



September 23, 2021

Mr. John Haley Aera Energy LLC P O Box 11164 Bakersfield, CA 93389

Re: Notice of Preliminary Decision - Title V Permit Renewal

Facility Number: S-1548 Project Number: S-1201797

Dear Mr. Haley:

Enclosed for your review and comment is the District's analysis of the application to renew the Federally Mandated Operating Permit for Aera Energy LLC at the Light Oil Western Stationary Source in Kern County, California.

The notice of preliminary decision for this project has been posted on the District's website (www.valleyair.org). 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,

Brian Clements

**Director of Permit Services** 

**Enclosures** 

CC: Courtney Graham, CARB (w/enclosure) via email Laura Yannayon, EPA (w/enclosure) via EPS CC:

> Samir Sheikh Executive Director/Air Pollution Control Officer

# SAN JOAQUIN VALLEY AIR POLLUTION CONTROL DISTRICT

#### Proposed Title V Permit Renewal Evaluation Aera Energy LLC S-1548

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#### TITLE V PERMIT RENEWAL EVALUATION

#### **Light Oil Production Operation**

Engineer: Robert Rinaldi

Date: September 16, 2021

SDD

9-23-21

Facility Number: S-1548

Facility Name: Aera Energy LLC Mailing Address: P O Box 11164

Bakersfield, CA 93389

Contact Name: John Haley

**Phone:** (661) 665-5000

Responsible Official: W.J. Dittman

Title: Vice President

**Project #**: S-1201797

**Deemed Complete:** May 28, 2020

#### I. PROPOSAL

Aera Energy LLC (Aera) was issued a Title V permit which was last renewed on March 27, 2017. As required by District Rule 2520, the applicant is requesting a new 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 issuance of the last renewed Title V permit on March 27, 2017 to present.

#### II. FACILITY LOCATION

Aera S-1548 is located at the light oil western 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 is requesting to use the following model general permit Templates:

#### A. Template SJV-UM-0-3 Facility Wide Umbrella

The facility wide permit includes the conditions (#1 through #40) on template No. SJV-UM-0-3, Facility Wide Umbrella in addition to the following facility specific conditions. However, Aera requests that certain Conditions on permit S-1548-0 be modified as follows:

Condition 8 – Specify that the specific elements listed in the condition are required only when those elements apply to the particular required data.

The operator shall maintain records of required monitoring, <u>where applicable</u>, 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.

Condition 23 - revised to provide for the exemptions allowed in Sections 4.1 and 4.2 of Rule 4601

No person shall manufacture, blend, repackage, supply, sell, solicit or apply any architectural coating <u>not exempt as allowed by Sections 4.1 and 4.2 of Rule 4601</u> with a VOC content in excess of the corresponding limit specified in Table of Standards 1 effective until 12/30/10 or Table of Standards 2 effective on and after 1/1/11 of District Rule 4601 (12/17/09) for use or sale within the District.

#### 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 following permit conditions, including their underlying applicable requirements, originate from model general permit templates and are not subject to further EPA or public review.

Conditions 1 through 40 of the requirements for permit unit S-1548-0-6.

The applicant is not requesting any other 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 March 27, 2017:

- District Rule 2201, New and Modified Stationary Source Review Rule (amended August 15, 2019)
- District Rule 2520, Federally Mandated Operating Permits (amended August 15, 2019)
- District Rule 4306, Boilers, Steam Generators and Process Heaters Phase 3 (amended December 17, 2020)
- District Rule 4311, Flares, (amended December 17, 2020)
- District Rule 4320, Advanced Emission Reduction Options for Boilers, Steam Generators and Process Heaters greater than 5.0 MMBtu/hr (amended December 17, 2020)
- District Rule 4601 Architectural Coatings (amended April 16, 2020)
- District Rule 4702, Internal Combustion Engines Phase 2 (amended August 19, 2021)
- 40 CFR Part 60 Appendix F, Quality Assurance Procedures (amended Oct. 7, 2020)
- 40 CFR 60, Subpart IIII –Standards of Performance for Stationary Compression Ignition Internal Combustion Engines (RICE)(amended June 29, 2021)
- 40 CFR Part 60, Subpart OOOO Standards of Performance for Crude Oil and Natural Gas Production, Transmission and Distribution (amended 9/14/20)
- 40 CFR Part 82, Subpart B Stratospheric Ozone (amended March 24, 2021)
- 40 CFR Part 82, Subpart F Stratospheric Ozone (amended April 10, 2020)

#### B. Rules Removed since March 27, 2017:

None

#### C. Rules Added since March 27, 2017:

Following rules are now considered applicable to the operation of this facility have been incorporated since issuance of the renewed Title V permit.

- 40 CFR Part 63, Subpart HH National Emission Standards for Hazardous Air Pollutants for Oil and Natural Gas Production Facilities (Amended 11/19/2020)
- 40 CFR Part 60, Subpart OOOOa—Standards of Performance for Crude Oil and Natural Gas Facilities for which Construction, Modification or Reconstruction Commenced After September 18, 2015 (9/14/2020)
- 40 CFR Part 63, Subpart ZZZZ (I.C. Engine MACT) (Amended 12/4/2020)

#### D. Rules Not Updated since March 27, 2017:

- District Rule 1070 Inspections (Amended December 17, 1992)
- District Rule 1080, Stack Monitoring (amended December 17, 1992)
- District Rule 1081, Source Sampling (amended December 16, 1993)
- District Rule 1100, Equipment Breakdown (amended December 17,1992)
- District Rule 1160, Emission Statements (adopted November 18, 1992)
- District Rule 2010, Permits Required (amended December 17, 1992)
- District Rule 2020, Exemptions (amended December 18, 2014)
- District Rule 2031, Transfer of Permits (amended December 17, 1992)
- District Rule 2040, Applications (amended December 17, 1992)
- District Rule 2070, Standards for Granting Applications (amended December 17, 1992)
- District Rule 2080, Conditional Approval (amended December 17, 1992)
- District Rule 2410, Prevention of Significant Deterioration (amended June 16, 2011)
- District Rule 4002 National Emissions Standards for Hazardous Air Pollutants (Amended May 20, 2004)
- District Rule 4101, Visible Emissions (amended February 17, 2005)
- District Rule 4201, Particulate Matter Concentration (amended December 17, 1992)
- District Rule 4305, Boilers, Steam Generators and Process Heaters Phase
   2 (amended August 21, 2003)

- District Rule 4401, Steam Enhanced Crude Oil Production Wells (Amended June 16, 2011)
- District Rule 4623, Storage of Organic Liquids (Amended 5/19/05)
- District Rule 4801, Sulfur Compounds (amended December 17, 1992)
- 40 CFR Part 61, Subpart M, National Emission Standard for Asbestos (Amended July 20, 2004)
- 40 CFR Part 64, Compliance Assurance Monitoring (10/22/97)

#### VII. REQUIREMENTS NOT FEDERALLY ENFORCEABLE

For each Title V source, the District issues a single permit that contains the Federally Enforceable requirements, as well as the 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 since March 27, 2017

None

#### B. Rules Not Updated since March 27, 2017

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

Condition 41 of permit unit -0-5 reflects the requirements of District Rule 4102 and will therefore will not be discussed any further.

#### VIII. PERMIT REQUIREMENTS

The purpose of this evaluation is to review changes to federally enforceable requirements; therefore, this compliance section will only address rules that have been amended or added since the issuance of the most recent renewal of the Title V permit, which occurred on March 27, 2017.

#### A. District Rule 2201 - New and Modified Stationary Source Review Rule

District Rule 2201 has been amended since this facility's renewed Title V permit was issued. This Title V permit renewal does not constitute a modification per Section 3.26, defined as an action including at least one of the following items:

- Any change in hours of operation, production rate, or method of operation of an existing emissions unit, which would necessitate a change in permit conditions.
- 2) Any structural change or addition to an existing emissions unit which would necessitate a change in permit conditions. Routine replacement shall not be considered to be a structural change.
- 3) An increase in emissions from an emissions unit caused by a modification of the Stationary Source when the emissions unit is not subject to a daily emissions limitation.
- 4) Addition of any new emissions unit which is subject to District permitting requirements.
- 5) A change in a permit term or condition proposed by an applicant to obtain an exemption from an applicable requirement to which the source would otherwise be subject.

Therefore, the updated requirements of this rule are not applicable at this time.

#### **B. District Rule 2520 - Federally Mandated Operating Permits**

District Rule 2520 has been amended since this facility's last Title V Permit renewal was issued. However, the only amendments to the rule involve the cessation of publishing public notices in the local newspaper of general circulation in favor of electronically posted notification on the District's website.

#### Greenhouse Gas Discussion

There are no federally applicable Greenhouse Gas (GHG) requirements for this source. It should be noted that the Mandatory Greenhouse Gas Reporting rule (40 CFR Part 98) is not included in the definition of an applicable requirement within Title V (per 40 CFR 71.2). Therefore, there will be no further discussion of GHG in this evaluation.

## C. District Rule 4306 - Boilers, Steam Generators and Process Heaters - Phase 3

This rule does not have any new requirements that are applicable now, but has compliance dates that start in 2022 (for application submittal) and 2023 (for compliance with the rule requirements).

#### D. District Rule 4311 - Flares

This rule does not have any new requirements that are applicable now, but has compliance dates that start in 2022 (for application submittal) and 2023 (for compliance with the rule requirements).

# E. District Rule 4320 - Advanced Emission Reduction Options for Boilers, Steam Generators and Process Heaters greater than 5.0 MMBtu/hr

This rule does not have any new requirements that are applicable now, but has compliance dates that start in 2022 (for application submittal) and 2023 (for compliance with the rule requirements).

#### F. District Rule 4601 - Architectural Coatings

This rule was amended on April 16, 2020, but the rule amendments have not been incorporated into the SIP. The amended rule is as stringent as the SIP approved version of the rule that was adopted on December 17, 2009. Therefore, the following conditions are still valid for this project.

This rule limits the emissions of VOCs from architectural coatings. It requires limiting the application of any architectural coating to no more than what is listed in the Table of Standards (Section 5.0). The rule was amended in April 16, 2020. Since the changes included in the latest rule amendment did not result in adding new requirements and/or revising current requirements in the facility-wide permit, no further evaluation is needed.

#### a. S-1548-0-6 – Brief Equipment Description

• Conditions 23, 24, and 25 ensure compliance with the revised requirements of this rule.

#### G. District Rule 4702 - Internal Combustion Engines - Phase 2

This rule does not have any new requirements that are applicable now, but has compliance dates that start in 2022 (for application submittal) and 2023 (for compliance with the rule requirements).

#### H. 40 CFR Part 60 Appendix F, Quality Assurance Procedures

This appendix is used to evaluate the effectiveness of quality control (QC) and quality assurance (QA) procedures and the quality of data produced by any continuous emission monitoring system (CEMS) that is used for determining compliance with the emission standards on a continuous basis as specified in the applicable regulation. The CEMS may include pollutant (e.g., S02 and N0x) and diluent (e.g., 02 or C02) monitors.

Facility S-1548 currently has no permitted equipment that use CEMS. Therefore, this appendix does not apply.

# I. 40 CFR 60, Subpart IIII –Standards of Performance for Stationary Compression Ignition Internal Combustion Engines (RICE)

The provisions of this subpart are applicable to manufacturers, owners, and operators of stationary compression ignition (CI) internal combustion engines (ICE) and other persons as specified in paragraphs (a)(1) through (4) of this section. For the purposes of this subpart, the date that construction commences is the date the engine is ordered by the owner or operator.

Facility S-1548 currently has no permitted compression ignition internal combustion engines. All permitted IC engines are spark-ignited natural gas fired IC engines. Therefore, this subpart does not apply.

# J. 40 CFR Part 60, Subpart OOOO - Standards of Performance for Crude Oil and Natural Gas Production, Transmission and Distribution

These Standards of Performance for Crude Oil and Natural Gas Production, Transmission, and Distribution were adopted 8/16/2012. They apply to certain equipment constructed, reconstructed, or modified after 8/23/2011. In particular, the standards apply to new natural gas well completions, oil/condensate storage tanks with individual tank VOC emissions of 6 tons per day or greater, certain centrifugal compressors with wet seals and reciprocating compressors, continuous bleed natural gas-driven pneumatic

controllers with a bleed rate greater than 6 scf/h, glycol dehydrators at major HAP sources, leak detection limits for new valves at gas processing plants, and sulfur removal units producing sulfur at a rate of at least 5 tons/day and located at natural gas processing plants.

This standard could potentially apply to the storage tanks located at this facility. However, pursuant to section §60.5365, Subpart OOOO has no standards for tanks with annual VOC emission less than 6 tons per year. As seen in the Actual Emissions Report included with this permit renewal application, none of the tanks in this facility meet the threshold for applicability of the rule. Therefore, the tanks are not an affected facility and Subpart OOOO does not apply.

# K. 40 CFR Part 60, Subpart OOOOa - Standards of Performance for Crude Oil and Natural Gas Facilities for which Construction, Modification or Reconstruction Commenced After September 18, 2015

This standard could potentially apply to the storage tanks located at this facility. However, pursuant to section §60.5365a, Subpart OOOOa has no standards for tanks with annual VOC emission less than 6 tons per year. As seen in the Actual Emissions Report included with this permit renewal application, none of the tanks in this facility meet the threshold for applicability of the rule. Therefore, the tanks are not an affected facility and Subpart OOOOa does not apply

#### L. 40 CFR Part 63, Subpart HH (Oil and Gas MACT)

40 CFR Part 63, Subpart HH regulates the emissions of Hazardous Air Pollutants from oil and gas production facilities. Certain facilities are exempt from the regulations pursuant to 40 CFR 63.760 (e). Of particular interest is the exemption from 40 CFR 63.760 (e)(1) that states:

A facility that exclusively processes, stores, or transfers black oil (as defined in § 63.761) is not subject to the requirements of this subpart. For the purposes of this subpart, a black oil facility that uses natural gas for fuel or generates gas from black oil shall qualify for this exemption.

The definition of "black oil" as contained in 40 CFR 63.761 is restated below:

Black oil means hydrocarbon (petroleum) liquid with an initial producing gas-to-oil ratio (GOR) less than 0.31 cubic meters per liter and an API gravity less than 40 degrees.

The District has previously determined that Aera's Light Oil Western Stationary Source produces black oil as defined in 40 CFR 63.761. In Project S-1021082, the District reviewed reservoir information provided by Aera and concluded that the Light Oil Western Stationary Source is exempt from 40 CFR Part 63, Subpart HH. In fact, the following permit shield was added to Facility-Wide Permit to Operate #S-1548-0-3 as Condition 99:

This source meets the criteria for black oil per 40 CFR 63.761. Therefore, the requirements of 40 CFR Part 63, Subpart HH do not apply to this source. A permit shield is granted from these requirements.

40 CFR Part 63, Subpart HH has not been modified since the District evaluated Project #S-1021082, therefore, the Light Oil Western Stationary Source remains exempt from this regulation.

## M. 40 CFR Part 63, Subpart ZZZZ (Stationary Internal Combustion Engine MACT)

40 CFR Part 63, Subpart ZZZZ establishes national emission limitations and operating limitations for hazardous air pollutants (HAPs) from stationary reciprocating internal combustion engines. Aera operates two 2SLB RICE engines, two 4SRB RICE <500HP, and eight 4SRB RICE >= 500HP at this facility. All engines are natural gas-fired internal combustion engines therefore, 40 CFR Part 63, Subpart ZZZZ is applicable.

#### **2-Stroke Lean Burn Engines**

Permit	Engine ID	Engine Description	Engine Location
Number			
S-1548-115	C-5	450 BHP AJAX Cleanburn IC	Lost Hills 1
		Engine	Compressor
			Station
S-1548-116	C-6	450 BHP AJAX Cleanburn IC	Lost Hills 1
		Engine	Compressor
		-	Station

Two engines qualify as non-emergency, non-black start 2SLB stationary RICE per 40 CFR Part 63, Subpart ZZZZ. Both are located at the Lost Hills 1 Compressor Station which is a remote area source for HAPs. The following conditions apply for this type of IC engine:

- The engine's oil and filter shall be changed every 4,320 hours of operation or annually, whichever comes first. [40 CFR 63 Subpart ZZZZ]Y
- The engine's spark plugs must be inspected every 4,320 hours of operation or annually, whichever comes first, and replace as necessary. [40 CFR 63 Subpart ZZZZ]Y
- The engine's hoses and belts must be inspected every 4,320 hours of operation or annually, whichever comes first, and replace as necessary.
   [40 CFR 63 Subpart ZZZZ]Y
- The permittee shall operate and maintain IC engine per manufacturer's emission-related instructions or develop and follow a maintenance plan which provides to the extent practicable for the operation and maintenance of the engine in a manner consistent with good practices.
   [District Rule 4702 and 40 CFR 63 Subpart ZZZZ] Y
- The permittee has the option of utilizing an oil analysis program in order to extend the specified oil change requirement in Tables 2c and 2d of 40 CFR 63 Subpart ZZZZ. The oil analysis must be performed every 4,320 hours of operation or every 12 months, whichever comes first. The analysis program must at a minimum analyze the following three parameters: Total Acid Number, viscosity, and percent water content. The condemning limits for these parameters are as follows: Total Acid Number increases by more than 3.0 milligrams of potassium hydroxide (KOH) per gram from Total Acid Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. If all of these condemning limits are not exceeded, the engine owner or operator is not required to change the oil. If any of the limits are exceeded, the engine owner or operator must change the oil within 2 days of receiving the results of the analysis; if the engine is not in operation when the results of the analysis are received, the engine owner or operator must change the oil within 2 days or before commencing operation, whichever is later. The owner or operator must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine. [40 CFR 63 Subpart ZZZZ] Y

 The owner must operate and maintain the engine per the manufacturers emission-related instructions, or develop and follow your own maintenance plan which provides to the extent practicable for the operation and maintenance of the engine in a manner consistent with good practices [40 CFR 63 Subpart ZZZZ] Y

#### Less than 500 hp 4 Stroke Rich Burn Engines

Permit Number	Engine ID	Engine Description	Engine Location
S-1548-400	49-8	498 BHP Caterpillar Natural Gas Fired IC Engine Compressor Station 49	Compressor Station 49
S-1548-411	49-9	498 BHP Caterpillar Natural Gas Fired IC Engine Compressor Station 49	Compressor Station 49

Two engines qualify as non-black start 4SRB stationary RICE ≤500 hp per 40 CFR Part 63, Subpart ZZZZ. Both are located at Compressor Station 49 which is a remote area source for HAPs. The following conditions apply for this type of IC engine:

- This engine shall be operated and maintained in proper operating condition per the Inspection and Maintenance (I & M) plan submitted to the District. [District Rule 4702, 6.5 and 40 CFR 63, ZZZZ] Y
- The permittee must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes. [40 CFR 63, ZZZZ] Y
- The engine shall be in full compliance with 40 CFR Part 63, Subpart ZZZZ (National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines). [40 CFR 63, ZZZZ] Y
- The engine's oil and filter shall be changed every 1,440 hours of operation or annually, whichever comes first. [40 CFR 63 Subpart ZZZZ]Y
- The engine's spark plugs must be inspected every 1,440 hour of operation or annually, whichever comes first, and replace as necessary. [40 CFR 63 Subpart ZZZZ]Y

 The engine's hoses and belts must be inspected every 1,440 hour of operation or annually, whichever comes first, and replace as necessary. [40 CFR 63 Subpart ZZZZ]Y

#### **Remote 4 Stoke Rich Burn Engines**

Permit Number	Engine ID	Engine Description	Engine Location
S-1548-171	26-2	1,215 BHP Waukesha Model L-5790 Natural Gas Fired IC Engine	Compressor Station 26
S-1548-172	C-7	1,478 BHP Waukesha Model 7042 Natural Gas Fired IC Engine	Lost Hills 1 Compressor Station
S-1548-173	50-3	1,478 BHP Waukesha Model 7042 Natural Gas Fired IC Engine	Compressor Station 50
S-1548-174	50-4	1,478 BHP Waukesha Model 7042 Natural Gas Fired IC Engine	Compressor Station 50
S-1548-175	50-5	1,478 BHP Waukesha Model 7042 Natural Gas Fired IC Engine	Compressor Station 50
S-1548-433	DS 1	1,680 BHP Waukesha Model 7044 Natural Gas Fired IC Engine	Del Sur Compressor Station
S-1548-434	DS 2	1,680 BHP Waukesha Model 7044 Natural Gas Fired IC Engine	Del Sur Compressor Station
S-1548-435	DS 3	1,680 BHP Waukesha Model 7044 Natural Gas Fired IC Engine	Del Sur Compressor Station

The remaining eight engines Aera operates under this facility qualify as non-black start 4SRB remote stationary RICE >500 hp. These engines are located at Compressor Station 26, Compressor Station 49, Compressor Station 50, and Lost Hills 1 Compressor Station, which all are considered a remote area source for HAPs. The following conditions apply for this type of IC engine:

- The engine's oil and filter shall be changed every 2,160 hours of operation or annually, whichever comes first. [40 CFR 63 Subpart ZZZZ]
- The engine's spark plugs must be inspected every 2,160 hour of operation or annually, whichever comes first, and replace as necessary. [40 CFR 63 Subpart ZZZZ]

 The engine's hoses and belts must be inspected every 2,160 hour of operation or annually, whichever comes first, and replace as necessary. [40 CFR 63 Subpart ZZZZ]

In addition, the requirement from Table 6 Item #9 in 40 CFR 63 Subpart ZZZZ is also added to each permit;

 The owner must operate and maintain the engine per the manufacturers emission-related instructions, or develop and follow your own maintenance plan which provides to the extent practicable for the operation and maintenance of the engine in a manner consistent with good practices.

40 CFR Part 63, Subpart ZZZZ is considered applicable to the natural gas fired IC engines at this facility. Several conditions have been added on the permits for the twelve engines to enforce Subpart ZZZZ.

#### N. 40 CFR Part 82, Subpart B Stratospheric Ozone

This subpart was amended since the initial TV was issued. However, the amendments to this subpart do not have any effect on existing permit requirements as addressed by conditions 27 & 28 of the requirements for permit unit S-1548-0-6 on the draft renewed permit.

#### O. 40 CFR Part 82, Subpart F Stratospheric Ozone

This subpart was amended since the initial TV was issued. However, the amendments to this subpart do not have any effect on existing permit requirements as addressed by conditions 27 & 28 of the requirements for permit unit S-1548-0-6 on the draft renewed permit.

#### 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.

Conditions 40 and 41 on the proposed permit S-1141-0-6 are permit shields for the facility.

#### X. PERMIT CONDITIONS

See Attachment A - Draft Renewed Title V Operating Permit.

#### XI. ATTACHMENTS

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

# ATTACHMENT A

Draft Renewed Title V Operating Permit

## San Joaquin Valley Air Pollution Control District

**EXPIRATION D FACILITY:** S-1548-0-6

### **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] 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] Federally Enforceable Through Title V Permit
- 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
- 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, 9.9.1 an] Federally Enforceable Through Title V Permit
- 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
- The operator shall maintain records of required monitoring, where applicable, 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
- 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
- 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

FACILITY-WIDE REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Requirements that affect specific Permit Units may constitute modification of those Permit Units.

Facility Name: AERA ENERGY LLC

LIGHT OIL WESTERN STATIONARY SOURCE, CA Location:

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- 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 (02/17/05). 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, and County Rules 401 (in all e] Federally Enforceable Through Title V Permit

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- 23. No person shall manufacture, blend, repackage, supply, sell, solicit or apply any architectural coating not exempt as allowed by Sections 4.1 and 4.2 of Rule 4601 with a VOC content in excess of the corresponding limit specified in Table of Standards 1 effective until 12/30/10 or Table of Standards 2 effective on and after 1/1/11 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 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 Part 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 Part 82, Subpart B. [40 CFR Part 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 (8/19/2004) or Rule 8011 (8/19/2004). [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 (8/19/2004) or Rule 8011 (8/19/2004). [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 (8/19/2004) or Rule 8011 (8/19/2004). [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 (8/19/2004) or Rule 8011 (8/19/2004). [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 (8/19/2004) or Rule 8011 (8/19/2004). [District Rule 8061 and Rule 8011] Federally Enforceable Through Title V Permit
- 34. Any unpaved vehicle/equipment area that anticipates more than 50 Average annual daily Trips (AADT) shall comply with the requirements of Section 5.1.1 of District Rule 8071. Any unpaved vehicle/equipment area that anticipates more than 150 vehicle trips per day (VDT) shall comply with the requirements of Section 5.1.2 of District Rule 8071. On each day that 25 or more VDT with 3 or more axles will occur on an unpaved vehicle/equipment traffic area, the owner/operator shall comply with the requirements of Section 5.1.3 of District Rule 8071. On each day when a special event will result in 1,000 or more vehicles that will travel/park on an unpaved area, the owner/operator shall comply with the requirements of Section 5.1.4 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 (9/16/2004) or Rule 8011 (8/19/2004). [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), Rule 111 (Kern, Tulare, Kings), and Rule 202 (Fresno, Kern, Tulare, Kings, Madera, Stanislaus, Merced, San Joaquin). 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 (12/17/09); 8021 (8/19/2004); 8031 (8/19/2004); 8041 (8/19/2004); 8051 (8/19/2004); 8061 (8/19/2004); and 8071 (9/16/2004). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
- 41. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102] Federally Enforceable Through Title V Permit
- 42. 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
- 43. For valves, threaded connections, flanges, pipes, pumps, compressors, and other components 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
- 44. 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
- 45. 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
- 46. 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

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- 47. 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
- 48. 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
- 49. 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
- 50. 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
- 51. 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
- 52. 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
- 53. 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
- 54. 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
- 55. 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 ppmy. 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
- 56. 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

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- 57. 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 ppmy. [District Rule 4409, 5.1.4.4] Federally Enforceable Through Title V Permit
- 58. 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
- 59. 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
- 60. 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
- 61. 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
- 62. 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
- 63. 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
- 64. 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
- 65. 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
- 66. 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
- 67. 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
- 68. 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
- 69. 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

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- 70. 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 Enforced Through Title V Permit [District Rule 4409, 5.2.8.1] Federally Enforceable Through Title V Permit
- 71. 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 Enforced Through Title V Permit [District Rule 4409, 5.2.8.2] Federally Enforceable Through Title V Permit
- 72. 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
- 73. 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
- 74. 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
- 75. 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
- 76. 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
- 77. 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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- 78. 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
- 79. 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 ppmy, 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
- 80. 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
- 81. 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
- 82. 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 [District Rule 4409, 5.3.7] Federally Enforceable Through Title V Permit
- 83. 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

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- 84. 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
- 85. 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
- 86. 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
- 87. 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
- 88. 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
- 89. 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
- 90. 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
- 91. 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
- 92. 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
- 93. 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
- 94. 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

Facility Name: AERA ENERGY LLC Location:

- 95. 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
- 96. 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
- 97. When applicable to 40 CFR Part 68, a subject facility shall submit to the proper authority a Risk Management Plan when mandated by the regulation. [40 CFR Part 68] Federally Enforceable Through Title V Permit
- 98. Compliance with permit conditions in the Title V permit shall be deemed compliance with SJVUAPCD Rule 4403, Sections 5.1, 5.3, and 6.3 (Amended February 16,1995). A permit shield is granted from these requirements. [District Rule 2520, 12.2] Federally Enforceable Through Title V Permit
- 99. This source meets the criteria for black oil per 40 CFR 63.761. Therefore, the requirements of 40 CFR Part 63, Subpart HH do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 12.2] Federally Enforceable Through Title V Permit
- 100. The reporting periods for the Report of Required Monitoring and the Compliance Certification Report begin October 31 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
- 101. IC ENGINE CONDITION: This engine shall be equipped with an operational nonresettable elapsed time meter or other APCO approved alternative. [District Rule 4702, 5.6.6] Federally Enforceable Through Title V Permit
- 102. IC ENGINE CONDITION: Emissions source testing shall be conducted with the engine operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. Source testing emissions for this unit shall be calculated using the arithmetic mean, pursuant to District Rule 1081 (Amended December 16, 1993), of 3 thirty-minute test runs for NOx. [District Rules 4702, 6.3.3 and 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 103. IC ENGINE CONDITION: Source testing shall be District witnessed, or authorized, sample collection by ARB certified testing laboratory. [District Rule 1080] Federally Enforceable Through Title V Permit
- 104. IC ENGINE CONDITION: Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified 30 days prior to any compliance source test, and a source test plan must be submitted for approval 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
- 105. IC ENGINE CONDITION: 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
- 106. IC ENGINE CONDITION: The following test methods shall be used: NOx (ppmv) EPA Method 7E or ARB Method 100, CO (ppmv) - EPA Method 10 or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, and VOC (ppmv) - EPA Method 25 or EPA Method 18 referenced as methane, fuel gas sulfur content - ASTM D 3246 or double GC for total sulfur content, and EPA Method 21 for fugitive components. [District Rule 1081] Federally Enforceable Through Title V Permit
- 107. IC ENGINE CONDITION: Emissions for this unit shall be calculated using the arithmetic mean, pursuant to District Rule 1081 (Amended December 16, 1993), of 3 thirty minute test runs for NOx and CO. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
- 108. IC ENGINE CONDITION: This engine shall be operated and maintained in proper operating condition per the Inspection and Maintenance (I & M) plan submitted to the District. [District Rule 4702, 6.5 and 40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit

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- 109. IC ENGINE CONDITION: The permittee shall update the I & M plan for this engine prior to any planned change in operation. The permittee must notify the District no later than seven days after changing the I & M plan and must submit an updated I & M plan to the APCO no later than 14 days after the change for approval. The date and time of the change to the I & M plan shall be recorded in the engine's operating log. For modifications, the revised I & M plan shall be submitted to and approved by the APCO prior to issuance of the Permit to Operate. The permittee may request a change to the I & M plan at any time. [District Rules 4702, 6.5 and 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 110. IC ENGINE CONDITION: Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [District Rule 4801] Federally Enforceable Through Title V Permit
- 111. IC ENGINE CONDITION: Particulate emissions shall not exceed, at the point of discharge, 0.1 gr/dscf. [District Rule 4201] Federally Enforceable Through Title V Permit
- 112. IC ENGINE CONDITION: If the IC engine is fired on natural gas with supplier certified sulfur content, then permittee shall document sulfur content by maintaining file copies of all natural gas bills or supplier's certification of sulfur content. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
- 113. IC ENGINE CONDITION: If the IC engine is not fired on natural gas with supplier certified sulfur content, then the sulfur content of the natural gas being fired in the engine shall be tested using ASTM D 3246 or double GC for sulfur content (as H2S). [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 114. IC ENGINE CONDITION: If the engine is not fired on certified natural gas, the sulfur content of each fuel source shall be tested weekly except that if compliance with the fuel sulfur content limit has been demonstrated for 8 consecutive weeks for a fuel source, then the testing frequency shall be quarterly. If a test shows noncompliance with the sulfur content requirement, the source must return to weekly testing until eight consecutive weeks show compliance. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
- 115. IC ENGINE CONDITION: The permittee shall monitor and record the stack concentration of NOx (as NO2), CO, and O2 at least once every calendar month (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall not be required if the engine is not in operation, i.e. the engine need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the engine unless monitoring has been performed within the last month. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies. [District Rule 4702, 5.6.1.1, 5.6.9, and 6.5.7] Federally Enforceable Through Title V Permit
- 116. IC ENGINE CONDITION: If either the NOx or CO concentrations corrected to 15% O2, as measured by the portable analyzer, exceed the permitted emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1-hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of performing the notification and testing required by this condition. [District Rule 4702, 6.5.4] Federally Enforceable Through Title V Permit
- 117. IC ENGINE CONDITION: All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the permit-to-operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rule 4702, 5.6.9, 6.5.7] Federally Enforceable Through Title V Permit

Facility Name: AERA ENERGY LLC
Location: LIGHT OIL WESTERN STATIONARY SOURCE,
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- 118. IC ENGINE CONDITION: The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 15% O2, (3) identification of testing equipment, (4) identification of testing personal, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rules 4702, 5.6.1 and 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 119. IC ENGINE CONDITION: An engine operating log shall be maintained. The log shall include, on a monthly basis, the total hours of operation, type and quantity of fuel used, preventative and corrective maintenance and modifications performed, monitoring data, compliance source test results and any other information necessary to demonstrate compliance. [District Rule 4702, 6.2.1] Federally Enforceable Through Title V Permit
- 120. IC ENGINE CONDITION: The engine shall be in full compliance with 40 CFR Part 63, Subpart ZZZZ (National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines). [40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit
- 121. IC ENGINE CONDITION: The permittee must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes. [40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit
- 122. IC ENGINE CONDITION: All records required by this permit shall be maintained for a period of five years and shall be made readily available for District inspection upon request. [District Rule 4702, 6.2.2 and 40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit
- 123. IC ENGINE CONDITION: District witnessed or approved compliance source testing for NOx, VOC, and CO emissions shall be demonstrated within 60 days of startup and not less than once every 24 months thereafter. [District Rule 4702] Federally Enforceable Through Title V Permit

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

Facility Name: AERA ENERGY LLC
Location: LIGHT OIL WESTERN STATIONARY SOURCE
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# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-1548-45-9

SECTION: 28 TOWNSHIP: 28S RANGE: 21E

**EQUIPMENT DESCRIPTION:** 

2,730,000 GALLON FIXED ROOF PETROLEUM STORAGE TANK #T-471 WITH VAPOR RECOVERY SYSTEM WITH VAPOR CONTROL COMPRESSOR(S), COOLER(S), LIQUID KNOCKOUT(S) AND PIPING TO FIELD GAS SYSTEM SHARED WITH S-1548-143 (TANK #T-470)

### PERMIT UNIT REQUIREMENTS

- 1. The tank shall be equipped with a vapor recovery system consisting of a closed system that collects VOCs from the storage tank. [District Rule 4623, 5.1] 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, 5.1.3] Federally Enforceable Through Title V Permit
- 3. A 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 reading in excess of 10,000 ppmv above background is a violation of this permit and Rule 4623 and shall be reported as a deviation. [District Rule 4623, 3.11 and 6.4.8] Federally Enforceable Through Title V Permit
- 4. Any vessel gauging or sampling device on a vessel 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, 5.6.2] Federally Enforceable Through Title V Permit
- 5. All piping, fittings, and valves on this vessel associated with the vapor recovery system shall be inspected annually by the facility operator in accordance with EPA Method 21, with the instrument calibrated with methane, to ensure compliance with the leaking provisions of this permit. [District Rule 4623, 5.7 (Table 3)] Federally Enforceable Through Title V Permit
- 6. If any of the vessel components are found to be leaking, operator shall immediately affix a tag and maintain records of gas leak detection readings, date/time leak was discovered, and date/time the component was repaired to a leak-free condition [District Rule 4623, 5.7 (Table 3)] Federally Enforceable Through Title V Permit
- 7. Upon detection of any leaking components (having a gas leak > 10,000 ppmv, measured in accordance with EPA Method 21 by a portable hydrocarbon detection instrument that is calibrated with methane), the operator shall: a. Eliminate the leak within 8 hours after detection; or b. If the leak can not be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices; and c. Eliminate the leak within 48 hours after minimization; and d. In no event that the total time to minimize and eliminate the leak shall exceed 56 hours after detection. [District Rule 4623, 5.7 (Table 3)] Federally Enforceable Through Title V Permit
- 8. Leaking components that have been discovered by the operator that have been immediately tagged and repaired within the deadlines specified in the Emissions Minimization requirements, shall not constitute a violation of this rule and does not have to be reported as a deviation. However, leaking components discovered during inspections by District staff that were not previously identified and/or tagged by the operator, and/or any leaks that were not repaired within deadlines specified in the Emissions Minimization requirements, shall constitute a violation of this rule or permit and has to be reported as a deviation. [District Rule 4623, 5.7 (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: AERA ENERGY LLC Location: LIGHT OIL WESTERN STATIONARY SOURCE,CA

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- If a component type for a given vessel is found to leak above the leak free standard during an annual inspection, then quarterly inspections of that component type on the vessel or system shall be conducted for four consecutive quarters. After four successful quarterly inspections in which the component type is found to be leak free (<10,000 ppmv), inspections interval may revert to annual. [District Rule 4623, 5.7 (Table 3)] Federally Enforceable Through Title V Permit
- 10. Any component found to be leaking above the leak free standard on two consecutive annual inspections is considered a violation, even if it is under the voluntary inspection and maintenance program. [District Rule 4623, 5.7 (Table 3)] Federally Enforceable Through Title V Permit
- 11. Permittee shall notify the APCO in writing at least three (3) days prior to performing vessel degassing and interior vessel cleaning activities. Written notification shall include the following: 1) the Permit to Operate number and physical location of the vessel being degassed, 2) the date and time that vessel 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 vessel, 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, 5.7.5.1] Federally Enforceable Through Title V Permit
- 12. This vessel shall be degassed before commencing interior cleaning by one of the following: 1) exhausting VOCs contained in the vessel vapor space to an APCO-approved vapor recovery system until the organic vapor concentration is 5,000 ppmy 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 vessel vapor space to an APCO-approved vapor recovery system by filling the vessel with a suitable liquid until 90 percent or more of the maximum operating level of the vessel 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 vessel vapor space to an APCO-approved vapor recovery system by filling the vessel with a suitable gas. Degassing shall continue until the operator has achieved a vapor displacement equivalent to at least 2.3 times the vessel capacity. Suitable gases are air, nitrogen, carbon dioxide, or natural gas containing less than 10 percent VOC by weight. [District Rule 4623, 5.7.5.4] Federally Enforceable Through Title V Permit
- 13. During vessel degassing, the operator shall discharge or displace organic vapors contained in the vessel vapor space to an APCO-approved vapor recovery system. [District Rule 4623, 5.7.5.4.5] Federally Enforceable Through Title V Permit
- 14. To facilitate connection to an external APCO-approved recovery system, a suitable vessel fitting, such as a manway, may be temporarily removed for a period of time not to exceed 1 hour. [District Rule 4623, 5.7.5.4.6] Federally Enforceable Through Title V Permit
- 15. This vessel shall be in compliance with the applicable requirements of District Rule 4623 at all times during draining, degassing, and refilling the tank with an organic liquid having a TVP of 0.5 psia or greater. [District Rule 4623, 5.7.5.4.7] Federally Enforceable Through Title V Permit
- 16. After a tank has been degassed pursuant to the requirements of this permit, vapor control requirements are not applicable until an organic liquid having a TVP of 0.5 psia or greater is placed, held, or stored in this vessel. [District Rule 4623, 5.7.5.4.10] Federally Enforceable Through Title V Permit
- 17. While performing vessel 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, 5.7.5.5.1] Federally Enforceable Through Title V Permit
- 18. 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, 5.7.5.5.2] Federally Enforceable Through Title V Permit
- 19. During sludge removal, the operator shall control emissions from the sludge receiving vessel by operating an APCOapproved vapor control device that reduces emissions of organic vapors by at least 95%. [District Rule 4623, 5.7.5.6.1] Federally Enforceable Through Title V Permit

Facility Name: AERA ENERGY LLC

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- 20. Permittee shall only transport removed sludge in closed, liquid leak-free containers. [District Rule 4623, 5.7.5.6.2] Federally Enforceable Through Title V Permit
- 21. Permittee 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, 5.7.5.6.3] Federally Enforceable Through Title V Permit
- 22. P/V vents shall be set to relieve at a pressure higher than required to activate vapor compressor. [District NSR Rule] Federally Enforceable Through Title V Permit
- 23. The tank shall be equipped with a fixed roof with no holes or openings. [District NSR Rule] Federally Enforceable Through Title V Permit
- 24. Compressed vapors shall be sent to the field gas gathering system. [District NSR Rule] Federally Enforceable Through Title V Permit
- 25. Permittee shall maintain with the permit accurate fugitive component count and resultant emissions calculated using U.S. EPA Publication 453/R-95-017, Table 2-4. [District Rule 1070] Federally Enforceable Through Title V Permit
- 26. All records required by this permit shall be maintained for a period of Five years and permittee shall make such records available for District inspection upon request. [District Rule 1070 and 2520, 9.5.2] Federally Enforceable Through Title V Permit
- 27. 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
- 28. The efficiency of any VOC destruction device shall be measured by EPA Method 25, 25a, 25b, or as approved by District Rule 4623. [District Rule 4623, 6.2.5] Federally Enforceable Through Title V Permit
- 29. The operator shall ensure that the vapor recovery system is functional and is operating in compliance with permit conditions at all times. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 30. Fugitive VOC emissions from components associated with vapor recovery system shared between this permit unit and permit unit S-1548-143 shall not exceed 59.0 lb/day. [District NSR Rule and 4623, 5.3.1] Federally Enforceable Through Title V Permit

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

Facility Name: AERA ENERGY LLC LIGHT OIL WESTERN STATIONARY SOURCE S-1548-45-9 : Sep 17 2021 8:09AM -- RINALDIR

Location:

### San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-1548-113-10

**SECTION: 04 TOWNSHIP: 27S** RANGE: 21E

**EQUIPMENT DESCRIPTION:** 

584,318,750 BTU/HR SAFETY FLARE WITH INDAIR I-12 FLARE TIP (LOST HILLS 1 LEASE)

### PERMIT UNIT REQUIREMENTS

EXPIRATION DA

- Gas flared shall not exceed 15,000,000 scf/day. [District NSR Rule] Federally Enforceable Through Title V Permit 1.
- If the flare is utilized to combust emergency releases of VOC for three (3) hours or more in a calendar quarter, the 2. permittee shall perform a visible emissions inspection using EPA Method 22. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- The concentration of sulfur compounds in the exhaust from this unit shall not exceed 0.2% by volume as measured on a dry basis over a 15 minute period. To show compliance compliance with the sulfur limits, the gas being flared shall be tested quarterly for sulfur content and higher heating value. [District Rule 2520, 9.3.2 and 4801] Federally Enforceable Through Title V Permit
- The sulfur content of the gas being flared shall be determined using ASTM D 1072, D 3031, D 4084, D 3246 or grab sample analysis by GC-FPD/TCD performed in the laboratory. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- Permittee shall maintain records of emergency and non-emergency operation, hours of operation for flare maintenance and testing, and the amount of gas flared for a period of five years and make such records readily available for District inspection upon request. [District NSR Rule, District Rule 1070, and District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
- A flame shall be present at all time when combustible gases are vented through the flare. [District Rule 4311, 5.2] Federally Enforceable Through Title V Permit
- 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 when gases may be vented to the flare. Pilot monitoring is not required during unforeseen or essential planned power outages. [District Rule 4311, 5.4] Federally Enforceable Through Title V Permit
- 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, 5.5] Federally Enforceable Through Title V Permit
- Permittee shall maintain copies of the compliance determination conducted pursuant to Section 6.4.1, copies of the source testing result conducted pursuant to Section 6.4.2, effective on and after July 1, 2011, a copy of the approved flare minimization plan pursuant to Section 6.5, effective on and after July 1, 2012, a copy of annual reports submitted to the APCO pursuant to Section 6.2 and effective on and after July 1, 2011, monitoring data collected pursuant to Sections 5.10, 6.6, 6.7. 6.8, 6.9 and 6.10. [District Rule 4311, 6.1] Federally Enforceable Through Title V Permit
- 10. For flares used during an emergency, the operator shall record of the duration of flare operation, amount of gas burned, and the nature of the emergency situation. [District Rule 4311, 6.1] Federally Enforceable Through Title V Permit

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Facility Name: AERA ENERGY LLC

- 11. All records shall be maintained, retained on-site for a minimum of five years, and made available to the APCO, ARB, and EPA upon request. [District Rule 4311, 6.1] Federally Enforceable Through Title V Permit
- 12. VOC emissions, 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 Method 25a may be used, and analysis of halogenated exempt compounds shall be analyzed by EPA Method 18 or ARB Method 422 "Determination of Volatile organic Compounds in Emission from Stationary Sources". The VOC concentration in ppmv shall be converted to pounds per million Btu (lb/MMBtu) by using the equation in District Rule 4311, Section 6.3.1. [District Rule 4311, 6.3.1] Federally Enforceable Through Title V Permit
- 13. NOx emissions in pounds per million BTU shall be determined by using EPA Method 19. NOx and O2 concentrations shall be determined by using EPA Method 3A, EPA Method 7E, or ARB 100. [District Rule 4311, 6.3.2 and 6.3.3] Federally Enforceable Through Title V Permit
- 14. Total hydrocarbon content and methane content of vent gas shall be determined using ASTM Method D 1945-96, ASTM Method UOP 539-97, EPA Method 18, EPA Method 25A or 25B, or an alternative method approved by the APCO, ARB and EPA. Hydrogen sulfide content of vent gas shall be determined using ASTM Method D 1945-96, ASTM Method UOP 539-97, ASTM Method D 4084-94, ASTM Method D 4810-88, or an alternative method approved by the APCO, ARB and EPA. [District Rule 4311, 6.3.4] Federally Enforceable Through Title V Permit
- 15. If vent gas composition is monitored with a continuous analyzer employing gas chromatography the minimum sampling frequency shall be one sample every 30 minutes. If vent gas composition is monitored using continuous analyzers not employing gas chromatography, the total reduced sulfur content of vent gas shall be determined by using EPA Method D4468-85, or an alternative method approved by the APCO, ARB and EPA. [District Rule 4311, 6.3.4] Federally Enforceable Through Title V Permit
- 16. Vent gas flow shall be determined using one of the following: EPA Methods 1 and 2; a verification method recommended by the manufacturer of the flow monitoring equipment; tracer gas dilution or velocity; other flow monitors or process monitors that can provide comparison data on a vent stream that is being directed past the ultrasonic flow meter; or an alternative method approved by the APCO, ARB, and EPA. [District Rule 4311, 6.3.5] Federally Enforceable Through Title V Permit
- 17. The operator shall monitor vent gas composition using one of the five methods pursuant to Section 6.6.1 through Section 6.6.5 in District Rule 4311. [District Rule 4311, 6.6] Federally Enforceable Through Title V Permit
- 18. The operator shall monitor the volumetric flows of purge and pilot gases with flow measuring devices or other parameters as specified on the Permit to Operate so that volumetric flows of pilot and purge gas may be calculated based on pilot design and the parameters monitored. [District Rule 4311, 6.7] Federally Enforceable Through Title V Permit
- 19. The operator of a flare with a water seal shall monitor and record the water level and pressure of the water seal that services each flare daily or as specified on the Permit to Operate. [District Rule 4311, 6.8] Federally Enforceable Through Title V Permit
- 20. Periods of flare monitoring system inoperation greater than 24 continuous hours shall be reported by the following working day, followed by notification of resumption of monitoring. Periods of inoperation of monitoring equipment shall not exceed 14 days per any 18-consecutive-month period. Periods of flare monitoring system inoperation do not include the periods when the system feeding the flare is not operating. [District Rule 4311, 6.9.1] Federally Enforceable Through Title V Permit
- 21. During periods of inoperation of continuous analyzers or auto-samplers installed pursuant to Section 6.6, operators responsible for monitoring shall take one sample within 30 minutes of the commencement of flaring, from the flare header or from an alternate location at which samples are representative of vent gas composition and have samples analyzed pursuant to Section 6.3.4. During periods of inoperation of flow monitors required by Section 5.10, flow shall be calculated using good engineering practices. [District Rule 4311, 6.9.2] Federally Enforceable Through Title V Permit

Facility Name: AERA ENERGY LLC
Location: LIGHT OIL WESTERN STATIONARY SOURCE C

- 22. Permittee shall maintain and calibrate all required monitors and recording devices in accordance with the applicable manufacturer's specifications. In order to claim that a manufacturer's specification is not applicable, the person responsible for emissions must have, and follow, a written maintenance policy that was developed for the device in question. The written policy must explain and justify the difference between the written procedure and the manufacturer's procedure. [District Rule 4311, 6.9.3] Federally Enforceable Through Title V Permit
- 23. All in-line continuous analyzer and flow monitoring data must be continuously recorded by an electronic data acquisition system capable of one-minute averages. Flow monitoring data shall be recorded as one-minute averages. [District Rule 4311, 6.9.4] Federally Enforceable Through Title V Permit
- 24. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101] Federally Enforceable Through Title V Permit
- 25. Components associated with flare and knockout vessel shall be inspected and any detected leaks repaired in accordance with inspection frequencies and repair times established in District Rule 4409. [District Rule 2201] Federally Enforceable Through Title V Permit
- 26. VOC content of gas served by inlet liquid knockout vessel and flare shall not exceed 40% VOC/TOC by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
- 27. Fugitive VOC emissions from components serving the inlet liquid knockout vessel shall not exceed 7.2 lb/day. [District Rule2201] Federally Enforceable Through Title V Permit
- 28. VOC content of gas shall be determined by ASTM D-1945, or equivalent test method with prior District approval. [District Rule 2201] Federally Enforceable Through Title V Permit
- 29. Permittee shall maintain accurate records of fugitive inspection component counts and resultant emissions calculated in accordance with U.S.E.P.A. Protocol for Equipment Leak Emission Estimates (EPA-453/R95-017) Table 2-4 "Oil and Gas Production Operations Average Emission Factors" (November 1995). Permittee shall make records of component counts, and associated emissions, readily available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit
- 30. Formerly S-1512-1

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

Facility Name: AERA ENERGY LLC Location: LIGHT OIL WESTERN STATIONARY SOURCE

**PERMIT UNIT:** S-1548-115-10

**SECTION:** SW04 **TOWNSHIP:** 27S **RANGE:** 21E

**EQUIPMENT DESCRIPTION:** 

450 BHP AJAX DPC450 CLEANBURN IC ENGINE POWERING COMPRESSOR UNIT #5, WITH ASSOCIATE GAS AND CONDENSATE HANDLING EQUIPMENT, INCLUDING SCRUBBER(S), VESSEL(S), COOLER(S), AND LIQUID TRANSFER PUMP(S) (LOST HILLS ONE)

#### PERMIT UNIT REQUIREMENTS

- 1. When this unit is not operated (dormant for Rule 4702) the fuel line shall be physically disconnected from this unit. [District Rule 2080] Federally Enforceable Through Title V Permit
- 2. A source test to demonstrate compliance with NOx, CO and VOC emission limits shall be performed within 60 days of recommencing operation of this unit. [District Rule 4702] Federally Enforceable Through Title V Permit
- 3. Upon seven days written notice to the District this engine may be designated as a dormant emissions unit or an active emissions unit. [District Rule 1070] Federally Enforceable Through Title V Permit
- 4. The engine shall only burn natural gas with a sulfur content of less than or equal to 0.017% by weight. [District NSR Rule] Federally Enforceable Through Title V Permit
- 5. Emissions from IC engine shall not exceed any of the following: NOx (as NO2): 65 ppmv @ 15% O2; VOC: 750 ppmv @ 15% O2; and CO: 2000 ppmv @ 15% O2. [District Rule 4702, 5.1.1 and 2520] Federally Enforceable Through Title V Permit
- 6. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements of SJVUAPCD Rule 4201; 407 (Kern). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
- 7. The engine's oil and filter shall be changed every 4,320 hours of operation or every 12 months, whichever comes first. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- 8. The engine's spark plugs shall be inspected every 4,320 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- 9. The engine's hoses and belts shall be inspected every 4,320 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- 10. The permittee shall operate and maintain IC engine per manufacturer's emission-related instructions or develop and follow a maintenance plan which provides to the extent practicable for the operation and maintenance of the engine in a manner consistent with good practices. [District Rule 4702 and 40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit

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

Facility Name: AERA ENERGY LLC Location: LIGHT OIL WESTERN STATIONARY SOURCE,CA

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- 11. The permittee has the option of utilizing an oil analysis program in order to extend the specified oil change requirement in Tables 2c and 2d of 40 CFR 63 Subpart ZZZZ. The oil analysis must be performed every 4,320 hours of operation or every 12 months, whichever comes first. The analysis program must at a minimum analyze the following three parameters: Total Acid Number, viscosity, and percent water content. The condemning limits for these parameters are as follows: Total Acid Number increases by more than 3.0 milligrams of potassium hydroxide (KOH) per gram from Total Acid Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. If all of these condemning limits are not exceeded, the engine owner or operator is not required to change the oil. If any of the limits are exceeded, the engine owner or operator must change the oil within 2 days of receiving the results of the analysis; if the engine is not in operation when the results of the analysis are received, the engine owner or operator must change the oil within 2 days or before commencing operation, whichever is later. The owner or operator must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- 12. The owner must operate and maintain the engine per the manufacturers emission-related instructions, or develop and follow your own maintenance plan which provides to the extent practicable for the operation and maintenance of the engine in a manner consistent with good practices [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- 13. Formerly S-1512-6 [District Rule 2201] Federally Enforceable Through Title V Permit
- 14. This unit is subject to IC Engine Conditions on the facility wide permit S-1548-0. Deviations from a standard condition shall be reported under the applicable condition in S-1548-0 [District Rule 2520] Federally Enforceable Through Title V Permit

These terms and condition the Facility-wide Permit to Operate.

Facility Name: AERA ENERGY LLC

LIGHT OIL WESTERN STATIONARY SOURCE Location: S-1548-115-10 : Sep 17 2021 8:09AM -- RINALDIR

**PERMIT UNIT:** S-1548-116-10

**SECTION:** SW04 **TOWNSHIP:** 27S RANGE: 21E

**EQUIPMENT DESCRIPTION:** 

450 BHP AJAX DPC450 CLEANBURN I.C. ENGINE POWERING COMPRESSOR UNIT #6 WITH ASSOCIATE GAS AND CONDENSATE HANDLING EQUIPMENT, INCLUDING SCRUBBER(S), VESSEL(S), COOLER(S), AND LIQUID TRANSFER PUMP(S) (LOST HILLS ONE)

#### PERMIT UNIT REQUIREMENTS

- When this unit is not operated (dormant for Rule 4702) the fuel line shall be physically disconnected from this unit. 1. [District Rule 2080] Federally Enforceable Through Title V Permit
- A source test to demonstrate compliance with NOx, CO and VOC emission limits shall be performed within 60 days of recommencing operation of this unit. [District Rule 4702] Federally Enforceable Through Title V Permit
- Upon seven days written notice to the District this engine may be designated as a dormant emissions unit or an active emissions unit. [District Rule 1070] Federally Enforceable Through Title V Permit
- The engine shall only burn natural gas with a sulfur content of less than or equal to 0.017% by weight. [District NSR 4. Rule] Federally Enforceable Through Title V Permit
- Emissions from IC engine shall not exceed any of the following: NOx (as NO2): 65 ppmv @ 15% O2; VOC: 750 ppmy @ 15% O2; and CO: 2000 ppmy @ 15% O2. [District Rule 4702, 5.1.1 and 2520] Federally Enforceable Through Title V Permit
- Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements of SJVUAPCD Rule 4201; 407 (Kern). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
- The engine's oil and filter shall be changed every 4,320 hours of operation or every 12 months, whichever comes first. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- The engine's spark plugs shall be inspected every 4,320 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- The engine's hoses and belts shall be inspected every 4,320 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- 10. The permittee shall operate and maintain IC engine per manufacturer's emission-related instructions or develop and follow a maintenance plan which provides to the extent practicable for the operation and maintenance of the engine in a manner consistent with good practices. [District Rule 4702 and 40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit

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

LIGHT OIL WESTERN STATIONARY SOURCE, CA Location: S-1548-116-10 : Sep 17 2021 8:09AM -- RINALDIR

Facility Name: AERA ENERGY LLC

- 11. The permittee has the option of utilizing an oil analysis program in order to extend the specified oil change requirement in Tables 2c and 2d of 40 CFR 63 Subpart ZZZZ. The oil analysis must be performed every 4,320 hours of operation or every 12 months, whichever comes first. The analysis program must at a minimum analyze the following three parameters: Total Acid Number, viscosity, and percent water content. The condemning limits for these parameters are as follows: Total Acid Number increases by more than 3.0 milligrams of potassium hydroxide (KOH) per gram from Total Acid Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. If all of these condemning limits are not exceeded, the engine owner or operator is not required to change the oil. If any of the limits are exceeded, the engine owner or operator must change the oil within 2 days of receiving the results of the analysis; if the engine is not in operation when the results of the analysis are received, the engine owner or operator must change the oil within 2 days or before commencing operation, whichever is later. The owner or operator must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- 12. The owner must operate and maintain the engine per the manufacturers emission-related instructions, or develop and follow your own maintenance plan which provides to the extent practicable for the operation and maintenance of the engine in a manner consistent with good practices [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- 13. Formerly S-1512-7 [District Rule 2201] Federally Enforceable Through Title V Permit
- 14. This unit is subject to IC Engine Conditions on the facility wide permit S-1548-0. Deviations from a standard condition shall be reported under the applicable condition in S-1548-0 [District Rule 2520] Federally Enforceable Through Title V Permit

Facility Name: AERA ENERGY LLC
Location: LIGHT OIL WESTERN STATIONARY SOURCE
S-1549-116-10: Sep 17 2021 8:09AM -- RINAL DIR

**PERMIT UNIT:** S-1548-120-21

SECTION: NW 4 TOWNSHIP: 27S RANGE: 21E

**EQUIPMENT DESCRIPTION:** 

126,000 GALLON CONE ROOF REJECT OIL TANK F-3005 WITH VAPOR CONTROL COMPRESSOR, COOLERS AND LIQUID KNOCKOUTS, SAND BASIN, ISOLATION VALVE, AND 3.3 MMBTU/HR PERMIT EXEMPT HEATER TREATER

#### PERMIT UNIT REQUIREMENTS

- 1. Total VOC fugitive emission rate from the tank (S-1548-120) and the associated vapor control system shall not exceed 45.2 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
- 2. 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] Federally Enforceable Through Title V Permit
- 3. This vapor control system is shared with permits S-1548-121, -122, -126, -385, -386, -420, and -443 and a permit exempt 3.3 MMBtu/hr heater treater. [District Rule 2201] Federally Enforceable Through Title V Permit
- 4. Permittee shall maintain an accurate fugitive component count and resultant emissions calculated using U.S. EPA Publication 453/R-95-017. [District Rule 2201] Federally Enforceable Through Title V Permit
- 5. Compliance with permit conditions in the Title V permit shall be deemed compliance with SJVUAPCD Rule 4623 (Amended December 17, 1992). A permit shield is granted from these requirements. [District Rule 2520] Federally Enforceable Through Title V Permit
- 6. The requirements of SJVUAPCD Rule 4661 (Amended December 17, 1992), and Rule 4801 (Amended December 17, 1992) do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520] Federally Enforceable Through Title V Permit
- 7. Formerly S-1512-11 [District Rule 2201] Federally Enforceable Through Title V Permit
- 8. LOST HILLS 1 VAPOR RECOVERY CONDITION: This tank shall only vent to a vapor recovery system except during District approved cleaning and maintenance procedures as described in this permit. The vapor recovery system shall be an APCO-approved system consisting of a closed vent system designed to collect VOCs from the storage tank and a VOC control device. The vapor recovery system shall be maintained in a 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 of District Rule 4623 (amended May 19, 2005). [District Rules 2201 and 4623, 5.6.1] Federally Enforceable Through Title V Permit
- 9. LOST HILLS 1 VAPOR RECOVERY CONDITION: The operator shall ensure that the vapor recovery system is functioning as necessary to maintain the vapor recovery pressure below the P/V vent setpoints on the tanks. [District Rule 2201] Federally Enforceable Through Title V Permit
- 10. LOST HILLS 1 VAPOR RECOVERY CONDITION: The tank shall be equipped with a fixed roof with no holes or openings. [District Rule 2201] Federally Enforceable Through-Pitle V Permit

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

Facility Name: AERA ENERGY LLC Location: LIGHT OIL WESTERN STATIONARY SOURCE,CA

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- 11. LOST HILLS 1 VAPOR RECOVERY CONDITION: 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
- 12. LOST HILLS 1 INSPECTION CONDITION: 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
- 13. LOST HILLS 1 INSPECTION CONDITION: 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
- 14. LOST HILLS 1 INSPECTION CONDITION: 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
- 15. LOST HILLS 1 INSPECTION CONDITION: 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
- 16. LOST HILLS 1 INSPECTION CONDITION: 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 permit. 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 permit. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
- 17. LOST HILLS 1 INSPECTION CONDITION: 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 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
- 18. LOST HILLS 1 INSPECTION CONDITION: Any component found to be leaking on two consecutive annual inspections is in violation of this permit, even if covered under the voluntary inspection and maintenance program. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
- 19. LOST HILLS 1 INSPECTION CONDITION: Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date of leak detection, and method of detection; 3) Date and emission level of recheck after leak is repaired. [District Rule 2201] Federally Enforceable Through Title V Permit
- 20. LOST HILLS 1 CLEANING CONDITION: This permit authorizes tank cleaning that is not the result of breakdowns or poor maintenance as a routine maintenance activity. [District Rules 2020 and 2080] Federally Enforceable Through Title V Permit

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

Facility Name: AERA ENERGY LLC

Location: LIGHT OIL WESTERN STATIONARY SOURCE S-1548-120-21: Sep 17 2021 8:09AM -- RINALDIR

- 21. LOST HILLS 1 CLEANING CONDITION: Permittee shall notify the APCO in writing at least three (3) days for fixed roof tanks and one (1) day for pressure vessels (as defined in Rule 4623) prior to performing degassing and interior cleaning activities. Written notification shall include the following: 1) the Permit to Operate number and physical location of the vessel being degassed, 2) the date and time that vessel 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 vessel, 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
- 22. LOST HILLS 1 CLEANING CONDITION: Excluding pressure vessels as defined in Rule 4623, tank/vessel shall be degassed before commencing interior cleaning or maintenance by one of the following: 1) exhausting VOCs contained in the 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 vapor space to an APCO-approved vapor recovery system by filling the vessel with a suitable liquid until 90 percent or more of the maximum operating level 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 vapor space to an APCO-approved vapor recovery system by filling the vessel with a suitable gas. Degassing shall continue until the operator has achieved a vapor displacement equivalent to at least 2.3 times the vessel 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
- 23. LOST HILLS 1 CLEANING CONDITION: Pressure vessel (as defined in Rule 4623) shall be degassed before commencing interior cleaning or maintenance by one of the following: 1) Prior to venting the vessel to the atmosphere, operate the vapor recovery system/vapor control device for at least 24 hours such that it collects the vapors; or 2) use liquid displacement, conducted using a liquid with a TVP less than 0.5 psia, or conducted by floating the oil pad off by restricting the outflow of water, such that 90% of the vessel volume is displaced; or 3) depressurize vessel to the onsite flare until the vessel reaches atmospheric pressure. [District Rule 2080] Federally Enforceable Through Title V Permit
- 24. LOST HILLS 1 CLEANING CONDITION: During tank degassing, the operator shall discharge or displace organic vapors contained in the vessel vapor space to an APCO-approved vapor recovery system. [District Rule 4623] Federally Enforceable Through Title V Permit
- 25. LOST HILLS 1 CLEANING CONDITION: To facilitate connection to an external APCO-approved recovery system, a suitable vessel 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
- 26. LOST HILLS 1 CLEANING CONDITION: After a tank/vessel has been degassed pursuant to the requirements of this permit, vapor control requirements are not applicable until an organic liquid having a TVP of 0.5 psia or greater is placed, held, or stored in the tank/vessel. [District Rule 4623] Federally Enforceable Through Title V Permit
- 27. LOST HILLS 1 CLEANING CONDITION: While performing interior 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
- 28. LOST HILLS 1 CLEANING CONDITION: 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
- 29. LOST HILLS 1 CLEANING CONDITION: If the tank is holding organic liquids with 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%. Pressure vessels (as defined in Rule 4623) are excluded from this condition. [District Rule 4623] Federally Enforceable Through Title V Permit

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

Facility Name: AERA ENERGY LLC

LIGHT OIL WESTERN STATIONARY SOURCE,C Location:

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- 30. LOST HILLS 1 CLEANING CONDITION: If the tank is holding organic liquids with a TVP of 1.5 psia or greater then permittee shall only transport removed sludge in closed, liquid leak-free containers. Pressure vessels (as defined in Rule 4623) are excluded from this condition. [District Rule 4623] Federally Enforceable Through Title V Permit
- 31. LOST HILLS 1 CLEANING CONDITION: If the tank is holding organic liquids with a TVP of 1.5 psia or greater then permittee 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. Pressure vessels (as defined in Rule 4623) are excluded from this condition. [District Rule 2020 and 4623] Federally Enforceable Through Title V Permit
- 32. LOST HILLS 1 CLEANING CONDITION: Permittee shall maintain records of each period of cleaning and maintenance when the vessel is disconnected or isolated from the vapor control system. Records shall include the date that cleaning was initiated, the date cleaning was completed, the procedure used to vent vapors prior to opening, and a description of internal and external repairs and maintenance performed. [District Rule 2080] Federally Enforceable Through Title V Permit

These terms and condition the Facility-wide Permit to Operate.

Facility Name: AERA ENERGY LLC

LIGHT OIL WESTERN STATIONARY SOURCE Location: S-1548-120-21 : Sep 17 2021 8:09AM -- RINALDIR

**PERMIT UNIT:** S-1548-121-11

**SECTION:** NW 4 **TOWNSHIP:** 27S **RANGE:** 21E

**EQUIPMENT DESCRIPTION:** 

126,000 GALLON FIXED CONE ROOF LACT TANK WITH ISOLATION VALVE VENTED TO VAPOR CONTROL SYSTEM LISTED ON PERMIT S-1548-120:

### PERMIT UNIT REQUIREMENTS

- 1. VOC fugitive emissions from the components in gas service on the tank and tank vapor collection piping shall not exceed 8.9 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
- 2. 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 40 CFR 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
- 3. Compliance with permit conditions in the Title V permit shall be deemed compliance with SJVUAPCD Rule 4623 (Amended December 17, 1992). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
- 4. Permittee shall maintain an accurate fugitive component count and resultant emissions calculated using U.S. EPA Publication 453/R-95-017, or other factors approved by the District. [District Rule 2201] Federally Enforceable Through Title V Permit
- 5. Formerly S-1512-12 [District Rule 2201] Federally Enforceable Through Title V Permit
- 6. This unit is subject to the Lost Hills 1 Dehy Vapor Recovery, Inspection, and Tank Cleaning Conditions on Permit S-1548-120. Deviations from a standard condition shall be reported under the applicable condition in S-1548-120. [District Rule 2520] Federally Enforceable Through Title V Permit

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

Facility Name: AERA ENERGY LLC Location: LIGHT OIL WESTERN STATIONARY SOURCE,CA \$1548-121-11: Sep 17:021 R099M = RINAI DIR

**PERMIT UNIT:** S-1548-122-11

SECTION: 04 TOWNSHIP: 27S RANGE: 21E

**EQUIPMENT DESCRIPTION:** 

24,300 GALLON (10 FT. DIA BY 40 FT. LONG SHELL) FREE WATER KNOCKOUT VESSEL V-3002 WITH VAPOR PIPING TO VAPOR CONTROL SYSTEM LISTED ON PERMIT S-1548-120:

### PERMIT UNIT REQUIREMENTS

1. Formerly S-1512-13 [District Rule 2201] Federally Enforceable Through Title V Permit

2. This unit is subject to the Lost Hills 1 Dehy Vapor Recovery, Inspection, and Tank Cleaning Conditions on Permit S-1548-120. Deviations from a standard condition shall be reported under the applicable condition in S-1548-120. [District Rule 2520] Federally Enforceable Through Title V Permit

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

Facility Name: AERA ENERGY LLC Location: LIGHT OIL WESTERN STATIONARY SOURCE,CA

S-1548-122-11 : Sep 17 2021 8:09AM -- RINALDIR

**PERMIT UNIT:** S-1548-126-10

SECTION: 04 TOWNSHIP: 27S RANGE: 21E

**EQUIPMENT DESCRIPTION:** 

126,000 GALLON FIXED ROOF CONE BOTTOM CLARIFIER TANK VENTED TO VAPOR CONTROL SYSTEM LISTED ON S-1548-120:

### PERMIT UNIT REQUIREMENTS

- 1. 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 40 CFR 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
- 2. Compliance with permit conditions in the Title V permit shall be deemed compliance with SJVUAPCD Rule 4623 (Amended December 17, 1992). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
- 3. Formerly S-1512-18 [District Rule 2201] Federally Enforceable Through Title V Permit
- 4. This unit is subject to the Lost Hills 1 Dehy Vapor Recovery, Inspection, and Tank Cleaning Conditions on Permit S-1548-120. Deviations from a standard condition shall be reported under the applicable condition in S-1548-120. [District Rule 2520] Federally Enforceable Through Title V Permit

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

Facility Name: AERA ENERGY LLC Location: LIGHT OIL WESTERN STATIONARY SOURCE,CA

S-1548-126-10 : Sep 17 2021 8:09AM -- RINALDIR

**PERMIT UNIT:** S-1548-134-12

**SECTION:** NW02 **TOWNSHIP:** 29S RANGE: 21E

**EQUIPMENT DESCRIPTION:** 625 MMBTU/HR LIMITED USE FLARE

### PERMIT UNIT REQUIREMENTS

- No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark, as, or darker than, Ringlemann 1/4 or 5% opacity. [District Rule 2201] Federally Enforceable Through Title V Permit
- Emission rates from flare (lb/day and lb/yr demonstrated by compliance with flared volumes of combustion gas) shall not exceed any of the following: PM10: 0.008 lb/MMBtu (120.0 lb/day, 713 lb/yr), NOx (as NO2): 0.068 lb/MMBtu (1020.0 lb/day, 6063 lb/yr), VOC: 0.063 lb/MMBtu (945.0 lb/day, 5617 lb/yr), CO: 0.37 lb/MMBtu (5550.0 lb/day, 32,989 lb/yr). [District NSR Rule] Federally Enforceable Through Title V Permit
- SOx emissions shall not exceed 1089.2 lb/day nor 6,474 lb/yr. [District Rule 2201] Federally Enforceable Through Title V Permit
- Flare shall be equipped with two automatic, electronic pilots (model KEP-100 or equivalent) and gas flow detector for startup of automatic ignitors. [District Rules 2201 and 4311] Federally Enforceable Through Title V Permit
- 5. Flare shall use purge gas for purging. [District Rule 4311] Federally Enforceable Through Title V Permit
- Flare inlet pressure shall be no less than 6 psig. [District Rules 2201 and 4311] Federally Enforceable Through Title V 6. Permit
- 7. Total quantity of produced gas combusted in flare shall not exceed 89,160 mscf/yr. [District Rule 2201] Federally Enforceable Through Title V Permit
- Flare shall be equipped with operational produced gas volume flow meter. [District Rule 2201] Federally Enforceable Through Title V Permit
- Permittee shall measure and record produced gas sulfur content and calculate SO2 emissions at least annually. [District Rule 2201] Federally Enforceable Through Title V Permit
- 10. The gas sulfur content of combustion gas, purge gas, and pilot gas shall be determined using double GC for H2S and mercaptans or any of ASTM test methods D-1072, D-3246, D-4346, or D-6228 or by the gas/propane supplier. [District Rule 1081] Federally Enforceable Through Title V Permit
- 11. Each quarter in which the flare is operated for three (3) hours or more, the permittee shall perform a visible emissions inspection using either EPA Method 22 or EPA Method 9. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
- 12. Permittee shall keep accurate daily and annual records of flare gas volumes, sulfur content, higher heating value of flared gas, and calculated SOx emissions in units of lb/day and lb/yr, and such records shall be retained for a period of 5 years and be made readily available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit

These terms and conditions e Facility-wide Permit to Operate.

Facility Name: AERA ENERGY LLC LIGHT OIL WESTERN STATIONARY SOURCE, CA

Location: S-1548-134-12 : Sep 17 2021 8:09AM -- RINAL DIR

**PERMIT UNIT:** S-1548-140-10

SECTION: SE35 TOWNSHIP: 27S RANGE: 20E

**EQUIPMENT DESCRIPTION:** 

THREE 800 HP ELECTRIC MOTOR DRIVEN FUEL GAS COMPRESSORS, EACH WITH A FUEL GAS & A SURGE DRUM AND ASSOCIATED PIPING (COMPRESSOR STATION #49)

### PERMIT UNIT REQUIREMENTS

- VOC emissions shall not exceed 22.0 pounds per day. [District Rule 2201] Federally Enforceable Through Title V
  Permit
- 2. Permittee shall demonstrate and maintain records of compliance with daily VOC emission limit on annual basis by listing equipment type, number of components, appropriate emission factors from Table 2-4 of the U.S. EPA document "Protocol for Equipment Leak Emission Estimates (EPA-453/R-95-017)" or other District approved emission factors, and the total daily emissions. [District Rule 2201] Federally Enforceable Through Title V Permit
- 3. All records shall be maintained and retained on-site for a period of at least 5 years and shall be made available for District inspection upon request. [District Rule 1070]

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

Facility Name: AERA ENERGY LLC Location: LIGHT OIL WESTERN STATIONARY SOURCE,CA

S-1548-140-10 : Sep 17 2021 8:09AM -- RINALDIR

**PERMIT UNIT:** S-1548-143-7

SECTION: SW28 TOWNSHIP: 28S RANGE: 21E

**EQUIPMENT DESCRIPTION:** 

2,730,000 GALLON FIXED ROOF CRUDE OIL STORAGE TANK T-470 (ALSO PERMITTED AS S-1547-384 IN THE HEAVY OIL SS) WITH SHARED VAPOR RECOVERY SYSTEM DESCRIBED ON S-1548-45

IN SHARED VAPOR RECOVERT STSTEW DESCRIBED ON 3-1340-43

### PERMIT UNIT REQUIREMENTS

- 1. The tank shall be equipped with a vapor recovery system consisting of a closed system that collects VOCs from the storage tank. [District Rule 4623, 5.1] 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, 5.1.3] Federally Enforceable Through Title V Permit
- 3. A 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 reading in excess of 10,000 ppmv above background is a violation of this permit and Rule 4623 and shall be reported as a deviation. [District Rule 4623, 3.11 and 6.4.8] Federally Enforceable Through Title V Permit
- 4. Any vessel gauging or sampling device on a vessel 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, 5.6.2] Federally Enforceable Through Title V Permit
- 5. All piping, fittings, and valves on this vessel associated with the vapor recovery system shall be inspected annually by the facility operator in accordance with EPA Method 21, with the instrument calibrated with methane, to ensure compliance with the leaking provisions of this permit. [District Rule 4623, 5.7 (Table 3)] Federally Enforceable Through Title V Permit
- 6. If any of the vessel components are found to be leaking, operator shall immediately affix a tag and maintain records of gas leak detection readings, date/time leak was discovered, and date/time the component was repaired to a leak-free condition [District Rule 4623, 5.7 (Table 3)] Federally Enforceable Through Title V Permit
- 7. Upon detection of any leaking components (having a gas leak > 10,000 ppmv, measured in accordance with EPA Method 21 by a portable hydrocarbon detection instrument that is calibrated with methane), the operator shall: a. Eliminate the leak within 8 hours after detection; or b. If the leak can not be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices; and c. Eliminate the leak within 48 hours after minimization; and d. In no event that the total time to minimize and eliminate the leak shall exceed 56 hours after detection. [District Rule 4623, 5.7 (Table 3)] Federally Enforceable Through Title V Permit
- 8. Leaking components that have been discovered by the operator that have been immediately tagged and repaired within the deadlines specified in the Emissions Minimization requirements, shall not constitute a violation of this rule and does not have to be reported as a deviation. However, leaking components discovered during inspections by District staff that were not previously identified and/or tagged by the operator, and/or any leaks that were not repaired within deadlines specified in the Emissions Minimization requirements, shall constitute a violation of this rule or permit and has to be reported as a deviation. [District Rule 4623, 5.7 (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: AERA ENERGY LLC Location: LIGHT OIL WESTERN STATIONARY SOURCE,CA

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- If a component type for a given vessel is found to leak above the leak free standard during an annual inspection, then quarterly inspections of that component type on the vessel or system shall be conducted for four consecutive quarters. After four successful quarterly inspections in which the component type is found to be leak free (<10,000 ppmv), inspections interval may revert to annual. [District Rule 4623, 5.7 (Table 3)] Federally Enforceable Through Title V Permit
- 10. Any component found to be leaking above the leak free standard on two consecutive annual inspections is considered a violation, even if it is under the voluntary inspection and maintenance program. [District Rule 4623, 5.7 (Table 3)] Federally Enforceable Through Title V Permit
- 11. Permittee shall notify the APCO in writing at least three (3) days prior to performing vessel degassing and interior vessel cleaning activities. Written notification shall include the following: 1) the Permit to Operate number and physical location of the vessel being degassed, 2) the date and time that vessel 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 vessel, 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, 5.7.5.1] Federally Enforceable Through Title V Permit
- 12. This vessel shall be degassed before commencing interior cleaning by one of the following: 1) exhausting VOCs contained in the vessel vapor space to an APCO-approved vapor recovery system until the organic vapor concentration is 5,000 ppmy 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 vessel vapor space to an APCO-approved vapor recovery system by filling the vessel with a suitable liquid until 90 percent or more of the maximum operating level of the vessel 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 vessel vapor space to an APCO-approved vapor recovery system by filling the vessel with a suitable gas. Degassing shall continue until the operator has achieved a vapor displacement equivalent to at least 2.3 times the vessel capacity. Suitable gases are air, nitrogen, carbon dioxide, or natural gas containing less than 10 percent VOC by weight. [District Rule 4623, 5.7.5.4] Federally Enforceable Through Title V Permit
- 13. During vessel degassing, the operator shall discharge or displace organic vapors contained in the vessel vapor space to an APCO-approved vapor recovery system. [District Rule 4623, 5.7.5.4.5] Federally Enforceable Through Title V Permit
- 14. To facilitate connection to an external APCO-approved recovery system, a suitable vessel fitting, such as a manway, may be temporarily removed for a period of time not to exceed 1 hour. [District Rule 4623, 5.7.5.4.6] Federally Enforceable Through Title V Permit
- 15. This vessel shall be in compliance with the applicable requirements of District Rule 4623 at all times during draining, degassing, and refilling the tank with an organic liquid having a TVP of 0.5 psia or greater. [District Rule 4623, 5.7.5.4.7] Federally Enforceable Through Title V Permit
- 16. After a tank has been degassed pursuant to the requirements of this permit, vapor control requirements are not applicable until an organic liquid having a TVP of 0.5 psia or greater is placed, held, or stored in this vessel. [District Rule 4623, 5.7.5.4.10] Federally Enforceable Through Title V Permit
- 17. While performing vessel 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, 5.7.5.5.1] Federally Enforceable Through Title V Permit
- 18. 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, 5.7.5.5.2] Federally Enforceable Through Title V Permit
- 19. During sludge removal, the operator shall control emissions from the sludge receiving vessel by operating an APCOapproved vapor control device that reduces emissions of organic vapors by at least 95%. [District Rule 4623, 5.7.5.6.1] Federally Enforceable Through Title V Permit

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

Facility Name: AERA ENERGY LLC LIGHT OIL WESTERN STATIONARY SOURCE CA

Location: S-1548-143-7 : Sep 17 2021 8:09AM -- RINAL DIE

- 20. Permittee shall only transport removed sludge in closed, liquid leak-free containers. [District Rule 4623, 5.7.5.6.2] Federally Enforceable Through Title V Permit
- 21. Permittee 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, 5.7.5.6.3] Federally Enforceable Through Title V Permit
- 22. The efficiency of any VOC destruction device shall be measured by EPA Method 18, 25, 25a, or 25b, and analysis of halogenated exempt compounds shall be analyzed by ARB Method 422. [District Rule 4623, 6.2.5] Federally Enforceable Through Title V Permit
- 23. The tank shall be equipped with a fixed roof with no holes or openings. [District NSR Rule] Federally Enforceable Through Title V Permit
- 24. Fugitive VOC emissions from components associated with vapor recovery system shared between this permit unit and permit unit S-1548-45 shall not exceed 59.0 lb/day. [District NSR Rule] Federally Enforceable Through Title V Permit
- 25. Permittee shall maintain with the permit accurate fugitive component count and resultant emissions calculated using U.S. EPA Publication 453/R-95-017, Table 2-4. [District NSR Rule] Federally Enforceable Through Title V Permit
- 26. Tank vapors shall only vent through vapor collection system shared with S-1548-45. [District NSR Rule] Federally Enforceable Through Title V Permit
- 27. Tank shall be equipped with an operational stored liquid temperature indicator. [District Rule 2010] Federally Enforceable Through Title V Permit
- 28. Permittee shall maintain accurate records of liquid temperature and Reid vapor pressure. Such records shall be made readily available for District inspection upon request for a period of five years. [District NSR Rule, 2520, 9.4.2 and 4623] Federally Enforceable Through Title V Permit
- 29. Vapor control efficiency shall be maintained at no less than 99%. [District NSR Rule] Federally Enforceable Through Title V Permit
- 30. 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
- 31. The operator of a fixed roof tank shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

Facility Name: AERA ENERGY LLC
Location: LIGHT OIL WESTERN STATIONARY SOURCE
S-1548-143-7: Sep 17 2021 8 0994M - RINAL DIR

**PERMIT UNIT:** S-1548-148-15

SECTION: NW20 TOWNSHIP: 28S RANGE: 21E

**EQUIPMENT DESCRIPTION:** 

40.000 BBL FIXED ROOF STORAGE TANK #T211 WITH VAPOR CONTROL COMPRESSOR(S), COOLER(S), LIQUID KNOCKOUT(S) & PIPING TO FIELD GAS SYSTEM OR AIR ASSISTED KALDAIR FLARE W/PLA-18 FLARE TIP - DEHY

### PERMIT UNIT REQUIREMENTS

- Vapor control system shall consist of vapor piping from vessels and tanks S-1548-148, '149, '418, '419, '428, '429, 1. '439, '440, '441, '442, '463, '476, and '-478 through '-484, '486 through '489, '497, '498, '501, '503, '504 and '505. [District Rule 2201] Federally Enforceable Through Title V Permit
- Except during maintenance activities and power outages, operator shall continuously monitor the discharge pressure of the vapor recovery system to ensure its proper operation. The monitoring system shall be programmed to alarm the operator when the discharge pressure increases to where the flare activates. [District Rule 2201 and 40 CFR 60.113b(c)(1)(ii)] Federally Enforceable Through Title V Permit
- Drain valves shall only drain into covered containers which shall be emptied into tanks with vapor control systems. [District Rule 2201] Federally Enforceable Through Title V Permit
- Permittee shall maintain an accurate fugitive component count and resultant emissions calculated using U.S. EPA Publication 453/R-95-017, or other factors approved by the district. [District Rule 2201] Federally Enforceable Through Title V Permit
- Total VOC emission rate from S-1548-148 (excluding the flare), S-1548-149, S-1548-428, S-1548-429, S-1548-439, S-1548-440, S-1548-441, and S-1548-442 shall not exceed 140.4 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
- Collected vapors shall be compressed to the field gas system or incinerated in the flare. [District Rule 2201] Federally Enforceable Through Title V Permit
- The requirements of SJVUAPCD Rule 4661 (Amended December 17, 1992), and Rule 4801 (Amended December 17, 7. 1992) 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
- Flare shall be operated with a flame present at all times. Presence of a flame shall be monitored using a thermocouple or equivalent device. Kaldair Inc.'s KEP-100 Ignition System is an approved monitoring device. [District Rule 4001 and 4311] Federally Enforceable Through Title V Permit
- Flare pilot fuel shall be LPG or natural gas with sulfur content less than 0.75 grains/100 scf. [District NSR Rule] Federally Enforceable Through Title V Permit
- 10. Records shall be maintained of all periods when the flare pilot flame is absent. [District Rule 40CFR 60.115(d)(2)] Federally Enforceable Through Title V Permit
- 11. Semi-annual reports of all periods without the presence of a flare pilot flame shall be furnished to the District Compliance Division and EPA. [District Rule 4001 40CFR-60.115b(d)(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.

LIGHT OIL WESTERN STATIONARY SOURCE, CA Location:

Facility Name: AERA ENERGY LLC

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- 12. Flare air-assist blower shall be maintained and operated for smokeless combustion, i.e. no visible emissions in excess of 5% opacity or 1/4 Ringelmann except for periods not to exceed a total of 5 minutes during any 2 consecutive hours. [District Rules 2201 and 4001] Federally Enforceable Through Title V Permit
- 13. Flare shall be equipped with flare gas volume flowmeter. [District Rule 2201] Federally Enforceable Through Title V Permit
- 14. Net heating value of the gas being combusted by flare shall be 300 Btu/scf or greater. [District Rule 4001 and 4311] Federally Enforceable Through Title V Permit
- 15. Total sulfur concentration of gas incinerated in flare shall not exceed 2000 ppmv. [District Rules 2201 and 4801] Federally Enforceable Through Title V Permit
- 16. Maximum amount of gas combusted shall not exceed any of the following: 5,000,000 scf/day, 25 MMscf/quarter, 100 MMscf/year. [District Rule 2201] Federally Enforceable Through Title V Permit
- 17. Emissions from the flare shall not exceed any of the following (based on total gas combusted): PM-10: 0.008 lb/MMBtu; NOx (as NO2): 0.068 lb/MMBtu; VOC: 0.063 lb/MMBtu; or CO: 0.37 lb/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
- 18. Permittee shall measure sulfur content of gas incinerated in flare at least once every year. Such data shall be submitted to the District within 60 days of sample collection. [District Rules 2201 and 4801] Federally Enforceable Through Title V Permit
- 19. Permittee shall keep accurate records of daily, quarterly, and annual quantity of gas combusted. Such records shall be retained for a period of five years and made readily available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit
- 20. A trained observer, as defined in EPA Method 22, shall check visible emissions at least once annually for a period of 15 minutes. If visible emissions are detected at any time during this period, the observation period shall be extended to two hours. A record containing the results of these observations shall be maintained, which also includes company name, process unit, observer's name and affiliation, date, estimated wind speed and direction, sky condition, and the observer's location relative to the source and sun. [District Rules 2201 and 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 21. The outlet shall be equipped with an automatic ignition system, or, shall be operated 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, 5.3] Federally Enforceable Through Title V Permit
- 22. 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, 5.4] Federally Enforceable Through Title V Permit
- 23. 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, 5.5] Federally Enforceable Through Title V Permit
- 24. Flaring is prohibited unless it is consistent with an approved flare minimization plan (FMP), pursuant to District Rule 4311 Section 6.5 and all commitments listed in that plan have been met. [District Rule 4311, 5.8] Federally Enforceable Through Title V Permit
- 25. Permittee shall maintain copies of the compliance determination conducted pursuant to Section 6.4.1, copies of the source testing result conducted pursuant to Section 6.4.2, effective on and after July 1, 2011, a copy of the approved flare minimization plan pursuant to Section 6.5, effective on and after July 1, 2012, a copy of annual reports submitted to the APCO pursuant to Section 6.2 and effective on and after July 1, 2011, monitoring data collected pursuant to Sections 5.10, 6.6, 6.7. 6.8, 6.9 and 6.10. [District Rule 4311, 6.1] Federally Enforceable Through Title V Permit
- 26. All records shall be maintained, retained on-site for a minimum of five years, and made available to the APCO, ARB, and EPA upon request. [District Rule 4311, 6.1] Federally Enforceable Through Title V Permit

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

Facility Name: AERA ENERGY LLC

- 27. 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, 6.2.1] Federally Enforceable Through Title V Permit
- 28. Effective on and after July 1, 2012, and annually thereafter, the operator shall submit an annual report to the APCO that summarizes all Reportable Flaring Events that occurred during the previous 12 month period. The report shall be submitted within 30 days following the end of the twelve month period of the previous year and shall include: 1) the results of an investigation to determine the primary cause and contributing factors of the flaring event; 2) Any prevention measures considered or implemented to prevent recurrence together with a justification for rejecting any measures that were considered but not implemented; 3) If appropriate, an explanation of why the flaring was an emergency and necessary to prevent accident, hazard or release of vent gas to the atmosphere, or where, due to a regulatory mandate to vent a flare, it cannot be recovered, treated and used as a fuel gas at the facility; and 4) The date, time and duration of the flaring event. [District Rule 4311, 6.2.2] Federally Enforceable Through Title V Permit
- 29. Effective on and after July 1, 2012, and annually thereafter, the operator shall submit an annual report to the APCO within 30 days following the end of each 12 month period include: 1) The total volumetric flow of vent gas in standard cubic feet for each day; 2) Hydrogen sulfide content, methane content, and hydrocarbon content of vent gas composition pursuant to Section 6.6; 3) If vent gas composition is monitored by a continuous analyzer or analyzers pursuant to Section 5.11, average total hydrocarbon content by volume, average methane content by volume, and depending upon the analytical method used pursuant to Section 6.3.4, total reduced sulfur content by volume or hydrogen sulfide content by volume of vent gas flared for each hour of the month; 4) If the flow monitor used pursuant to Section 5.10 measures molecular weight, the average molecular weight for each hour of each month; 5) For any pilot and purge gas used, the type of gas used, the volumetric flow for each day and for each month, and the means used to determine flow; 6) Flare monitoring system downtime periods, including dates and times; 7) For each day and for each month provide calculated sulfur dioxide emissions; 8) A flow verification report for each flare subject to this rule. The flow verification report shall include flow verification testing pursuant to Section 6.3.5. [District Rule 4311, 6.2.3] Federally Enforceable Through Title V Permit
- 30. Total hydrocarbon content and methane content of vent gas shall be determined using ASTM Method D 1945-96, ASTM Method UOP 539-97, EPA Method 18, EPA Method 25A or 25B, or an alternative method approved by the APCO, ARB and EPA. Hydrogen sulfide content of vent gas shall be determined using ASTM Method D 1945-96, ASTM Method UOP 539-97, ASTM Method D 4084-94, ASTM Method D 4810-88, or an alternative method approved by the APCO, ARB and EPA. [District Rule 4311, 6.3.4] Federally Enforceable Through Title V Permit
- 31. Vent gas flow shall be determined using one of the following: EPA Methods 1 and 2; a verification method recommended by the manufacturer of the flow monitoring equipment; tracer gas dilution or velocity; other flow monitors or process monitors that can provide comparison data on a vent stream that is being directed past the ultrasonic flow meter; or an alternative method approved by the APCO, ARB, and EPA. [District Rule 4311, 6.3.5] Federally Enforceable Through Title V Permit
- 32. Every five years after the initial FMP submittal, the operator shall submit an updated FMP for each flare to the APCO for approval. The current FMP shall remain in effect until the updated FMP is approved by the APCO. If the operator fails to submit an updated FMP as required by this section, the existing FMP shall no longer be considered an approved plan. [District Rule 4311, 6.5.2] Federally Enforceable Through Title V Permit
- 33. An updated FMP shall be submitted by the operator addressing new or modified equipment, prior to installing the equipment only if: 1) The equipment change would require an Authority To Construct (ATC) and would impact the emissions for the flare; 2) The ATC is deemed complete after June 18, 2009; 3) The modification is not solely the removal or decommissioning of equipment that is listed in the FMP and has no associated increase in flare emissions. [District Rule 4311, 6.5.3] Federally Enforceable Through Title V Permit
- 34. When submitting the initial FMP, or updated FMP, the operator shall designate as confidential any information claimed to be exempt from public disclosure under the California Public Records Act, Government Code Section 6250 et seq. and provide a justification for this designation and also submit a separate copy of the document with the information designated confidential redacted. [District Rule 4311, 6.5.4] Federally Enforceable Through Title V Permit

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- 35. The operator shall monitor vent gas composition using one of the five methods pursuant to Section 6.6.1 through Section 6.6.5 in District Rule 4311. [District Rule 4311, 6.6] Federally Enforceable Through Title V Permit
- 36. The operator shall monitor the volumetric flows of purge and pilot gases with flow measuring devices or other parameters as specified on the Permit to Operate so that volumetric flows of pilot and purge gas may be calculated based on pilot design and the parameters monitored. [District Rule 4311, 6.7] Federally Enforceable Through Title V Permit
- 37. Periods of flare monitoring system inoperation greater than 24 continuous hours shall be reported by the following working day, followed by notification of resumption of monitoring. Periods of inoperation of monitoring equipment shall not exceed 14 days per any 18-consecutive-month period. Periods of flare monitoring system inoperation do not include the periods when the system feeding the flare is not operating. [District Rule 4311, 6.9.1] Federally Enforceable Through Title V Permit
- 38. During periods of inoperation of continuous analyzers or auto-samplers installed pursuant to Section 6.6, operators responsible for monitoring shall take one sample within 30 minutes of the commencement of flaring, from the flare header or from an alternate location at which samples are representative of vent gas composition and have samples analyzed pursuant to Section 6.3.4. During periods of inoperation of flow monitors required by Section 5.10, flow shall be calculated using good engineering practices. [District Rule 4311, 6.9.2] Federally Enforceable Through Title V Permit
- 39. Permittee shall maintain and calibrate all required monitors and recording devices in accordance with the applicable manufacturer's specifications. In order to claim that a manufacturer's specification is not applicable, the person responsible for emissions must have, and follow, a written maintenance policy that was developed for the device in question. The written policy must explain and justify the difference between the written procedure and the manufacturer's procedure. [District Rule 4311, 6.9.3] Federally Enforceable Through Title V Permit
- 40. DEHY 20 VAPOR RECOVERY CONDITION: This tank shall only vent to a vapor recovery system except during District approved cleaning and maintenance procedures as described in this permit. The vapor recovery system shall be an APCO-approved system consisting of a closed vent system designed to collect VOCs from the storage tank and a VOC control device. The vapor recovery system shall be maintained in a 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 of District Rule 4623 (amended May 19, 2005). [District Rules 2201 and 4623, 5.6.1] Federally Enforceable Through Title V Permit
- 41. DEHY 20 VAPOR RECOVERY CONDITION: The operator shall ensure that the vapor recovery system is functioning as necessary to maintain the vapor recovery pressure below the P/V vent setpoints on the tanks. [District Rule 2201] Federally Enforceable Through Title V Permit
- 42. DEHY 20 VAPOR RECOVERY CONDITION: The tank shall be equipped with a fixed roof with no holes or openings. [District Rule 2201] Federally Enforceable Through Title V Permit
- 43. DEHY 20 VAPOR RECOVERY CONDITION: 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, 5.6.2] Federally Enforceable Through Title V Permit
- 44. DEHY 20 INSPECTION CONDITION: 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
- 45. DEHY 20 INSPECTION CONDITION: 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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- 46. DEHY 20 INSPECTION CONDITION: Upon detection of a gas leak, defined as a VOC concentration of greater than 10,000 ppmy 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
- 47. DEHY 20 INSPECTION CONDITION: 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
- 48. DEHY 20 INSPECTION CONDITION: 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 permit. 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 permit. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
- 49. DEHY 20 INSPECTION CONDITION: 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 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
- 50. DEHY 20 INSPECTION CONDITION: Any component found to be leaking on two consecutive annual inspections is in violation of this permit, even if covered under the voluntary inspection and maintenance program. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
- 51. DEHY 20 INSPECTION CONDITION: Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date of leak detection, and method of detection; 3) Date and emission level of recheck after leak is repaired. [District Rule 2201] Federally Enforceable Through Title V Permit
- 52. DEHY 20 CLEANING CONDITION: This permit authorizes tank cleaning that is not the result of breakdowns or poor maintenance as a routine maintenance activity. [District Rules 2020 and 2080] Federally Enforceable Through Title V Permit
- 53. DEHY 20 CLEANING CONDITION: Permittee shall notify the APCO in writing at least three (3) days for fixed roof tanks and one (1) day for pressure vessels (as defined in Rule 4623) prior to performing degassing and interior cleaning activities. Written notification shall include the following: 1) the Permit to Operate number and physical location of the vessel being degassed, 2) the date and time that vessel 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 vessel, 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, 5.7.5.1] Federally Enforceable Through Title V Permit
- 54. DEHY 20 CLEANING CONDITION: Excluding pressure vessels as defined in Rule 4623, tank/vessel shall be degassed before commencing interior cleaning or maintenance by one of the following: 1) exhausting VOCs contained in the 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 vapor space to an APCO-approved vapor recovery system by filling the vessel with a suitable liquid until 90 percent or more of the maximum operating level 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 vapor space to an APCO-approved vapor recovery system by filling the vessel with a suitable gas. Degassing shall continue until the operator has achieved a vapor displacement equivalent to at least 2.3 times the vessel capacity. Suitable gases are air, nitrogen, carbon dioxide, or natural gas containing less than 10 percent VOC by weight. [District Rule 4623, 5.7.5.4] Federally Enforceable Through Title V Permit

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- 55. DEHY 20 CLEANING CONDITION: Pressure vessel (as defined in Rule 4623) shall be degassed before commencing interior cleaning or maintenance by one of the following: 1) Prior to venting the vessel to the atmosphere, operate the vapor recovery system/vapor control device for at least 24 hours such that it collects the vapors; or 2) use liquid displacement, conducted using a liquid with a TVP less than 0.5 psia, or conducted by floating the oil pad off by restricting the outflow of water, such that 90% of the vessel volume is displaced; or 3) depressurize vessel to the onsite flare until the vessel reaches atmospheric pressure. [District Rule 2080] Federally Enforceable Through Title V Permit
- 56. DEHY 20 CLEANING CONDITION: During tank degassing, the operator shall discharge or displace organic vapors contained in the vessel vapor space to an APCO-approved vapor recovery system. [District Rule 4623, 5.7.5.4.5] Federally Enforceable Through Title V Permit
- 57. DEHY 20 CLEANING CONDITION: To facilitate connection to an external APCO-approved recovery system, a suitable vessel fitting, such as a manway, may be temporarily removed for a period of time not to exceed 1 hour. [District Rule 4623, 5.7.5.4.6] Federally Enforceable Through Title V Permit
- 58. DEHY 20 CLEANING CONDITION: After a tank/vessel has been degassed pursuant to the requirements of this permit, vapor control requirements are not applicable until an organic liquid having a TVP of 0.5 psia or greater is placed, held, or stored in the tank/vessel. [District Rule 4623, 5.7.5.4.10] Federally Enforceable Through Title V Permit
- 59. DEHY 20 CLEANING CONDITION: While performing interior 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, 5.7.5.5.1] Federally Enforceable Through Title V Permit
- 60. DEHY 20 CLEANING CONDITION: 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, 5.7.5.5.2] Federally Enforceable Through Title V Permit
- 61. DEHY 20 CLEANING CONDITION: If the tank is holding organic liquids with 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%. Pressure vessels (as defined in Rule 4623) are excluded from this condition. [District Rule 4623, 5.7.5.6.1] Federally Enforceable Through Title V Permit
- 62. DEHY 20 CLEANING CONDITION: If the tank is holding organic liquids with a TVP of 1.5 psia or greater then permittee shall only transport removed sludge in closed, liquid leak-free containers. Pressure vessels (as defined in Rule 4623) are excluded from this condition. [District Rule 4623, 5.7.5.6.2] Federally Enforceable Through Title V Permit
- 63. DEHY 20 CLEANING CONDITION: If the tank is holding organic liquids with a TVP of 1.5 psia or greater then permittee 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. Pressure vessels (as defined in Rule 4623) are excluded from this condition. [District Rule 4623, 5.7.5.6.3] Federally Enforceable Through Title V Permit
- 64. DEHY 20 CLEANING CONDITION: Permittee shall maintain records of each period of cleaning and maintenance when the vessel is disconnected or isolated from the vapor control system. Records shall include the date that cleaning was initiated, the date cleaning was completed, the procedure used to vent vapors prior to opening, and a description of internal and external repairs and maintenance performed. [District Rule 2080] Federally Enforceable Through Title V Permit

Facility Name: AERA ENERGY LLC Location: LIGHT OIL WESTERN STATIONARY SOURCE \$1548-148-15: Sep 17 2021 8098M - RINAL DR

**PERMIT UNIT:** S-1548-149-11

SECTION: NW20 TOWNSHIP: 28S RANGE: 21E

**EQUIPMENT DESCRIPTION:** 

2,000 BBL CRUDE OIL SKIM TANK #T242 WITH VAPOR CONTROL DESCRIBED IN S-1548-148 - DEHY 20

#### PERMIT UNIT REQUIREMENTS

- 1. Compliance with permit conditions in the Title V permit shall be deemed compliance with SJVUAPCD Rule 4623 (Amended December 17, 1992). A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
- 2. 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
- 3. The requirements of SJVUAPCD Rule 4661 (Amended December 17, 1992) and Rule 4801 (Amended December 17, 1992) 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
- 4. This unit is subject to the Dehy 20 Vapor Recovery, Inspection, and Tank Cleaning Conditions on Permit S-1548-148. Deviations from a standard condition shall be reported under the applicable condition in S-1548-148. [District Rule 2520] Federally Enforceable Through Title V Permit

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**PERMIT UNIT:** S-1548-171-10

**SECTION:** NE13 **TOWNSHIP:** 28S **RANGE:** 20E

**EQUIPMENT DESCRIPTION:** 

1,215 BHP WAUKESHA MODEL L-5790 GSI NATURAL GAS-FIRED IC ENGINE (SERIAL # C-12312/1) WITH 3-WAY CATALYST AND AIR/FUEL RATIO CONTROLLER DRIVING A GAS COMPRESSOR (MID BELRIDGE COMPRESSOR STATION #26)

### PERMIT UNIT REQUIREMENTS

- 1. When this unit is not operated (dormant for Rule 4701 and 4702) the fuel line shall be physically disconnected from this unit. [District Rule 2080] Federally Enforceable Through Title V Permit
- 2. A source test to demonstrate compliance with NOx, CO and VOC emission limits shall be performed within 60 days of recommencing operation of this unit. [District Rule 4702] Federally Enforceable Through Title V Permit
- 3. Permittee shall submit written notification to the District upon designating the unit as dormant or active. [District Rule 1070] Federally Enforceable Through Title V Permit
- 4. The engine shall only burn natural gas with fuel gas sulfur concentration (as H2S) not exceeding 1.0 grains/100 dscf. [District NSR Rule] Federally Enforceable Through Title V Permit
- 5. The engine shall be equipped with a positive crankcase ventilation (PCV) system or a crankcase emissions control device of at least 90% control efficiency. [District NSR Rule] Federally Enforceable Through Title V Permit
- 6. VOC emissions from fugitive components associated with this engine/compressor shall not exceed 3.9 lb VOC per day. [District NSR Rule] Federally Enforceable Through Title V Permit
- 7. Emissions from IC engine shall not exceed any of the following: NOx (as NO2) -11 ppmv @ 15% O2, VOC 30 ppmv @ 15% O2, CO 70 ppmv @ 15% O2, PM10 0.003 g/hp-hr, or SOx (as SO2) 0.0108 g/hp-hr. [District NSR Rule and 4702] Federally Enforceable Through Title V Permit
- 8. Leaks from valves, connectors, and other components (not including compressor seals) shall be defined as a reading of methane on a portable hydrocarbon detection instrument in excess of 100 ppmv above background when measured as close as possible to the potential source. [District NSR Rule] Federally Enforceable Through Title V Permit
- 9. Leaks from compressor seals shall be defined as a reading of methane on a portable hydrocarbon detection instrument in excess of 500 ppmv above background when measured as close as possible to the potential source. [District NSR Rule] Federally Enforceable Through Title V Permit
- 10. Components shall be screened and inspected with a minimum of 25% of the components inspected each quarter. Any leak greater than 500 ppmv for compressor seals and 100 ppmv for valves, connectors and other components, when measured with a portable hydrocarbon detection instrument calibrated with methane in accordance with EPA Method 21 or leaking at a rate of greater than 3 drops of liquid per minute, shall be repaired in a manner consistent with the procedures specified in Section 5.3 of Rule 4409. This requirement shall not apply to inaccessible or unsafe-to-access components as identified in the Operator Management Plan pursuant to Section 6.1 of Rule 4409. [District NSR Rule] Federally Enforceable Through Title V Permit

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- 11. Components to be screened shall be identified and categorized according to the following equipment types: connectors, flanges, open-ended lines (sample connections, drains, bleed valves, etc.) pump seals, valves with visible actuators and other (pressure relief devices, compressor seals, meters, etc.). Components shall be further identified and categorized according to the following types of service: gas/light liquid and heavy liquid service. [District NSR Rule] Federally Enforceable Through Title V Permit
- 12. VOC content of gas processed shall not exceed 37% by weight. Permittee shall maintain a written record of VOC content (sampled not less than annually) and shall make such records available for District inspection upon request for a period of two years. [District Rule 1070 and District NSR Rule] Federally Enforceable Through Title V Permit
- 13. VOC content of gas shall be measured using ASTM D1945-96, EPA Method 25 or EPA Method 18 referenced as methane. [District NSR Rule] Federally Enforceable Through Title V Permit
- 14. The permittee shall record the inlet temperature to the catalytic converter on a daily basis. [District Rule 2520, 9.4.2 and 40 CFR 64] Federally Enforceable Through Title V Permit
- 15. The inlet temperature of the catalyst shall be maintained between 750 F and 1250 F. [40 CFR 64] Federally Enforceable Through Title V Permit
- 16. The permittee shall comply with the compliance assurance monitoring operation and maintenance requirements of 40 CFR Part 64.7. [40 CFR 64] Federally Enforceable Through Title V Permit
- 17. The permittee shall comply with the recordkeeping and reporting requirements of 40 CFR part 64.9. [40 CFR 64] Federally Enforceable Through Title V Permit
- 18. If the District or EPA determine that a Quality Improvement Plan is required under 40 CFR 64.7(d)(2), the permittee shall develop and implement the Quality Improvement Plan in accordance with 40 CFR part 64.8. [40 CFR 64] Federally Enforceable Through Title V Permit
- 19. Written records of the engine idling time are not required. Compliance with idle-time limit shall be demonstrated by maintaining a copy of a work practice standard that includes the minimization of engine idling time. [District Rule 2520, 9.4] Federally Enforceable Through Title V Permit
- 20. The engine's oil and filter shall be changed every 2,160 hours of operation or every 12 months, whichever comes first. Permittee may utilize the oil analysis program specified in the Inspection and Maintenance (I&M) plan to extend the oil change requirement. [40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit
- 21. The engine's spark plugs shall be inspected every 2,160 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit
- 22. The engine's hoses and belts shall be inspected every 2,160 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit
- 23. The owner must operate and maintain the engine per the manufacturers emission-related instructions, or develop and follow your own maintenance plan which provides to the extent practicable for the operation and maintenance of the engine in a manner consistent with good practices [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- 24. This unit is subject to IC Engine Conditions on the facility wide permit S-1548-0. Deviations from a standard condition shall be reported under the applicable condition in S-1548-0. [District Rule 2520] Federally Enforceable Through Title V Permit

Facility Name: AERA ENERGY LLC Location: LIGHT OIL WESTERN STATIONARY SOURCE

**PERMIT UNIT:** S-1548-172-14

SECTION: NE32 TOWNSHIP: 29S RANGE: 21E

**EQUIPMENT DESCRIPTION:** 

1.478 BHP WAUKESHA MODEL 7042 GSI NATURAL GAS-FIRED IC ENGINE WITH 3-WAY CATALYST. AIR/FUEL RATIO CONTROLLER, AND POSITIVE CRANKCASE VENTILATION SYSTEM DRIVING A GAS COMPRESSOR (SOUTH BELRIDGE COMPRESSOR STATION #50)

#### PERMIT UNIT REQUIREMENTS

- When this unit is not operated (dormant for Rule 4701 and 4702) the fuel line shall be physically disconnected from 1. this unit. [District Rule 2080] Federally Enforceable Through Title V Permit
- A source test to demonstrate compliance with NOx, CO and VOC emission limits shall be performed within 60 days of recommencing operation of this unit. [District Rule 4702] Federally Enforceable Through Title V Permit
- Upon seven days written notice to the District this engine may be designated as a dormant emissions unit or an active emissions unit. [District Rule 1070] Federally Enforceable Through Title V Permit
- This unit shall only be operated at the South Belridge Compressor Station #50 and the Lost Hills 1 Compressor 4. Station. [District Rules 2201 and 4201] Federally Enforceable Through Title V Permit
- The engine shall only burn natural gas with fuel gas sulfur concentration (as H2S) not exceeding 1.0 grains/100 dscf. [District NSR Rule] Federally Enforceable Through Title V Permit
- The engine shall be equipped with a positive crankcase ventilation (PCV) system or a crankcase emissions control device of at least 90% control efficiency. [District NSR Rule] Federally Enforceable Through Title V Permit
- VOC emissions from fugitive components shall not exceed 10.8 lb VOC per day. [District Rule 2201] Federally 7. Enforceable Through Title V Permit
- All Rule 4409 applicable components associated with the compressors shall comply with all Rule 4409 requirements listed in the facility wide permit. [District Rule 4409] Federally Enforceable Through Title V Permit
- Emissions from IC engine shall not exceed any of the following: NOx (as NO2) 11 ppmv @ 15% O2, VOC 30 ppmy @ 15% O2, CO - 70 ppmy @ 15% O2, PM10 - 0.003 g/hp-hr, or SOx (as SO2) - 0.0108 g/hp-hr. [District NSR Rule] Federally Enforceable Through Title V Permit
- 10. Leaks from valves, connectors, and other components (not including compressor seals) shall be defined as a reading of methane on a portable hydrocarbon detection instrument in excess of 100 ppmv above background when measured as close as possible to the potential source. [District NSR Rule] Federally Enforceable Through Title V Permit
- 11. Leaks from compressor seals shall be defined as a reading of methane on a portable hydrocarbon detection instrument in excess of 500 ppmy above background when measured as close as possible to the potential source. [District NSR Rule] Federally Enforceable Through Title V Permit

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- 12. Components shall be screened and inspected with a minimum of 25% of the components inspected each quarter. Any leak greater than 500 ppmv for compressor seals and 100 ppmv for valves, connectors and other components, when measured with a portable hydrocarbon detection instrument calibrated with methane in accordance with EPA Method 21 or leaking at a rate of greater than 3 drops of liquid per minute, shall be repaired in a manner consistent with the procedures specified in Section 5.3 of Rule 4409. This requirement shall not apply to inaccessible or unsafe-to-access components as identified in the Operator Management Plan pursuant to Section 6.1 of Rule 4409. [District NSR Rule] Federally Enforceable Through Title V Permit
- 13. Components to be screened shall be identified and categorized according to the following equipment types: connectors, flanges, open-ended lines (sample connections, drains, bleed valves, etc.) pump seals, valves with visible actuators and other (pressure relief devices, compressor seals, meters, etc.). Components shall be further identified and categorized according to the following types of service: gas/light liquid and heavy liquid service. [District NSR Rule] Federally Enforceable Through Title V Permit
- 14. VOC content of gas processed shall not exceed 40% by weight. Permittee shall maintain a written record of VOC content (sampled not less than annually) and shall make such records available for District inspection upon request for a period of two years. [District Rule 1070 and District NSR Rule] Federally Enforceable Through Title V Permit
- 15. VOC content of gas shall be measured using ASTM D1945, EPA Method 25 or EPA Method 18 referenced as methane. [District NSR Rule] Federally Enforceable Through Title V Permit
- 16. The permittee shall record the inlet temperature to the catalytic converter on a daily basis. [District Rule 2520, 9.4.2 and 40 CFR 64] Federally Enforceable Through Title V Permit
- 17. The inlet temperature of the catalyst shall be maintained between 750 F and 1250 F. [40 CFR 64] Federally Enforceable Through Title V Permit
- 18. The permittee shall comply with the compliance assurance monitoring operation and maintenance requirements of 40 CFR Part 64.7. [40 CFR 64] Federally Enforceable Through Title V Permit
- 19. The permittee shall comply with the recordkeeping and reporting requirements of 40 CFR part 64.9. [40 CFR 64] Federally Enforceable Through Title V Permit
- 20. If the District or EPA determine that a Quality Improvement Plan is required under 40 CFR 64.7(d)(2), the permittee shall develop and implement the Quality Improvement Plan in accordance with 40 CFR part 64.8. [40 CFR 64] Federally Enforceable Through Title V Permit
- 21. Written records of the engine idling time are not required. Compliance with idle-time limit shall be demonstrated by maintaining a copy of a work practice standard that includes the minimization of engine idling time. [District Rule 2520, 9.4] Federally Enforceable Through Title V Permit
- 22. The engine's oil and filter shall be changed every 2,160 hours of operation or every 12 months, whichever comes first. Permittee may utilize the oil analysis program specified in the Inspection and Maintenance (I&M) plan to extend the oil change requirement. [40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit
- 23. The engine's spark plugs shall be inspected every 2,160 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit
- 24. The engine's hoses and belts shall be inspected every 2,160 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit
- 25. The owner must operate and maintain the engine per the manufacturers emission-related instructions, or develop and follow your own maintenance plan which provides to the extent practicable for the operation and maintenance of the engine in a manner consistent with good practices. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- 26. This unit is subject to IC Engine Conditions on the facility wide permit S-1548-0. Deviations from a standard condition shall be reported under the applicable condition in S-1548-0. [District Rule 2520] Federally Enforceable Through Title V Permit

Facility Name: AERA ENERGY LLC
Location: LIGHT OIL WESTERN STATIONARY SOURCE,
S1548-172-14 - Sep 17 2012, 809AM - RINAI DIR

**PERMIT UNIT:** S-1548-173-14

SECTION: NE32 TOWNSHIP: 29S RANGE: 21E

**EQUIPMENT DESCRIPTION:** 

1.478 HBP WAUKESHA MODEL 7042 GSI NATURAL GAS-FIRED IC ENGINE WITH 3-WAY CATALYST. AIR/FUEL RATIO CONTROLLER, AND POSITIVE CRANKCASE VENTILATION SYSTEM DRIVING A GAS COMPRESSOR (SOUTH BELRIDGE COMPRESSOR STATION #50)

#### PERMIT UNIT REQUIREMENTS

- When this unit is not operated (dormant for Rule 4701 and 4702) the fuel line shall be physically disconnected from 1. this unit. [District Rule 2080] Federally Enforceable Through Title V Permit
- A source test to demonstrate compliance with NOx, CO and VOC emission limits shall be performed within 60 days of recommencing operation of this unit. [District Rule 4702] Federally Enforceable Through Title V Permit
- Permittee shall submit written notification to the District upon designating the unit as dormant or active. [District Rule 2080] Federally Enforceable Through Title V Permit
- 4. The engine shall only burn natural gas with fuel gas sulfur concentration (as H2S) not exceeding 1.0 grains/100 dscf. [District NSR Rule] Federally Enforceable Through Title V Permit
- The engine shall be equipped with a positive crankcase ventilation (PCV) system or a crankcase emissions control device of at least 90% control efficiency. [District NSR Rule] Federally Enforceable Through Title V Permit
- VOC emissions from fugitive components shall not exceed 13.8 lb VOC per day. [District Rule 2201] Federally Enforceable Through Title V Permit
- 7. All Rule 4409 applicable components associated with the compressors shall comply with all Rule 4409 requirements listed in the facility wide permit. [District Rule 4409] Federally Enforceable Through Title V Permit
- Emissions from IC engine shall not exceed any of the following: NOx (as NO2) 11 ppmv @ 15% O2, VOC 30 ppmv @ 15% O2, CO - 70 ppmv @ 15% O2, PM10 - 0.003 g/hp-hr, or SOx (as SO2) - 0.0108 g/hp-hr. [District Rules 2201a nd 4702] Federally Enforceable Through Title V Permit
- Leaks from valves, connectors, and other components (not including compressor seals) shall be defined as a reading of methane on a portable hydrocarbon detection instrument in excess of 100 ppmv above background when measured as close as possible to the potential source. [District NSR Rule] Federally Enforceable Through Title V Permit
- 10. Leaks from compressor seals shall be defined as a reading of methane on a portable hydrocarbon detection instrument in excess of 500 ppmv above background when measured as close as possible to the potential source. [District NSR Rule] Federally Enforceable Through Title V Permit
- 11. Components shall be screened and inspected with a minimum of 25% of the components inspected each quarter. Any leak greater than 500 ppmv for compressor seals and 100 ppmv for valves, connectors and other components, when measured with a portable hydrocarbon detection instrument calibrated with methane in accordance with EPA Method 21 or leaking at a rate of greater than 3 drops of liquid per minute, shall be repaired in a manner consistent with the procedures specified in Section 5.3 of Rule 4409. This requirement shall not apply to inaccessible or unsafe-to-access components as identified in the Operator Management Plan pursuant to Section 6.1 of Rule 4409. [District NSR Rule] 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.

LIGHT OIL WESTERN STATIONARY SOURCE, CA Location:

Facility Name: AERA ENERGY LLC

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- 12. Components to be screened shall be identified and categorized according to the following equipment types: connectors, flanges, open-ended lines (sample connections, drains, bleed valves, etc.) pump seals, valves with visible actuators and other (pressure relief devices, compressor seals, meters, etc.). Components shall be further identified and categorized according to the following types of service: gas/light liquid and heavy liquid service. [District NSR Rule] Federally Enforceable Through Title V Permit
- 13. VOC content of gas processed shall not exceed 70% by weight. Permittee shall maintain a written record of VOC content (sampled not less than annually) and shall make such records available for District inspection upon request for a period of two years. [District Rule 1070 and District NSR Rule] Federally Enforceable Through Title V Permit
- 14. VOC content of gas shall be measured using ASTM D1945-96, EPA Method 25 or EPA Method 18 referenced as methane. [District NSR Rule] Federally Enforceable Through Title V Permit
- 15. The permittee shall record the inlet temperature to the catalytic converter on a daily basis. [District Rule 2520, 9.4.2 and 40 CFR 64] Federally Enforceable Through Title V Permit
- 16. The inlet temperature of the catalyst shall be maintained between 750 F and 1250 F. [40 CFR 64] Federally Enforceable Through Title V Permit
- 17. The permittee shall comply with the compliance assurance monitoring operation and maintenance requirements of 40 CFR Part 64.7. [40 CFR 64] Federally Enforceable Through Title V Permit
- 18. The permittee shall comply with the recordkeeping and reporting requirements of 40 CFR part 64.9. [40 CFR 64] Federally Enforceable Through Title V Permit
- 19. If the District or EPA determine that a Quality Improvement Plan is required under 40 CFR 64.7(d)(2), the permittee shall develop and implement the Quality Improvement Plan in accordance with 40 CFR part 64.8. [40 CFR 64] Federally Enforceable Through Title V Permit
- 20. Written records of the engine idling time are not required. Compliance with idle-time limit shall be demonstrated by maintaining a copy of a work practice standard that includes the minimization of engine idling time. [District Rule 2520, 9.4] Federally Enforceable Through Title V Permit
- 21. The engine's oil and filter shall be changed every 2,160 hours of operation or every 12 months, whichever comes first. Permittee may utilize the oil analysis program specified in the Inspection and Maintenance (I&M) plan to extend the oil change requirement. [40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit
- 22. The engine's air filter shall be inspected every 2,160 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit
- 23. The engine's hoses and belts shall be inspected every 2,160 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit
- 24. The owner must operate and maintain the engine per the manufacturers emission-related instructions, or develop and follow your own maintenance plan which provides to the extent practicable for the operation and maintenance of the engine in a manner consistent with good practices [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- 25. This unit is subject to IC Engine Conditions on the facility wide permit S-1548-0. Deviations from a standard condition shall be reported under the applicable condition in S-1548-0. [District Rule 2520] Federally Enforceable Through Title V Permit

Facility Name: AERA ENERGY LLC Location: LIGHT OIL WESTERN STATIONARY SOURCE

**PERMIT UNIT:** S-1548-174-14

SECTION: NE32 TOWNSHIP: 29S RANGE: 21E

**EQUIPMENT DESCRIPTION:** 

1,478 BHP WAUKESHA MODEL 7042 GSI NATURAL GAS-FIRED IC ENGINE WITH 3-WAY CATALYST, AIR/FUEL RATIO CONTROLLER, AND POSITIVE CRANKCASE VENTILATION SYSTEM DRIVING A GAS COMPRESSOR (SOUTH BELRIDGE COMPRESSOR STATION #50)

#### PERMIT UNIT REQUIREMENTS

- 1. When this unit is not operated (dormant for Rule 4701 and 4702) the fuel line shall be physically disconnected from this unit. [District Rule 2080] Federally Enforceable Through Title V Permit
- 2. A source test to demonstrate compliance with NOx, CO and VOC emission limits shall be performed within 60 days of recommencing operation of this unit. [District Rule 4702] Federally Enforceable Through Title V Permit
- 3. Permittee shall submit written notification to the District upon designating the unit as dormant or active. [District Rule 2080] Federally Enforceable Through Title V Permit
- 4. The engine shall only burn natural gas with fuel gas sulfur concentration (as H2S) not exceeding 1.0 grains/100 dscf. [District NSR Rule] Federally Enforceable Through Title V Permit
- 5. The engine shall be equipped with a positive crankcase ventilation (PCV) system or a crankcase emissions control device of at least 90% control efficiency. [District NSR Rule] Federally Enforceable Through Title V Permit
- 6. VOC emissions from fugitive components shall not exceed 12.8 lb VOC per day. [District Rule 2201] Federally Enforceable Through Title V Permit
- 7. All Rule 4409 applicable components associated with the compressors shall comply with all Rule 4409 requirements listed in the facility wide permit. [District Rule 4409] Federally Enforceable Through Title V Permit
- 8. Emissions from IC engine shall not exceed any of the following: NOx (as NO2) 11 ppmv @ 15% O2, VOC 30 ppmv @ 15% O2, CO 70 ppmv @ 15% O2, PM10 0.003 g/hp-hr, or SOx (as SO2) 0.0108 g/hp-hr. [District Rules 2201a nd 4702] Federally Enforceable Through Title V Permit
- 9. Leaks from valves, connectors, and other components (not including compressor seals) shall be defined as a reading of methane on a portable hydrocarbon detection instrument in excess of 100 ppmv above background when measured as close as possible to the potential source. [District NSR Rule] Federally Enforceable Through Title V Permit
- 10. Leaks from compressor seals shall be defined as a reading of methane on a portable hydrocarbon detection instrument in excess of 500 ppmv above background when measured as close as possible to the potential source. [District NSR Rule] Federally Enforceable Through Title V Permit
- 11. Components shall be screened and inspected with a minimum of 25% of the components inspected each quarter. Any leak greater than 500 ppmv for compressor seals and 100 ppmv for valves, connectors and other components, when measured with a portable hydrocarbon detection instrument calibrated with methane in accordance with EPA Method 21 or leaking at a rate of greater than 3 drops of liquid per minute, shall be repaired in a manner consistent with the procedures specified in Section 5.3 of Rule 4409. This requirement shall not apply to inaccessible or unsafe-to-access components as identified in the Operator Management Plan pursuant to Section 6.1 of Rule 4409. [District NSR Rule] 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: AERA ENERGY LLC Location: LIGHT OIL WESTERN STATIONARY SOURCE,CA

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- 12. Components to be screened shall be identified and categorized according to the following equipment types: connectors, flanges, open-ended lines (sample connections, drains, bleed valves, etc.) pump seals, valves with visible actuators and other (pressure relief devices, compressor seals, meters, etc.). Components shall be further identified and categorized according to the following types of service: gas/light liquid and heavy liquid service. [District NSR Rule] Federally Enforceable Through Title V Permit
- 13. VOC content of gas processed shall not exceed 70% by weight. Permittee shall maintain a written record of VOC content (sampled not less than annually) and shall make such records available for District inspection upon request for a period of two years. [District Rule 1070 and District NSR Rule] Federally Enforceable Through Title V Permit
- 14. VOC content of gas shall be measured using ASTM D1945-96, EPA Method 25 or EPA Method 18 referenced as methane. [District NSR Rule] Federally Enforceable Through Title V Permit
- 15. The permittee shall record the inlet temperature to the catalytic converter on a daily basis. [District Rule 2520, 9.4.2 and 40 CFR 64] Federally Enforceable Through Title V Permit
- 16. The inlet temperature of the catalyst shall be maintained between 750 F and 1250 F. [40 CFR 64] Federally Enforceable Through Title V Permit
- 17. The permittee shall comply with the compliance assurance monitoring operation and maintenance requirements of 40 CFR Part 64.7. [40 CFR 64] Federally Enforceable Through Title V Permit
- 18. The permittee shall comply with the recordkeeping and reporting requirements of 40 CFR part 64.9. [40 CFR 64] Federally Enforceable Through Title V Permit
- 19. If the District or EPA determine that a Quality Improvement Plan is required under 40 CFR 64.7(d)(2), the permittee shall develop and implement the Quality Improvement Plan in accordance with 40 CFR part 64.8. [40 CFR 64] Federally Enforceable Through Title V Permit
- 20. Written records of the engine idling time are not required. Compliance with idle-time limit shall be demonstrated by maintaining a copy of a work practice standard that includes the minimization of engine idling time. [District Rule 2520, 9.4] Federally Enforceable Through Title V Permit
- 21. The engine's oil and filter shall be changed every 2,160 hours of operation or every 12 months, whichever comes first. Permittee may utilize the oil analysis program specified in the Inspection and Maintenance (I&M) plan to extend the oil change requirement. [40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit
- 22. The engine's air filter shall be inspected every 2,160 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit
- 23. The engine's hoses and belts shall be inspected every 2,160 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit
- 24. The owner must operate and maintain the engine per the manufacturers emission-related instructions, or develop and follow your own maintenance plan which provides to the extent practicable for the operation and maintenance of the engine in a manner consistent with good practices [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- 25. This unit is subject to IC Engine Conditions on the facility wide permit S-1548-0. Deviations from a standard condition shall be reported under the applicable condition in S-1548-0. [District Rule 2520] Federally Enforceable Through Title V Permit

Facility Name: AERA ENERGY LLC Location: LIGHT OIL WESTERN STATIONARY SOURCE

**PERMIT UNIT:** S-1548-175-14

SECTION: NE32 TOWNSHIP: 29S RANGE: 21E

**EQUIPMENT DESCRIPTION:** 

1.478 BHP WAUKESHA MODEL 7042 GSI NATURAL GAS-FIRED IC ENGINE WITH 3-WAY CATALYST. AIR/FUEL RATIO CONTROLLER, AND POSITIVE CRANKCASE VENTILATION SYSTEM DRIVING A GAS COMPRESSOR (SOUTH BELRIDGE COMPRESSOR STATION #50)

### PERMIT UNIT REQUIREMENTS

- When this unit is not operated (dormant for Rule 4701 and 4702) the fuel line shall be physically disconnected from 1. this unit. [District Rule 2080] Federally Enforceable Through Title V Permit
- A source test to demonstrate compliance with NOx, CO and VOC emission limits shall be performed within 60 days of recommencing operation of this unit. [District Rule 4702] Federally Enforceable Through Title V Permit
- Permittee shall submit written notification to the District upon designating the unit as dormant or active. [District Rule 2080] Federally Enforceable Through Title V Permit
- 4. The engine shall only burn natural gas with fuel gas sulfur concentration (as H2S) not exceeding 1.0 grains/100 dscf. [District NSR Rule] Federally Enforceable Through Title V Permit
- The engine shall be equipped with a positive crankcase ventilation (PCV) system or a crankcase emissions control device of at least 90% control efficiency. [District NSR Rule] Federally Enforceable Through Title V Permit
- VOC emissions from fugitive components shall not exceed 21.6 lb VOC per day. [District Rule 2201] Federally Enforceable Through Title V Permit
- All Rule 4409 applicable components associated with the compressors shall comply with all Rule 4409 requirements listed in the facility wide permit. [District Rule 4409] Federally Enforceable Through Title V Permit
- Emissions from IC engine shall not exceed any of the following: NOx (as NO2) 11ppmv @ 15% O2, VOC 30 ppmv @ 15% O2, CO - 70 ppmv @ 15% O2, PM10 - 0.003 g/hp-hr, or SOx (as SO2) - 0.0108 g/hp-hr. [District Rules 2201 and 4702] Federally Enforceable Through Title V Permit
- Leaks from valves, connectors, and other components (not including compressor seals) shall be defined as a reading of methane on a portable hydrocarbon detection instrument in excess of 100 ppmv above background when measured as close as possible to the potential source. [District NSR Rule] Federally Enforceable Through Title V Permit
- 10. Leaks from compressor seals shall be defined as a reading of methane on a portable hydrocarbon detection instrument in excess of 500 ppmv above background when measured as close as possible to the potential source. [District NSR Rule] Federally Enforceable Through Title V Permit
- 11. Components shall be screened and inspected with a minimum of 25% of the components inspected each quarter. Any leak greater than 500 ppmv for compressor seals and 100 ppmv for valves, connectors and other components, when measured with a portable hydrocarbon detection instrument calibrated with methane in accordance with EPA Method 21 or leaking at a rate of greater than 3 drops of liquid per minute, shall be repaired in a manner consistent with the procedures specified in Section 5.3 of Rule 4409. This requirement shall not apply to inaccessible or unsafe-to-access components as identified in the Operator Management Plan pursuant to Section 6.1 of Rule 4409. [District NSR Rule] 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: AERA ENERGY LLC LIGHT OIL WESTERN STATIONARY SOURCE, CA Location:

S-1548-175-14 : Sep 17 2021 8:10AM -- RINAL DIR

- 12. Components to be screened shall be identified and categorized according to the following equipment types: connectors, flanges, open-ended lines (sample connections, drains, bleed valves, etc.) pump seals, valves with visible actuators and other (pressure relief devices, compressor seals, meters, etc.). Components shall be further identified and categorized according to the following types of service: gas/light liquid and heavy liquid service. [District NSR Rule] Federally Enforceable Through Title V Permit
- 13. VOC content of gas processed shall not exceed 70% by weight. Permittee shall maintain a written record of VOC content (sampled not less than annually) and shall make such records available for District inspection upon request for a period of two years. [District Rule 1070 and District NSR Rule] Federally Enforceable Through Title V Permit
- 14. VOC content of gas shall be measured using ASTM D1945-96, EPA Method 25 or EPA Method 18 referenced as methane. [District NSR Rule] Federally Enforceable Through Title V Permit
- 15. The permittee shall record the inlet temperature to the catalytic converter on a daily basis. [District Rule 2520, 9.4.2 and 40 CFR 64] Federally Enforceable Through Title V Permit
- 16. The inlet temperature of the catalyst shall be maintained between 750 F and 1250 F. [40 CFR 64] Federally Enforceable Through Title V Permit
- 17. The permittee shall comply with the compliance assurance monitoring operation and maintenance requirements of 40 CFR Part 64.7. [40 CFR 64] Federally Enforceable Through Title V Permit
- 18. The permittee shall comply with the recordkeeping and reporting requirements of 40 CFR part 64.9. [40 CFR 64] Federally Enforceable Through Title V Permit
- 19. If the District or EPA determine that a Quality Improvement Plan is required under 40 CFR 64.7(d)(2), the permittee shall develop and implement the Quality Improvement Plan in accordance with 40 CFR part 64.8. [40 CFR 64] Federally Enforceable Through Title V Permit
- 20. Written records of the engine idling time are not required. Compliance with idle-time limit shall be demonstrated by maintaining a copy of a work practice standard that includes the minimization of engine idling time. [District Rule 2520, 9.4] Federally Enforceable Through Title V Permit
- 21. The engine's oil and filter shall be changed every 2,160 hours of operation or every 12 months, whichever comes first. Permittee may utilize the oil analysis program specified in the Inspection and Maintenance (I&M) plan to extend the oil change requirement. [40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit
- 22. The engine's air filter shall be inspected every 2,160 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit
- 23. The engine's hoses and belts shall be inspected every 2,160 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit
- 24. The owner must operate and maintain the engine per the manufacturers emission-related instructions, or develop and follow your own maintenance plan which provides to the extent practicable for the operation and maintenance of the engine in a manner consistent with good practices [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- 25. This unit is subject to IC Engine Conditions on the facility wide permit S-1548-0. Deviations from a standard condition shall be reported under the applicable condition in S-1548-0 [District Rule 2520] Federally Enforceable Through Title V Permit

Facility Name: AERA ENERGY LLC Location: LIGHT OIL WESTERN STATIONARY SOURCE

**PERMIT UNIT:** S-1548-178-7

SECTION: NE13 TOWNSHIP: 28S RANGE: 20E

**EQUIPMENT DESCRIPTION:** 

SULFATREAT FUEL GAS SCRUBBING SYSTEM WITH LIQUID KNOCKOUT VESSEL AND CONTACTOR VESSEL

### PERMIT UNIT REQUIREMENTS

- 1. No components (i.e., valves, flanges, etc.) associated with the Sulfa Treat unit shall be the source of any leak greater than 10,000 ppmv (as methane) when measured at the surface of the component interface from the potential source per EPA Method 21. [District Rule 2201] Federally Enforceable Through Title V Permit
- 2. Effluent gas streams of Sulfa Treat system shall be monitored at least monthly for H2S content to determine when recharging is required. [District Rule 2201] Federally Enforceable Through Title V Permit
- 3. During recharging of the sulfur scrubber, untreated vapors shall not be introduced into the fuel system or vented to the atmosphere. [District Rule 2201] Federally Enforceable Through Title V Permit
- 4. VOC emissions from fugitive emissions components associated with this equipment shall not exceed 0.5 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
- 5. Permittee shall maintain accurate component counts according to CAPCOA's "California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities," Table IV-2c (Feb 1999), Screening Value Range emission factors < 10,000 ppmv. Permittee shall update such records when new components are approved and installed. [District Rule 2201] Federally Enforceable Through Title V Permit
- 6. The following test method shall be used for fuel gas sulfur content ASTM D3246 or double GC for H2S and mercaptans. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
- 7. Record of H2S content of effluent gas shall be maintained. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
- 8. {918} All records of required monitoring data and support information shall be maintained for at least five years. [District Rule 2520, 9.5.2] Federally Enforceable Through Title V Permit

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

Facility Name: AERA ENERGY LLC Location: LIGHT OIL WESTERN STATIONARY SOURCE,CA

S-1548-178-7 : Sep 17 2021 8:10AM -- RINALDI

**PERMIT UNIT:** S-1548-385-11

SECTION: 4 TOWNSHIP: 27S RANGE: 21E

**EQUIPMENT DESCRIPTION:** 

420,000 GALLON FIXED ROOF TANK VENTED TO VAPOR CONTROL SYSTEM LISTED ON PERMIT S-1548-120:

### PERMIT UNIT REQUIREMENTS

1. Formerly S-1130-32 [District Rule 2201] Federally Enforceable Through Title V Permit

2. This unit is subject to the Lost Hills 1 Dehy Vapor Recovery, Inspection, and Tank Cleaning Conditions on Permit S-1548-120. Deviations from a standard condition shall be reported under the applicable condition in S-1548-120. [District Rule 2520] Federally Enforceable Through Title V Permit

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

Facility Name: AERA ENERGY LLC Location: LIGHT OIL WESTERN STATIONARY SOURCE,CA

S-1548-385-11 : Sep 17 2021 8:10AM -- RINALDIR

**PERMIT UNIT:** S-1548-386-11

SECTION: 4 TOWNSHIP: 27S RANGE: 21E

**EQUIPMENT DESCRIPTION:** 

420,000 GALLON FIXED ROOF TANK VENTED TO VAPOR CONTROL SYSTEM LISTED ON PERMIT S-1548-120:

### PERMIT UNIT REQUIREMENTS

1. Formerly S-1130-33 [District Rule 2201] Federally Enforceable Through Title V Permit

2. This unit is subject to the Lost Hills 1 Dehy Vapor Recovery, Inspection, and Tank Cleaning Conditions on Permit S-1548-120. Deviations from a standard condition shall be reported under the applicable condition in S-1548-120. [District Rule 2520] Federally Enforceable Through Title V Permit

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

Facility Name: AERA ENERGY LLC Location: LIGHT OIL WESTERN STATIONARY SOURCE,CA

S-1548-386-11 : Sep 17 2021 8:10AM -- RINALDIR

**PERMIT UNIT:** S-1548-389-9

**SECTION**: 15 **TOWNSHIP**: 27S RANGE: 21E

**EQUIPMENT DESCRIPTION:** 

223,125,000 BTU/HR COANDA EFFECT SAFETY FLARE (WESTSIDE)

#### PERMIT UNIT REQUIREMENTS

- No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark, as, or darker than, Ringlemann 1/4 or 5% opacity. [District Rule 2201] Federally Enforceable Through Title V Permit
- Emission rates from flare (lb/day and lb/yr demonstrated by compliance with flared volumes of combustion gas) shall not exceed any of the following: PM10: 0.008 lb/MMBtu (42.8 lb/day, 713 lb/yr), SOx (as SO2): 0.3377 lb/MMBtu (1808.4 lb/day, 30,109 lb/yr), NOx (as NO2): 0.068 lb/MMBtu (364.1 lb/day, 6063 lb/yr), VOC: 0.063 lb/MMBtu (337.4 lb/day, 5617 lb/yr), CO: 0.37 lb/MMBtu (1981.4 lb/day, 32,989 lb/yr). [District NSR Rule] Federally Enforceable Through Title V Permit
- Total quantity of produced gas combusted in flare shall not exceed 89,160 mscf/yr. [District Rule 2201] Federally Enforceable Through Title V Permit
- Flare shall be equipped with operational produced gas volume flow meter. [District Rule 2201] Federally Enforceable Through Title V Permit
- Flares shall be operated with a pilot flame present at all times, and kept in operation when emissions may be vented to them. Except during power outages and planned maintenance, the presence of a flare pilot flame shall be monitored using a thermocouple or any other equivalent device to detect the presence of a flame. [District Rules 2520, 9.4.2 and 4311] Federally Enforceable Through Title V Permit
- Only propane or natural gas shall be used to fuel the flare pilot. [District Rule 2201] Federally Enforceable Through Title V Permit
- Sulfur content of produced gas combusted shall not exceed 2000 ppmv. [District Rule 2201] Federally Enforceable 7. Through Title V Permit
- Permittee shall measure and record sulfur content of flared gas at least annually. [District Rule 2201] Federally Enforceable Through Title V Permit
- The gas sulfur content of combustion gas, purge gas, and pilot gas shall be determined using double GC for H2S and mercaptans or any of ASTM test methods D-1072, D-3246, D-4346, or D-6228 or by the gas/propane supplier. [District Rule 1081] Federally Enforceable Through Title V Permit
- 10. Permittee shall keep accurate daily and annual records of flare gas volumes, sulfur content, and higher heating value of flared gas and such records shall be retained for a period of 5 years and be made readily available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit
- 11. Each quarter in which the flare is operated for three (3) hours or more, the permittee shall perform a visible emissions inspection using either EPA Method 22 or EPA Method 9. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

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

Facility Name: AERA ENERGY LLC LIGHT OIL WESTERN STATIONARY SOURCE, CA

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- 12. A flame shall be present at all time when combustible gases are vented through the flare. [District Rule 4311, 5.2] Federally Enforceable Through Title V Permit
- 13. The outlet shall be equipped with an automatic ignition system, or, shall be operated 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, 5.3] 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, 5.4] 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, 5.5] Federally Enforceable Through Title V Permit
- 16. On and after July 1, 2011 flaring is prohibited unless it is consistent with an approved flare minimization plan (FMP), pursuant to District Rule 4311 Section 6.5 and all commitments listed in that plan have been met. [District Rule 4311, 5.8] Federally Enforceable Through Title V Permit
- 17. Permittee shall maintain copies of the compliance determination conducted pursuant to Section 6.4.1, copies of the source testing result conducted pursuant to Section 6.4.2, a copy of the approved flare minimization plan pursuant to Section 6.5, effective on and after July 1, 2012, a copy of annual reports submitted to the APCO pursuant to Section 6.2 and monitoring data collected pursuant to Sections 5.10, 6.6, 6.7. 6.8, 6.9 and 6.10. [District Rule 4311, 6.1] Federally Enforceable Through Title V Permit
- 18. For flares used during an emergency, record of the duration of flare operation, amount of gas burned, and the nature of the emergency situation. [District Rule 4311, 6.1] Federally Enforceable Through Title V Permit
- 19. All records shall be maintained, retained on-site for a minimum of five years, and made available to the APCO, ARB, and EPA upon request. [District Rule 4311, 6.1] Federally Enforceable Through Title V Permit
- 20. 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, 6.2.1] Federally Enforceable Through Title V Permit
- 21. Effective on and after July 1, 2012, and annually thereafter, the operator shall submit an annual report to the APCO that summarizes all Reportable Flaring Events that occurred during the previous 12 month period. The report shall be submitted within 30 days following the end of the twelve month period of the previous year and shall include: 1) the results of an investigation to determine the primary cause and contributing factors of the flaring event; 2) Any prevention measures considered or implemented to prevent recurrence together with a justification for rejecting any measures that were considered but not implemented; 3) If appropriate, an explanation of why the flaring was an emergency and necessary to prevent accident, hazard or release of vent gas to the atmosphere, or where, due to a regulatory mandate to vent a flare, it cannot be recovered, treated and used as a fuel gas at the facility; and 4) The date, time and duration of the flaring event. [District Rule 4311, 6.2.2] Federally Enforceable Through Title V Permit
- 22. Effective on and after July 1, 2012, and annually thereafter, the operator shall submit an annual report to the APCO within 30 days following the end of each 12 month period include: 1) The total volumetric flow of vent gas in standard cubic feet for each day; 2) Hydrogen sulfide content, methane content, and hydrocarbon content of vent gas composition pursuant to Section 6.6; 3) If vent gas composition is monitored by a continuous analyzer or analyzers pursuant to Section 5.11, average total hydrocarbon content by volume, average methane content by volume, and depending upon the analytical method used pursuant to Section 6.3.4, total reduced sulfur content by volume or hydrogen sulfide content by volume of vent gas flared for each hour of the month; 4) If the flow monitor used pursuant to Section 5.10 measures molecular weight, the average molecular weight for each hour of each month; 5) For any pilot and purge gas used, the type of gas used, the volumetric flow for each day and for each month, and the means used to determine flow; 6) Flare monitoring system downtime periods, including dates and times; 7) For each day and for each month provide calculated sulfur dioxide emissions; 8) A flow verification report for each flare subject to this rule. The flow verification report shall include flow verification testing pursuant to Section 6.3.5. [District Rule 4311, 6.2.3] Federally Enforceable Through Title V Permit

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

Facility Name: AERA ENERGY LLC

LIGHT OIL WESTERN STATIONARY SOURCE CA Location: S-1548-389-9 : Sep 17 2021 8:10AM -- RINAI DIR

- 23. VOC emissions, 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 Method 25a may be used, and analysis of halogenated exempt compounds shall be analyzed by EPA Method 18 or ARB Method 422 "Determination of Volatile organic Compounds in Emission from Stationary Sources". The VOC concentration in ppmv shall be converted to pounds per million Btu (lb/MMBtu) by using the equation in District Rule 4311, Section 6.3.1. [District Rule 4311, 6.3.1] Federally Enforceable Through Title V Permit
- 24. NOx emissions in pounds per million BTU shall be determined by using EPA Method 19. NOx and O2 concentrations shall be determined by using EPA Method 3A, EPA Method 7E, or ARB 100. [District Rule 4311, 6.3.2 and 6.3.3] Federally Enforceable Through Title V Permit
- 25. Total hydrocarbon content and methane content of vent gas shall be determined using ASTM Method D 1945-96, ASTM Method UOP 539-97, EPA Method 18, EPA Method 25A or 25B, or an alternative method approved by the APCO, ARB and EPA. Hydrogen sulfide content of vent gas shall be determined using ASTM Method D 1945-96, ASTM Method UOP 539-97, ASTM Method D 4084-94, ASTM Method D 4810-88, or an alternative method approved by the APCO, ARB and EPA. [District Rule 4311, 6.3.4] Federally Enforceable Through Title V Permit
- 26. If vent gas composition is monitored with a continuous analyzer employing gas chromatography the minimum sampling frequency shall be one sample every 30 minutes. If vent gas composition is monitored using continuous analyzers not employing gas chromatography, the total reduced sulfur content of vent gas shall be determined by using EPA Method D4468-85, or an alternative method approved by the APCO, ARB and EPA. [District Rule 4311, 6.3.4] Federally Enforceable Through Title V Permit
- 27. Vent gas flow shall be determined using one of the following: EPA Methods 1 and 2; a verification method recommended by the manufacturer of the flow monitoring equipment; tracer gas dilution or velocity; other flow monitors or process monitors that can provide comparison data on a vent stream that is being directed past the ultrasonic flow meter; or an alternative method approved by the APCO, ARB, and EPA. [District Rule 4311, 6.3.5] Federally Enforceable Through Title V Permit
- 28. Every five years after the initial FMP submittal, the operator shall submit an updated FMP for each flare to the APCO for approval. The current FMP shall remain in effect until the updated FMP is approved by the APCO. If the operator fails to submit an updated FMP as required by this section, the existing FMP shall no longer be considered an approved plan. [District Rule 4311, 6.5.2] Federally Enforceable Through Title V Permit
- 29. An updated FMP shall be submitted by the operator addressing new or modified equipment, prior to installing the equipment only if: 1) The equipment change would require an Authority To Construct (ATC) and would impact the emissions for the flare; 2) The ATC is deemed complete after June 18, 2009; 3) The modification is not solely the removal or decommissioning of equipment that is listed in the FMP and has no associated increase in flare emissions. [District Rule 4311, 6.5.3] Federally Enforceable Through Title V Permit
- 30. When submitting the initial FMP, or updated FMP, the operator shall designate as confidential any information claimed to be exempt from public disclosure under the California Public Records Act, Government Code Section 6250 et seq. and provide a justification for this designation and also submit a separate copy of the document with the information designated confidential redacted. [District Rule 4311, 6.5.4]
- 31. The shall monitor vent gas composition using one of the five methods pursuant to Section 6.6.1 through Section 6.6.5 in District Rule 4311. [District Rule 4311, 6.6] Federally Enforceable Through Title V Permit
- 32. The operator shall monitor the volumetric flows of purge and pilot gases with flow measuring devices or other parameters as specified on the Permit to Operate so that volumetric flows of pilot and purge gas may be calculated based on pilot design and the parameters monitored. [District Rule 4311, 6.7] Federally Enforceable Through Title V Permit
- 33. The operator of a flare with a water seal shall monitor and record the water level and pressure of the water seal that services each flare daily or as specified on the Permit to Operate. [District Rule 4311, 6.8] Federally Enforceable Through Title V Permit

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Facility Name: AERA ENERGY LLC

Location: LIGHT OIL WESTERN STATIONARY SOURCE, C S-1548-389-9 : Sep 17 2021 8:10AM -- RINALDIR

- 34. Periods of flare monitoring system inoperation greater than 24 continuous hours shall be reported by the following working day, followed by notification of resumption of monitoring. Periods of inoperation of monitoring equipment shall not exceed 14 days per any 18-consecutive-month period. Periods of flare monitoring system inoperation do not include the periods when the system feeding the flare is not operating. [District Rule 4311, 6.9.1] Federally Enforceable Through Title V Permit
- 35. During periods of inoperation of continuous analyzers or auto-samplers installed pursuant to Section 6.6, operators responsible for monitoring shall take one sample within 30 minutes of the commencement of flaring, from the flare header or from an alternate location at which samples are representative of vent gas composition and have samples analyzed pursuant to Section 6.3.4. During periods of inoperation of flow monitors required by Section 5.10, flow shall be calculated using good engineering practices. [District Rule 4311, 6.9.2] Federally Enforceable Through Title V Permit
- 36. Permittee shall maintain and calibrate all required monitors and recording devices in accordance with the applicable manufacturer's specifications. In order to claim that a manufacturer's specification is not applicable, the person responsible for emissions must have, and follow, a written maintenance policy that was developed for the device in question. The written policy must explain and justify the difference between the written procedure and the manufacturer's procedure. [District Rule 4311, 6.9.3] Federally Enforceable Through Title V Permit
- 37. All in-line continuous analyzer and flow monitoring data must be continuously recorded by an electronic data acquisition system capable of one-minute averages. Flow monitoring data shall be recorded as one-minute averages. [District Rule 4311, 6.9.4] Federally Enforceable Through Title V Permit
- 38. Formerly S-1130-89 [District Rule 2010] Federally Enforceable Through Title V Permit

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Facility Name: AERA ENERGY LLC LIGHT OIL WESTERN STATIONARY SOURCE

Location: S-1548-389-9 : Sep 17 2021 8:10AM -- RINAL DIE

**PERMIT UNIT:** S-1548-400-18

SECTION: SE35 TOWNSHIP: 27S RANGE: 20E

**EQUIPMENT DESCRIPTION:** 

498 BHP CATERPILLAR GAS FIRED/FIELD GAS FIRED IC ENGINE WITH THREE-WAY CATALYTIC CONVERTER AND 02 CONTROLLER DRIVING A GAS COMPRESSOR (COMPRESSOR STATION 49)

#### PERMIT UNIT REQUIREMENTS

- While dormant, the fuel line shall be physically disconnected from the unit. [District Rule 2080] Federally Enforceable Through Title V Permit
- Permittee shall submit written notification to the District upon designating the unit as dormant or active. [District Rule 2080] Federally Enforceable Through Title V Permit
- 3. While dormant, normal source testing shall not be required. [District Rule 2080] Federally Enforceable Through Title V Permit
- 4. Upon recommencing operation of this unit, normal source testing shall resume. [District Rule 2080] Federally Enforceable Through Title V Permit
- Any source testing required by this permit shall be performed within 60 days of recommencing operation of this unit, regardless of whether the unit remains active or is again designated as dormant. [District Rule 2080] Federally Enforceable Through Title V Permit
- Records of all dates and times that this unit is designated as dormant or active, and copies of all corresponding notices to the District, shall be maintained, retained for a period of at least five years, and made available for District inspection upon request. [District Rule 1070] Federally Enforceable Through Title V Permit
- This engine shall be equipped with an operational nonresettable elapsed time meter or other APCO approved alternative. [District Rule 4702, 5.6.6] Federally Enforceable Through Title V Permit
- The engine shall be fired on natural gas or field gas with a sulfur content less than 1.0 grains/100 dscf only. [District Rule 2080] Federally Enforceable Through Title V Permit
- Sampling facilities for source testing shall be provided in accordance with the provisions of Rule 1081 (Source Sampling). [District Rule 1081] Federally Enforceable Through Title V Permit
- 10. Emissions of oxides of nitrogen (NOx) shall not exceed 11 ppmv on a dry basis corrected to 15% oxygen. [District Rules 2201 & 4702] Federally Enforceable Through Title V Permit
- 11. Emissions of carbon monoxide (CO) in exhaust shall not exceed 2000 ppm on a dry basis corrected to 15% oxygen. [District Rule 4702] Federally Enforceable Through Title V Permit
- 12. Emissions of volatile organic compounds (VOC) in exhaust averaged over not less than 15 consecutive minutes shall not exceed 250 ppm on a dry basis corrected to 15% oxygen. [District Rule 4702] Federally Enforceable Through Title V Permit

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Facility Name: AERA ENERGY LLC LIGHT OIL WESTERN STATIONARY SOURCE, CA Location:

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- 13. Emissions source testing shall be conducted with the engine operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. Source testing emissions for this unit shall be calculated using the arithmetic mean, pursuant to District Rule 1081 (Amended December 16, 1993), of 3 thirty-minute test runs for NOx. [District Rules 4702 and 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 14. District witnessed or approved compliance source testing for NOx, VOC, and CO emissions shall be demonstrated within 60 days of start up. [District Rules 2201 and 4702] Federally Enforceable Through Title V Permit
- 15. NOx, CO, and VOC emissions shall be measured (source tested) not less than once every 24 months. [District Rule 4702] Federally Enforceable Through Title V Permit
- 16. Source testing shall be by District witnessed, or authorized, sample collection by ARB certified testing laboratory. [District Rule 1080] Federally Enforceable Through Title V Permit
- 17. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified 30 days prior to any compliance source test, and a source test plan must be submitted for approval 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
- 18. 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
- 19. The following test methods shall be used: NOx (ppmv) EPA Method 7E or ARB Method 100, CO (ppmv) EPA Method 10 or ARB Method 100, stack gas oxygen EPA Method 3 or 3A or ARB Method 100, and VOC (ppmv) EPA Method 25 or EPA Method 18 referenced as methane, fuel gas sulfur content ASTM D 3246 or double GC for total sulfur content, and EPA Method 21 for fugitive components. [District Rules 1081] Federally Enforceable Through Title V Permit
- 20. Emissions for this unit shall be calculated using the arithmetic mean, pursuant to District Rule 1081 (Amended December 16, 1993), of 3 thirty minute test runs for NOx and CO. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 21. The permittee shall monitor and record the stack concentration of NOx (as NO2), CO, and O2 at least once every calendar month (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall not be required if the engine is not in operation, i.e. the engine need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the engine unless monitoring has been performed within the last month. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies. [District Rule 4702] Federally Enforceable Through Title V Permit
- 22. If either the NOx or CO concentrations corrected to 15% O2, as measured by the portable analyzer, exceed the permitted emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1-hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of performing the notification and testing required by this condition. [District Rule 4702] Federally Enforceable Through Title V Permit
- 23. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the permit-to-operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rule 4702] Federally Enforceable Through Title V Permit

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

Facility Name: AERA ENERGY LLC
Location: LIGHT OIL WESTERN STATIONARY SOURCE C

- 24. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 15% O2, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rule 4702] Federally Enforceable Through Title V Permit
- 25. This engine shall be operated and maintained in proper operating condition per the Inspection and Maintenance (I & M) plan submitted to the District. [District Rule 4702, 6.5 and 40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit
- 26. The permittee shall update the I & M plan for this engine prior to any planned change in operation. The permittee must notify the District no later than seven days after changing the I & M plan and must submit an updated I & M plan to the APCO no later than 14 days after the change for approval. The date and time of the change to the I & M plan shall be recorded in the engine's operating log. For modifications, the revised I & M plan shall be submitted to and approved by the APCO prior to issuance of the Permit to Operate. The permittee may request a change to the I & M plan at any time. [District Rule 4702] Federally Enforceable Through Title V Permit
- 27. Monthly monitoring of NOx, CO and O2 using a portable emission monitor that meets District specifications may be used to satisfy the monthly inspection requirements of the I & M plan. [In-stack O2 monitors may be allowed if approved by the APCO.] [District Rules 4702 and 2520] Federally Enforceable Through Title V Permit
- 28. Particulate emissions shall not exceed at the point of discharge, 0.1 gr/dscf. [District Rule 4201, 3.1] Federally Enforceable Through Title V Permit
- 29. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [District Rule 4801] Federally Enforceable Through Title V Permit
- 30. If the IC engine is fired on natural gas with supplier certified sulfur content, then permittee shall document sulfur content by maintaining file copies of all natural gas bills or supplier's certification of sulfur content. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 31. If the IC engine is not fired on natural gas with supplier certified sulfur content, then the sulfur content of the natural gas being fired in the engine shall be tested using ASTM D 3246 or double GC for sulfur content (as H2S). [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 32. If the engine is not fired on certified natural gas, the sulfur content of each fuel source shall be tested weekly except that if compliance with the fuel sulfur content limit has been demonstrated for 8 consecutive weeks for a fuel source, then the testing frequency shall be quarterly. If a test shows noncompliance with the sulfur content requirement, the source must return to weekly testing until eight consecutive weeks show compliance. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 33. The permittee shall record the inlet temperature to the catalytic converter on a daily basis. [District Rule 2520, 9.4.2 and 40 CFR 64] Federally Enforceable Through Title V Permit
- 34. The inlet temperature of the catalyst shall be maintained between 750 F and 1250 F. [40 CFR 64] Federally Enforceable Through Title V Permit
- 35. The permittee shall comply with the compliance assurance monitoring operation and maintenance requirements of 40 CFR Part 64.7. [40 CFR 64] Federally Enforceable Through Title V Permit
- 36. The permittee shall comply with the recordkeeping and reporting requirements of 40 CFR part 64.9. [40 CFR 64] Federally Enforceable Through Title V Permit
- 37. If the District or EPA determine that a Quality Improvement Plan is required under 40 CFR 64.7(d)(2), the permittee shall develop and implement the Quality Improvement Plan in accordance with 40 CFR part 64.8. [40 CFR 64] Federally Enforceable Through Title V Permit
- 38. An engine operating log shall be maintained. The log shall include, on a monthly basis, the total hours of operation, type and quantity of fuel used, preventative and corrective maintenance and modifications performed, monitoring data, compliance source test results and any other information necessary to demonstrate compliance. [District Rule 4702] Federally Enforceable Through Title V Permit

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Facility Name: AERA ENERGY LLC

Location: LIGHT OIL WESTERN STATIONARY SOURCE, CA

- 39. All records required by this permit shall be maintained for a period of five years and shall be made readily available for District inspection upon request. [District Rules 1070, 4702 and 2520, 9.4.2] Federally Enforceable Through Title V Permit
- 40. Fugitive components associated with the SulfaTreat sulfur removal system shall not exceed the following: 16 flanges, 24 threaded connectors, 8 valves, 2 pressure relief valves, and 4 other. [District Rule 2201] Federally Enforceable Through Title V Permit
- 41. The permittee must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes. [40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit
- 42. Written records of the engine idling time are not required. Compliance with idle-time limit shall be demonstrated by maintaining a copy of a work practice standard that includes the minimization of engine idling time. [District Rule 2520, 9.4] Federally Enforceable Through Title V Permit
- 43. The engine shall be in full compliance with 40 CFR Part 63, Subpart ZZZZ (National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines). [40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit
- 44. The engine's oil and filter shall be changed every 1,440 hours of operation or every 12 months, whichever comes first. Permittee may use the oil analysis program specified in the Inspection and Maintenance (I&M) plan to extend the oil change requirement. [40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit
- 45. The engine's air filter shall be inspected every 1,440 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit
- 46. The engine's hoses and belts shall be inspected every 1,440 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit
- 47. Note: Formerly S-1130-146.

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

Facility Name: AERA ENERGY LLC Location: LIGHT OIL WESTERN STATIONARY SOURCE \$1548-400.18 Sep 17 2021 8 TOMM - RINAI DIR

**PERMIT UNIT:** S-1548-411-18

SECTION: SE35 TOWNSHIP: 27S RANGE: 20E

**EQUIPMENT DESCRIPTION:** 

498 BHP CATERPILLAR GAS FIRED/FIELD GAS FIRED IC ENGINE WITH THREE-WAY CATALYTIC CONVERTER AND 02 CONTROLLER DRIVING A GAS COMPRESSOR (COMPRESSOR STATION 49)

#### PERMIT UNIT REQUIREMENTS

- While dormant, the fuel line shall be physically disconnected from the unit. [District Rule 2080] Federally Enforceable Through Title V Permit
- Permittee shall submit written notification to the District upon designating the unit as dormant or active. [District Rule 2080] Federally Enforceable Through Title V Permit
- 3. While dormant, normal source testing shall not be required. [District Rule 2080] Federally Enforceable Through Title V Permit
- 4. Upon recommencing operation of this unit, normal source testing shall resume. [District Rule 2080] Federally Enforceable Through Title V Permit
- Any source testing required by this permit shall be performed within 60 days of recommencing operation of this unit, regardless of whether the unit remains active or is again designated as dormant. [District Rule 2080] Federally Enforceable Through Title V Permit
- Records of all dates and times that this unit is designated as dormant or active, and copies of all corresponding notices to the District, shall be maintained, retained for a period of at least five years, and made available for District inspection upon request. [District Rule 1070] Federally Enforceable Through Title V Permit
- This engine shall be equipped with an operational nonresettable elapsed time meter or other APCO approved alternative. [District Rule 4702, 5.6.6] Federally Enforceable Through Title V Permit
- The engine shall be fired on natural gas or field gas with a sulfur content less than 1.0 grains/100 dscf only. [District Rule 2080] Federally Enforceable Through Title V Permit
- Sampling facilities for source testing shall be provided in accordance with the provisions of Rule 1081 (Source Sampling). [District Rule 1081] Federally Enforceable Through Title V Permit
- 10. Emissions of oxides of nitrogen (NOx) shall shall not exceed 11 ppmv on a dry basis corrected to 15% oxygen. [District Rules 2201 & 4702] Federally Enforceable Through Title V Permit
- 11. Emissions of carbon monoxide (CO) in exhaust shall not exceed 2000 ppm on a dry basis corrected to 15% oxygen. [District Rule 4702] Federally Enforceable Through Title V Permit
- 12. Emissions of volatile organic compounds (VOC) in exhaust averaged over not less than 15 consecutive minutes shall not exceed 250 ppm on a dry basis corrected to 15% oxygen. [District Rule 4702] Federally Enforceable Through Title V Permit

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Facility Name: AERA ENERGY LLC LIGHT OIL WESTERN STATIONARY SOURCE, CA Location:

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- 13. Emissions source testing shall be conducted with the engine operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. Source testing emissions for this unit shall be calculated using the arithmetic mean, pursuant to District Rule 1081 (Amended December 16, 1993), of 3 thirty-minute test runs for NOx. [District Rules 4702 and 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 14. District witnessed or approved compliance source testing for NOx, VOC, and CO emissions shall be demonstrated within 60 days of start up. [District Rules 2201 & 4702] Federally Enforceable Through Title V Permit
- 15. NOx, CO, and VOC emissions shall be measured (source tested) not less than once every 24 months. [District Rule 4702] Federally Enforceable Through Title V Permit
- 16. Source testing shall be by District witnessed, or authorized, sample collection by ARB certified testing laboratory. [District Rule 1080] Federally Enforceable Through Title V Permit
- 17. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified 30 days prior to any compliance source test, and a source test plan must be submitted for approval 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
- 18. 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
- 19. The following test methods shall be used: NOx (ppmv) EPA Method 7E or ARB Method 100, CO (ppmv) EPA Method 10 or ARB Method 100, stack gas oxygen EPA Method 3 or 3A or ARB Method 100, and VOC (ppmv) EPA Method 25 or EPA Method 18 referenced as methane, fuel gas sulfur content ASTM D 3246 or double GC for total sulfur content, and EPA Method 21 for fugitive components. [District Rules 1081] Federally Enforceable Through Title V Permit
- 20. Emissions for this unit shall be calculated using the arithmetic mean, pursuant to District Rule 1081 (Amended December 16, 1993), of 3 thirty minute test runs for NOx and CO. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 21. The permittee shall monitor and record the stack concentration of NOx (as NO2), CO, and O2 at least once every calendar month (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall not be required if the engine is not in operation, i.e. the engine need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the engine unless monitoring has been performed within the last month. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies. [District Rule 4702] Federally Enforceable Through Title V Permit
- 22. If either the NOx or CO concentrations corrected to 15% O2, as measured by the portable analyzer, exceed the permitted emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1-hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of performing the notification and testing required by this condition. [District Rule 4702] Federally Enforceable Through Title V Permit
- 23. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the permit-to-operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rule 4702] Federally Enforceable Through Title V Permit

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

Facility Name: AERA ENERGY LLC

Location: LIGHT OIL WESTERN STATIONARY SOURCE, C S-1548-411-18: Sep 17 2021 8:10AM -- RINALDIR

- 24. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 15% O2, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rule 4702] Federally Enforceable Through Title V Permit
- 25. This engine shall be operated and maintained in proper operating condition per the Inspection and Maintenance (I & M) plan submitted to the District. [District Rule 4702] Federally Enforceable Through Title V Permit
- 26. The permittee shall update the I & M plan for this engine prior to any planned change in operation. The permittee must notify the District no later than seven days after changing the I & M plan and must submit an updated I & M plan to the APCO no later than 14 days after the change for approval. The date and time of the change to the I & M plan shall be recorded in the engine's operating log. For modifications, the revised I & M plan shall be submitted to and approved by the APCO prior to issuance of the Permit to Operate. The permittee may request a change to the I & M plan at any time. [District Rule 4702] Federally Enforceable Through Title V Permit
- 27. Monthly monitoring of NOx, CO and O2 using a portable emission monitor that meets District specifications may be used to satisfy the monthly inspection requirements of the I & M plan. [In-stack O2 monitors may be allowed if approved by the APCO.] [District Rules 4702 and 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 28. Particulate emissions shall not exceed at the point of discharge, 0.1 gr/dscf. [District Rule 4201, 3.1] Federally Enforceable Through Title V Permit
- 29. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [District Rule 4801] Federally Enforceable Through Title V Permit
- 30. If the IC engine is fired on natural gas with supplier certified sulfur content, then permittee shall document sulfur content by maintaining file copies of all natural gas bills or supplier's certification of sulfur content. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 31. If the IC engine is not fired on natural gas with supplier certified sulfur content, then the sulfur content of the natural gas being fired in the engine shall be tested using ASTM D 3246 or double GC for sulfur content (as H2S). [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 32. If the engine is not fired on certified natural gas, the sulfur content of each fuel source shall be tested weekly except that if compliance with the fuel sulfur content limit has been demonstrated for 8 consecutive weeks for a fuel source, then the testing frequency shall be quarterly. If a test shows noncompliance with the sulfur content requirement, the source must return to weekly testing until eight consecutive weeks show compliance. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 33. The permittee shall record the inlet temperature to the catalytic converter on a daily basis. [District Rule 2520, 9.4.2 and 40 CFR 64] Federally Enforceable Through Title V Permit
- 34. The inlet temperature of the catalyst shall be maintained between 750 F and 1250 F. [40 CFR 64] Federally Enforceable Through Title V Permit
- 35. The permittee shall comply with the compliance assurance monitoring operation and maintenance requirements of 40 CFR Part 64.7. [40 CFR 64] Federally Enforceable Through Title V Permit
- 36. The permittee shall comply with the recordkeeping and reporting requirements of 40 CFR part 64.9. [40 CFR 64] Federally Enforceable Through Title V Permit
- 37. If the District or EPA determine that a Quality Improvement Plan is required under 40 CFR 64.7(d)(2), the permittee shall develop and implement the Quality Improvement Plan in accordance with 40 CFR part 64.8. [40 CFR 64] Federally Enforceable Through Title V Permit
- 38. An engine operating log shall be maintained. The log shall include, on a monthly basis, the total hours of operation, type and quantity of fuel used, preventative and corrective maintenance and modifications performed, monitoring data, compliance source test results and any other information necessary to demonstrate compliance. [District Rule 4702] Federally Enforceable Through Title V Permit

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

Facility Name: AERA ENERGY LLC

LIGHT OIL WESTERN STATIONARY SOURCE CA Location:

- 39. All records required by this permit shall be maintained for a period of five years and shall be made readily available for District inspection upon request. [District Rules 1070, 4702 and 2520, 9.4.2] Federally Enforceable Through Title V Permit
- 40. The permittee must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes. [40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit
- 41. Written records of the engine idling time are not required. Compliance with idle-time limit shall be demonstrated by maintaining a copy of a work practice standard that includes the minimization of engine idling time. [District Rule 2520, 9.4] Federally Enforceable Through Title V Permit
- 42. The engine shall be in full compliance with 40 CFR Part 63, Subpart ZZZZ (National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines). [40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit
- 43. The engine's oil and filter shall be changed every 1,440 hours of operation or every 12 months, whichever comes first. Permittee may use the oil analysis program specified in the Inspection and Maintenance (I&M) plan to extend the oil change requirement. [40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit
- 44. The engine's air filter shall be inspected every 1,440 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit
- 45. The engine's hoses and belts shall be inspected every 1,440 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit
- 46. Note: Formerly S-1130-157.

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

Facility Name: AERA ENERGY LLC Location: LIGHT OIL WESTERN STATIONARY SOURC \$1548-411-18: Sep 17:0021 & 110M - RINAD IDR

**PERMIT UNIT:** S-1548-418-12

SECTION: NW20 TOWNSHIP: 28S RANGE: 21E

**EQUIPMENT DESCRIPTION:** 

8,500 BBL WATER STORAGE TANK T-231A SERVED BY VAPOR CONTROL SYSTEM DESCRIBED IN S-1548-148

#### PERMIT UNIT REQUIREMENTS

- 1. Fugitive VOC emission rate shall not exceed 4.4 lb/day. [District NSR Rule] Federally Enforceable Through Title V Permit
- 2. Permittee shall maintain an accurate fugitive component count and resultant emissions calculated using U.S. EPA Publication 453/R-95-017, or other factors approved by the District. [District NSR Rule] Federally Enforceable Through Title V Permit
- 3. Tank shall vent to vapor control system listed in S-1548-148. [District NSR Rule] Federally Enforceable Through Title V Permit
- 4. Liquid stored in tank shall have a maximum VOC content of up to 10% by weight as determined by EPA Test Method 413.2, or 418.1 and/or, if necessary, EPA Test Method 8240. Hydrocarbons heavier than C14, as determined by Test Method ASTM E260-85, may be excluded from the total concentration. [District Rule 2201] Federally Enforceable Through Title V Permit
- 5. This unit is subject to the Dehy 20 Vapor Recovery, Inspection, and Tank Cleaning Conditions on Permit S-1548-148. Deviations from a standard condition shall be reported under the applicable condition in S-1548-148. [District Rule 2520] Federally Enforceable Through Title V Permit

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

Facility Name: AERA ENERGY LLC Location: LIGHT OIL WESTERN STATIONARY SOURCE,CA

S-1548-418-12 : Sep 17 2021 8:10AM -- RINALDIR

**PERMIT UNIT:** S-1548-419-12

SECTION: NW20 TOWNSHIP: 28S RANGE: 21E

**EQUIPMENT DESCRIPTION:** 

8,500 BBL WATER STORAGE TANK T-231B SERVED BY VAPOR CONTROL SYSTEM DESCRIBED IN S-1548-148

#### PERMIT UNIT REQUIREMENTS

- 1. Tank shall vent to vapor control system listed in S-1548-148. [District NSR Rule] Federally Enforceable Through Title V Permit
- 2. Liquid stored in tank shall have a maximum VOC content of up to 10% by weight as determined by EPA Test Method 413.2, or 418.1 and/or, if necessary, EPA Test Method 8240. Hydrocarbons heavier than C14, as determined by Test Method ASTM E260-85, may be excluded from the total concentration. [District Rule 2201] Federally Enforceable Through Title V Permit
- 3. Fugitive VOC emission rate shall not exceed 5.5 lb/day. [District NSR Rule] Federally Enforceable Through Title V Permit
- 4. Permittee shall maintain an accurate fugitive component count and resultant emissions calculated using U.S. EPA Publication 453/R-95-017, or other factors approved by the District. [District NSR Rule] Federally Enforceable Through Title V Permit
- 5. This unit is subject to the Dehy 20 Vapor Recovery, Inspection, and Tank Cleaning Conditions on Permit S-1548-148. Deviations from a standard condition shall be reported under the applicable condition in S-1548-148. [District Rule 2520] Federally Enforceable Through Title V Permit

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

Facility Name: AERA ENERGY LLC Location: LIGHT OIL WESTERN STATIONARY SOURCE,CA

S-1548-419-12 : Sep 17 2021 8:10AM -- RINALDIR

**PERMIT UNIT:** S-1548-420-11

SECTION: NW 4 TOWNSHIP: 27S RANGE: 21E

**EQUIPMENT DESCRIPTION:** 

24,300 GALLON (10 FT. DIA BY 40 FT. LONG SHELL) FREE WATER KNOCKOUT VESSEL V-3004 WITH VAPOR PIPING TO VAPOR CONTROL SYSTEM LISTED ON S-1548-120:

#### PERMIT UNIT REQUIREMENTS

1. This unit is subject to the Lost Hills 1 Dehy Vapor Recovery, Inspection, and Tank Cleaning Conditions on Permit S-1548-120. Deviations from a standard condition shall be reported under the applicable condition in S-1548-120. [District Rule 2520] Federally Enforceable Through Title V Permit

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

Facility Name: AERA ENERGY LLC Location: LIGHT OIL WESTERN STATIONARY SOURCE,CA \$1548-49-01-1 : Sep 17:001-8:1004-8:INAI DIR

**PERMIT UNIT:** S-1548-423-13

EXPIRATION DATE: 05/31/2021

**EQUIPMENT DESCRIPTION:** 

1,600 THERMALLY ENHANCED PRODUCTION WELLS WITH CLOSED CASING VENTS

#### PERMIT UNIT REQUIREMENTS

- 1. Well casing valves shall remain closed or connected to production lines at all times except during periods of actual service or repair as defined in Rule 4401. [District Rule 2201 and 4401] Federally Enforceable Through Title V Permit
- 2. All produced fluids from any thermally enhanced production well associated with this operation shall be handled only in closed production equipment prior to introduction to the Section 20 dehydration facility (principally, S-1548-144 through '-149 including associated equipment, i.e., Wemco, ISF units, drain tanks, etc.) [District Rule 2201] Federally Enforceable Through Title V Permit
- 3. Thermally enhanced production wells covered by this permit shall each have a visible identification number. Field personnel shall be provided with written instructions concerning proper operation and maintenance of these wells. [District Rule 2201] Federally Enforceable Through Title V Permit
- 4. Any thermally enhanced production well producing crude oil with an API gravity greater than 30 and a true vapor pressure greater than 1.5 psia (determined using the methods specified in Rule 4409) shall comply with all applicable Rule 4409 requirements. [District Rule 4409] Federally Enforceable Through Title V Permit
- 5. Total number of leaks from the vapor collection and control system, including condensate handling shall not exceed the number allowed by Rule 4401. [District Rule 4401] Federally Enforceable Through Title V Permit
- 6. All components to be screened shall be identified and categorized according to the following equipment types: connectors, flanges, open-ended lines (sample connections, drains, bleed valves, etc.), pump seals, valves with visible actuators, polish rod stuffing boxes and other (pressure relief devices, compressor seals, meters, etc.). Components shall be further identified and categorized according to the following types of service: gas/light liquid and heavy liquid service. [District Rule 2201] Federally Enforceable Through Title V Permit
- 7. Component screening shall be performed in accordance with EPA reference Method 21. [District Rule 2201] Federally Enforceable Through Title V Permit
- 8. Portable hydrocarbon detection instrument shall be operated and calibrated in accordance with recommendations in CAPCOA/CARB's California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities (February, 1999). [District Rule 2201] Federally Enforceable Through Title V Permit
- 9. Fugitive VOC emission rate from all components associated with this steam enhanced well operation shall not exceed 517.7 b/day. [District Rule 2201] Federally Enforceable Through Title V Permit
- 10. Fugitive VOC emission rate listed above does not include the fugitive emissions from the well test pressure vessels and piping at the LOTS sites. [District Rule 2201] Federally Enforceable Through Title V Permit
- 11. Permittee shall maintain a current list of all thermally enhanced production wells associated with this operation; shall update the list whenever a well is added, replaced, or deleted; and such listing shall be made readily available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit

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

Facility Name: AERA ENERGY LLC Location: LIGHT OIL WESTERN STATIONARY SOURCE,CA \$1548.493-13: Sep 17.001.8:10AM = RINAI DR 12. Permittee shall maintain for a period of five years, accurate records of fugitive inspection component counts, leak screening values in excess of 10,000 ppm, and shall, as approved by the District, calculate fugitive emissions using February 1999 CAPCOA California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities Table IV-2c. Permittee shall make records of component counts, screening values, and calculations readily available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit

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

Facility Name: AERA ENERGY LLC
Location: LIGHT OIL WESTERN STATIONARY SOURCE
S-1548-423-13: Sep 17 2021 8:10AM - RINALDIR

**PERMIT UNIT:** S-1548-424-9

SECTION: SW35 TOWNSHIP: 27S RANGE: 20E

**EQUIPMENT DESCRIPTION:** 

825 MMBTU/HR KALDAIR INDAIR MODEL I-15-H-VS LIMITED USE FLARE WITH COANDA EFFECT FLARE TIP

(COMPRESSOR STATION 49)

### PERMIT UNIT REQUIREMENTS

- Emission rates from flare (lb/day and lb/yr demonstrated by compliance with flared volumes of combustion gas) shall not exceed any of the following: PM10: 0.008 lb/MMBtu (158.4 lb/day, 713 lb/yr), NOx (as NO2): 0.068 lb/MMBtu (1346.4 lb/day, 6063 lb/yr), VOC: 0.063 lb/MMBtu (1247.4 lb/day, 5617 lb/yr), CO: 0.37 lb/MMBtu (7326.0 lb/day, 32,989 lb/yr). [District Rule 2201] Federally Enforceable Through Title V Permit
- SOx emissions shall not exceed 1437.7 lb/day nor 6,474 lb/yr. [District Rule 2201] Federally Enforceable Through Title V Permit
- Flare shall be equipped with operational produced gas volume flow meter. [District Rule 2201] Federally Enforceable Through Title V Permit
- Flare shall be equipped with continuous pilot fired solely on propane or natural gas. [District Rules 2201 and 4311] Federally Enforceable Through Title V Permit
- Total quantity of produced gas combusted in flare shall not exceed 89,160 mscf/yr. [District Rule 2201] Federally Enforceable Through Title V Permit
- Permittee shall measure and record sulfur content of flared gas at least annually. [District Rule 2201] Federally Enforceable Through Title V Permit
- The gas sulfur content of combustion gas, purge gas, and pilot gas shall be determined using double GC for H2S and mercaptans or any of ASTM test methods D-1072, D-3246, D-4346, or D-6228 or by the gas/propane supplier. [District Rule 1081] Federally Enforceable Through Title V Permit
- Permittee shall keep accurate daily and annual records of flare gas volumes, sulfur content, calculated SOx emissions in units of lb/day and lb/year and higher heating value of flared gas and such records shall be retained for a period of 5 years and be made readily available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit
- Each quarter in which the flare is operated for three (3) hours or more, the permittee shall perform a visible emissions inspection using either EPA Method 22 or EPA Method 9. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
- 10. A flame shall be present at all time when combustible gases are vented through the flare. [District Rule 4311, 5.2] Federally Enforceable Through Title V Permit
- 11. The outlet shall be equipped with an automatic ignition system, or, shall be operated 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, 5.3] 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: AERA ENERGY LLC LIGHT OIL WESTERN STATIONARY SOURCE, CA Location:

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- 12. 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. The flame detection device shall be kept operational at all times except during flare maintenance when the flare is isolated from gas flow. During essential planned power outages when the flare is operating, the pilot monitor is allowed to be non-functional if the flare flame is clearly visible to onsite operators. [District Rule 4311] Federally Enforceable Through Title V Permit
- 13. 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, 5.5] Federally Enforceable Through Title V Permit
- 14. Flaring is prohibited unless it is consistent with an approved flare minimization plan (FMP), pursuant to District Rule 4311 Section 6.5 and all commitments listed in that plan have been met. [District Rule 4311, 5.8] Federally Enforceable Through Title V Permit
- 15. Permittee shall maintain copies of the compliance determination conducted pursuant to Section 6.4.1, copies of the source testing result conducted pursuant to Section 6.4.2, a copy of the approved flare minimization plan pursuant to Section 6.5, effective on and after July 1, 2012, a copy of annual reports submitted to the APCO pursuant to Section 6.2, monitoring data collected pursuant to Sections 5.10, 6.6, 6.7. 6.8, 6.9 and 6.10. [District Rule 4311, 6.1] Federally Enforceable Through Title V Permit
- 16. For flares used during an emergency, record of the duration of flare operation, amount of gas burned, and the nature of the emergency situation. [District Rule 4311, 6.1] Federally Enforceable Through Title V Permit
- 17. All records shall be maintained, retained on-site for a minimum of five years, and made available to the APCO, ARB, and EPA upon request. [District Rule 4311, 6.1] Federally Enforceable Through Title V Permit
- 18. 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, 6.2.1] Federally Enforceable Through Title V Permit
- 19. Effective on and after July 1, 2012, and annually thereafter, the operator shall submit an annual report to the APCO that summarizes all Reportable Flaring Events that occurred during the previous 12 month period. The report shall be submitted within 30 days following the end of the twelve month period of the previous year and shall include: 1) the results of an investigation to determine the primary cause and contributing factors of the flaring event; 2) Any prevention measures considered or implemented to prevent recurrence together with a justification for rejecting any measures that were considered but not implemented; 3) If appropriate, an explanation of why the flaring was an emergency and necessary to prevent accident, hazard or release of vent gas to the atmosphere, or where, due to a regulatory mandate to vent a flare, it cannot be recovered, treated and used as a fuel gas at the facility; and 4) The date, time and duration of the flaring event. [District Rule 4311, 6.2.2] Federally Enforceable Through Title V Permit
- 20. Effective on and after July 1, 2012, and annually thereafter, the operator shall submit an annual report to the APCO within 30 days following the end of each 12 month period include: 1) The total volumetric flow of vent gas in standard cubic feet for each day; 2) Hydrogen sulfide content, methane content, and hydrocarbon content of vent gas composition pursuant to Section 6.6; 3) If vent gas composition is monitored by a continuous analyzer or analyzers pursuant to Section 5.11, average total hydrocarbon content by volume, average methane content by volume, and depending upon the analytical method used pursuant to Section 6.3.4, total reduced sulfur content by volume or hydrogen sulfide content by volume of vent gas flared for each hour of the month; 4) If the flow monitor used pursuant to Section 5.10 measures molecular weight, the average molecular weight for each hour of each month; 5) For any pilot and purge gas used, the type of gas used, the volumetric flow for each day and for each month, and the means used to determine flow; 6) Flare monitoring system downtime periods, including dates and times; 7) For each day and for each month provide calculated sulfur dioxide emissions; 8) A flow verification report for each flare subject to this rule. The flow verification report shall include flow verification testing pursuant to Section 6.3.5. [District Rule 4311, 6.2.3] Federally Enforceable Through Title V Permit

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

Facility Name: AERA ENERGY LLC

Location: LIGHT OIL WESTERN STATIONARY SOURCE

- 21. Total hydrocarbon content and methane content of vent gas shall be determined using ASTM Method D 1945-96, ASTM Method UOP 539-97, EPA Method 18, EPA Method 25A or 25B, or an alternative method approved by the APCO, ARB and EPA. Hydrogen sulfide content of vent gas shall be determined using ASTM Method D 1945-96, ASTM Method UOP 539-97, ASTM Method D 4084-94, ASTM Method D 4810-88, or an alternative method approved by the APCO, ARB and EPA. [District Rule 4311, 6.3.4] Federally Enforceable Through Title V Permit
- 22. Vent gas flow shall be determined using one of the following: EPA Methods 1 and 2; a verification method recommended by the manufacturer of the flow monitoring equipment; tracer gas dilution or velocity; other flow monitors or process monitors that can provide comparison data on a vent stream that is being directed past the ultrasonic flow meter; or an alternative method approved by the APCO, ARB, and EPA. [District Rule 4311, 6.3.5] Federally Enforceable Through Title V Permit
- 23. The operator of a petroleum refinery flare or any flare that has a flaring capacity of greater than or equal to 5.0 MMBtu per hour shall submit a flare minimization plan (FMP) to the APCO for approval and shall include: 1) A description and technical specifications for each flare and associated knock-out pots, surge drums, water seals and flare gas recovery systems; 2) Detailed process flow diagrams of all upstream equipment and process units venting to each flare, identifying the type and location of all control equipment; 3) A description of equipment, processes, or procedures the operator plans to install or implement to eliminate or minimize flaring and planned date of installation or implementation;; 4) An evaluation of prevention measures to reduce flaring that has occurred or may by expected to occur during planned major maintenance activities, including startup and shutdown;; 5) An evaluation of preventative measures to reduce flaring that may be expected to occur due to issues of gas quantity and quality. The evaluation shall include an audit of the vent gas recovery capacity of each flare system, the storage capacity available for excess vent gases, and the scrubbing capacity available for vent gases including any limitations associated with scrubbing vent gases for use as a fuel; and shall determine the feasibility of reducing flaring through the recovery, treatment and use of the gas or other means; 6) An evaluation of preventative measures to reduce flaring caused by the recurrent failure of air pollution control equipment, process equipment, or a process to operate in a normal or usual manner. The evaluation shall determine the adequacy of existing maintenance schedules and protocols for such equipment. For purposes of this section, a failure is recurrent if it occurs more than twice during any five year period as a result of the same cause as identified in accordance with Section 6.2.2; 7) Any other information requested by the APCO as necessary for determination of compliance with applicable provisions of this rule. [District Rule 4311, 6.5.1] Federally Enforceable Through Title V Permit
- 24. Every five years after the initial FMP submittal, the operator shall submit an updated FMP for each flare to the APCO for approval. The current FMP shall remain in effect until the updated FMP is approved by the APCO. If the operator fails to submit an updated FMP as required by this section, the existing FMP shall no longer be considered an approved plan. [District Rule 4311, 6.5.2] Federally Enforceable Through Title V Permit
- 25. An updated FMP shall be submitted by the operator addressing new or modified equipment, prior to installing the equipment only if: 1) The equipment change would require an Authority To Construct (ATC) and would impact the emissions for the flare; 2) The ATC is deemed complete after June 18, 2009; 3) The modification is not solely the removal or decommissioning of equipment that is listed in the FMP and has no associated increase in flare emissions. [District Rule 4311, 6.5.3] Federally Enforceable Through Title V Permit
- 26. When submitting the initial FMP, or updated FMP, the operator shall designate as confidential any information claimed to be exempt from public disclosure under the California Public Records Act, Government Code Section 6250 et seg, and provide a justification for this designation and also submit a separate copy of the document with the information designated confidential redacted. [District Rule 4311, 6.5.4]
- 27. The shall monitor vent gas composition using one of the five methods pursuant to Section 6.6.1 through Section 6.6.5 in District Rule 4311. [District Rule 4311, 6.6] Federally Enforceable Through Title V Permit
- 28. The operator shall monitor the volumetric flows of purge and pilot gases with flow measuring devices or other parameters as specified on the Permit to Operate so that volumetric flows of pilot and purge gas may be calculated based on pilot design and the parameters monitored. [District Rule 4311, 6.7] Federally Enforceable Through Title V Permit

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

Facility Name: AERA ENERGY LLC LIGHT OIL WESTERN STATIONARY SOURCE C

Location: S-1548-424-9 : Sep 17 2021 8:10AM -- RINAL DIR

- 29. Periods of flare monitoring system inoperation greater than 24 continuous hours shall be reported by the following working day, followed by notification of resumption of monitoring. Periods of inoperation of monitoring equipment shall not exceed 14 days per any 18-consecutive-month period. Periods of flare monitoring system inoperation do not include the periods when the system feeding the flare is not operating. [District Rule 4311, 6.9.1] Federally Enforceable Through Title V Permit
- 30. Permittee shall maintain and calibrate all required monitors and recording devices in accordance with the applicable manufacturer's specifications. In order to claim that a manufacturer's specification is not applicable, the person responsible for emissions must have, and follow, a written maintenance policy that was developed for the device in question. The written policy must explain and justify the difference between the written procedure and the manufacturer's procedure. [District Rule 4311, 6.9.3] Federally Enforceable Through Title V Permit
- 31. All in-line continuous analyzer and flow monitoring data must be continuously recorded by an electronic data acquisition system capable of one-minute averages. Flow monitoring data shall be recorded as one-minute averages. [District Rule 4311, 6.9.4] Federally Enforceable Through Title V Permit

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

Facility Name: AERA ENERGY LLC
Location: LIGHT OIL WESTERN STATIONARY SOURCE
S-1548-474-9: Sen 17 2021 8:10AM - RINAL DIR

**PERMIT UNIT:** S-1548-426-3

SECTION: NE13 TOWNSHIP: 28S RANGE: 20E

**EQUIPMENT DESCRIPTION:** 

COOPER-BESSEMER FUEL GAS COMPRESSOR WITH FUEL GAS DRUM AND SURGE DRUM POWERED BY A  $400\,$ 

HP GE ELECTRIC MOTOR - STATION #26

### PERMIT UNIT REQUIREMENTS

1. See Facility-wide requirement for permit conditions applicable to this permit unit. [District Rule 2010] Federally Enforceable Through Title V Permit

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

Facility Name: AERA ENERGY LLC Location: LIGHT OIL WESTERN STATIONARY SOURCE,CA

S-1548-426-3 : Sep 17 2021 8:10AM -- RINALDIR

**PERMIT UNIT:** S-1548-427-3

SECTION: NE32 TOWNSHIP: 29S RANGE: 21E

**EQUIPMENT DESCRIPTION:** 

 ${\tt COOPER-BESSEMER\ FUEL\ GAS\ COMPRESSOR\ WITH\ FUEL\ GAS\ DRUM\ AND\ SURGE\ DRUM\ POWERED\ BY\ A\ 800}$ 

HP GE ELECTRIC MOTOR - STATION #50

### PERMIT UNIT REQUIREMENTS

1. See Facility-wide requirement for permit conditions applicable to this permit unit. [District Rule 2010] Federally Enforceable Through Title V Permit

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

Facility Name: AERA ENERGY LLC Location: LIGHT OIL WESTERN STATIONARY SOURCE,CA

S-1548-427-3 : Sep 17 2021 8:10AM -- RINALDIR

**PERMIT UNIT:** S-1548-428-10

SECTION: NW20 TOWNSHIP: 28S RANGE: 21E

**EQUIPMENT DESCRIPTION:** 

617 BBL INDUCED STATIC FLOTATION CELL V-240 WITH VAPOR CONTROL AS DESCRIBED IN S-1548-148 - DEHY 20

#### PERMIT UNIT REQUIREMENTS

- Vessel is a pressure vessel as defined by District Rule 4623 Section 3.20. [District Rule 4623] Federally Enforceable 1. Through Title V Permit
- Vessel shall vent to vapor control system listed in S-1548-148, except during periods of vessel interior cleaning. [District Rule 2201] Federally Enforceable Through Title V Permit
- 3. Drain valves shall only drain into covered containers which shall be emptied into tanks with vapor control system. [District Rule 2201] Federally Enforceable Through Title V Permit
- Fugitive VOC emission rate shall not exceed that listed in S-1548-148. [District Rule 2201] Federally Enforceable Through Title V Permit
- This unit is subject to the Dehy 20 Vapor Recovery, Inspection, and Tank Cleaning Conditions on Permit S-1548-148. Deviations from a standard condition shall be reported under the applicable condition in S-1548-148. [District Rule 2520] Federally Enforceable Through Title V Permit

These terms and conditions acility-wide Permit to Operate.

Facility Name: AERA ENERGY LLC LIGHT OIL WESTERN STATIONARY SOURCE, CA Location:

**PERMIT UNIT:** S-1548-429-11

SECTION: NW20 TOWNSHIP: 28S RANGE: 21E

**EQUIPMENT DESCRIPTION:** 

140 BBL CRUDE OIL PROCESS DRAIN VESSEL V-244 WITH VAPOR CONTROL AS DESCRIBED IN S-1548-148 - DEHY 20

#### PERMIT UNIT REQUIREMENTS

- 1. Vessel is a pressure vessel as defined by District Rule 4623 Section 3.20. [District Rule 4623] Federally Enforceable Through Title V Permit
- 2. Vessel shall vent to vapor control system listed in S-1548-148, except during periods of vessel interior cleaning. [District Rule 2201] Federally Enforceable Through Title V Permit
- 3. Drain valves shall only drain into covered containers which shall be emptied into tanks with vapor control system. [District Rule 2201] Federally Enforceable Through Title V Permit
- 4. Fugitive VOC emission rate shall not exceed that listed in S-1548-148. [District Rule 2201] Federally Enforceable Through Title V Permit
- 5. This unit is subject to the Dehy 20 Vapor Recovery, Inspection, and Tank Cleaning Conditions on Permit S-1548-148. Deviations from a standard condition shall be reported under the applicable condition in S-1548-148. [District Rule 2520] Federally Enforceable Through Title V Permit

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

Facility Name: AERA ENERGY LLC Location: LIGHT OIL WESTERN STATIONARY SOURCE,CA

S-1548-429-11 : Sep 17 2021 8:10AM -- RINALDIR

**PERMIT UNIT:** S-1548-433-8

SECTION: NW 2 TOWNSHIP: 29S RANGE: 21E

**EQUIPMENT DESCRIPTION:** 

1.680 BHP WAUKESHA MODEL 7044 GSI NATURAL GAS-FIRED IC ENGINE EQUIPPED WITH PCV. O2 CONTROLLER, AND 3-WAY CATALYST POWERING A GAS COMPRESSOR

#### PERMIT UNIT REQUIREMENTS

- When this unit is not operated (dormant for Rule 4702) the fuel line shall be physically disconnected from this unit. [District Rule 2080] Federally Enforceable Through Title V Permit
- A source test to demonstrate compliance with NOx, CO and VOC emission limits shall be performed within 60 days of recommencing operation of this unit. [District Rule 4702] Federally Enforceable Through Title V Permit
- 3. Upon seven days written notice to the District this engine may be designated as a dormant emissions unit or an active emissions unit. [District Rule 1070] Federally Enforceable Through Title V Permit
- The engine shall only burn natural gas with fuel gas sulfur concentration (as H2S) not exceeding 0.88 grains/100 dscf (15 ppmv). [District NSR Rule] Federally Enforceable Through Title V Permit
- VOC emissions from fugitive components associated permit units S-1548-433 through S-1548-438 shall not exceed 57.2 lb VOC per day. [District NSR Rule] Federally Enforceable Through Title V Permit
- Leaks from valves, connectors, and other components (not including compressor seals) shall be defined as a reading of methane on a portable hydrocarbon detection instrument in excess of 100 ppmv above background when measured as close as possible to the potential source. [District NSR Rule] Federally Enforceable Through Title V Permit
- Leaks from compressor seals shall be defined as a reading of methane on a portable hydrocarbon detection instrument in excess of 500 ppmv above background when measured as close as possible to the potential source. [District NSR Rule] Federally Enforceable Through Title V Permit
- Components to be screened shall be identified and categorized according to the following equipment types: connectors, flanges, open ended lines (sample connections, drains, bleed valves, etc.), pump seals, valves with visible actuators and other (pressure relief devices, compressor seals, meters, etc.). Components shall be further identified and categorized according to the following types of service: gas/light liquid and heavy liquid service. [District NSR Rule] Federally Enforceable Through Title V Permit
- Component screening shall be performed in accordance with EPA reference Method 21. [District NSR Rule] Federally Enforceable Through Title V Permit
- 10. Fugitive emission calculations shall be performed using EPA Publication 453/R-95-017, Table 2-8 factors. [District NSR Rule] Federally Enforceable Through Title V Permit
- 11. Permittee shall maintain a current listing of all fugitive components installed with engine/compressor and corresponding VOC emission calculations to verify compliance with fugitive VOC emission limit. [District NSR Rule] 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: AERA ENERGY LLC LIGHT OIL WESTERN STATIONARY SOURCE, CA Location:

S-1548-433-8 : Sep 17 2021 8:10AM -- RINAL DIR

- 12. Emissions from this engine shall not exceed any of the following limits: 0.071 gr-NOx/bhp-hr (5 ppmv @ 15% O2), 0.003 gr-PM10/bhp-hr, 0.613 gr-CO/bhp-hr (70 ppmv @ 15% O2), or 0.15 gr-VOC/bhp-hr (30 ppmv @ 15% O2). [District NSR Rule] Federally Enforceable Through Title V Permit
- 13. The permittee shall record the inlet temperature to the catalytic converter on a daily basis. [District Rule 2520, 9.4.2 and 40 CFR 64] Federally Enforceable Through Title V Permit
- 14. The inlet temperature of the catalyst shall be maintained between 750 F and 1250 F. [40 CFR 64] Federally Enforceable Through Title V Permit
- 15. The permittee shall comply with the compliance assurance monitoring operation and maintenance requirements of 40 CFR Part 64.7. [40 CFR 64] Federally Enforceable Through Title V Permit
- 16. The permittee shall comply with the recordkeeping and reporting requirements of 40 CFR part 64.9. [40 CFR 64] Federally Enforceable Through Title V Permit
- 17. If the District or EPA determine that a Quality Improvement Plan is required under 40 CFR 64.7(d)(2), the permittee shall develop and implement the Quality Improvement Plan in accordance with 40 CFR part 64.8. [40 CFR 64] Federally Enforceable Through Title V Permit
- 18. Written records of the engine idling time are not required. Compliance with idle-time limit shall be demonstrated by maintaining a copy of a work practice standard that includes the minimization of engine idling time. [District Rule 2520, 9.4] Federally Enforceable Through Title V Permit
- 19. The engine's oil and filter shall be changed every 2,160 hours of operation or every 12 months, whichever comes first. Permittee may utilize the oil analysis program specified in the Inspection and Maintenance (I&M) plan to extend the oil change requirement. [40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit
- 20. The engine's air filter shall be inspected every 2,160 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit
- 21. The engine's hoses and belts shall be inspected every 2,160 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit
- 22. The owner must operate and maintain the engine per the manufacturers emission-related instructions, or develop and follow your own maintenance plan which provides to the extent practicable for the operation and maintenance of the engine in a manner consistent with good practices [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- 23. This unit is subject to IC Engine Conditions on the facility wide permit S-1548-0. Deviations from a standard condition shall be reported under the applicable condition in S-1548-0. [District Rule 2520] Federally Enforceable Through Title V Permit

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

Facility Name: AERA ENERGY LLC
Location: LIGHT OIL WESTERN STATIONARY SOURCE

Location: LIGHT OIL WES S-1548-433-8: Sep 17 2021 8:10AM -- RINALDIR

**PERMIT UNIT:** S-1548-434-8

SECTION: NW 2 TOWNSHIP: 29S RANGE: 21E

**EQUIPMENT DESCRIPTION:** 

1,680 BHP WAUKESHA MODEL 7044 GSI NATURAL GAS-FIRED IC ENGINE EQUIPPED WITH PCV, O2 CONTROLLER, AND 3-WAY CATALYST POWERING A GAS COMPRESSOR

#### PERMIT UNIT REQUIREMENTS

- 1. When this unit is not operated (dormant for Rule 4701 and 4702) the fuel line shall be physically disconnected from this unit. [District Rule 2080] Federally Enforceable Through Title V Permit
- 2. A source test to demonstrate compliance with NOx, CO and VOC emission limits shall be performed within 60 days of recommencing operation of this unit. [District Rule 4702] Federally Enforceable Through Title V Permit
- 3. Upon seven days written notice to the District this engine may be designated as a dormant emissions unit or an active emissions unit. [District Rule 1070] Federally Enforceable Through Title V Permit
- 4. The engine shall only burn natural gas with fuel gas sulfur content concentration (as H2S) not exceeding 0.25 grains/100 dscf. [District NSR Rule] Federally Enforceable Through Title V Permit
- 5. The engine shall only burn natural gas with total sulfur content not exceeding 1.0 grains/100 dscf. [District NSR Rule] Federally Enforceable Through Title V Permit
- 6. VOC emissions from fugitive components associated permit units S-1548-433 through S-1548-438 shall not exceed 57.2 lb VOC per day. [District NSR Rule] Federally Enforceable Through Title V Permit
- 7. Leaks from valves, connectors, and other components (not including compressor seals) shall be defined as a reading of methane on a portable hydrocarbon detection instrument in excess of 100 ppmv above background when measured as close as possible to the potential source. [District NSR Rule] Federally Enforceable Through Title V Permit
- 8. Leaks from compressor seals shall be defined as a reading of methane on a portable hydrocarbon detection instrument in excess of 500 ppmv above background when measured as close as possible to the potential source. [District NSR Rule] Federally Enforceable Through Title V Permit
- 9. Components shall be screened and inspected with a minimum of 25% of the components inspected each quarter. Any leak greater than 500 ppmv for compressor seals and 100 ppmv for valves, connectors and other components, when measured with a portable hydrocarbon detection instrument calibrated with methane in accordance with EPA Method 21 or leaking at a rate of greater than 3 drops of liquid per minute, shall be repaired in a manner consistent with the procedures specified in Section 5.3 of Rule 4409. This requirement shall not apply to inaccessible or unsafe-to-access components as identified in the Operator Management Plan pursuant to Section 6.1 of Rule 4409. [District NSR Rule] Federally Enforceable Through Title V Permit
- 10. Components to be screened shall be identified and categorized according to the following equipment types: connectors, flanges, open ended lines (sample connections, drains, bleed valves, etc.), pump seals, valves with visible actuators and other (pressure relief devices, compressor seals, meters, etc.). Components shall be further identified and categorized according to the following types of service: gas/light liquid and heavy liquid service. [District NSR Rule] 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: AERA ENERGY LLC Location: LIGHT OIL WESTERN STATIONARY SOURCE,CA \$1548-4348-\$1917 2021 \$100M - RINAD IDR

- 11. Component screening shall be performed in accordance with EPA reference Method 21. [District NSR Rule] Federally Enforceable Through Title V Permit
- 12. Fugitive emission calculations shall be performed using EPA Publication 453/R-95-017, Table 2-8 factors. [District NSR Rule] Federally Enforceable Through Title V Permit
- 13. Permittee shall maintain a current listing of all fugitive components installed with engine/compressor and corresponding VOC emission calculations to verify compliance with fugitive VOC emission limit. [District NSR Rule] Federally Enforceable Through Title V Permit
- 14. Emissions from this engine shall not exceed any of the following limits: 0.071 gr-NOx/bhp-hr (5 ppmv @ 15% O2), 0.003 gr-PM10/bhp-hr, 0.613 gr-CO/bhp-hr (70 ppmv @ 15% O2), or 0.15 gr-VOC/bhp-hr (30 ppmv @ 15% O2). [District NSR Rule] Federally Enforceable Through Title V Permit
- 15. District witnessed or approved compliance source testing for NOx, CO, and VOC emission limits shall be conducted on all engines not less than once every 24 months. [District Rule 4702, 6.3.2] Federally Enforceable Through Title V Permit
- 16. The permittee shall record the inlet temperature to the catalytic converter on a daily basis. [District Rule 2520, 9.4.2 and 40 CFR 64] Federally Enforceable Through Title V Permit
- 17. The inlet temperature of the catalyst shall be maintained between 750 F and 1250 F. [40 CFR 64] Federally Enforceable Through Title V Permit
- 18. The permittee shall comply with the compliance assurance monitoring operation and maintenance requirements of 40 CFR Part 64.7. [40 CFR 64] Federally Enforceable Through Title V Permit
- 19. The permittee shall comply with the recordkeeping and reporting requirements of 40 CFR part 64.9. [40 CFR 64] Federally Enforceable Through Title V Permit
- 20. If the District or EPA determine that a Quality Improvement Plan is required under 40 CFR 64.7(d)(2), the permittee shall develop and implement the Quality Improvement Plan in accordance with 40 CFR part 64.8. [40 CFR 64] Federally Enforceable Through Title V Permit
- 21. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following subsumed requirements: Rules 402 (Madera) and 404 (Fresno, Merced, Kern, Kings, San Joaquin, Stanislaus, Tulare). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
- 22. Written records of the engine idling time are not required. Compliance with idle-time limit shall be demonstrated by maintaining a copy of a work practice standard that includes the minimization of engine idling time. [District Rule 2520, 9.4] Federally Enforceable Through Title V Permit
- 23. The engine's oil and filter shall be changed every 2,160 hours of operation or every 12 months, whichever comes first. Permittee may utilize the oil analysis program specified in the Inspection and Maintenance (I&M) plan to extend the oil change requirement. [40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit
- 24. The engine's air filter shall be inspected every 2,160 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit
- 25. The engine's hoses and belts shall be inspected every 2,160 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit
- 26. The owner must operate and maintain the engine per the manufacturers emission-related instructions, or develop and follow your own maintenance plan which provides to the extent practicable for the operation and maintenance of the engine in a manner consistent with good practices [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- 27. This unit is subject to IC Engine Conditions on the facility wide permit S-1548-0. Deviations from a standard condition shall be reported under the applicable condition in S-1548-0. [District Rule 2520] Federally Enforceable Through Title V Permit

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

Facility Name: AERA ENERGY LLC
Location: LIGHT OIL WESTERN STATIONARY SOURCE

LIGHT OIL WES S-1548-434-8 : Sep 17 2021 8:10AM -- RINALDIR

**PERMIT UNIT:** S-1548-435-8

SECTION: NW 2 TOWNSHIP: 29S RANGE: 21E

**EQUIPMENT DESCRIPTION:** 

1.680 HP WAUKESHA MODEL 7044 GSI NATURAL GAS-FIRED IC ENGINE EQUIPPED WITH PCV. O2 CONTROLLER. AND 3-WAY CATALYST POWERING A GAS COMPRESSOR

#### PERMIT UNIT REQUIREMENTS

- When this unit is not operated (dormant for Rule 4701 and 4702) the fuel line shall be physically disconnected from this unit. [District Rule 2080] Federally Enforceable Through Title V Permit
- A source test to demonstrate compliance with NOx, CO and VOC emission limits shall be performed within 60 days of recommencing operation of this unit. [District Rule 4702] Federally Enforceable Through Title V Permit
- 3. Upon seven days written notice to the District this engine may be designated as a dormant emissions unit or an active emissions unit. [District Rule 1070] Federally Enforceable Through Title V Permit
- The engine shall only burn natural gas with fuel gas sulfur content concentration (as H2S) not exceeding 0.25 grains/100 dscf. [District NSR Rule] Federally Enforceable Through Title V Permit
- The engine shall only burn natural gas with total sulfur content not exceeding 1.0 grains/100 dscf. [District NSR Rule] 5. Federally Enforceable Through Title V Permit
- VOC emissions from fugitive components associated permit units S-1548-433 through S-1548-438 shall not exceed 57.2 lb VOC per day. [District NSR Rule] Federally Enforceable Through Title V Permit
- Leaks from valves, connectors, and other components (not including compressor seals) shall be defined as a reading of methane on a portable hydrocarbon detection instrument in excess of 100 ppmv above background when measured as close as possible to the potential source. [District NSR Rule] Federally Enforceable Through Title V Permit
- Leaks from compressor seals shall be defined as a reading of methane on a portable hydrocarbon detection instrument in excess of 500 ppmv above background when measured as close as possible to the potential source. [District NSR Rule] Federally Enforceable Through Title V Permit
- Components shall be screened and inspected with a minimum of 25% of the components inspected each quarter. Any leak greater than 500 ppmv for compressor seals and 100 ppmv for valves, connectors and other components, when measured with a portable hydrocarbon detection instrument calibrated with methane in accordance with EPA Method 21 or leaking at a rate of greater than 3 drops of liquid per minute, shall be repaired in a manner consistent with the procedures specified in Section 5.3 of Rule 4409. This requirement shall not apply to inaccessible or unsafe-to-access components as identified in the Operator Management Plan pursuant to Section 6.1 of Rule 4409. [District NSR Rule] Federally Enforceable Through Title V Permit
- 10. Components to be screened shall be identified and categorized according to the following equipment types: connectors, flanges, open ended lines (sample connections, drains, bleed valves, etc.), pump seals, valves with visible actuators and other (pressure relief devices, compressor seals, meters, etc.). Components shall be further identified and categorized according to the following types of service: gas/light liquid and heavy liquid service. [District NSR Rule] 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.

LIGHT OIL WESTERN STATIONARY SOURCE, CA Location: S-1548-435-8 : Sep 17 2021 8:10AM -- RINAL DIR

Facility Name: AERA ENERGY LLC

- 11. Component screening shall be performed in accordance with EPA reference Method 21. [District NSR Rule] Federally Enforceable Through Title V Permit
- 12. Fugitive emission calculations shall be performed using EPA Publication 453/R-95-017, Table 2-8 factors. [District NSR Rule] Federally Enforceable Through Title V Permit
- 13. Permittee shall maintain a current listing of all fugitive components installed with engine/compressor and corresponding VOC emission calculations to verify compliance with fugitive VOC emission limit. [District NSR Rule] Federally Enforceable Through Title V Permit
- 14. Emissions from this engine shall not exceed any of the following limits: 0.071 gr-NOx/bhp-hr (5 ppmv @ 15% O2), 0.003 gr-PM10/bhp-hr, 0.613 gr-CO/bhp-hr (70 ppmv @ 15% O2), or 0.15 gr-VOC/bhp-hr (30 ppmv @ 15% O2). [District NSR Rule] Federally Enforceable Through Title V Permit
- 15. District witnessed or approved compliance source testing for NOx, CO, and VOC emission limits shall be conducted on all engines not less than once every 24 months. [District Rule 4702, 6.3.2] Federally Enforceable Through Title V Permit
- 16. The permittee shall record the inlet temperature to the catalytic converter on a daily basis. [District Rule 2520, 9.4.2 and 40 CFR 64] Federally Enforceable Through Title V Permit
- 17. The inlet temperature of the catalyst shall be maintained between 750 F and 1250 F. [40 CFR 64] Federally Enforceable Through Title V Permit
- 18. The permittee shall comply with the compliance assurance monitoring operation and maintenance requirements of 40 CFR Part 64.7. [40 CFR 64] Federally Enforceable Through Title V Permit
- 19. The permittee shall comply with the recordkeeping and reporting requirements of 40 CFR part 64.9. [40 CFR 64] Federally Enforceable Through Title V Permit
- 20. If the District or EPA determine that a Quality Improvement Plan is required under 40 CFR 64.7(d)(2), the permittee shall develop and implement the Quality Improvement Plan in accordance with 40 CFR part 64.8. [40 CFR 64] Federally Enforceable Through Title V Permit
- 21. Written records of the engine idling time are not required. Compliance with idle-time limit shall be demonstrated by maintaining a copy of a work practice standard that includes the minimization of engine idling time. [District Rule 2520, 9.4] Federally Enforceable Through Title V Permit
- 22. The engine's oil and filter shall be changed every 2,160 hours of operation or every 12 months, whichever comes first. Permittee may utilize the oil analysis program specified in the Inspection and Maintenance (I&M) plan to extend the oil change requirement. [40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit
- 23. The engine's air filter shall be inspected every 2,160 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit
- 24. The engine's hoses and belts shall be inspected every 2,160 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit
- 25. The owner must operate and maintain the engine per the manufacturers emission-related instructions, or develop and follow your own maintenance plan which provides to the extent practicable for the operation and maintenance of the engine in a manner consistent with good practices [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- 26. This unit is subject to IC Engine Conditions on the facility wide permit S-1548-0. Deviations from a standard condition shall be reported under the applicable condition in S-1548-0. [District Rule 2520] Federally Enforceable Through Title V Permit

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

Facility Name: AERA ENERGY LLC
Location: LIGHT OIL WESTERN STATIONARY SOURCE

Location: LIGHT OIL WES S-1548-435-8: Sep 17 2021 8:10AM -- RINALDIR

**PERMIT UNIT:** S-1548-439-14

SECTION: NW20 TOWNSHIP: 28S RANGE: 21E

**EQUIPMENT DESCRIPTION:** 

1310 BBL FREE WATER KNOCKOUT VESSEL V-201A WITH VAPOR CONTROL AS DESCRIBED IN S-1548-148- DEHY 20

#### PERMIT UNIT REQUIREMENTS

- Vessel is a pressure vessel as defined by District Rule 4623. [District Rule 4623] Federally Enforceable Through Title V Permit
- The vessel shall vent only to the vapor control system listed on permit S-1548-148, except during periods of vessel 2. cleaning or maintenance. [District Rule 2201] Federally Enforceable Through Title V Permit
- 3. The control valve on the common vapor-out line from the FWKO vessels shall be set at a sufficient pressure to prevent the backflow of tank vapors into the FWKO vessels. Components (valves, flanges, etc) downstream of this control valve are subject to the requirements of Rule 4623 and, therefore, any leak in excess of 10,000 ppmv detected from components downstream of the control valve shall be reported as a deviation. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
- Fugitive VOC emission rate shall not exceed that listed in S-1548-148. [District Rule 2201] Federally Enforceable Through Title V Permit
- 5. This unit is subject to the Dehy 20 Vapor Recovery, Inspection, and Tank Cleaning Conditions on Permit S-1548-148. Deviations from a standard condition shall be reported under the applicable condition in S-1548-148. [District Rule 2520] Federally Enforceable Through Title V Permit

These terms and conditions acility-wide Permit to Operate.

Facility Name: AERA ENERGY LLC Location:

LIGHT OIL WESTERN STATIONARY SOURCE, CA S-1548-439-14 : Sep 17 2021 8:10AM -- RINALDIR

**PERMIT UNIT:** S-1548-440-14

SECTION: NW20 TOWNSHIP: 28S RANGE: 21E

**EQUIPMENT DESCRIPTION:** 

1310 BBL FREE WATER KNOCKOUT VESSEL V-201B WITH VAPOR CONTROL AS DESCRIBED IN S-1548-148- DEHY 20

#### PERMIT UNIT REQUIREMENTS

- Vessel is a pressure vessel as defined by District Rule 4623. [District Rule 4623] Federally Enforceable Through Title V Permit
- The vessel shall vent only to the vapor control system listed on permit S-1548-148, except during periods of vessel 2. cleaning or maintenance. [District Rule 2201] Federally Enforceable Through Title V Permit
- 3. The control valve on the common vapor-out line from the FWKO vessels shall be set at a sufficient pressure to prevent the backflow of tank vapors into the FWKO vessels. Components (valves, flanges, etc) downstream of this control valve are subject to the requirements of Rule 4623 and, therefore, any leak in excess of 10,000 ppmv detected from components downstream of the control valve shall be reported as a deviation. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
- Fugitive VOC emission rate shall not exceed that listed in S-1548-148. [District Rule 2201] Federally Enforceable Through Title V Permit
- 5. This unit is subject to the Dehy 20 Vapor Recovery, Inspection, and Tank Cleaning Conditions on Permit S-1548-148. Deviations from a standard condition shall be reported under the applicable condition in S-1548-148. [District Rule 2520] Federally Enforceable Through Title V Permit

These terms and conditions acility-wide Permit to Operate.

Facility Name: AERA ENERGY LLC

LIGHT OIL WESTERN STATIONARY SOURCE, CA Location: S-1548-440-14 : Sep 17 2021 8:10AM -- RINALDIR

**PERMIT UNIT:** S-1548-441-14

SECTION: NW20 TOWNSHIP: 28S RANGE: 21E

**EQUIPMENT DESCRIPTION:** 

1310 BBL FREE WATER KNOCKOUT VESSEL V-201C WITH VAPOR CONTROL AS DESCRIBED IN S-1548-148- DEHY 20

#### PERMIT UNIT REQUIREMENTS

- 1. Vessel is a pressure vessel as defined by District Rule 4623. [District Rule 4623] Federally Enforceable Through Title V Permit
- 2. The vessel shall vent only to the vapor control system listed on permit S-1548-148, except during periods of vessel cleaning or maintenance. [District Rule 2201] Federally Enforceable Through Title V Permit
- 3. The control valve on the common vapor-out line from the FWKO vessels shall be set at a sufficient pressure to prevent the backflow of tank vapors into the FWKO vessels. Components (valves, flanges, etc) downstream of this control valve are subject to the requirements of Rule 4623 and, therefore, any leak in excess of 10,000 ppmv detected from components downstream of the control valve shall be reported as a deviation. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
- 4. Fugitive VOC emission rate shall not exceed that listed in S-1548-148. [District Rule 2201] Federally Enforceable Through Title V Permit
- 5. This unit is subject to the Dehy 20 Vapor Recovery, Inspection, and Tank Cleaning Conditions on Permit S-1548-148. Deviations from a standard condition shall be reported under the applicable condition in S-1548-148. [District Rule 2520] Federally Enforceable Through Title V Permit

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

Facility Name: AERA ENERGY LLC Location: LIGHT OIL WESTERN STATIONARY SOURCE,CA

S-1548-441-14 : Sep 17 2021 8:10AM -- RINALDIR

**PERMIT UNIT:** S-1548-442-14

SECTION: NW20 TOWNSHIP: 28S RANGE: 21E

**EQUIPMENT DESCRIPTION:** 

1310 BBL FREE WATER KNOCKOUT VESSEL V-201D WITH VAPOR CONTROL AS DESCRIBED IN S-1548-148- DEHY 20

#### PERMIT UNIT REQUIREMENTS

- 1. Vessel is a pressure vessel as defined by District Rule 4623. [District Rule 4623] Federally Enforceable Through Title V Permit
- 2. The vessel shall vent only to the vapor control system listed on permit S-1548-148, except during periods of vessel cleaning or maintenance. [District Rule 2201] Federally Enforceable Through Title V Permit
- 3. The control valve on the common vapor-out line from the FWKO vessels shall be set at a sufficient pressure to prevent the backflow of tank vapors into the FWKO vessels. Components (valves, flanges, etc) downstream of this control valve are subject to the requirements of Rule 4623 and, therefore, any leak in excess of 10,000 ppmv detected from components downstream of the control valve shall be reported as a deviation. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
- 4. Fugitive VOC emission rate shall not exceed that listed in S-1548-148. [District Rule 2201] Federally Enforceable Through Title V Permit
- 5. This unit is subject to the Dehy 20 Vapor Recovery, Inspection, and Tank Cleaning Conditions on Permit S-1548-148. Deviations from a standard condition shall be reported under the applicable condition in S-1548-148. [District Rule 2520] Federally Enforceable Through Title V Permit

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

Facility Name: AERA ENERGY LLC Location: LIGHT OIL WESTERN STATIONARY SOURCE,CA

S-1548-442-14 : Sep 17 2021 8:10AM -- RINALDIR

**PERMIT UNIT:** S-1548-443-7

**SECTION:** NW 4 **TOWNSHIP:** 27S **RANGE:** 21E

**EQUIPMENT DESCRIPTION:** 

24,300 GALLON (10 FT. DIA. BY 40 FT. LONG SHELL) FREE WATER KNOCKOUT VESSEL V-3005 WITH VAPOR PIPING TO VAPOR CONTROL SYSTEM LISTED ON S-1548-120:

#### PERMIT UNIT REQUIREMENTS

- 1. VOC emission rate from components shall not exceed 20.6 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
- 2. Permittee shall maintain an accurate fugitive component count and resultant emissions calculated using U.S. EPA Publication 453/R-95-017, Table 2-4. [District Rule 2201] Federally Enforceable Through Title V Permit
- 3. This unit is subject to the Lost Hills 1 Dehy Vapor Recovery, Inspection, and Tank Cleaning Conditions on Permit S-1548-120. Deviations from a standard condition shall be reported under the applicable condition in S-1548-120. [District Rule 2520] Federally Enforceable Through Title V Permit

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

Facility Name: AERA ENERGY LLC Location: LIGHT OIL WESTERN STATIONARY SOURCE,CA

S-1548-443-7 : Sep 17 2021 8:10AM -- RINALDII

**PERMIT UNIT:** S-1548-444-6

**SECTION:** SE 19 **TOWNSHIP:** 28S **RANGE:** 21E

**EQUIPMENT DESCRIPTION:** 

29,400 GALLON FREE WATER KNOCKOUT VESSEL (V-300) WITH VAPOR PIPING TO GAS COMPRESSORS (S-1548-172, '-173, '-174, '-175, AND '-427) AND CONNECTED TO S-1547-1079 CASING VENT VAPOR RECOVERY AND CONTROL SYSTEM

### PERMIT UNIT REQUIREMENTS

- 1. Prior to opening vessel for interior cleaning, operator shall drain all liquid from the tank to the maximum extent feasible and shall operate the vapor recovery system/vapor control system for at least 24 hours such that it collects all tank vapors. [District Rule 2201] Federally Enforceable Through Title V Permit
- 2. The interior of the vessel may be cleaned once per calendar quarter. [District Rule 2201] Federally Enforceable Through Title V Permit
- 3. Collected vapors shall be piped to the gas gathering system or to S-1547-1079 casing vent vapor recovery and control system, except during periods of vessel interior cleaning. [District Rule 2201] Federally Enforceable Through Title V Permit
- 4. VOC emission rate from components shall not exceed 45.5 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
- 5. Permittee shall maintain an accurate fugitive component count and resultant emissions calculated using U.S. EPA Publication 453/R-95-017, Table 2-4. [District Rule 2201] Federally Enforceable Through Title V Permit
- 6. Permittee shall maintain accurate records of the date of each interior cleaning. Such records shall be made readily available for District inspection for a period of five years. [District Rule 1070] Federally Enforceable Through Title V Permit

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

Facility Name: AERA ENERGY LLC Location: LIGHT OIL WESTERN STATIONARY SOURCE.CA

S-1548-444-6 : Sep 17 2021 8:10AM -- RINALDIR

**PERMIT UNIT:** S-1548-445-4

SECTION: SE 12 TOWNSHIP: 28S RANGE: 20E

**EQUIPMENT DESCRIPTION:** 

42,300 GALLON FREE WATER KNOCKOUT VESSEL (V-100) WITH VAPOR PIPING TO GAS COMPRESSORS (S-1548-171 AND '-426)

### PERMIT UNIT REQUIREMENTS

- 1. Prior to opening vessel for interior cleaning, operator shall drain all liquid from the vessel to the maximum extent feasible and shall operate the vapor recovery system or vapor control device for at least 24 hours such that it collects the vapors from the vessel. [District Rule 2201] Federally Enforceable Through Title V Permit
- 2. Collected vapors shall be piped to the gas gathering system, except during periods of vessel interior cleaning. [District Rule 2201]
- 3. The interior of the vessel may be cleaned once per calendar quarter. [District Rule 2201] Federally Enforceable Through Title V Permit
- 4. VOC emission rate from components shall not exceed 45.5 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
- 5. Permittee shall maintain an accurate fugitive component count and resultant emissions calculated using U.S. EPA Publication 453/R-95-017, Table 2-4. [District Rule 2201] Federally Enforceable Through Title V Permit
- 6. Permittee shall maintain accurate records of the date of each interior cleaning. Such records shall be made readily available for District inspection for a period of five years. [District Rule 1070] Federally Enforceable Through Title V Permit

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

Facility Name: AERA ENERGY LLC

Location: LIGHT OIL WESTERN STATIONARY SOURCE,CA S-1548-445-4 : Sep 17 2021 8:10AM -- RINALDIR

**PERMIT UNIT:** S-1548-451-5

EXPIRATION DAT

#### **EQUIPMENT DESCRIPTION:**

HYDROGEN SULFIDE (H2S) SCAVENGER CHEMICAL STORAGE AND INJECTION OPERATION APPROVED TO OPERATE AT VARIOUS UNSPECIFIED LOCATIONS IN THE LIGHT OIL WESTERN STATIONARY SOURCE UTILIZING UP TO 5 CHEMICAL STORAGE TANKS (CAPACITY OF 500 GALLONS OR LESS) EACH EQUIPPED WITH A CATCH BASIN AND ASSOCIATED COMPONENTS INCLUDING LIQUID TRANSFER PUMP(S), VALVES, FLANGES, THREADED CONNECTIONS, FLEXIBLE PIPING, AND STINGER-TYPE INJECTION FITTINGS ON PRODUCED GAS **PIPELINES** 

### PERMIT UNIT REQUIREMENTS

- No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102] 1.
- 2. Permittee shall notify the SJVUAPCD of each location at which an H2S scavenger chemical storage and injection operation 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 2201] Federally Enforceable Through Title V Permit
- Chemical storage and injection operations shall not be located within 1000 feet of a school. [District Rule 4102]
- Each chemical storage tank shall have a maximum rated capacity of 500 gallons or less and up to eight injection fittings. [District Rule 2201] Federally Enforceable Through Title V Permit
- Permit exempt tanks with a capacity of 250 gallons or less where the actual storage temperature does not exceed 150 deg F may be used to store H2S scavenger chemical. [District Rule 2020] Federally Enforceable Through Title V Permit
- The maximum throughput of each chemical storage tank shall not exceed 200 gallons per day. [District Rule 2201] Federally Enforceable Through Title V Permit
- 7. True vapor pressure of materials stored in each chemical tank shall not exceed 3.0 psia. [District Rule 2201] Federally Enforceable Through Title V Permit
- Total VOC emissions from all H2S scavenger injection equipment shall not exceed 7.0 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
- On a monthly basis, to determine compliance with daily throughput limits, permittee shall maintain accurate records of average daily throughput for each tank based on purchase records. Such records shall be made readily available for District inspection upon request. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 10. Permittee shall maintain accurate fugitive component counts and resultant emissions calculated using Table 2-4 of U.S. EPA Publication 453/R-95-017. [District Rule 2201] Federally Enforceable Through Title V Permit
- 11. Accurate records of the dates and amounts of chemical deliveries for each chemical injection site and fugitive component counts shall be retained and made available for District inspection upon request for a period of 5 years. [District Rule 2201] Federally Enforceable Through Title V Permit

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

Facility Name: AERA ENERGY LLC LIGHT OIL WESTERN STATIONARY SOURCE, CA Location:

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- 12. Operator shall keep records of the true vapor pressure of the chemical stored in the tank. These records shall include a laboratory analysis for TVP according to the methods described in District Rule 4623, Section 6.4 (Amended 12/20/01), MSDS which lists the true vapor pressure, or environmental data sheet which lists the true vapor pressure. Such records shall be made readily available for District inspection upon request for a period of 5 years. [District Rule 4623] Federally Enforceable Through Title V Permit
- 13. Injection of scavenging chemicals shall not result in an increase in air contaminant or odorous emissions at downstream production handling facilities or wastewater separators, containers, loadouts, or disposal sites. [District Rule 2010] Federally Enforceable Through Title V Permit

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

Facility Name: AERA ENERGY LLC
Location: LIGHT OIL WESTERN STATIONARY SOURCE
S-1548-451-5: Sep 17 2021 8:10AM - RINAL DIR

**PERMIT UNIT:** S-1548-463-10

#### **EQUIPMENT DESCRIPTION:**

1310 BBL FREE WATER KNOCKOUT VESSEL V-201E WITH VAPOR CONTROL AS DESCRIBED/IN-S-1548-148 -DEHY 20

### PERMIT UNIT REQUIREMENTS

- Vessel is a pressure vessel as defined by District Rule 4623. [District Rule 4623] Federally Enforceable Through Title 1. V Permit
- The vessel shall vent only to the vapor control system listed on permit S-1548-148, except during periods of vessel cleaning or maintenance. [District Rule 2201] Federally Enforceable Through Title V Permit
- 3. The control valve on the common vapor-out line from the FWKO vessels shall be set at a sufficient pressure to prevent the backflow of tank vapors into the FWKO vessels. Components (valves, flanges, etc) downstream of this control valve are subject to the requirements of Rule 4623 and, therefore, any leak in excess of 10,000 ppmv detected from components downstream of the control valve shall be reported as a deviation. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
- VOC fugitives from components in gas service shall not exceed 24.1 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
- Permittee shall maintain accurate records of fugitive inspection component counts and calculated fugitive emissions using EPA Document -453/R-95-017, Protocol for Equipment Leak Emission Estimates Table 2-4 "Oil and Gas Production Operations Average Emission Factors" (November 1995). Permittee shall make records of component counts, emission factors, and calculations readily available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit
- This unit is subject to the Dehy 20 Vapor Recovery, Inspection, and Tank Cleaning Conditions on Permit S-1548-148. Deviations from a standard condition shall be reported under the applicable condition in S-1548-148. [District Rule 2520] Federally Enforceable Through Title V Permit

These terms and conditions acility-wide Permit to Operate.

Facility Name: AERA ENERGY LLC Location:

LIGHT OIL WESTERN STATIONARY SOURCE, CA

**PERMIT UNIT:** S-1548-470-13

**EQUIPMENT DESCRIPTION:** 

400 CYCLIC STEAM ENHANCED WELLS WITH CLOSED CASING VENTS

#### PERMIT UNIT REQUIREMENTS

- 1. Cyclic wells covered by this permit shall each have a visible identification number. Field personnel shall be provided with written instructions concerning proper operation and maintenance of these wells. [District Rule 2201] Federally Enforceable Through Title V Permit
- Fugitive emissions from all components associated with this cyclic well operation shall not exceed 86.2 lb-VOC/day. [District Rule 2201] Federally Enforceable Through Title V Permit
- All components to be screened shall be identified and categorized according to the following equipment types: connectors, flanges, open-ended lines (sample connections, drains, bleed valves, etc.), pump seals, valves with visible actuators, and other (pressure relief devices, compressor seals, meters, etc.). Components shall be further identified and categorized according to the following types of service: gas/light liquid, light oil, heavy oil, and water/oil. [District Rule 2201] Federally Enforceable Through Title V Permit
- Portable hydrocarbon detection instrument shall be operated and calibrated in accordance with recommendations in CAPCOA/CARB's California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities (February, 1999). [District Rule 2201] Federally Enforceable Through Title V Permit
- Flanges shall be monitored with a portable hydrocarbon detection instrument along the entire circumference of the flange-gasket interface. Threaded connections, tubing fittings, and other types of non-permanent joints shall be monitored along the entire circumference of joint interface. [District Rule 2201] Federally Enforceable Through Title V Permit
- Valves shall be monitored with a portable hydrocarbon detection instrument where the stem comes through the packing gland, and at any attached or connected body flange(s), bonnet flange(s), or plug(s). [District Rule 2201] Federally Enforceable Through Title V Permit
- All other components such as diaphragms, dump arms, instruments and meters shall be monitored at all points of possible emissions. [District Rule 2201] Federally Enforceable Through Title V Permit
- Permittee shall maintain a current list of all cyclic wells associated with this operation, shall update the list whenever a 8. well is added, replaced, or deleted, and such listing shall be made readily available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit
- Permittee shall maintain accurate records of fugitive inspection component counts and calculated fugitive emissions using CAPCOA's "California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities," Table IV-2c, "Oil and Gas Production Screening Value Ranges Emission Factors" (Feb 1999). Permittee shall make records of component counts, screening values, and calculations readily available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit

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

Facility Name: AERA ENERGY LLC LIGHT OIL WESTERN STATIONARY SOURCE, CA Location:

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- 10. A gas leak is defined as the detection of a concentration of total organic compounds, above background (measured in accordance with EPA Method 21) that exceeds the following values: 1) A major gas leak is a detection of greater than 10,000 ppmv as methane; and 2) A minor gas leak is a detection of 400 to 10,000 ppmv as methane for pressure relief devices (PRDs) and 2,000 to 10,000 for components other than PRDs. [District Rule 4401, 3.20] Federally Enforceable Through Title V Permit
- 11. A liquid leak is defined as the dripping of VOC-containing liquid. A major liquid leak is a visible mist or a continuous flow of liquid that is not seal lubricant. A minor liquid leak is a liquid leak that is not a major liquid leak and drips liquid at a rate of more than three drops per minute, except for seal lubricant. [District Rule 4401, 3.20] Federally Enforceable Through Title V Permit
- 12. During the time any steam-enhanced crude oil production well is undergoing service or repair while the well is not producing, it shall be exempt from the emission control requirements of District Rule 4401, 5.0. [District Rule 4401, 4.1] Federally Enforceable Through Title V Permit
- 13. Permittee shall not operate a steam-enhanced crude oil production well unless they comply with one of the following requirements: 1) Permittee shall keep the steam-enhanced crude oil production well vents closed and the front line production equipment downstream of the wells that carry produced fluids (crude oil or mixture of crude oil and water) shall be connected to a VOC collection and control system. The well vent may be temporarily opened during periods of attended service or repair of the well provided such activity is done as expeditiously as possible with minimal spillage of material and VOC emissions to the atmosphere; or 2) Permittee shall install and maintain an APCO-approved VOC collection and control system that is not open to the atmosphere and that 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 an APCO-approved control device that has a VOC destruction or removal efficiency of at least 99%, or that transports gases or vapors back to a process system. [District Rules 2201 and 4401, 5.1.1, and 5.1.2] Federally Enforceable Through Title V Permit
- 14. During District compliance inspection, the following conditions shall be used to determination of a violation: 1) Existence of an open-ended line or a valve located at the end of the line that is not sealed with a blind flange, plug, 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 lines. 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; 2) Existence of a component with a major liquid leak; 3) Existence of a component with a gas leak greater than 50,000 ppmv; or 4) Existence of a component leak consisting of a minor liquid or gas leak, or a gas leak greater than 10,000 ppmv up to 50,000 ppmv, in excess of the allowable number of leaks specified in Table 3 of Rule 4401. [District Rule 4401, 5.2.1] Federally Enforceable Through Title V Permit
- 15. 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 4401, 5.3.1] Federally Enforceable Through Title V Permit
- 16. Permittee shall keep all hatches 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 with minimal spillage of material and VOC emissions to the atmosphere. [District Rule 4401, 5.3.2] Federally Enforceable Through Title V Permit
- 17. Except for pipes and unsafe-to-monitor components, permittee shall visually inspect all pipes at least once every year. Any visual inspection of pipes that indicates a leak that cannot be immediately repaired to meet the leak standards of Rule 4401 shall be inspected within 24 hours after detecting the leak. If a leak is found, the leak shall be repaired as soon as practicable but not later than the time frame specified in Table 4 of Rule 4401. [District Rule 4401, 5.4.1 & 5.4.2] Federally Enforceable Through Title V Permit

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

Facility Name: AERA ENERGY LLC

Location: LIGHT OIL WESTERN STATIONARY SOURCE C \$1548-470-13: Sep 17 2021 8:10AM -- RINALDIR

- 18. Permittee shall inspect audio-visually (by hearing and by sight) for leaks all accessible operating pumps, compressors, and pressure relief devices (PRDs) in service at least once each calendar week. [District Rule 4401, 5.4.3] Federally Enforceable Through Title V Permit
- 19. Any audio-visual inspection of an accessible operating pump, compressor, and PRD performed by an operator that indicates a leak that cannot be immediately repaired to meet the leak standards of Rule 4401 shall be inspected not later than 24 hours after conducting the audio-visual inspection. If a leak is found, the leak shall be repaired as soon as practicable but not later than the time frame specified in Table 3 of Rule 4401. [District Rule 4401, 5.4.3] Federally Enforceable Through Title V Permit
- 20. Permittee shall initially inspect a PRD that releases to the atmosphere as soon as practicable but not later than 24 hours after the discovery of the release. Permittee shall re-inspect the PRD not earlier than 24 hours after the initial inspection but not later than 15 calendar days after the initial inspection. [District Rule 4401, 5.4.4] Federally Enforceable Through Title V Permit
- 21. Permittee shall inspect all new, replaced, or repaired fittings, flanges, and threaded connections within 72 hours of placing the component in service. [District Rule 4401, 5.4.4] Federally Enforceable Through Title V Permit
- 22. Except for PRDs, permittee shall inspect a component that has been repaired or replaced not later than 15 calendar days after the component was repaired or replaced. [District Rule 4401, 5.4.5] Federally Enforceable Through Title V Permit
- 23. Permittee shall inspect all unsafe-to-monitor components during each turnaround. [District Rule 4401, 5.4.5] Federally Enforceable Through Title V Permit
- 24. Permittee shall affix a readily visible weatherproof tag to a leaking component upon detection of the leak. The following information shall be included on the tag: 1) the date and time of leak detection; 2) the date and time of leak measurement; 3) leak concentration in ppmv for a gaseous leak; 4) description of whether it is a major liquid leak or a minor liquid leak; and 5) whether the component is an essential component, an unsafe-to-monitor component, or a critical component. [District Rule 4401, 5.5.1] Federally Enforceable Through Title V Permit
- 25. Permittee shall keep the tag affixed to the component until all of the following conditions have been met: 1) the leaking component has been repaired or replaced, and 2) the component has been re-inspected using the test methods described in this permit; and 3) the component is found to be in compliance with the requirements of Rule 4401. [District Rule 4401, 5.5.2] Federally Enforceable Through Title V Permit
- 26. Permittee shall minimize a component leak in order to stop or reduce leakage to the atmosphere immediately to the extent possible, but not later than one (1) hour after detection of the leak. [District Rule 4401, 5.5.3] Federally Enforceable Through Title V Permit
- 27. Except for leaking critical components or leaking essential components, if the operator has minimized a leak but the leak still exceeds the applicable leak limits, the operator shall comply with at least one of the following requirements as soon as practicable but not later than the time period specified in Table 3 of Rule 4401: 1) repair or replace the leaking component; 2) vent the leaking component to a VOC collection and control system; or 3) remove the leaking component from operation. [District Rule 4401, 5.5.4] Federally Enforceable Through Title V Permit
- 28. The leak rate, measured after leak minimization has been performed, shall be used to determine the applicable repair period specified in Table 3 of Rule 4401 and the time of initial leak detection shall be the start of the repair period specified in Table 4 of Rule 4401. [District Rule 4401, 5.5.5, and 5.5.6] Federally Enforceable Through Title V Permit
- 29. If the leaking component is an essential component or a critical component that cannot be immediately shut down for repairs, and if the leak has been minimized but the leak still exceeds the applicable leak standard of this rule, the operator shall repair or replace the essential component or critical component to eliminate the leak during the next process unit turnaround, but in no case later than one year from the date of the original leak detection, whichever comes earlier. [District Rule 4401, 5.5.7] Federally Enforceable Through Title V Permit
- 30. Permittee shall maintain monitoring records of the date and well identification where steam injection or well stimulation occurs. [District Rule 4401, 6.1.1] Federally Enforceable Through Title V Permit

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

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- 31. Unless waived by the District, or vapors are sent to a process system, permittee shall maintain source test records which show that the control efficiency requirements of the VOC collection and control system have been satisfied. [District Rule 4401, 6.1]
- 32. 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 4401, 6.1.6] Federally Enforceable Through Title V Permit
- 33. Permittee shall maintain a copy of the latest APCO-approved Operator Management Plan (OMP) at the facility and make it available to the APCO, ARB, and US EPA upon request. [District Rule 4401, 6.1.8] Federally Enforceable Through Title V Permit
- 34. Annual control efficiency compliance tests shall be performed by source testers certified by the California Air Resource Board (CARB) on all vapor collection and control systems used to control emissions from steam-enhanced crude oil production wells. Testing shall be performed during June, July, August, or September of each year if the system's control efficiency is dependent upon ambient air temperature. The APCO may waive these source testing requirements if the vapor control system does not exhaust to atmosphere, or if all uncondensed VOC emissions collected by the vapor collection and control system are incinerated in fuel burning equipment, an internal combustion engine, or in a smokeless flare. [District Rule 4401, 6.2.1 & 6.2.2] Federally Enforceable Through Title V Permit
- 35. 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 4401, 6.3.1] Federally Enforceable Through Title V Permit
- 36. Permittee shall perform leak inspections at least annually, using a portable hydrocarbon detection instrument in accordance with USEPA Method 21. Where safety is a concern, such as measuring leaks from compressor seals or pump seals when the shaft is rotating, a person shall measure leaks by placing the instrument probe inlet at a distance of one centimeter or less from the surface of the component interface. [District Rule 4401, 6.3.3] Federally Enforceable Through Title V Permit
- 37. Permittee shall maintain an inspection log in which, at a minimum, all of the following information shall be recorded for each inspection performed: 1) The total number of components inspected, and the total number and percentage of leaking components found by component type; 2) The location, type, and name or description of each leaking component and description of any unit where the leaking component is found; 3) The date of leak detection and the method of leak detection; 4) For gaseous leaks, 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 leaking components; 6) The identify 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 earlier; 7) The methods 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 ppmy after the component is repaired or is replaced; 9) The inspector's name, business mailing address, and business telephone number; and 10) The date and signature of the facility operator responsible for the inspection and repair program certifying the accuracy of the information recorded in the log. [District Rule 4401, 6.1.5 & 6.4] Federally Enforceable Through Title V Permit
- 38. Permittee shall establish and implement an employee training program for inspecting and repairing components and recordkeeping procedures, as necessary. Permittee shall maintain at the facility the copies of the training records of the training program. [District Rule 4401, 6.1.7 & 6.5] Federally Enforceable Through Title V Permit

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

Facility Name: AERA ENERGY LLC

- 39. In accordance with the approved OMP, permittee shall meet all applicable operating, leak standards, inspection and reinspection, leak repair, record keeping, and notification requirements of Rule 4401. [District Rule 4401, 6.6] Federally Enforceable Through Title V Permit
- 40. By January 30 of each year, permittee shall submit to the APCO for approval, in writing, an annual report indicating any changes to the existing, approved OMP. [District Rule 4401, 5.3.3, and 6.7] Federally Enforceable Through Title V Permit
- 41. All records of required monitoring data and support information required by this permit shall be retained for a period of at least five years and shall be made available for District inspection upon request. [District Rules 2520, 9.4.2, and 4401, 6.1] Federally Enforceable Through Title V Permit

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

Facility Name: AERA ENERGY LLC
Location: LIGHT OIL WESTERN STATIONARY SOURCE
S-1548-470-13: Sep 17 2021 8:10AM -- RINAL DIR

**PERMIT UNIT:** S-1548-476-10

**SECTION: 20 TOWNSHIP: 28S** RANGE: 21E

**EQUIPMENT DESCRIPTION:** 

55,000 GALLON (12 FT DIAMETER X 65 FT SHELL LENGTH) FREE WATER KNOCKOUT VESSEL V-201F WITH VAPOR CONTROL LISTED ON S-1548-148 (DEHY 20)

### PERMIT UNIT REQUIREMENTS

- Vessel is a pressure vessel as defined by District Rule 4623. [District Rule 4623] Federally Enforceable Through Title V Permit
- The vessel shall vent only to the vapor control system listed on permit S-1548-148, except during periods of vessel cleaning or maintenance. [District Rule 2201] Federally Enforceable Through Title V Permit
- 3. The control valve on the common vapor-out line from the FWKO vessels shall be set at a sufficient pressure to prevent the backflow of tank vapors into the FWKO vessels. Components (valves, flanges, etc) downstream of this control valve are subject to the requirements of Rule 4623 and, therefore, any leak in excess of 10,000 ppmy detected from components downstream of the control valve shall be reported as a deviation. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
- VOC fugitives from components in gas service shall not exceed 24.1 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
- 5. Permittee shall maintain accurate records of fugitive inspection component counts and calculated fugitive emissions using EPA Document -453/R-95-017, Protocol for Equipment Leak Emission Estimates Table 2-4 "Oil and Gas Production Operations Average Emission Factors" (November 1995). Permittee shall make records of component counts, emission factors, and calculations readily available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit
- This unit is subject to the Dehy 20 Vapor Recovery, Inspection, and Tank Cleaning Conditions on Permit S-1548-148. Deviations from a standard condition shall be reported under the applicable condition in S-1548-148. [District Rule 2520] Federally Enforceable Through Title V Permit

These terms and conditions acility-wide Permit to Operate.

Facility Name: AERA ENERGY LLC LIGHT OIL WESTERN STATIONARY SOURCE, CA Location:

S-1548-476-10 : Sep 17 2021 8:10AM -- RINALDIR

**PERMIT UNIT:** S-1548-478-7

SECTION: NW20 TOWNSHIP: 28S RANGE: 21E

**EQUIPMENT DESCRIPTION:** 

26,000 GALLON (10 FT DIAMETER X 40 FT SHELL LENGTH) INDUCED STATIC FLOTATION CELL V-240B VENTED TO VAPOR CONTROL SYSTEM LISTED ON S-1548-148 (DEHY 20)

### PERMIT UNIT REQUIREMENTS

- 1. Vessel is a pressure vessel as defined by District Rule 4623, Section 3.20. [District Rule 4623] Federally Enforceable Through Title V Permit
- 2. When in service, vessel shall vent to vapor control system listed in S-1548-148, except during periods of vessel interior cleaning. [District NSR Rule] Federally Enforceable Through Title V Permit
- 3. VOC emission rate from vapor control components associated with this emissions unit shall not exceed 30.0 lb/day. [District NSR Rule] Federally Enforceable Through Title V Permit
- 4. Permittee shall maintain an accurate fugitive component count and resultant emissions calculated using emission factors from U.S. EPA Publication 453/R-95-017, or other District approved factors. [District NSR Rule] Federally Enforceable Through Title V Permit
- 5. This unit is subject to the Dehy 20 Vapor Recovery, Inspection, and Tank Cleaning Conditions on Permit S-1548-148. Deviations from a standard condition shall be reported under the applicable condition in S-1548-148. [District Rule 2520] Federally Enforceable Through Title V Permit

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

Facility Name: AERA ENERGY LLC Location: LIGHT OIL WESTERN STATIONARY SOURCE,CA

S-1548-478-7: Sep 17 2021 8:10AM -- RINALDI

**PERMIT UNIT:** S-1548-479-7

SECTION: NW20 TOWNSHIP: 28S RANGE: 21E

**EQUIPMENT DESCRIPTION:** 

26,000 GALLON (10 FT DIAMETER X 40 FT SHELL LENGTH) INDUCED STATIC FLOTATION CELL V-240C VENTED TO VAPOR CONTROL SYSTEM LISTED ON S-1548-148 (DEHY 20)

### PERMIT UNIT REQUIREMENTS

- 1. Vessel is a pressure vessel as defined by District Rule 4623, Section 3.20. [District Rule 4623] Federally Enforceable Through Title V Permit
- 2. When in service, vessel shall vent to vapor control system listed in S-1548-148, except during periods of vessel interior cleaning. [District NSR Rule] Federally Enforceable Through Title V Permit
- 3. VOC emission rate from vapor control components associated with this emissions unit shall not exceed 30.0 lb/day. [District NSR Rule] Federally Enforceable Through Title V Permit
- 4. Permittee shall maintain an accurate fugitive component count and resultant emissions calculated using emission factors from U.S. EPA Publication 453/R-95-017, or other District approved factors. [District NSR Rule] Federally Enforceable Through Title V Permit
- 5. This unit is subject to the Dehy 20 Vapor Recovery, Inspection, and Tank Cleaning Conditions on Permit S-1548-148. Deviations from a standard condition shall be reported under the applicable condition in S-1548-148. [District Rule 2520] Federally Enforceable Through Title V Permit

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

Facility Name: AERA ENERGY LLC Location: LIGHT OIL WESTERN STATIONARY SOURCE,CA

S-1548-479-7 : Sep 17 2021 8:10AM -- RINALD

**PERMIT UNIT:** S-1548-480-7

SECTION: NW20 TOWNSHIP: 28S RANGE: 21E

**EQUIPMENT DESCRIPTION:** 

26,000 GALLON (10 FT DIAMETER X 40 FT SHELL LENGTH) INDUCED STATIC FLOTATION CELL V-240D VENTED TO VAPOR CONTROL SYSTEM LISTED ON S-1548-148 (DEHY 20)

### PERMIT UNIT REQUIREMENTS

- 1. Vessel is a pressure vessel as defined by District Rule 4623, Section 3.20. [District Rule 4623] Federally Enforceable Through Title V Permit
- 2. When in service, vessel shall vent to vapor control system listed in S-1548-148, except during periods of vessel interior cleaning. [District NSR Rule] Federally Enforceable Through Title V Permit
- 3. VOC emission rate from vapor control components associated with this emissions unit shall not exceed 30.0 lb/day. [District NSR Rule] Federally Enforceable Through Title V Permit
- 4. Permittee shall maintain an accurate fugitive component count and resultant emissions calculated using emission factors from U.S. EPA Publication 453/R-95-017, or other District approved factors. [District NSR Rule] Federally Enforceable Through Title V Permit
- 5. This unit is subject to the Dehy 20 Vapor Recovery, Inspection, and Tank Cleaning Conditions on Permit S-1548-148. Deviations from a standard condition shall be reported under the applicable condition in S-1548-148. [District Rule 2520] Federally Enforceable Through Title V Permit

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

Facility Name: AERA ENERGY LLC Location: LIGHT OIL WESTERN STATIONARY SOURCE,CA

S-1548-480-7 : Sep 17 2021 8:10AM -- RINALD

**PERMIT UNIT:** S-1548-481-7

**SECTION:** NW20 **TOWNSHIP:** 28S **RANGE:** 21E

**EQUIPMENT DESCRIPTION:** 

26,000 GALLON (10 FT DIAMETER X 40 FT SHELL LENGTH) INDUCED STATIC FLOTATION CELL V-240E VENTED TO VARIOUS CONTROL SYSTEM LISTED ON S. 1548, 148 (DELIX 20)

TO VAPOR CONTROL SYSTEM LISTED ON S-1548-148 (DEHY 20)

#### PERMIT UNIT REQUIREMENTS

- 1. Tank gauging or sampling devices shall be equipped with a gas-tight cover which shall be closed at all times except during gauging or sampling. [District NSR Rule] Federally Enforced Through Title V Permit [District NSR Rule] Federally Enforceable Through Title V Permit
- 2. Vessel is a pressure vessel as defined by District Rule 4623, Section 3.20. [District Rule 4623] Federally Enforceable Through Title V Permit
- 3. When in service, vessel shall vent to vapor control system listed in S-1548-148, except during periods of vessel interior cleaning. [District NSR Rule] Federally Enforceable Through Title V Permit
- 4. VOC emission rate from vapor control components associated with this emissions unit shall not exceed 30.0 lb/day. [District NSR Rule] Federally Enforceable Through Title V Permit
- 5. Permittee shall maintain an accurate fugitive component count and resultant emissions calculated using emission factors from U.S. EPA Publication 453/R-95-017, or other District approved factors. [District NSR Rule] Federally Enforceable Through Title V Permit
- 6. This unit is subject to the Dehy 20 Vapor Recovery, Inspection, and Tank Cleaning Conditions on Permit S-1548-148. Deviations from a standard condition shall be reported under the applicable condition in S-1548-148. [District Rule 2520] Federally Enforceable Through Title V Permit

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

Facility Name: AERA ENERGY LLC Location: LIGHT OIL WESTERN STATIONARY SOURCE.CA

S-1548-481-7 : Sep 17 2021 8:10AM -- RINALDI

**PERMIT UNIT:** S-1548-482-9

SECTION: NW20 TOWNSHIP: 28S RANGE: 21E

**EQUIPMENT DESCRIPTION:** 

15,000 BBL (60.0 FT DIAMETER BY 32.0 FT SHELL HEIGHT) FILTER SURGE TANK T-220A VENTED TO SHARED VAPOR CONTROL SYSTEM LISTED ON S-1548-148 (DEHY 20)

#### PERMIT UNIT REQUIREMENTS

- 1. Only water with a maximum VOC content of 35 milligram/liter shall be placed or stored in this tank. [District Rule 4623] Federally Enforceable Through Title V Permit
- 2. VOC content of the water stored or placed in this tank shall be determined annually by sample analysis using one of the approved methods listed in Rule 1020 or other District approved method. [District Rules 1020 and 4623] Federally Enforceable Through Title V Permit
- 3. VOC emission rate from components in gas and light crude oil service associated with this emissions unit shall be less than 7.1 lb/day. [District NSR Rule] Federally Enforceable Through Title V Permit
- 4. Permittee shall maintain an accurate fugitive component count and resultant emissions calculated using emission factors from EPA Document 453/R-95-017, Protocol for Equipment Leak Emissions Estimates. [District NSR Rule] Federally Enforceable Through Title V Permit
- 5. Permittee shall maintain a record of the lab analysis, sampling date and VOC content of the water in milligrams per liter. [District Rule 2080] Federally Enforceable Through Title V Permit
- 6. This unit is subject to the Dehy 20 Vapor Recovery, Inspection, and Tank Cleaning Conditions on Permit S-1548-148. Deviations from a standard condition shall be reported under the applicable condition in S-1548-148. [District Rule 2520] Federally Enforceable Through Title V Permit

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

Facility Name: AERA ENERGY LLC Location: LIGHT OIL WESTERN STATIONARY SOURCE,CA

S-1548-482-9 : Sep 17 2021 8:10AM -- RINALDIR

**PERMIT UNIT:** S-1548-483-9

SECTION: NW20 TOWNSHIP: 28S RANGE: 21E

**EQUIPMENT DESCRIPTION:** 

15,000 BBL (60.0 FT DIAMETER BY 32.0 FT SHELL HEIGHT) FILTER SURGE TANK T-220B VENTED TO SHARED VAPOR CONTROL SYSTEM LISTED ON S-1548-148 (DEHY 20)

### PERMIT UNIT REQUIREMENTS

- 1. Only water with a maximum VOC content of 35 milligram/liter shall be placed or stored in this tank. [District Rule 4623] Federally Enforceable Through Title V Permit
- 2. VOC content of the water stored or placed in this tank shall be determined annually by sample analysis using one of the approved methods listed in Rule 1020 or other District approved method. [District Rules 1020 and 4623] Federally Enforceable Through Title V Permit
- 3. VOC emission rate from components in gas and light crude oil service associated with this emissions unit shall be less than 7.1 lb/day. [District NSR Rule] Federally Enforceable Through Title V Permit
- 4. Permittee shall maintain an accurate fugitive component count and resultant emissions calculated using emission factors from EPA Document 453/R-95-017, Protocol for Equipment Leak Emissions Estimates. [District NSR Rule] Federally Enforceable Through Title V Permit
- 5. Permittee shall maintain a record of the lab analysis, sampling date and VOC content of the water in milligrams per liter. [District Rule 2080] Federally Enforceable Through Title V Permit
- 6. This unit is subject to the Dehy 20 Vapor Recovery, Inspection, and Tank Cleaning Conditions on Permit S-1548-148. Deviations from a standard condition shall be reported under the applicable condition in S-1548-148. [District Rule 2520] Federally Enforceable Through Title V Permit

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

Facility Name: AERA ENERGY LLC Location: LIGHT OIL WESTERN STATIONARY SOURCE,CA

S-1548-483-9 : Sep 17 2021 8:10AM -- RINALDII

**PERMIT UNIT:** S-1548-484-10

SECTION: NW20 TOWNSHIP: 28S RANGE: 21E

**EQUIPMENT DESCRIPTION:** 

3.000 BBL FIXED ROOF CRUDE OIL/PRODUCED WATER STORAGE TANK T-300A VENTED TO VAPOR CONTROL

SYSTEM LISTED ON S-1548-148 (DEHY 20)

### PERMIT UNIT REQUIREMENTS

- Permittee shall maintain an accurate fugitive component count and resultant emissions calculated using emission factors from EPA Document 453/R-95-017, Protocol for Equipment Leak Emissions Estimates. [District NSR Rule] Federally Enforceable Through Title V Permit
- VOC emission rate from components in gas and light crude oil service associated with this emissions unit shall be less than 7.6 lb/day. [District NSR Rule] Federally Enforceable Through Title V Permit
- This unit is subject to the Dehy 20 Vapor Recovery, Inspection, and Tank Cleaning Conditions on Permit S-1548-148. Deviations from a standard condition shall be reported under the applicable condition in S-1548-148. [District Rule 2520] Federally Enforceable Through Title V Permit

These terms and conditions acility-wide Permit to Operate.

LIGHT OIL WESTERN STATIONARY SOURCE, CA Location:

Facility Name: AERA ENERGY LLC

**PERMIT UNIT:** S-1548-486-9

SECTION: NW20 TOWNSHIP: 28S RANGE: 21E

**EQUIPMENT DESCRIPTION:** 

500 BBL FIXED ROOF CRUDE OIL/PRODUCED WATER STORAGE TANK T-310A VENTED TO VAPOR CONTROL

SYSTEM LISTED ON S-1548-148 (DEHY 20)

### PERMIT UNIT REQUIREMENTS

- Permittee shall maintain an accurate fugitive component count and resultant emissions calculated using emission factors from EPA Document 453/R-95-017, Protocol for Equipment Leak Emissions Estimates. [District NSR Rule] Federally Enforceable Through Title V Permit
- VOC emission rate from components in gas and light crude oil service associated with this emissions unit shall be less than 8.3 lb/day. [District NSR Rule] Federally Enforceable Through Title V Permit
- This unit is subject to the Dehy 20 Vapor Recovery, Inspection, and Tank Cleaning Conditions on Permit S-1548-148. Deviations from a standard condition shall be reported under the applicable condition in S-1548-148. [District Rule 2520] Federally Enforceable Through Title V Permit

These terms and conditions acility-wide Permit to Operate.

Facility Name: AERA ENERGY LLC LIGHT OIL WESTERN STATIONARY SOURCE, CA Location:

**PERMIT UNIT:** S-1548-487-10

SECTION: NW20 TOWNSHIP: 28S RANGE: 21E

**EQUIPMENT DESCRIPTION:** 

500 BBL FIXED ROOF CRUDE OIL/PRODUCED WATER STORAGE TANK T-320A VENTED TO VAPOR CONTROL

SYSTEM LISTED ON S-1548-148 (DEHY 20)

### PERMIT UNIT REQUIREMENTS

- 1. Permittee shall maintain an accurate fugitive component count and resultant emissions calculated using emission factors from EPA Document 453/R-95-017, Protocol for Equipment Leak Emissions Estimates. [District NSR Rule] Federally Enforceable Through Title V Permit
- 2. VOC emission rate from components in gas and light crude oil service associated with this emissions unit shall be less than 5.9 lb/day. [District NSR Rule] Federally Enforceable Through Title V Permit
- 3. This unit is subject to the Dehy 20 Vapor Recovery, Inspection, and Tank Cleaning Conditions on Permit S-1548-148. Deviations from a standard condition shall be reported under the applicable condition in S-1548-148. [District Rule 2520] Federally Enforceable Through Title V Permit

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

Facility Name: AERA ENERGY LLC Location: LIGHT OIL WESTERN STATIONARY SOURCE,CA

**PERMIT UNIT:** S-1548-488-10

SECTION: NW20 TOWNSHIP: 28S RANGE: 21E

**EQUIPMENT DESCRIPTION:** 

500 BBL FIXED ROOF CRUDE OIL/PRODUCED WATER STORAGE TANK T-330A VENTED TO VAPOR CONTROL

**SYSTEM LISTED ON S-1548-148 (DEHY 20)** 

### PERMIT UNIT REQUIREMENTS

- 1. Permittee shall maintain an accurate fugitive component count and resultant emissions calculated using emission factors from EPA Document 453/R-95-017, Protocol for Equipment Leak Emissions Estimates. [District NSR Rule] Federally Enforceable Through Title V Permit
- 2. VOC emission rate from components in gas and light crude oil service associated with this emissions unit shall be less than 5.9 lb/day. [District NSR Rule] Federally Enforceable Through Title V Permit
- 3. This unit is subject to the Dehy 20 Vapor Recovery, Inspection, and Tank Cleaning Conditions on Permit S-1548-148. Deviations from a standard condition shall be reported under the applicable condition in S-1548-148. [District Rule 2520] Federally Enforceable Through Title V Permit

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

Facility Name: AERA ENERGY LLC Location: LIGHT OIL WESTERN STATIONARY SOURCE,CA

S-1548-488-10 : Sep 17 2021 8:10AM -- RINALDIF

**PERMIT UNIT:** S-1548-489-10

SECTION: NW20 TOWNSHIP: 28S RANGE: 21E

**EQUIPMENT DESCRIPTION:** 

1,700 GALLON (84" DIA X 72" TALL) INDUCED GAS FLOTATION UNIT V-300A VENTED TO VAPOR CONTROL

SYSTEM LISTED ON S-1548-148 (DEHY 20)

### PERMIT UNIT REQUIREMENTS

1. Permittee shall maintain an accurate fugitive component count and resultant emissions calculated using emission factors from EPA Document -453/R-95-017, Protocol for Equipment Leak Emissions Estimates. [District NSR Rule] Federally Enforceable Through Title V Permit

- 2. VOC emission rate from components in gas and light crude oil service associated with this emissions unit shall be less than 8.8 lb/day. [District NSR Rule] Federally Enforceable Through Title V Permit
- 3. This unit is subject to the Dehy 20 Vapor Recovery, Inspection, and Tank Cleaning Conditions on Permit S-1548-148. Deviations from a standard condition shall be reported under the applicable condition in S-1548-148. [District Rule 2520] Federally Enforceable Through Title V Permit

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

Facility Name: AERA ENERGY LLC Location: LIGHT OIL WESTERN STATIONARY SOURCE,CA

S-1548-489-10 : Sep 17 2021 8:10AM -- RINALDIR

**PERMIT UNIT:** S-1548-497-10

SECTION: NW20 TOWNSHIP: 28S RANGE: 21E

**EQUIPMENT DESCRIPTION:** 

1.300 BBL (12 FT DIAMETER BY 65 FT SHELL LENGTH) FREE WATER KNOCK OUT V-201G VENTED TO SHARED VAPOR CONTROL SYSTEM LISTED ON S-1548-148 (DEHY 20)

#### PERMIT UNIT REQUIREMENTS

- Vessel is a pressure vessel as defined by District Rule 4623. [District Rule 4623] Federally Enforceable Through Title V Permit
- The vessel shall vent only to the vapor control system listed on permit S-1548-148, except during periods of vessel cleaning or maintenance. [District Rule 2201] Federally Enforceable Through Title V Permit
- 3. The control valve on the common vapor-out line from the FWKO vessels shall be set at a sufficient pressure to prevent the backflow of tank vapors into the FWKO vessels. Components (valves, flanges, etc) downstream of this control valve are subject to the requirements of Rule 4623 and, therefore, any leak in excess of 10,000 ppmy detected from components downstream of the control valve shall be reported as a deviation. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
- VOC fugitives from components in gas service shall not exceed 20.1 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
- Permittee shall maintain accurate records of fugitive inspection component counts and calculated fugitive emissions using EPA Document -453/R-95-017, Protocol for Equipment Leak Emission Estimates Table 2-4 "Oil and Gas Production Operations Average Emission Factors" (November 1995). Permittee shall make records of component counts, emission factors, and calculations readily available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit
- This unit is subject to the Dehy 20 Vapor Recovery, Inspection, and Tank Cleaning Conditions on Permit S-1548-148. Deviations from a standard condition shall be reported under the applicable condition in S-1548-148. [District Rule 2520] Federally Enforceable Through Title V Permit

These terms and conditions acility-wide Permit to Operate.

LIGHT OIL WESTERN STATIONARY SOURCE, CA

Facility Name: AERA ENERGY LLC Location:

**PERMIT UNIT:** S-1548-498-9

SECTION: NW20 TOWNSHIP: 28S RANGE: 21E

**EQUIPMENT DESCRIPTION:** 

40.000 BBL FIXED-ROOF CRUDE OIL/PRODUCED WATER STORAGE TANK T-200A VENTED TO SHARED VAPOR CONTROL SYSTEM LISTED ON S-1548-148 (DEHY 20)

### PERMIT UNIT REQUIREMENTS

- When in service, the tank shall vent only to the vapor control system listed in S-1548-148, except during periods of vessel cleaning. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
- All components attached to this tank shall be identified and categorized according to the following equipment types: connectors, flanges, open-ended lines (sample connections, drains, bleed valves, etc.), pump seals, valves with visible actuators, and other (pressure relief devices, compressor seals, meters, etc.). Components shall be further identified and categorized according to the following types of service: gas/light liquid, light oil and heavy oil. [District Rule 2201] Federally Enforceable Through Title V Permit
- Flanges shall be monitored with a portable hydrocarbon detection instrument along the entire circumference of the flange-gasket interface. Threaded connections, tubing fittings, and other types of non-permanent joints shall be monitored along the entire circumference of joint interface. [District Rule 2201] Federally Enforceable Through Title V Permit
- All piping, valves and fittings shall be constructed and maintained in a leak-free (<10,000 ppmy, measured in accordance with EPA Method 21 by a portable hydrocarbon detection instrument that is calibrated with methane) condition except as provided below. [District Rule 4623 and 40 CFR 60.112b(a)(3)(i)] Federally Enforceable Through Title V Permit
- For leak detection and repair (LDAR) monitoring, a leak is defined as a reading in excess of 500 ppmv, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21. [District Rule 2201 and 40 CFR 60.112b(a)(3)(i)] Federally Enforceable Through Title V Permit
- Permittee shall maintain an accurate fugitive component count and resultant emissions calculated using emission factors from EPA Publication 453/R-95-017 Protocol for Equipment Leak Emission Estimates Table 2-4 Oil and Gas Production Operations Average Emission Factors (lb/hr/source). [District Rule 2201] Federally Enforceable Through Title V Permit
- VOC emission rate from components in gas and light oil crude service associated with this emission unit shall not exceed 9.2 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
- All piping, fittings, and valves directly affixed to the tank or associated with the tank vapor recovery system shall be inspected annually by the facility operator in accordance with EPA Method 21, with the instrument calibrated with methane, to ensure compliance with the provisions of this permit. [District Rule 4623 and 40 CFR 60.112b(a)(3)(i)] Federally Enforceable Through Title V Permit

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

LIGHT OIL WESTERN STATIONARY SOURCE, CA

Facility Name: AERA ENERGY LLC

Location:

- 9. For the purposes of company conducted inspections, if any of the tank components are found to be leaking (>500 ppmv, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21), operator shall immediately affix a tag and maintain records of gas leak detection readings, date/time leak was discovered, and date/time the component was repaired to a leak-free condition. [District Rule 4623 and 40 CFR 60.112b(a)(3)(i)] Federally Enforceable Through Title V Permit
- 10. Leaks measuring > 500 ppmv and <10,000 ppmv, or leaks measuring >10,000 ppmv from components within five feet of the tank that have been discovered by the operator and have been immediately tagged and repaired within the deadlines specified in the Emissions Minimization requirements, shall not constitute a violation of this permit. However, leaking components > 10,000 ppmv discovered during inspections by District staff that were not previously identified and/or tagged by the operator, and/or any leaks that were not repaired within the deadlines specified in the Emissions Minimization requirements, shall constitute a violation. [District Rule 4623] Federally Enforceable Through Title V Permit
- 11. Upon detection of any leaks >10,000 ppmv, measured in accordance with EPA Method 21 by a portable hydrocarbon detection instrument that is calibrated with methane, the operator shall: (a) Eliminate the leak within 8 hours after detection; or (b) If the leak can not be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices; (c) Eliminate the leak within 48 hours after minimization; and (d) In no event that the total time to eliminate the leak shall exceed 56 hours after detection. [District Rule 4623] Federally Enforceable Through Title V Permit
- 12. If a component type for a given tank is found to leak above the 10,000 ppmv during an annual inspection, then quarterly inspections of that component type on the tank or system shall be conducted for four consecutive quarters. After four successful quarterly inspections in which the component type is found to leak less than 10,000 ppmv, inspections interval may revert to annual. [District Rule 4623] Federally Enforceable Through Title V Permit
- 13. Operator shall maintain an inspection log containing the following (1) type of component leaking; (2) date of leak detection, and method of detection; (3) date and emission level of recheck after leak is repaired; (4) method used to minimize the leak to lowest possible level within 8 hours after leak detection. [District Rule 2520] Federally Enforceable Through Title V Permit
- 14. This unit is subject to the Dehy 20 Vapor Recovery and Tank Cleaning Conditions on Permit S-1548-148. Deviations from a standard condition shall be reported under the applicable condition in S-1548-148. [District Rule 2520] Federally Enforceable Through Title V Permit

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

Facility Name: AERA ENERGY LLC Location: LIGHT OIL WESTERN STATIONARY SOURCE S:1548-499-9: Sen 17 2021 B:10AM - BINAI DIR

**PERMIT UNIT:** S-1548-499-6

SECTION: NW 20 TOWNSHIP: 28S RANGE: 21E

**EQUIPMENT DESCRIPTION:** 

5.000 GALLON OIL/WATER TANK T-410 AND AUXILIARY EQUIPMENT INCLUDING TWO DECANTER CENTRIFUGES. ONE VERTICAL CENTRIFUGE, ONE AUGER, TWO OILWATER PUMPS AND FOUR ROLL-OFF BINS (DEHY 20)

#### PERMIT UNIT REQUIREMENTS

- 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, 5.2] Federally Enforceable Through Title V Permit
- 2. The tank shall not store organic liquids with a true vapor pressure (TVP) greater than 4.65 psia. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
- Tank shall be operated at a constant level. [District Rule 2201] Federally Enforceable Through Title V Permit 3.
- 4. Emissions from the tank shall not exceed 1.1 lb VOC/day. [District Rule 2201] Federally Enforceable Through Title V Permit
- Only four roll-off bins shall be used at any given time. No onsite storage of more than four filled roll-off bins is allowed. [District Rule 2201] Federally Enforceable Through Title V Permit
- Daily VOC emissions from each roll-off bin shall not exceed 1.9 lb VOC/day. Only roll-bins with a surface area of less than 148.5 square feet shall be used to ensure compliance with the VOC emissions limit. [District Rule 2201] Federally Enforceable Through Title V Permit
- VOC emission rate from fugitive components in light crude oil service associated with this emissions unit shall not exceed 1.0 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
- This tank shall not be required to de-gas before commencing cleaning activities. All other applicable requirements shall be complied with before, during, and after tank cleaning activities. [District Rule 4623, 5.7.5.3] Federally Enforceable Through Title V Permit
- While performing vessel 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, 5.7.5.5.1] Federally Enforceable Through Title V Permit
- 10. 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, 5.7.5.5.2] Federally Enforceable Through Title V Permit
- 11. If the TVP of the organic liquid stored in this tank is greater than 1.5 psia, 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, 5.7.5.6] 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.

LIGHT OIL WESTERN STATIONARY SOURCE, CA Location: S-1548-499-6 : Sep 17 2021 8:10AM -- RINAL DIR

Facility Name: AERA ENERGY LLC

- 12. If the TVP of the organic liquid stored in this tank is greater than 1.5 psia, permittee shall only transport removed sludge in closed, liquid leak-free containers. [District Rule 4623, 5.7.5.6] Federally Enforceable Through Title V Permit
- 13. If the TVP of the organic liquid stored in this tank is greater than 1.5 psia, permittee 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, 5.7.5.6] Federally Enforceable Through Title V Permit
- 14. The following components can be excluded from the fugitive component count: 1) components handling produced fluids with an API gravity less than 30 degrees; 2) components in water/oil service (water content >50%); and 3) components handling fluid streams with a VOC content < 10%. [District Rule 2201] Federally Enforceable Through Title V Permit
- 15. True vapor pressure of tank contents and API gravity shall be measured at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored, according to the approved test methods listed in District Rule 4623. [District Rules 2201 and 4623, 6.2] Federally Enforceable Through Title V Permit
- 16. Permittee shall keep accurate records of true vapor pressure, storage temperature, API gravity, and types of liquids stored for a period of five years, and shall make such records readily available for District inspection upon request. [District Rules 2201 and 4623, 6.3] Federally Enforceable Through Title V Permit
- 17. Permittee shall maintain accurate component count for tank according to CAPCOA's "California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities," Table IV-2c (Feb 1999), Screening Value Range emission factors < 10,000 ppmv. Permittee shall update such records when new components are approved and installed. [District Rule 2201] Federally Enforceable Through Title V Permit
- 18. A leak is defined as a reading in excess of 500 ppmv, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21. [40 CFR 60.112b(a)(3)(i)] Federally Enforceable Through Title V Permit
- 19. All records shall be maintained and retained on-site for a period of at least 5 years and shall be made available for District inspection upon request. [District Rule 1070] Federally Enforceable Through Title V Permit

These terms and condition he Facility-wide Permit to Operate.

Facility Name: AERA ENERGY LLC

LIGHT OIL WESTERN STATIONARY SOURCE Location: S-1548-499-6 : Sep 17 2021 8:10AM -- RINAL DIR

**PERMIT UNIT:** S-1548-501-10

SECTION: NW 20 TOWNSHIP: 28S RANGE: 21E

**EQUIPMENT DESCRIPTION:** 

55,000 GALLON (12 FT DIAMETER X 65 FT LENGTH) FREE WATER KNOCKOUT VESSEL V-201H WITH VAPOR

CONTROL AS DESCRIBED IN S-1548-148 (DEHY 20)

### PERMIT UNIT REQUIREMENTS

- 1. Vessel is a pressure vessel as defined by District Rule 4623. [District Rule 4623] Federally Enforceable Through Title V Permit
- 2. The vessel shall vent only to the vapor control system listed on permit S-1548-148, except during periods of vessel cleaning or maintenance. [District Rule 2201] Federally Enforceable Through Title V Permit
- 3. The control valve on the common vapor-out line from the FWKO vessels shall be set at a sufficient pressure to prevent the backflow of tank vapors into the FWKO vessels. Components (valves, flanges, etc) downstream of this control valve are subject to the requirements of Rule 4623 and, therefore, any leak in excess of 10,000 ppmv detected from components downstream of the control valve shall be reported as a deviation. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
- 4. VOC fugitives from components in gas service shall not exceed 20.1 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
- 5. Permittee shall maintain accurate records of fugitive inspection component counts and calculated fugitive emissions using EPA Document -453/R-95-017, Protocol for Equipment Leak Emission Estimates Table 2-4 "Oil and Gas Production Operations Average Emission Factors" (November 1995). Permittee shall make records of component counts, emission factors, and calculations readily available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit
- 6. This unit is subject to the Dehy 20 Vapor Recovery, Inspection, and Tank Cleaning Conditions on Permit S-1548-148. Deviations from a standard condition shall be reported under the applicable condition in S-1548-148. [District Rule 2520] Federally Enforceable Through Title V Permit

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

Facility Name: AERA ENERGY LLC Location: LIGHT OIL WESTERN STATIONARY SOURCE,CA

S-1548-501-10 : Sep 17 2021 8:10AM -- RINALDIR

**PERMIT UNIT:** S-1548-503-6

SECTION: NW 20 TOWNSHIP: 28S RANGE: 21E

**EQUIPMENT DESCRIPTION:** 

40,000 BBL FIXED-ROOF CLARIFIER TANK T-200B VENTED TO SHARED VAPOR CONTROL SYSTEM LISTED ON S-

1548-148 (DEHY 20)

### PERMIT UNIT REQUIREMENTS

- 1. All piping, valves and fittings shall be constructed and maintained in a leak-free (<10,000 ppmv, measured in accordance with EPA Method 21 by a portable hydrocarbon detection instrument that is calibrated with methane) condition except as provided below. [District Rule 4623 and 40 CFR 60.112b(a)(3)(i)] Federally Enforceable Through Title V Permit
- 2. For leak detection and repair (LDAR) monitoring, a leak is defined as a reading in excess of 500 ppmv, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21. [District Rule 4623 and 40 CFR 60.112b(a)(3)(i)] Federally Enforceable Through Title V Permit
- 3. Permittee shall maintain an accurate fugitive component count and resultant emissions calculated using emission factors from EPA Publication 453/R-95-017 Protocol for Equipment Leak Emission Estimates Table 2-4 Oil and Gas Production Operations Average Emission Factors (kg/hr/source). [District Rule 2201] Federally Enforceable Through Title V Permit
- 4. VOC emission rate from components in gas and light crude oil service associated with this emission unit shall be less than 9.2 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
- 5. All piping, fittings, and valves directly affixed to the tank or associated with the tank vapor recovery system shall be inspected annually by the facility operator in accordance with EPA Method 21, with the instrument calibrated with methane, to ensure compliance with the provisions of this permit. [District Rule 4623 and 40 CFR 60.112b(a)(3)(i)] Federally Enforceable Through Title V Permit
- 6. For the purposes of company conducted inspections, if any of the tank components are found to be leaking (>500 ppmv, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21), operator shall immediately affix a tag and maintain records of gas leak detection readings, date/time leak was discovered, and date/time the component was repaired to a leak-free condition. [District Rule 4623 and 40 CFR 60.112b(a)(3)(i)] Federally Enforceable Through Title V Permit
- 7. Leaks measuring > 500 ppmv and <10,000 ppmv, or leaks measuring >10,000 ppmv from components within five feet of the tank that have been discovered by the operator and have been immediately tagged and repaired within the deadlines specified in the Emissions Minimization requirements, shall not constitute a violation of this permit. However, leaking components > 10,000 ppmv discovered during inspections by District staff that were not previously identified and/or tagged by the operator, and/or any leaks that were not repaired within the deadlines specified in the Emissions Minimization requirements, shall constitute a violation. [District Rule 4623] 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: AERA ENERGY LLC Location: LIGHT OIL WESTERN STATIONARY SOURCE.CA

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- 8. Upon detection of any leaks >10,000 ppmv, measured in accordance with EPA Method 21 by a portable hydrocarbon detection instrument that is calibrated with methane, the operator shall: a. Eliminate the leak within 8 hours after detection; or b. If the leak can not be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices; c. Eliminate the leak within 48 hours after minimization; and d. In no event that the total time to eliminate the leak shall exceed 56 hours after detection. [District Rule 4623] Federally Enforceable Through Title V Permit
- 9. If a component type for a given tank is found to leak above the 10,000 ppmv during an annual inspection, then quarterly inspections of that component type on the tank or system shall be conducted for four consecutive quarters. After four successful quarterly inspections in which the component type is found to leak less than 10,000 ppmv, inspections interval may revert to annual. [District Rule 4623] Federally Enforceable Through Title V Permit
- 10. Operator shall maintain an inspection log containing the following 1) type of component leaking; 2) date of leak detection, and method of detection; 3) date and emission level of recheck after leak is repaired; 4) method used to minimize the leak to lowest possible level within 8 hours after leak detection. [District Rule 2520] Federally Enforceable Through Title V Permit
- 11. This unit is subject to the Dehy 20 Vapor Recovery and Tank Cleaning Conditions on Permit S-1548-148. Deviations from a standard condition shall be reported under the applicable condition in S-1548-148. [District Rule 2520] Federally Enforceable Through Title V Permit

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

Facility Name: AERA ENERGY LLC
Location: LIGHT OIL WESTERN STATIONARY SOURCE
S-1548-503-6: Sen 17 2021 8:10AM - RINAL DIR

**PERMIT UNIT:** S-1548-504-6

SECTION: 20 TOWNSHIP: 28S RANGE: 21E

**EQUIPMENT DESCRIPTION:** 

14,000 GALLON (7.5 FT DIAMETER X 40 FT LENGTH) INDUCED STATIC FLOTATION CELL V-240F CONNECTED TO VAPOR CONTROL SYSTEM LISTED IN S-1548-148 (DEHY 20)

#### PERMIT UNIT REQUIREMENTS

- 1. The induced static flotation unit is a pressure vessel as defined by District Rule 4623, Section 3.20. [District Rule 4623] Federally Enforceable Through Title V Permit
- 2. When in service, the vessel shall vent only to the vapor control system listed in S-1548-148, except during periods of vessel cleaning. [District Rule 2201] Federally Enforceable Through Title V Permit
- 3. VOC fugitive emissions from the vapor control components associated with this unit shall not exceed 13.3 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
- 4. Permittee shall maintain accurate records of fugitive inspection component counts and calculated fugitive emissions using EPA Document -453/R-95-017, Protocol for Equipment Leak Emission Estimates Table 2-4 "Oil and Gas Production Operations Average Emission Factors" (November 1995). Permittee shall make records of component counts, emission factors, and calculations readily available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit
- 5. This unit is subject to the Dehy 20 Vapor Recovery, Inspection, and Tank Cleaning Conditions on Permit S-1548-148. Deviations from a standard condition shall be reported under the applicable condition in S-1548-148. [District Rule 2520] Federally Enforceable Through Title V Permit

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

Facility Name: AERA ENERGY LLC

Location: LIGHT OIL WESTERN STATIONARY SOURCE,CA \$-1548-504-6: Sep 17 2021 8:10AM -- RINALDIR

**PERMIT UNIT:** S-1548-505-4

SECTION: NW20 TOWNSHIP: 28S RANGE: 21E

**EQUIPMENT DESCRIPTION:** 

5,000 BBL FIXED ROOF CRUDE OIL/PRODUCED WATER TANK (T-241) VENTED TO THE SHARED VAPOR

CONTROL SYSTEM LISTED ON S-1548-148 (DEHY 20)

#### PERMIT UNIT REQUIREMENTS

1. API gravity of the oil stored in this tank shall be less than 30 degrees API. [District Rule 2201] Federally Enforceable Through Title V Permit

- 2. VOC fugitive emissions from the vapor control components associated with this unit shall not exceed 6.7 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
- 3. Permittee shall maintain accurate records of fugitive inspection component counts and calculated fugitive emissions using EPA Document -453/R-95-017, Protocol for Equipment Leak Emission Estimates Table 2-4 "Oil and Gas Production Operations Average Emission Factors" (November 1995). Permittee shall make records of component counts, emission factors, and calculations readily available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit
- 4. This unit is subject to the Dehy 20 Vapor Recovery, Inspection, and Tank Cleaning Conditions on Permit S-1548-148. Deviations from a standard condition shall be reported under the applicable condition in S-1548-148. [District Rule 2520] Federally Enforceable Through Title V Permit

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

Facility Name: AERA ENERGY LLC

Location: LIGHT OIL WESTERN STATIONARY SOURCE,CA S-1548-505-4: Sep 17 2021 8:10AM -- RINALDIR

**PERMIT UNIT:** S-1548-554-3

**SECTION:** NE 29 **TOWNSHIP:** 28S RANGE: 21E

**EQUIPMENT DESCRIPTION:** 

100 MMBTU/HR NATURAL/PRODUCED GAS-FIRED STEAM GENERATOR WITH NORTH AMERICAN MAGNA-FLAME GLE ULTRA LOW NOX BURNER (2972 SETTING)

### PERMIT UNIT REQUIREMENTS

- The refractory curing period is the time required to gradually increase the firing rate and internal temperature of a unit to thermally temper and set the optimal properties of new refractory material that has been installed as part of a unit's initial commissioning or has been replaced as part of a subsequent maintenance or repair procedure. The refractory curing period following the replacement of material as part of a maintenance or repair procedure shall not exceed 30 hours total of actual burner operation per occurrence. [District Rule 2201] Federally Enforceable Through Title V Permit
- During the initial commissioning period and any refractory curing period, operator shall limit emissions to the extent possible by optimizing the performance of the low NOx burner and flue gas recirculation system as can be accommodated by individual initial commissioning and refractory curing activities, by following good work practices and fuel conserving measures and by completing all work in an expeditious manner. Operator shall keep a record of the specific activities undertaken as part of the initial commissioning period and all refractory curing periods and the duration of each activity and shall make the records available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit
- This unit may only operate in the NE \(^1\)4 of Section 29, Township 28S, and Range 21E. [District Rule 4102] 3.
- 4. The exhaust stack shall vent vertically upward. The vertical exhaust flow shall not be impeded by a rain cap, roof overhang, or any other obstruction. [District Rule 4102]
- 5. The unit shall only be fired on natural gas with sulfur content not to exceed 0.75 gr-S/100 scf. [District Rules 2201, 4320 and 4801] Federally Enforceable Through Title V Permit
- Except for periods of startup and shutdown, emissions shall not exceed any of the following limits: NOx: 7 ppmvd @ 3% O2 or 0.008 lb-NOx/MMBtu; PM10: 0.005 lb-PM10/MMBtu; CO: 25 ppmvd @ 3% O2 or 0.0185 lb-CO/MMBtu or VOC: 0.003 lb-VOC/MMBtu. [District Rules 2201, 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
- Emission rates during startup, shutdown and refractory curing shall not exceed: particulate matter 10 pounds per hour, or 0.1 grains/dscf calculated to 12% CO2; sulfur - 200 pounds of SO2 per hour, or 2000 ppmv as SO2; NO2 -140 pounds per hour or 0.14 pounds per MMBtu. [District Rules 4101, 4102, 4201, 4301, 4405 and 4801] Federally Enforceable Through Title V Permit
- Maximum emissions from the steam generator, including start-up, shutdown and refractory curing periods shall not exceed any of the following limits: 7,008 lb-NOx/yr, 1,840 lb-SOx/yr, 4,380 lb-PM10/yr, 16,206 lb-CO/yr, and 2,628 lb-VOC/vr. [District Rule 2201] Federally Enforceable Through Title V Permit

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

LIGHT OIL WESTERN STATIONARY SOURCE, CA Location: S-1548-554-3 : Sep 17 2021 8:10AM -- RINAL DIR

Facility Name: AERA ENERGY LLC

- 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
- 10. 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
- 11. Duration of refractory curing shall not exceed 30 hours per each occurrence. Permittee shall keep accurate records of refractory curing duration and make records readily available to the District upon request. [District Rule 2080] Federally Enforceable Through Title V Permit
- 12. Permittee shall maintain records of duration of each start-up and shutdown, and refractory curing, for a period of five years and make such records readily available for District inspection upon request. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
- 13. Source testing to measure natural gas-combustion NOx and CO emissions from this unit shall be conducted at least once every twelve (12) months (no more than 30 days before or after the required annual source test date). After demonstrating compliance on two (2) consecutive annual source tests, the unit shall be tested not less than once every thirty-six (36) months (no more than 30 days before or after the required 36-month source test date). 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 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
- 14. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
- 15. 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
- 16. The following test methods shall be used: NOX (ppmv) EPA Method 7E or ARB Method 100, NOx (lb/MMBtu) -EPA Method 19; CO (ppmv) - EPA Method 10 or ARB Method 100; Stack gas oxygen (O2) - EPA Method 3 or 3A or ARB Method 100; stack gas velocities - EPA Method 2; Stack gas moisture content - EPA Method 4; SOx - EPA Method 6C or 8 or ARB Method 100; fuel gas sulfur as H2S content - EPA Method 11 or 15; and fuel hhv (MMBtu) -ASTM D 1826 or D 1945 in conjunction with ASTM D 3588. [District Rules 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. 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
- 19. The permittee shall monitor and record the stack concentration of NOX, CO, and O2 at least once every month (in which a source test is not performed) using a portable analyzer 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

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

Facility Name: AERA ENERGY LLC LIGHT OIL WESTERN STATIONARY SOURCE

Location: S-1548-554-3 : Sep 17 2021 8:10AM -- RINAI DIR

- 20. 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 performing the notification and testing required by this condition. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
- 21. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the permit-to-operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
- 22. The permittee shall maintain records of: (1) the date and time of NOX, CO, and O2 measurements, (2) the O2 concentration in percent by volume 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
- 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. Unless otherwise 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. For the purposes of permittee-performed alternate monitoring, emissions measurements may be performed at any time after the unit reaches conditions representative of normal operation. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
- 24. PUC quality natural gas is any gaseous fuel where the sulfur content is no more than one-fourth (0.25) grain of hydrogen sulfide per one hundred (100) standard cubic feet, no more than five (5) grains of total sulfur per one hundred (100) standard cubic feet, and at least 80% methane by volume. [District Rule 4320] Federally Enforceable Through Title V Permit
- 25. If the steam generator is not fired on PUC-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
- 26. When complying with sulfur emission limits by fuel analysis or by a combination of source testing and fuel analysis, permittee shall demonstrate compliance at least annually. [District Rule 4320] Federally Enforceable Through Title V Permit
- 27. If the unit is fired on PUC-regulated natural gas, valid purchase contracts, supplier certifications, tariff sheets, or transportation contracts 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
- 28. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070, 4305, 4306 and 4320] Federally Enforceable Through Title V Permit

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

Facility Name: AERA ENERGY LLC LIGHT OIL WESTERN STATIONARY SOURCE

Location: S-1548-554-3 : Sep 17 2021 8:10AM -- RINAI DIR

- 29. Steam generator shall be equipped with variable frequency drive electrical motors driving the blower and water pump and a convection section with at least 235 square feet of heat transfer surface area per MMBtu/hr of maximum rated heat input (verified by manufacturer) or a manufacturer's overall thermal efficiency rating of 88%. [District Rule Public Resources Code 21000-21177: California Environmental Quality Act]
- 30. Permittee shall comply with all California Department of Fish and Wildlife mitigation measures identified in the Biological Resources discussion in Mitigated Negative Declaration No. 20110323 to ensure the protection of potential biological species impacts. Permittee shall retain records on-site demonstrating compliance with these mitigation measures. [Public Resources Code 21000-21177: California Environmental Quality Act]
- 31. Permittee shall comply with all Native American Heritage Commission (NAHC) mitigation measures identified in the Cultural Resources discussion in Mitigated Negative Declaration No. 20110323 to ensure the protection of potential cultural, archaeological, and paleontological impacts. Permittee shall retain records on-site demonstrating compliance with these mitigation measures. [Public Resources Code 21000-21177: California Environmental Quality Act]
- 32. Permittee shall comply with all Department of Toxic Substances Control (DTSC) mitigation measures identified in the Hazards and Hazardous Material discussion in Mitigated Negative Declaration No. 20110323 to ensure the protection of the public and environment from hazards and hazardous materials. Permittee shall retain records on-site demonstrating compliance with these mitigation measures. [Public Resources Code 21000-21177: California Environmental Quality Act]
- 33. Permittee shall comply with all Division of Oil, Gas, and Geothermal Resources (DOGGR) mitigation measures identified in the Hazards and Hazardous Material discussion in Mitigated Negative Declaration No. 20110323 to ensure the protection of the public from hazards and hazardous materials. Permittee shall retain records on-site demonstrating compliance with these mitigation measures. [Public Resources Code 21000-21177: California Environmental Quality Act]
- 34. Permittee shall comply with all Division of Oil, Gas, and Geothermal Resources (DOGGR) mitigation measures identified in the Hydrology and Water Quality discussion in Mitigated Negative Declaration No. 20110323 to ensure the protection of potential water quality impacts. Permittee shall retain records on-site demonstrating compliance with these mitigation measures. [Public Resources Code 21000-21177: California Environmental Quality Act]

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

Facility Name: AERA ENERGY LLC
Location: LIGHT OIL WESTERN STATIONARY SOURCE
\$1548-5543: Sep 17 2021 8:10AM - RINAI DIR

**PERMIT UNIT:** S-1548-621-2

**SECTION: 20 TOWNSHIP: 28S** RANGE: 21E

**EQUIPMENT DESCRIPTION:** 

6500 GALLON CHEMICAL STORAGE TANK WITH P/V VALVE AND LIQUID LOADOUT OPERATION (ALSO

PERMITTED AS S-1547-1337)

### PERMIT UNIT REQUIREMENTS

- Tank shall be equipped with pressure/vacuum valve set to within 10 percent of the maximum working pressure of the tank. [District Rules 2201 and 4624] Federally Enforceable Through Title V Permit
- Tank shall be in a leak-free condition. A Leak-Free condition is defined as a condition without a gas leak or 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 reading in excess of 10,000 ppmv above background is a violation of this permit and Rule 4623 (amended May 19, 2005). A liquid leak is defined as the dripping of organic liquid at a rate of more than 3 drops per minutes. [District Rules 2201] and 4623] Federally Enforceable Through Title V Permit
- Tank throughput shall not exceed 6,500 gallons per day based on a monthly average. [District Rule 2201] Federally Enforceable Through Title V Permit
- 4. Total volume of liquid loaded out shall not exceed 2,500 gallon per day. [District Rule 2201] Federally Enforceable Through Title V Permit
- 5. Tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.6 psia under all storage conditions. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
- Liquids loaded out shall have a true vapor pressure (TVP) of less than 0.6 psia [District Rule 2201] Federally Enforceable Through Title V Permit
- Total number of disconnects from unloading and load-out operations shall not exceed 8 per day. [District Rule 2201] Federally Enforceable Through Title V Permit
- VOC emissions from liquid loadout and excess liquid drainage shall not exceed 2.0 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
- MSDS or chemical laboratory results documenting typ of liquid stored and loaded out shall be maintained on-site and made available for District inspection upon request. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
- 10. Permittee shall maintain monthly records of average daily throughput and shall keep accurate records of each organic liquid stored in the tank, including its storage temperature and TVP. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
- 11. Permittee shall keep accurate daily records of TVP, types of liquids loaded out, liquid loadout temperature, gallons per day of liquid loaded out, and number of disconnects for loading and unloading. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit

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

Facility Name: AERA ENERGY LLC LIGHT OIL WESTERN STATIONARY SOURCE, CA Location:

S-1548-621-2 : Sep 17 2021 8:10AM -- RINAL DIR

12. Records shall be maintained on site for a period of at least five years and shall be made available for District inspection upon request. [District Rules 1070, 4623 and 4624] Federally Enforceable Through Title V Permit

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

Facility Name: AERA ENERGY LLC
Location: LIGHT OIL WESTERN STATIONARY SOURCE
S-1548-621-2: Sep 17 2021 8:10AM - RINALDIR

**PERMIT UNIT:** S-1548-622-2

SECTION: NW 20 TOWNSHIP: 28S RANGE: 21E

**EQUIPMENT DESCRIPTION:** 

6,500 GALLON OILFIELD CHEMICAL STORAGE TANK #3 - DEHY 20 (ALSO PERMITTED AS S-1547-1338-0)

### PERMIT UNIT REQUIREMENTS

- 1. 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]
- 2. Tank shall be equipped with an operational temperature indicator. [District Rule 2201]
- 3. The tank shall be equipped with a fixed roof with no holes or openings. [District Rule 2201]
- 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 leak-free condition except when the operating pressure exceeds the valve's set pressure. [District Rule 4623]
- 5. This tank shall be in a leak-free condition. 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. A reading in excess of 10,000 ppmv above background is a violation of this permit and Rule 4623. [District Rule 4623]
- 6. All piping, fittings, and valves on this tank shall be inspected annually by the facility operator in accordance with EPA Method 21, with the instrument calibrated with methane, to ensure compliance with the leaking provisions of this permit. [District Rule 4623]
- 7. 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]
- 8. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) not to exceed 2.7 psia under all storage conditions. [District Rules 2201 and 4623]
- 9. Tank throughput shall not exceed 234,000 gallon per year. [District Rule 2201]
- 10. Tank throughput shall not exceed 6,500 gallon per day. [District Rule 2201]
- 11. VOC emission rate from the tank shall not exceed 2.7 lb/day [District Rule 2201]
- 12. True vapor testing (TVP) testing to demonstrate compliance with Rule 4623 shall be conducted within 60 days of startup, and once every 24 months during summer (July September) thereafter. [District Rules 1081 and 4623]
- 13. The TVP testing shall be conducted at actual storage temperature of the organic liquid in the tank. [District Rule 4623, 6.2.1.2]

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

Facility Name: AERA ENERGY LLC LIGHT OIL WESTERN STATIONARY SOURCE.CA

S-1548-622-2 : Sep 17 2021 8:10AM -- RINALDIR

- 14. The permit holder shall conduct true vapor pressure (TVP) testing of the organic liquid stored in this tank at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored in this tank. [District Rule 4623, 6.2.2]
- 15. The true vapor pressure (TVP) shall be measured using Reid vapor pressure ASTM Method D323, and converting the RVP to TVP at the tank's maximum organic liquid storage temperature. The conversion of RVP to TVP shall be done in accordance with the oil and gas section of the "California Air Resources Board's (ARB) Technical Guidance Document to the Criteria and Guidelines Regulations for AB 2588," dated August 1989. [District Rule 4623, 6.4.3]
- 16. In lieu of testing each uncontrolled fixed roof tank, the permit holder may conduct a TVP testing of the organic liquid stored in a representative tank provided the following requirements are met: (1) the selection of representative, uncontrolled fixed roof tanks shall be submitted in writing to the APCO, and written approval is granted by the APCO prior to conducting the test; (2) one uncontrolled fixed roof tank represents some or all of the tanks in a tank battery (as defined in Rule 4623, Section 3.31, Amended 5/19/05); (3) the TVP and storage temperature of the stored organic liquid of the representative tank to be tested are the same or higher than those of the tanks it is to represent; and (4) the stored organic liquid in each of the represented tanks is the same and came from the same source. [District Rule 4623, 6.2.1.1
- 17. An operator shall submit the records of TVP testing conducted in accordance with the testing requirements of Rule 4623, 6.2 to the APCO within 45 days after the date of testing. The record shall include the tank identification number, PTO number, type of stored organic liquid, TVP of the stored organic liquid, test methods used, and a copy of the test results. [District Rule 4623, 6.3.6]
- 18. Permittee shall maintain accurate records of tank throughput, true vapor pressure and temperature of liquid in the tank, inspection log and such records shall be retained on-site for a minimum of five (5) years and made available for APCO upon request, except for certain records that need to be submitted as specified in this permit. [District Rules 2201 and 4623]

These terms and condition the Facility-wide Permit to Operate.

Facility Name: AERA ENERGY LLC

LIGHT OIL WESTERN STATIONARY SOURCE Location: S-1548-622-2 : Sep 17 2021 8:10AM -- RINAL DIR

**PERMIT UNIT:** S-1548-627-3

EXPIRATION DATE: 05/31/2021

#### **EQUIPMENT DESCRIPTION:**

1,000 HP ELECTRIC MOTOR DRIVEN FUEL GAS COMPRESSOR WITH A FUEL GAS & A SURGE DRUM AND ASSOCIATED PIPING (COMPRESSOR STATION #49)

### PERMIT UNIT REQUIREMENTS

- 1. While dormant, the electrical line shall be physically disconnected from the unit. [District Rule 2080]
- 2. {4562} Permittee shall submit written notification to the District upon designating the unit as dormant or active. [District Rule 2080]
- 3. {4560} While dormant, normal source testing shall not be required. [District Rule 2080]
- 4. {4563} Upon recommencing operation of this unit, normal source testing shall resume. [District Rule 2080]
- 5. Any fugitive emission inspections required by this permit shall be performed within 60 days of recommencing operation of this unit, regardless of whether the unit remains active or is again designated as dormant. [District Rule 2080]
- 6. {4565} Records of all dates and times that this unit is designated as dormant or active, and copies of all corresponding notices to the District, shall be maintained, retained for a period of at least five years, and made available for District inspection upon request. [District Rule 1070]
- 7. VOC emissions shall not exceed 7.1 pounds per day. [District Rule 2201] Federally Enforceable Through Title V Permit
- 8. Permittee shall demonstrate and maintain records of compliance with daily VOC emission limit on annual basis by listing equipment type, number of components, appropriate emission factors from Table 2-4 of the U.S. EPA document "Protocol for Equipment Leak Emission Estimates (EPA-453/R-95-017)" or other District approved emission factors, and the total daily emissions. [District Rule 2201] Federally Enforceable Through Title V Permit
- 9. All records shall be maintained and retained on-site for a period of at least 5 years and shall be made available for District inspection upon request. [District Rule 1070]

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

Facility Name: AERA ENERGY LLC Location: LIGHT OIL WESTERN STATIONARY SOURCE.CA

S-1548-627-3 : Sep 17 2021 8:10AM -- RINALDIF

**PERMIT UNIT:** S-1548-628-5

**SECTION: 20 TOWNSHIP: 28S** RANGE: 21E

**EQUIPMENT DESCRIPTION:** 

CRUDE OIL TRUCK BOTTOM LOADING RACK WITH DRY BREAK COUPLINGS CONNECTED TO THE VAPOR

CONTROL SYSTEM LISTED ON PERMIT S-1548-148-13

### PERMIT UNIT REQUIREMENTS

- While dormant, the unit shall be rendered inoperable and normal leak inspections shall not be required. [District Rule 2080] Federally Enforceable Through Title V Permit
- Permittee shall submit written notification to the District upon designating the unit as dormant or active. [District Rule 2080] Federally Enforceable Through Title V Permit
- Any leak inspections required by this permit shall be performed within 60 days of recommencing operation of this unit, regardless of whether the unit remains active or is again designated as dormant. [District Rule 2080] Federally Enforceable Through Title V Permit
- No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
- Pressure in the delivery tank being loaded shall not exceed 18 inches water column pressure [District Rule 4624] 5. Federally Enforceable Through Title V Permit
- The loading rack shall be designed, installed, maintained and operated such that there are no leaks and no excess organic liquid drainage at disconnections. [District Rule 2201 and 4624] Federally Enforceable Through Title V Permit
- Emissions from loading rack disconnects shall not exceed 3.0 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
- Total number of disconnects during loading operations shall not exceed 150 per day. [District Rule 2201] Federally Enforceable Through Title V Permit
- Drainage from loading rack disconnects shall not exceed 10 ml per disconnect. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
- 10. Emissions from the loading rack shall not exceed 0.08 lb per 1,000 gallons of organic liquid transferred. [District Rule 4624] Federally Enforceable Through Title V Permit
- 11. Fugitive component emissions shall not exceed 0.1 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
- 12. Unless dormant, the loading rack vapor collection system shall be inspected during loading at least once every calendar quarter using a portable hydrocarbon analyzer in accordance with EPA Method 21. [District Rule 4624] Federally Enforceable Through Title V Permit
- 13. An operator may apply for a written approval from the APCO to change the inspection frequency from quarterly to annually provided no leaks were found during five consecutive quarterly inspections. Upon identification of any leak during an annual inspection, the inspection frequency shall revert back to quarterly, and the operator shall contact the APCO in writing within 14 days. [District Rule 4624] 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: AERA ENERGY LLC LIGHT OIL WESTERN STATIONARY SOURCE, CA

S-1548-628-5 : Sep 17 2021 8:10AM -- RINAL DIR

Location:

- 14. A leak in the loading rack's vapor collection system is the detection of any gaseous or vapor emissions with a concentration of VOC greater than 1,000 ppmv above background as methane when measured in accordance with EPA Method 21. [District Rule4624] Federally Enforceable Through Title V Permit
- 15. All loading rack equipment that is found leaking shall be repaired or replaced within 72 hours. If the leaking component cannot be repaired or replaced within 72 hours, the component shall be taken out of service until such time the component is repaired or replaced. The repaired or replacement equipment shall be reinspected the first time the equipment is in operation after the repair or replacement. [District Rules 2201 and 4624] Federally Enforceable Through Title V Permit
- 16. Permittee shall maintain accurate component count for tank according to CAPCOA's "California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities," Table IV-2c (Feb 1999), Screening Value Range emission factors < 10,000 ppmv. Permittee shall update such records when new components are approved and installed [District Rule 2201] Federally Enforceable Through Title V Permit
- 17. Permittee shall maintain 1) all dates and times that this unit is designated as dormant or active, and copies of all corresponding notices to the District 2) inspections for loading rack leaks, including the date and time of the inspection and the identification of every leaking component and 3) daily records of the number of loading rack disconnects. Records shall be retained on the premises for a period of at least five years and made available for District inspection upon request. [District Rules 1070, 2201 and 4624] Federally Enforceable Through Title V Permit

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

Facility Name: AERA ENERGY LLC
Location: LIGHT OIL WESTERN STATIONARY SOURCE
S-1548-678-5: Sep 17 2021 8:10AM - RINAI DIR

**PERMIT UNIT:** S-1548-632-1

SECTION: NE12 TOWNSHIP: 28S RANGE: 20E

**EQUIPMENT DESCRIPTION:** 

140 MMBTU/HR AIR-ASSISTED PRODUCED GAS FLARE SERVING VAPOR CONTROL SYSTEM

### PERMIT UNIT REQUIREMENTS

- 1. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
- 2. No more than 3,181,818 scf/day nor 66,287,787 scf/yr of gas shall be combusted in flare. [District Rule 2201] Federally Enforceable Through Title V Permit
- 3. Emission rates from the flare shall not exceed any of the following limits: 0.068 lb-NOx/MMBtu (NOx as NO2); 0.057 lb-SOx/MMBtu; 0.008 lb-PM10/MMBtu; 0.37 lb-CO/MMBtu; and 0.063 lb-VOC/MMBtu (VOC as methane). [District Rule 2201] Federally Enforceable Through Title V Permit
- 4. The flame shall be present at all times when combustible gases are vented through the flares. [District Rule 2201] Federally Enforceable Through Title V Permit
- 5. Flare 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 2201] Federally Enforceable Through Title V Permit
- 6. The flares shall be operated according to the manufacturer's specifications, a copy of which shall be maintained and made available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit
- 7. The sulfur content of produced gas combusted in the flare shall be monitored and recorded at least once every calendar quarter. Monitoring of the sulfur content of the produced gas shall not be required if the flares do not operate during that period. Records of the results of monitoring of the produced gas sulfur content shall be maintained. [District Rule 2201] Federally Enforceable Through Title V Permit
- 8. Monitoring of the produced gas sulfur content shall be performed using Gas Processors Association Standard 2377; ASTM Method D1072, D3246, D4084, D4810, or D5504; EPA Method 11 or 15; ARB Method 11; a continuous fuel gas monitor that meets the requirements specified in SCAQMD Rule 431.1; or an alternative method approved by the District. [District Rule 2201] Federally Enforceable Through Title V Permit
- 9. The net heating value of the gas combusted by the flare shall be calculated pursuant to 40 CFR 60.18(f)(3) or by using EPA Method 18, ASTMD1945, D1946, and ASTM D2382 if published values are not available or cannot be calculated. [District Rule 2201] Federally Enforceable Through Title V Permit
- 10. The permittee shall maintain records of the total quantity of produced gas (in scf) combusted in the flare each day. [District Rule 2201] Federally Enforceable Through Title V Permit

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

Facility Name: AERA ENERGY LLC Location: LIGHT OIL WESTERN STATIONARY SOURCE,CA

S-1548-632-1 : Sep 17 2021 8:10AM -- RINALDIR

**PERMIT UNIT:** S-1548-633-1

SECTION: NE12 TOWNSHIP: 28S RANGE: 20E

**EQUIPMENT DESCRIPTION:** 

470 BBL OR LESS BAKER STYLE STORAGE TANK WITH PV RELIEF VALVE (DOW CHANSLOR LEASE)

### PERMIT UNIT REQUIREMENTS

- The tank shall be equipped with a fixed roof with no holes or openings. [District Rule 2201] Federally Enforceable 1. Through Title V Permit
- This tank shall only store produced fluid from the free water knockout (FWKO) vessel connected to it and only during relief events when the FWKO has to vent to this tank to relieve pressure. [District Rule 2201] Federally Enforceable Through Title V Permit
- The maximum fluid throughput during a relief event shall not exceed 470 barrels per day. [District Rule 2201] Federally Enforceable Through Title V Permit
- There shall be no more than 18 relief events associated with this tank per calendar year. [District Rule 2201] Federally Enforceable Through Title V Permit
- 5. This tank shall be completely drained (i.e. no standing liquid) within 48 hours of the start of each relief event. [District Rule 2201] 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 leak-free condition except when the operating pressure exceeds the valve's set pressure. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
- This tank shall only store, place, or hold organic liquid with a Reid vapor pressure (RVP) no greater than 3.5 psia under all storage conditions. [District Rule 2201] 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. 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 reading in excess of 10,000 ppmv above background is a violation of this permit. [District Rule 4623] Federally Enforceable Through Title V Permit
- VOC emission rate from the tank shall not exceed 9.0 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
- 10. VOC emission rate from tank shall not exceed 182 lb/yr. [District Rule 2201] Federally Enforceable Through Title V Permit
- 11. Permittee shall maintain monthly records of date and time of each relief events, fluid throughput for each event, and date and time the tank was completely drained. [District Rules 2201 and 4623] 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: AERA ENERGY LLC

LIGHT OIL WESTERN STATIONARY SOURCE, CA

Location:

12. Permittee shall keep accurate records of each organic liquid stored in the tank, including its storage temperature, TVP, and API gravity. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit

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

Facility Name: AERA ENERGY LLC Location: LIGHT OIL WESTERN STATIONARY SOURCE, S-1548-633-1: Sep 17 2021 8:47AM - RINALDIR

## **ATTACHMENT B**

Previous Title V Operating Permit

## **Permit to Operate**

FACILITY: S-1548 EXPIRATION DATE: 05/31/2021

**LEGAL OWNER OR OPERATOR:** AERA ENERGY LLC

**MAILING ADDRESS:** PO BOX 11164

BAKERSFIELD, CA 93389-1164

FACILITY LOCATION: LIGHT OIL WESTERN STATIONARY SOURCE

CA

FACILITY DESCRIPTION: LIGHT OIL PRODUCTION

The Facility's Permit to Operate may include Facility-wide Requirements as well as requirements that apply to specific permit units.

This Permit to Operate remains valid through the permit expiration date listed above, subject to payment of annual permit fees and compliance with permit conditions and all applicable local, state, and federal regulations. This permit is valid only at the location specified above, and becomes void upon any transfer of ownership or location. Any modification of the equipment or operation, as defined in District Rule 2201, will require prior District approval. This permit shall be posted as prescribed in District Rule 2010.

Samir Sheikh
Executive Director / APCO

Brian Clements
Director of Permit Services

**FACILITY:** S-1548-0-5 EXPIRATION DATE: 05/31/2021

### **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] 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] Federally Enforceable Through Title V Permit
- 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
- 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, 9.9.1 an] Federally Enforceable Through Title V Permit
- 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
- The operator shall maintain records of required monitoring, where applicable, 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
- 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
- 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

FACILITY-WIDE REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate. Any amendments to these Facility-wide Requirements that affect specific Permit Units may constitute modification of those Permit Units.

Facility Name: AERA ENERGY LLC

Location: LIGHT OIL WE S-1548-0-5: Sep 14 2021 3:46PM -- RINALDIR LIGHT OIL WESTERN STATIONARY SOURCE, CA

- 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 (02/17/05). 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, and County Rules 401 (in all e] Federally Enforceable Through Title V Permit

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- 23. No person shall manufacture, blend, repackage, supply, sell, solicit or apply any architectural coating not exempt as allowed by Sections 4.1 and 4.2 of Rule 4601 with a VOC content in excess of the corresponding limit specified in Table of Standards 1 effective until 12/30/10 or Table of Standards 2 effective on and after 1/1/11 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 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 Part 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 Part 82, Subpart B. [40 CFR Part 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 (8/19/2004) or Rule 8011 (8/19/2004). [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 (8/19/2004) or Rule 8011 (8/19/2004). [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 (8/19/2004) or Rule 8011 (8/19/2004). [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 (8/19/2004) or Rule 8011 (8/19/2004). [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 (8/19/2004) or Rule 8011 (8/19/2004). [District Rule 8061 and Rule 8011] Federally Enforceable Through Title V Permit
- 34. Any unpaved vehicle/equipment area that anticipates more than 50 Average annual daily Trips (AADT) shall comply with the requirements of Section 5.1.1 of District Rule 8071. Any unpaved vehicle/equipment area that anticipates more than 150 vehicle trips per day (VDT) shall comply with the requirements of Section 5.1.2 of District Rule 8071. On each day that 25 or more VDT with 3 or more axles will occur on an unpaved vehicle/equipment traffic area, the owner/operator shall comply with the requirements of Section 5.1.3 of District Rule 8071. On each day when a special event will result in 1,000 or more vehicles that will travel/park on an unpaved area, the owner/operator shall comply with the requirements of Section 5.1.4 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 (9/16/2004) or Rule 8011 (8/19/2004). [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), Rule 111 (Kern, Tulare, Kings), and Rule 202 (Fresno, Kern, Tulare, Kings, Madera, Stanislaus, Merced, San Joaquin). 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 (12/17/09); 8021 (8/19/2004); 8031 (8/19/2004); 8041 (8/19/2004); 8051 (8/19/2004); 8061 (8/19/2004); and 8071 (9/16/2004). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
- 41. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102] Federally Enforceable Through Title V Permit
- 42. 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
- 43. For valves, threaded connections, flanges, pipes, pumps, compressors, and other components 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
- 44. 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
- 45. 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
- 46. 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

- 47. 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
- 48. 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
- 49. 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
- 50. 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
- 51. 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
- 52. 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
- 53. 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
- 54. 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
- 55. 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 ppmy. 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
- 56. 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

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- 57. 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
- 58. 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
- 59. 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
- 60. 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
- 61. 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
- 62. 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
- 63. 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
- 64. 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
- 65. 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
- 66. 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
- 67. 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
- 68. 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
- 69. 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

- 70. 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 Enforced Through Title V Permit [District Rule 4409, 5.2.8.1] Federally Enforceable Through Title V Permit
- 71. 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 Enforced Through Title V Permit [District Rule 4409, 5.2.8.2] Federally Enforceable Through Title V Permit
- 72. 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
- 73. 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
- 74. 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
- 75. 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
- 76. 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
- 77. 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

- 78. 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
- 79. 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
- 80. 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
- 81. 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
- 82. 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 [District Rule 4409, 5.3.7] Federally Enforceable Through Title V Permit
- 83. 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

- 84. 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
- 85. 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
- 86. 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
- 87. 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
- 88. 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
- 89. 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
- 90. 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
- 91. 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
- 92. 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
- 93. 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
- 94. 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

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- 95. 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
- 96. 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
- 97. When applicable to 40 CFR Part 68, a subject facility shall submit to the proper authority a Risk Management Plan when mandated by the regulation. [40 CFR Part 68] Federally Enforceable Through Title V Permit
- 98. Compliance with permit conditions in the Title V permit shall be deemed compliance with SJVUAPCD Rule 4403, Sections 5.1, 5.3, and 6.3 (Amended February 16,1995). A permit shield is granted from these requirements. [District Rule 2520, 12.2] Federally Enforceable Through Title V Permit
- 99. This source meets the criteria for black oil per 40 CFR 63.761. Therefore, the requirements of 40 CFR Part 63, Subpart HH do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 12.2] Federally Enforceable Through Title V Permit
- 100. The reporting periods for the Report of Required Monitoring and the Compliance Certification Report begin October 31 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
- 101. IC ENGINE CONDITION: This engine shall be equipped with an operational nonresettable elapsed time meter or other APCO approved alternative. [District Rule 4702, 5.6.6] Federally Enforceable Through Title V Permit
- 102. IC ENGINE CONDITION: Emissions source testing shall be conducted with the engine operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. Source testing emissions for this unit shall be calculated using the arithmetic mean, pursuant to District Rule 1081 (Amended December 16, 1993), of 3 thirty-minute test runs for NOx. [District Rules 4702, 6.3.3 and 2520, 9.3.2] Federally Enforceable Through Title V **Permit**
- 103. IC ENGINE CONDITION: Source testing shall be District witnessed, or authorized, sample collection by ARB certified testing laboratory. [District Rule 1080] Federally Enforceable Through Title V Permit
- 104. IC ENGINE CONDITION: Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified 30 days prior to any compliance source test, and a source test plan must be submitted for approval 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
- 105. IC ENGINE CONDITION: 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
- 106. IC ENGINE CONDITION: The following test methods shall be used: NOx (ppmv) EPA Method 7E or ARB Method 100, CO (ppmv) - EPA Method 10 or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, and VOC (ppmv) - EPA Method 25 or EPA Method 18 referenced as methane, fuel gas sulfur content - ASTM D 3246 or double GC for total sulfur content, and EPA Method 21 for fugitive components. [District Rule 1081] Federally Enforceable Through Title V Permit
- 107. IC ENGINE CONDITION: Emissions for this unit shall be calculated using the arithmetic mean, pursuant to District Rule 1081 (Amended December 16, 1993), of 3 thirty minute test runs for NOx and CO. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
- 108. IC ENGINE CONDITION: This engine shall be operated and maintained in proper operating condition per the Inspection and Maintenance (I & M) plan submitted to the District. [District Rule 4702, 6.5 and 40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit

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- 109. IC ENGINE CONDITION: The permittee shall update the I & M plan for this engine prior to any planned change in operation. The permittee must notify the District no later than seven days after changing the I & M plan and must submit an updated I & M plan to the APCO no later than 14 days after the change for approval. The date and time of the change to the I & M plan shall be recorded in the engine's operating log. For modifications, the revised I & M plan shall be submitted to and approved by the APCO prior to issuance of the Permit to Operate. The permittee may request a change to the I & M plan at any time. [District Rules 4702, 6.5 and 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 110. IC ENGINE CONDITION: Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [District Rule 4801] Federally Enforceable Through Title V Permit
- 111. IC ENGINE CONDITION: Particulate emissions shall not exceed, at the point of discharge, 0.1 gr/dscf. [District Rule 4201] Federally Enforceable Through Title V Permit
- 112. IC ENGINE CONDITION: If the IC engine is fired on natural gas with supplier certified sulfur content, then permittee shall document sulfur content by maintaining file copies of all natural gas bills or supplier's certification of sulfur content. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
- 113. IC ENGINE CONDITION: If the IC engine is not fired on natural gas with supplier certified sulfur content, then the sulfur content of the natural gas being fired in the engine shall be tested using ASTM D 3246 or double GC for sulfur content (as H2S). [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 114. IC ENGINE CONDITION: If the engine is not fired on certified natural gas, the sulfur content of each fuel source shall be tested weekly except that if compliance with the fuel sulfur content limit has been demonstrated for 8 consecutive weeks for a fuel source, then the testing frequency shall be quarterly. If a test shows noncompliance with the sulfur content requirement, the source must return to weekly testing until eight consecutive weeks show compliance. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
- 115. IC ENGINE CONDITION: The permittee shall monitor and record the stack concentration of NOx (as NO2), CO, and O2 at least once every calendar month (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall not be required if the engine is not in operation, i.e. the engine need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the engine unless monitoring has been performed within the last month. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies. [District Rule 4702, 5.6.1.1, 5.6.9, and 6.5.7] Federally Enforceable Through Title V Permit
- 116. IC ENGINE CONDITION: If either the NOx or CO concentrations corrected to 15% O2, as measured by the portable analyzer, exceed the permitted emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1-hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of performing the notification and testing required by this condition. [District Rule 4702, 6.5.4] Federally Enforceable Through Title V Permit
- 117. IC ENGINE CONDITION: All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the permit-to-operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rule 4702, 5.6.9, 6.5.7] Federally Enforceable Through Title V Permit

- 118. IC ENGINE CONDITION: The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 15% O2, (3) identification of testing equipment, (4) identification of testing personal, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rules 4702, 5.6.1 and 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 119. IC ENGINE CONDITION: An engine operating log shall be maintained. The log shall include, on a monthly basis, the total hours of operation, type and quantity of fuel used, preventative and corrective maintenance and modifications performed, monitoring data, compliance source test results and any other information necessary to demonstrate compliance. [District Rule 4702, 6.2.1] Federally Enforceable Through Title V Permit
- 120. IC ENGINE CONDITION: The engine shall be in full compliance with 40 CFR Part 63, Subpart ZZZZ (National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines). [40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit
- 121. IC ENGINE CONDITION: The permittee must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes. [40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit
- 122. IC ENGINE CONDITION: All records required by this permit shall be maintained for a period of five years and shall be made readily available for District inspection upon request. [District Rule 4702, 6.2.2 and 40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit
- 123. IC ENGINE CONDITION: District witnessed or approved compliance source testing for NOx, VOC, and CO emissions shall be demonstrated within 60 days of startup and not less than once every 24 months thereafter. [District Rule 4702] Federally Enforceable Through Title V Permit

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**PERMIT UNIT:** S-1548-45-8 EXPIRATION DATE: 05/31/2021

SECTION: 28 TOWNSHIP: 28S RANGE: 21E

**EQUIPMENT DESCRIPTION:** 

2.730.000 GALLON FIXED ROOF PETROLEUM STORAGE TANK #T-471 WITH VAPOR RECOVERY SYSTEM WITH VAPOR CONTROL COMPRESSOR(S), COOLER(S), LIQUID KNOCKOUT(S) AND PIPING TO FIELD GAS SYSTEM SHARED WITH S-1548-143 (TANK #T-470)

#### PERMIT UNIT REQUIREMENTS

- The tank shall be equipped with a vapor recovery system consisting of a closed system that collects VOCs from the 1. storage tank. [District Rule 4623, 5.1] Federally Enforceable Through Title V Permit
- All piping, valves, and fittings shall be constructed and maintained in a leak-free condition. [District Rule 4623, 5.1.3] Federally Enforceable Through Title V Permit
- A leak is defined as a reading in excess of 10,000 ppmy, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21. A reading in excess of 10,000 ppmv above background is a violation of this permit and Rule 4623 and shall be reported as a deviation. [District Rule 4623, 3.11 and 6.4.8] Federally Enforceable Through Title V Permit
- Any vessel gauging or sampling device on a vessel 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, 5.6.2] Federally Enforceable Through Title V Permit
- All piping, fittings, and valves on this vessel associated with the vapor recovery system shall be inspected annually by the facility operator in accordance with EPA Method 21, with the instrument calibrated with methane, to ensure compliance with the leaking provisions of this permit. [District Rule 4623, 5.7 (Table 3)] Federally Enforceable Through Title V Permit
- If any of the vessel components are found to be leaking, operator shall immediately affix a tag and maintain records of gas leak detection readings, date/time leak was discovered, and date/time the component was repaired to a leak-free condition [District Rule 4623, 5.7 (Table 3)] Federally Enforceable Through Title V Permit
- Upon detection of any leaking components (having a gas leak > 10,000 ppmv, measured in accordance with EPA Method 21 by a portable hydrocarbon detection instrument that is calibrated with methane), the operator shall: a. Eliminate the leak within 8 hours after detection; or b. If the leak can not be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices; and c. Eliminate the leak within 48 hours after minimization; and d. In no event that the total time to minimize and eliminate the leak shall exceed 56 hours after detection. [District Rule 4623, 5.7 (Table 3)] Federally Enforceable Through Title V Permit
- Leaking components that have been discovered by the operator that have been immediately tagged and repaired within the deadlines specified in the Emissions Minimization requirements, shall not constitute a violation of this rule and does not have to be reported as a deviation. However, leaking components discovered during inspections by District staff that were not previously identified and/or tagged by the operator, and/or any leaks that were not repaired within deadlines specified in the Emissions Minimization requirements, shall constitute a violation of this rule or permit and has to be reported as a deviation. [District Rule 4623, 5.7 (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.

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- If a component type for a given vessel is found to leak above the leak free standard during an annual inspection, then quarterly inspections of that component type on the vessel or system shall be conducted for four consecutive quarters. After four successful quarterly inspections in which the component type is found to be leak free (<10,000 ppmv), inspections interval may revert to annual. [District Rule 4623, 5.7 (Table 3)] Federally Enforceable Through Title V Permit
- 10. Any component found to be leaking above the leak free standard on two consecutive annual inspections is considered a violation, even if it is under the voluntary inspection and maintenance program. [District Rule 4623, 5.7 (Table 3)] Federally Enforceable Through Title V Permit
- 11. Permittee shall notify the APCO in writing at least three (3) days prior to performing vessel degassing and interior vessel cleaning activities. Written notification shall include the following: 1) the Permit to Operate number and physical location of the vessel being degassed, 2) the date and time that vessel 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 vessel, 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, 5.7.5.1] Federally Enforceable Through Title V Permit
- 12. This vessel shall be degassed before commencing interior cleaning by one of the following: 1) exhausting VOCs contained in the vessel vapor space to an APCO-approved vapor recovery system until the organic vapor concentration is 5,000 ppmy 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 vessel vapor space to an APCO-approved vapor recovery system by filling the vessel with a suitable liquid until 90 percent or more of the maximum operating level of the vessel 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 vessel vapor space to an APCO-approved vapor recovery system by filling the vessel with a suitable gas. Degassing shall continue until the operator has achieved a vapor displacement equivalent to at least 2.3 times the vessel capacity. Suitable gases are air, nitrogen, carbon dioxide, or natural gas containing less than 10 percent VOC by weight. [District Rule 4623, 5.7.5.4] Federally Enforceable Through Title V Permit
- 13. During vessel degassing, the operator shall discharge or displace organic vapors contained in the vessel vapor space to an APCO-approved vapor recovery system. [District Rule 4623, 5.7.5.4.5] Federally Enforceable Through Title V Permit
- 14. To facilitate connection to an external APCO-approved recovery system, a suitable vessel fitting, such as a manway, may be temporarily removed for a period of time not to exceed 1 hour. [District Rule 4623, 5.7.5.4.6] Federally Enforceable Through Title V Permit
- 15. This vessel shall be in compliance with the applicable requirements of District Rule 4623 at all times during draining, degassing, and refilling the tank with an organic liquid having a TVP of 0.5 psia or greater. [District Rule 4623, 5.7.5.4.7] Federally Enforceable Through Title V Permit
- 16. After a tank has been degassed pursuant to the requirements of this permit, vapor control requirements are not applicable until an organic liquid having a TVP of 0.5 psia or greater is placed, held, or stored in this vessel. [District Rule 4623, 5.7.5.4.10] Federally Enforceable Through Title V Permit
- 17. While performing vessel 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, 5.7.5.5.1] Federally Enforceable Through Title V Permit
- 18. 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, 5.7.5.5.2] Federally Enforceable Through Title V Permit
- 19. During sludge removal, the operator shall control emissions from the sludge receiving vessel by operating an APCOapproved vapor control device that reduces emissions of organic vapors by at least 95%. [District Rule 4623, 5.7.5.6.1] Federally Enforceable Through Title V Permit

- 20. Permittee shall only transport removed sludge in closed, liquid leak-free containers. [District Rule 4623, 5.7.5.6.2] Federally Enforceable Through Title V Permit
- 21. Permittee 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, 5.7.5.6.3] Federally Enforceable Through Title V Permit
- 22. P/V vents shall be set to relieve at a pressure higher than required to activate vapor compressor. [District NSR Rule] Federally Enforceable Through Title V Permit
- 23. The tank shall be equipped with a fixed roof with no holes or openings. [District NSR Rule] Federally Enforceable Through Title V Permit
- 24. Compressed vapors shall be sent to the field gas gathering system. [District NSR Rule] Federally Enforceable Through Title V Permit
- 25. Permittee shall maintain with the permit accurate fugitive component count and resultant emissions calculated using U.S. EPA Publication 453/R-95-017, Table 2-4. [District Rule 1070] Federally Enforceable Through Title V Permit
- 26. All records required by this permit shall be maintained for a period of Five years and permittee shall make such records available for District inspection upon request. [District Rule 1070 and 2520, 9.5.2] Federally Enforceable Through Title V Permit
- 27. 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
- 28. The efficiency of any VOC destruction device shall be measured by EPA Method 25, 25a, 25b, or as approved by District Rule 4623. [District Rule 4623, 6.2.5] Federally Enforceable Through Title V Permit
- 29. The operator shall ensure that the vapor recovery system is functional and is operating in compliance with permit conditions at all times. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 30. Fugitive VOC emissions from components associated with vapor recovery system shared between this permit unit and permit unit S-1548-143 shall not exceed 59.0 lb/day. [District NSR Rule and 4623, 5.3.1] Federally Enforceable Through Title V Permit

**EXPIRATION DATE:** 05/31/2021 **PERMIT UNIT:** S-1548-113-9

SECTION: 04 TOWNSHIP: 27S RANGE: 21E

**EQUIPMENT DESCRIPTION:** 

584,318,750 BTU/HR SAFETY FLARE WITH INDAIR I-12 FLARE TIP (LOST HILLS 1 LEASE)

### PERMIT UNIT REQUIREMENTS

- Gas flared shall not exceed 15,000,000 scf/day. [District NSR Rule] Federally Enforceable Through Title V Permit 1.
- If the flare is utilized to combust emergency releases of VOC for three (3) hours or more in a calendar quarter, the 2. permittee shall perform a visible emissions inspection using EPA Method 22. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- The concentration of sulfur compounds in the exhaust from this unit shall not exceed 0.2% by volume as measured on a dry basis over a 15 minute period. To show compliance compliance with the sulfur limits, the gas being flared shall be tested quarterly for sulfur content and higher heating value. [District Rule 2520, 9.3.2 and 4801] Federally Enforceable Through Title V Permit
- The sulfur content of the gas being flared shall be determined using ASTM D 1072, D 3031, D 4084, D 3246 or grab sample analysis by GC-FPD/TCD performed in the laboratory. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- Permittee shall maintain records of emergency and non-emergency operation, hours of operation for flare maintenance and testing, and the amount of gas flared for a period of five years and make such records readily available for District inspection upon request. [District NSR Rule, District Rule 1070, and District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
- A flame shall be present at all time when combustible gases are vented through the flare. [District Rule 4311, 5.2] Federally Enforceable Through Title V Permit
- 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 when gases may be vented to the flare. Pilot monitoring is not required during unforeseen or essential planned power outages. [District Rule 4311, 5.4] Federally Enforceable Through Title V Permit
- 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, 5.5] Federally Enforceable Through Title V Permit
- Permittee shall maintain copies of the compliance determination conducted pursuant to Section 6.4.1, copies of the source testing result conducted pursuant to Section 6.4.2, effective on and after July 1, 2011, a copy of the approved flare minimization plan pursuant to Section 6.5, effective on and after July 1, 2012, a copy of annual reports submitted to the APCO pursuant to Section 6.2 and effective on and after July 1, 2011, monitoring data collected pursuant to Sections 5.10, 6.6, 6.7. 6.8, 6.9 and 6.10. [District Rule 4311, 6.1] Federally Enforceable Through Title V Permit
- 10. For flares used during an emergency, the operator shall record of the duration of flare operation, amount of gas burned, and the nature of the emergency situation. [District Rule 4311, 6.1] Federally Enforceable Through Title V Permit

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Location:

- 11. All records shall be maintained, retained on-site for a minimum of five years, and made available to the APCO, ARB, and EPA upon request. [District Rule 4311, 6.1] Federally Enforceable Through Title V Permit
- 12. VOC emissions, 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 Method 25a may be used, and analysis of halogenated exempt compounds shall be analyzed by EPA Method 18 or ARB Method 422 "Determination of Volatile organic Compounds in Emission from Stationary Sources". The VOC concentration in ppmv shall be converted to pounds per million Btu (lb/MMBtu) by using the equation in District Rule 4311, Section 6.3.1. [District Rule 4311, 6.3.1] Federally Enforceable Through Title V Permit
- 13. NOx emissions in pounds per million BTU shall be determined by using EPA Method 19. NOx and O2 concentrations shall be determined by using EPA Method 3A, EPA Method 7E, or ARB 100. [District Rule 4311, 6.3.2 and 6.3.3] Federally Enforceable Through Title V Permit
- 14. Total hydrocarbon content and methane content of vent gas shall be determined using ASTM Method D 1945-96, ASTM Method UOP 539-97, EPA Method 18, EPA Method 25A or 25B, or an alternative method approved by the APCO, ARB and EPA. Hydrogen sulfide content of vent gas shall be determined using ASTM Method D 1945-96, ASTM Method UOP 539-97, ASTM Method D 4084-94, ASTM Method D 4810-88, or an alternative method approved by the APCO, ARB and EPA. [District Rule 4311, 6.3.4] Federally Enforceable Through Title V Permit
- 15. If vent gas composition is monitored with a continuous analyzer employing gas chromatography the minimum sampling frequency shall be one sample every 30 minutes. If vent gas composition is monitored using continuous analyzers not employing gas chromatography, the total reduced sulfur content of vent gas shall be determined by using EPA Method D4468-85, or an alternative method approved by the APCO, ARB and EPA. [District Rule 4311, 6.3.4] Federally Enforceable Through Title V Permit
- 16. Vent gas flow shall be determined using one of the following: EPA Methods 1 and 2; a verification method recommended by the manufacturer of the flow monitoring equipment; tracer gas dilution or velocity; other flow monitors or process monitors that can provide comparison data on a vent stream that is being directed past the ultrasonic flow meter; or an alternative method approved by the APCO, ARB, and EPA. [District Rule 4311, 6.3.5] Federally Enforceable Through Title V Permit
- 17. The operator shall monitor vent gas composition using one of the five methods pursuant to Section 6.6.1 through Section 6.6.5 in District Rule 4311. [District Rule 4311, 6.6] Federally Enforceable Through Title V Permit
- 18. The operator shall monitor the volumetric flows of purge and pilot gases with flow measuring devices or other parameters as specified on the Permit to Operate so that volumetric flows of pilot and purge gas may be calculated based on pilot design and the parameters monitored. [District Rule 4311, 6.7] Federally Enforceable Through Title V Permit
- 19. The operator of a flare with a water seal shall monitor and record the water level and pressure of the water seal that services each flare daily or as specified on the Permit to Operate. [District Rule 4311, 6.8] Federally Enforceable Through Title V Permit
- 20. Periods of flare monitoring system inoperation greater than 24 continuous hours shall be reported by the following working day, followed by notification of resumption of monitoring. Periods of inoperation of monitoring equipment shall not exceed 14 days per any 18-consecutive-month period. Periods of flare monitoring system inoperation do not include the periods when the system feeding the flare is not operating. [District Rule 4311, 6.9.1] Federally Enforceable Through Title V Permit
- 21. During periods of inoperation of continuous analyzers or auto-samplers installed pursuant to Section 6.6, operators responsible for monitoring shall take one sample within 30 minutes of the commencement of flaring, from the flare header or from an alternate location at which samples are representative of vent gas composition and have samples analyzed pursuant to Section 6.3.4. During periods of inoperation of flow monitors required by Section 5.10, flow shall be calculated using good engineering practices. [District Rule 4311, 6.9.2] Federally Enforceable Through Title V Permit

- 22. Permittee shall maintain and calibrate all required monitors and recording devices in accordance with the applicable manufacturer's specifications. In order to claim that a manufacturer's specification is not applicable, the person responsible for emissions must have, and follow, a written maintenance policy that was developed for the device in question. The written policy must explain and justify the difference between the written procedure and the manufacturer's procedure. [District Rule 4311, 6.9.3] Federally Enforceable Through Title V Permit
- 23. All in-line continuous analyzer and flow monitoring data must be continuously recorded by an electronic data acquisition system capable of one-minute averages. Flow monitoring data shall be recorded as one-minute averages. [District Rule 4311, 6.9.4] Federally Enforceable Through Title V Permit
- 24. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101] Federally Enforceable Through Title V Permit
- 25. Components associated with flare and knockout vessel shall be inspected and any detected leaks repaired in accordance with inspection frequencies and repair times established in District Rule 4409. [District Rule 2201] Federally Enforceable Through Title V Permit
- 26. VOC content of gas served by inlet liquid knockout vessel and flare shall not exceed 40% VOC/TOC by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
- 27. Fugitive VOC emissions from components serving the inlet liquid knockout vessel shall not exceed 7.2 lb/day. [District Rule2201] Federally Enforceable Through Title V Permit
- 28. VOC content of gas shall be determined by ASTM D-1945, or equivalent test method with prior District approval. [District Rule 2201] Federally Enforceable Through Title V Permit
- 29. Permittee shall maintain accurate records of fugitive inspection component counts and resultant emissions calculated in accordance with U.S.E.P.A. Protocol for Equipment Leak Emission Estimates (EPA-453/R95-017) Table 2-4 "Oil and Gas Production Operations Average Emission Factors" (November 1995). Permittee shall make records of component counts, and associated emissions, readily available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit
- 30. Formerly S-1512-1

**PERMIT UNIT:** S-1548-115-9 EXPIRATION DATE: 05/31/2021

SECTION: SW04 TOWNSHIP: 27S RANGE: 21E

#### **EQUIPMENT DESCRIPTION:**

450 BHP AJAX DPC450 CLEANBURN IC ENGINE POWERING COMPRESSOR UNIT #5. WITH ASSOCIATE GAS AND CONDENSATE HANDLING EQUIPMENT, INCLUDING SCRUBBER(S), VESSEL(S), COOLER(S), AND LIQUID TRANSFER PUMP(S) (LOST HILLS ONE)

#### PERMIT UNIT REQUIREMENTS

- When this unit is not operated (dormant for Rule 4702) the fuel line shall be physically disconnected from this unit. 1. [District Rule 2080] Federally Enforceable Through Title V Permit
- A source test to demonstrate compliance with NOx, CO and VOC emission limits shall be performed within 60 days of recommencing operation of this unit. [District Rule 4702] Federally Enforceable Through Title V Permit
- Upon seven days written notice to the District this engine may be designated as a dormant emissions unit or an active emissions unit. [District Rule 1070] Federally Enforceable Through Title V Permit
- The engine shall only burn natural gas with a sulfur content of less than or equal to 0.017% by weight. [District NSR 4. Rule] Federally Enforceable Through Title V Permit
- Emissions from IC engine shall not exceed any of the following: NOx (as NO2): 65 ppmv @ 15% O2; VOC: 750 ppmy @ 15% O2; and CO: 2000 ppmy @ 15% O2. [District Rule 4702, 5.1.1 and 2520] Federally Enforceable Through Title V Permit
- Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements of SJVUAPCD Rule 4201; 407 (Kern). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
- The engine's oil and filter shall be changed every 4,320 hours of operation or every 12 months, whichever comes first. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- The engine's spark plugs shall be inspected every 4,320 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- The engine's hoses and belts shall be inspected every 4,320 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- 10. The permittee shall operate and maintain IC engine per manufacturer's emission-related instructions or develop and follow a maintenance plan which provides to the extent practicable for the operation and maintenance of the engine in a manner consistent with good practices. [District Rule 4702 and 40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit

Facility Name: AERA ENERGY LLC LIGHT OIL WESTERN STATIONARY SOURCE, CA S-1548-115-9 : Sep 14 2021 3:46PM -- RINALDIR

Location:

- 11. The permittee has the option of utilizing an oil analysis program in order to extend the specified oil change requirement in Tables 2c and 2d of 40 CFR 63 Subpart ZZZZ. The oil analysis must be performed every 4,320 hours of operation or every 12 months, whichever comes first. The analysis program must at a minimum analyze the following three parameters: Total Acid Number, viscosity, and percent water content. The condemning limits for these parameters are as follows: Total Acid Number increases by more than 3.0 milligrams of potassium hydroxide (KOH) per gram from Total Acid Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. If all of these condemning limits are not exceeded, the engine owner or operator is not required to change the oil. If any of the limits are exceeded, the engine owner or operator must change the oil within 2 days of receiving the results of the analysis; if the engine is not in operation when the results of the analysis are received, the engine owner or operator must change the oil within 2 days or before commencing operation, whichever is later. The owner or operator must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- 12. The owner must operate and maintain the engine per the manufacturers emission-related instructions, or develop and follow your own maintenance plan which provides to the extent practicable for the operation and maintenance of the engine in a manner consistent with good practices [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- 13. Formerly S-1512-6 [District Rule 2201] Federally Enforceable Through Title V Permit
- 14. This unit is subject to IC Engine Conditions on the facility wide permit S-1548-0. Deviations from a standard condition shall be reported under the applicable condition in S-1548-0 [District Rule 2520] Federally Enforceable Through Title V Permit

PERMIT UNIT: S-1548-116-9 EXPIRATION DATE: 05/31/2021

SECTION: SW04 TOWNSHIP: 27S RANGE: 21E

**EQUIPMENT DESCRIPTION:** 

450 BHP AJAX DPC450 CLEANBURN I.C. ENGINE POWERING COMPRESSOR UNIT #6 WITH ASSOCIATE GAS AND CONDENSATE HANDLING EQUIPMENT, INCLUDING SCRUBBER(S), VESSEL(S), COOLER(S), AND LIQUID TRANSFER PUMP(S) (LOST HILLS ONE)

#### PERMIT UNIT REQUIREMENTS

- 1. When this unit is not operated (dormant for Rule 4702) the fuel line shall be physically disconnected from this unit. [District Rule 2080] Federally Enforceable Through Title V Permit
- 2. A source test to demonstrate compliance with NOx, CO and VOC emission limits shall be performed within 60 days of recommencing operation of this unit. [District Rule 4702] Federally Enforceable Through Title V Permit
- 3. Upon seven days written notice to the District this engine may be designated as a dormant emissions unit or an active emissions unit. [District Rule 1070] Federally Enforceable Through Title V Permit
- 4. The engine shall only burn natural gas with a sulfur content of less than or equal to 0.017% by weight. [District NSR Rule] Federally Enforceable Through Title V Permit
- 5. Emissions from IC engine shall not exceed any of the following: NOx (as NO2): 65 ppmv @ 15% O2; VOC: 750 ppmv @ 15% O2; and CO: 2000 ppmv @ 15% O2. [District Rule 4702, 5.1.1 and 2520] Federally Enforceable Through Title V Permit
- 6. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements of SJVUAPCD Rule 4201; 407 (Kern). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
- 7. The engine's oil and filter shall be changed every 4,320 hours of operation or every 12 months, whichever comes first. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- 8. The engine's spark plugs shall be inspected every 4,320 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- 9. The engine's hoses and belts shall be inspected every 4,320 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- 10. The permittee shall operate and maintain IC engine per manufacturer's emission-related instructions or develop and follow a maintenance plan which provides to the extent practicable for the operation and maintenance of the engine in a manner consistent with good practices. [District Rule 4702 and 40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit

Facility Name: AERA ENERGY LLC Location: LIGHT OIL WESTERN STATIONARY SOURCE,CA \$1548-1169: Sep 14 2021 34PPM - RINAI DIR

- 11. The permittee has the option of utilizing an oil analysis program in order to extend the specified oil change requirement in Tables 2c and 2d of 40 CFR 63 Subpart ZZZZ. The oil analysis must be performed every 4,320 hours of operation or every 12 months, whichever comes first. The analysis program must at a minimum analyze the following three parameters: Total Acid Number, viscosity, and percent water content. The condemning limits for these parameters are as follows: Total Acid Number increases by more than 3.0 milligrams of potassium hydroxide (KOH) per gram from Total Acid Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. If all of these condemning limits are not exceeded, the engine owner or operator is not required to change the oil. If any of the limits are exceeded, the engine owner or operator must change the oil within 2 days of receiving the results of the analysis; if the engine is not in operation when the results of the analysis are received, the engine owner or operator must change the oil within 2 days or before commencing operation, whichever is later. The owner or operator must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- 12. The owner must operate and maintain the engine per the manufacturers emission-related instructions, or develop and follow your own maintenance plan which provides to the extent practicable for the operation and maintenance of the engine in a manner consistent with good practices [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- 13. Formerly S-1512-7 [District Rule 2201] Federally Enforceable Through Title V Permit
- 14. This unit is subject to IC Engine Conditions on the facility wide permit S-1548-0. Deviations from a standard condition shall be reported under the applicable condition in S-1548-0 [District Rule 2520] Federally Enforceable Through Title V Permit

PERMIT UNIT: S-1548-120-19 EXPIRATION DATE: 05/31/2021

**SECTION:** NW 4 **TOWNSHIP:** 27S **RANGE:** 21E

**EQUIPMENT DESCRIPTION:** 

126,000 GALLON CONE ROOF REJECT OIL TANK F-3005 WITH VAPOR CONTROL COMPRESSOR, COOLERS AND LIQUID KNOCKOUTS, SAND BASIN, ISOLATION VALVE, AND 3.3 MMBTU/HR PERMIT EXEMPT HEATER TREATER

### PERMIT UNIT REQUIREMENTS

- 1. Total VOC fugitive emission rate from the tank (S-1548-120) and the associated vapor control system shall not exceed 45.2 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
- 2. 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] Federally Enforceable Through Title V Permit
- 3. This vapor control system is shared with permits S-1548-121, -122, -126, -385, -386, -420, and -443 and a permit exempt 3.3 MMBtu/hr heater treater. [District Rule 2201] Federally Enforceable Through Title V Permit
- 4. Permittee shall maintain an accurate fugitive component count and resultant emissions calculated using U.S. EPA Publication 453/R-95-017. [District Rule 2201] Federally Enforceable Through Title V Permit
- 5. Compliance with permit conditions in the Title V permit shall be deemed compliance with SJVUAPCD Rule 4623 (Amended December 17, 1992). A permit shield is granted from these requirements. [District Rule 2520] Federally Enforceable Through Title V Permit
- 6. The requirements of SJVUAPCD Rule 4661 (Amended December 17, 1992), and Rule 4801 (Amended December 17, 1992) do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520] Federally Enforceable Through Title V Permit
- 7. Formerly S-1512-11 [District Rule 2201] Federally Enforceable Through Title V Permit
- 8. LOST HILLS 1 VAPOR RECOVERY CONDITION: This tank shall only vent to a vapor recovery system except during District approved cleaning and maintenance procedures as described in this permit. The vapor recovery system shall be an APCO-approved system consisting of a closed vent system designed to collect VOCs from the storage tank and a VOC control device. The vapor recovery system shall be maintained in a 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 of District Rule 4623 (amended May 19, 2005). [District Rules 2201 and 4623, 5.6.1] Federally Enforceable Through Title V Permit
- 9. LOST HILLS 1 VAPOR RECOVERY CONDITION: The operator shall ensure that the vapor recovery system is functioning as necessary to maintain the vapor recovery pressure below the P/V vent setpoints on the tanks. [District Rule 2201] Federally Enforceable Through Title V Permit
- 10. LOST HILLS 1 VAPOR RECOVERY CONDITION: The tank shall be equipped with a fixed roof with no holes or openings. [District Rule 2201] Federally Enforceable Through Title V Permit

Facility Name: AERA ENERGY LLC Location: LIGHT OIL WESTERN STATIONARY SOURCE,CA \$-1549-120-19: Sep 14 2021 3-49PM - RINALDIR

- 11. LOST HILLS 1 VAPOR RECOVERY CONDITION: 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
- 12. LOST HILLS 1 INSPECTION CONDITION: 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
- 13. LOST HILLS 1 INSPECTION CONDITION: 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
- 14. LOST HILLS 1 INSPECTION CONDITION: 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
- 15. LOST HILLS 1 INSPECTION CONDITION: 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
- 16. LOST HILLS 1 INSPECTION CONDITION: 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 permit. 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 permit. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
- 17. LOST HILLS 1 INSPECTION CONDITION: 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 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
- 18. LOST HILLS 1 INSPECTION CONDITION: Any component found to be leaking on two consecutive annual inspections is in violation of this permit, even if covered under the voluntary inspection and maintenance program. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
- 19. LOST HILLS 1 INSPECTION CONDITION: Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date of leak detection, and method of detection; 3) Date and emission level of recheck after leak is repaired. [District Rule 2201] Federally Enforceable Through Title V Permit
- 20. LOST HILLS 1 CLEANING CONDITION: This permit authorizes tank cleaning that is not the result of breakdowns or poor maintenance as a routine maintenance activity. [District Rules 2020 and 2080] Federally Enforceable Through Title V Permit

Facility Name: AERA ENERGY LLC Location: LIGHT OIL WESTERN STATIONARY SOURCE,CA \$15494-120-19: Sep 14 2021 3:46PM = RINALDIR

- 21. LOST HILLS 1 CLEANING CONDITION: Permittee shall notify the APCO in writing at least three (3) days for fixed roof tanks and one (1) day for pressure vessels (as defined in Rule 4623) prior to performing degassing and interior cleaning activities. Written notification shall include the following: 1) the Permit to Operate number and physical location of the vessel being degassed, 2) the date and time that vessel 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 vessel, 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
- 22. LOST HILLS 1 CLEANING CONDITION: Excluding pressure vessels as defined in Rule 4623, tank/vessel shall be degassed before commencing interior cleaning or maintenance by one of the following: 1) exhausting VOCs contained in the 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 vapor space to an APCO-approved vapor recovery system by filling the vessel with a suitable liquid until 90 percent or more of the maximum operating level 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 vapor space to an APCO-approved vapor recovery system by filling the vessel with a suitable gas. Degassing shall continue until the operator has achieved a vapor displacement equivalent to at least 2.3 times the vessel 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
- 23. LOST HILLS 1 CLEANING CONDITION: Pressure vessel (as defined in Rule 4623) shall be degassed before commencing interior cleaning or maintenance by one of the following: 1) Prior to venting the vessel to the atmosphere, operate the vapor recovery system/vapor control device for at least 24 hours such that it collects the vapors; or 2) use liquid displacement, conducted using a liquid with a TVP less than 0.5 psia, or conducted by floating the oil pad off by restricting the outflow of water, such that 90% of the vessel volume is displaced; or 3) depressurize vessel to the onsite flare until the vessel reaches atmospheric pressure. [District Rule 2080] Federally Enforceable Through Title V Permit
- 24. LOST HILLS 1 CLEANING CONDITION: During tank degassing, the operator shall discharge or displace organic vapors contained in the vessel vapor space to an APCO-approved vapor recovery system. [District Rule 4623] Federally Enforceable Through Title V Permit
- 25. LOST HILLS 1 CLEANING CONDITION: To facilitate connection to an external APCO-approved recovery system, a suitable vessel 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
- 26. LOST HILLS 1 CLEANING CONDITION: After a tank/vessel has been degassed pursuant to the requirements of this permit, vapor control requirements are not applicable until an organic liquid having a TVP of 0.5 psia or greater is placed, held, or stored in the tank/vessel. [District Rule 4623] Federally Enforceable Through Title V Permit
- 27. LOST HILLS 1 CLEANING CONDITION: While performing interior 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
- 28. LOST HILLS 1 CLEANING CONDITION: 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
- 29. LOST HILLS 1 CLEANING CONDITION: If the tank is holding organic liquids with 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%. Pressure vessels (as defined in Rule 4623) are excluded from this condition. [District Rule 4623] Federally Enforceable Through Title V Permit

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- 30. LOST HILLS 1 CLEANING CONDITION: If the tank is holding organic liquids with a TVP of 1.5 psia or greater then permittee shall only transport removed sludge in closed, liquid leak-free containers. Pressure vessels (as defined in Rule 4623) are excluded from this condition. [District Rule 4623] Federally Enforceable Through Title V Permit
- 31. LOST HILLS 1 CLEANING CONDITION: If the tank is holding organic liquids with a TVP of 1.5 psia or greater then permittee 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. Pressure vessels (as defined in Rule 4623) are excluded from this condition. [District Rule 2020 and 4623] Federally Enforceable Through Title V Permit
- 32. LOST HILLS 1 CLEANING CONDITION: Permittee shall maintain records of each period of cleaning and maintenance when the vessel is disconnected or isolated from the vapor control system. Records shall include the date that cleaning was initiated, the date cleaning was completed, the procedure used to vent vapors prior to opening, and a description of internal and external repairs and maintenance performed. [District Rule 2080] Federally Enforceable Through Title V Permit

S-1548-120-19 : Sep 14 2021 3:46PM -- RINAL DIF

**EXPIRATION DATE: 05/31/2021 PERMIT UNIT:** S-1548-121-10

SECTION: NW 4 TOWNSHIP: 27S RANGE: 21E

**EQUIPMENT DESCRIPTION:** 

126.000 GALLON FIXED CONE ROOF LACT TANK WITH ISOLATION VALVE VENTED TO VAPOR CONTROL SYSTEM LISTED ON PERMIT S-1548-120:

### PERMIT UNIT REQUIREMENTS

- VOC fugitive emissions from the components in gas service on the tank and tank vapor collection piping shall not exceed 8.9 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
- 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 40 CFR 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
- Compliance with permit conditions in the Title V permit shall be deemed compliance with SJVUAPCD Rule 4623 (Amended December 17, 1992). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
- Permittee shall maintain an accurate fugitive component count and resultant emissions calculated using U.S. EPA Publication 453/R-95-017, or other factors approved by the District. [District Rule 2201] Federally Enforceable Through Title V Permit
- Formerly S-1512-12 [District Rule 2201] Federally Enforceable Through Title V Permit 5.
- This unit is subject to the Lost Hills 1 Dehy Vapor Recovery, Inspection, and Tank Cleaning Conditions on Permit S-6. 1548-120. Deviations from a standard condition shall be reported under the applicable condition in S-1548-120. [District Rule 2520] Federally Enforceable Through Title V Permit

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

Facility Name: AERA ENERGY LLC LIGHT OIL WESTERN STATIONARY SOURCE, CA Location:

S-1548-121-10 : Sep 14 2021 3:46PM -- RINALDIR

PERMIT UNIT: S-1548-122-9 EXPIRATION DATE: 05/31/2021

SECTION: 04 TOWNSHIP: 27S RANGE: 21E

**EQUIPMENT DESCRIPTION:** 

24,300 GALLON (10 FT. DIA BY 40 FT. LONG SHELL) FREE WATER KNOCKOUT VESSEL V-3002 WITH VAPOR PIPING TO VAPOR CONTROL SYSTEM LISTED ON PERMIT S-1548-120:

## PERMIT UNIT REQUIREMENTS

- 1. Formerly S-1512-13 [District Rule 2201] Federally Enforceable Through Title V Permit
- 2. This unit is subject to the Lost Hills 1 Dehy Vapor Recovery, Inspection, and Tank Cleaning Conditions on Permit S-1548-120. Deviations from a standard condition shall be reported under the applicable condition in S-1548-120. [District Rule 2520] Federally Enforceable Through Title V Permit

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

Facility Name: AERA ENERGY LLC

Location: LIGHT OIL WESTERN STATIONARY SOURCE,CA S-1548-122-9 : Sep 14 2021 3:46PM -- RINALDIR

**EXPIRATION DATE:** 05/31/2021 **PERMIT UNIT:** S-1548-126-9

**SECTION**: 04 **TOWNSHIP**: 27S RANGE: 21E

**EQUIPMENT DESCRIPTION:** 

126.000 GALLON FIXED ROOF CONE BOTTOM CLARIFIER TANK VENTED TO VAPOR CONTROL SYSTEM LISTED ON S-1548-120:

## PERMIT UNIT REQUIREMENTS

- 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 40 CFR 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
- Compliance with permit conditions in the Title V permit shall be deemed compliance with SJVUAPCD Rule 4623 (Amended December 17, 1992). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
- Formerly S-1512-18 [District Rule 2201] Federally Enforceable Through Title V Permit
- This unit is subject to the Lost Hills 1 Dehy Vapor Recovery, Inspection, and Tank Cleaning Conditions on Permit S-1548-120. Deviations from a standard condition shall be reported under the applicable condition in S-1548-120. [District Rule 2520] Federally Enforceable Through Title V Permit

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

Facility Name: AERA ENERGY LLC

LIGHT OIL WESTERN STATIONARY SOURCE, CA Location:

S-1548-126-9 : Sep 14 2021 3:46PM -- RINAL DIR

**EXPIRATION DATE:** 05/31/2021 **PERMIT UNIT:** S-1548-134-11

SECTION: NW02 TOWNSHIP: 29S RANGE: 21E

**EQUIPMENT DESCRIPTION:** 625 MMBTU/HR LIMITED USE FLARE

### PERMIT UNIT REQUIREMENTS

- No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark, as, or darker than, Ringlemann 1/4 or 5% opacity. [District Rule 2201] Federally Enforceable Through Title V Permit
- Emission rates from flare (lb/day and lb/yr demonstrated by compliance with flared volumes of combustion gas) shall not exceed any of the following: PM10: 0.008 lb/MMBtu (120.0 lb/day, 713 lb/yr), NOx (as NO2): 0.068 lb/MMBtu (1020.0 lb/day, 6063 lb/yr), VOC: 0.063 lb/MMBtu (945.0 lb/day, 5617 lb/yr), CO: 0.37 lb/MMBtu (5550.0 lb/day, 32,989 lb/yr). [District Rule 2201] Federally Enforceable Through Title V Permit
- The quantity of pilot fuel combusted shall not exceed 20,000 scf of natural gas per day, or 5,333 scf of LPG per day. [District Rule 2020, 2201, and 4311]
- 4. SOx emissions shall not exceed 1089.2 lb/day nor 6,474 lb/yr. [District Rule 2201] Federally Enforceable Through Title V Permit
- Flare 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 Rules 2201 and 4311] Federally Enforceable Through Title V Permit
- Flare shall use purge gas for purging. [District Rule 4311] Federally Enforceable Through Title V Permit
- 7. Flare inlet pressure shall be no less than 6 psig. [District Rules 2201 and 4311] Federally Enforceable Through Title V Permit
- Total quantity of produced gas combusted in flare shall not exceed 89,160 mscf/yr. [District Rule 2201] Federally Enforceable Through Title V Permit
- Flare shall be equipped with operational produced gas and pilot gas volume flow meters. [District Rule 2201] Federally Enforceable Through Title V Permit
- 10. Permittee shall measure and record produced gas sulfur content and calculate SO2 emissions at least annually. [District Rule 2201] Federally Enforceable Through Title V Permit
- 11. The gas sulfur content of combustion gas, purge gas, and pilot gas shall be determined using double GC for H2S and mercaptans or any of ASTM test methods D-1072, D-3246, D-4346, or D-6228 or by the gas/propane supplier. [District Rule 1081] Federally Enforceable Through Title V Permit
- 12. Each quarter in which the flare is operated for three (3) hours or more, the permittee shall perform a visible emissions inspection using either EPA Method 22 or EPA Method 9. [District Rule 2520] Federally Enforceable Through Title V Permit
- 13. Permittee shall keep accurate daily records of the quantity of pilot fuel combusted. [District Rule 2020, 2201, and 43111

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

LIGHT OIL WESTERN STATIONARY SOURCE, CA Location: S-1548-134-11 : Sep 14 2021 3:46PM -- RINALDIR

14. Permittee shall keep accurate daily and annual records of flare gas volumes, sulfur content, higher heating value of flared gas, and calculated SOx emissions in units of lb/day and lb/yr, and such records shall be retained for a period of 5 years and be made readily available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit

**PERMIT UNIT:** S-1548-140-9 **EXPIRATION DATE:** 05/31/2021

SECTION: SE35 TOWNSHIP: 27S RANGE: 20E

**EQUIPMENT DESCRIPTION:** 

THREE 800 HP ELECTRIC MOTOR DRIVEN FUEL GAS COMPRESSORS. EACH WITH A FUEL GAS & A SURGE DRUM AND ASSOCIATED PIPING (COMPRESSOR STATION #49)

## PERMIT UNIT REQUIREMENTS

- VOC emissions shall not exceed 22.0 pounds per day. [District Rule 2201] Federally Enforceable Through Title V Permit
- Permittee shall demonstrate and maintain records of compliance with daily VOC emission limit on annual basis by listing equipment type, number of components, appropriate emission factors from Table 2-4 of the U.S. EPA document "Protocol for Equipment Leak Emission Estimates (EPA-453/R-95-017)" or other District approved emission factors, and the total daily emissions. [District Rule 2201] Federally Enforceable Through Title V Permit
- All records shall be maintained and retained on-site for a period of at least 5 years and shall be made available for District inspection upon request. [District Rule 1070]

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

Facility Name: AERA ENERGY LLC

LIGHT OIL WESTERN STATIONARY SOURCE, CA Location:

PERMIT UNIT: S-1548-143-6 EXPIRATION DATE: 05/31/2021

SECTION: SW28 TOWNSHIP: 28S RANGE: 21E

**EQUIPMENT DESCRIPTION:** 

2,730,000 GALLON FIXED ROOF CRUDE OIL STORAGE TANK T-470 (ALSO PERMITTED AS S-1547-384 IN THE HEAVY OIL SS) WITH SHARED VAPOR RECOVERY SYSTEM DESCRIBED ON S-1548-45

### PERMIT UNIT REQUIREMENTS

- 1. The tank shall be equipped with a vapor recovery system consisting of a closed system that collects VOCs from the storage tank. [District Rule 4623, 5.1] 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, 5.1.3] Federally Enforceable Through Title V Permit
- 3. A 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 reading in excess of 10,000 ppmv above background is a violation of this permit and Rule 4623 and shall be reported as a deviation. [District Rule 4623, 3.11 and 6.4.8] Federally Enforceable Through Title V Permit
- 4. Any vessel gauging or sampling device on a vessel 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, 5.6.2] Federally Enforceable Through Title V Permit
- 5. All piping, fittings, and valves on this vessel associated with the vapor recovery system shall be inspected annually by the facility operator in accordance with EPA Method 21, with the instrument calibrated with methane, to ensure compliance with the leaking provisions of this permit. [District Rule 4623, 5.7 (Table 3)] Federally Enforceable Through Title V Permit
- 6. If any of the vessel components are found to be leaking, operator shall immediately affix a tag and maintain records of gas leak detection readings, date/time leak was discovered, and date/time the component was repaired to a leak-free condition [District Rule 4623, 5.7 (Table 3)] Federally Enforceable Through Title V Permit
- 7. Upon detection of any leaking components (having a gas leak > 10,000 ppmv, measured in accordance with EPA Method 21 by a portable hydrocarbon detection instrument that is calibrated with methane), the operator shall: a. Eliminate the leak within 8 hours after detection; or b. If the leak can not be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices; and c. Eliminate the leak within 48 hours after minimization; and d. In no event that the total time to minimize and eliminate the leak shall exceed 56 hours after detection. [District Rule 4623, 5.7 (Table 3)] Federally Enforceable Through Title V Permit
- 8. Leaking components that have been discovered by the operator that have been immediately tagged and repaired within the deadlines specified in the Emissions Minimization requirements, shall not constitute a violation of this rule and does not have to be reported as a deviation. However, leaking components discovered during inspections by District staff that were not previously identified and/or tagged by the operator, and/or any leaks that were not repaired within deadlines specified in the Emissions Minimization requirements, shall constitute a violation of this rule or permit and has to be reported as a deviation. [District Rule 4623, 5.7 (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: AERA ENERGY LLC Location: LIGHT OIL WESTERN STATIONARY SOURCE,CA \$15496-1436: Sep 14 2021 346PM - RINALIDR

- If a component type for a given vessel is found to leak above the leak free standard during an annual inspection, then quarterly inspections of that component type on the vessel or system shall be conducted for four consecutive quarters. After four successful quarterly inspections in which the component type is found to be leak free (<10,000 ppmv), inspections interval may revert to annual. [District Rule 4623, 5.7 (Table 3)] Federally Enforceable Through Title V Permit
- 10. Any component found to be leaking above the leak free standard on two consecutive annual inspections is considered a violation, even if it is under the voluntary inspection and maintenance program. [District Rule 4623, 5.7 (Table 3)] Federally Enforceable Through Title V Permit
- 11. Permittee shall notify the APCO in writing at least three (3) days prior to performing vessel degassing and interior vessel cleaning activities. Written notification shall include the following: 1) the Permit to Operate number and physical location of the vessel being degassed, 2) the date and time that vessel 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 vessel, 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, 5.7.5.1] Federally Enforceable Through Title V Permit
- 12. This vessel shall be degassed before commencing interior cleaning by one of the following: 1) exhausting VOCs contained in the vessel vapor space to an APCO-approved vapor recovery system until the organic vapor concentration is 5,000 ppmy 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 vessel vapor space to an APCO-approved vapor recovery system by filling the vessel with a suitable liquid until 90 percent or more of the maximum operating level of the vessel 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 vessel vapor space to an APCO-approved vapor recovery system by filling the vessel with a suitable gas. Degassing shall continue until the operator has achieved a vapor displacement equivalent to at least 2.3 times the vessel capacity. Suitable gases are air, nitrogen, carbon dioxide, or natural gas containing less than 10 percent VOC by weight. [District Rule 4623, 5.7.5.4] Federally Enforceable Through Title V Permit
- 13. During vessel degassing, the operator shall discharge or displace organic vapors contained in the vessel vapor space to an APCO-approved vapor recovery system. [District Rule 4623, 5.7.5.4.5] Federally Enforceable Through Title V Permit
- 14. To facilitate connection to an external APCO-approved recovery system, a suitable vessel fitting, such as a manway, may be temporarily removed for a period of time not to exceed 1 hour. [District Rule 4623, 5.7.5.4.6] Federally Enforceable Through Title V Permit
- 15. This vessel shall be in compliance with the applicable requirements of District Rule 4623 at all times during draining, degassing, and refilling the tank with an organic liquid having a TVP of 0.5 psia or greater. [District Rule 4623, 5.7.5.4.7] Federally Enforceable Through Title V Permit
- 16. After a tank has been degassed pursuant to the requirements of this permit, vapor control requirements are not applicable until an organic liquid having a TVP of 0.5 psia or greater is placed, held, or stored in this vessel. [District Rule 4623, 5.7.5.4.10] Federally Enforceable Through Title V Permit
- 17. While performing vessel 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, 5.7.5.5.1] Federally Enforceable Through Title V Permit
- 18. 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, 5.7.5.5.2] Federally Enforceable Through Title V Permit
- 19. During sludge removal, the operator shall control emissions from the sludge receiving vessel by operating an APCOapproved vapor control device that reduces emissions of organic vapors by at least 95%. [District Rule 4623, 5.7.5.6.1] Federally Enforceable Through Title V Permit

- 20. Permittee shall only transport removed sludge in closed, liquid leak-free containers. [District Rule 4623, 5.7.5.6.2] Federally Enforceable Through Title V Permit
- 21. Permittee 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, 5.7.5.6.3] Federally Enforceable Through Title V Permit
- 22. The efficiency of any VOC destruction device shall be measured by EPA Method 18, 25, 25a, or 25b, and analysis of halogenated exempt compounds shall be analyzed by ARB Method 422. [District Rule 4623, 6.2.5] Federally Enforceable Through Title V Permit
- 23. The tank shall be equipped with a fixed roof with no holes or openings. [District NSR Rule] Federally Enforceable Through Title V Permit
- 24. Fugitive VOC emissions from components associated with vapor recovery system shared between this permit unit and permit unit S-1548-45 shall not exceed 59.0 lb/day. [District NSR Rule] Federally Enforceable Through Title V Permit
- 25. Permittee shall maintain with the permit accurate fugitive component count and resultant emissions calculated using U.S. EPA Publication 453/R-95-017, Table 2-4. [District NSR Rule] Federally Enforceable Through Title V Permit
- 26. Tank vapors shall only vent through vapor collection system shared with S-1548-45. [District NSR Rule] Federally Enforceable Through Title V Permit
- 27. Tank shall be equipped with an operational stored liquid temperature indicator. [District Rule 2010] Federally Enforceable Through Title V Permit
- 28. Permittee shall maintain accurate records of liquid temperature and Reid vapor pressure. Such records shall be made readily available for District inspection upon request for a period of five years. [District NSR Rule, 2520, 9.4.2 and 4623] Federally Enforceable Through Title V Permit
- 29. Vapor control efficiency shall be maintained at no less than 99%. [District NSR Rule] Federally Enforceable Through Title V Permit
- 30. 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
- 31. The operator of a fixed roof tank shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

EXPIRATION DATE: 05/31/2021 **PERMIT UNIT:** S-1548-148-12

SECTION: NW20 TOWNSHIP: 28S RANGE: 21E

#### **EQUIPMENT DESCRIPTION:**

40.000 BBL FIXED ROOF STORAGE TANK #T211 WITH VAPOR CONTROL COMPRESSOR(S), COOLER(S), LIQUID KNOCKOUT(S) & PIPING TO FIELD GAS SYSTEM OR AIR ASSISTED KALDAIR FLARE W/PLA-18 FLARE TIP - DEHY

### PERMIT UNIT REQUIREMENTS

- Vapor control system shall consist of vapor piping from vessels and tanks S-1548-148, '149, '418, '419, '428, '429, 1. '439, '440, '441, '442, '463, '476, and '-478 through '-484, '486 through '489, '497, '498, '501, '503, '504 and '505. [District Rule 2201] Federally Enforceable Through Title V Permit
- Except during maintenance activities and power outages, operator shall continuously monitor the discharge pressure of the vapor recovery system to ensure its proper operation. The monitoring system shall be programmed to alarm the operator when the discharge pressure increases to where the flare activates. [District Rule 2201 and 40 CFR 60.113b(c)(1)(ii)] Federally Enforceable Through Title V Permit
- Drain valves shall only drain into covered containers which shall be emptied into tanks with vapor control systems. [District Rule 2201] Federally Enforceable Through Title V Permit
- Permittee shall maintain an accurate fugitive component count and resultant emissions calculated using U.S. EPA Publication 453/R-95-017, or other factors approved by the district. [District Rule 2201] Federally Enforceable Through Title V Permit
- Total VOC emission rate from S-1548-148 (excluding the flare), S-1548-149, S-1548-428, S-1548-429, S-1548-439, S-1548-440, S-1548-441, and S-1548-442 shall not exceed 140.4 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
- Collected vapors shall be compressed to the field gas system or incinerated in the flare. [District Rule 2201] Federally Enforceable Through Title V Permit
- The requirements of SJVUAPCD Rule 4661 (Amended December 17, 1992), and Rule 4801 (Amended December 17, 7. 1992) 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
- Flare shall be operated with a flame present at all times. Presence of a flame shall be monitored using a thermocouple or equivalent device. Kaldair Inc.'s KEP-100 Ignition System is an approved monitoring device. [District Rule 4001 and 4311] Federally Enforceable Through Title V Permit
- Flare pilot fuel shall be LPG or natural gas with sulfur content less than 0.75 grains/100 scf. [District NSR Rule] Federally Enforceable Through Title V Permit
- 10. Records shall be maintained of all periods when the flare pilot flame is absent. [District Rule 40CFR 60.115(d)(2)] Federally Enforceable Through Title V Permit
- 11. Semi-annual reports of all periods without the presence of a flare pilot flame shall be furnished to the District Compliance Division and EPA. [District Rule 4001 40CFR 60.115b(d)(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: AERA ENERGY LLC LIGHT OIL WESTERN STATIONARY SOURCE, CA Location: S-1548-148-12 : Sep 14 2021 3:46PM -- RINALDIR

- 12. Flare air-assist blower shall be maintained and operated for smokeless combustion, i.e. no visible emissions in excess of 5% opacity or 1/4 Ringelmann except for periods not to exceed a total of 5 minutes during any 2 consecutive hours. [District Rules 2201 and 4001] Federally Enforceable Through Title V Permit
- 13. Flare shall be equipped with flare gas volume flowmeter. [District Rule 2201] Federally Enforceable Through Title V Permit
- 14. Net heating value of the gas being combusted by flare shall be 300 Btu/scf or greater. [District Rule 4001 and 4311] Federally Enforceable Through Title V Permit
- 15. Total sulfur concentration of gas incinerated in flare shall not exceed 2000 ppmv. [District Rules 2201 and 4801] Federally Enforceable Through Title V Permit
- 16. Maximum amount of gas combusted shall not exceed any of the following: 5,000,000 scf/day, 25 MMscf/quarter, 100 MMscf/year. [District Rule 2201] Federally Enforceable Through Title V Permit
- 17. Emissions from the flare shall not exceed any of the following (based on total gas combusted): PM-10: 0.008 lb/MMBtu; NOx (as NO2): 0.068 lb/MMBtu; VOC: 0.063 lb/MMBtu; or CO: 0.37 lb/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
- 18. Permittee shall measure sulfur content of gas incinerated in flare at least once every year. Such data shall be submitted to the District within 60 days of sample collection. [District Rules 2201 and 4801] Federally Enforceable Through Title V Permit
- 19. Permittee shall keep accurate records of daily, quarterly, and annual quantity of gas combusted. Such records shall be retained for a period of five years and made readily available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit
- 20. A trained observer, as defined in EPA Method 22, shall check visible emissions at least once annually for a period of 15 minutes. If visible emissions are detected at any time during this period, the observation period shall be extended to two hours. A record containing the results of these observations shall be maintained, which also includes company name, process unit, observer's name and affiliation, date, estimated wind speed and direction, sky condition, and the observer's location relative to the source and sun. [District Rules 2201 and 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 21. The outlet shall be equipped with an automatic ignition system, or, shall be operated 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, 5.3] Federally Enforceable Through Title V Permit
- 22. 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, 5.4] Federally Enforceable Through Title V Permit
- 23. 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, 5.5] Federally Enforceable Through Title V Permit
- 24. Flaring is prohibited unless it is consistent with an approved flare minimization plan (FMP), pursuant to District Rule 4311 Section 6.5 and all commitments listed in that plan have been met. [District Rule 4311, 5.8] Federally Enforceable Through Title V Permit
- 25. Permittee shall maintain copies of the compliance determination conducted pursuant to Section 6.4.1, copies of the source testing result conducted pursuant to Section 6.4.2, effective on and after July 1, 2011, a copy of the approved flare minimization plan pursuant to Section 6.5, effective on and after July 1, 2012, a copy of annual reports submitted to the APCO pursuant to Section 6.2 and effective on and after July 1, 2011, monitoring data collected pursuant to Sections 5.10, 6.6, 6.7, 6.8, 6.9 and 6.10. [District Rule 4311, 6.1] Federally Enforceable Through Title V Permit
- 26. All records shall be maintained, retained on-site for a minimum of five years, and made available to the APCO, ARB, and EPA upon request. [District Rule 4311, 6.1] Federally Enforceable Through Title V Permit

- 27. 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, 6.2.1] Federally Enforceable Through Title V Permit
- 28. Effective on and after July 1, 2012, and annually thereafter, the operator shall submit an annual report to the APCO that summarizes all Reportable Flaring Events that occurred during the previous 12 month period. The report shall be submitted within 30 days following the end of the twelve month period of the previous year and shall include: 1) the results of an investigation to determine the primary cause and contributing factors of the flaring event; 2) Any prevention measures considered or implemented to prevent recurrence together with a justification for rejecting any measures that were considered but not implemented; 3) If appropriate, an explanation of why the flaring was an emergency and necessary to prevent accident, hazard or release of vent gas to the atmosphere, or where, due to a regulatory mandate to vent a flare, it cannot be recovered, treated and used as a fuel gas at the facility; and 4) The date, time and duration of the flaring event. [District Rule 4311, 6.2.2] Federally Enforceable Through Title V Permit
- 29. Effective on and after July 1, 2012, and annually thereafter, the operator shall submit an annual report to the APCO within 30 days following the end of each 12 month period include: 1) The total volumetric flow of vent gas in standard cubic feet for each day; 2) Hydrogen sulfide content, methane content, and hydrocarbon content of vent gas composition pursuant to Section 6.6; 3) If vent gas composition is monitored by a continuous analyzer or analyzers pursuant to Section 5.11, average total hydrocarbon content by volume, average methane content by volume, and depending upon the analytical method used pursuant to Section 6.3.4, total reduced sulfur content by volume or hydrogen sulfide content by volume of vent gas flared for each hour of the month; 4) If the flow monitor used pursuant to Section 5.10 measures molecular weight, the average molecular weight for each hour of each month; 5) For any pilot and purge gas used, the type of gas used, the volumetric flow for each day and for each month, and the means used to determine flow; 6) Flare monitoring system downtime periods, including dates and times; 7) For each day and for each month provide calculated sulfur dioxide emissions; 8) A flow verification report for each flare subject to this rule. The flow verification report shall include flow verification testing pursuant to Section 6.3.5. [District Rule 4311, 6.2.3] Federally Enforceable Through Title V Permit
- 30. Total hydrocarbon content and methane content of vent gas shall be determined using ASTM Method D 1945-96, ASTM Method UOP 539-97, EPA Method 18, EPA Method 25A or 25B, or an alternative method approved by the APCO, ARB and EPA. Hydrogen sulfide content of vent gas shall be determined using ASTM Method D 1945-96, ASTM Method UOP 539-97, ASTM Method D 4084-94, ASTM Method D 4810-88, or an alternative method approved by the APCO, ARB and EPA. [District Rule 4311, 6.3.4] Federally Enforceable Through Title V Permit
- 31. Vent gas flow shall be determined using one of the following: EPA Methods 1 and 2; a verification method recommended by the manufacturer of the flow monitoring equipment; tracer gas dilution or velocity; other flow monitors or process monitors that can provide comparison data on a vent stream that is being directed past the ultrasonic flow meter; or an alternative method approved by the APCO, ARB, and EPA. [District Rule 4311, 6.3.5] Federally Enforceable Through Title V Permit
- 32. Every five years after the initial FMP submittal, the operator shall submit an updated FMP for each flare to the APCO for approval. The current FMP shall remain in effect until the updated FMP is approved by the APCO. If the operator fails to submit an updated FMP as required by this section, the existing FMP shall no longer be considered an approved plan. [District Rule 4311, 6.5.2] Federally Enforceable Through Title V Permit
- 33. An updated FMP shall be submitted by the operator addressing new or modified equipment, prior to installing the equipment only if: 1) The equipment change would require an Authority To Construct (ATC) and would impact the emissions for the flare; 2) The ATC is deemed complete after June 18, 2009; 3) The modification is not solely the removal or decommissioning of equipment that is listed in the FMP and has no associated increase in flare emissions. [District Rule 4311, 6.5.3] Federally Enforceable Through Title V Permit
- 34. When submitting the initial FMP, or updated FMP, the operator shall designate as confidential any information claimed to be exempt from public disclosure under the California Public Records Act, Government Code Section 6250 et seq. and provide a justification for this designation and also submit a separate copy of the document with the information designated confidential redacted. [District Rule 4311, 6.5.4] Federally Enforceable Through Title V Permit

Facility Name: AERA ENERGY LLC

- 35. The operator shall monitor vent gas composition using one of the five methods pursuant to Section 6.6.1 through Section 6.6.5 in District Rule 4311. [District Rule 4311, 6.6] Federally Enforceable Through Title V Permit
- 36. The operator shall monitor the volumetric flows of purge and pilot gases with flow measuring devices or other parameters as specified on the Permit to Operate so that volumetric flows of pilot and purge gas may be calculated based on pilot design and the parameters monitored. [District Rule 4311, 6.7] Federally Enforceable Through Title V **Permit**
- 37. Periods of flare monitoring system inoperation greater than 24 continuous hours shall be reported by the following working day, followed by notification of resumption of monitoring. Periods of inoperation of monitoring equipment shall not exceed 14 days per any 18-consecutive-month period. Periods of flare monitoring system inoperation do not include the periods when the system feeding the flare is not operating. [District Rule 4311, 6.9.1] Federally Enforceable Through Title V Permit
- 38. During periods of inoperation of continuous analyzers or auto-samplers installed pursuant to Section 6.6, operators responsible for monitoring shall take one sample within 30 minutes of the commencement of flaring, from the flare header or from an alternate location at which samples are representative of vent gas composition and have samples analyzed pursuant to Section 6.3.4. During periods of inoperation of flow monitors required by Section 5.10, flow shall be calculated using good engineering practices. [District Rule 4311, 6.9.2] Federally Enforceable Through Title V Permit
- 39. Permittee shall maintain and calibrate all required monitors and recording devices in accordance with the applicable manufacturer's specifications. In order to claim that a manufacturer's specification is not applicable, the person responsible for emissions must have, and follow, a written maintenance policy that was developed for the device in question. The written policy must explain and justify the difference between the written procedure and the manufacturer's procedure. [District Rule 4311, 6.9.3] Federally Enforceable Through Title V Permit
- 40. DEHY 20 VAPOR RECOVERY CONDITION: This tank shall only vent to a vapor recovery system except during District approved cleaning and maintenance procedures as described in this permit. The vapor recovery system shall be an APCO-approved system consisting of a closed vent system designed to collect VOCs from the storage tank and a VOC control device. The vapor recovery system shall be maintained in a 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 of District Rule 4623 (amended May 19, 2005). [District Rules 2201 and 4623, 5.6.1] Federally Enforceable Through Title V Permit
- 41. DEHY 20 VAPOR RECOVERY CONDITION: The operator shall ensure that the vapor recovery system is functioning as necessary to maintain the vapor recovery pressure below the P/V vent setpoints on the tanks. [District Rule 2201] Federally Enforceable Through Title V Permit
- 42. DEHY 20 VAPOR RECOVERY CONDITION: The tank shall be equipped with a fixed roof with no holes or openings. [District Rule 2201] Federally Enforceable Through Title V Permit
- 43. DEHY 20 VAPOR RECOVERY CONDITION: 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, 5.6.2] Federally Enforceable Through Title V Permit
- 44. DEHY 20 INSPECTION CONDITION: 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
- 45. DEHY 20 INSPECTION CONDITION: 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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- 46. DEHY 20 INSPECTION CONDITION: 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
- 47. DEHY 20 INSPECTION CONDITION: 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
- 48. DEHY 20 INSPECTION CONDITION: 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 permit. 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 permit. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
- 49. DEHY 20 INSPECTION CONDITION: 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 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
- 50. DEHY 20 INSPECTION CONDITION: Any component found to be leaking on two consecutive annual inspections is in violation of this permit, even if covered under the voluntary inspection and maintenance program. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
- 51. DEHY 20 INSPECTION CONDITION: Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date of leak detection, and method of detection; 3) Date and emission level of recheck after leak is repaired. [District Rule 2201] Federally Enforceable Through Title V Permit
- 52. DEHY 20 CLEANING CONDITION: This permit authorizes tank cleaning that is not the result of breakdowns or poor maintenance as a routine maintenance activity. [District Rules 2020 and 2080] Federally Enforceable Through Title V Permit
- 53. DEHY 20 CLEANING CONDITION: Permittee shall notify the APCO in writing at least three (3) days for fixed roof tanks and one (1) day for pressure vessels (as defined in Rule 4623) prior to performing degassing and interior cleaning activities. Written notification shall include the following: 1) the Permit to Operate number and physical location of the vessel being degassed, 2) the date and time that vessel 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 vessel, 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, 5.7.5.1] Federally Enforceable Through Title V Permit
- 54. DEHY 20 CLEANING CONDITION: Excluding pressure vessels as defined in Rule 4623, tank/vessel shall be degassed before commencing interior cleaning or maintenance by one of the following: 1) exhausting VOCs contained in the 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 vapor space to an APCO-approved vapor recovery system by filling the vessel with a suitable liquid until 90 percent or more of the maximum operating level 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 vapor space to an APCO-approved vapor recovery system by filling the vessel with a suitable gas. Degassing shall continue until the operator has achieved a vapor displacement equivalent to at least 2.3 times the vessel capacity. Suitable gases are air, nitrogen, carbon dioxide, or natural gas containing less than 10 percent VOC by weight. [District Rule 4623, 5.7.5.4] Federally Enforceable Through Title V Permit

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- 55. DEHY 20 CLEANING CONDITION: Pressure vessel (as defined in Rule 4623) shall be degassed before commencing interior cleaning or maintenance by one of the following: 1) Prior to venting the vessel to the atmosphere, operate the vapor recovery system/vapor control device for at least 24 hours such that it collects the vapors; or 2) use liquid displacement, conducted using a liquid with a TVP less than 0.5 psia, or conducted by floating the oil pad off by restricting the outflow of water, such that 90% of the vessel volume is displaced; or 3) depressurize vessel to the onsite flare until the vessel reaches atmospheric pressure. [District Rule 2080] Federally Enforceable Through Title V Permit
- 56. DEHY 20 CLEANING CONDITION: During tank degassing, the operator shall discharge or displace organic vapors contained in the vessel vapor space to an APCO-approved vapor recovery system. [District Rule 4623, 5.7.5.4.5] Federally Enforceable Through Title V Permit
- 57. DEHY 20 CLEANING CONDITION: To facilitate connection to an external APCO-approved recovery system, a suitable vessel fitting, such as a manway, may be temporarily removed for a period of time not to exceed 1 hour. [District Rule 4623, 5.7.5.4.6] Federally Enforceable Through Title V Permit
- 58. DEHY 20 CLEANING CONDITION: After a tank/vessel has been degassed pursuant to the requirements of this permit, vapor control requirements are not applicable until an organic liquid having a TVP of 0.5 psia or greater is placed, held, or stored in the tank/vessel. [District Rule 4623, 5.7.5.4.10] Federally Enforceable Through Title V Permit
- 59. DEHY 20 CLEANING CONDITION: While performing interior 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, 5.7.5.5.1] Federally Enforceable Through Title V Permit
- 60. DEHY 20 CLEANING CONDITION: 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, 5.7.5.5.2] Federally Enforceable Through Title V Permit
- 61. DEHY 20 CLEANING CONDITION: If the tank is holding organic liquids with 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%. Pressure vessels (as defined in Rule 4623) are excluded from this condition. [District Rule 4623, 5.7.5.6.1] Federally Enforceable Through Title V Permit
- 62. DEHY 20 CLEANING CONDITION: If the tank is holding organic liquids with a TVP of 1.5 psia or greater then permittee shall only transport removed sludge in closed, liquid leak-free containers. Pressure vessels (as defined in Rule 4623) are excluded from this condition. [District Rule 4623, 5.7.5.6.2] Federally Enforceable Through Title V Permit
- 63. DEHY 20 CLEANING CONDITION: If the tank is holding organic liquids with a TVP of 1.5 psia or greater then permittee 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. Pressure vessels (as defined in Rule 4623) are excluded from this condition. [District Rule 4623, 5.7.5.6.3] Federally Enforceable Through Title V Permit
- 64. DEHY 20 CLEANING CONDITION: Permittee shall maintain records of each period of cleaning and maintenance when the vessel is disconnected or isolated from the vapor control system. Records shall include the date that cleaning was initiated, the date cleaning was completed, the procedure used to vent vapors prior to opening, and a description of internal and external repairs and maintenance performed. [District Rule 2080] Federally Enforceable Through Title V Permit

PERMIT UNIT: S-1548-149-10 EXPIRATION DATE: 05/31/2021

SECTION: NW20 TOWNSHIP: 28S RANGE: 21E

**EQUIPMENT DESCRIPTION:** 

2.000 BBL CRUDE OIL SKIM TANK #T242 WITH VAPOR CONTROL DESCRIBED IN S-1548-148 - DEHY 20

### PERMIT UNIT REQUIREMENTS

- 1. Compliance with permit conditions in the Title V permit shall be deemed compliance with SJVUAPCD Rule 4623 (Amended December 17, 1992). A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
- 2. 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
- 3. The requirements of SJVUAPCD Rule 4661 (Amended December 17, 1992) and Rule 4801 (Amended December 17, 1992) 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
- 4. This unit is subject to the Dehy 20 Vapor Recovery, Inspection, and Tank Cleaning Conditions on Permit S-1548-148. Deviations from a standard condition shall be reported under the applicable condition in S-1548-148. [District Rule 2520] Federally Enforceable Through Title V Permit

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

Facility Name: AERA ENERGY LLC

Location: LIGHT OIL WESTERN STATIONARY SOURCE, CA S-1548-149-10: Sep 14 2021 3:46PM -- RINALDIR

**PERMIT UNIT:** S-1548-171-9 EXPIRATION DATE: 05/31/2021

SECTION: NE13 TOWNSHIP: 28S RANGE: 20E

#### **EQUIPMENT DESCRIPTION:**

1.215 BHP WAUKESHA MODEL L-5790 GSI NATURAL GAS-FIRED IC ENGINE (SERIAL # C-12312/1) WITH 3-WAY CATALYST AND AIR/FUEL RATIO CONTROLLER DRIVING A GAS COMPRESSOR (MID BELRIDGE COMPRESSOR STATION #26)

### PERMIT UNIT REQUIREMENTS

- When this unit is not operated (dormant for Rule 4701 and 4702) the fuel line shall be physically disconnected from 1. this unit. [District Rule 2080] Federally Enforceable Through Title V Permit
- A source test to demonstrate compliance with NOx, CO and VOC emission limits shall be performed within 60 days of recommencing operation of this unit. [District Rule 4702] Federally Enforceable Through Title V Permit
- Permittee shall submit written notification to the District upon designating the unit as dormant or active. [District Rule 1070] Federally Enforceable Through Title V Permit
- The engine shall only burn natural gas with fuel gas sulfur concentration (as H2S) not exceeding 1.0 grains/100 dscf. 4. [District NSR Rule] Federally Enforceable Through Title V Permit
- The engine shall be equipped with a positive crankcase ventilation (PCV) system or a crankcase emissions control device of at least 90% control efficiency. [District NSR Rule] Federally Enforceable Through Title V Permit
- VOC emissions from fugitive components associated with this engine/compressor shall not exceed 3.9 lb VOC per day. [District NSR Rule] Federally Enforceable Through Title V Permit
- Emissions from IC engine shall not exceed any of the following: NOx (as NO2) -11 ppmv @ 15% O2, VOC 30 ppmv @ 15% O2, CO - 70 ppmv @ 15% O2, PM10 - 0.003 g/hp-hr, or SOx (as SO2) - 0.0108 g/hp-hr. [District NSR Rule and 4702] Federally Enforceable Through Title V Permit
- Leaks from valves, connectors, and other components (not including compressor seals) shall be defined as a reading of methane on a portable hydrocarbon detection instrument in excess of 100 ppmv above background when measured as close as possible to the potential source. [District NSR Rule] Federally Enforceable Through Title V Permit
- Leaks from compressor seals shall be defined as a reading of methane on a portable hydrocarbon detection instrument in excess of 500 ppmv above background when measured as close as possible to the potential source. [District NSR Rule] Federally Enforceable Through Title V Permit
- 10. Components shall be screened and inspected with a minimum of 25% of the components inspected each quarter. Any leak greater than 500 ppmv for compressor seals and 100 ppmv for valves, connectors and other components, when measured with a portable hydrocarbon detection instrument calibrated with methane in accordance with EPA Method 21 or leaking at a rate of greater than 3 drops of liquid per minute, shall be repaired in a manner consistent with the procedures specified in Section 5.3 of Rule 4409. This requirement shall not apply to inaccessible or unsafe-to-access components as identified in the Operator Management Plan pursuant to Section 6.1 of Rule 4409. [District NSR Rule] 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.

LIGHT OIL WESTERN STATIONARY SOURCE, CA Location: S-1548-171-9: Sep 14 2021 3:46PM -- RINALDIR

- 11. Components to be screened shall be identified and categorized according to the following equipment types: connectors, flanges, open-ended lines (sample connections, drains, bleed valves, etc.) pump seals, valves with visible actuators and other (pressure relief devices, compressor seals, meters, etc.). Components shall be further identified and categorized according to the following types of service: gas/light liquid and heavy liquid service. [District NSR Rule] Federally Enforceable Through Title V Permit
- 12. VOC content of gas processed shall not exceed 37% by weight. Permittee shall maintain a written record of VOC content (sampled not less than annually) and shall make such records available for District inspection upon request for a period of two years. [District Rule 1070 and District NSR Rule] Federally Enforceable Through Title V Permit
- 13. VOC content of gas shall be measured using ASTM D1945-96, EPA Method 25 or EPA Method 18 referenced as methane. [District NSR Rule] Federally Enforceable Through Title V Permit
- 14. The permittee shall record the inlet temperature to the catalytic converter on a daily basis. [District Rule 2520, 9.4.2 and 40 CFR 64] Federally Enforceable Through Title V Permit
- 15. The inlet temperature of the catalyst shall be maintained between 750 F and 1250 F. [40 CFR 64] Federally Enforceable Through Title V Permit
- 16. The permittee shall comply with the compliance assurance monitoring operation and maintenance requirements of 40 CFR Part 64.7. [40 CFR 64] Federally Enforceable Through Title V Permit
- 17. The permittee shall comply with the recordkeeping and reporting requirements of 40 CFR part 64.9. [40 CFR 64] Federally Enforceable Through Title V Permit
- 18. If the District or EPA determine that a Quality Improvement Plan is required under 40 CFR 64.7(d)(2), the permittee shall develop and implement the Quality Improvement Plan in accordance with 40 CFR part 64.8. [40 CFR 64] Federally Enforceable Through Title V Permit
- 19. Written records of the engine idling time are not required. Compliance with idle-time limit shall be demonstrated by maintaining a copy of a work practice standard that includes the minimization of engine idling time. [District Rule 2520, 9.4] Federally Enforceable Through Title V Permit
- 20. The engine's oil and filter shall be changed every 2,160 hours of operation or every 12 months, whichever comes first. Permittee may utilize the oil analysis program specified in the Inspection and Maintenance (I&M) plan to extend the oil change requirement. [40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit
- 21. The engine's air filter shall be inspected every 2,160 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit
- 22. The engine's hoses and belts shall be inspected every 2,160 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit
- 23. The owner must operate and maintain the engine per the manufacturers emission-related instructions, or develop and follow your own maintenance plan which provides to the extent practicable for the operation and maintenance of the engine in a manner consistent with good practices [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- 24. This unit is subject to IC Engine Conditions on the facility wide permit S-1548-0. Deviations from a standard condition shall be reported under the applicable condition in S-1548-0 [District Rule 2520] Federally Enforceable Through Title V Permit

**PERMIT UNIT:** S-1548-172-12 **EXPIRATION DATE: 05/31/2021** 

SECTION: NE32 TOWNSHIP: 29S RANGE: 21E

#### **EQUIPMENT DESCRIPTION:**

1.478 BHP WAUKESHA MODEL 7042 GSI NATURAL GAS-FIRED IC ENGINE WITH 3-WAY CATALYST. AIR/FUEL RATIO CONTROLLER, AND POSITIVE CRANKCASE VENTILATION SYSTEM DRIVING A GAS COMPRESSOR (SOUTH BELRIDGE COMPRESSOR STATION #50)

### PERMIT UNIT REQUIREMENTS

- When this unit is not operated (dormant for Rule 4701 and 4702) the fuel line shall be physically disconnected from 1. this unit. [District Rule 2080] Federally Enforceable Through Title V Permit
- A source test to demonstrate compliance with NOx, CO and VOC emission limits shall be performed within 60 days of recommencing operation of this unit. [District Rule 4702] Federally Enforceable Through Title V Permit
- Upon seven days written notice to the District this engine may be designated as a dormant emissions unit or an active emissions unit. [District Rule 1070] Federally Enforceable Through Title V Permit
- This unit shall only be operated at the South Belridge Compressor Station #50 and the Lost Hills 1 Compressor 4. Station. [District Rules 2201 and 4201] Federally Enforceable Through Title V Permit
- The engine shall only burn natural gas with fuel gas sulfur concentration (as H2S) not exceeding 1.0 grains/100 dscf. [District NSR Rule] Federally Enforceable Through Title V Permit
- The engine shall be equipped with a positive crankcase ventilation (PCV) system or a crankcase emissions control device of at least 90% control efficiency. [District NSR Rule] Federally Enforceable Through Title V Permit
- VOC emissions from fugitive components shall not exceed 10.8 lb VOC per day. [District Rule 2201] Federally 7. Enforceable Through Title V Permit
- All Rule 4409 applicable components associated with the compressors shall comply with all Rule 4409 requirements listed in the facility wide permit. [District Rule 4409] Federally Enforceable Through Title V Permit
- Emissions from IC engine shall not exceed any of the following: NOx (as NO2) 11 ppmv @ 15% O2, VOC 30 ppmy @ 15% O2, CO - 70 ppmy @ 15% O2, PM10 - 0.003 g/hp-hr, or SOx (as SO2) - 0.0108 g/hp-hr. [District NSR Rule] Federally Enforceable Through Title V Permit
- 10. Leaks from valves, connectors, and other components (not including compressor seals) shall be defined as a reading of methane on a portable hydrocarbon detection instrument in excess of 100 ppmv above background when measured as close as possible to the potential source. [District NSR Rule] Federally Enforceable Through Title V Permit
- 11. Leaks from compressor seals shall be defined as a reading of methane on a portable hydrocarbon detection instrument in excess of 500 ppmy above background when measured as close as possible to the potential source. [District NSR Rule] Federally Enforceable Through Title V Permit

Facility Name: AERA ENERGY LLC LIGHT OIL WESTERN STATIONARY SOURCE, CA S-1548-172-12 : Sep 14 2021 3:46PM -- RINALDIR

Location:

- 12. Components shall be screened and inspected with a minimum of 25% of the components inspected each quarter. Any leak greater than 500 ppmy for compressor seals and 100 ppmy for valves, connectors and other components, when measured with a portable hydrocarbon detection instrument calibrated with methane in accordance with EPA Method 21 or leaking at a rate of greater than 3 drops of liquid per minute, shall be repaired in a manner consistent with the procedures specified in Section 5.3 of Rule 4409. This requirement shall not apply to inaccessible or unsafe-to-access components as identified in the Operator Management Plan pursuant to Section 6.1 of Rule 4409. [District NSR Rule] Federally Enforceable Through Title V Permit
- 13. Components to be screened shall be identified and categorized according to the following equipment types: connectors, flanges, open-ended lines (sample connections, drains, bleed valves, etc.) pump seals, valves with visible actuators and other (pressure relief devices, compressor seals, meters, etc.). Components shall be further identified and categorized according to the following types of service: gas/light liquid and heavy liquid service. [District NSR Rule] Federally Enforceable Through Title V Permit
- 14. VOC content of gas processed shall not exceed 40% by weight. Permittee shall maintain a written record of VOC content (sampled not less than annually) and shall make such records available for District inspection upon request for a period of two years. [District Rule 1070 and District NSR Rule] Federally Enforceable Through Title V Permit
- 15. VOC content of gas shall be measured using ASTM D1945, EPA Method 25 or EPA Method 18 referenced as methane. [District NSR Rule] Federally Enforceable Through Title V Permit
- 16. The permittee shall record the inlet temperature to the catalytic converter on a daily basis. [District Rule 2520, 9.4.2 and 40 CFR 64] Federally Enforceable Through Title V Permit
- 17. The inlet temperature of the catalyst shall be maintained between 750 F and 1250 F. [40 CFR 64] Federally Enforceable Through Title V Permit
- 18. The permittee shall comply with the compliance assurance monitoring operation and maintenance requirements of 40 CFR Part 64.7. [40 CFR 64] Federally Enforceable Through Title V Permit
- 19. The permittee shall comply with the recordkeeping and reporting requirements of 40 CFR part 64.9. [40 CFR 64] Federally Enforceable Through Title V Permit
- 20. If the District or EPA determine that a Quality Improvement Plan is required under 40 CFR 64.7(d)(2), the permittee shall develop and implement the Quality Improvement Plan in accordance with 40 CFR part 64.8. [40 CFR 64] Federally Enforceable Through Title V Permit
- 21. Written records of the engine idling time are not required. Compliance with idle-time limit shall be demonstrated by maintaining a copy of a work practice standard that includes the minimization of engine idling time. [District Rule 2520, 9.4] Federally Enforceable Through Title V Permit
- 22. The engine's oil and filter shall be changed every 2,160 hours of operation or every 12 months, whichever comes first. Permittee may utilize the oil analysis program specified in the Inspection and Maintenance (I&M) plan to extend the oil change requirement. [40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit
- 23. The engine's air filter shall be inspected every 2,160 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit
- 24. The engine's hoses and belts shall be inspected every 2,160 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit
- 25. The owner must operate and maintain the engine per the manufacturers emission-related instructions, or develop and follow your own maintenance plan which provides to the extent practicable for the operation and maintenance of the engine in a manner consistent with good practices [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- 26. This unit is subject to IC Engine Conditions on the facility wide permit S-1548-0. Deviations from a standard condition shall be reported under the applicable condition in S-1548-0. [District Rule 2520] Federally Enforceable Through Title V Permit

EXPIRATION DATE: 05/31/2021 **PERMIT UNIT:** S-1548-173-12

SECTION: NE32 TOWNSHIP: 29S RANGE: 21E

#### **EQUIPMENT DESCRIPTION:**

1,478 HBP WAUKESHA MODEL 7042 GSI NATURAL GAS-FIRED IC ENGINE WITH 3-WAY CATALYST, AIR/FUEL RATIO CONTROLLER, AND POSITIVE CRANKCASE VENTILATION SYSTEM DRIVING A GAS COMPRESSOR (SOUTH BELRIDGE COMPRESSOR STATION #50)

### PERMIT UNIT REQUIREMENTS

- When this unit is not operated (dormant for Rule 4701 and 4702) the fuel line shall be physically disconnected from 1. this unit. [District Rule 2080] Federally Enforceable Through Title V Permit
- A source test to demonstrate compliance with NOx, CO and VOC emission limits shall be performed within 60 days of recommencing operation of this unit. [District Rule 4702] Federally Enforceable Through Title V Permit
- Permittee shall submit written notification to the District upon designating the unit as dormant or active. [District Rule 2080] Federally Enforceable Through Title V Permit
- 4. The engine shall only burn natural gas with fuel gas sulfur concentration (as H2S) not exceeding 1.0 grains/100 dscf. [District NSR Rule] Federally Enforceable Through Title V Permit
- The engine shall be equipped with a positive crankcase ventilation (PCV) system or a crankcase emissions control 5. device of at least 90% control efficiency. [District NSR Rule] Federally Enforceable Through Title V Permit
- VOC emissions from fugitive components shall not exceed 13.8 lb VOC per day. [District Rule 2201] Federally Enforceable Through Title V Permit
- 7. All Rule 4409 applicable components associated with the compressors shall comply with all Rule 4409 requirements listed in the facility wide permit. [District Rule 4409] Federally Enforceable Through Title V Permit
- Emissions from IC engine shall not exceed any of the following: NOx (as NO2) 11 ppmv @ 15% O2, VOC 30 ppmv @ 15% O2, CO - 70 ppmv @ 15% O2, PM10 - 0.003 g/hp-hr, or SOx (as SO2) - 0.0108 g/hp-hr. [District Rules 2201a nd 4702] Federally Enforceable Through Title V Permit
- Leaks from valves, connectors, and other components (not including compressor seals) shall be defined as a reading of methane on a portable hydrocarbon detection instrument in excess of 100 ppmv above background when measured as close as possible to the potential source. [District NSR Rule] Federally Enforceable Through Title V Permit
- 10. Leaks from compressor seals shall be defined as a reading of methane on a portable hydrocarbon detection instrument in excess of 500 ppmv above background when measured as close as possible to the potential source. [District NSR Rule] Federally Enforceable Through Title V Permit
- 11. Components shall be screened and inspected with a minimum of 25% of the components inspected each quarter. Any leak greater than 500 ppmv for compressor seals and 100 ppmv for valves, connectors and other components, when measured with a portable hydrocarbon detection instrument calibrated with methane in accordance with EPA Method 21 or leaking at a rate of greater than 3 drops of liquid per minute, shall be repaired in a manner consistent with the procedures specified in Section 5.3 of Rule 4409. This requirement shall not apply to inaccessible or unsafe-to-access components as identified in the Operator Management Plan pursuant to Section 6.1 of Rule 4409. [District NSR Rule] 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: AERA ENERGY LLC LIGHT OIL WESTERN STATIONARY SOURCE, CA Location: S-1548-173-12 : Sep 14 2021 3:46PM -- RINALDIR

- 12. Components to be screened shall be identified and categorized according to the following equipment types: connectors, flanges, open-ended lines (sample connections, drains, bleed valves, etc.) pump seals, valves with visible actuators and other (pressure relief devices, compressor seals, meters, etc.). Components shall be further identified and categorized according to the following types of service: gas/light liquid and heavy liquid service. [District NSR Rule] Federally Enforceable Through Title V Permit
- 13. VOC content of gas processed shall not exceed 70% by weight. Permittee shall maintain a written record of VOC content (sampled not less than annually) and shall make such records available for District inspection upon request for a period of two years. [District Rule 1070 and District NSR Rule] Federally Enforceable Through Title V Permit
- 14. VOC content of gas shall be measured using ASTM D1945-96, EPA Method 25 or EPA Method 18 referenced as methane. [District NSR Rule] Federally Enforceable Through Title V Permit
- 15. The permittee shall record the inlet temperature to the catalytic converter on a daily basis. [District Rule 2520, 9.4.2 and 40 CFR 64] Federally Enforceable Through Title V Permit
- 16. The inlet temperature of the catalyst shall be maintained between 750 F and 1250 F. [40 CFR 64] Federally Enforceable Through Title V Permit
- 17. The permittee shall comply with the compliance assurance monitoring operation and maintenance requirements of 40 CFR Part 64.7. [40 CFR 64] Federally Enforceable Through Title V Permit
- 18. The permittee shall comply with the recordkeeping and reporting requirements of 40 CFR part 64.9. [40 CFR 64] Federally Enforceable Through Title V Permit
- 19. If the District or EPA determine that a Quality Improvement Plan is required under 40 CFR 64.7(d)(2), the permittee shall develop and implement the Quality Improvement Plan in accordance with 40 CFR part 64.8. [40 CFR 64] Federally Enforceable Through Title V Permit
- 20. Written records of the engine idling time are not required. Compliance with idle-time limit shall be demonstrated by maintaining a copy of a work practice standard that includes the minimization of engine idling time. [District Rule 2520, 9.4] Federally Enforceable Through Title V Permit
- 21. The engine's oil and filter shall be changed every 2,160 hours of operation or every 12 months, whichever comes first. Permittee may utilize the oil analysis program specified in the Inspection and Maintenance (I&M) plan to extend the oil change requirement. [40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit
- 22. The engine's air filter shall be inspected every 2,160 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit
- 23. The engine's hoses and belts shall be inspected every 2,160 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit
- 24. The owner must operate and maintain the engine per the manufacturers emission-related instructions, or develop and follow your own maintenance plan which provides to the extent practicable for the operation and maintenance of the engine in a manner consistent with good practices [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- 25. This unit is subject to IC Engine Conditions on the facility wide permit S-1548-0. Deviations from a standard condition shall be reported under the applicable condition in S-1548-0. [District Rule 2520] Federally Enforceable Through Title V Permit

Facility Name: AERA ENERGY LLC

EXPIRATION DATE: 05/31/2021 **PERMIT UNIT:** S-1548-174-12

SECTION: NE32 TOWNSHIP: 29S RANGE: 21E

#### **EQUIPMENT DESCRIPTION:**

1,478 BHP WAUKESHA MODEL 7042 GSI NATURAL GAS-FIRED IC ENGINE WITH 3-WAY CATALYST, AIR/FUEL RATIO CONTROLLER, AND POSITIVE CRANKCASE VENTILATION SYSTEM DRIVING A GAS COMPRESSOR (SOUTH BELRIDGE COMPRESSOR STATION #50)

### PERMIT UNIT REQUIREMENTS

- When this unit is not operated (dormant for Rule 4701 and 4702) the fuel line shall be physically disconnected from 1. this unit. [District Rule 2080] Federally Enforceable Through Title V Permit
- A source test to demonstrate compliance with NOx, CO and VOC emission limits shall be performed within 60 days of recommencing operation of this unit. [District Rule 4702] Federally Enforceable Through Title V Permit
- Permittee shall submit written notification to the District upon designating the unit as dormant or active. [District Rule 2080] Federally Enforceable Through Title V Permit
- 4. The engine shall only burn natural gas with fuel gas sulfur concentration (as H2S) not exceeding 1.0 grains/100 dscf. [District NSR Rule] Federally Enforceable Through Title V Permit
- The engine shall be equipped with a positive crankcase ventilation (PCV) system or a crankcase emissions control 5. device of at least 90% control efficiency. [District NSR Rule] Federally Enforceable Through Title V Permit
- VOC emissions from fugitive components shall not exceed 12.8 lb VOC per day. [District Rule 2201] Federally Enforceable Through Title V Permit
- 7. All Rule 4409 applicable components associated with the compressors shall comply with all Rule 4409 requirements listed in the facility wide permit. [District Rule 4409] Federally Enforceable Through Title V Permit
- Emissions from IC engine shall not exceed any of the following: NOx (as NO2) 11 ppmv @ 15% O2, VOC 30 ppmv @ 15% O2, CO - 70 ppmv @ 15% O2, PM10 - 0.003 g/hp-hr, or SOx (as SO2) - 0.0108 g/hp-hr. [District Rules 2201a nd 4702] Federally Enforceable Through Title V Permit
- Leaks from valves, connectors, and other components (not including compressor seals) shall be defined as a reading of methane on a portable hydrocarbon detection instrument in excess of 100 ppmv above background when measured as close as possible to the potential source. [District NSR Rule] Federally Enforceable Through Title V Permit
- 10. Leaks from compressor seals shall be defined as a reading of methane on a portable hydrocarbon detection instrument in excess of 500 ppmv above background when measured as close as possible to the potential source. [District NSR Rule] Federally Enforceable Through Title V Permit
- 11. Components shall be screened and inspected with a minimum of 25% of the components inspected each quarter. Any leak greater than 500 ppmv for compressor seals and 100 ppmv for valves, connectors and other components, when measured with a portable hydrocarbon detection instrument calibrated with methane in accordance with EPA Method 21 or leaking at a rate of greater than 3 drops of liquid per minute, shall be repaired in a manner consistent with the procedures specified in Section 5.3 of Rule 4409. This requirement shall not apply to inaccessible or unsafe-to-access components as identified in the Operator Management Plan pursuant to Section 6.1 of Rule 4409. [District NSR Rule] 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: AERA ENERGY LLC LIGHT OIL WESTERN STATIONARY SOURCE, CA Location:

S-1548-174-12 : Sep 14 2021 3:46PM -- RINALDIR

- 12. Components to be screened shall be identified and categorized according to the following equipment types: connectors, flanges, open-ended lines (sample connections, drains, bleed valves, etc.) pump seals, valves with visible actuators and other (pressure relief devices, compressor seals, meters, etc.). Components shall be further identified and categorized according to the following types of service: gas/light liquid and heavy liquid service. [District NSR Rule] Federally Enforceable Through Title V Permit
- 13. VOC content of gas processed shall not exceed 70% by weight. Permittee shall maintain a written record of VOC content (sampled not less than annually) and shall make such records available for District inspection upon request for a period of two years. [District Rule 1070 and District NSR Rule] Federally Enforceable Through Title V Permit
- 14. VOC content of gas shall be measured using ASTM D1945-96, EPA Method 25 or EPA Method 18 referenced as methane. [District NSR Rule] Federally Enforceable Through Title V Permit
- 15. The permittee shall record the inlet temperature to the catalytic converter on a daily basis. [District Rule 2520, 9.4.2 and 40 CFR 64] Federally Enforceable Through Title V Permit
- 16. The inlet temperature of the catalyst shall be maintained between 750 F and 1250 F. [40 CFR 64] Federally Enforceable Through Title V Permit
- 17. The permittee shall comply with the compliance assurance monitoring operation and maintenance requirements of 40 CFR Part 64.7. [40 CFR 64] Federally Enforceable Through Title V Permit
- 18. The permittee shall comply with the recordkeeping and reporting requirements of 40 CFR part 64.9. [40 CFR 64] Federally Enforceable Through Title V Permit
- 19. If the District or EPA determine that a Quality Improvement Plan is required under 40 CFR 64.7(d)(2), the permittee shall develop and implement the Quality Improvement Plan in accordance with 40 CFR part 64.8. [40 CFR 64] Federally Enforceable Through Title V Permit
- 20. Written records of the engine idling time are not required. Compliance with idle-time limit shall be demonstrated by maintaining a copy of a work practice standard that includes the minimization of engine idling time. [District Rule 2520, 9.4] Federally Enforceable Through Title V Permit
- 21. The engine's oil and filter shall be changed every 2,160 hours of operation or every 12 months, whichever comes first. Permittee may utilize the oil analysis program specified in the Inspection and Maintenance (I&M) plan to extend the oil change requirement. [40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit
- 22. The engine's air filter shall be inspected every 2,160 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit
- 23. The engine's hoses and belts shall be inspected every 2,160 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit
- 24. The owner must operate and maintain the engine per the manufacturers emission-related instructions, or develop and follow your own maintenance plan which provides to the extent practicable for the operation and maintenance of the engine in a manner consistent with good practices [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- 25. This unit is subject to IC Engine Conditions on the facility wide permit S-1548-0. Deviations from a standard condition shall be reported under the applicable condition in S-1548-0. [District Rule 2520] Federally Enforceable Through Title V Permit

EXPIRATION DATE: 05/31/2021 **PERMIT UNIT:** S-1548-175-12

SECTION: NE32 TOWNSHIP: 29S RANGE: 21E

#### **EQUIPMENT DESCRIPTION:**

1,478 BHP WAUKESHA MODEL 7042 GSI NATURAL GAS-FIRED IC ENGINE WITH 3-WAY CATALYST, AIR/FUEL RATIO CONTROLLER, AND POSITIVE CRANKCASE VENTILATION SYSTEM DRIVING A GAS COMPRESSOR (SOUTH BELRIDGE COMPRESSOR STATION #50)

### PERMIT UNIT REQUIREMENTS

- When this unit is not operated (dormant for Rule 4701 and 4702) the fuel line shall be physically disconnected from 1. this unit. [District Rule 2080] Federally Enforceable Through Title V Permit
- A source test to demonstrate compliance with NOx, CO and VOC emission limits shall be performed within 60 days of recommencing operation of this unit. [District Rule 4702] Federally Enforceable Through Title V Permit
- Permittee shall submit written notification to the District upon designating the unit as dormant or active. [District Rule 2080] Federally Enforceable Through Title V Permit
- 4. The engine shall only burn natural gas with fuel gas sulfur concentration (as H2S) not exceeding 1.0 grains/100 dscf. [District NSR Rule] Federally Enforceable Through Title V Permit
- The engine shall be equipped with a positive crankcase ventilation (PCV) system or a crankcase emissions control device of at least 90% control efficiency. [District NSR Rule] Federally Enforceable Through Title V Permit
- VOC emissions from fugitive components shall not exceed 21.6 lb VOC per day. [District Rule 2201] Federally Enforceable Through Title V Permit
- All Rule 4409 applicable components associated with the compressors shall comply with all Rule 4409 requirements listed in the facility wide permit. [District Rule 4409] Federally Enforceable Through Title V Permit
- Emissions from IC engine shall not exceed any of the following: NOx (as NO2) 11ppmv @ 15% O2, VOC 30 ppmv @ 15% O2, CO - 70 ppmv @ 15% O2, PM10 - 0.003 g/hp-hr, or SOx (as SO2) - 0.0108 g/hp-hr. [District Rules 2201 and 4702] Federally Enforceable Through Title V Permit
- Leaks from valves, connectors, and other components (not including compressor seals) shall be defined as a reading of methane on a portable hydrocarbon detection instrument in excess of 100 ppmv above background when measured as close as possible to the potential source. [District NSR Rule] Federally Enforceable Through Title V Permit
- 10. Leaks from compressor seals shall be defined as a reading of methane on a portable hydrocarbon detection instrument in excess of 500 ppmv above background when measured as close as possible to the potential source. [District NSR Rule] Federally Enforceable Through Title V Permit
- 11. Components shall be screened and inspected with a minimum of 25% of the components inspected each quarter. Any leak greater than 500 ppmv for compressor seals and 100 ppmv for valves, connectors and other components, when measured with a portable hydrocarbon detection instrument calibrated with methane in accordance with EPA Method 21 or leaking at a rate of greater than 3 drops of liquid per minute, shall be repaired in a manner consistent with the procedures specified in Section 5.3 of Rule 4409. This requirement shall not apply to inaccessible or unsafe-to-access components as identified in the Operator Management Plan pursuant to Section 6.1 of Rule 4409. [District NSR Rule] 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: AERA ENERGY LLC LIGHT OIL WESTERN STATIONARY SOURCE, CA S-1548-175-12 : Sep 14 2021 3:46PM -- RINALDIR

Location:

- 12. Components to be screened shall be identified and categorized according to the following equipment types: connectors, flanges, open-ended lines (sample connections, drains, bleed valves, etc.) pump seals, valves with visible actuators and other (pressure relief devices, compressor seals, meters, etc.). Components shall be further identified and categorized according to the following types of service: gas/light liquid and heavy liquid service. [District NSR Rule] Federally Enforceable Through Title V Permit
- 13. VOC content of gas processed shall not exceed 70% by weight. Permittee shall maintain a written record of VOC content (sampled not less than annually) and shall make such records available for District inspection upon request for a period of two years. [District Rule 1070 and District NSR Rule] Federally Enforceable Through Title V Permit
- 14. VOC content of gas shall be measured using ASTM D1945-96, EPA Method 25 or EPA Method 18 referenced as methane. [District NSR Rule] Federally Enforceable Through Title V Permit
- 15. The permittee shall record the inlet temperature to the catalytic converter on a daily basis. [District Rule 2520, 9.4.2 and 40 CFR 64] Federally Enforceable Through Title V Permit
- 16. The inlet temperature of the catalyst shall be maintained between 750 F and 1250 F. [40 CFR 64] Federally Enforceable Through Title V Permit
- 17. The permittee shall comply with the compliance assurance monitoring operation and maintenance requirements of 40 CFR Part 64.7. [40 CFR 64] Federally Enforceable Through Title V Permit
- 18. The permittee shall comply with the recordkeeping and reporting requirements of 40 CFR part 64.9. [40 CFR 64] Federally Enforceable Through Title V Permit
- 19. If the District or EPA determine that a Quality Improvement Plan is required under 40 CFR 64.7(d)(2), the permittee shall develop and implement the Quality Improvement Plan in accordance with 40 CFR part 64.8. [40 CFR 64] Federally Enforceable Through Title V Permit
- 20. Written records of the engine idling time are not required. Compliance with idle-time limit shall be demonstrated by maintaining a copy of a work practice standard that includes the minimization of engine idling time. [District Rule 2520, 9.4] Federally Enforceable Through Title V Permit
- 21. The engine's oil and filter shall be changed every 2,160 hours of operation or every 12 months, whichever comes first. Permittee may utilize the oil analysis program specified in the Inspection and Maintenance (I&M) plan to extend the oil change requirement. [40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit
- 22. The engine's air filter shall be inspected every 2,160 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit
- 23. The engine's hoses and belts shall be inspected every 2,160 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit
- 24. The owner must operate and maintain the engine per the manufacturers emission-related instructions, or develop and follow your own maintenance plan which provides to the extent practicable for the operation and maintenance of the engine in a manner consistent with good practices [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- 25. This unit is subject to IC Engine Conditions on the facility wide permit S-1548-0. Deviations from a standard condition shall be reported under the applicable condition in S-1548-0 [District Rule 2520] Federally Enforceable Through Title V Permit

Facility Name: AERA ENERGY LLC

PERMIT UNIT: S-1548-178-6 EXPIRATION DATE: 05/31/2021

SECTION: NE13 TOWNSHIP: 28S RANGE: 20E

**EQUIPMENT DESCRIPTION:** 

SULFATREAT FUEL GAS SCRUBBING SYSTEM WITH LIQUID KNOCKOUT VESSEL AND CONTACTOR VESSEL

## PERMIT UNIT REQUIREMENTS

- 1. No components (i.e., valves, flanges, etc.) associated with the Sulfa Treat unit shall be the source of any leak greater than 10,000 ppmv (as methane) when measured at the surface of the component interface from the potential source per EPA Method 21. [District Rule 2201] Federally Enforceable Through Title V Permit
- 2. Effluent gas streams of Sulfa Treat system shall be monitored at least monthly for H2S content to determine when recharging is required. [District Rule 2201] Federally Enforceable Through Title V Permit
- 3. During recharging of the sulfur scrubber, untreated vapors shall not be introduced into the fuel system or vented to the atmosphere. [District Rule 2201] Federally Enforceable Through Title V Permit
- 4. VOC emissions from fugitive emissions components associated with this equipment shall not exceed 0.5 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
- 5. Permittee shall maintain accurate component counts according to CAPCOA's "California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities," Table IV-2c (Feb 1999), Screening Value Range emission factors < 10,000 ppmv. Permittee shall update such records when new components are approved and installed. [District Rule 2201] Federally Enforceable Through Title V Permit
- 6. The following test method shall be used for fuel gas sulfur content ASTM D3246 or double GC for H2S and mercaptans. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
- 7. Record of H2S content of effluent gas shall be maintained. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
- 8. All records of required monitoring data and support information shall be maintained for at least five years. [District Rule 2520, 9.5.2] Federally Enforceable Through Title V Permit

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

Facility Name: AERA ENERGY LLC

Location: LIGHT OIL WESTERN STATIONARY SOURCE,CA S-1548-178-6: Sep 14 2021 3:46PM - RINALDIR

**PERMIT UNIT:** S-1548-385-10 **EXPIRATION DATE:** 05/31/2021

SECTION: 4 TOWNSHIP: 27S RANGE: 21E

**EQUIPMENT DESCRIPTION:** 

420,000 GALLON FIXED ROOF TANK VENTED TO VAPOR CONTROL SYSTEM LISTED ON PERMIT S-1548-120:

## PERMIT UNIT REQUIREMENTS

- Formerly S-1130-32 [District Rule 2201] Federally Enforceable Through Title V Permit 1.
- 2. This unit is subject to the Lost Hills 1 Dehy Vapor Recovery, Inspection, and Tank Cleaning Conditions on Permit S-1548-120. Deviations from a standard condition shall be reported under the applicable condition in S-1548-120. [District Rule 2520] Federally Enforceable Through Title V Permit

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

Facility Name: AERA ENERGY LLC

Location: LIGHT OIL WEST S-1548-385-10: Sep 14 2021 3:46PM -- RINALDIR LIGHT OIL WESTERN STATIONARY SOURCE, CA

**PERMIT UNIT:** S-1548-386-10 **EXPIRATION DATE:** 05/31/2021

SECTION: 4 TOWNSHIP: 27S RANGE: 21E

**EQUIPMENT DESCRIPTION:** 

420,000 GALLON FIXED ROOF TANK VENTED TO VAPOR CONTROL SYSTEM LISTED ON PERMIT S-1548-120:

## PERMIT UNIT REQUIREMENTS

- 1. Formerly S-1130-33 [District Rule 2201] Federally Enforceable Through Title V Permit
- 2. This unit is subject to the Lost Hills 1 Dehy Vapor Recovery, Inspection, and Tank Cleaning Conditions on Permit S-1548-120. Deviations from a standard condition shall be reported under the applicable condition in S-1548-120. [District Rule 2520] Federally Enforceable Through Title V Permit

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

Facility Name: AERA ENERGY LLC

Location: LIGHT OIL WESTERN STATIONARY SOURCE,CA 8-1548-386-10 : Sep 14 2021 3:46PM - RINALDIR

PERMIT UNIT: S-1548-389-8 EXPIRATION DATE: 05/31/2021

SECTION: 15 TOWNSHIP: 27S RANGE: 21E

**EQUIPMENT DESCRIPTION:** 

223,125,000 BTU/HR COANDA EFFECT SAFETY FLARE (WESTSIDE)

### PERMIT UNIT REQUIREMENTS

- 1. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark, as, or darker than, Ringlemann 1/4 or 5% opacity. [District Rule 2201] Federally Enforceable Through Title V Permit
- 2. Emission rates from flare (lb/day and lb/yr demonstrated by compliance with flared volumes of combustion gas) shall not exceed any of the following: PM10: 0.008 lb/MMBtu (42.8 lb/day, 713 lb/yr), SOx (as SO2): 0.3377 lb/MMBtu (1808.4 lb/day, 30,109 lb/yr), NOx (as NO2): 0.068 lb/MMBtu (364.1 lb/day, 6063 lb/yr), VOC: 0.063 lb/MMBtu (337.4 lb/day, 5617 lb/yr), CO: 0.37 lb/MMBtu (1981.4 lb/day, 32,989 lb/yr). [District NSR Rule] Federally Enforceable Through Title V Permit
- 3. Total quantity of produced gas combusted in flare shall not exceed 89,160 mscf/yr. [District Rule 2201] Federally Enforceable Through Title V Permit
- 4. Flare shall be equipped with operational produced gas volume flow meter. [District Rule 2201] Federally Enforceable Through Title V Permit
- 5. Flares shall be operated with a pilot flame present at all times, and kept in operation when emissions may be vented to them. Except during power outages and planned maintenance, the presence of a flare pilot flame shall be monitored using a thermocouple or any other equivalent device to detect the presence of a flame. [District Rules 2520, 9.4.2 and 4311] Federally Enforceable Through Title V Permit
- 6. Only propane or natural gas shall be used to fuel the flare pilot. [District Rule 2201] Federally Enforceable Through Title V Permit
- 7. Sulfur content of produced gas combusted shall not exceed 2000 ppmv. [District Rule 2201] Federally Enforceable Through Title V Permit
- 8. Permittee shall measure and record sulfur content of flared gas at least annually. [District Rule 2201] Federally Enforceable Through Title V Permit
- 9. The gas sulfur content of combustion gas, purge gas, and pilot gas shall be determined using double GC for H2S and mercaptans or any of ASTM test methods D-1072, D-3246, D-4346, or D-6228 or by the gas/propane supplier. [District Rule 1081] Federally Enforceable Through Title V Permit
- 10. Permittee shall keep accurate daily and annual records of flare gas volumes, sulfur content, and higher heating value of flared gas and such records shall be retained for a period of 5 years and be made readily available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit
- 11. Each quarter in which the flare is operated for three (3) hours or more, the permittee shall perform a visible emissions inspection using either EPA Method 22 or EPA Method 9. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

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

Facility Name: AERA ENERGY LLC Location: LIGHT OIL WESTERN STATIONARY SOURCE,CA \$1548-398-8: Sep 14 2021 34PM - RINAI DIR

- 12. A flame shall be present at all time when combustible gases are vented through the flare. [District Rule 4311, 5.2] Federally Enforceable Through Title V Permit
- 13. The outlet shall be equipped with an automatic ignition system, or, shall be operated 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, 5.3] 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, 5.4] 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, 5.5] Federally Enforceable Through Title V Permit
- 16. On and after July 1, 2011 flaring is prohibited unless it is consistent with an approved flare minimization plan (FMP), pursuant to District Rule 4311 Section 6.5 and all commitments listed in that plan have been met. [District Rule 4311, 5.8] Federally Enforceable Through Title V Permit
- 17. Permittee shall maintain copies of the compliance determination conducted pursuant to Section 6.4.1, copies of the source testing result conducted pursuant to Section 6.4.2, a copy of the approved flare minimization plan pursuant to Section 6.5, effective on and after July 1, 2012, a copy of annual reports submitted to the APCO pursuant to Section 6.2 and monitoring data collected pursuant to Sections 5.10, 6.6, 6.7. 6.8, 6.9 and 6.10. [District Rule 4311, 6.1] Federally Enforceable Through Title V Permit
- 18. For flares used during an emergency, record of the duration of flare operation, amount of gas burned, and the nature of the emergency situation. [District Rule 4311, 6.1] Federally Enforceable Through Title V Permit
- 19. All records shall be maintained, retained on-site for a minimum of five years, and made available to the APCO, ARB, and EPA upon request. [District Rule 4311, 6.1] Federally Enforceable Through Title V Permit
- 20. 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, 6.2.1] Federally Enforceable Through Title V Permit
- 21. Effective on and after July 1, 2012, and annually thereafter, the operator shall submit an annual report to the APCO that summarizes all Reportable Flaring Events that occurred during the previous 12 month period. The report shall be submitted within 30 days following the end of the twelve month period of the previous year and shall include: 1) the results of an investigation to determine the primary cause and contributing factors of the flaring event; 2) Any prevention measures considered or implemented to prevent recurrence together with a justification for rejecting any measures that were considered but not implemented; 3) If appropriate, an explanation of why the flaring was an emergency and necessary to prevent accident, hazard or release of vent gas to the atmosphere, or where, due to a regulatory mandate to vent a flare, it cannot be recovered, treated and used as a fuel gas at the facility; and 4) The date, time and duration of the flaring event. [District Rule 4311, 6.2.2] Federally Enforceable Through Title V Permit
- 22. Effective on and after July 1, 2012, and annually thereafter, the operator shall submit an annual report to the APCO within 30 days following the end of each 12 month period include: 1) The total volumetric flow of vent gas in standard cubic feet for each day; 2) Hydrogen sulfide content, methane content, and hydrocarbon content of vent gas composition pursuant to Section 6.6; 3) If vent gas composition is monitored by a continuous analyzer or analyzers pursuant to Section 5.11, average total hydrocarbon content by volume, average methane content by volume, and depending upon the analytical method used pursuant to Section 6.3.4, total reduced sulfur content by volume or hydrogen sulfide content by volume of vent gas flared for each hour of the month; 4) If the flow monitor used pursuant to Section 5.10 measures molecular weight, the average molecular weight for each hour of each month; 5) For any pilot and purge gas used, the type of gas used, the volumetric flow for each day and for each month, and the means used to determine flow; 6) Flare monitoring system downtime periods, including dates and times; 7) For each day and for each month provide calculated sulfur dioxide emissions; 8) A flow verification report for each flare subject to this rule. The flow verification report shall include flow verification testing pursuant to Section 6.3.5. [District Rule 4311, 6.2.3] 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: AERA ENERGY LLC

Location: LIGHT OIL WESTERN STATIONARY SOURCE,CA \$-1548-389-8 : Sep 14 2021 3:46PM -- RINAL DIR

- 23. VOC emissions, 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 Method 25a may be used, and analysis of halogenated exempt compounds shall be analyzed by EPA Method 18 or ARB Method 422 "Determination of Volatile organic Compounds in Emission from Stationary Sources". The VOC concentration in ppmv shall be converted to pounds per million Btu (lb/MMBtu) by using the equation in District Rule 4311, Section 6.3.1. [District Rule 4311, 6.3.1] Federally Enforceable Through Title V Permit
- 24. NOx emissions in pounds per million BTU shall be determined by using EPA Method 19. NOx and O2 concentrations shall be determined by using EPA Method 3A, EPA Method 7E, or ARB 100. [District Rule 4311, 6.3.2 and 6.3.3] Federally Enforceable Through Title V Permit
- 25. Total hydrocarbon content and methane content of vent gas shall be determined using ASTM Method D 1945-96, ASTM Method UOP 539-97, EPA Method 18, EPA Method 25A or 25B, or an alternative method approved by the APCO, ARB and EPA. Hydrogen sulfide content of vent gas shall be determined using ASTM Method D 1945-96, ASTM Method UOP 539-97, ASTM Method D 4084-94, ASTM Method D 4810-88, or an alternative method approved by the APCO, ARB and EPA. [District Rule 4311, 6.3.4] Federally Enforceable Through Title V Permit
- 26. If vent gas composition is monitored with a continuous analyzer employing gas chromatography the minimum sampling frequency shall be one sample every 30 minutes. If vent gas composition is monitored using continuous analyzers not employing gas chromatography, the total reduced sulfur content of vent gas shall be determined by using EPA Method D4468-85, or an alternative method approved by the APCO, ARB and EPA. [District Rule 4311, 6.3.4] Federally Enforceable Through Title V Permit
- 27. Vent gas flow shall be determined using one of the following: EPA Methods 1 and 2; a verification method recommended by the manufacturer of the flow monitoring equipment; tracer gas dilution or velocity; other flow monitors or process monitors that can provide comparison data on a vent stream that is being directed past the ultrasonic flow meter; or an alternative method approved by the APCO, ARB, and EPA. [District Rule 4311, 6.3.5] Federally Enforceable Through Title V Permit
- 28. Every five years after the initial FMP submittal, the operator shall submit an updated FMP for each flare to the APCO for approval. The current FMP shall remain in effect until the updated FMP is approved by the APCO. If the operator fails to submit an updated FMP as required by this section, the existing FMP shall no longer be considered an approved plan. [District Rule 4311, 6.5.2] Federally Enforceable Through Title V Permit
- 29. An updated FMP shall be submitted by the operator addressing new or modified equipment, prior to installing the equipment only if: 1) The equipment change would require an Authority To Construct (ATC) and would impact the emissions for the flare; 2) The ATC is deemed complete after June 18, 2009; 3) The modification is not solely the removal or decommissioning of equipment that is listed in the FMP and has no associated increase in flare emissions. [District Rule 4311, 6.5.3] Federally Enforceable Through Title V Permit
- 30. When submitting the initial FMP, or updated FMP, the operator shall designate as confidential any information claimed to be exempt from public disclosure under the California Public Records Act, Government Code Section 6250 et seq. and provide a justification for this designation and also submit a separate copy of the document with the information designated confidential redacted. [District Rule 4311, 6.5.4]
- 31. The shall monitor vent gas composition using one of the five methods pursuant to Section 6.6.1 through Section 6.6.5 in District Rule 4311. [District Rule 4311, 6.6] Federally Enforceable Through Title V Permit
- 32. The operator shall monitor the volumetric flows of purge and pilot gases with flow measuring devices or other parameters as specified on the Permit to Operate so that volumetric flows of pilot and purge gas may be calculated based on pilot design and the parameters monitored. [District Rule 4311, 6.7] Federally Enforceable Through Title V Permit
- 33. The operator of a flare with a water seal shall monitor and record the water level and pressure of the water seal that services each flare daily or as specified on the Permit to Operate. [District Rule 4311, 6.8] Federally Enforceable Through Title V Permit

- 34. Periods of flare monitoring system inoperation greater than 24 continuous hours shall be reported by the following working day, followed by notification of resumption of monitoring. Periods of inoperation of monitoring equipment shall not exceed 14 days per any 18-consecutive-month period. Periods of flare monitoring system inoperation do not include the periods when the system feeding the flare is not operating. [District Rule 4311, 6.9.1] Federally Enforceable Through Title V Permit
- 35. During periods of inoperation of continuous analyzers or auto-samplers installed pursuant to Section 6.6, operators responsible for monitoring shall take one sample within 30 minutes of the commencement of flaring, from the flare header or from an alternate location at which samples are representative of vent gas composition and have samples analyzed pursuant to Section 6.3.4. During periods of inoperation of flow monitors required by Section 5.10, flow shall be calculated using good engineering practices. [District Rule 4311, 6.9.2] Federally Enforceable Through Title V Permit
- 36. Permittee shall maintain and calibrate all required monitors and recording devices in accordance with the applicable manufacturer's specifications. In order to claim that a manufacturer's specification is not applicable, the person responsible for emissions must have, and follow, a written maintenance policy that was developed for the device in question. The written policy must explain and justify the difference between the written procedure and the manufacturer's procedure. [District Rule 4311, 6.9.3] Federally Enforceable Through Title V Permit
- 37. All in-line continuous analyzer and flow monitoring data must be continuously recorded by an electronic data acquisition system capable of one-minute averages. Flow monitoring data shall be recorded as one-minute averages. [District Rule 4311, 6.9.4] Federally Enforceable Through Title V Permit
- 38. Formerly S-1130-89 [District Rule 2010] Federally Enforceable Through Title V Permit

LIGHT OIL WESTERN STATIONARY SOURCE, CA Location:

**PERMIT UNIT:** S-1548-400-17 **EXPIRATION DATE:** 05/31/2021

SECTION: SE35 TOWNSHIP: 27S RANGE: 20E

**EQUIPMENT DESCRIPTION:** 

498 BHP CATERPILLAR GAS FIRED/FIELD GAS FIRED IC ENGINE WITH THREE-WAY CATALYTIC CONVERTER AND 02 CONTROLLER DRIVING A GAS COMPRESSOR (COMPRESSOR STATION 49)

## PERMIT UNIT REQUIREMENTS

- While dormant, the fuel line shall be physically disconnected from the unit. [District Rule 2080] Federally Enforceable Through Title V Permit
- Permittee shall submit written notification to the District upon designating the unit as dormant or active. [District Rule 2080] Federally Enforceable Through Title V Permit
- 3. While dormant, normal source testing shall not be required. [District Rule 2080] Federally Enforceable Through Title V Permit
- 4. Upon recommencing operation of this unit, normal source testing shall resume. [District Rule 2080] Federally Enforceable Through Title V Permit
- Any source testing required by this permit shall be performed within 60 days of recommencing operation of this unit, regardless of whether the unit remains active or is again designated as dormant. [District Rule 2080] Federally Enforceable Through Title V Permit
- Records of all dates and times that this unit is designated as dormant or active, and copies of all corresponding notices to the District, shall be maintained, retained for a period of at least five years, and made available for District inspection upon request. [District Rule 1070] Federally Enforceable Through Title V Permit
- This engine shall be equipped with an operational nonresettable elapsed time meter or other APCO approved alternative. [District Rule 4702, 5.6.6] Federally Enforceable Through Title V Permit
- The engine shall be fired on natural gas or field gas with a sulfur content less than 1.0 grains/100 dscf only. [District Rule 2080] Federally Enforceable Through Title V Permit
- Sampling facilities for source testing shall be provided in accordance with the provisions of Rule 1081 (Source Sampling). [District Rule 1081] Federally Enforceable Through Title V Permit
- 10. Emissions of oxides of nitrogen (NOx) shall not exceed 11 ppmv on a dry basis corrected to 15% oxygen. [District Rules 2201 & 4702] Federally Enforceable Through Title V Permit
- 11. Emissions of carbon monoxide (CO) in exhaust shall not exceed 2000 ppm on a dry basis corrected to 15% oxygen. [District Rule 4702] Federally Enforceable Through Title V Permit
- 12. Emissions of volatile organic compounds (VOC) in exhaust averaged over not less than 15 consecutive minutes shall not exceed 250 ppm on a dry basis corrected to 15% oxygen. [District Rule 4702] Federally Enforceable Through Title V Permit

LIGHT OIL WESTERN STATIONARY SOURCE, CA Location: S-1548-400-17 : Sep 14 2021 3:46PM -- RINALDIR

- 13. Emissions source testing shall be conducted with the engine operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. Source testing emissions for this unit shall be calculated using the arithmetic mean, pursuant to District Rule 1081 (Amended December 16, 1993), of 3 thirty-minute test runs for NOx. [District Rules 4702 and 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 14. District witnessed or approved compliance source testing for NOx, VOC, and CO emissions shall be demonstrated within 60 days of start up. [District Rules 2201 and 4702] Federally Enforceable Through Title V Permit
- 15. NOx, CO, and VOC emissions shall be measured (source tested) not less than once every 24 months. [District Rule 4702] Federally Enforceable Through Title V Permit
- 16. Source testing shall be by District witnessed, or authorized, sample collection by ARB certified testing laboratory. [District Rule 1080] Federally Enforceable Through Title V Permit
- 17. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified 30 days prior to any compliance source test, and a source test plan must be submitted for approval 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
- 18. 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
- 19. The following test methods shall be used: NOx (ppmv) EPA Method 7E or ARB Method 100, CO (ppmv) EPA Method 10 or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, and VOC (ppmv) -EPA Method 25 or EPA Method 18 referenced as methane, fuel gas sulfur content - ASTM D 3246 or double GC for total sulfur content, and EPA Method 21 for fugitive components. [District Rules 1081] Federally Enforceable Through Title V Permit
- 20. Emissions for this unit shall be calculated using the arithmetic mean, pursuant to District Rule 1081 (Amended December 16, 1993), of 3 thirty minute test runs for NOx and CO. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 21. The permittee shall monitor and record the stack concentration of NOx (as NO2), CO, and O2 at least once every calendar month (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall not be required if the engine is not in operation, i.e. the engine need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the engine unless monitoring has been performed within the last month. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies. [District Rule 4702] Federally Enforceable Through Title V Permit
- 22. If either the NOx or CO concentrations corrected to 15% O2, as measured by the portable analyzer, exceed the permitted emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1-hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of performing the notification and testing required by this condition. [District Rule 4702] Federally Enforceable Through Title V Permit
- 23. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the permit-to-operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rule 4702] Federally Enforceable Through Title V Permit

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- 24. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 15% O2, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rule 4702] Federally Enforceable Through Title V Permit
- 25. This engine shall be operated and maintained in proper operating condition per the Inspection and Maintenance (I & M) plan submitted to the District. [District Rule 4702, 6.5 and 40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit
- 26. The permittee shall update the I & M plan for this engine prior to any planned change in operation. The permittee must notify the District no later than seven days after changing the I & M plan and must submit an updated I & M plan to the APCO no later than 14 days after the change for approval. The date and time of the change to the I & M plan shall be recorded in the engine's operating log. For modifications, the revised I & M plan shall be submitted to and approved by the APCO prior to issuance of the Permit to Operate. The permittee may request a change to the I & M plan at any time. [District Rule 4702] Federally Enforceable Through Title V Permit
- 27. Monthly monitoring of NOx, CO and O2 using a portable emission monitor that meets District specifications may be used to satisfy the monthly inspection requirements of the I & M plan. [In-stack O2 monitors may be allowed if approved by the APCO.] [District Rules 4702 and 2520] Federally Enforceable Through Title V Permit
- 28. Particulate emissions shall not exceed at the point of discharge, 0.1 gr/dscf. [District Rule 4201, 3.1] Federally Enforceable Through Title V Permit
- 29. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [District Rule 4801] Federally Enforceable Through Title V Permit
- 30. If the IC engine is fired on natural gas with supplier certified sulfur content, then permittee shall document sulfur content by maintaining file copies of all natural gas bills or supplier's certification of sulfur content. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 31. If the IC engine is not fired on natural gas with supplier certified sulfur content, then the sulfur content of the natural gas being fired in the engine shall be tested using ASTM D 3246 or double GC for sulfur content (as H2S). [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 32. If the engine is not fired on certified natural gas, the sulfur content of each fuel source shall be tested weekly except that if compliance with the fuel sulfur content limit has been demonstrated for 8 consecutive weeks for a fuel source, then the testing frequency shall be quarterly. If a test shows noncompliance with the sulfur content requirement, the source must return to weekly testing until eight consecutive weeks show compliance. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 33. The permittee shall record the inlet temperature to the catalytic converter on a daily basis. [District Rule 2520, 9.4.2 and 40 CFR 64] Federally Enforceable Through Title V Permit
- 34. The inlet temperature of the catalyst shall be maintained between 750 F and 1250 F. [40 CFR 64] Federally Enforceable Through Title V Permit
- 35. The permittee shall comply with the compliance assurance monitoring operation and maintenance requirements of 40 CFR Part 64.7. [40 CFR 64] Federally Enforceable Through Title V Permit
- 36. The permittee shall comply with the recordkeeping and reporting requirements of 40 CFR part 64.9. [40 CFR 64] Federally Enforceable Through Title V Permit
- 37. If the District or EPA determine that a Quality Improvement Plan is required under 40 CFR 64.7(d)(2), the permittee shall develop and implement the Quality Improvement Plan in accordance with 40 CFR part 64.8. [40 CFR 64] Federally Enforceable Through Title V Permit
- 38. An engine operating log shall be maintained. The log shall include, on a monthly basis, the total hours of operation, type and quantity of fuel used, preventative and corrective maintenance and modifications performed, monitoring data, compliance source test results and any other information necessary to demonstrate compliance. [District Rule 4702] Federally Enforceable Through Title V Permit

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

LIGHT OIL WESTERN STATIONARY SOURCE, CA Location: S-1548-400-17 : Sep 14 2021 3:46PM -- RINAI DIR

Facility Name: AERA ENERGY LLC

- 39. All records required by this permit shall be maintained for a period of five years and shall be made readily available for District inspection upon request. [District Rules 1070, 4702 and 2520, 9.4.2] Federally Enforceable Through Title V Permit
- 40. Fugitive components associated with the SulfaTreat sulfur removal system shall not exceed the following: 16 flanges, 24 threaded connectors, 8 valves, 2 pressure relief valves, and 4 other. [District Rule 2201] Federally Enforceable Through Title V Permit
- 41. The permittee must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes. [40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit
- 42. Written records of the engine idling time are not required. Compliance with idle-time limit shall be demonstrated by maintaining a copy of a work practice standard that includes the minimization of engine idling time. [District Rule 2520, 9.4] Federally Enforceable Through Title V Permit
- 43. The engine shall be in full compliance with 40 CFR Part 63, Subpart ZZZZ (National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines). [40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit
- 44. The engine's oil and filter shall be changed every 1,440 hours of operation or every 12 months, whichever comes first. Permittee may use the oil analysis program specified in the Inspection and Maintenance (I&M) plan to extend the oil change requirement. [40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit
- 45. The engine's air filter shall be inspected every 1,440 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit
- 46. The engine's hoses and belts shall be inspected every 1,440 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit
- 47. Note: Formerly S-1130-146.

PERMIT UNIT: S-1548-411-17 EXPIRATION DATE: 05/31/2021

SECTION: SE35 TOWNSHIP: 27S RANGE: 20E

**EQUIPMENT DESCRIPTION:** 

498 BHP CATERPILLAR GAS FIRED/FIELD GAS FIRED IC ENGINE WITH THREE-WAY CATALYTIC CONVERTER AND O2 CONTROLLER DRIVING A GAS COMPRESSOR (COMPRESSOR STATION 49)

### PERMIT UNIT REQUIREMENTS

- 1. While dormant, the fuel line shall be physically disconnected from the unit. [District Rule 2080] Federally Enforceable Through Title V Permit
- 2. Permittee shall submit written notification to the District upon designating the unit as dormant or active. [District Rule 2080] Federally Enforceable Through Title V Permit
- 3. While dormant, normal source testing shall not be required. [District Rule 2080] Federally Enforceable Through Title V Permit
- 4. Upon recommencing operation of this unit, normal source testing shall resume. [District Rule 2080] Federally Enforceable Through Title V Permit
- 5. Any source testing required by this permit shall be performed within 60 days of recommencing operation of this unit, regardless of whether the unit remains active or is again designated as dormant. [District Rule 2080] Federally Enforceable Through Title V Permit
- 6. Records of all dates and times that this unit is designated as dormant or active, and copies of all corresponding notices to the District, shall be maintained, retained for a period of at least five years, and made available for District inspection upon request. [District Rule 1070] Federally Enforceable Through Title V Permit
- 7. This engine shall be equipped with an operational nonresettable elapsed time meter or other APCO approved alternative. [District Rule 4702, 5.6.6] Federally Enforceable Through Title V Permit
- 8. The engine shall be fired on natural gas or field gas with a sulfur content less than 1.0 grains/100 dscf only. [District Rule 2080] Federally Enforceable Through Title V Permit
- 9. Sampling facilities for source testing shall be provided in accordance with the provisions of Rule 1081 (Source Sampling). [District Rule 1081] Federally Enforceable Through Title V Permit
- 10. Emissions of oxides of nitrogen (NOx) shall shall not exceed 11 ppmv on a dry basis corrected to 15% oxygen. [District Rules 2201 & 4702] Federally Enforceable Through Title V Permit
- 11. Emissions of carbon monoxide (CO) in exhaust shall not exceed 2000 ppm on a dry basis corrected to 15% oxygen. [District Rule 4702] Federally Enforceable Through Title V Permit
- 12. Emissions of volatile organic compounds (VOC) in exhaust averaged over not less than 15 consecutive minutes shall not exceed 250 ppm on a dry basis corrected to 15% oxygen. [District Rule 4702] Federally Enforceable Through Title V Permit

Facility Name: AERA ENERGY LLC

Location: LIGHT OIL WESTERN STATIONARY SOURCE, CA \$-1548-411-17: Sep 14 2021 3:46PM - RINALDIR

- 13. Emissions source testing shall be conducted with the engine operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. Source testing emissions for this unit shall be calculated using the arithmetic mean, pursuant to District Rule 1081 (Amended December 16, 1993), of 3 thirty-minute test runs for NOx. [District Rules 4702 and 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 14. District witnessed or approved compliance source testing for NOx, VOC, and CO emissions shall be demonstrated within 60 days of start up. [District Rules 2201 & 4702] Federally Enforceable Through Title V Permit
- 15. NOx, CO, and VOC emissions shall be measured (source tested) not less than once every 24 months. [District Rule 4702] Federally Enforceable Through Title V Permit
- 16. Source testing shall be by District witnessed, or authorized, sample collection by ARB certified testing laboratory. [District Rule 1080] Federally Enforceable Through Title V Permit
- 17. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified 30 days prior to any compliance source test, and a source test plan must be submitted for approval 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
- 18. 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
- 19. The following test methods shall be used: NOx (ppmv) EPA Method 7E or ARB Method 100, CO (ppmv) EPA Method 10 or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, and VOC (ppmv) -EPA Method 25 or EPA Method 18 referenced as methane, fuel gas sulfur content - ASTM D 3246 or double GC for total sulfur content, and EPA Method 21 for fugitive components. [District Rules 1081] Federally Enforceable Through Title V Permit
- 20. Emissions for this unit shall be calculated using the arithmetic mean, pursuant to District Rule 1081 (Amended December 16, 1993), of 3 thirty minute test runs for NOx and CO. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 21. The permittee shall monitor and record the stack concentration of NOx (as NO2), CO, and O2 at least once every calendar month (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall not be required if the engine is not in operation, i.e. the engine need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the engine unless monitoring has been performed within the last month. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies. [District Rule 4702] Federally Enforceable Through Title V Permit
- 22. If either the NOx or CO concentrations corrected to 15% O2, as measured by the portable analyzer, exceed the permitted emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1-hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of performing the notification and testing required by this condition. [District Rule 4702] Federally Enforceable Through Title V Permit
- 23. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the permit-to-operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rule 4702] Federally Enforceable Through Title V Permit

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- 24. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 15% O2, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rule 4702] Federally Enforceable Through Title V Permit
- 25. This engine shall be operated and maintained in proper operating condition per the Inspection and Maintenance (I & M) plan submitted to the District. [District Rule 4702] Federally Enforceable Through Title V Permit
- 26. The permittee shall update the I & M plan for this engine prior to any planned change in operation. The permittee must notify the District no later than seven days after changing the I & M plan and must submit an updated I & M plan to the APCO no later than 14 days after the change for approval. The date and time of the change to the I & M plan shall be recorded in the engine's operating log. For modifications, the revised I & M plan shall be submitted to and approved by the APCO prior to issuance of the Permit to Operate. The permittee may request a change to the I & M plan at any time. [District Rule 4702] Federally Enforceable Through Title V Permit
- 27. Monthly monitoring of NOx, CO and O2 using a portable emission monitor that meets District specifications may be used to satisfy the monthly inspection requirements of the I & M plan. [In-stack O2 monitors may be allowed if approved by the APCO.] [District Rules 4702 and 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 28. Particulate emissions shall not exceed at the point of discharge, 0.1 gr/dscf. [District Rule 4201, 3.1] Federally Enforceable Through Title V Permit
- 29. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [District Rule 4801] Federally Enforceable Through Title V Permit
- 30. If the IC engine is fired on natural gas with supplier certified sulfur content, then permittee shall document sulfur content by maintaining file copies of all natural gas bills or supplier's certification of sulfur content. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 31. If the IC engine is not fired on natural gas with supplier certified sulfur content, then the sulfur content of the natural gas being fired in the engine shall be tested using ASTM D 3246 or double GC for sulfur content (as H2S). [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 32. If the engine is not fired on certified natural gas, the sulfur content of each fuel source shall be tested weekly except that if compliance with the fuel sulfur content limit has been demonstrated for 8 consecutive weeks for a fuel source, then the testing frequency shall be quarterly. If a test shows noncompliance with the sulfur content requirement, the source must return to weekly testing until eight consecutive weeks show compliance. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 33. The permittee shall record the inlet temperature to the catalytic converter on a daily basis. [District Rule 2520, 9.4.2 and 40 CFR 64] Federally Enforceable Through Title V Permit
- 34. The inlet temperature of the catalyst shall be maintained between 750 F and 1250 F. [40 CFR 64] Federally Enforceable Through Title V Permit
- 35. The permittee shall comply with the compliance assurance monitoring operation and maintenance requirements of 40 CFR Part 64.7. [40 CFR 64] Federally Enforceable Through Title V Permit
- 36. The permittee shall comply with the recordkeeping and reporting requirements of 40 CFR part 64.9. [40 CFR 64] Federally Enforceable Through Title V Permit
- 37. If the District or EPA determine that a Quality Improvement Plan is required under 40 CFR 64.7(d)(2), the permittee shall develop and implement the Quality Improvement Plan in accordance with 40 CFR part 64.8. [40 CFR 64] Federally Enforceable Through Title V Permit
- 38. An engine operating log shall be maintained. The log shall include, on a monthly basis, the total hours of operation, type and quantity of fuel used, preventative and corrective maintenance and modifications performed, monitoring data, compliance source test results and any other information necessary to demonstrate compliance. [District Rule 4702] Federally Enforceable Through Title V Permit

- 39. All records required by this permit shall be maintained for a period of five years and shall be made readily available for District inspection upon request. [District Rules 1070, 4702 and 2520, 9.4.2] Federally Enforceable Through Title V Permit
- 40. The permittee must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes. [40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit
- 41. Written records of the engine idling time are not required. Compliance with idle-time limit shall be demonstrated by maintaining a copy of a work practice standard that includes the minimization of engine idling time. [District Rule 2520, 9.4] Federally Enforceable Through Title V Permit
- 42. The engine shall be in full compliance with 40 CFR Part 63, Subpart ZZZZ (National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines). [40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit
- 43. The engine's oil and filter shall be changed every 1,440 hours of operation or every 12 months, whichever comes first. Permittee may use the oil analysis program specified in the Inspection and Maintenance (I&M) plan to extend the oil change requirement. [40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit
- 44. The engine's air filter shall be inspected every 1,440 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit
- 45. The engine's hoses and belts shall be inspected every 1,440 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit
- 46. Note: Formerly S-1130-157.

PERMIT UNIT: S-1548-418-11 EXPIRATION DATE: 05/31/2021

SECTION: NW20 TOWNSHIP: 28S RANGE: 21E

**EQUIPMENT DESCRIPTION:** 

8.500 BBL WATER STORAGE TANK T-231A SERVED BY VAPOR CONTROL SYSTEM DESCRIBED IN S-1548-148

#### PERMIT UNIT REQUIREMENTS

- 1. Fugitive VOC emission rate shall not exceed 4.4 lb/day. [District NSR Rule] Federally Enforceable Through Title V Permit
- 2. Permittee shall maintain an accurate fugitive component count and resultant emissions calculated using U.S. EPA Publication 453/R-95-017, or other factors approved by the District. [District NSR Rule] Federally Enforceable Through Title V Permit
- 3. Tank shall vent to vapor control system listed in S-1548-148. [District NSR Rule] Federally Enforceable Through Title V Permit
- 4. Liquid stored in tank shall have a maximum VOC content of up to 10% by weight as determined by EPA Test Method 413.2, or 418.1 and/or, if necessary, EPA Test Method 8240. Hydrocarbons heavier than C14, as determined by Test Method ASTM E260-85, may be excluded from the total concentration. [District Rule 2201] Federally Enforceable Through Title V Permit
- 5. This unit is subject to the Dehy 20 Vapor Recovery, Inspection, and Tank Cleaning Conditions on Permit S-1548-148. Deviations from a standard condition shall be reported under the applicable condition in S-1548-148. [District Rule 2520] Federally Enforceable Through Title V Permit

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

Facility Name: AERA ENERGY LLC

Location: LIGHT OIL WESTERN STATIONARY SOURCE,CA S-1548-418-11: Sep 14 2021 3:46PM -- RINALDIR

**EXPIRATION DATE:** 05/31/2021 **PERMIT UNIT:** S-1548-419-11

SECTION: NW20 TOWNSHIP: 28S RANGE: 21E

**EQUIPMENT DESCRIPTION:** 

8.500 BBL WATER STORAGE TANK T-231B SERVED BY VAPOR CONTROL SYSTEM DESCRIBED IN S-1548-148

### PERMIT UNIT REQUIREMENTS

- Tank shall vent to vapor control system listed in S-1548-148. [District NSR Rule] Federally Enforceable Through 1. Title V Permit
- Liquid stored in tank shall have a maximum VOC content of up to 10% by weight as determined by EPA Test Method 413.2, or 418.1 and/or, if necessary, EPA Test Method 8240. Hydrocarbons heavier than C14, as determined by Test Method ASTM E260-85, may be excluded from the total concentration. [District Rule 2201] Federally Enforceable Through Title V Permit
- Fugitive VOC emission rate shall not exceed 5.5 lb/day. [District NSR Rule] Federally Enforceable Through Title V Permit
- Permittee shall maintain an accurate fugitive component count and resultant emissions calculated using U.S. EPA Publication 453/R-95-017, or other factors approved by the District. [District NSR Rule] Federally Enforceable Through Title V Permit
- 5. This unit is subject to the Dehy 20 Vapor Recovery, Inspection, and Tank Cleaning Conditions on Permit S-1548-148. Deviations from a standard condition shall be reported under the applicable condition in S-1548-148. [District Rule 2520] Federally Enforceable Through Title V Permit

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

Facility Name: AERA ENERGY LLC

LIGHT OIL WESTERN STATIONARY SOURCE, CA Location:

PERMIT UNIT: S-1548-420-9 EXPIRATION DATE: 05/31/2021

SECTION: NW 4 TOWNSHIP: 27S RANGE: 21E

**EQUIPMENT DESCRIPTION:** 

24,300 GALLON (10 FT. DIA BY 40 FT. LONG SHELL) FREE WATER KNOCKOUT VESSEL V-3004 WITH VAPOR PIPING TO VAPOR CONTROL SYSTEM LISTED ON S-1548-120:

### PERMIT UNIT REQUIREMENTS

1. This unit is subject to the Lost Hills 1 Dehy Vapor Recovery, Inspection, and Tank Cleaning Conditions on Permit S-1548-120. Deviations from a standard condition shall be reported under the applicable condition in S-1548-120. [District Rule 2520] Federally Enforceable Through Title V Permit

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

Facility Name: AERA ENERGY LLC

Location: LIGHT OIL WESTERN STATIONARY SOURCE,CA S-1548-420-9 : Sep 14 2021 3:46PM -- RINALDIR

EXPIRATION DATE: 05/31/2021 **PERMIT UNIT:** S-1548-423-10

#### **EQUIPMENT DESCRIPTION:**

1.600 THERMALLY ENHANCED PRODUCTION WELLS WITH CLOSED CASING VENTS

#### PERMIT UNIT REQUIREMENTS

- 1. Well casing valves shall remain closed or connected to production lines at all times except during periods of actual service or repair as defined in Rule 4401. [District Rule 2201 and 4401] Federally Enforceable Through Title V Permit
- All produced fluids from any thermally enhanced production well associated with this operation shall be handled only in closed production equipment prior to introduction to the Section 20 dehydration facility (principally, S-1548-144 through '-149 including associated equipment, i.e., Wemco, ISF units, drain tanks, etc.) [District Rule 2201] Federally Enforceable Through Title V Permit
- 3. Thermally enhanced production wells covered by this permit shall each have a visible identification number. Field personnel shall be provided with written instructions concerning proper operation and maintenance of these wells. [District Rule 2201] Federally Enforceable Through Title V Permit
- Any thermally enhanced production well producing crude oil with an API gravity greater than 30 and a true vapor pressure greater than 1.5 psia (determined using the methods specified in Rule 4409) shall comply with all applicable Rule 4409 requirements. [District Rule 4409] Federally Enforceable Through Title V Permit
- Total number of leaks from the vapor collection and control system, including condensate handling shall not exceed the number allowed by Rule 4401. [District Rule 4401] Federally Enforceable Through Title V Permit
- All components to be screened shall be identified and categorized according to the following equipment types: connectors, flanges, open-ended lines (sample connections, drains, bleed valves, etc.), pump seals, valves with visible actuators, polish rod stuffing boxes and other (pressure relief devices, compressor seals, meters, etc.). Components shall be further identified and categorized according to the following types of service: gas/light liquid and heavy liquid service. [District Rule 2201] Federally Enforceable Through Title V Permit
- Component screening shall be performed in accordance with EPA reference Method 21. [District Rule 2201] Federally Enforceable Through Title V Permit
- Portable hydrocarbon detection instrument shall be operated and calibrated in accordance with recommendations in CAPCOA/CARB's California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities (February, 1999). [District Rule 2201] Federally Enforceable Through Title V Permit
- Fugitive VOC emission rate from all components associated with this steam enhanced well operation shall not exceed 517.7 b/day. [District Rule 2201] Federally Enforceable Through Title V Permit
- 10. Fugitive VOC emission rate listed above does not include the fugitive emissions from the well test pressure vessels and piping at the LOTS sites. [District Rule 2201] Federally Enforceable Through Title V Permit
- 11. Permittee shall maintain a current list of all thermally enhanced production wells associated with this operation; shall update the list whenever a well is added, replaced, or deleted; and such listing shall be made readily available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit

Facility Name: AERA ENERGY LLC LIGHT OIL WESTERN STATIONARY SOURCE, CA Location:

S-1548-423-10 : Sep 14 2021 3:46PM -- RINALDIR

12. Permittee shall maintain for a period of five years, accurate records of fugitive inspection component counts, leak screening values in excess of 10,000 ppm, and shall, as approved by the District, calculate fugitive emissions using February 1999 CAPCOA California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities Table IV-2c. Permittee shall make records of component counts, screening values, and calculations readily available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit

Location: LIGHT OIL WEST S-1548-423-10 : Sep 14 2021 3:46PM -- RINALDIR

**EXPIRATION DATE: 05/31/2021 PERMIT UNIT:** S-1548-424-8

SECTION: SW35 TOWNSHIP: 27S RANGE: 20E

**EQUIPMENT DESCRIPTION:** 

825 MMBTU/HR KALDAIR INDAIR MODEL I-15-H-VS LIMITED USE FLARE WITH COANDA EFFECT FLARE TIP

(COMPRESSOR STATION 49)

#### PERMIT UNIT REQUIREMENTS

- Emission rates from flare (lb/day and lb/yr demonstrated by compliance with flared volumes of combustion gas) shall not exceed any of the following: PM10: 0.008 lb/MMBtu (158.4 lb/day, 713 lb/yr), NOx (as NO2): 0.068 lb/MMBtu (1346.4 lb/day, 6063 lb/yr), VOC: 0.063 lb/MMBtu (1247.4 lb/day, 5617 lb/yr), CO: 0.37 lb/MMBtu (7326.0 lb/day, 32,989 lb/yr). [District Rule 2201] Federally Enforceable Through Title V Permit
- SOx emissions shall not exceed 1437.7 lb/day nor 6,474 lb/yr. [District Rule 2201] Federally Enforceable Through Title V Permit
- Flare shall be equipped with operational produced gas volume flow meter. [District Rule 2201] Federally Enforceable Through Title V Permit
- Flare shall be equipped with continuous pilot fired solely on propane or natural gas. [District Rules 2201 and 4311] Federally Enforceable Through Title V Permit
- Total quantity of produced gas combusted in flare shall not exceed 89,160 mscf/yr. [District Rule 2201] Federally Enforceable Through Title V Permit
- Permittee shall measure and record sulfur content of flared gas at least annually. [District Rule 2201] Federally Enforceable Through Title V Permit
- The gas sulfur content of combustion gas, purge gas, and pilot gas shall be determined using double GC for H2S and mercaptans or any of ASTM test methods D-1072, D-3246, D-4346, or D-6228 or by the gas/propane supplier. [District Rule 1081] Federally Enforceable Through Title V Permit
- Permittee shall keep accurate daily and annual records of flare gas volumes, sulfur content, calculated SOx emissions in units of lb/day and lb/year and higher heating value of flared gas and such records shall be retained for a period of 5 years and be made readily available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit
- Each quarter in which the flare is operated for three (3) hours or more, the permittee shall perform a visible emissions inspection using either EPA Method 22 or EPA Method 9. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
- 10. A flame shall be present at all time when combustible gases are vented through the flare. [District Rule 4311, 5.2] Federally Enforceable Through Title V Permit
- 11. The outlet shall be equipped with an automatic ignition system, or, shall be operated 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, 5.3] 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: AERA ENERGY LLC LIGHT OIL WESTERN STATIONARY SOURCE, CA S-1548-424-8 : Sep 14 2021 3:46PM -- RINALDIR

- 12. 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. The flame detection device shall be kept operational at all times except during flare maintenance when the flare is isolated from gas flow. During essential planned power outages when the flare is operating, the pilot monitor is allowed to be non-functional if the flare flame is clearly visible to onsite operators. [District Rule 4311] Federally Enforceable Through Title V Permit
- 13. 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, 5.5] Federally Enforceable Through Title V Permit
- 14. Flaring is prohibited unless it is consistent with an approved flare minimization plan (FMP), pursuant to District Rule 4311 Section 6.5 and all commitments listed in that plan have been met. [District Rule 4311, 5.8] Federally Enforceable Through Title V Permit
- 15. Permittee shall maintain copies of the compliance determination conducted pursuant to Section 6.4.1, copies of the source testing result conducted pursuant to Section 6.4.2, a copy of the approved flare minimization plan pursuant to Section 6.5, effective on and after July 1, 2012, a copy of annual reports submitted to the APCO pursuant to Section 6.2, monitoring data collected pursuant to Sections 5.10, 6.6, 6.7. 6.8, 6.9 and 6.10. [District Rule 4311, 6.1] Federally Enforceable Through Title V Permit
- 16. For flares used during an emergency, record of the duration of flare operation, amount of gas burned, and the nature of the emergency situation. [District Rule 4311, 6.1] Federally Enforceable Through Title V Permit
- 17. All records shall be maintained, retained on-site for a minimum of five years, and made available to the APCO, ARB, and EPA upon request. [District Rule 4311, 6.1] Federally Enforceable Through Title V Permit
- 18. 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, 6.2.1] Federally Enforceable Through Title V Permit
- 19. Effective on and after July 1, 2012, and annually thereafter, the operator shall submit an annual report to the APCO that summarizes all Reportable Flaring Events that occurred during the previous 12 month period. The report shall be submitted within 30 days following the end of the twelve month period of the previous year and shall include: 1) the results of an investigation to determine the primary cause and contributing factors of the flaring event; 2) Any prevention measures considered or implemented to prevent recurrence together with a justification for rejecting any measures that were considered but not implemented; 3) If appropriate, an explanation of why the flaring was an emergency and necessary to prevent accident, hazard or release of vent gas to the atmosphere, or where, due to a regulatory mandate to vent a flare, it cannot be recovered, treated and used as a fuel gas at the facility; and 4) The date, time and duration of the flaring event. [District Rule 4311, 6.2.2] Federally Enforceable Through Title V Permit
- 20. Effective on and after July 1, 2012, and annually thereafter, the operator shall submit an annual report to the APCO within 30 days following the end of each 12 month period include: 1) The total volumetric flow of vent gas in standard cubic feet for each day; 2) Hydrogen sulfide content, methane content, and hydrocarbon content of vent gas composition pursuant to Section 6.6; 3) If vent gas composition is monitored by a continuous analyzer or analyzers pursuant to Section 5.11, average total hydrocarbon content by volume, average methane content by volume, and depending upon the analytical method used pursuant to Section 6.3.4, total reduced sulfur content by volume or hydrogen sulfide content by volume of vent gas flared for each hour of the month; 4) If the flow monitor used pursuant to Section 5.10 measures molecular weight, the average molecular weight for each hour of each month; 5) For any pilot and purge gas used, the type of gas used, the volumetric flow for each day and for each month, and the means used to determine flow; 6) Flare monitoring system downtime periods, including dates and times; 7) For each day and for each month provide calculated sulfur dioxide emissions; 8) A flow verification report for each flare subject to this rule. The flow verification report shall include flow verification testing pursuant to Section 6.3.5. [District Rule 4311, 6.2.3] Federally Enforceable Through Title V Permit

- 21. Total hydrocarbon content and methane content of vent gas shall be determined using ASTM Method D 1945-96, ASTM Method UOP 539-97, EPA Method 18, EPA Method 25A or 25B, or an alternative method approved by the APCO, ARB and EPA. Hydrogen sulfide content of vent gas shall be determined using ASTM Method D 1945-96, ASTM Method UOP 539-97, ASTM Method D 4084-94, ASTM Method D 4810-88, or an alternative method approved by the APCO, ARB and EPA. [District Rule 4311, 6.3.4] Federally Enforceable Through Title V Permit
- 22. Vent gas flow shall be determined using one of the following: EPA Methods 1 and 2; a verification method recommended by the manufacturer of the flow monitoring equipment; tracer gas dilution or velocity; other flow monitors or process monitors that can provide comparison data on a vent stream that is being directed past the ultrasonic flow meter; or an alternative method approved by the APCO, ARB, and EPA. [District Rule 4311, 6.3.5] Federally Enforceable Through Title V Permit
- 23. The operator of a petroleum refinery flare or any flare that has a flaring capacity of greater than or equal to 5.0 MMBtu per hour shall submit a flare minimization plan (FMP) to the APCO for approval and shall include: 1) A description and technical specifications for each flare and associated knock-out pots, surge drums, water seals and flare gas recovery systems; 2) Detailed process flow diagrams of all upstream equipment and process units venting to each flare, identifying the type and location of all control equipment; 3) A description of equipment, processes, or procedures the operator plans to install or implement to eliminate or minimize flaring and planned date of installation or implementation;; 4) An evaluation of prevention measures to reduce flaring that has occurred or may by expected to occur during planned major maintenance activities, including startup and shutdown;; 5) An evaluation of preventative measures to reduce flaring that may be expected to occur due to issues of gas quantity and quality. The evaluation shall include an audit of the vent gas recovery capacity of each flare system, the storage capacity available for excess vent gases, and the scrubbing capacity available for vent gases including any limitations associated with scrubbing vent gases for use as a fuel; and shall determine the feasibility of reducing flaring through the recovery, treatment and use of the gas or other means; 6) An evaluation of preventative measures to reduce flaring caused by the recurrent failure of air pollution control equipment, process equipment, or a process to operate in a normal or usual manner. The evaluation shall determine the adequacy of existing maintenance schedules and protocols for such equipment. For purposes of this section, a failure is recurrent if it occurs more than twice during any five year period as a result of the same cause as identified in accordance with Section 6.2.2; 7) Any other information requested by the APCO as necessary for determination of compliance with applicable provisions of this rule. [District Rule 4311, 6.5.1] Federally Enforceable Through Title V Permit
- 24. Every five years after the initial FMP submittal, the operator shall submit an updated FMP for each flare to the APCO for approval. The current FMP shall remain in effect until the updated FMP is approved by the APCO. If the operator fails to submit an updated FMP as required by this section, the existing FMP shall no longer be considered an approved plan. [District Rule 4311, 6.5.2] Federally Enforceable Through Title V Permit
- 25. An updated FMP shall be submitted by the operator addressing new or modified equipment, prior to installing the equipment only if: 1) The equipment change would require an Authority To Construct (ATC) and would impact the emissions for the flare; 2) The ATC is deemed complete after June 18, 2009; 3) The modification is not solely the removal or decommissioning of equipment that is listed in the FMP and has no associated increase in flare emissions. [District Rule 4311, 6.5.3] Federally Enforceable Through Title V Permit
- 26. When submitting the initial FMP, or updated FMP, the operator shall designate as confidential any information claimed to be exempt from public disclosure under the California Public Records Act, Government Code Section 6250 et seg, and provide a justification for this designation and also submit a separate copy of the document with the information designated confidential redacted. [District Rule 4311, 6.5.4]
- 27. The shall monitor vent gas composition using one of the five methods pursuant to Section 6.6.1 through Section 6.6.5 in District Rule 4311. [District Rule 4311, 6.6] Federally Enforceable Through Title V Permit
- 28. The operator shall monitor the volumetric flows of purge and pilot gases with flow measuring devices or other parameters as specified on the Permit to Operate so that volumetric flows of pilot and purge gas may be calculated based on pilot design and the parameters monitored. [District Rule 4311, 6.7] Federally Enforceable Through Title V Permit

Location: S-1548-424-8 : Sep 14 2021 3:46PM -- RINAL DIE

- 29. Periods of flare monitoring system inoperation greater than 24 continuous hours shall be reported by the following working day, followed by notification of resumption of monitoring. Periods of inoperation of monitoring equipment shall not exceed 14 days per any 18-consecutive-month period. Periods of flare monitoring system inoperation do not include the periods when the system feeding the flare is not operating. [District Rule 4311, 6.9.1] Federally Enforceable Through Title V Permit
- 30. Permittee shall maintain and calibrate all required monitors and recording devices in accordance with the applicable manufacturer's specifications. In order to claim that a manufacturer's specification is not applicable, the person responsible for emissions must have, and follow, a written maintenance policy that was developed for the device in question. The written policy must explain and justify the difference between the written procedure and the manufacturer's procedure. [District Rule 4311, 6.9.3] Federally Enforceable Through Title V Permit
- 31. All in-line continuous analyzer and flow monitoring data must be continuously recorded by an electronic data acquisition system capable of one-minute averages. Flow monitoring data shall be recorded as one-minute averages. [District Rule 4311, 6.9.4] Federally Enforceable Through Title V Permit

S-1548-424-8 : Sep 14 2021 3:46PM -- RINAL DIR

**EXPIRATION DATE: 05/31/2021 PERMIT UNIT:** S-1548-426-2

SECTION: NE13 TOWNSHIP: 28S RANGE: 20E

**EQUIPMENT DESCRIPTION:** 

COOPER-BESSEMER FUEL GAS COMPRESSOR WITH FUEL GAS DRUM AND SURGE DRUM POWERED BY A 400

HP GE ELECTRIC MOTOR - STATION #26

### PERMIT UNIT REQUIREMENTS

See Facility-wide requirement for permit conditions applicable to this permit unit. [District Rule 2010] Federally Enforceable Through Title V Permit

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

Facility Name: AERA ENERGY LLC

LIGHT OIL WESTERN STATIONARY SOURCE, CA Location:

S-1548-426-2 : Sep 14 2021 3:46PM -- RINALDIR

**PERMIT UNIT:** S-1548-427-2 **EXPIRATION DATE:** 05/31/2021

SECTION: NE32 TOWNSHIP: 29S RANGE: 21E

**EQUIPMENT DESCRIPTION:** 

 ${\tt COOPER-BESSEMER\ FUEL\ GAS\ COMPRESSOR\ WITH\ FUEL\ GAS\ DRUM\ AND\ SURGE\ DRUM\ POWERED\ BY\ A\ 800}$ 

HP GE ELECTRIC MOTOR - STATION #50

### PERMIT UNIT REQUIREMENTS

1. See Facility-wide requirement for permit conditions applicable to this permit unit. [District Rule 2010] Federally Enforceable Through Title V Permit

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

Facility Name: AERA ENERGY LLC

Location: LIGHT OIL WESTERN STATIONARY SOURCE,CA S-1548-427-2; Sep 14 2021 3:46PM - RINALDIR

PERMIT UNIT: S-1548-428-9 EXPIRATION DATE: 05/31/2021

SECTION: NW20 TOWNSHIP: 28S RANGE: 21E

**EQUIPMENT DESCRIPTION:** 

617 BBL INDUCED STATIC FLOTATION CELL V-240 WITH VAPOR CONTROL AS DESCRIBED IN S-1548-148 - DEHY 20

### PERMIT UNIT REQUIREMENTS

- 1. Vessel is a pressure vessel as defined by District Rule 4623 Section 3.20. [District Rule 4623] Federally Enforceable Through Title V Permit
- 2. Vessel shall vent to vapor control system listed in S-1548-148, except during periods of vessel interior cleaning. [District Rule 2201] Federally Enforceable Through Title V Permit
- 3. Drain valves shall only drain into covered containers which shall be emptied into tanks with vapor control system. [District Rule 2201] Federally Enforceable Through Title V Permit
- 4. Fugitive VOC emission rate shall not exceed that listed in S-1548-148. [District Rule 2201] Federally Enforceable Through Title V Permit
- 5. This unit is subject to the Dehy 20 Vapor Recovery, Inspection, and Tank Cleaning Conditions on Permit S-1548-148. Deviations from a standard condition shall be reported under the applicable condition in S-1548-148. [District Rule 2520] Federally Enforceable Through Title V Permit

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

Facility Name: AERA ENERGY LLC

Location: LIGHT OIL WESTERN STATIONARY SOURCE,CA \$1548-428-9: Sep 14 2021 3:48PM - RINAL DIR

**EXPIRATION DATE:** 05/31/2021 **PERMIT UNIT:** S-1548-429-10

SECTION: NW20 TOWNSHIP: 28S RANGE: 21E

**EQUIPMENT DESCRIPTION:** 

140 BBL CRUDE OIL PROCESS DRAIN VESSEL V-244 WITH VAPOR CONTROL AS DESCRIBED IN S-1548-148 -

DEHY 20

### PERMIT UNIT REQUIREMENTS

- 1. Vessel is a pressure vessel as defined by District Rule 4623 Section 3.20. [District Rule 4623] Federally Enforceable Through Title V Permit
- Vessel shall vent to vapor control system listed in S-1548-148, except during periods of vessel interior cleaning. [District Rule 2201] Federally Enforceable Through Title V Permit
- 3. Drain valves shall only drain into covered containers which shall be emptied into tanks with vapor control system. [District Rule 2201] Federally Enforceable Through Title V Permit
- Fugitive VOC emission rate shall not exceed that listed in S-1548-148. [District Rule 2201] Federally Enforceable Through Title V Permit
- This unit is subject to the Dehy 20 Vapor Recovery, Inspection, and Tank Cleaning Conditions on Permit S-1548-148. Deviations from a standard condition shall be reported under the applicable condition in S-1548-148. [District Rule 2520] Federally Enforceable Through Title V Permit

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

Facility Name: AERA ENERGY LLC

LIGHT OIL WESTERN STATIONARY SOURCE, CA S-1548-429-10 : Sep 14 2021 3:46PM -- RINAI DIR

**EXPIRATION DATE:** 05/31/2021 **PERMIT UNIT:** S-1548-433-7

SECTION: NW 2 TOWNSHIP: 29S RANGE: 21E

**EQUIPMENT DESCRIPTION:** 

1,680 BHP WAUKESHA MODEL 7044 GSI NATURAL GAS-FIRED IC ENGINE EQUIPPED WITH PCV, O2 CONTROLLER, AND 3-WAY CATALYST POWERING A GAS COMPRESSOR

#### PERMIT UNIT REQUIREMENTS

- When this unit is not operated (dormant for Rule 4702) the fuel line shall be physically disconnected from this unit. [District Rule 2080] Federally Enforceable Through Title V Permit
- A source test to demonstrate compliance with NOx, CO and VOC emission limits shall be performed within 60 days of recommencing operation of this unit. [District Rule 4702] Federally Enforceable Through Title V Permit
- 3. Upon seven days written notice to the District this engine may be designated as a dormant emissions unit or an active emissions unit. [District Rule 1070] Federally Enforceable Through Title V Permit
- The engine shall only burn natural gas with fuel gas sulfur concentration (as H2S) not exceeding 0.88 grains/100 dscf (15 ppmv). [District NSR Rule] Federally Enforceable Through Title V Permit
- VOC emissions from fugitive components associated permit units S-1548-433 through S-1548-438 shall not exceed 57.2 lb VOC per day. [District NSR Rule] Federally Enforceable Through Title V Permit
- Leaks from valves, connectors, and other components (not including compressor seals) shall be defined as a reading of methane on a portable hydrocarbon detection instrument in excess of 100 ppmv above background when measured as close as possible to the potential source. [District NSR Rule] Federally Enforceable Through Title V Permit
- Leaks from compressor seals shall be defined as a reading of methane on a portable hydrocarbon detection instrument in excess of 500 ppmv above background when measured as close as possible to the potential source. [District NSR Rule] Federally Enforceable Through Title V Permit
- Components to be screened shall be identified and categorized according to the following equipment types: connectors, flanges, open ended lines (sample connections, drains, bleed valves, etc.), pump seals, valves with visible actuators and other (pressure relief devices, compressor seals, meters, etc.). Components shall be further identified and categorized according to the following types of service: gas/light liquid and heavy liquid service. [District NSR Rule] Federally Enforceable Through Title V Permit
- Component screening shall be performed in accordance with EPA reference Method 21. [District NSR Rule] Federally Enforceable Through Title V Permit
- 10. Fugitive emission calculations shall be performed using EPA Publication 453/R-95-017, Table 2-8 factors. [District NSR Rule] Federally Enforceable Through Title V Permit
- 11. Permittee shall maintain a current listing of all fugitive components installed with engine/compressor and corresponding VOC emission calculations to verify compliance with fugitive VOC emission limit. [District NSR Rule] 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: AERA ENERGY LLC LIGHT OIL WESTERN STATIONARY SOURCE, CA Location:

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- 12. Emissions from this engine shall not exceed any of the following limits: 0.071 gr-NOx/bhp-hr (5 ppmv @ 15% O2), 0.003 gr-PM10/bhp-hr, 0.613 gr-CO/bhp-hr (70 ppmv @ 15% O2), or 0.15 gr-VOC/bhp-hr (30 ppmv @ 15% O2). [District NSR Rule] Federally Enforceable Through Title V Permit
- 13. The permittee shall record the inlet temperature to the catalytic converter on a daily basis. [District Rule 2520, 9.4.2 and 40 CFR 64] Federally Enforceable Through Title V Permit
- 14. The inlet temperature of the catalyst shall be maintained between 750 F and 1250 F. [40 CFR 64] Federally Enforceable Through Title V Permit
- 15. The permittee shall comply with the compliance assurance monitoring operation and maintenance requirements of 40 CFR Part 64.7. [40 CFR 64] Federally Enforceable Through Title V Permit
- 16. The permittee shall comply with the recordkeeping and reporting requirements of 40 CFR part 64.9. [40 CFR 64] Federally Enforceable Through Title V Permit
- 17. If the District or EPA determine that a Quality Improvement Plan is required under 40 CFR 64.7(d)(2), the permittee shall develop and implement the Quality Improvement Plan in accordance with 40 CFR part 64.8. [40 CFR 64] Federally Enforceable Through Title V Permit
- 18. Written records of the engine idling time are not required. Compliance with idle-time limit shall be demonstrated by maintaining a copy of a work practice standard that includes the minimization of engine idling time. [District Rule 2520, 9.4] Federally Enforceable Through Title V Permit
- 19. The engine's oil and filter shall be changed every 2,160 hours of operation or every 12 months, whichever comes first. Permittee may utilize the oil analysis program specified in the Inspection and Maintenance (I&M) plan to extend the oil change requirement. [40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit
- 20. The engine's air filter shall be inspected every 2,160 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit
- 21. The engine's hoses and belts shall be inspected every 2,160 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit
- 22. The owner must operate and maintain the engine per the manufacturers emission-related instructions, or develop and follow your own maintenance plan which provides to the extent practicable for the operation and maintenance of the engine in a manner consistent with good practices [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- 23. This unit is subject to IC Engine Conditions on the facility wide permit S-1548-0. Deviations from a standard condition shall be reported under the applicable condition in S-1548-0. [District Rule 2520] Federally Enforceable Through Title V Permit

**PERMIT UNIT:** S-1548-434-7 **EXPIRATION DATE:** 05/31/2021

SECTION: NW 2 TOWNSHIP: 29S RANGE: 21E

**EQUIPMENT DESCRIPTION:** 

1,680 BHP WAUKESHA MODEL 7044 GSI NATURAL GAS-FIRED IC ENGINE EQUIPPED WITH PCV, O2 CONTROLLER, AND 3-WAY CATALYST POWERING A GAS COMPRESSOR

### PERMIT UNIT REQUIREMENTS

- 1. When this unit is not operated (dormant for Rule 4701 and 4702) the fuel line shall be physically disconnected from this unit. [District Rule 2080] Federally Enforceable Through Title V Permit
- 2. A source test to demonstrate compliance with NOx, CO and VOC emission limits shall be performed within 60 days of recommencing operation of this unit. [District Rule 4702] Federally Enforceable Through Title V Permit
- 3. Upon seven days written notice to the District this engine may be designated as a dormant emissions unit or an active emissions unit. [District Rule 1070] Federally Enforceable Through Title V Permit
- 4. The engine shall only burn natural gas with fuel gas sulfur content concentration (as H2S) not exceeding 0.25 grains/100 dscf. [District NSR Rule] Federally Enforceable Through Title V Permit
- 5. The engine shall only burn natural gas with total sulfur content not exceeding 1.0 grains/100 dscf. [District NSR Rule] Federally Enforceable Through Title V Permit
- 6. VOC emissions from fugitive components associated permit units S-1548-433 through S-1548-438 shall not exceed 57.2 lb VOC per day. [District NSR Rule] Federally Enforceable Through Title V Permit
- 7. Leaks from valves, connectors, and other components (not including compressor seals) shall be defined as a reading of methane on a portable hydrocarbon detection instrument in excess of 100 ppmv above background when measured as close as possible to the potential source. [District NSR Rule] Federally Enforceable Through Title V Permit
- 8. Leaks from compressor seals shall be defined as a reading of methane on a portable hydrocarbon detection instrument in excess of 500 ppmv above background when measured as close as possible to the potential source. [District NSR Rule] Federally Enforceable Through Title V Permit
- 9. Components shall be screened and inspected with a minimum of 25% of the components inspected each quarter. Any leak greater than 500 ppmv for compressor seals and 100 ppmv for valves, connectors and other components, when measured with a portable hydrocarbon detection instrument calibrated with methane in accordance with EPA Method 21 or leaking at a rate of greater than 3 drops of liquid per minute, shall be repaired in a manner consistent with the procedures specified in Section 5.3 of Rule 4409. This requirement shall not apply to inaccessible or unsafe-to-access components as identified in the Operator Management Plan pursuant to Section 6.1 of Rule 4409. [District NSR Rule] Federally Enforceable Through Title V Permit
- 10. Components to be screened shall be identified and categorized according to the following equipment types: connectors, flanges, open ended lines (sample connections, drains, bleed valves, etc.), pump seals, valves with visible actuators and other (pressure relief devices, compressor seals, meters, etc.). Components shall be further identified and categorized according to the following types of service: gas/light liquid and heavy liquid service. [District NSR Rule] 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: AERA ENERGY LLC Location: LIGHT OIL WESTERN STATIONARY SOURCE,CA 5-1549-43-7: Sep 14 2021 3-46PM -- RINALDIR

- 11. Component screening shall be performed in accordance with EPA reference Method 21. [District NSR Rule] Federally Enforceable Through Title V Permit
- 12. Fugitive emission calculations shall be performed using EPA Publication 453/R-95-017, Table 2-8 factors. [District NSR Rule] Federally Enforceable Through Title V Permit
- 13. Permittee shall maintain a current listing of all fugitive components installed with engine/compressor and corresponding VOC emission calculations to verify compliance with fugitive VOC emission limit. [District NSR Rule] Federally Enforceable Through Title V Permit
- 14. Emissions from this engine shall not exceed any of the following limits: 0.071 gr-NOx/bhp-hr (5 ppmv @ 15% O2), 0.003 gr-PM10/bhp-hr, 0.613 gr-CO/bhp-hr (70 ppmv @ 15% O2), or 0.15 gr-VOC/bhp-hr (30 ppmv @ 15% O2). [District NSR Rule] Federally Enforceable Through Title V Permit
- 15. District witnessed or approved compliance source testing for NOx, CO, and VOC emission limits shall be conducted on all engines not less than once every 24 months. [District Rule 4702, 6.3.2] Federally Enforceable Through Title V Permit
- 16. The permittee shall record the inlet temperature to the catalytic converter on a daily basis. [District Rule 2520, 9.4.2 and 40 CFR 64] Federally Enforceable Through Title V Permit
- 17. The inlet temperature of the catalyst shall be maintained between 750 F and 1250 F. [40 CFR 64] Federally Enforceable Through Title V Permit
- 18. The permittee shall comply with the compliance assurance monitoring operation and maintenance requirements of 40 CFR Part 64.7. [40 CFR 64] Federally Enforceable Through Title V Permit
- 19. The permittee shall comply with the recordkeeping and reporting requirements of 40 CFR part 64.9. [40 CFR 64] Federally Enforceable Through Title V Permit
- 20. If the District or EPA determine that a Quality Improvement Plan is required under 40 CFR 64.7(d)(2), the permittee shall develop and implement the Quality Improvement Plan in accordance with 40 CFR part 64.8. [40 CFR 64] Federally Enforceable Through Title V Permit
- 21. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following subsumed requirements: Rules 402 (Madera) and 404 (Fresno, Merced, Kern, Kings, San Joaquin, Stanislaus, Tulare). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
- 22. Written records of the engine idling time are not required. Compliance with idle-time limit shall be demonstrated by maintaining a copy of a work practice standard that includes the minimization of engine idling time. [District Rule 2520, 9.4] Federally Enforceable Through Title V Permit
- 23. The engine's oil and filter shall be changed every 2,160 hours of operation or every 12 months, whichever comes first. Permittee may utilize the oil analysis program specified in the Inspection and Maintenance (I&M) plan to extend the oil change requirement. [40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit
- 24. The engine's air filter shall be inspected every 2,160 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit
- 25. The engine's hoses and belts shall be inspected every 2,160 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit
- 26. The owner must operate and maintain the engine per the manufacturers emission-related instructions, or develop and follow your own maintenance plan which provides to the extent practicable for the operation and maintenance of the engine in a manner consistent with good practices [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- 27. This unit is subject to IC Engine Conditions on the facility wide permit S-1548-0. Deviations from a standard condition shall be reported under the applicable condition in S-1548-0. [District Rule 2520] Federally Enforceable Through Title V Permit

PERMIT UNIT: S-1548-435-7 EXPIRATION DATE: 05/31/2021

SECTION: NW 2 TOWNSHIP: 29S RANGE: 21E

**EQUIPMENT DESCRIPTION:** 

1,680 HP WAUKESHA MODEL 7044 GSI NATURAL GAS-FIRED IC ENGINE EQUIPPED WITH PCV, O2 CONTROLLER, AND 3-WAY CATALYST POWERING A GAS COMPRESSOR

### PERMIT UNIT REQUIREMENTS

- 1. When this unit is not operated (dormant for Rule 4701 and 4702) the fuel line shall be physically disconnected from this unit. [District Rule 2080] Federally Enforceable Through Title V Permit
- 2. A source test to demonstrate compliance with NOx, CO and VOC emission limits shall be performed within 60 days of recommencing operation of this unit. [District Rule 4702] Federally Enforceable Through Title V Permit
- 3. Upon seven days written notice to the District this engine may be designated as a dormant emissions unit or an active emissions unit. [District Rule 1070] Federally Enforceable Through Title V Permit
- 4. The engine shall only burn natural gas with fuel gas sulfur content concentration (as H2S) not exceeding 0.25 grains/100 dscf. [District NSR Rule] Federally Enforceable Through Title V Permit
- 5. The engine shall only burn natural gas with total sulfur content not exceeding 1.0 grains/100 dscf. [District NSR Rule] Federally Enforceable Through Title V Permit
- 6. VOC emissions from fugitive components associated permit units S-1548-433 through S-1548-438 shall not exceed 57.2 lb VOC per day. [District NSR Rule] Federally Enforceable Through Title V Permit
- 7. Leaks from valves, connectors, and other components (not including compressor seals) shall be defined as a reading of methane on a portable hydrocarbon detection instrument in excess of 100 ppmv above background when measured as close as possible to the potential source. [District NSR Rule] Federally Enforceable Through Title V Permit
- 8. Leaks from compressor seals shall be defined as a reading of methane on a portable hydrocarbon detection instrument in excess of 500 ppmv above background when measured as close as possible to the potential source. [District NSR Rule] Federally Enforceable Through Title V Permit
- 9. Components shall be screened and inspected with a minimum of 25% of the components inspected each quarter. Any leak greater than 500 ppmv for compressor seals and 100 ppmv for valves, connectors and other components, when measured with a portable hydrocarbon detection instrument calibrated with methane in accordance with EPA Method 21 or leaking at a rate of greater than 3 drops of liquid per minute, shall be repaired in a manner consistent with the procedures specified in Section 5.3 of Rule 4409. This requirement shall not apply to inaccessible or unsafe-to-access components as identified in the Operator Management Plan pursuant to Section 6.1 of Rule 4409. [District NSR Rule] Federally Enforceable Through Title V Permit
- 10. Components to be screened shall be identified and categorized according to the following equipment types: connectors, flanges, open ended lines (sample connections, drains, bleed valves, etc.), pump seals, valves with visible actuators and other (pressure relief devices, compressor seals, meters, etc.). Components shall be further identified and categorized according to the following types of service: gas/light liquid and heavy liquid service. [District NSR Rule] 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: AERA ENERGY LLC Location: LIGHT OIL WESTERN STATIONARY SOURCE,CA \$1548-435-7: Sep 14 2021 34PPM - RINAI DIR

- 11. Component screening shall be performed in accordance with EPA reference Method 21. [District NSR Rule] Federally Enforceable Through Title V Permit
- 12. Fugitive emission calculations shall be performed using EPA Publication 453/R-95-017, Table 2-8 factors. [District NSR Rule] Federally Enforceable Through Title V Permit
- 13. Permittee shall maintain a current listing of all fugitive components installed with engine/compressor and corresponding VOC emission calculations to verify compliance with fugitive VOC emission limit. [District NSR Rule] Federally Enforceable Through Title V Permit
- 14. Emissions from this engine shall not exceed any of the following limits: 0.071 gr-NOx/bhp-hr (5 ppmv @ 15% O2), 0.003 gr-PM10/bhp-hr, 0.613 gr-CO/bhp-hr (70 ppmv @ 15% O2), or 0.15 gr-VOC/bhp-hr (30 ppmv @ 15% O2). [District NSR Rule] Federally Enforceable Through Title V Permit
- 15. District witnessed or approved compliance source testing for NOx, CO, and VOC emission limits shall be conducted on all engines not less than once every 24 months. [District Rule 4702, 6.3.2] Federally Enforceable Through Title V Permit
- 16. The permittee shall record the inlet temperature to the catalytic converter on a daily basis. [District Rule 2520, 9.4.2 and 40 CFR 64] Federally Enforceable Through Title V Permit
- 17. The inlet temperature of the catalyst shall be maintained between 750 F and 1250 F. [40 CFR 64] Federally Enforceable Through Title V Permit
- 18. The permittee shall comply with the compliance assurance monitoring operation and maintenance requirements of 40 CFR Part 64.7. [40 CFR 64] Federally Enforceable Through Title V Permit
- 19. The permittee shall comply with the recordkeeping and reporting requirements of 40 CFR part 64.9. [40 CFR 64] Federally Enforceable Through Title V Permit
- 20. If the District or EPA determine that a Quality Improvement Plan is required under 40 CFR 64.7(d)(2), the permittee shall develop and implement the Quality Improvement Plan in accordance with 40 CFR part 64.8. [40 CFR 64] Federally Enforceable Through Title V Permit
- 21. Written records of the engine idling time are not required. Compliance with idle-time limit shall be demonstrated by maintaining a copy of a work practice standard that includes the minimization of engine idling time. [District Rule 2520, 9.4] Federally Enforceable Through Title V Permit
- 22. The engine's oil and filter shall be changed every 2,160 hours of operation or every 12 months, whichever comes first. Permittee may utilize the oil analysis program specified in the Inspection and Maintenance (I&M) plan to extend the oil change requirement. [40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit
- 23. The engine's air filter shall be inspected every 2,160 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit
- 24. The engine's hoses and belts shall be inspected every 2,160 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit
- 25. The owner must operate and maintain the engine per the manufacturers emission-related instructions, or develop and follow your own maintenance plan which provides to the extent practicable for the operation and maintenance of the engine in a manner consistent with good practices [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- 26. This unit is subject to IC Engine Conditions on the facility wide permit S-1548-0. Deviations from a standard condition shall be reported under the applicable condition in S-1548-0. [District Rule 2520] Federally Enforceable Through Title V Permit

Facility Name: AERA ENERGY LLC

LIGHT OIL WESTERN STATIONARY SOURCE, CA

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**EXPIRATION DATE:** 05/31/2021 **PERMIT UNIT:** S-1548-439-13

SECTION: NW20 TOWNSHIP: 28S RANGE: 21E

**EQUIPMENT DESCRIPTION:** 

1310 BBL FREE WATER KNOCKOUT VESSEL V-201A WITH VAPOR CONTROL AS DESCRIBED IN S-1548-148- DEHY 20

#### PERMIT UNIT REQUIREMENTS

- Vessel is a pressure vessel as defined by District Rule 4623. [District Rule 4623] Federally Enforceable Through Title V Permit
- The vessel shall vent only to the vapor control system listed on permit S-1548-148, except during periods of vessel cleaning or maintenance. [District Rule 2201] Federally Enforceable Through Title V Permit
- 3. The control valve on the common vapor-out line from the FWKO vessels shall be set at a sufficient pressure to prevent the backflow of tank vapors into the FWKO vessels. Components (valves, flanges, etc) downstream of this control valve are subject to the requirements of Rule 4623 and, therefore, any leak in excess of 10,000 ppmv detected from components downstream of the control valve shall be reported as a deviation. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
- Fugitive VOC emission rate shall not exceed that listed in S-1548-148. [District Rule 2201] Federally Enforceable Through Title V Permit
- This unit is subject to the Dehy 20 Vapor Recovery, Inspection, and Tank Cleaning Conditions on Permit S-1548-148. Deviations from a standard condition shall be reported under the applicable condition in S-1548-148. [District Rule 2520] Federally Enforceable Through Title V Permit

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

Facility Name: AERA ENERGY LLC

LIGHT OIL WESTERN STATIONARY SOURCE, CA Location: S-1548-439-13 : Sep 14 2021 3:46PM -- RINALDIR

PERMIT UNIT: S-1548-440-13 EXPIRATION DATE: 05/31/2021

SECTION: NW20 TOWNSHIP: 28S RANGE: 21E

**EQUIPMENT DESCRIPTION:** 

1310 BBL FREE WATER KNOCKOUT VESSEL V-201B WITH VAPOR CONTROL AS DESCRIBED IN S-1548-148- DEHY 20

#### PERMIT UNIT REQUIREMENTS

- 1. Vessel is a pressure vessel as defined by District Rule 4623. [District Rule 4623] Federally Enforceable Through Title V Permit
- 2. The vessel shall vent only to the vapor control system listed on permit S-1548-148, except during periods of vessel cleaning or maintenance. [District Rule 2201] Federally Enforceable Through Title V Permit
- 3. The control valve on the common vapor-out line from the FWKO vessels shall be set at a sufficient pressure to prevent the backflow of tank vapors into the FWKO vessels. Components (valves, flanges, etc) downstream of this control valve are subject to the requirements of Rule 4623 and, therefore, any leak in excess of 10,000 ppmv detected from components downstream of the control valve shall be reported as a deviation. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
- 4. Fugitive VOC emission rate shall not exceed that listed in S-1548-148. [District Rule 2201] Federally Enforceable Through Title V Permit
- 5. This unit is subject to the Dehy 20 Vapor Recovery, Inspection, and Tank Cleaning Conditions on Permit S-1548-148. Deviations from a standard condition shall be reported under the applicable condition in S-1548-148. [District Rule 2520] Federally Enforceable Through Title V Permit

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

Facility Name: AERA ENERGY LLC

Location: LIGHT OIL WESTERN STATIONARY SOURCE,CA S-1548-440-13: Sep 14 2021 3:46PM -- RINALDIR

**EXPIRATION DATE:** 05/31/2021 **PERMIT UNIT:** S-1548-441-13

SECTION: NW20 TOWNSHIP: 28S RANGE: 21E

**EQUIPMENT DESCRIPTION:** 

1310 BBL FREE WATER KNOCKOUT VESSEL V-201C WITH VAPOR CONTROL AS DESCRIBED IN S-1548-148- DEHY 20

### PERMIT UNIT REQUIREMENTS

- Vessel is a pressure vessel as defined by District Rule 4623. [District Rule 4623] Federally Enforceable Through Title V Permit
- The vessel shall vent only to the vapor control system listed on permit S-1548-148, except during periods of vessel cleaning or maintenance. [District Rule 2201] Federally Enforceable Through Title V Permit
- 3. The control valve on the common vapor-out line from the FWKO vessels shall be set at a sufficient pressure to prevent the backflow of tank vapors into the FWKO vessels. Components (valves, flanges, etc) downstream of this control valve are subject to the requirements of Rule 4623 and, therefore, any leak in excess of 10,000 ppmv detected from components downstream of the control valve shall be reported as a deviation. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
- Fugitive VOC emission rate shall not exceed that listed in S-1548-148. [District Rule 2201] Federally Enforceable Through Title V Permit
- This unit is subject to the Dehy 20 Vapor Recovery, Inspection, and Tank Cleaning Conditions on Permit S-1548-148. Deviations from a standard condition shall be reported under the applicable condition in S-1548-148. [District Rule 2520] Federally Enforceable Through Title V Permit

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

Facility Name: AERA ENERGY LLC Location:

**EXPIRATION DATE:** 05/31/2021 **PERMIT UNIT:** S-1548-442-13

SECTION: NW20 TOWNSHIP: 28S RANGE: 21E

**EQUIPMENT DESCRIPTION:** 

1310 BBL FREE WATER KNOCKOUT VESSEL V-201D WITH VAPOR CONTROL AS DESCRIBED IN S-1548-148- DEHY 20

#### PERMIT UNIT REQUIREMENTS

- Vessel is a pressure vessel as defined by District Rule 4623. [District Rule 4623] Federally Enforceable Through Title V Permit
- The vessel shall vent only to the vapor control system listed on permit S-1548-148, except during periods of vessel cleaning or maintenance. [District Rule 2201] Federally Enforceable Through Title V Permit
- 3. The control valve on the common vapor-out line from the FWKO vessels shall be set at a sufficient pressure to prevent the backflow of tank vapors into the FWKO vessels. Components (valves, flanges, etc) downstream of this control valve are subject to the requirements of Rule 4623 and, therefore, any leak in excess of 10,000 ppmv detected from components downstream of the control valve shall be reported as a deviation. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
- Fugitive VOC emission rate shall not exceed that listed in S-1548-148. [District Rule 2201] Federally Enforceable Through Title V Permit
- This unit is subject to the Dehy 20 Vapor Recovery, Inspection, and Tank Cleaning Conditions on Permit S-1548-148. Deviations from a standard condition shall be reported under the applicable condition in S-1548-148. [District Rule 2520] Federally Enforceable Through Title V Permit

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

Facility Name: AERA ENERGY LLC

LIGHT OIL WESTERN STATIONARY SOURCE, CA Location:

**PERMIT UNIT:** S-1548-443-5 **EXPIRATION DATE:** 05/31/2021

SECTION: NW 4 TOWNSHIP: 27S RANGE: 21E

**EQUIPMENT DESCRIPTION:** 

24,300 GALLON (10 FT. DIA. BY 40 FT. LONG SHELL) FREE WATER KNOCKOUT VESSEL V-3005 WITH VAPOR PIPING TO VAPOR CONTROL SYSTEM LISTED ON S-1548-120:

#### PERMIT UNIT REQUIREMENTS

- VOC emission rate from components shall not exceed 20.6 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
- Permittee shall maintain an accurate fugitive component count and resultant emissions calculated using U.S. EPA Publication 453/R-95-017, Table 2-4. [District Rule 2201] Federally Enforceable Through Title V Permit
- This unit is subject to the Lost Hills 1 Dehy Vapor Recovery, Inspection, and Tank Cleaning Conditions on Permit S-1548-120. Deviations from a standard condition shall be reported under the applicable condition in S-1548-120. [District Rule 2520] Federally Enforceable Through Title V Permit

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

Facility Name: AERA ENERGY LLC

LIGHT OIL WESTERN STATIONARY SOURCE, CA Location:

S-1548-443-5 : Sep 14 2021 3:46PM -- RINAL DIE

**PERMIT UNIT:** S-1548-444-5 EXPIRATION DATE: 05/31/2021

SECTION: SE 19 TOWNSHIP: 28S RANGE: 21E

#### **EQUIPMENT DESCRIPTION:**

29,400 GALLON FREE WATER KNOCKOUT VESSEL (V-300) WITH VAPOR PIPING TO GAS COMPRESSORS (S-1548-172, '-173, '-174, '-175, AND '-427) AND CONNECTED TO S-1547-1079 CASING VENT VAPOR RECOVERY AND CONTROL SYSTEM

#### PERMIT UNIT REQUIREMENTS

- Prior to opening vessel for interior cleaning, operator shall drain all liquid from the tank to the maximum extent 1. feasible and shall operate the vapor recovery system/vapor control system for at least 24 hours such that it collects all tank vapors. [District Rule 2201] Federally Enforceable Through Title V Permit
- The interior of the vessel may be cleaned once per calendar quarter. [District Rule 2201] Federally Enforceable Through Title V Permit
- Collected vapors shall be piped to the gas gathering system or to S-1547-1079 casing vent vapor recovery and control system, except during periods of vessel interior cleaning. [District Rule 2201] Federally Enforceable Through Title V Permit
- VOC emission rate from components shall not exceed 45.5 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
- Permittee shall maintain an accurate fugitive component count and resultant emissions calculated using U.S. EPA Publication 453/R-95-017, Table 2-4. [District Rule 2201] Federally Enforceable Through Title V Permit
- Permittee shall maintain accurate records of the date of each interior cleaning. Such records shall be made readily available for District inspection for a period of five years. [District Rule 1070] Federally Enforceable Through Title V Permit

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

Facility Name: AERA ENERGY LLC

LIGHT OIL WESTERN STATIONARY SOURCE, CA Location: S-1548-444-5 : Sep 14 2021 3:46PM -- RINAL DIE

**EXPIRATION DATE:** 05/31/2021 **PERMIT UNIT:** S-1548-445-3

SECTION: SE 12 TOWNSHIP: 28S RANGE: 20E

**EQUIPMENT DESCRIPTION:** 

42,300 GALLON FREE WATER KNOCKOUT VESSEL (V-100) WITH VAPOR PIPING TO GAS COMPRESSORS (S-1548-171 AND '-426)

#### PERMIT UNIT REQUIREMENTS

- Prior to opening vessel for interior cleaning, operator shall drain all liquid from the vessel to the maximum extent feasible and shall operate the vapor recovery system or vapor control device for at least 24 hours such that it collects the vapors from the vessel. [District Rule 2201] Federally Enforceable Through Title V Permit
- Collected vapors shall be piped to the gas gathering system, except during periods of vessel interior cleaning. [District Rule 2201]
- The interior of the vessel may be cleaned once per calendar quarter. [District Rule 2201] Federally Enforceable 3. Through Title V Permit
- VOC emission rate from components shall not exceed 45.5 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
- Permittee shall maintain an accurate fugitive component count and resultant emissions calculated using U.S. EPA Publication 453/R-95-017, Table 2-4. [District Rule 2201] Federally Enforceable Through Title V Permit
- Permittee shall maintain accurate records of the date of each interior cleaning. Such records shall be made readily available for District inspection for a period of five years. [District Rule 1070] Federally Enforceable Through Title V Permit

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

Facility Name: AERA ENERGY LLC

LIGHT OIL WESTERN STATIONARY SOURCE, CA Location:

**PERMIT UNIT:** S-1548-451-4 EXPIRATION DATE: 05/31/2021

#### **EQUIPMENT DESCRIPTION:**

HYDROGEN SULFIDE (H2S) SCAVENGER CHEMICAL STORAGE AND INJECTION OPERATION APPROVED TO OPERATE AT VARIOUS UNSPECIFIED LOCATIONS IN THE LIGHT OIL WESTERN STATIONARY SOURCE UTILIZING UP TO 5 CHEMICAL STORAGE TANKS (CAPACITY OF 500 GALLONS OR LESS) EACH EQUIPPED WITH A CATCH BASIN AND ASSOCIATED COMPONENTS INCLUDING LIQUID TRANSFER PUMP(S), VALVES, FLANGES, THREADED CONNECTIONS, FLEXIBLE PIPING, AND STINGER-TYPE INJECTION FITTINGS ON PRODUCED GAS **PIPELINES** 

### PERMIT UNIT REQUIREMENTS

- No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102] 1.
- 2. Permittee shall notify the SJVUAPCD of each location at which an H2S scavenger chemical storage and injection operation 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 2201] Federally Enforceable Through Title V Permit
- Chemical storage and injection operations shall not be located within 1000 feet of a school. [District Rule 4102]
- Each chemical storage tank shall have a maximum rated capacity of 500 gallons or less and up to eight injection fittings. [District Rule 2201] Federally Enforceable Through Title V Permit
- Permit exempt tanks with a capacity of 250 gallons or less where the actual storage temperature does not exceed 150 deg F may be used to store H2S scavenger chemical. [District Rule 2020] Federally Enforceable Through Title V Permit
- The maximum throughput of each chemical storage tank shall not exceed 200 gallons per day. [District Rule 2201] Federally Enforceable Through Title V Permit
- 7. True vapor pressure of materials stored in each chemical tank shall not exceed 3.0 psia. [District Rule 2201] Federally Enforceable Through Title V Permit
- Total VOC emissions from all H2S scavenger injection equipment shall not exceed 7.0 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
- On a monthly basis, to determine compliance with daily throughput limits, permittee shall maintain accurate records of average daily throughput for each tank based on purchase records. Such records shall be made readily available for District inspection upon request. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 10. Permittee shall maintain accurate fugitive component counts and resultant emissions calculated using Table 2-4 of U.S. EPA Publication 453/R-95-017. [District Rule 2201] Federally Enforceable Through Title V Permit
- 11. Accurate records of the dates and amounts of chemical deliveries for each chemical injection site and fugitive component counts shall be retained and made available for District inspection upon request for a period of 5 years. [District Rule 2201] Federally Enforceable Through Title V Permit

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

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- 12. Operator shall keep records of the true vapor pressure of the chemical stored in the tank. These records shall include a laboratory analysis for TVP according to the methods described in District Rule 4623, Section 6.4 (Amended 12/20/01), MSDS which lists the true vapor pressure, or environmental data sheet which lists the true vapor pressure. Such records shall be made readily available for District inspection upon request for a period of 5 years. [District Rule 4623] Federally Enforceable Through Title V Permit
- 13. Injection of scavenging chemicals shall not result in an increase in air contaminant or odorous emissions at downstream production handling facilities or wastewater separators, containers, loadouts, or disposal sites. [District Rule 2010] Federally Enforceable Through Title V Permit

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PERMIT UNIT: S-1548-463-9 EXPIRATION DATE: 05/31/2021

#### **EQUIPMENT DESCRIPTION:**

1310 BBL FREE WATER KNOCKOUT VESSEL V-201E WITH VAPOR CONTROL AS DESCRIBED IN S-1548-148 - DEHY 20

### PERMIT UNIT REQUIREMENTS

- 1. Vessel is a pressure vessel as defined by District Rule 4623. [District Rule 4623] Federally Enforceable Through Title V Permit
- 2. The vessel shall vent only to the vapor control system listed on permit S-1548-148, except during periods of vessel cleaning or maintenance. [District Rule 2201] Federally Enforceable Through Title V Permit
- 3. The control valve on the common vapor-out line from the FWKO vessels shall be set at a sufficient pressure to prevent the backflow of tank vapors into the FWKO vessels. Components (valves, flanges, etc) downstream of this control valve are subject to the requirements of Rule 4623 and, therefore, any leak in excess of 10,000 ppmv detected from components downstream of the control valve shall be reported as a deviation. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
- 4. VOC fugitives from components in gas service shall not exceed 24.1 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
- 5. Permittee shall maintain accurate records of fugitive inspection component counts and calculated fugitive emissions using EPA Document -453/R-95-017, Protocol for Equipment Leak Emission Estimates Table 2-4 "Oil and Gas Production Operations Average Emission Factors" (November 1995). Permittee shall make records of component counts, emission factors, and calculations readily available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit
- 6. This unit is subject to the Dehy 20 Vapor Recovery, Inspection, and Tank Cleaning Conditions on Permit S-1548-148. Deviations from a standard condition shall be reported under the applicable condition in S-1548-148. [District Rule 2520] Federally Enforceable Through Title V Permit

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

Facility Name: AERA ENERGY LLC

Location: LIGHT OIL WESTERN STATIONARY SOURCE,CA S-1548-463-9 : Sep 14 2021 3:46PM -- RINALDIR

**PERMIT UNIT:** S-1548-470-12 EXPIRATION DATE: 05/31/2021

**EQUIPMENT DESCRIPTION:** 

400 CYCLIC STEAM ENHANCED WELLS WITH CLOSED CASING VENTS

#### PERMIT UNIT REQUIREMENTS

- Cyclic wells covered by this permit shall each have a visible identification number. Field personnel shall be provided with written instructions concerning proper operation and maintenance of these wells. [District Rule 2201] Federally Enforceable Through Title V Permit
- Fugitive emissions from all components associated with this cyclic well operation shall not exceed 86.2 lb-VOC/day. [District Rule 2201] Federally Enforceable Through Title V Permit
- All components to be screened shall be identified and categorized according to the following equipment types: connectors, flanges, open-ended lines (sample connections, drains, bleed valves, etc.), pump seals, valves with visible actuators, and other (pressure relief devices, compressor seals, meters, etc.). Components shall be further identified and categorized according to the following types of service: gas/light liquid, light oil, heavy oil, and water/oil. [District Rule 2201] Federally Enforceable Through Title V Permit
- Portable hydrocarbon detection instrument shall be operated and calibrated in accordance with recommendations in CAPCOA/CARB's California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities (February, 1999). [District Rule 2201] Federally Enforceable Through Title V Permit
- Flanges shall be monitored with a portable hydrocarbon detection instrument along the entire circumference of the flange-gasket interface. Threaded connections, tubing fittings, and other types of non-permanent joints shall be monitored along the entire circumference of joint interface. [District Rule 2201] Federally Enforceable Through Title V Permit
- Valves shall be monitored with a portable hydrocarbon detection instrument where the stem comes through the packing gland, and at any attached or connected body flange(s), bonnet flange(s), or plug(s). [District Rule 2201] Federally Enforceable Through Title V Permit
- All other components such as diaphragms, dump arms, instruments and meters shall be monitored at all points of possible emissions. [District Rule 2201] Federally Enforceable Through Title V Permit
- 8. Permittee shall maintain a current list of all cyclic wells associated with this operation, shall update the list whenever a well is added, replaced, or deleted, and such listing shall be made readily available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit
- Permittee shall maintain accurate records of fugitive inspection component counts and calculated fugitive emissions using CAPCOA's "California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities," Table IV-2c, "Oil and Gas Production Screening Value Ranges Emission Factors" (Feb 1999). Permittee shall make records of component counts, screening values, and calculations readily available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit

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

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Facility Name: AERA ENERGY LLC

- 10. A gas leak is defined as the detection of a concentration of total organic compounds, above background (measured in accordance with EPA Method 21) that exceeds the following values: 1) A major gas leak is a detection of greater than 10,000 ppmv as methane; and 2) A minor gas leak is a detection of 400 to 10,000 ppmv as methane for pressure relief devices (PRDs) and 2,000 to 10,000 for components other than PRDs. [District Rule 4401, 3.20] Federally Enforceable Through Title V Permit
- 11. A liquid leak is defined as the dripping of VOC-containing liquid. A major liquid leak is a visible mist or a continuous flow of liquid that is not seal lubricant. A minor liquid leak is a liquid leak that is not a major liquid leak and drips liquid at a rate of more than three drops per minute, except for seal lubricant. [District Rule 4401, 3.20] Federally Enforceable Through Title V Permit
- 12. During the time any steam-enhanced crude oil production well is undergoing service or repair while the well is not producing, it shall be exempt from the emission control requirements of District Rule 4401, 5.0. [District Rule 4401, 4.1] Federally Enforceable Through Title V Permit
- 13. Permittee shall not operate a steam-enhanced crude oil production well unless they comply with one of the following requirements: 1) Permittee shall keep the steam-enhanced crude oil production well vents closed and the front line production equipment downstream of the wells that carry produced fluids (crude oil or mixture of crude oil and water) shall be connected to a VOC collection and control system. The well vent may be temporarily opened during periods of attended service or repair of the well provided such activity is done as expeditiously as possible with minimal spillage of material and VOC emissions to the atmosphere; or 2) Permittee shall install and maintain an APCOapproved VOC collection and control system that is not open to the atmosphere and that 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 an APCO-approved control device that has a VOC destruction or removal efficiency of at least 99%, or that transports gases or vapors back to a process system. [District Rules 2201 and 4401, 5.1.1, and 5.1.2] Federally Enforceable Through Title V Permit
- 14. During District compliance inspection, the following conditions shall be used to determination of a violation: 1) Existence of an open-ended line or a valve located at the end of the line that is not sealed with a blind flange, plug, 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 lines. 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; 2) Existence of a component with a major liquid leak; 3) Existence of a component with a gas leak greater than 50,000 ppmv; or 4) Existence of a component leak consisting of a minor liquid or gas leak, or a gas leak greater than 10,000 ppmv up to 50,000 ppmv, in excess of the allowable number of leaks specified in Table 3 of Rule 4401. [District Rule 4401, 5.2.1] Federally Enforceable Through Title V Permit
- 15. 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 4401, 5.3.1] Federally Enforceable Through Title V Permit
- 16. Permittee shall keep all hatches 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 with minimal spillage of material and VOC emissions to the atmosphere. [District Rule 4401, 5.3.2] Federally Enforceable Through Title V Permit
- 17. Except for pipes and unsafe-to-monitor components, permittee shall visually inspect all pipes at least once every year. Any visual inspection of pipes that indicates a leak that cannot be immediately repaired to meet the leak standards of Rule 4401 shall be inspected within 24 hours after detecting the leak. If a leak is found, the leak shall be repaired as soon as practicable but not later than the time frame specified in Table 4 of Rule 4401. [District Rule 4401, 5.4.1 & 5.4.2] Federally Enforceable Through Title V Permit

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- 18. Permittee shall inspect audio-visually (by hearing and by sight) for leaks all accessible operating pumps, compressors, and pressure relief devices (PRDs) in service at least once each calendar week. [District Rule 4401, 5.4.3] Federally Enforceable Through Title V Permit
- 19. Any audio-visual inspection of an accessible operating pump, compressor, and PRD performed by an operator that indicates a leak that cannot be immediately repaired to meet the leak standards of Rule 4401 shall be inspected not later than 24 hours after conducting the audio-visual inspection. If a leak is found, the leak shall be repaired as soon as practicable but not later than the time frame specified in Table 3 of Rule 4401. [District Rule 4401, 5.4.3] Federally Enforceable Through Title V Permit
- 20. Permittee shall initially inspect a PRD that releases to the atmosphere as soon as practicable but not later than 24 hours after the discovery of the release. Permittee shall re-inspect the PRD not earlier than 24 hours after the initial inspection but not later than 15 calendar days after the initial inspection. [District Rule 4401, 5.4.4] Federally Enforceable Through Title V Permit
- 21. Permittee shall inspect all new, replaced, or repaired fittings, flanges, and threaded connections within 72 hours of placing the component in service. [District Rule 4401, 5.4.4] Federally Enforceable Through Title V Permit
- 22. Except for PRDs, permittee shall inspect a component that has been repaired or replaced not later than 15 calendar days after the component was repaired or replaced. [District Rule 4401, 5.4.5] Federally Enforceable Through Title V Permit
- 23. Permittee shall inspect all unsafe-to-monitor components during each turnaround. [District Rule 4401, 5.4.5] Federally Enforceable Through Title V Permit
- 24. Permittee shall affix a readily visible weatherproof tag to a leaking component upon detection of the leak. The following information shall be included on the tag: 1) the date and time of leak detection; 2) the date and time of leak measurement; 3) leak concentration in ppmv for a gaseous leak; 4) description of whether it is a major liquid leak or a minor liquid leak; and 5) whether the component is an essential component, an unsafe-to-monitor component, or a critical component. [District Rule 4401, 5.5.1] Federally Enforceable Through Title V Permit
- 25. Permittee shall keep the tag affixed to the component until all of the following conditions have been met: 1) the leaking component has been repaired or replaced, and 2) the component has been re-inspected using the test methods described in this permit; and 3) the component is found to be in compliance with the requirements of Rule 4401. [District Rule 4401, 5.5.2] Federally Enforceable Through Title V Permit
- 26. Permittee shall minimize a component leak in order to stop or reduce leakage to the atmosphere immediately to the extent possible, but not later than one (1) hour after detection of the leak. [District Rule 4401, 5.5.3] Federally Enforceable Through Title V Permit
- 27. Except for leaking critical components or leaking essential components, if the operator has minimized a leak but the leak still exceeds the applicable leak limits, the operator shall comply with at least one of the following requirements as soon as practicable but not later than the time period specified in Table 3 of Rule 4401: 1) repair or replace the leaking component; 2) vent the leaking component to a VOC collection and control system; or 3) remove the leaking component from operation. [District Rule 4401, 5.5.4] Federally Enforceable Through Title V Permit
- 28. The leak rate, measured after leak minimization has been performed, shall be used to determine the applicable repair period specified in Table 3 of Rule 4401 and the time of initial leak detection shall be the start of the repair period specified in Table 4 of Rule 4401. [District Rule 4401, 5.5.5, and 5.5.6] Federally Enforceable Through Title V Permit
- 29. If the leaking component is an essential component or a critical component that cannot be immediately shut down for repairs, and if the leak has been minimized but the leak still exceeds the applicable leak standard of this rule, the operator shall repair or replace the essential component or critical component to eliminate the leak during the next process unit turnaround, but in no case later than one year from the date of the original leak detection, whichever comes earlier. [District Rule 4401, 5.5.7] Federally Enforceable Through Title V Permit
- 30. Permittee shall maintain monitoring records of the date and well identification where steam injection or well stimulation occurs. [District Rule 4401, 6.1.1] Federally Enforceable Through Title V Permit

- 31. Unless waived by the District, or vapors are sent to a process system, permittee shall maintain source test records which show that the control efficiency requirements of the VOC collection and control system have been satisfied. [District Rule 4401, 6.1]
- 32. 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 4401, 6.1.6] Federally Enforceable Through Title V Permit
- 33. Permittee shall maintain a copy of the latest APCO-approved Operator Management Plan (OMP) at the facility and make it available to the APCO, ARB, and US EPA upon request. [District Rule 4401, 6.1.8] Federally Enforceable Through Title V Permit
- 34. Annual control efficiency compliance tests shall be performed by source testers certified by the California Air Resource Board (CARB) on all vapor collection and control systems used to control emissions from steam-enhanced crude oil production wells. Testing shall be performed during June, July, August, or September of each year if the system's control efficiency is dependent upon ambient air temperature. The APCO may waive these source testing requirements if the vapor control system does not exhaust to atmosphere, or if all uncondensed VOC emissions collected by the vapor collection and control system are incinerated in fuel burning equipment, an internal combustion engine, or in a smokeless flare. [District Rule 4401, 6.2.1 & 6.2.2] Federally Enforceable Through Title V Permit
- 35. 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 4401, 6.3.1] Federally Enforceable Through Title V Permit
- 36. Permittee shall perform leak inspections at least annually, using a portable hydrocarbon detection instrument in accordance with USEPA Method 21. Where safety is a concern, such as measuring leaks from compressor seals or pump seals when the shaft is rotating, a person shall measure leaks by placing the instrument probe inlet at a distance of one centimeter or less from the surface of the component interface. [District Rule 4401, 6.3.3] Federally Enforceable Through Title V Permit
- 37. Permittee shall maintain an inspection log in which, at a minimum, all of the following information shall be recorded for each inspection performed: 1) The total number of components inspected, and the total number and percentage of leaking components found by component type; 2) The location, type, and name or description of each leaking component and description of any unit where the leaking component is found; 3) The date of leak detection and the method of leak detection; 4) For gaseous leaks, 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 leaking components; 6) The identify 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 earlier; 7) The methods 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 ppmy after the component is repaired or is replaced; 9) The inspector's name, business mailing address, and business telephone number; and 10) The date and signature of the facility operator responsible for the inspection and repair program certifying the accuracy of the information recorded in the log. [District Rule 4401, 6.1.5 & 6.4] Federally Enforceable Through Title V Permit
- 38. Permittee shall establish and implement an employee training program for inspecting and repairing components and recordkeeping procedures, as necessary. Permittee shall maintain at the facility the copies of the training records of the training program. [District Rule 4401, 6.1.7 & 6.5] Federally Enforceable Through Title V Permit

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- 39. In accordance with the approved OMP, permittee shall meet all applicable operating, leak standards, inspection and reinspection, leak repair, record keeping, and notification requirements of Rule 4401. [District Rule 4401, 6.6] Federally Enforceable Through Title V Permit
- 40. By January 30 of each year, permittee shall submit to the APCO for approval, in writing, an annual report indicating any changes to the existing, approved OMP. [District Rule 4401, 5.3.3, and 6.7] Federally Enforceable Through Title V Permit
- 41. All records of required monitoring data and support information required by this permit shall be retained for a period of at least five years and shall be made available for District inspection upon request. [District Rules 2520, 9.4.2, and 4401, 6.1] Federally Enforceable Through Title V Permit

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PERMIT UNIT: S-1548-476-9 EXPIRATION DATE: 05/31/2021

SECTION: 20 TOWNSHIP: 28S RANGE: 21E

**EQUIPMENT DESCRIPTION:** 

55,000 GALLON (12 FT DIAMETER X 65 FT SHELL LENGTH) FREE WATER KNOCKOUT VESSEL V-201F WITH VAPOR CONTROL LISTED ON S-1548-148 (DEHY 20)

### PERMIT UNIT REQUIREMENTS

- 1. Vessel is a pressure vessel as defined by District Rule 4623. [District Rule 4623] Federally Enforceable Through Title V Permit
- 2. The vessel shall vent only to the vapor control system listed on permit S-1548-148, except during periods of vessel cleaning or maintenance. [District Rule 2201] Federally Enforceable Through Title V Permit
- 3. The control valve on the common vapor-out line from the FWKO vessels shall be set at a sufficient pressure to prevent the backflow of tank vapors into the FWKO vessels. Components (valves, flanges, etc) downstream of this control valve are subject to the requirements of Rule 4623 and, therefore, any leak in excess of 10,000 ppmv detected from components downstream of the control valve shall be reported as a deviation. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
- 4. VOC fugitives from components in gas service shall not exceed 24.1 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
- 5. Permittee shall maintain accurate records of fugitive inspection component counts and calculated fugitive emissions using EPA Document -453/R-95-017, Protocol for Equipment Leak Emission Estimates Table 2-4 "Oil and Gas Production Operations Average Emission Factors" (November 1995). Permittee shall make records of component counts, emission factors, and calculations readily available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit
- 6. This unit is subject to the Dehy 20 Vapor Recovery, Inspection, and Tank Cleaning Conditions on Permit S-1548-148. Deviations from a standard condition shall be reported under the applicable condition in S-1548-148. [District Rule 2520] Federally Enforceable Through Title V Permit

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

Facility Name: AERA ENERGY LLC

Location: LIGHT OIL WESTERN STATIONARY SOURCE,CA \$1548-476-9: Sep 14 2021 3:48PM - RINAL DIR

**EXPIRATION DATE:** 05/31/2021 **PERMIT UNIT:** S-1548-478-6

SECTION: NW20 TOWNSHIP: 28S RANGE: 21E

**EQUIPMENT DESCRIPTION:** 

26,000 GALLON (10 FT DIAMETER X 40 FT SHELL LENGTH) INDUCED STATIC FLOTATION CELL V-240B VENTED TO VAPOR CONTROL SYSTEM LISTED ON S-1548-148 (DEHY 20)

#### PERMIT UNIT REQUIREMENTS

- 1. Vessel is a pressure vessel as defined by District Rule 4623, Section 3.20. [District Rule 4623] Federally Enforceable Through Title V Permit
- When in service, vessel shall vent to vapor control system listed in S-1548-148, except during periods of vessel interior cleaning. [District NSR Rule] Federally Enforceable Through Title V Permit
- 3. VOC emission rate from vapor control components associated with this emissions unit shall not exceed 30.0 lb/day. [District NSR Rule] Federally Enforceable Through Title V Permit
- Permittee shall maintain an accurate fugitive component count and resultant emissions calculated using emission factors from U.S. EPA Publication 453/R-95-017, or other District approved factors. [District NSR Rule] Federally Enforceable Through Title V Permit
- This unit is subject to the Dehy 20 Vapor Recovery, Inspection, and Tank Cleaning Conditions on Permit S-1548-148. Deviations from a standard condition shall be reported under the applicable condition in S-1548-148. [District Rule 2520] Federally Enforceable Through Title V Permit

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

Facility Name: AERA ENERGY LLC

LIGHT OIL WESTERN STATIONARY SOURCE, CA Location:

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**EXPIRATION DATE:** 05/31/2021 **PERMIT UNIT:** S-1548-479-6

SECTION: NW20 TOWNSHIP: 28S RANGE: 21E

**EQUIPMENT DESCRIPTION:** 

26,000 GALLON (10 FT DIAMETER X 40 FT SHELL LENGTH) INDUCED STATIC FLOTATION CELL V-240C VENTED TO VAPOR CONTROL SYSTEM LISTED ON S-1548-148 (DEHY 20)

#### PERMIT UNIT REQUIREMENTS

- 1. Vessel is a pressure vessel as defined by District Rule 4623, Section 3.20. [District Rule 4623] Federally Enforceable Through Title V Permit
- When in service, vessel shall vent to vapor control system listed in S-1548-148, except during periods of vessel interior cleaning. [District NSR Rule] Federally Enforceable Through Title V Permit
- 3. VOC emission rate from vapor control components associated with this emissions unit shall not exceed 30.0 lb/day. [District NSR Rule] Federally Enforceable Through Title V Permit
- Permittee shall maintain an accurate fugitive component count and resultant emissions calculated using emission factors from U.S. EPA Publication 453/R-95-017, or other District approved factors. [District NSR Rule] Federally Enforceable Through Title V Permit
- This unit is subject to the Dehy 20 Vapor Recovery, Inspection, and Tank Cleaning Conditions on Permit S-1548-148. Deviations from a standard condition shall be reported under the applicable condition in S-1548-148. [District Rule 2520] Federally Enforceable Through Title V Permit

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

Facility Name: AERA ENERGY LLC

LIGHT OIL WESTERN STATIONARY SOURCE, CA Location:

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**EXPIRATION DATE:** 05/31/2021 **PERMIT UNIT:** S-1548-480-6

SECTION: NW20 TOWNSHIP: 28S RANGE: 21E

**EQUIPMENT DESCRIPTION:** 

26,000 GALLON (10 FT DIAMETER X 40 FT SHELL LENGTH) INDUCED STATIC FLOTATION CELL V-240D VENTED TO VAPOR CONTROL SYSTEM LISTED ON S-1548-148 (DEHY 20)

### PERMIT UNIT REQUIREMENTS

- 1. Vessel is a pressure vessel as defined by District Rule 4623, Section 3.20. [District Rule 4623] Federally Enforceable Through Title V Permit
- When in service, vessel shall vent to vapor control system listed in S-1548-148, except during periods of vessel interior cleaning. [District NSR Rule] Federally Enforceable Through Title V Permit
- 3. VOC emission rate from vapor control components associated with this emissions unit shall not exceed 30.0 lb/day. [District NSR Rule] Federally Enforceable Through Title V Permit
- Permittee shall maintain an accurate fugitive component count and resultant emissions calculated using emission factors from U.S. EPA Publication 453/R-95-017, or other District approved factors. [District NSR Rule] Federally Enforceable Through Title V Permit
- This unit is subject to the Dehy 20 Vapor Recovery, Inspection, and Tank Cleaning Conditions on Permit S-1548-148. Deviations from a standard condition shall be reported under the applicable condition in S-1548-148. [District Rule 2520] Federally Enforceable Through Title V Permit

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

Facility Name: AERA ENERGY LLC

LIGHT OIL WESTERN STATIONARY SOURCE, CA Location:

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EXPIRATION DATE: 05/31/2021 **PERMIT UNIT:** S-1548-481-6

SECTION: NW20 TOWNSHIP: 28S RANGE: 21E

**EQUIPMENT DESCRIPTION:** 

26,000 GALLON (10 FT DIAMETER X 40 FT SHELL LENGTH) INDUCED STATIC FLOTATION CELL V-240E VENTED TO VAPOR CONTROL SYSTEM LISTED ON S-1548-148 (DEHY 20)

#### PERMIT UNIT REQUIREMENTS

- Tank gauging or sampling devices shall be equipped with a gas-tight cover which shall be closed at all times except during gauging or sampling. [District NSR Rule] Federally Enforced Through Title V Permit [District NSR Rule] Federally Enforceable Through Title V Permit
- Vessel is a pressure vessel as defined by District Rule 4623, Section 3.20. [District Rule 4623] Federally Enforceable Through Title V Permit
- When in service, vessel shall vent to vapor control system listed in S-1548-148, except during periods of vessel 3. interior cleaning. [District NSR Rule] Federally Enforceable Through Title V Permit
- VOC emission rate from vapor control components associated with this emissions unit shall not exceed 30.0 lb/day. [District NSR Rule] Federally Enforceable Through Title V Permit
- Permittee shall maintain an accurate fugitive component count and resultant emissions calculated using emission factors from U.S. EPA Publication 453/R-95-017, or other District approved factors. [District NSR Rule] Federally Enforceable Through Title V Permit
- This unit is subject to the Dehy 20 Vapor Recovery, Inspection, and Tank Cleaning Conditions on Permit S-1548-148. Deviations from a standard condition shall be reported under the applicable condition in S-1548-148. [District Rule 2520] Federally Enforceable Through Title V Permit

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

Facility Name: AERA ENERGY LLC

LIGHT OIL WESTERN STATIONARY SOURCE, CA Location:

S-1548-481-6 : Sep 14 2021 3:46PM -- RINALDIR

PERMIT UNIT: S-1548-482-8 EXPIRATION DATE: 05/31/2021

SECTION: NW20 TOWNSHIP: 28S RANGE: 21E

**EQUIPMENT DESCRIPTION:** 

15,000 BBL (60.0 FT DIAMETER BY 32.0 FT SHELL HEIGHT) FILTER SURGE TANK T-220A VENTED TO SHARED VAPOR CONTROL SYSTEM LISTED ON S-1548-148 (DEHY 20)

### PERMIT UNIT REQUIREMENTS

- 1. Only water with a maximum VOC content of 35 milligram/liter shall be placed or stored in this tank. [District Rule 4623] Federally Enforceable Through Title V Permit
- 2. VOC content of the water stored or placed in this tank shall be determined annually by sample analysis using one of the approved methods listed in Rule 1020 or other District approved method. [District Rules 1020 and 4623] Federally Enforceable Through Title V Permit
- 3. VOC emission rate from components in gas and light crude oil service associated with this emissions unit shall be less than 7.1 lb/day. [District NSR Rule] Federally Enforceable Through Title V Permit
- 4. Permittee shall maintain an accurate fugitive component count and resultant emissions calculated using emission factors from EPA Document 453/R-95-017, Protocol for Equipment Leak Emissions Estimates. [District NSR Rule] Federally Enforceable Through Title V Permit
- 5. Permittee shall maintain a record of the lab analysis, sampling date and VOC content of the water in milligrams per liter. [District Rule 2080] Federally Enforceable Through Title V Permit
- 6. This unit is subject to the Dehy 20 Vapor Recovery, Inspection, and Tank Cleaning Conditions on Permit S-1548-148. Deviations from a standard condition shall be reported under the applicable condition in S-1548-148. [District Rule 2520] Federally Enforceable Through Title V Permit

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

Facility Name: AERA ENERGY LLC

**EXPIRATION DATE:** 05/31/2021 **PERMIT UNIT:** S-1548-483-8

SECTION: NW20 TOWNSHIP: 28S RANGE: 21E

**EQUIPMENT DESCRIPTION:** 

15,000 BBL (60.0 FT DIAMETER BY 32.0 FT SHELL HEIGHT) FILTER SURGE TANK T-220B VENTED TO SHARED VAPOR CONTROL SYSTEM LISTED ON S-1548-148 (DEHY 20)

### PERMIT UNIT REQUIREMENTS

- Only water with a maximum VOC content of 35 milligram/liter shall be placed or stored in this tank. [District Rule 4623] Federally Enforceable Through Title V Permit
- VOC content of the water stored or placed in this tank shall be determined annually by sample analysis using one of the approved methods listed in Rule 1020 or other District approved method. [District Rules 1020 and 4623] Federally Enforceable Through Title V Permit
- VOC emission rate from components in gas and light crude oil service associated with this emissions unit shall be less than 7.1 lb/day. [District NSR Rule] Federally Enforceable Through Title V Permit
- Permittee shall maintain an accurate fugitive component count and resultant emissions calculated using emission factors from EPA Document 453/R-95-017, Protocol for Equipment Leak Emissions Estimates. [District NSR Rule] Federally Enforceable Through Title V Permit
- Permittee shall maintain a record of the lab analysis, sampling date and VOC content of the water in milligrams per liter. [District Rule 2080] Federally Enforceable Through Title V Permit
- This unit is subject to the Dehy 20 Vapor Recovery, Inspection, and Tank Cleaning Conditions on Permit S-1548-148. Deviations from a standard condition shall be reported under the applicable condition in S-1548-148. [District Rule 2520] Federally Enforceable Through Title V Permit

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

Facility Name: AERA ENERGY LLC

LIGHT OIL WESTERN STATIONARY SOURCE, CA Location:

S-1548-483-8 : Sep 14 2021 3:46PM -- RINALDIR

**PERMIT UNIT:** S-1548-484-9 **EXPIRATION DATE:** 05/31/2021

SECTION: NW20 TOWNSHIP: 28S RANGE: 21E

**EQUIPMENT DESCRIPTION:** 

3.000 BBL FIXED ROOF CRUDE OIL/PRODUCED WATER STORAGE TANK T-300A VENTED TO VAPOR CONTROL SYSTEM LISTED ON S-1548-148 (DEHY 20)

### PERMIT UNIT REQUIREMENTS

- Permittee shall maintain an accurate fugitive component count and resultant emissions calculated using emission factors from EPA Document 453/R-95-017, Protocol for Equipment Leak Emissions Estimates. [District NSR Rule] Federally Enforceable Through Title V Permit
- VOC emission rate from components in gas and light crude oil service associated with this emissions unit shall be less than 7.6 lb/day. [District NSR Rule] Federally Enforceable Through Title V Permit
- This unit is subject to the Dehy 20 Vapor Recovery, Inspection, and Tank Cleaning Conditions on Permit S-1548-148. Deviations from a standard condition shall be reported under the applicable condition in S-1548-148. [District Rule 2520] Federally Enforceable Through Title V Permit

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

Facility Name: AERA ENERGY LLC

LIGHT OIL WESTERN STATIONARY SOURCE, CA Location:

S-1548-484-9 : Sep 14 2021 3:46PM -- RINAL DIE

**PERMIT UNIT:** S-1548-486-8 **EXPIRATION DATE:** 05/31/2021

SECTION: NW20 TOWNSHIP: 28S RANGE: 21E

**EQUIPMENT DESCRIPTION:** 

500 BBL FIXED ROOF CRUDE OIL/PRODUCED WATER STORAGE TANK T-310A VENTED TO VAPOR CONTROL SYSTEM LISTED ON S-1548-148 (DEHY 20)

## PERMIT UNIT REQUIREMENTS

- Permittee shall maintain an accurate fugitive component count and resultant emissions calculated using emission factors from EPA Document 453/R-95-017, Protocol for Equipment Leak Emissions Estimates. [District NSR Rule] Federally Enforceable Through Title V Permit
- VOC emission rate from components in gas and light crude oil service associated with this emissions unit shall be less than 8.3 lb/day. [District NSR Rule] Federally Enforceable Through Title V Permit
- This unit is subject to the Dehy 20 Vapor Recovery, Inspection, and Tank Cleaning Conditions on Permit S-1548-148. Deviations from a standard condition shall be reported under the applicable condition in S-1548-148. [District Rule 2520] Federally Enforceable Through Title V Permit

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

Facility Name: AERA ENERGY LLC

LIGHT OIL WESTERN STATIONARY SOURCE, CA Location:

S-1548-486-8 : Sep 14 2021 3:46PM -- RINAL DIE

**PERMIT UNIT:** S-1548-487-9 **EXPIRATION DATE:** 05/31/2021

SECTION: NW20 TOWNSHIP: 28S RANGE: 21E

**EQUIPMENT DESCRIPTION:** 

500 BBL FIXED ROOF CRUDE OIL/PRODUCED WATER STORAGE TANK T-320A VENTED TO VAPOR CONTROL SYSTEM LISTED ON S-1548-148 (DEHY 20)

## PERMIT UNIT REQUIREMENTS

- Permittee shall maintain an accurate fugitive component count and resultant emissions calculated using emission factors from EPA Document 453/R-95-017, Protocol for Equipment Leak Emissions Estimates. [District NSR Rule] Federally Enforceable Through Title V Permit
- VOC emission rate from components in gas and light crude oil service associated with this emissions unit shall be less than 5.9 lb/day. [District NSR Rule] Federally Enforceable Through Title V Permit
- This unit is subject to the Dehy 20 Vapor Recovery, Inspection, and Tank Cleaning Conditions on Permit S-1548-148. Deviations from a standard condition shall be reported under the applicable condition in S-1548-148. [District Rule 2520] Federally Enforceable Through Title V Permit

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

Facility Name: AERA ENERGY LLC

LIGHT OIL WESTERN STATIONARY SOURCE, CA Location:

S-1548-487-9 : Sep 14 2021 3:46PM -- RINAL DIE

PERMIT UNIT: S-1548-488-9 EXPIRATION DATE: 05/31/2021

SECTION: NW20 TOWNSHIP: 28S RANGE: 21E

**EQUIPMENT DESCRIPTION:** 

500 BBL FIXED ROOF CRUDE OIL/PRODUCED WATER STORAGE TANK T-330A VENTED TO VAPOR CONTROL SYSTEM LISTED ON S-1548-148 (DEHY 20)

## PERMIT UNIT REQUIREMENTS

- 1. Permittee shall maintain an accurate fugitive component count and resultant emissions calculated using emission factors from EPA Document 453/R-95-017, Protocol for Equipment Leak Emissions Estimates. [District NSR Rule] Federally Enforceable Through Title V Permit
- 2. VOC emission rate from components in gas and light crude oil service associated with this emissions unit shall be less than 5.9 lb/day. [District NSR Rule] Federally Enforceable Through Title V Permit
- 3. This unit is subject to the Dehy 20 Vapor Recovery, Inspection, and Tank Cleaning Conditions on Permit S-1548-148. Deviations from a standard condition shall be reported under the applicable condition in S-1548-148. [District Rule 2520] Federally Enforceable Through Title V Permit

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

Facility Name: AERA ENERGY LLC

Location: LIGHT OIL WESTERN STATIONARY SOURCE,CA S-1548-488-9: Sep 14 2021 3:46PM -- RINAL DIR

**PERMIT UNIT:** S-1548-489-9 **EXPIRATION DATE:** 05/31/2021

SECTION: NW20 TOWNSHIP: 28S RANGE: 21E

**EQUIPMENT DESCRIPTION:** 

1,700 GALLON (84" DIA X 72" TALL) INDUCED GAS FLOTATION UNIT V-300A VENTED TO VAPOR CONTROL SYSTEM LISTED ON S-1548-148 (DEHY 20)

### PERMIT UNIT REQUIREMENTS

- Permittee shall maintain an accurate fugitive component count and resultant emissions calculated using emission factors from EPA Document -453/R-95-017, Protocol for Equipment Leak Emissions Estimates. [District NSR Rule] Federally Enforceable Through Title V Permit
- VOC emission rate from components in gas and light crude oil service associated with this emissions unit shall be less than 8.8 lb/day. [District NSR Rule] Federally Enforceable Through Title V Permit
- This unit is subject to the Dehy 20 Vapor Recovery, Inspection, and Tank Cleaning Conditions on Permit S-1548-148. Deviations from a standard condition shall be reported under the applicable condition in S-1548-148. [District Rule 2520] Federally Enforceable Through Title V Permit

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

Facility Name: AERA ENERGY LLC

LIGHT OIL WESTERN STATIONARY SOURCE, CA Location:

S-1548-489-9 : Sep 14 2021 3:46PM -- RINAL DIE

**EXPIRATION DATE:** 05/31/2021 **PERMIT UNIT:** S-1548-497-9

SECTION: NW20 TOWNSHIP: 28S RANGE: 21E

**EQUIPMENT DESCRIPTION:** 

1.300 BBL (12 FT DIAMETER BY 65 FT SHELL LENGTH) FREE WATER KNOCK OUT V-201G VENTED TO SHARED VAPOR CONTROL SYSTEM LISTED ON S-1548-148 (DEHY 20)

### PERMIT UNIT REQUIREMENTS

- Vessel is a pressure vessel as defined by District Rule 4623. [District Rule 4623] Federally Enforceable Through Title V Permit
- The vessel shall vent only to the vapor control system listed on permit S-1548-148, except during periods of vessel cleaning or maintenance. [District Rule 2201] Federally Enforceable Through Title V Permit
- The control valve on the common vapor-out line from the FWKO vessels shall be set at a sufficient pressure to prevent the backflow of tank vapors into the FWKO vessels. Components (valves, flanges, etc) downstream of this control valve are subject to the requirements of Rule 4623 and, therefore, any leak in excess of 10,000 ppmy detected from components downstream of the control valve shall be reported as a deviation. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
- VOC fugitives from components in gas service shall not exceed 20.1 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
- Permittee shall maintain accurate records of fugitive inspection component counts and calculated fugitive emissions using EPA Document -453/R-95-017, Protocol for Equipment Leak Emission Estimates Table 2-4 "Oil and Gas Production Operations Average Emission Factors" (November 1995). Permittee shall make records of component counts, emission factors, and calculations readily available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit
- This unit is subject to the Dehy 20 Vapor Recovery, Inspection, and Tank Cleaning Conditions on Permit S-1548-148. Deviations from a standard condition shall be reported under the applicable condition in S-1548-148. [District Rule 2520] Federally Enforceable Through Title V Permit

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

Facility Name: AERA ENERGY LLC

LIGHT OIL WESTERN STATIONARY SOURCE, CA Location:

EXPIRATION DATE: 05/31/2021 **PERMIT UNIT:** S-1548-498-8

SECTION: NW20 TOWNSHIP: 28S RANGE: 21E

**EQUIPMENT DESCRIPTION:** 

40.000 BBL FIXED-ROOF CRUDE OIL/PRODUCED WATER STORAGE TANK T-200A VENTED TO SHARED VAPOR CONTROL SYSTEM LISTED ON S-1548-148 (DEHY 20)

### PERMIT UNIT REQUIREMENTS

- When in service, the tank shall vent only to the vapor control system listed in S-1548-148, except during periods of vessel cleaning. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
- All components attached to this tank shall be identified and categorized according to the following equipment types: connectors, flanges, open-ended lines (sample connections, drains, bleed valves, etc.), pump seals, valves with visible actuators, and other (pressure relief devices, compressor seals, meters, etc.). Components shall be further identified and categorized according to the following types of service: gas/light liquid, light oil and heavy oil. [District Rule 2201] Federally Enforceable Through Title V Permit
- Flanges shall be monitored with a portable hydrocarbon detection instrument along the entire circumference of the flange-gasket interface. Threaded connections, tubing fittings, and other types of non-permanent joints shall be monitored along the entire circumference of joint interface. [District Rule 2201] Federally Enforceable Through Title V Permit
- All piping, valves and fittings shall be constructed and maintained in a leak-free (<10,000 ppmy, measured in accordance with EPA Method 21 by a portable hydrocarbon detection instrument that is calibrated with methane) condition except as provided below. [District Rule 4623 and 40 CFR 60.112b(a)(3)(i)] Federally Enforceable Through Title V Permit
- For leak detection and repair (LDAR) monitoring, a leak is defined as a reading in excess of 500 ppmv, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21. [District Rule 2201 and 40 CFR 60.112b(a)(3)(i)] Federally Enforceable Through Title V Permit
- Permittee shall maintain an accurate fugitive component count and resultant emissions calculated using emission factors from EPA Publication 453/R-95-017 Protocol for Equipment Leak Emission Estimates Table 2-4 Oil and Gas Production Operations Average Emission Factors (lb/hr/source). [District Rule 2201] Federally Enforceable Through Title V Permit
- VOC emission rate from components in gas and light oil crude service associated with this emission unit shall not exceed 9.2 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
- All piping, fittings, and valves directly affixed to the tank or associated with the tank vapor recovery system shall be inspected annually by the facility operator in accordance with EPA Method 21, with the instrument calibrated with methane, to ensure compliance with the provisions of this permit. [District Rule 4623 and 40 CFR 60.112b(a)(3)(i)] 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: AERA ENERGY LLC LIGHT OIL WESTERN STATIONARY SOURCE, CA Location:

S-1548-498-8 : Sep 14 2021 3:46PM -- RINALDIR

- For the purposes of company conducted inspections, if any of the tank components are found to be leaking (>500 ppmy, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21), operator shall immediately affix a tag and maintain records of gas leak detection readings, date/time leak was discovered, and date/time the component was repaired to a leak-free condition. [District Rule 4623 and 40 CFR 60.112b(a)(3)(i)] Federally Enforceable Through Title V Permit
- 10. Leaks measuring > 500 ppmv and <10,000 ppmv, or leaks measuring >10,000 ppmv from components within five feet of the tank that have been discovered by the operator and have been immediately tagged and repaired within the deadlines specified in the Emissions Minimization requirements, shall not constitute a violation of this permit. However, leaking components > 10,000 ppmv discovered during inspections by District staff that were not previously identified and/or tagged by the operator, and/or any leaks that were not repaired within the deadlines specified in the Emissions Minimization requirements, shall constitute a violation. [District Rule 4623] Federally Enforceable Through Title V Permit
- 11. Upon detection of any leaks >10,000 ppmy, measured in accordance with EPA Method 21 by a portable hydrocarbon detection instrument that is calibrated with methane, the operator shall: (a) Eliminate the leak within 8 hours after detection; or (b) If the leak can not be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices; (c) Eliminate the leak within 48 hours after minimization; and (d) In no event that the total time to eliminate the leak shall exceed 56 hours after detection. [District Rule 4623] Federally Enforceable Through Title V Permit
- 12. If a component type for a given tank is found to leak above the 10,000 ppmv during an annual inspection, then quarterly inspections of that component type on the tank or system shall be conducted for four consecutive quarters. After four successful quarterly inspections in which the component type is found to leak less than 10,000 ppmy, inspections interval may revert to annual. [District Rule 4623] Federally Enforceable Through Title V Permit
- 13. Operator shall maintain an inspection log containing the following (1) type of component leaking; (2) date of leak detection, and method of detection; (3) date and emission level of recheck after leak is repaired; (4) method used to minimize the leak to lowest possible level within 8 hours after leak detection. [District Rule 2520] Federally Enforceable Through Title V Permit
- 14. This unit is subject to the Dehy 20 Vapor Recovery and Tank Cleaning Conditions on Permit S-1548-148. Deviations from a standard condition shall be reported under the applicable condition in S-1548-148. [District Rule 2520] Federally Enforceable Through Title V Permit

LIGHT OIL WESTERN STATIONARY SOURCE, CA Location:

S-1548-498-8 : Sep 14 2021 3:46PM -- RINALDIR

**PERMIT UNIT:** S-1548-499-5 **EXPIRATION DATE: 05/31/2021** 

SECTION: NW 20 TOWNSHIP: 28S RANGE: 21E

**EQUIPMENT DESCRIPTION:** 

5.000 GALLON OIL/WATER TANK T-410 AND AUXILIARY EQUIPMENT INCLUDING TWO DECANTER CENTRIFUGES. ONE VERTICAL CENTRIFUGE, ONE AUGER, TWO OILWATER PUMPS AND FOUR ROLL-OFF BINS (DEHY 20)

### PERMIT UNIT REQUIREMENTS

- 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, 5.2] Federally Enforceable Through Title V Permit
- 2. The tank shall not store organic liquids with a true vapor pressure (TVP) greater than 4.65 psia. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
- Tank shall be operated at a constant level. [District Rule 2201] Federally Enforceable Through Title V Permit 3.
- 4. Emissions from the tank shall not exceed 1.1 lb VOC/day. [District Rule 2201] Federally Enforceable Through Title V Permit
- Only four roll-off bins shall be used at any given time. No onsite storage of more than four filled roll-off bins is allowed. [District Rule 2201] Federally Enforceable Through Title V Permit
- Daily VOC emissions from each roll-off bin shall not exceed 1.9 lb VOC/day. Only roll-bins with a surface area of less than 148.5 square feet shall be used to ensure compliance with the VOC emissions limit. [District Rule 2201] Federally Enforceable Through Title V Permit
- VOC emission rate from fugitive components in light crude oil service associated with this emissions unit shall not exceed 1.0 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
- This tank shall not be required to de-gas before commencing cleaning activities. All other applicable requirements shall be complied with before, during, and after tank cleaning activities. [District Rule 4623, 5.7.5.3] Federally Enforceable Through Title V Permit
- While performing vessel 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, 5.7.5.5.1] Federally Enforceable Through Title V Permit
- 10. 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, 5.7.5.5.2] Federally Enforceable Through Title V Permit
- 11. If the TVP of the organic liquid stored in this tank is greater than 1.5 psia, 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, 5.7.5.6] 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: AERA ENERGY LLC

LIGHT OIL WESTERN STATIONARY SOURCE, CA Location:

- 12. If the TVP of the organic liquid stored in this tank is greater than 1.5 psia, permittee shall only transport removed sludge in closed, liquid leak-free containers. [District Rule 4623, 5.7.5.6] Federally Enforceable Through Title V Permit
- 13. If the TVP of the organic liquid stored in this tank is greater than 1.5 psia, permittee 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, 5.7.5.6] Federally Enforceable Through Title V Permit
- 14. The following components can be excluded from the fugitive component count: 1) components handling produced fluids with an API gravity less than 30 degrees; 2) components in water/oil service (water content >50%); and 3) components handling fluid streams with a VOC content < 10%. [District Rule 2201] Federally Enforceable Through Title V Permit
- 15. True vapor pressure of tank contents and API gravity shall be measured at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored, according to the approved test methods listed in District Rule 4623. [District Rules 2201 and 4623, 6.2] Federally Enforceable Through Title V Permit
- 16. Permittee shall keep accurate records of true vapor pressure, storage temperature, API gravity, and types of liquids stored for a period of five years, and shall make such records readily available for District inspection upon request. [District Rules 2201 and 4623, 6.3] Federally Enforceable Through Title V Permit
- 17. Permittee shall maintain accurate component count for tank according to CAPCOA's "California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities," Table IV-2c (Feb 1999), Screening Value Range emission factors < 10,000 ppmv. Permittee shall update such records when new components are approved and installed. [District Rule 2201] Federally Enforceable Through Title V Permit
- 18. A leak is defined as a reading in excess of 500 ppmy, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21. [40 CFR 60.112b(a)(3)(i)] Federally Enforceable Through Title V Permit
- 19. All records shall be maintained and retained on-site for a period of at least 5 years and shall be made available for District inspection upon request. [District Rule 1070] Federally Enforceable Through Title V Permit

S-1548-499-5 : Sep 14 2021 3:46PM -- RINALDIR

PERMIT UNIT: S-1548-501-9 EXPIRATION DATE: 05/31/2021

SECTION: NW 20 TOWNSHIP: 28S RANGE: 21E

**EQUIPMENT DESCRIPTION:** 

55,000 GALLON (12 FT DIAMETER X 65 FT LENGTH) FREE WATER KNOCKOUT VESSEL V-201H WITH VAPOR CONTROL AS DESCRIBED IN S-1548-148 (DEHY 20)

### PERMIT UNIT REQUIREMENTS

- 1. Vessel is a pressure vessel as defined by District Rule 4623. [District Rule 4623] Federally Enforceable Through Title V Permit
- 2. The vessel shall vent only to the vapor control system listed on permit S-1548-148, except during periods of vessel cleaning or maintenance. [District Rule 2201] Federally Enforceable Through Title V Permit
- 3. The control valve on the common vapor-out line from the FWKO vessels shall be set at a sufficient pressure to prevent the backflow of tank vapors into the FWKO vessels. Components (valves, flanges, etc) downstream of this control valve are subject to the requirements of Rule 4623 and, therefore, any leak in excess of 10,000 ppmv detected from components downstream of the control valve shall be reported as a deviation. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
- 4. VOC fugitives from components in gas service shall not exceed 20.1 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
- 5. Permittee shall maintain accurate records of fugitive inspection component counts and calculated fugitive emissions using EPA Document -453/R-95-017, Protocol for Equipment Leak Emission Estimates Table 2-4 "Oil and Gas Production Operations Average Emission Factors" (November 1995). Permittee shall make records of component counts, emission factors, and calculations readily available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit
- 6. This unit is subject to the Dehy 20 Vapor Recovery, Inspection, and Tank Cleaning Conditions on Permit S-1548-148. Deviations from a standard condition shall be reported under the applicable condition in S-1548-148. [District Rule 2520] Federally Enforceable Through Title V Permit

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

Facility Name: AERA ENERGY LLC

Location: LIGHT OIL WESTERN STATIONARY SOURCE,CA S-1548-501-9: Sep 14 2021 3:46PM - RINALDIR

**PERMIT UNIT:** S-1548-503-5 **EXPIRATION DATE:** 05/31/2021

SECTION: NW 20 TOWNSHIP: 28S RANGE: 21E

**EQUIPMENT DESCRIPTION:** 

40,000 BBL FIXED-ROOF CLARIFIER TANK T-200B VENTED TO SHARED VAPOR CONTROL SYSTEM LISTED ON S-1548-148 (DEHY 20)

#### PERMIT UNIT REQUIREMENTS

- 1. All piping, valves and fittings shall be constructed and maintained in a leak-free (<10,000 ppmv, measured in accordance with EPA Method 21 by a portable hydrocarbon detection instrument that is calibrated with methane) condition except as provided below. [District Rule 4623 and 40 CFR 60.112b(a)(3)(i)] Federally Enforceable Through Title V Permit
- 2. For leak detection and repair (LDAR) monitoring, a leak is defined as a reading in excess of 500 ppmv, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21. [District Rule 4623 and 40 CFR 60.112b(a)(3)(i)] Federally Enforceable Through Title V Permit
- 3. Permittee shall maintain an accurate fugitive component count and resultant emissions calculated using emission factors from EPA Publication 453/R-95-017 Protocol for Equipment Leak Emission Estimates Table 2-4 Oil and Gas Production Operations Average Emission Factors (kg/hr/source). [District Rule 2201] Federally Enforceable Through Title V Permit
- 4. VOC emission rate from components in gas and light crude oil service associated with this emission unit shall be less than 9.2 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
- 5. All piping, fittings, and valves directly affixed to the tank or associated with the tank vapor recovery system shall be inspected annually by the facility operator in accordance with EPA Method 21, with the instrument calibrated with methane, to ensure compliance with the provisions of this permit. [District Rule 4623 and 40 CFR 60.112b(a)(3)(i)] Federally Enforceable Through Title V Permit
- 6. For the purposes of company conducted inspections, if any of the tank components are found to be leaking (>500 ppmv, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21), operator shall immediately affix a tag and maintain records of gas leak detection readings, date/time leak was discovered, and date/time the component was repaired to a leak-free condition. [District Rule 4623 and 40 CFR 60.112b(a)(3)(i)] Federally Enforceable Through Title V Permit
- 7. Leaks measuring > 500 ppmv and <10,000 ppmv, or leaks measuring >10,000 ppmv from components within five feet of the tank that have been discovered by the operator and have been immediately tagged and repaired within the deadlines specified in the Emissions Minimization requirements, shall not constitute a violation of this permit. However, leaking components > 10,000 ppmv discovered during inspections by District staff that were not previously identified and/or tagged by the operator, and/or any leaks that were not repaired within the deadlines specified in the Emissions Minimization requirements, shall constitute a violation. [District Rule 4623] 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: AERA ENERGY LLC

Location: LIGHT OIL WESTERN STATIONARY SOURCE,CA S-1548-503-5 : Sep 14 2021 3:46PM - RINALDIR

- Upon detection of any leaks >10,000 ppmy, measured in accordance with EPA Method 21 by a portable hydrocarbon detection instrument that is calibrated with methane, the operator shall: a. Eliminate the leak within 8 hours after detection; or b. If the leak can not be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices; c. Eliminate the leak within 48 hours after minimization; and d. In no event that the total time to eliminate the leak shall exceed 56 hours after detection. [District Rule 4623] Federally Enforceable Through Title V Permit
- If a component type for a given tank is found to leak above the 10,000 ppmv during an annual inspection, then quarterly inspections of that component type on the tank or system shall be conducted for four consecutive quarters. After four successful quarterly inspections in which the component type is found to leak less than 10,000 ppmy, inspections interval may revert to annual. [District Rule 4623] Federally Enforceable Through Title V Permit
- 10. Operator shall maintain an inspection log containing the following 1) type of component leaking; 2) date of leak detection, and method of detection; 3) date and emission level of recheck after leak is repaired; 4) method used to minimize the leak to lowest possible level within 8 hours after leak detection. [District Rule 2520] Federally Enforceable Through Title V Permit
- 11. This unit is subject to the Dehy 20 Vapor Recovery and Tank Cleaning Conditions on Permit S-1548-148. Deviations from a standard condition shall be reported under the applicable condition in S-1548-148. [District Rule 2520] Federally Enforceable Through Title V Permit

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EXPIRATION DATE: 05/31/2021 **PERMIT UNIT:** S-1548-504-5

SECTION: 20 TOWNSHIP: 28S RANGE: 21E

**EQUIPMENT DESCRIPTION:** 

14,000 GALLON (7.5 FT DIAMETER X 40 FT LENGTH) INDUCED STATIC FLOTATION CELL V-240F CONNECTED TO VAPOR CONTROL SYSTEM LISTED IN S-1548-148 (DEHY 20)

### PERMIT UNIT REQUIREMENTS

- The induced static flotation unit is a pressure vessel as defined by District Rule 4623, Section 3.20. [District Rule 4623] Federally Enforceable Through Title V Permit
- When in service, the vessel shall vent only to the vapor control system listed in S-1548-148, except during periods of vessel cleaning. [District Rule 2201] Federally Enforceable Through Title V Permit
- 3. VOC fugitive emissions from the vapor control components associated with this unit shall not exceed 13.3 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
- Permittee shall maintain accurate records of fugitive inspection component counts and calculated fugitive emissions using EPA Document -453/R-95-017, Protocol for Equipment Leak Emission Estimates Table 2-4 "Oil and Gas Production Operations Average Emission Factors" (November 1995). Permittee shall make records of component counts, emission factors, and calculations readily available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit
- This unit is subject to the Dehy 20 Vapor Recovery, Inspection, and Tank Cleaning Conditions on Permit S-1548-148. Deviations from a standard condition shall be reported under the applicable condition in S-1548-148. [District Rule 2520] Federally Enforceable Through Title V Permit

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

Facility Name: AERA ENERGY LLC

LIGHT OIL WESTERN STATIONARY SOURCE, CA Location:

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**EXPIRATION DATE:** 05/31/2021 **PERMIT UNIT:** S-1548-505-3

SECTION: NW20 TOWNSHIP: 28S RANGE: 21E

**EQUIPMENT DESCRIPTION:** 

5,000 BBL FIXED ROOF CRUDE OIL/PRODUCED WATER TANK (T-241) VENTED TO THE SHARED VAPOR CONTROL SYSTEM LISTED ON S-1548-148 (DEHY 20)

### PERMIT UNIT REQUIREMENTS

- API gravity of the oil stored in this tank shall be less than 30 degrees API. [District Rule 2201] Federally Enforceable Through Title V Permit
- VOC fugitive emissions from the vapor control components associated with this unit shall not exceed 6.7 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
- Permittee shall maintain accurate records of fugitive inspection component counts and calculated fugitive emissions using EPA Document -453/R-95-017, Protocol for Equipment Leak Emission Estimates Table 2-4 "Oil and Gas Production Operations Average Emission Factors" (November 1995). Permittee shall make records of component counts, emission factors, and calculations readily available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit
- This unit is subject to the Dehy 20 Vapor Recovery, Inspection, and Tank Cleaning Conditions on Permit S-1548-148. Deviations from a standard condition shall be reported under the applicable condition in S-1548-148. [District Rule 2520] Federally Enforceable Through Title V Permit

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

Facility Name: AERA ENERGY LLC

LIGHT OIL WESTERN STATIONARY SOURCE, CA Location:

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EXPIRATION DATE: 05/31/2021 **PERMIT UNIT:** S-1548-554-1

SECTION: NE 29 TOWNSHIP: 28S RANGE: 21E

**EQUIPMENT DESCRIPTION:** 

100 MMBTU/HR NATURAL/PRODUCED GAS-FIRED STEAM GENERATOR WITH NORTH AMERICAN MAGNA-FLAME GLE ULTRA LOW NOX BURNER (2972 SETTING)

### PERMIT UNIT REQUIREMENTS

- The refractory curing period is the time required to gradually increase the firing rate and internal temperature of a unit to thermally temper and set the optimal properties of new refractory material that has been installed as part of a unit's initial commissioning or has been replaced as part of a subsequent maintenance or repair procedure. The refractory curing period following the replacement of material as part of a maintenance or repair procedure shall not exceed 30 hours total of actual burner operation per occurrence. [District Rule 2201] Federally Enforceable Through Title V Permit
- During the initial commissioning period and any refractory curing period, operator shall limit emissions to the extent possible by optimizing the performance of the low NOx burner and flue gas recirculation system as can be accommodated by individual initial commissioning and refractory curing activities, by following good work practices and fuel conserving measures and by completing all work in an expeditious manner. Operator shall keep a record of the specific activities undertaken as part of the initial commissioning period and all refractory curing periods and the duration of each activity and shall make the records available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit
- This unit may only operate in the NE \(^1\)4 of Section 29, Township 28S, and Range 21E. [District Rule 4102] 3.
- 4. The exhaust stack shall vent vertically upward. The vertical exhaust flow shall not be impeded by a rain cap, roof overhang, or any other obstruction. [District Rule 4102]
- 5. The unit shall only be fired on natural gas with sulfur content not to exceed 0.75 gr-S/100 scf. [District Rules 2201, 4320 and 4801] Federally Enforceable Through Title V Permit
- Except for periods of startup and shutdown, emissions shall not exceed any of the following limits: NOx: 7 ppmvd @ 3% O2 or 0.008 lb-NOx/MMBtu; PM10: 0.005 lb-PM10/MMBtu; CO: 25 ppmvd @ 3% O2 or 0.0185 lb-CO/MMBtu or VOC: 0.003 lb-VOC/MMBtu. [District Rules 2201, 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
- Emission rates during startup, shutdown and refractory curing shall not exceed: particulate matter 10 pounds per hour, or 0.1 grains/dscf calculated to 12% CO2; sulfur - 200 pounds of SO2 per hour, or 2000 ppmv as SO2; NO2 -140 pounds per hour or 0.14 pounds per MMBtu. [District Rules 4101, 4102, 4201, 4301, 4405 and 4801] Federally Enforceable Through Title V Permit
- Maximum emissions from the steam generator, including start-up, shutdown and refractory curing periods shall not exceed any of the following limits: 7,008 lb-NOx/yr, 1,840 lb-SOx/yr, 4,380 lb-PM10/yr, 16,206 lb-CO/yr, and 2,628 lb-VOC/vr. [District Rule 2201] Federally Enforceable Through Title V Permit

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

Facility Name: AERA ENERGY LLC LIGHT OIL WESTERN STATIONARY SOURCE, CA S-1548-554-1 : Sep 14 2021 3:46PM -- RINAL DIR

- 9. 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
- 10. 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
- 11. Duration of refractory curing shall not exceed 30 hours per each occurrence. Permittee shall keep accurate records of refractory curing duration and make records readily available to the District upon request. [District Rule 2080] Federally Enforceable Through Title V Permit
- 12. Permittee shall maintain records of duration of each start-up and shutdown, and refractory curing, for a period of five years and make such records readily available for District inspection upon request. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
- 13. Source testing to measure natural gas-combustion NOx and CO emissions from this unit shall be conducted at least once every twelve (12) months (no more than 30 days before or after the required annual source test date). After demonstrating compliance on two (2) consecutive annual source tests, the unit shall be tested not less than once every thirty-six (36) months (no more than 30 days before or after the required 36-month source test date). 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 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
- 14. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
- 15. 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
- 16. The following test methods shall be used: NOX (ppmv) EPA Method 7E or ARB Method 100, NOx (lb/MMBtu) EPA Method 19; CO (ppmv) EPA Method 10 or ARB Method 100; Stack gas oxygen (O2) EPA Method 3 or 3A or ARB Method 100; stack gas velocities EPA Method 2; Stack gas moisture content EPA Method 4; SOx EPA Method 6C or 8 or ARB Method 100; fuel gas sulfur as H2S content EPA Method 11 or 15; and fuel hhv (MMBtu) ASTM D 1826 or D 1945 in conjunction with ASTM D 3588. [District Rules 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. 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
- 19. The permittee shall monitor and record the stack concentration of NOX, CO, and O2 at least once every month (in which a source test is not performed) using a portable analyzer 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

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- 20. 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 performing the notification and testing required by this condition. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
- 21. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the permit-to-operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
- 22. The permittee shall maintain records of: (1) the date and time of NOX, CO, and O2 measurements, (2) the O2 concentration in percent by volume 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
- 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. Unless otherwise 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. For the purposes of permittee-performed alternate monitoring, emissions measurements may be performed at any time after the unit reaches conditions representative of normal operation. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
- 24. PUC quality natural gas is any gaseous fuel where the sulfur content is no more than one-fourth (0.25) grain of hydrogen sulfide per one hundred (100) standard cubic feet, no more than five (5) grains of total sulfur per one hundred (100) standard cubic feet, and at least 80% methane by volume. [District Rule 4320] Federally Enforceable Through Title V Permit
- 25. If the steam generator is not fired on PUC-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
- 26. When complying with sulfur emission limits by fuel analysis or by a combination of source testing and fuel analysis, permittee shall demonstrate compliance at least annually. [District Rule 4320] Federally Enforceable Through Title V Permit
- 27. If the unit is fired on PUC-regulated natural gas, valid purchase contracts, supplier certifications, tariff sheets, or transportation contracts 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
- 28. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070, 4305, 4306 and 4320] Federally Enforceable Through Title V Permit

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- 29. Steam generator shall be equipped with variable frequency drive electrical motors driving the blower and water pump and a convection section with at least 235 square feet of heat transfer surface area per MMBtu/hr of maximum rated heat input (verified by manufacturer) or a manufacturer's overall thermal efficiency rating of 88%. [District Rule Public Resources Code 21000-21177: California Environmental Quality Act]
- 30. Permittee shall comply with all California Department of Fish and Wildlife mitigation measures identified in the Biological Resources discussion in Mitigated Negative Declaration No. 20110323 to ensure the protection of potential biological species impacts. Permittee shall retain records on-site demonstrating compliance with these mitigation measures. [Public Resources Code 21000-21177: California Environmental Quality Act]
- 31. Permittee shall comply with all Native American Heritage Commission (NAHC) mitigation measures identified in the Cultural Resources discussion in Mitigated Negative Declaration No. 20110323 to ensure the protection of potential cultural, archaeological, and paleontological impacts. Permittee shall retain records on-site demonstrating compliance with these mitigation measures. [Public Resources Code 21000-21177: California Environmental Quality Act]
- 32. Permittee shall comply with all Department of Toxic Substances Control (DTSC) mitigation measures identified in the Hazards and Hazardous Material discussion in Mitigated Negative Declaration No. 20110323 to ensure the protection of the public and environment from hazards and hazardous materials. Permittee shall retain records on-site demonstrating compliance with these mitigation measures. [Public Resources Code 21000-21177: California Environmental Quality Act]
- 33. Permittee shall comply with all Division of Oil, Gas, and Geothermal Resources (DOGGR) mitigation measures identified in the Hazards and Hazardous Material discussion in Mitigated Negative Declaration No. 20110323 to ensure the protection of the public from hazards and hazardous materials. Permittee shall retain records on-site demonstrating compliance with these mitigation measures. [Public Resources Code 21000-21177: California Environmental Quality Act]
- 34. Permittee shall comply with all Division of Oil, Gas, and Geothermal Resources (DOGGR) mitigation measures identified in the Hydrology and Water Quality discussion in Mitigated Negative Declaration No. 20110323 to ensure the protection of potential water quality impacts. Permittee shall retain records on-site demonstrating compliance with these mitigation measures. [Public Resources Code 21000-21177: California Environmental Quality Act]

**EXPIRATION DATE: 05/31/2021 PERMIT UNIT:** S-1548-621-1

**SECTION**: 20 **TOWNSHIP**: 28S RANGE: 21E

**EQUIPMENT DESCRIPTION:** 

6500 GALLON CHEMICAL STORAGE TANK WITH P/V VALVE AND LIQUID LOADOUT OPERATION (ALSO

PERMITTED AS S-1547-1337)

### PERMIT UNIT REQUIREMENTS

- Tank shall be equipped with pressure/vacuum valve set to within 10 percent of the maximum working pressure of the tank. [District Rules 2201 and 4624] Federally Enforceable Through Title V Permit
- Tank shall be in a leak-free condition. A Leak-Free condition is defined as a condition without a gas leak or 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 reading in excess of 10,000 ppmv above background is a violation of this permit and Rule 4623 (amended May 19, 2005). A liquid leak is defined as the dripping of organic liquid at a rate of more than 3 drops per minutes. [District Rules 2201] and 4623] Federally Enforceable Through Title V Permit
- Tank throughput shall not exceed 6,500 gallons per day based on a monthly average. [District Rule 2201] Federally Enforceable Through Title V Permit
- Total volume of liquid loaded out shall not exceed 2,500 gallon per day. [District Rule 2201] Federally Enforceable Through Title V Permit
- Tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.6 psia under all storage conditions. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
- Liquids loaded out shall have a true vapor pressure (TVP) of less than 0.6 psia [District Rule 2201] Federally Enforceable Through Title V Permit
- Total number of disconnects from unloading and load-out operations shall not exceed 8 per day. [District Rule 2201] Federally Enforceable Through Title V Permit
- VOC emissions from liquid loadout and excess liquid drainage shall not exceed 2.0 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
- MSDS or chemical laboratory results documenting typ of liquid stored and loaded out shall be maintained on-site and made available for District inspection upon request. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
- 10. Permittee shall maintain monthly records of average daily throughput and shall keep accurate records of each organic liquid stored in the tank, including its storage temperature and TVP. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
- 11. Permittee shall keep accurate daily records of TVP, types of liquids loaded out, liquid loadout temperature, gallons per day of liquid loaded out, and number of disconnects for loading and unloading. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit

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

Facility Name: AERA ENERGY LLC Location:

12. Records shall be maintained on site for a period of at least five years and shall be made available for District inspection upon request. [District Rules 1070, 4623 and 4624] Federally Enforceable Through Title V Permit

**PERMIT UNIT:** S-1548-622-1 EXPIRATION DATE: 05/31/2021

SECTION: NW 20 TOWNSHIP: 28S RANGE: 21E

**EQUIPMENT DESCRIPTION:** 

6.500 GALLON OILFIELD CHEMICAL STORAGE TANK #3 - DEHY 20 (ALSO PERMITTED AS S-1547-1338-0)

#### PERMIT UNIT REQUIREMENTS

- All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize 1. emissions of air contaminants into the atmosphere. [District Rule 2201]
- 2. Tank shall be equipped with an operational temperature indicator. [District Rule 2201]
- 3. The tank shall be equipped with a fixed roof with no holes or openings. [District Rule 2201]
- 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 leak-free condition except when the operating pressure exceeds the valve's set pressure. [District Rule 4623]
- This tank shall be in a leak-free condition. 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 ppmy, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21. A reading in excess of 10,000 ppmv above background is a violation of this permit and Rule 4623. [District Rule 4623]
- All piping, fittings, and valves on this tank shall be inspected annually by the facility operator in accordance with EPA Method 21, with the instrument calibrated with methane, to ensure compliance with the leaking provisions of this permit. [District Rule 4623]
- 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]
- This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) not to exceed 2.7 psia under all storage conditions. [District Rules 2201 and 4623]
- Tank throughput shall not exceed 234,000 gallon per year. [District Rule 2201]
- 10. Tank throughput shall not exceed 6,500 gallon per day. [District Rule 2201]
- 11. VOC emission rate from the tank shall not exceed 2.7 lb/day [District Rule 2201]
- 12. True vapor testing (TVP) testing to demonstrate compliance with Rule 4623 shall be conducted within 60 days of startup, and once every 24 months during summer (July - September) thereafter. [District Rules 1081 and 4623]
- 13. The TVP testing shall be conducted at actual storage temperature of the organic liquid in the tank. [District Rule 4623, 6.2.1.21

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

Facility Name: AERA ENERGY LLC

LIGHT OIL WESTERN STATIONARY SOURCE, CA Location:

- 14. The permit holder shall conduct true vapor pressure (TVP) testing of the organic liquid stored in this tank at least once every 24 months during summer (July September), and/or whenever there is a change in the source or type of organic liquid stored in this tank. [District Rule 4623, 6.2.2]
- 15. The true vapor pressure (TVP) shall be measured using Reid vapor pressure ASTM Method D323, and converting the RVP to TVP at the tank's maximum organic liquid storage temperature. The conversion of RVP to TVP shall be done in accordance with the oil and gas section of the "California Air Resources Board's (ARB) Technical Guidance Document to the Criteria and Guidelines Regulations for AB 2588," dated August 1989. [District Rule 4623, 6.4.3]
- 16. In lieu of testing each uncontrolled fixed roof tank, the permit holder may conduct a TVP testing of the organic liquid stored in a representative tank provided the following requirements are met: (1) the selection of representative, uncontrolled fixed roof tanks shall be submitted in writing to the APCO, and written approval is granted by the APCO prior to conducting the test; (2) one uncontrolled fixed roof tank represents some or all of the tanks in a tank battery (as defined in Rule 4623, Section 3.31, Amended 5/19/05); (3) the TVP and storage temperature of the stored organic liquid of the representative tank to be tested are the same or higher than those of the tanks it is to represent; and (4) the stored organic liquid in each of the represented tanks is the same and came from the same source. [District Rule 4623, 6.2.1.1]
- 17. An operator shall submit the records of TVP testing conducted in accordance with the testing requirements of Rule 4623, 6.2 to the APCO within 45 days after the date of testing. The record shall include the tank identification number, PTO number, type of stored organic liquid, TVP of the stored organic liquid, test methods used, and a copy of the test results. [District Rule 4623, 6.3.6]
- 18. Permittee shall maintain accurate records of tank throughput, true vapor pressure and temperature of liquid in the tank, inspection log and such records shall be retained on-site for a minimum of five (5) years and made available for APCO upon request, except for certain records that need to be submitted as specified in this permit. [District Rules 2201 and 4623]

**EXPIRATION DATE: 05/31/2021 PERMIT UNIT:** S-1548-627-2

#### **EQUIPMENT DESCRIPTION:**

1.000 HP ELECTRIC MOTOR DRIVEN FUEL GAS COMPRESSOR WITH A FUEL GAS & A SURGE DRUM AND ASSOCIATED PIPING (COMPRESSOR STATION #49)

### PERMIT UNIT REQUIREMENTS

- While dormant, the electrical line shall be physically disconnected from the unit. [District Rule 2080]
- 2. Permittee shall submit written notification to the District upon designating the unit as dormant or active. [District Rule 2080]
- While dormant, normal source testing shall not be required. [District Rule 2080] 3.
- Upon recommencing operation of this unit, normal source testing shall resume. [District Rule 2080] 4.
- Any fugitive emission inspections required by this permit shall be performed within 60 days of recommencing operation of this unit, regardless of whether the unit remains active or is again designated as dormant. [District Rule 20801
- Records of all dates and times that this unit is designated as dormant or active, and copies of all corresponding notices to the District, shall be maintained, retained for a period of at least five years, and made available for District inspection upon request. [District Rule 1070]
- 7. VOC emissions shall not exceed 7.1 pounds per day. [District Rule 2201] Federally Enforceable Through Title V Permit
- Permittee shall demonstrate and maintain records of compliance with daily VOC emission limit on annual basis by listing equipment type, number of components, appropriate emission factors from Table 2-4 of the U.S. EPA document "Protocol for Equipment Leak Emission Estimates (EPA-453/R-95-017)" or other District approved emission factors, and the total daily emissions. [District Rule 2201] Federally Enforceable Through Title V Permit
- All records shall be maintained and retained on-site for a period of at least 5 years and shall be made available for District inspection upon request. [District Rule 1070]

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

Facility Name: AERA ENERGY LLC

LIGHT OIL WESTERN STATIONARY SOURCE, CA Location:

S-1548-627-2 : Sep 14 2021 3:46PM -- RINAL DIE

## San Joaquin Valley Air Pollution Control District

**EXPIRATION DATE:** 05/31/2021 **PERMIT UNIT:** S-1548-628-4

**SECTION**: 20 **TOWNSHIP**: 28S RANGE: 21E

**EQUIPMENT DESCRIPTION:** 

CRUDE OIL TRUCK BOTTOM LOADING RACK WITH DRY BREAK COUPLINGS CONNECTED TO THE VAPOR CONTROL SYSTEM LISTED ON PERMIT S-1548-148-13

## PERMIT UNIT REQUIREMENTS

- While dormant, the unit shall be rendered inoperable and normal leak inspections shall not be required. [District Rule 2080] Federally Enforceable Through Title V Permit
- Permittee shall submit written notification to the District upon designating the unit as dormant or active. [District Rule 2080] Federally Enforceable Through Title V Permit
- Any leak inspections required by this permit shall be performed within 60 days of recommencing operation of this unit, regardless of whether the unit remains active or is again designated as dormant. [District Rule 2080] Federally Enforceable Through Title V Permit
- No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
- Pressure in the delivery tank being loaded shall not exceed 18 inches water column pressure [District Rule 4624] 5. Federally Enforceable Through Title V Permit
- The loading rack shall be designed, installed, maintained and operated such that there are no leaks and no excess organic liquid drainage at disconnections. [District Rule 2201 and 4624] Federally Enforceable Through Title V Permit
- Emissions from loading rack disconnects shall not exceed 3.0 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
- Total number of disconnects during loading operations shall not exceed 150 per day. [District Rule 2201] Federally Enforceable Through Title V Permit
- Drainage from loading rack disconnects shall not exceed 10 ml per disconnect. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
- 10. Emissions from the loading rack shall not exceed 0.08 lb per 1,000 gallons of organic liquid transferred. [District Rule 4624] Federally Enforceable Through Title V Permit
- 11. Fugitive component emissions shall not exceed 0.1 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
- 12. Unless dormant, the loading rack vapor collection system shall be inspected during loading at least once every calendar quarter using a portable hydrocarbon analyzer in accordance with EPA Method 21. [District Rule 4624] Federally Enforceable Through Title V Permit
- 13. An operator may apply for a written approval from the APCO to change the inspection frequency from quarterly to annually provided no leaks were found during five consecutive quarterly inspections. Upon identification of any leak during an annual inspection, the inspection frequency shall revert back to quarterly, and the operator shall contact the APCO in writing within 14 days. [District Rule 4624] 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: AERA ENERGY LLC LIGHT OIL WESTERN STATIONARY SOURCE, CA Location: S-1548-628-4 : Sep 14 2021 3:46PM -- RINAL DIE

- 14. A leak in the loading rack's vapor collection system is the detection of any gaseous or vapor emissions with a concentration of VOC greater than 1,000 ppmv above background as methane when measured in accordance with EPA Method 21. [District Rule4624] Federally Enforceable Through Title V Permit
- 15. All loading rack equipment that is found leaking shall be repaired or replaced within 72 hours. If the leaking component cannot be repaired or replaced within 72 hours, the component shall be taken out of service until such time the component is repaired or replaced. The repaired or replacement equipment shall be reinspected the first time the equipment is in operation after the repair or replacement. [District Rules 2201 and 4624] Federally Enforceable Through Title V Permit
- 16. Permittee shall maintain accurate component count for tank according to CAPCOA's "California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities," Table IV-2c (Feb 1999), Screening Value Range emission factors < 10,000 ppmv. Permittee shall update such records when new components are approved and installed [District Rule 2201] Federally Enforceable Through Title V Permit
- 17. Permittee shall maintain 1) all dates and times that this unit is designated as dormant or active, and copies of all corresponding notices to the District 2) inspections for loading rack leaks, including the date and time of the inspection and the identification of every leaking component and 3) daily records of the number of loading rack disconnects. Records shall be retained on the premises for a period of at least five years and made available for District inspection upon request. [District Rules 1070, 2201 and 4624] Federally Enforceable Through Title V Permit

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-1548-632-0 **EXPIRATION DATE:** 05/31/2021

SECTION: NE12 TOWNSHIP: 28S RANGE: 20E

**EQUIPMENT DESCRIPTION:** 

140 MMBTU/HR AIR-ASSISTED PRODUCED GAS FLARE SERVING VAPOR CONTROL SYSTEM LISTED ON S-510-27

### PERMIT UNIT REQUIREMENTS

- 1. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
- 2. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201]
- 3. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101]
- 4. No more than 3,181,818 scf/day nor 66,287,787 scf/yr of gas shall be combusted in flare. [District Rule 2201]
- 5. Emission rates from the flare shall not exceed any of the following limits: 0.068 lb-NOx/MMBtu (NOx as NO2); 0.057 lb-SOx/MMBtu; 0.008 lb-PM10/MMBtu; 0.37 lb-CO/MMBtu; and 0.063 lb-VOC/MMBtu (VOC as methane). [District Rule 2201]
- 6. The flame shall be present at all times when combustible gases are vented through the flares. [District Rule 2201]
- 7. Flare 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 2201]
- 8. The flares shall be operated according to the manufacturer's specifications, a copy of which shall be maintained and made available for District inspection upon request. [District Rule 2201]
- 9. The sulfur content of produced gas combusted in the flare shall be monitored and recorded at least once every calendar quarter. Monitoring of the sulfur content of the produced gas shall not be required if the flares do not operate during that period. Records of the results of monitoring of the produced gas sulfur content shall be maintained. [District Rule 2201]
- 10. Monitoring of the produced gas sulfur content shall be performed using Gas Processors Association Standard 2377; ASTM Method D1072, D3246, D4084, D4810, or D5504; EPA Method 11 or 15; ARB Method 11; a continuous fuel gas monitor that meets the requirements specified in SCAQMD Rule 431.1; or an alternative method approved by the District. [District Rule 2201]
- 11. The net heating value of the gas combusted by the flare shall be calculated pursuant to 40 CFR 60.18(f)(3) or by using EPA Method 18, ASTMD1945, D1946, and ASTM D2382 if published values are not available or cannot be calculated. [District Rule 2201]
- 12. To maintain exemption from District Rule 4311, the facility shall maintain records of annual gas combusted, and/or any other information necessary to demonstrate that the Stationary Source Potential to Emit for all processes at the facility is less than 10.0 tons/year of VOC and less than 10.0 tons/year of NOx. [District Rule 4311]
- 13. The permittee shall maintain records of the total quantity of produced gas (in scf) combusted in the flare each day. [District Rule 2201]

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

Facility Name: AERA ENERGY LLC Location: LIGHT OIL WESTERN STATIONARY SOURCE,CA \$-1549-632-0: Sep 14 2021 3-46PM -- RINALDIR

- 14. All records shall be maintained and retained for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070, 2201, and 4311]
- 15. Facilities S-510 and S-1548 are part of the same stationary source. [District Rule 2201]

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-1548-633-0 **EXPIRATION DATE:** 05/31/2021

SECTION: NE12 TOWNSHIP: 28S RANGE: 20E

**EQUIPMENT DESCRIPTION:** 

470 BBL OR LESS BAKER STYLE STORAGE TANK WITH PV RELIEF VALVE (DOW CHANSLOR LEASE)

### PERMIT UNIT REQUIREMENTS

- 1. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
- 2. The tank shall be equipped with a fixed roof with no holes or openings. [District Rule 2201]
- 3. This tank shall only store produced fluid from the free water knockout (FWKO) vessel connected to it and only during relief events when the FWKO has to vent to this tank to relieve pressure. [District Rule 2201]
- 4. The maximum fluid throughput during a relief event shall not exceed 470 barrels per day. [District Rule 2201]
- 5. There shall be no more than 18 relief events associated with this tank per calendar year. [District Rule 2201]
- 6. This tank shall be completely drained (i.e. no standing liquid) within 48 hours of the start of each relief event. [District Rule 2201]
- 7. 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 leak-free condition except when the operating pressure exceeds the valve's set pressure. [District Rules 2201 and 4623]
- 8. This tank shall only store, place, or hold organic liquid with a Reid vapor pressure (RVP) no greater than 3.5 psia under all storage conditions. [District Rule 2201]
- 9. This tank shall be in a leak-free condition. 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. A reading in excess of 10,000 ppmv above background is a violation of this permit. [District Rule 4623]
- 10. VOC emission rate from the tank shall not exceed 9.0 lb/day. [District Rule 2201]
- 11. VOC emission rate from tank shall not exceed 182 lb/yr. [District Rule 2201]
- 12. Permittee shall maintain monthly records of date and time of each relief events, fluid throughput for each event, and date and time the tank was completely drained. [District Rules 2201 and 4623]
- 13. Permittee shall keep accurate records of each organic liquid stored in the tank, including its storage temperature, TVP, and API gravity. [District Rules 2201 and 4623]
- 14. 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 Rules 2201 and 4623]
- 15. Facilities S-510 and S-1548 are part of the same stationary source. [District Rule 2201]

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

Facility Name: AERA ENERGY LLC

Location: LIGHT OIL WESTERN STATIONARY SOURCE,CA S-1548-633-0 : Sep 14 2021 3:46PM - RINALDIR

## ATTACHMENT C

**Detailed Facility List** 

AERA ENERGY LLC

LIGHT OIL WESTERN STATIONARY SOURCE

## Detailed Facility Report For Facility=1548

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STATUS:

4:21 pm Sorted by Facility Name and Permit Number S 1548 FAC# 05/31/2021 TYPE: EXPIRE ON: TitleV

TOXIC ID: 50230

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AREA:

CA CA	OTATIONALIT COCIOE		TELE	EPHONE:	6616655279		INSP. DATE: 10/21
PERMIT NUMBER	FEE DESCRIPTION	FEE RULE	QTY	FEE AMOUNT	FEE TOTAL	PERMIT STATUS	EQUIPMENT DESCRIPTION
S-1548-14-8	4,200 GALLONS	3020-05 A	1	91.00	91.00	D	4,200 GALLON SKIM OIL TANK #T-2 CONNECTED TO VAPOR RECOVERY SYSTEM SHARED WITH S-1548-46, 47, 48, 52, 53 (DEHY 26)
S-1548-15-1	10,500 GALLONS	3020-05 B	1	113.00	113.00	D	19,999 GALLONS LIGHT OIL TEST STATION CANCEL PER CO REQUEST - 6-16-93 - RS
S-1548-16-0	10,500 GALLONS	3020-05 B	1	113.00	113.00	D	19,999 GALLONS LIGHT OIL TEST STATION CANCEL PER CO REQUEST 6-16-93 - RS
S-1548-17-2	MISCELLANEOUS	3020-06	1	128.00	128.00	D	LIGHT OIL TEST STATION #3375 INCLUDING 2 PRESSURE VESSELS (10'X 3' DIA AND 16'X 6' DIA) AT LOTS SITE AND 1 CONDENSATE PRESSURE VESSEL (4'X 2' DIA) AT COMPRESSOR STATION #44. *** CANCELLED, EQUIPMENT CONSOLIDATED WITH S-1548-59-3, DMR, 3/17/97.***
S-1548-18-0	10,500 GALLONS	3020-05 B	1	113.00	113.00	D	19,999 GALLONS LIGHT OIL TEST STATION CANCEL PER CO REQUEST - 06/16/93 - RS
S-1548-19-0	25+ HP	3020-01 B	1	143.00	143.00	D	LIGHT OIL TEST STATION #1817 WITH VAPOR CONTROL SYSTEM *** CANCELLED, TANK REMOVED, FUGITIVE COMPONENTS CONSOLIDATED WITH S-1548-59-3, DMR, 3/17/97. ***
S-1548-20-2	MISC	3020-06	1	128.00	128.00	D	LIGHT OIL TEST STATION #2987 INCLUDING 2 PRESSURE VESSELS (16'X 2' DIA AND 16'X 3' DIA) AT LOTS SITE AND 1 CONDENSATE PRESSURE VESSEL (4'X 2' DIA) AT COMPRESSOR STATION #50 (NW 1/4 SEC 33, T28S, R21E). *** COMBINED WITH S-1548-59-3, DMR, 3/17/97 ***
S-1548-21-2	MISC	3020-06	1	128.00	128.00	D	LIGHT OIL TEST STATION #2965 INCLUDING 2 PRESSURE VESSELS (16'X 2' DIA AND 16'X 3' DIA) AT LOTS SITE AND 1 CONDENSATE PRESSURE VESSEL (4'X 2' DIA) AT COMPRESSOR STATION #45. *** CANCELLED, FUGITIVE COMONENTS COMBINED WITH S-1548-59-3, DMR, 3/17/97**
S-1548-22-0	25+ HP	3020-01 B	1	143.00	143.00	D	LIGHT OIL TEST STATION #2932 WITH VAPOR CONTROL SYSTEM *** CANCELLED, COMBINED WITH S-1548-59-3, DMR, 3/17/97. ***
S-1548-23-0	30+ HP	3020-01 B	1	143.00	143.00	D	LIGHT OIL TEST STATION #3362 WITH VAPOR CONTROL SYSTEM *** CANCELLED, COMBINED WITH S-1548-59-3, DMR, 3/17/97. ***
S-1548-24-0	10,500 GALLONS	3020-05 B	1	113.00	113.00	D	19,999 GALLONS LIGHT OIL TEST STATION CANCEL PER CO REQUEST 6-16-93 - RS
S-1548-25-2	MISC	3020-06	1	128.00	128.00	D	LIGHT OIL TEST STATION #3435 INCLUDING 2 PRESSURE VESSELS (10'X 3' DIA AND 16'X 6' DIA) AT LOTS SITE AND 1 CONDENSATE PRESSURE VESSEL (4'X 2' DIA) AT COMPRESSOR STATION #46.  ***CANCELLED, FUGITIVE COMPONENTS COMBINED WITH S-1548-59-3, DMR, 3/17/97.*
S-1548-26-0	30+ HP	3020-01 B	1	143.00	143.00	D	LIGHT OIL TEST STATION #3331 WITH VAPOR CONTROL SYSTEM *** CANCELED, COMBINED WITH S-1548-59-3, DMR, 3/17/97. ***

PERMIT NUMBER	FEE DESCRIPTION	FEE RULE	QTY	FEE AMOUNT	FEE TOTAL	PERMIT STATUS	EQUIPMENT DESCRIPTION
S-1548-27-0	25+ HP	3020-01 B	1	143.00	143.00	D	LIGHT OIL TEST STATION #2816 WITH VAPOR CONTROL SYSTEM *** CANCELED, COMBINED WITH S-1548-59-3, DMR, 3/17/97. ***
S-1548-28-2	MISC	3020-06	1	128.00	128.00	D	LIGHT OIL TEST STATION #2944 INCLUDING 3 PRESSURE VESSELS (16'X 3' DIA, 16'X 6' DIA AND 16'X 2' DIA) AT LOTS SITE AND 1 CONDENSATE PRESSURE VESSEL (4'X 2' DIA) AT COMPRESSOR STATION #42. ** CANCELLED, COMBINED WITH S-1548-59-3, DMR, 3/17/97. **
S-1548-29-2	MISC	3020-06	1	128.00	128.00	D	LIGHT OIL TEST STATION #2018 INCLUDING 3 PRESSURE VESSELS (16'X 3' DIA, 16'X 6' DIA AND 16'X 2' DIA) AT LOTS SITE AND 1 CONDENSATE PRESSURE VESSEL (4'X 2' DIA) AT COMPRESSOR STATION #48. *** CANCELED, COMBINED WITH S-1548-59-3, DMR, 3/17/97. **
S-1548-30-0	30+ HP	3020-01 B	1	143.00	143.00	D	LIGHT OIL TEST STATION #3447 WITH VAPOR CONTROL SYSTEM *** CANCELED, COMBINED WITH S-1548-59-3, DMR, 3/17/97. ***
S-1548-31-2	MISC	3020-06	1	128.00	128.00	D	LIGHT OIL TEST STATION #3530 INCLUDING 3 PRESSURE VESSELS (16'X 2' DIA, 16'X 6' DIA AND 16'X 2' DIA) AT LOTS SITE AND 1 CONDENSATE PRESSURE VESSEL (4'X 2' DIA) AT COMPRESSOR STATION #49. *** CANCELED, COMBINED WITH S-1548-59-3, DMR, 3/17/97. **
S-1548-32-1	42,000 GALLONS	3020-05 C	1	165.00	165.00	D	42,000 GALLON FIXED ROOF PETROLEUM STOCK TANK T-213 WITH VAPOR RECOVERY SYSTEM SHARED WITH S-1548-54, 55, 56, 57, 58, 59, 65, AND 66 (SEC 28 LOHF) - CANCELED BY S-1548-59-2 LMS 4/9/96
S-1548-33-0	10,500 GALLONS	3020-05 B	1	113.00	113.00	D	19,999 GALLONS LIGHT OIL TEST STATION CANCEL PER CO REQUEST 06/16/93 - RS
S-1548-34-0	25+ HP	3020-01 B	1	143.00	143.00	D	LIGHT OIL TEST STATION #1827 WITH VAPOR RECOVERY SYSTEM *** CANCELED, COMBINED WITH S-1548-59-3, DMR, 3/17/97. ***
S-1548-35-3	MISC	3020-06	1	128.00	128.00	D	LIGHT OIL TEST STATION #1383 INCLUDING 3 VESSELS (16'X 3' DIA, 16'X 6' DIA AND 16'X 2' DIA) AT LOTS SITE AND 1 CONDENSATE PRESSURE VESSEL (4'X 2' DIA) AT COMPRESSOR STATION #47.  *** CANCELED, COMBINED WITH S-1548-59-3, DMR, 3/17/97. ***
S-1548-36-0	25+ HP	3020-01 B	1	143.00	143.00	D	LIGHT OIL TEST STATION #2922 WITH VAPOR CONTROL SYSTEM *** CANCELED, COMBINED WITH S-1548-59-3, DMR, 3/17/97. ***
S-1548-37-2	MISC	3020-06	1	128.00	128.00	D	LIGHT OIL TEST STATION #3417 INCLUDING 2 PRESSURE VESSELS (10'X 3' DIA AND 16'X 6' DIA) AT LOTS SITE AND 1 CONDENSATE PRESSURE VESSEL (4'X 2' DIA) AT COMPRESSOR STATION #40. *** CANCELED, COMBINED WITH S-1548-59-3, DMR, 3/17/97. ***
S-1548-38-2	MISC	3020-06	1	128.00	128.00	D	LIGHT OIL TEST STATION #3344 INCLUDING 2 PRESSURE VESSELS (10'X 3' DIA AND 16'X 6' DIA) AT LOTS SITE AND 1 CONDENSATE PRESSURE VESSEL (4'X 2' DIA) AT COMPRESSOR STATION #41 (NW 1/4 SEC 33, T28S, R21E).**CANCELED, COMBINED W/ S-1548-59-3, DMR 3/17/97*

PERMIT NUMBER	FEE DESCRIPTION	FEE RULE	QTY	FÉE AMOUNT	FEE TOTAL	PERMIT STATUS	EQUIPMENT DESCRIPTION
S-1548-45-8	2,730,000 Gal storage tank	3020-05 G	1	461.00	461.00	А	2,730,000 GALLON FIXED ROOF PETROLEUM STORAGE TANK #T-471 WITH VAPOR RECOVERY SYSTEM WITH VAPOR CONTROL COMPRESSOR(S), COOLER(S), LIQUID KNOCKOUT(S) AND PIPING TO FIELD GAS SYSTEM SHARED WITH S-1548-143 (TANK #T-470)
S-1548-46-0	10,500 GALLONS	3020-05 B	1	113.00	113.00	D	10,500 GALLON JETTING WATER TANK #T-3 CONNECTED TO VAPOR CONTROL SYSTEM LISTED ON S-1548-14 (DEHY 26)
S-1548-47-1	42,000 GALLONS	3020-05 C	1	165.00	165.00	D	42,000 GALLON PRODUCED WATER STORAGE TANK T-4 VENTED TO VAPOR CONTROL SYSTEM SHARED LISTED ON S-1548-14 (DEHY 26)
S-1548-48-1	42,000 GALLONS	3020-05 C	1	165.00	165.00	D	42,000 GALLON OFFSPEC OIL STORAGE TANK #T-5 VENTED TO VAPOR CONTROL SYSTEM LISTED ON S-1548-14 (DEHY 26)
S-1548-49-0	756,000 GALLONS	3020-05 F	1	362.00	362.00	D	999,999 GALLONS LIGHT OIL DEHYDRA FAC TANK BATTERY CANCEL PER CO REQUEST - 6-16-93 - RS
S-1548-50-2	1,260,000 GALLONS	3020-05 G	1	461.00	461.00	D	1,000,000 GALLONS LIGHT OIL DEHYDRA FAC TANK BATTERY CANCEL PER CO REQUEST 6-16-93 - RS
S-1548-51-2	1,260,000 GALLONS	3020-05 G	1	461.00	461.00	D	1,000,000 GALLONS LIGHT OIL DEHYDRA FAC TANK BATTERY CANCEL PER CO REQUEST 6-16-93 - RS
S-1548-52-2	1,260,000 GALLONS	3020-05 G	1	461.00	461.00	D	1,260,000 GALLON LIGHT OIL STORAGE/SHIPPING TANK #T-210 VENTED TO VAPOR CONTROL SYSTEM LISTED ON S-1548-14 (DEHY 26)
S-1548-53-3	1,260,000 GALLONS	3020-05 G	1	461.00	461.00	D	1,260,000 GALLON LIGHT OIL STORAGE/SHIPPING TANK #T-275 VENTED TO VAPOR CONTROL SYSTEM LISTED ON S-1548-14 - DEHY 26
S-1548-54-1	42,000 GALLONS	3020-05 C	1	165.00	165.00	D	42,000 GALLON FIXED ROOF CRUDE OIL STOCK TANK #T-214 WITH VAPOR RECOVERY SYSTEM SHARED WITH S-1548-32 (SEC 28 LOHF) - CANCELED BY S-1548-59-2 LMS 4/9/96
S-1548-55-1	42,000 GALLONS	3020-05 C	1	165.00	165.00	D	42,000 GALLON FIXED ROOF CRUDE OIL STOCK TANK #T-221 WITH VAPOR RECOVERY SYSTEM SHARED WITH S-1548-32 (SEC 28 LOHF) - CANCELED BY S-1548-59-2 LMS 4/9/96
S-1548-56-1	42,000 GALLONS	3020-05 C	1	165.00	165.00	D	42,000 GALLON FIXED ROOF CRUDE OIL STOCK TANK #T-222 WITH VAPOR RECOVERY SYSTEM SHARED WITH S-1548-32 (SEC 28 LOHF) - CANCELED BY S-1548-59-2 LMS 4/9/96
S-1548-57-1	6,300 GALLONS	3020-05 B	1	113.00	113.00	D	6,300 GALLON FIXED ROOF JETTING WATER TANK #T-216 WITH VAPOR RECOVERY SYSTEM SHARED WITH S-1548-32 (SEC 28 LOHF) - CANCELED BY S-1548-59-2 LMS 4/9/96
S-1548-58-1	6,300 GALLONS	3020-05 B	1	113.00	113.00	D	6,300 GALLON FIXED ROOF JETTING WATER TANK #T-228 WITH VAPOR RECOVERY SYSTEM SHARED WITH S-1548-32 (SEC 28 LOHF) - CANCELED BY S-1548-59-2 LMS 4/89/96
S-1548-59-4	4,200 GALLONS	3020-05 A	1	91.00	91.00	D	42,000 GALLON (1000 BBL) FIXED ROOF SKIM OIL TANK #T-310 WITH VAPOR RECOVERY SYSTEM SHARED WITH S-1548-65 AND S-1548-66 - SEC 28 LOHF

PERMIT NUMBER	FEE DESCRIPTION	FEE RULE	QTY	FÉE AMOUNT	FEE TOTAL	PERMIT STATUS	EQUIPMENT DESCRIPTION
S-1548-62-0	42,000 GALLONS	3020-05 C	1	165.00	165.00	D	49,999 GALLONS LIGHT OIL TANK FARM W/VR CANCEL PER CO REQUEST 6-16-93 -RS
S-1548-63-0	42,000 GALLONS	3020-05 C	1	165.00	165.00	D	49,999 GALLONS LIGHT OIL TANK FARM W/VR CANCEL PER CO REQUEST 6-16-93 RS
S-1548-64-0	42,000 GALLONS	3020-05 C	1	165.00	165.00	D	49,999 GALLONS LIGHT OIL TANK FARM W/VR CANCEL PER CO REQUEST 6-16-93 - RS
S-1548-65-1	54,600 GALLONS	3020-05 D	1	223.00	223.00	D	54,600 GALLON FIXED ROOF CLARIFIER TANK #T-300A VENTED TO VAPOR RECOVERY SYSTEM LISTED ON S-1548-59 - SEC 28 LOHF *CANCELLED PER ERC APPLICATION, 990769, RGR, 7/21/99*
S-1548-66-1	54,600 GALLONS	3020-05 D	1	223.00	223.00	D	54,600 GALLON FIXED ROOF CLARIFIER TANK #T-300B VENTED TO VAPOR RECOVERY SYSTEM LISTED ON S-1548-59 - SEC 28 LOHF *CANCELLED PER ERC PROJECT 990769, RGR, 7/21/99*
S-1548-67-0	280 BRAKE HP	3020-10 C	1	290.00	290.00	D	280 HP I. C. ENGINE #40-1 S/N# 76032 (CANCELLED BY PERMITTEE @ RENEWAL BILLING - RUE 7/7/99)
S-1548-68-0	280 BRAKE HP	3020-10 C	1	290.00	290.00	D	280 HP I. C. ENGINE #40-2 S/N# 76465 (CANCELLED BY PERMITTEE @ RENEWAL BILLING - RUE 7/7/99)
S-1548-69-1	280 BRAKE HP	3020-10 C	1	290.00	290.00	D	280 HP AJAX I.C. ENGINE S/N# 76035 POWERING COMPRESSOR 51-1 (CANCELLED BY PERMITTEE @ RENEWAL BILLING - RUE 7/7/99)
S-1548-70-1	280 BRAKE HP	3020-10 C	1	290.00	290.00	D	280 HP AJAX I.C. ENGINE S/N# 76472 POWERING COMPRESSOR 51-2 (CANCELLED BY PERMITTEE @ RENEWAL BILLING - RUE 7/7/99)
S-1548-71-0	280 BRAKE HP	3020-10 C	1	290.00	290.00	D	280 HP I. C. ENGINE #42-1 S/N# 76547 (CANCELLED BY PERMITTEE @ RENEWAL BILLING - RUE 7/7/99)
S-1548-72-0	280 BRAKE HP	3020-10 C	1	290.00	290.00	D	280 HP I. C. ENGINE #42-2 S/N# 76621 (CANCELLED BY PERMITTEE @ RENEWAL BILLING - RUE 7/7/99)
S-1548-73-0	280 BRAKE HP	3020-10 C	1	290.00	290.00	D	280 HP I. C. ENGINE #43-1 S/N# 76543 (CANCELLED BY PERMITTEE @ RENEWAL BILLING - RUE 7/7/99)
S-1548-74-0	280 BRAKE HP	3020-10 C	1	290.00	290.00	D	280 HP I. C. ENGINE #43-2 S/N# 76542 (CANCELLED BY PERMITTEE @ RENEWAL BILLING - RUE 7/7/99)
S-1548-75-0	280 BRAKE HP	3020-10 C	1	290.00	290.00	D	280 HP I. C. ENGINE #44-1 S/N# 77595 (PERMIT TO OPERATE SURRENDERED FOR ERC CERTIFICATES S-0298-1, S-0298-2, AND S-0298 3, BY RWK ON 02/03/95)
S-1548-76-0	280 BRAKE HP	3020-10 C	1	290.00	290.00	D	280 HP I. C. ENGINE #44-2 S/N# 77571 (CANCELLED BY PERMITTEE @ RENEWAL BILLING - RUE 7/7/99)
S-1548-77-0	280 BRAKE HP	3020-10 C	1	290.00	290.00	D	280 HP I. C. ENGINE #45-1 S/N# 77565 (CANCELLED BY PERMITTEE @ RENEWAL BILLING - RUE 7/7/99)
S-1548-78-0	280 BRAKE HP	3020-10 C	1	290.00	290.00	D	280 HP I. C. ENGINE #45-2 S/N# 77568 (CANCELLED BY PERMITTEE @ RENEWAL BILLING - RUE 7/7/99)

PERMIT NUMBER	FEE DESCRIPTION	FEE RULE	QTY	FEE AMOUNT	FEE TOTAL	PERMIT STATUS	EQUIPMENT DESCRIPTION
S-1548-79-0	280 BRAKE HP	3020-10 C	1	290.00	290.00	D	280 HP I. C. ENGINE #46-1 S/N# 80728 (CANCELLED BY PERMITTEE @ RENEWAL BILLING - RUE 7/7/99)
S-1548-80-0	280 BRAKE HP	3020-10 C	1	290.00	290.00	D	280 HP I. C. ENGINE #46-2 S/N# 80719 (CANCELLED BY PERMITTEE @ RENEWAL BILLING - RUE 7/7/99)
S-1548-81-0	280 BRAKE HP	3020-10 C	1	290.00	290.00	D	280 HP I. C. ENGINE #47-1 S/N# 80724 (CANCELLED BY PERMITTEE @ RENEWAL BILLING - RUE 7/7/99)
S-1548-82-0	280 BRAKE HP	3020-10 C	1	290.00	290.00	D	280 HP I. C. ENGINE #47-2 S/N# 80716 (CANCELLED BY PERMITTEE @ RENEWAL BILLING - RUE 7/7/99)
S-1548-83-0	360 BRAKE HP	3020-10 C	1	290.00	290.00	D	360 HP I. C. ENGINE #47-3 S/N# 81761 (CANCELLED BY PERMITTEE @ RENEWAL BILLING - RUE 7/7/99)
S-1548-84-0	360 BRAKE HP	3020-10 C	1	290.00	290.00	D	360 HP I. C. ENGINE #48-1 S/N# 81762 (CANCELLED BY PERMITTEE @ RENEWAL BILLING - RUE 7/7/99)
S-1548-85-0	360 BRAKE HP	3020-10 C	1	290.00	290.00	D	360 HP I. C. ENGINE #48-2 S/N# 81759 (CANCELLED BY PERMITTEE @ RENEWAL BILLING - RUE 7/7/99)
S-1548-86-0	360 BRAKE HP	3020-10 C	1	290.00	290.00	D	360 HP I. C. ENGINE #49-1 S/N# 82050 (CANCELLED BY PERMITTEE @ RENEWAL BILLING - RUE 7/7/99)
S-1548-87-0	360 BRAKE HP	3020-10 C	1	290.00	290.00	D	360 HP I. C. ENGINE #49-2 S/N# 81760 (CANCELLED BY PERMITTEE @ RENEWAL BILLING - RUE 7/7/99)
S-1548-88-0	360 BRAKE HP	3020-10 C	1	290.00	290.00	D	360 HP I. C. ENGINE #49-3 S/N# 82049 (CANCELLED BY PERMITTEE @ RENEWAL BILLING - RUE 7/7/99)
S-1548-89-0	360 BRAKE HP	3020-10 C	1	290.00	290.00	D	540 BRAKE HP I. C. ENGINE CANCEL PER CO REQUEST - 6-16-93 - RS
S-1548-90-0	360 BRAKE HP	3020-10 C	1	290.00	290.00	D	540 BRAKE HP I. C. ENGINE CANCEL PER CO REQUEST - 6-16-93 - RS
S-1548-91-0	360 BRAKE HP	3020-10 C	1	290.00	290.00	D	540 BRAKE HP I. C. ENGINE CANCEL PER CO REQUEST 6-16-93 - RS
S-1548-92-0	360 BRAKE HP	3020-10 C	1	290.00	290.00	D	360 HP I. C. ENGINE #51-4 S/N# 82293 (CANCELLED BY PERMITTEE @ RENEWAL BILLING - RUE 7/7/99)
S-1548-93-0	360 BRAKE HP	3020-10 C	1	290.00	290.00	D	360 HP I. C. ENGINE #51-5 S/N# 82277 (CANCELLED BY PERMITTEE @ RENEWAL BILLING - RUE 7/7/99)
S-1548-99-0	180 BRAKE HP	3020-10 B	1	143.00	143.00	D	499 BRAKE HP I. C. ENGINE CANCEL PER CO REQUEST - 6-16-93 - RS
S-1548-101-0	80 BRAKE HP	3020-10 A	1	98.00	98.00	D	199 BRAKE HP I. C. ENGINE CANCEL PER CO REQUEST 6-16-93 - RS
S-1548-104-0	21,600,000 MISC.	3020-06	1	128.00	128.00	D	WELL SAFETY FLARE #44

PERMIT NUMBER	FEE DESCRIPTION	FEE RULE	QTY	FÉE AMOUNT	FEE TOTAL	PERMIT STATUS	EQUIPMENT DESCRIPTION
S-1548-105-1	200 < Electric Motor HP < 400	3020-01 E	1	495.00	495.00	D	DORMANT LIGHT CRUDE OIL TRUCK LOADING OPERATION WITH BOTTOM LOADING RACK WITH 4 LOADING ARMS, 11 GATE VALVES, 12 PLUG VALVES, 110 FLANGED CONNECTIONS, DRY-BREAK QUICK DISCONNECT COUPLING AT EACH LOADING POINT (OT & M)
S-1548-106-4	4,200 GALLON	3020-05 A	1	91.00	91.00	D	4,200 GALLON TANK INCLUDING PIPING TO LOTS #3331
S-1548-107-4	4,200 GALLONS	3020-05 A	1	91.00	91.00	D	4,200 GALLON TANK INCLUDING PIPING TO LOTS #3435
S-1548-108-4	4,200 GALLONS	3020-05 A	1	91.00	91.00	D	4,200 GALLON TANK INCLUDING PIPING TO LOTS #3362
S-1548-109-4	4,200 GALLONS	3020-05 A	1	91.00	91.00	D	4,200 GALLON TANK INCLUDING PIPING TO LOTS #3417
S-1548-110-4	4,200 GALLONS	3020-05 A	1	91.00	91.00	D	4,200 GALLON TANK INCLUDING PIPING TO LOTS #3344
S-1548-111-4	4,200 GALLONS	3020-05 A	1	91.00	91.00	D	4,200 GALLON TANK INCLUDING PIPING TO LOTS #3447
S-1548-112-2	4,200 GALLONS	3020-05 A	1	91.00	91.00	D	4,200 GALLON EMERGENCY RELIEF TANK INCLUDING PIPING TO LOTS #3375
S-1548-113-9	584,318,750 BTU/HR	3020-02 H	1	1,238.00	1,238.00	Α	584,318,750 BTU/HR SAFETY FLARE WITH INDAIR I-12 FLARE TIP (LOST HILLS 1 LEASE)
S-1548-114-0	360 HP	3020-10 C	1	290.00	290.00	D	360 HP AJAX DPC-360 LE CLEANBURN I.C. ENGINE #7, LOST HILLS ONE LEASE **PERMIT TO OPERATE SURRENDERED FOR ERC CERTIFICATES S-790-1, -2, -3, -4, AND -5 HAR 2/12/98**
S-1548-115-9	450 BHP	3020-10 D	1	577.00	577.00	A	450 BHP AJAX DPC450 CLEANBURN IC ENGINE POWERING COMPRESSOR UNIT #5, WITH ASSOCIATE GAS AND CONDENSATE HANDLING EQUIPMENT, INCLUDING SCRUBBER(S), VESSEL(S), COOLER(S), AND LIQUID TRANSFER PUMP(S) (LOST HILLS ONE)
S-1548-116-9	450 BHP	3020-10 D	1	577.00	577.00	A	450 BHP AJAX DPC450 CLEANBURN I.C. ENGINE POWERING COMPRESSOR UNIT #6 WITH ASSOCIATE GAS AND CONDENSATE HANDLING EQUIPMENT, INCLUDING SCRUBBER(S), VESSEL(S), COOLER(S), AND LIQUID TRANSFER PUMP(S) (LOST HILLS ONE)
S-1548-117-2	31,500 GALLONS	3020-05 C	1	165.00	165.00	D	31,500 GALLON PRODUCED WATER STORAGE TANK, UNFIRED FREE WATER KNOCK-OUT VESSEL, AND VAPOR CONTROL SYSTEM SERVING PERMITS S-1548-117, '124, AND '125 BELRIDGE
S-1548-118-0	42,000 GALLONS	3020-05 C	1	165.00	165.00	D	42,000 GALLON FIXED ROOF PETROLEUM WASH TANK WITH VAPOR CONTROL SYSTEM SHARED WITH PERMITS S-1548-119 TO -123, AND -126, INCLUDING ONE 30 HP COMPRESSOR DISCHARGING TO SALES GAS LINE, AND SAND BASIN LOST HILLS
S-1548-119-0	21,000 GALLONS	3020-05 C	1	165.00	165.00	D	21,000 GALLON FIXED ROOF PETROLEUM SKIM TANK VENTED TO VAPOR CONTROL SYSTEM LISTED ON PERMIT S-1548-118 - LOST HILLS
S-1548-120-19	126,000 gallons	3020-05 E	1	296.00	296.00	Α	126,000 GALLON CONE ROOF REJECT OIL TANK F-3005 WITH VAPOR CONTROL COMPRESSOR, COOLERS AND LIQUID KNOCKOUTS, SAND BASIN, ISOLATION VALVE, AND 3.3 MMBTU/HR PERMIT EXEMPT HEATER TREATER

DEDMIT NUMBER	FFF DECORIDATION	FEE RULE	QTY	FEE AMOUNT	FEE TOTAL	PERMIT STATUS	FOURDMENT DECORIDATION
PERMIT NUMBER	FEE DESCRIPTION	FEE HULE	QIY	AMOUNI	IOIAL	STATUS	EQUIPMENT DESCRIPTION
S-1548-121-10	126,000 gallon tank	3020-05 E	1	296.00	296.00	Α	126,000 GALLON FIXED CONE ROOF LACT TANK WITH ISOLATION VALVE VENTED TO VAPOR CONTROL SYSTEM LISTED ON PERMIT S-1548-120:
S-1548-122-9	17,579 gallons	3020-05 B	1	113.00	113.00	А	24,300 GALLON (10 FT. DIA BY 40 FT. LONG SHELL) FREE WATER KNOCKOUT VESSEL V-3002 WITH VAPOR PIPING TO VAPOR CONTROL SYSTEM LISTED ON PERMIT S-1548-120:
S-1548-123-1	12,032 GALLONS	3020-05 B	1	113.00	113.00	D	12,032 GALLON WEMCO DEPURATOR OIL/WATER SEPARATOR VENTED TO VAPOR CONTROL SYSTEM LISTED ON PERMIT S-1548-118 - LOST HILLS
S-1548-124-0	168,000 GALLON	3020-05 E	1	296.00	296.00	D	168,000 GALLON FIXED ROOF PETROLEUM LACT TANK VENTED TO VAPOR CONTROL SYSTEM LISTED ON PERMIT S-1548-117 - SOUTH BELRIDGE FIELD
S-1548-125-0	42,000 GALLONS	3020-05 C	1	165.00	165.00	D	42,000 GALLON FIXED ROOF PETROLEUM REJECT TANK VENTED TO VAPOR CONTROL SYSTEM LISTED ON PERMIT S-1548-117 - BELRIDGE
S-1548-126-9	126,000 gallons	3020-05 E	1	296.00	296.00	Α	126,000 GALLON FIXED ROOF CONE BOTTOM CLARIFIER TANK VENTED TO VAPOR CONTROL SYSTEM LISTED ON S-1548-120:
S-1548-127-1	13,000 GALLONS STORAGE	3020-05 B	1	113.00	113.00	D	CRUDE OIL BLENDING OPERATION INCLUDING 13,000 GALLON NATURAL GASOLINE PRESSURIZED STORAGE TANK WITH PRESSURE RELIEF VALVE, DRY-BREAK LOADING LINE COUPLERS, INJECTION PUMP WITH PIPING, AND NITROGEN PURGE SYSTEM - LOST HILLS
S-1548-128-0	210 GALLONS	3020-05 A	1	91.00	91.00	D	210 GALLON FIXED ROOF EMERGENCY BLOWDOWN VESSEL (AWT MANIFOLD 3-6) - BELRIDGE
S-1548-129-0	210 GALLONS	3020-05 A	1	91.00	91.00	D	210 GALLON FIXED ROOF EMERGENCY BLOWDOWN VESSEL (AWT MANIFOLD 2-4) - BELRIDGE
S-1548-130-0	210 GALLONS	3020-05 A	1	91.00	91.00	D	210 GALLON FIXED ROOF EMERGENCY BLOWDOWN VESSEL (AWT MANIFOLD 2-19) - BELRIDGE
S-1548-131-0	210 GALLONS	3020-05 A	1	91.00	91.00	D	210 GALLON FIXED ROOF EMERGENCY BLOWDOWN VESSEL (AWT MANIFOLD 2-3) - BELRIDGE
S-1548-132-0	210 GALLON	3020-05 A	1	91.00	91.00	D	ONE 4' DIA. X 10' HIGH TWO-PHASE SEPARATOR VESSEL AT 2-4 MANIFOLD - SOUTH BELRIDGE FIELD
S-1548-133-1	66 TEOR Wells	3020-09 A	66	11.23	741.18	D	THERMALLY ENHANCED OIL RECOVERY (TEOR) OPERATION SERVING 36 STEAM ENHANCED LIGHT CRUDE OIL PRODUCTION WELL VENTS, WITH NONCONDENSIBLE CASING GAS PIPED TO "REEFRIDGE" GAS GATHERING SYSTEM - BELRIDGE FIELD
S-1548-134-11	625 MMBtu/hr	3020-02 H	1	1,238.00	1,238.00	Α	625 MMBTU/HR LIMITED USE FLARE
S-1548-135-0	210 GALLON TANK	3020-05 A	1	91.00	91.00	D	210 GALLON FIXED ROOF EMERGENCY BLOWDOWN VESSEL (AWT MANIFOLD 1-3) - BELRIDGE

DEDMIT NUMBER	FEE DESCRIPTION	FEE RULE	QTY	FÉE AMOUNT	FEE TOTAL	PERMIT STATUS	EQUIPMENT DESCRIPTION
S-1548-136-0	230 BHP DIESEL FUELD IC ENGINE	3020-10 C	1	290.00	290.00	D	GAS COMPRESSOR UNIT INCL. 230 HP AJAX, MODEL 230, LEAN-BURN
0 10 10 100 0	200 BIN BILOLET OLLB TO LINGING	3323 10 3	·	200.00	200.00	J	NAT GAS-FIRED I.C. ENGINE WITH CLEAN-BURN COMBUSTION TECHNOLOGY SERVING PRESSURE MAINTENANCE OPER WITH 100 PROD WELLS.**RENTAL UNIT, REMOVED FROM SERVICE IN 10/97,DELETED 5/11/99,DBT **
S-1548-137-0	280 BHP IC ENGINE	3020-10 C	1	290.00	290.00	D	2ND STAGE GAS COMPRESSOR UNIT W/ 280 BHP AJAX, MODEL 280, LEAN-BURN NAT GAS-FIRED I.C. ENGINE W/ CLEAN-BURN TECHNOLOGY SERVING PRESSURE MAINTENANCE OPER LISTED ON #S-1548-136**RENTAL UNIT, REMOVED FROM SERVICE IN 10/97,DELETED 5/11/99,DBT**
S-1548-138-2	100 - 200 HP	3020-01 D	1	379.00	379.00	D	WEMCO MODEL 120X AIR FLOATATION OIL/WATER SEPARATOR #V202D WITH VAPOR CONTROL APPROVED TO OPERATE AT VARIOUS UNSPECIFIED LOCATIONS IN THE LIGHT OIL WESTERN STATIONARY SOURCE
S-1548-139-4	4,200,000 Gallons	3020-05 G	1	461.00	461.00	D	4,200,000 GALLON EXTERNAL FLOATING ROOF CRUDE OIL STORAGE TANK T-484 WITH REPUBLIC FABRICATORS INC. WEATHERGUARD VOLUME MAXIMIZING DOUBLE WIPER SEAL SYSTEM (ALSO PERMITTED AS S-1547-260-0 IN HOW SS)
S-1548-140-9	3,400 hp electric motors	3020-01 H	1	1,238.00	1,238.00	А	THREE 800 HP ELECTRIC MOTOR DRIVEN FUEL GAS COMPRESSORS, EACH WITH A FUEL GAS & A SURGE DRUM AND ASSOCIATED PIPING (COMPRESSOR STATION #49)
S-1548-141-3	4,200,000 Gallons	3020-05 G	1	461.00	461.00	D	4,200,000 GALLON (100,000 BBL) EXTERNAL FLOATING ROOF CRUDE OIL STORAGE TANK T-485 WITH REPUBLIC FABRICATORS INC. WEATHERGUARD VOLUME MAXIMIZING DOUBLE WIPER SEAL SYSTEM (ALSO PERMITTED AS S-1547-261 IN HOW SS)
S-1548-142-1	5,250,000 GALLONS	3020-05 G	1	461.00	461.00	D	5,250,000 GALLON (125,000 BBL) FLOATING ROOF CRUDE OIL STORAGE TANK T-486 WITH MECHANICAL SHOE PRIMARY SEAL AND WIPER-TYPE SECONDARY SEAL (ALSO PERMITTED AS S-1547-350 IN HOW SS).
S-1548-143-6	2,730,000 GALLONS	3020-05 G	1	461.00	461.00	Α	2,730,000 GALLON FIXED ROOF CRUDE OIL STORAGE TANK T-470 (ALSO PERMITTED AS S-1547-384 IN THE HEAVY OIL SS) WITH SHARED VAPOR RECOVERY SYSTEM DESCRIBED ON S-1548-45
S-1548-144-38	504,000 gallons	3020-05 F	1	362.00	362.00	D	504,000 GALLON FIXED ROOF CLARIFIER TANK 201A W/ VAPOR CONTROL COMPRESSOR(S), COOLER(S), LIQUID KNOCKOUT(S) & PIPING TO FIELD GAS SYSTEM OR AIR ASSISTED KALDAIR FLARE W/PLA-18 FLARE TIP
S-1548-145-5	504,000 gallon storage tank	3020-05 F	1	362.00	362.00	D	12,000 BBL FIXED ROOF CLARIFIER TANK #T201B WITH VAPOR CONTROL DESCRIBED IN S-1548-144 - DEHY 20
S-1548-146-5	504,000 gallon storage tank	3020-05 F	1	362.00	362.00	D	12,000 BBL FIXED ROOF CLARIFIER TANK #T202A WITH VAPOR CONTROL DESCRIBED IN S-1548-144 - DEHY 20
S-1548-147-5	504,000 gallon storage tank	3020-05 F	1	362.00	362.00	D	12,000 BBL FIXED ROOF CLARIFIER TANK #T202B WITH VAPOR CONTROL DESCRIBED IN S-1548-144 - DEHY 20

PERMIT NUMBER	FEE DESCRIPTION	FEE RULE	QTY	FÉE AMOUNT	FEE TOTAL	PERMIT STATUS	EQUIPMENT DESCRIPTION
S-1548-148-12	1,680,000 gallon storage tank	3020-05 G	1	461.00	461.00	A	40,000 BBL FIXED ROOF STORAGE TANK #T211 WITH VAPOR CONTROL COMPRESSOR(S), COOLER(S), LIQUID KNOCKOUT(S) & PIPING TO FIELD GAS SYSTEM OR AIR ASSISTED KALDAIR FLARE W/PLA-18 FLARE TIP - DEHY 20
S-1548-149-10	84,000 GALLONS	3020-05 D	1	223.00	223.00	Α	2,000 BBL CRUDE OIL SKIM TANK #T242 WITH VAPOR CONTROL DESCRIBED IN S-1548-148 - DEHY 20
S-1548-150-2	25 - 50 HP	3020-01 B	1	143.00	143.00	D	WEMCO AIR FLOATATION OIL/WATER SEPARATOR #BODD-V-101 APPROVED TO OPERATE AT VARIOUS UNSPECIFIED LOCATIONS IN THE LIGHT OIL WESTERN STATIONARY SOURCE
S-1548-151-1	2310 GALLONS	3020-05 A	1	91.00	91.00	D	55 BBL FIXED ROOF DRAIN TANK, ASSOCIATED PIPING, AND EQUIPMENT AT LOTS 156
S-1548-152-1	2310 GALLONS	3020-05 A	1	91.00	91.00	D	55 BBL FIXED ROOF DRAIN TANK, ASSOCIATED PIPING, AND EQUIPMENT AT LOTS 2-1
S-1548-153-3	2310 GALLONS	3020-05 A	1	91.00	91.00	D	55 BBL FIXED ROOF DRAIN TANK, ASSOCIATED PIPING, AND EQUIPMENT SERVED BY A PRESSURE RELIEF VALVE AT LOTS 2018
S-1548-154-3	2310 GALLONS	3020-05 A	1	91.00	91.00	D	55 BBL FIXED ROOF DRAIN TANK, ASSOCIATED PIPING, AND EQUIPMENT SERVED BY A PRESSURE RELIEF VALVE AT LOTS 213
S-1548-155-3	2310 GALLONS	3020-05 A	1	91.00	91.00	D	55 BBL FIXED ROOF DRAIN TANK, ASSOCIATED PIPING, AND EQUIPMENT SERVED BY A PRESSURE RELIEF VALVE AT LOTS 2816
S-1548-156-3	2310 GALLONS	3020-05 A	1	91.00	91.00	D	55 BBL FIXED ROOF DRAIN TANK, ASSOCIATED PIPING, AND EQUIPMENT SERVED BY A PRESSURE RELIEF VALVE AT LOTS 2922
S-1548-157-3	2310 GALLONS	3020-05 A	1	91.00	91.00	D	55 BBL FIXED ROOF DRAIN TANK, ASSOCIATED PIPING, AND EQUIPMENT SERVED BY A PRESSURE RELIEF VALVE AT LOTS 2987
S-1548-159-3	2310 GALLONS	3020-05 A	1	91.00	91.00	D	55 BBL FIXED ROOF DRAIN TANK, ASSOCIATED PIPING, AND EQUIPMENT SERVED BY A PRESSURE RELIEF VALVE AT LOTS 2932
S-1548-161-3	2310 GALLONS	3020-05 A	1	91.00	91.00	D	55 BBL FIXED ROOF DRAIN TANK, ASSOCIATED PIPING, AND EQUIPMENT SERVED BY A PRESSURE RELIEF VALVE AT LOTS 1-3
S-1548-162-3	2310 GALLONS	3020-05 A	1	91.00	91.00	D	55 BBL FIXED ROOF DRAIN TANK, ASSOCIATED PIPING, AND EQUIPMENT SERVED BY A PRESSURE RELIEF VALVE AT LOTS 1231
S-1548-163-3	2310 GALLONS	3020-05 A	1	91.00	91.00	D	55 BBL FIXED ROOF DRAIN TANK, ASSOCIATED PIPING, AND EQUIPMENT SERVED BY A PRESSURE RELIEF VALVE AT LOTS 3-7
S-1548-164-3	2310 GALLONS	3020-05 A	1	91.00	91.00	D	55 BBL FIXED ROOF DRAIN TANK, ASSOCIATED PIPING, AND EQUIPMENT SERVED BY A PRESSURE RELIEF VALVE AT LOTS 3-6A
S-1548-165-1	2310 GALLONS	3020-05 A	1	91.00	91.00	D	55 BBL FIXED ROOF DRAIN TANK, ASSOCIATED PIPING, AND EQUIPMENT AT LOTS 3332
S-1548-166-3	2310 GALLONS	3020-05 A	1	91.00	91.00	D	55 BBL FIXED ROOF DRAIN TANK, ASSOCIATED PIPING, AND EQUIPMENT SERVED BY A PRESSURE RELIEF VALVE AT LOTS 123

DERMIT NUMBER	FEE DESCRIPTION	FEE RULE	QTY	FÉE AMOUNT	FEE TOTAL	PERMIT STATUS	EQUIPMENT DESCRIPTION
		-					
S-1548-167-3	2310 GALLONS	3020-05 A	1	91.00	91.00	D	55 BBL FIXED ROOF DRAIN TANK SERVED BY A PRESSURE RELIEF VALVE AT LIGHT OIL TEST STATION 2-19
S-1548-168-3	2310 GALLONS	3020-05 A	1	91.00	91.00	D	55 BBL FIXED ROOF DRAIN TANK SERVED BY A PRESSURE RELIEF VALVE AT LIGHT OIL TEST STATION 3-10
S-1548-171-9	1,215 BHP	3020-10 F	1	900.00	900.00	A	1,215 BHP WAUKESHA MODEL L-5790 GSI NATURAL GAS-FIRED IC ENGINE (SERIAL # C-12312/1) WITH 3-WAY CATALYST AND AIR/FUEL RATIO CONTROLLER DRIVING A GAS COMPRESSOR (MID BELRIDGE COMPRESSOR STATION #26)
S-1548-172-12	1,478 BHP	3020-10 F	1	900.00	900.00	A	1,478 BHP WAUKESHA MODEL 7042 GSI NATURAL GAS-FIRED IC ENGINE WITH 3-WAY CATALYST, AIR/FUEL RATIO CONTROLLER, AND POSITIVE CRANKCASE VENTILATION SYSTEM DRIVING A GAS COMPRESSOR (SOUTH BELRIDGE COMPRESSOR STATION #50)
S-1548-173-12	1,478 BHP	3020-10 F	1	900.00	900.00	A	1,478 HBP WAUKESHA MODEL 7042 GSI NATURAL GAS-FIRED IC ENGINE WITH 3-WAY CATALYST, AIR/FUEL RATIO CONTROLLER, AND POSITIVE CRANKCASE VENTILATION SYSTEM DRIVING A GAS COMPRESSOR (SOUTH BELRIDGE COMPRESSOR STATION #50)
S-1548-174-12	1,478 BHP	3020-10 F	1	900.00	900.00	А	1,478 BHP WAUKESHA MODEL 7042 GSI NATURAL GAS-FIRED IC ENGINE WITH 3-WAY CATALYST, AIR/FUEL RATIO CONTROLLER, AND POSITIVE CRANKCASE VENTILATION SYSTEM DRIVING A GAS COMPRESSOR (SOUTH BELRIDGE COMPRESSOR STATION #50)
S-1548-175-12	1,478 BHP	3020-10 F	1	900.00	900.00	А	1,478 BHP WAUKESHA MODEL 7042 GSI NATURAL GAS-FIRED IC ENGINE WITH 3-WAY CATALYST, AIR/FUEL RATIO CONTROLLER, AND POSITIVE CRANKCASE VENTILATION SYSTEM DRIVING A GAS COMPRESSOR (SOUTH BELRIDGE COMPRESSOR STATION #50)
S-1548-178-6	SULFATREAT FUEL GAS SCRUBBER	3020-06	1	128.00	128.00	Α	SULFATREAT FUEL GAS SCRUBBING SYSTEM WITH LIQUID KNOCKOUT VESSEL AND CONTACTOR VESSEL
S-1548-179-0	600 BRAKE HP	3020-10 D	1	577.00	577.00	D	600 BHP AJAX I.C. ENGINE #10 **VALID ONLY UNTIL 2/29/2000**
S-1548-180-0	126,000 GALLONS	3020-05 E	1	296.00	296.00	D	126,000 GALLON (3,000 BBL) FIXED ROOF WASH TANK WITH VAPOR RECOVERY SHARED WITH TANKS S-1548-180 THROUGH '185, INCLUDING ONE 75 HP VAPOR COMPRESSOR. "YOLUMNE SEC 3" TANK BATTERY.
S-1548-181-0	84,000 GALLONS	3020-05 D	1	223.00	223.00	D	84,000 GALLON (2,000 BBL) FIXED ROOF PETROLEUM STORAGE TANK #2047 WITH VAPOR RECOVERY SHARED BETWEEN TANKS S-1548-180 THROUGH '185. "YOLUMNE SEC 3" TANK BATTERY.
S-1548-182-0	84,000 GALLONS	3020-05 D	1	223.00	223.00	D	84,000 GALLON (2,000 BBL) FIXED ROOF STORAGE TANK #2048 WITH VAPOR RECOVERY SHARED BETWEEN TANKS S-1548-180 THROUGH '185. YOLUMNE SEC. 3" TANK BATTERY.
S-1548-183-0	84,000 GALLONS	3020-05 D	1	223.00	223.00	D	84,000 GALLON (2,000 BBL) FIXED ROOF STORAGE TANK #2049 WITH VAPOR RECOVERY SHARED BETWEEN TANKS S-1548-180 THROUGH 185. "YOLUMNE SEC.3" TANK BATTERY. **VALID ONLY UNTIL 2/29/2000**

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PERMIT NUMBER	FEE DESCRIPTION	FEE RULE	QTY	FÉE AMOUNT	FEE TOTAL	PERMIT STATUS	EQUIPMENT DESCRIPTION
S-1548-184-0	42,000 GALLONS	3020-05 C	1	165.00	165.00	D	42,000 GALLON (1,000 BBL) FIXED ROOF WATER TANK WITH VAPOR RECOVERY SHARED BETWEEN TANKS S-1548-180 THROUGH '185. "YOLUMNE SEC 3" TANK BATTERY.
S-1548-185-0	21,000 GALLONS	3020-05 C	1	165.00	165.00	D	21,000 GALLON (500 BBL) FIXED ROOF PETROLEUM STORAGE TEST TANK WITH VAPOR RECOVERY SYSTEM SHARED BETWEEN TANKS S-1548-180 THROUGH '185. "YOLUMNE SEC.3" TANK BATTERY. **VALID ONLY UNTIL 2/29/2000**
S-1548-186-2	126,000 GALLONS	3020-05 E	1	296.00	296.00	D	126,000 GALLON (3,000 BBL) FIXED ROOF WASH TANK WITH VAPOR RECOVERY, INCLUDING: VAPOR COMPRESSORS, SEPARATORS, AND ONE EMERGENCY FLARE. V/R SYSTEM SHARED WITH TANKS S-1548-186, '188, '189, '190 AND '193. YOWLUMNE TANK BATTERY.
S-1548-187-0	210,000 GALLONS	3020-05 E	1	296.00	296.00	D	210,000 GALLON (5,000 BBL) FIXED ROOF WATER TANK #50 WITH VAPOR RECOVERY SYSTEM SHARED WITH TANKS S-1548-186 THROUGH 194. YOLUMNE TANK BATTERY.
S-1548-188-0	84,000 GALLONS	3020-05 D	1	223.00	223.00	D	84,000 GALLON (2,000 BBL) FIXED ROOF PETROLEUM STORAGE TANK #2005 WITH VAPOR RECOVERY SYSTEM SHARED WITH TANKS S-1548-186 THROUGH 194. YOLUMNE TANK BATTERY.
S-1548-189-0	84,000 GALLONS	3020-05 D	1	223.00	223.00	D	84,000 GALLON (2,000 BBL) FIXED ROOF PETROLEUM STORAGE TANK #2006 WITH VAPOR RECOVERY SYSTEM SHARED WITH TANKS S-1548-186 THROUGH 194. YOLUMNE TANK BATTERY.
S-1548-190-0	84,000 GALLONS	3020-05 D	1	223.00	223.00	D	84,000 GALLON (2,000 BBL) FIXED ROOF PETROLEUM STORAGE TANK #2007 WITH VAPOR RECOVERY SYSTEM SHARED WITH TANKS S-1548-186 THROUGH 194. YOLUMNE TANK BATTERY.
S-1548-191-0	84,000 GALLONS	3020-05 D	1	223.00	223.00	D	84,000 GALLON (2,000 BBL) FIXED ROOF PETROLEUM STORAGE TANK #5094 WITH VAPOR RECOVERY SYSTEM SHARED WITH TANKS S-1548-186 THROUGH 194. YOLUMNE TANK BATTERY. **VALID ONLY UNTIL 2/29 2000**
S-1548-192-0	84,000 GALLONS	3020-05 D	1	223.00	223.00	D	84,000 GALLON FIXED ROOF PETROLEUM STORAGE TANK #5095 WITH VAPOR RECOVERY SYSTEM SHARED WITH TANKS S-1548-186 THROUGH 194. YOLUMNE TANK BATTERY. **VALID ONLY UNTIL 2/29/2000**
S-1548-193-0	42,000 GALLONS	3020-05 C	1	165.00	165.00	D	42,000 GALLON (1,000 BBL) FIXED ROOF WATER TANK WITH VAPOR RECOVERY SYSTEM SHARED WITH TANKS S-1548-186 THROUGH 194. YOLUMNE TANK BATTERY.
S-1548-194-0	21,000 GALLONS	3020-05 C	1	165.00	165.00	D	21,000 GALLON FIXED ROOF TEST TANK #1031 WITH VAPOR RECOVERY SYSTEM SHARED WITH TANKS S-1548-186 THROUGH 194. YOLUMNE TANK BATTERY. **VALID ONLY UNTIL 2/29/2000**
S-1548-195-0	42,000 GALLONS	3020-05 C	1	165.00	165.00	D	42,000 GALLON (1,000 BBL) FIXED ROOF TEST TANK #CLA 1001, WITH VAPOR RECOVERY. NORTH COLES LEVEE. **VALID ONLY UNTIL 2/29 2000**
S-1548-196-2	208 HP	3020-10 C	1	290.00	290.00	D	208 BHP WAUKESHA, MODEL F1905GRU, NATURAL GAS-FIRED I.C. ENGINE WITH CATALYTIC CONVERTER AND HIGH TEMP SHUTDOWN SYSTEM

PERMIT NUMBER	FEE DESCRIPTION	FEE RULE	QTY	FEE AMOUNT	FEE TOTAL	PERMIT STATUS	EQUIPMENT DESCRIPTION
S-1548-197-2	208 HP	3020-10 C	1	290.00	290.00	D	208 BHP WAUKESHA, MODEL F1905, NATURAL GAS-FIRED I.C. ENGINE WITH CATALYTIC CONVERTER, HIGH TEMP SHUTDOWN SYSTEM AND AUTO AIR/FUEL RATIO CONTROLLER - YOWLUMNE WELL 42-3
S-1548-198-2	208 HP	3020-10 C	1	290.00	290.00	D	208 BHP WAUKESHA, MODEL F1905GRU, NATURAL GAS-FIRED I.C. ENGINE WITH CATALYTIC CONVERTER AND HIGH TEMP SHUTDOWN SYSTEM - YOWLUMNE B WELL 21-3
S-1548-199-2	316 BHP IC engine	3020-10 C	1	290.00	290.00	D	316 BHP WAUKESHA, MODEL H2476GU, NATURAL GAS-FIRED I.C. ENGINE WITH CATALYTIC CONVERTER AND HIGH TEMP SHUTDOWN SYSTEM - YOWLUMNE B WELL 16-34
S-1548-200-2	316 BHP IC engine	3020-10 C	1	290.00	290.00	D	316 BHP WAUKESHA, MODEL H2476GU, NATURAL GAS-FIRED I.C. ENGINE WITH CATALYTIC CONVERTER AND HIGH TEMP SHUTDOWN SYSTEM - YOWLUMNE WELL 14-34
S-1548-201-2	316 BHP IC engine	3020-10 C	1	290.00	290.00	D	316 BHP WAUKESHA, MODEL H2476GU, NATURAL GAS-FIRED I.C. ENGINE WITH CATALYTIC CONVERTER AND HIGH TEMP SHUTDOWN SYSTEM - YOWLUMNE B WELL 36-34
S-1548-202-2	316 BHP IC engine	3020-10 C	1	290.00	290.00	D	316 BHP WAUKESHA, MODEL H2476GU, NATURAL GAS-FIRED I.C. ENGINE WITH CATALYTIC CONVERTER AND HIGH TEMP SHUTDOWN SYSTEM - YOWLUMNE B WELL 81-5
S-1548-203-2	316 BHP IC enigne	3020-10 C	1	290.00	290.00	D	316 BHP WAUKESHA, MODEL H2476GU, NATURAL GAS-FIRED I.C. ENGINE WITH CATALYTIC CONVERTER AND HIGH TEMP SHUTDOWN SYSTEM - YOWLUMNE WELL 72-4
S-1548-204-2	316 BHP IC engine	3020-10 C	1	290.00	290.00	D	316 BHP WAUKESHA, MODEL H2476GU, NATURAL GAS-FIRED I.C. ENGINE WITH CATALYTIC CONVERTER AND HIGH TEMP SHUTDOWN SYSTEM - YOWLUMNE WELL 32-3
S-1548-205-0	55 BRAKE HP	3020-10 A	1	98.00	98.00	D	55 BHP MINNEAPOLIS MOLINE NATURAL GAS-FIRED I. C. ENGINE. SOUTH COLES LEVEE WELL # 38-1 ***PERMIT CANCELED, ENGINE RERATED TO $<$ 50 HP, 10/26/99 SVT***
S-1548-206-0	162 BRAKE HP	3020-10 B	1	143.00	143.00	D	162 BHP WAUKESHA MODEL F1197GU RICH GAS-BURN I. C. ENGINE - WELL# 86X-32
S-1548-207-0	162 BRAKE HP	3020-10 B	1	143.00	143.00	D	162 BHP WAUKESHA MODEL F1197GU RICH GAS-BURN I. C. ENGINE - WELL# 27-33
S-1548-208-0	80 BRAKE HP	3020-10 A	1	98.00	98.00	D	80 BHP M&M MODEL HD800A-6A RICH GAS BURN I. C. ENGINE - WELL# 21X-13
S-1548-209-0	80 BRAKE HP	3020-10 A	1	98.00	98.00	D	80 BHP MINNEAPOLIS MOLINE NATURAL GAS-FIRED I. C. ENGINE - WELL# 46-33 **VALID ONLY UNTIL 2/29/2000** ***PERMIT CANCELED, ENGINE RE-RATED TO < 50 HP, 10/26/99 SVT***
S-1548-210-0	162 BRAKE HP	3020-10 B	1	143.00	143.00	D	162 BHP WAUKESHA MODEL F1197GU RICH GAS BURN I. C. ENGINE - YOWLUMNE A WELL #88-11.
S-1548-211-0	162 BRAKE HP	3020-10 B	1	143.00	143.00	D	162 BHP WAUKESHA NATURAL GAS FIRED I. C. ENGINE. YOULUMNE A, WELL # 65-11.

PERMIT NUMBER	FEE DESCRIPTION	FEE RULE	QTY	FÉE AMOUNT	FEE TOTAL	PERMIT STATUS	EQUIPMENT DESCRIPTION
S-1548-212-2	162 BRAKE HP	3020-10 B	1	143.00	143.00	D	162 BHP WAUKESHA NATURAL GAS FIRED I. C. ENGINE. YOWLUMNE A, WELL # 14-11.
S-1548-213-2	162 BRAKE HP	3020-10 B	1	143.00	143.00	D	162 BHP WAUKESHA NATURAL GAS FIRED I. C. ENGINE. YOWLUMNE A, WELL # 25-11.
S-1548-214-0	162 BRAKE HP	3020-10 B	1	143.00	143.00	D	162 BHP WAUKESHA RICH BURN NATURAL GAS FIRED I. C. ENGINE. YOWLUMNE WELL #16-4.
S-1548-215-0	162 BRAKE HP	3020-10 B	1	143.00	143.00	D	162 BHP WAUKESHA NATURAL GAS FIRED I. C. ENGINE. YOLUMNE A, WELL # $54-3$ .
S-1548-216-1	162 BRAKE HP	3020-10 B	1	143.00	143.00	D	162 BHP WAUKESHA NATURAL GAS FIRED I. C. ENGINE WITH CATALYTIC CONVERTER AND AIR/FUEL RATIO CONTROLLER. YOLUMNE A, WELL # 45-3.
S-1548-217-0	162 BRAKE HP	3020-10 B	1	143.00	143.00	D	162 BHP WAUKESHA NATURAL GAS FIRED I. C. ENGINE. YOLUMNE A, WELL # 77-3.
S-1548-218-0	162 BRAKE HP	3020-10 B	1	143.00	143.00	D	162 BHP WAUKESHA NATURAL GAS FIRED I. C. ENGINE. YOLUMNE A, WELL # 87-3.
S-1548-219-0	162 BRAKE HP	3020-10 B	1	143.00	143.00	D	162 BHP WAUKESHA NATURAL GAS FIRED I. C. ENGINE. YOLUMNE A, WELL # 64-3.
S-1548-220-2	60 BRAKE HP	3020-10 A	1	98.00	98.00	D	60 BHP MINNEAPOLIS MOLINE NATURAL GAS FIRED I. C. ENGINE. YOLUMNE A, WELL # 72-10. **PERMIT VALID ONLY UNTIL 2/29/2000**
S-1548-221-2	80 BRAKE HP	3020-10 A	1	98.00	98.00	D	80 BHP MINNEAPOLIS MOLINE NATURAL GAS FIRED I. C. ENGINE. YOLUMNE, WELL #45-11. ***PERMIT CANCELED, ENGINE RE-RATED TO < 50 HP, 10/26/99 SVT***
S-1548-222-2	80 BRAKE HP	3020-10 A	1	98.00	98.00	D	80 BHP MINNEAPOLIS MOLINE NATURAL GAS FIRED I. C. ENGINE. YOLUMNE A, WELL # 22-11. ***PERMIT CANCELED, ENGINE RE-RATED TO < 50 HP, 10/26/99 SVT***
S-1548-223-0	162 BRAKE HP	3020-10 B	1	143.00	143.00	D	162 BHP WAUKESHA MODEL F1197GU RICH GAS BURN I. C. ENGINE - YOWLUMNE B WELL #55-34.
S-1548-224-0	162 BRAKE HP	3020-10 B	1	143.00	143.00	D	162 BHP WAUKESHA MODEL F1197GU RICH GAS BURN I. C. ENGINE - YOWLUMNE B WELL #76-33
S-1548-225-0	162 BRAKE HP	3020-10 B	1	143.00	143.00	D	162 BHP WAUKESHA NATURAL GAS FIRED I. C. ENGINE. YOLUMNE B, WELL # 65-33.
S-1548-226-0	162 BRAKE HP	3020-10 B	1	143.00	143.00	D	162 BHP WAUKESHA NATURAL GAS FIRED I. C. ENGINE. YOWLUMNE B, WELL # 38X-34.
S-1548-227-0	162 BRAKE HP	3020-10 B	1	143.00	143.00	D	162 BHP WAUKESHA NATURAL GAS FIRED I. C. ENGINE. YOLUMNE B, WELL # 44-3.
S-1548-228-0	162 BRAKE HP	3020-10 B	1	143.00	143.00	D	162 BHP WAUKESHA NATURAL GAS FIRED I. C. ENGINE. YOLUMNE B, WELL # 36-3.

PERMIT NUMBER	FEE DESCRIPTION	FEE RULE	QTY	FÉE AMOUNT	FEE TOTAL	PERMIT STATUS	EQUIPMENT DESCRIPTION
S-1548-229-0	162 BRAKE HP	3020-10 B	1	143.00	143.00	D	162 BHP WAUKESHA NATURAL GAS FIRED I. C. ENGINE. YOLUMNE B, WELL # 41-10. **VALID ONLY UNTIL 2/29/2000**
S-1548-230-0	162 BRAKE HP	3020-10 B	1	143.00	143.00	D	162 BHP WAUKESHA NATURAL GAS FIRED I. C. ENGINE, WELL # 28X-3.
S-1548-231-0	162 BRAKE HP	3020-10 B	1	143.00	143.00	D	162 BHP WAUKESHA NATURAL GAS FIRED I. C. ENGINE. YOLUMNE B, WELL # 23-3.
S-1548-232-0	162 BRAKE HP	3020-10 B	1	143.00	143.00	D	162 BHP WAUKESHA NATURAL GAS FIRED I. C. ENGINE. YOLUMNE B, WELL # 22-3.
S-1548-233-0	162 BRAKE HP	3020-10 B	1	143.00	143.00	D	162 BHP WAUKESHA NATURAL GAS FIRED I. C. ENGINE. YOLUMNE B, WELL # 63-4.
S-1548-234-0	162 BRAKE HP	3020-10 B	1	143.00	143.00	D	162 BHP WAUKESHA NATURAL GAS FIRED I. C. ENGINE. YOLUMNE B, WELL # 52-4.
S-1548-235-0	162 BRAKE HP	3020-10 B	1	143.00	143.00	D	162 BHP WAUKESHA NATURAL GAS FIRED I. C. ENGINE. YOLUMNE B LEASE, WELL # 42-4.
S-1548-236-0	162 BRAKE HP	3020-10 B	1	143.00	143.00	D	162 BHP WAUKESHA NATURAL GAS FIRED I. C. ENGINE. YOLUMNE B, WELL 74-4.
S-1548-237-0	162 BRAKE HP	3020-10 B	1	143.00	143.00	D	162 BHP WAUKESHA NATURAL GAS-FIRED I. C. ENGINE - YOWLUMNE WELL # 72-5
S-1548-238-0	162 BRAKE HP	3020-10 B	1	143.00	143.00	D	162 BHP WAILESJA NATURAL GAS FIRED I. C. ENGINE. YOLUMNE B, WELL # 67-4.
S-1548-239-0	162 BRAKE HP	3020-10 B	1	143.00	143.00	D	162 BHP WAUKESHA NATURAL GAS FIRED I. C. ENGINE. YOLUMNE B, WELL # 16-3.
S-1548-240-2	208 BHP IC engine	3020-10 C	1	290.00	290.00	D	208 BHP WAUKESHA, MODEL F1905GRU, NATURAL GAS-FIRED I.C. ENGINE WITH CATALYTIC CONVERTER AND HIGH TEMP SHUTDOWN SYSTEM - WELL 41-3
S-1548-241-0	162 BRAKE HP	3020-10 B	1	143.00	143.00	D	162 BHP WAUKESHA NATURAL GAS FIRED I. C. ENGINE. YOLUMNE B, WELL # 47-34.
S-1548-242-0	162 BRAKE HP	3020-10 B	1	143.00	143.00	D	162 BHP WAUKESHA NATURAL GAS FIRED I. C. ENGINE. YOLUMNE B, WELL # 46-34.
S-1548-243-0	162 BRAKE HP	3020-10 B	1	143.00	143.00	D	162 BHP WAUKESHA NATURAL GAS FIRED I. C. ENGINE. YOLUMNE B, WELL # 45-34.
S-1548-244-0	162 BRAKE HP	3020-10 B	1	143.00	143.00	D	162 BHP WAUKESHA NATURAL GAS FIRED I. C. ENGINE. YOLUMNE B, WELL # $47-3$
S-1548-245-0	162 BRAKE HP	3020-10 B	1	143.00	143.00	D	162 BHP WAUKESHA NATURAL GAS FIRED I. C. ENGINE. YOLUMNE B, WELL # $57-33$ .
S-1548-246-0	162 BRAKE HP	3020-10 B	1	143.00	143.00	D	162 BHP WAUKESHA NATURAL GAS FIRED I. C. ENGINE. YOLUMNE B, WELL # $78\text{-}33$ .

PERMIT NUMBER	FEE DESCRIPTION	FEE RULE	QTY	FEE AMOUNT	FEE TOTAL	PERMIT STATUS	EQUIPMENT DESCRIPTION
S-1548-247-0	162 BRAKE HP	3020-10 B	1	143.00	143.00	D	162 BHP WAUKESHA NATURAL GAS FIRED I. C. ENGINE. YOLUMNE B, WELL # 87-33.
S-1548-248-0	162 BRAKE HP	3020-10 B	1	143.00	143.00	D	162 BHP WAUKESHA NATURAL GAS FIRED I. C. ENGINE. YOLUMNE B, WELL # 11-3.
S-1548-249-2	162 BRAKE HP	3020-10 B	1	143.00	143.00	D	162 BHP WAUKESHA NATURAL GAS FIRED I. C. ENGINE. YOLUMNE B, WELL # 27-34.
S-1548-250-2	162 BRAKE HP	3020-10 B	1	143.00	143.00	D	162 BHP WAUKESHA NATURAL GAS FIRED I. C. ENGINE. YOWLUMNE B, WELL # 44X-34.
S-1548-251-0	162 BRAKE HP	3020-10 B	1	143.00	143.00	D	162 BHP WAUKESHA NATURAL GAS FIRED I. C. ENGINE. YOLUMNE B, WELL # 74-33.
S-1548-252-0	162 BRAKE HP	3020-10 B	1	143.00	143.00	D	162 BHP WAUKESHA NATURAL GAS FIRED I. C. ENGINE. YOLUMNE B, WELL $\#$ 88-32.
S-1548-253-0	162 BRAKE HP	3020-10 B	1	143.00	143.00	D	162 BHP WAUKESHA NATURAL GAS FIRED I. C. ENGINE. YOLUMNE B, WELL # 28-33.
S-1548-254-0	162 BRAKE HP	3020-10 B	1	143.00	143.00	D	162 BHP WAUKESHA NATURAL GAS FIRED I. C. ENGINE WITH CATALYTIC CONVERTER AND AIR TO FUEL RATIO CONTROLLER. YOLUMNE B, WELL # 16-33.
S-1548-255-0	162 BRAKE HP	3020-10 B	1	143.00	143.00	D	162 BHP WAUKESHA NATURAL GAS FIRED I. C. ENGINE. YOLUMNE B, WELL # 76-32. **VALID ONLY UNTIL 2/29/2000**
S-1548-256-0	80 BRAKE HP	3020-10 A	1	98.00	98.00	D	80 BHP MINNEAPOLIS MOLINE NATURAL GAS FIRED I. C. ENGINE. YOLUMNE B, WELL # 31-10. **VALID ONLY UNTIL 2/29/2000** ***PERMIT CANCELED, ENGINE RE-RATED TO < 50 HP, 10/26/99 SVT***
S-1548-257-0	360 BRAKE HP	3020-10 C	1	290.00	290.00	D	360 BHP AJAX NATURAL GAS FIRED I. C. ENGINE. YOLUMNE B, ENGINE # 7. **VALID ONLY UNTIL 2/29/2000**
S-1548-258-0	360 BRAKE HP	3020-10 C	1	290.00	290.00	D	EMERGENCY 360 BHP AJAX NATURAL GAS FIRED I. C. ENGINE COMPRESSOR. YOWLUMNE LEASE, YUB #6.
S-1548-259-0	360 BRAKE HP	3020-10 C	1	290.00	290.00	D	360 BHP AJAX NATURAL GAS FIRED I. C. ENGINE #4. YOLUMNE B LEASE. **VALID ONLY YNTIL 2/29/2000**
S-1548-260-0	162 BRAKE HP	3020-10 B	1	143.00	143.00	D	162 BHP WAUKESHA NATURAL GAS-FIRED I. C. ENGINE - YOWLUMNE WELL #56-34
S-1548-261-0	162 BRAKE HP	3020-10 B	1	143.00	143.00	D	162 BHP WAUKESHA NATURAL GAS FIRED I. C. ENGINE. YOLUMNE B, WELL # 85-33.
S-1548-262-0	108 BRAKE HP	3020-10 B	1	143.00	143.00	D	108 BHP WAUKESHA NATURAL GAS FIRED I. C. ENGINE. YOLUMNE B, WELL # 48-32. **VALID ONLY UNTIL 2/29/2000**
S-1548-263-0	80 BRAKE HP	3020-10 A	1	98.00	98.00	D	80 BHP MINNEAPOLIS MOLINE NATURAL GAS FIRED I. C. ENGINE - WELL# 21-10 **VALID ONLY UNTIL 2/29/2000**

PERMIT NUMBER	FEE DESCRIPTION	FEE RULE	QTY	FEE AMOUNT	FEE TOTAL	PERMIT STATUS	EQUIPMENT DESCRIPTION
S-1548-264-0	80 BRAKE HP	3020-10 A	1	98.00	98.00	D	80 BHP MINNEAPOLIS MOLINE NATURAL GAS FIRED I. C. ENGINE. YOLUMNE B, WELL # 43-10. **VALID ONLY UNTIL 2/29/2000** ***PERMIT CANCELED, ENGINE RE-RATED TO < 50 HP, 10/26/99 SVT***
S-1548-265-0	162 BRAKE HP	3020-10 B	1	143.00	143.00	D	162 BHP WAUKESHA NATURAL GAS FIRED I. C. ENGINE. YOLUMNE B, WELL # 67X-34. **VALID ONLY UNTIL 2/29/2000**
S-1548-266-0	162 BRAKE HP	3020-10 B	1	143.00	143.00	D	162 BHP WAUKESHA NATURAL GAS FIRED I. C. ENGINE - WELL# 84-32
S-1548-267-0	80 BRAKE HP	3020-10 A	1	98.00	98.00	D	80 BHP MINNEAPOLIS MOLINE NATURAL GAS-FIRED I. C. ENGINE - YOWLUMNE WELL #66-11 **VALID ONLY UNTIL 2/29/2000** ****PERMIT CANCELED, ENGINE RE-RATED TO < 50 HP, 10/26/99 SVT***
S-1548-268-0	212,982 GALLONS	3020-05 E	1	296.00	296.00	D	212,982 GAL FIXED ROOF SHIP TANK # 12602 WITH V/R INCL: 7.5 BHP COMPRESSOR, PIPING, CONNECTIONS, VALVES, & OTHER EQUIP TYING VRU, AND TANKS S-1548-268 & -269, TO GAS PLANT 8. NORTH COLES LEVEE.***REMOVED PER INSPECTOR MWO, 9/7/99, DBT***
S-1548-269-0	212,982 GALLONS	3020-05 E	1	296.00	296.00	D	212,982 GALLON FIXED ROOF STANDBY TANK, ID# 5005 W/VR INCLUDING: 7.5 HP COMPRESSOR, PIPING, CONNECTIONS, VALVES, AND OTHER EQUIPMENT TYING VRU AND TANK S-1548-269 TO GAS PLANT #8. NORTH COLES LEVEE
S-1548-270-0	80,304 GALLONS	3020-05 D	1	223.00	223.00	D	80,304 GALLON FIXED ROOF WATER TANK, ID# 101. NORTH COLES LEVEE.
S-1548-271-0	65,184 GALLONS	3020-05 D	1	223.00	223.00	D	65,184 GALLON FIXED ROOF WATER TANK, ID# 107. NORTH COLES LEVEE.
S-1548-272-0	60,060 GALLONS	3020-05 D	1	223.00	223.00	D	60,060 GALLON FIXED ROOF WATER TANK. NORTH COLES LEVEE. **VALID ONLY UNTIL 2/29/2000**
S-1548-273-0	210,000 GALLONS	3020-05 E	1	296.00	296.00	D	210,000 GALLON FIXED ROOF SPARE TANK, ID# 103. NORTH COLES LEVEE.
S-1548-274-0	43,470 GALLONS	3020-05 C	1	165.00	165.00	D	43,470 GALLON FIXED ROOF TEST TANK, ID# 1037. NORTH COLES LEVEE.
S-1548-275-0	43,470 GALLONS	3020-05 C	1	165.00	165.00	D	43,470 GALLON FIXED ROOF STORAGE TANK. NORTH COLES LEVEE 4FS.*** INSPECTOR COULD NOT LOCATE, DBT, 9/7/99***
S-1548-276-0	43,470 GALLONS	3020-05 C	1	165.00	165.00	D	43,470 GALLON FIXED ROOF TEST TANK, ID# 1063. NORTH COLES LEVEE 13A.
S-1548-277-0	82,908 GALLONS	3020-05 D	1	223.00	223.00	D	82,908 GALLON FIXED ROOF TEST TANK, ID# R30047. NORTH COLES LEVEE 14A.***INSPECTOR COULD NOT LOCATE, DBT, 9/7/99***
S-1548-278-0	43,470 GALLONS	3020-05 C	1	165.00	165.00	D	43,470 GALLON FIXED ROOF STANDBY TANK, ID# R30157. NORTH COLES LEVEE 2A.
S-1548-279-0	22,302 GALLONS	3020-05 C	1	165.00	165.00	D	22,302 GALLON FIXED ROOF WATER TANK, ID# R30223. NORTH COLES LEVEE 14A.
S-1548-280-0	43,470 GALLONS	3020-05 C	1	165.00	165.00	D	43,470 GALLON FIXED ROOF TEST TANK #2. NORTH COLES LEVEE #2 TEST.

PERMIT NUMBER	FEE DESCRIPTION	FEE RULE	QTY	FÉE AMOUNT	FEE TOTAL	PERMIT STATUS	EQUIPMENT DESCRIPTION
S-1548-281-0	154,308 GALLONS	3020-05 E	1	296.00	296.00	D	154,308 GALLON FIXED ROOF LACT TANK ID# 5001. NORTH COLES LEVEE #12A.***REMOVED PER INSPECTOR, DBT, 9/7/99***
S-1548-282-0	124,362 GALLONS	3020-05 E	1	296.00	296.00	D	124,362 GALLON FIXED ROOF DILUENT TANK ID# 3001. NORTH COLES LEVEE # 12A.
S-1548-283-0	21,000 GALLONS	3020-05 C	1	165.00	165.00	D	21,000 GALLON FIXED ROOF TEST TANK WITH VAPOR CONTROL SYSTEM INCLUDING 10 HP COMPRESSOR - SOUTH COLES LEVEE #38X-1
S-1548-284-0	126,924 GALLONS	3020-05 E	1	296.00	296.00	D	126,924 GALLON FIXED ROOF SKIM TANK. YOLUMNE UNIT B SEC 4.
S-1548-285-0	63,000 GALLONS	3020-05 D	1	223.00	223.00	D	63,000 GALLON FIXED ROOF SLOP TANK. YOLUMNE UNIT B SEC 4.
S-1548-286-0	126,924 GALLONS	3020-05 E	1	296.00	296.00	D	126,924 GALLON FIXED ROOF WATER TANK. YOLUMNE UNIT B SEC 4.
S-1548-287-0	144,396 GALLONS	3020-05 E	1	296.00	296.00	D	144,396 GALLON FIXED ROOF WATER TANK. YOLUMNE UNIT A 47-11.
S-1548-288-0	43,470 GALLONS	3020-05 C	1	165.00	165.00	D	43,470 GALLON FIXED ROOF TEST TANK, ID# 1019. NORTH COLES LEVEE # 16A TANK BATTERY.
S-1548-289-0	50,000 GALLONS	3020-05 D	1	223.00	223.00	D	CLASS II LPG LOADING OPERATION WITH 50,000 GALLON (11 FT. DIA. X 75 FT. LONG) BULLET TANK INCLUDING 3" LOADING LINE, 1.5" VAPOR LINE, LOADING PUMP WITH 15 HP (MAXIMUM) MOTOR, NITROGEN PURGE SYSTEM, AND ADDITIONAL PIPING, VALVES, AND CONNECTIONS
S-1548-290-0	70 BHP	3020-10 A	1	98.00	98.00	D	70 BHP M & M RICH-BURN, NATURAL GAS FIRED INTERNAL COMBUSTION ENGINE. NORTH COLES LEVEE WELL # 41-30. **VALID ONLY UNTIL 2/29/2000** ****PERMIT CANCELED, ENGINE RE-RATED TO < 50 HP, 10/26/99 SVT***
S-1548-291-2	208 BHP IC engine	3020-10 C	1	290.00	290.00	D	208 BHP WAUKESHA, MODEL F1905GRU, NATURAL GAS-FIRED I.C. ENGINE WITH CATALYTIC CONVERTER AND HIGH TEMP SHUTDOWN SYSTEM - YOWLUMNE B WELL 85-4
S-1548-292-0	300 BHP	3020-10 C	1	290.00	290.00	D	PORTABLE 300 BHP CATERPILLAR MODEL D334PC DIESEL FIRED IC ENGINE DRIVING ELECTRICAL GENERATOR
S-1548-340-0	162 hp IC engine	3020-10 B	1	143.00	143.00	D	162 HP WAUKESHA 1197 NATURAL GAS-FIRED IC ENGINE WITH CATALYTIC CONVERTER AND AIR/FUEL RATIO CONTROLLER POWERING A FLUID PUMP - YOWLUMNE 64X-3
S-1548-341-0	162 hp IC engine	3020-10 B	1	143.00	143.00	D	162 HP WAUKESHA 1197 NATURAL GAS-FIRED IC ENGINE WITH CATALYTIC CONVERTER AND AIR/FUEL RATIO CONTROLLER POWERING A FLUID PUMP - YOWLUMNE 55X-34
S-1548-342-0	162 hp IC engine	3020-10 B	1	143.00	143.00	D	162 HP WAUKESHA 1197 NATURAL GAS-FIRED IC ENGINE WITH CATALYTIC CONVERTER AND AIR/FUEL RATIO CONTROLLER POWERING A FLUID PUMP - YOWLUMNE 28-3
S-1548-343-0	162 hp IC engine	3020-10 B	1	143.00	143.00	D	162 HP WAUKESHA 1197 NATURAL GAS-FIRED IC ENGINE WITH CATALYTIC CONVERTER AND AIR/FUEL RATIO CONTROLLER POWERING A FLUID PUMP - YOWLUMNE 27X-33

PERMIT NUMBER	FEE DESCRIPTION	FEE RULE	QTY	FEE AMOUNT	FEE TOTAL	PERMIT STATUS	EQUIPMENT DESCRIPTION
S-1548-344-0	162 hp IC engine	3020-10 B	1	143.00	143.00	D	162 HP WAUKESHA 1197 NATURAL GAS-FIRED IC ENGINE WITH CATALYTIC CONVERTER AND AIR/FUEL RATIO CONTROLLER POWERING A FLUID PUMP - YOWLUMNE 11X-3
S-1548-345-0	162 hp IC engine	3020-10 B	1	143.00	143.00	D	162 HP WAUKESHA 1197 NATURAL GAS-FIRED IC ENGINE WITH CATALYTIC CONVERTER AND AIR/FUEL RATIO CONTROLLER POWERING A FLUID PUMP - YOWLUMNE 16X-3
S-1548-346-0	162 hp IC engine	3020-10 B	1	143.00	143.00	D	162 HP WAUKESHA 1197 NATURAL GAS-FIRED IC ENGINE WITH CATALYTIC CONVERTER AND AIR/FUEL RATIO CONTROLLER POWERING A FLUID PUMP - YOWLUMNE 16X-4
S-1548-347-0	162 hp IC engine	3020-10 B	1	143.00	143.00	D	162 HP WAUKESHA 1197 NATURAL GAS-FIRED IC ENGINE WITH CATALYTIC CONVERTER AND AIR/FUEL RATIO CONTROLLER POWERING A FLUID PUMP - YOWLUMNE 22X-3
S-1548-348-0	162 hp IC engine	3020-10 B	1	143.00	143.00	D	162 HP WAUKESHA 1197 NATURAL GAS-FIRED IC ENGINE WITH CATALYTIC CONVERTER AND AIR/FUEL RATIO CONTROLLER POWERING A FLUID PUMP - YOWLUMNE 23X-3
S-1548-349-0	162 hp IC engine	3020-10 B	1	143.00	143.00	D	162 HP WAUKESHA 1197 NATURAL GAS-FIRED IC ENGINE WITH CATALYTIC CONVERTER AND AIR/FUEL RATIO CONTROLLER POWERING A FLUID PUMP - YOWLUMNE 28X-33
S-1548-350-0	162 hp IC engine	3020-10 B	1	143.00	143.00	D	162 HP WAUKESHA 1197 NATURAL GAS-FIRED IC ENGINE WITH CATALYTIC CONVERTER AND AIR/FUEL RATIO CONTROLLER POWERING A FLUID PUMP - YOWLUMNE 36X-3
S-1548-351-0	162 hp IC engine	3020-10 B	1	143.00	143.00	D	162 HP WAUKESHA 1197 NATURAL GAS-FIRED IC ENGINE WITH CATALYTIC CONVERTER AND AIR/FUEL RATIO CONTROLLER POWERING A FLUID PUMP - YOWLUMNE 38X-34
S-1548-352-0	162 hp IC engine	3020-10 B	1	143.00	143.00	D	162 HP WAUKESHA 1197 NATURAL GAS-FIRED IC ENGINE WITH CATALYTIC CONVERTER AND AIR/FUEL RATIO CONTROLLER POWERING A FLUID PUMP - YOWLUMNE 42X-4
S-1548-353-0	162 hp IC engine	3020-10 B	1	143.00	143.00	D	162 HP WAUKESHA 1197 NATURAL GAS-FIRED IC ENGINE WITH CATALYTIC CONVERTER AND AIR/FUEL RATIO CONTROLLER POWERING A FLUID PUMP - YOWLUMNE 44X-3
S-1548-354-0	162 hp IC engine	3020-10 B	1	143.00	143.00	D	162 HP WAUKESHA 1197 NATURAL GAS-FIRED IC ENGINE WITH CATALYTIC CONVERTER AND AIR/FUEL RATIO CONTROLLER POWERING A FLUID PUMP - YOWLUMNE 45X-34
S-1548-355-0	162 hp IC engine	3020-10 B	1	143.00	143.00	D	162 HP WAUKESHA 1197 NATURAL GAS-FIRED IC ENGINE WITH CATALYTIC CONVERTER AND AIR/FUEL RATIO CONTROLLER POWERING A FLUID PUMP - YOWLUMNE 46X-34
S-1548-356-0	162 hp IC engine	3020-10 B	1	143.00	143.00	D	162 HP WAUKESHA 1197 NATURAL GAS-FIRED IC ENGINE WITH CATALYTIC CONVERTER AND AIR/FUEL RATIO CONTROLLER POWERING A FLUID PUMP - YOWLUMNE 47X-3
S-1548-358-0	162 hp IC engine	3020-10 B	1	143.00	143.00	D	162 HP WAUKESHA 1197 NATURAL GAS-FIRED IC ENGINE WITH CATALYTIC CONVERTER AND AIR/FUEL RATIO CONTROLLER POWERING A FLUID PUMP - YOWLUMNE 54X-3

PERMIT NUMBER	FEE DESCRIPTION	FEE RULE	QTY	FÉE AMOUNT	FEE TOTAL	PERMIT STATUS	EQUIPMENT DESCRIPTION
S-1548-359-0	162 hp IC engine	3020-10 B	1	143.00	143.00	D	162 HP WAUKESHA 1197 NATURAL GAS-FIRED IC ENGINE WITH CATALYTIC CONVERTER AND AIR/FUEL RATIO CONTROLLER POWERING A FLUID PUMP - YOWLUMNE 56X-34
S-1548-360-0	162 hp IC engine	3020-10 B	1	143.00	143.00	D	162 HP WAUKESHA 1197 NATURAL GAS-FIRED IC ENGINE WITH CATALYTIC CONVERTER AND AIR/FUEL RATIO CONTROLLER POWERING A FLUID PUMP - YOWLUMNE 57-33
S-1548-361-0	162 hp IC engine	3020-10 B	1	143.00	143.00	D	162 HP WAUKESHA 1197 NATURAL GAS-FIRED IC ENGINE WITH CATALYTIC CONVERTER AND AIR/FUEL RATIO CONTROLLER POWERING A FLUID PUMP - YOWLUMNE 63X-4
S-1548-362-0	162 hp IC engine	3020-10 B	1	143.00	143.00	D	162 HP WAUKESHA 1197 NATURAL GAS-FIRED IC ENGINE WITH CATALYTIC CONVERTER AND AIR/FUEL RATIO CONTROLLER POWERING A FLUID PUMP - YOWLUMNE 87X-3
S-1548-363-0	162 hp IC engine	3020-10 B	1	143.00	143.00	D	162 HP WAUKESHA 1197 NATURAL GAS-FIRED IC ENGINE WITH CATALYTIC CONVERTER AND AIR/FUEL RATIO CONTROLLER POWERING A FLUID PUMP - YOWLUMNE 76X-33
S-1548-364-0	162 hp IC engine	3020-10 B	1	143.00	143.00	D	162 HP WAUKESHA 1197 NATURAL GAS-FIRED IC ENGINE WITH CATALYTIC CONVERTER AND AIR/FUEL RATIO CONTROLLER POWERING A FLUID PUMP - YOWLUMNE 74-4
S-1548-365-0	162 hp IC engine	3020-10 B	1	143.00	143.00	D	162 HP WAUKESHA 1197 NATURAL GAS-FIRED IC ENGINE WITH CATALYTIC CONVERTER AND AIR/FUEL RATIO CONTROLLER POWERING A FLUID PUMP - YOWLUMNE 74X-33
S-1548-366-0	162 hp IC engine	3020-10 B	1	143.00	143.00	D	162 HP WAUKESHA 1197 NATURAL GAS-FIRED IC ENGINE WITH CATALYTIC CONVERTER AND AIR/FUEL RATIO CONTROLLER POWERING A FLUID PUMP - YOWLUMNE 67X-4
S-1548-367-0	162 hp IC engine	3020-10 B	1	143.00	143.00	D	162 HP WAUKESHA 1197 NATURAL GAS-FIRED IC ENGINE WITH CATALYTIC CONVERTER AND AIR/FUEL RATIO CONTROLLER POWERING A FLUID PUMP - YOWLUMNE 87-33
S-1548-368-0	162 hp IC engine	3020-10 B	1	143.00	143.00	D	162 HP WAUKESHA 1197 NATURAL GAS-FIRED IC ENGINE WITH CATALYTIC CONVERTER AND AIR/FUEL RATIO CONTROLLER POWERING A FLUID PUMP - YOWLUMNE 25-34
S-1548-369-0	162 hp IC engine	3020-10 B	1	143.00	143.00	D	162 HP WAUKESHA 1197 NATURAL GAS-FIRED IC ENGINE WITH CATALYTIC CONVERTER AND AIR/FUEL RATIO CONTROLLER POWERING A FLUID PUMP - YOWLUMNE 65X-33
S-1548-370-0	162 hp IC engine	3020-10 B	1	143.00	143.00	D	162 HP WAUKESHA 1197 NATURAL GAS-FIRED IC ENGINE WITH CATALYTIC CONVERTER AND AIR/FUEL RATIO CONTROLLER POWERING A FLUID PUMP - YOWLUMNE 65-11
S-1548-371-0	162 hp IC engine	3020-10 B	1	143.00	143.00	D	162 HP WAUKESHA 1197 NATURAL GAS-FIRED IC ENGINE WITH CATALYTIC CONVERTER AND AIR/FUEL RATIO CONTROLLER POWERING A FLUID PUMP - YOWLUMNE 72X-5
S-1548-372-0	162 hp IC engine	3020-10 B	1	143.00	143.00	D	162 HP WAUKESHA 1197 NATURAL GAS-FIRED IC ENGINE WITH CATALYTIC CONVERTER AND AIR/FUEL RATIO CONTROLLER POWERING A FLUID PUMP - YOWLUMNE 47-34

PERMIT NUMBER	FEE DESCRIPTION	FEE RULE	QTY	FÉE AMOUNT	FEE TOTAL	PERMIT STATUS	EQUIPMENT DESCRIPTION
S-1548-373-0	162 hp IC engine	3020-10 B	1	143.00	143.00	D	162 HP WAUKESHA 1197 NATURAL GAS-FIRED IC ENGINE WITH CATALYTIC CONVERTER AND AIR/FUEL RATIO CONTROLLER POWERING A FLUID PUMP - YOWLUMNE 78X-33
S-1548-374-0	162 hp IC engine	3020-10 B	1	143.00	143.00	D	162 HP WAUKESHA 1197 NATURAL GAS-FIRED IC ENGINE WITH CATALYTIC CONVERTER AND AIR/FUEL RATIO CONTROLLER POWERING AN AIR-BALANCED CYCLIC WELL PUMP - YOWLUMNE 84- 32
S-1548-375-0	162 hp IC engine	3020-10 B	1	143.00	143.00	D	162 HP WAUKESHA 1197 NATURAL GAS-FIRED IC ENGINE WITH CATALYTIC CONVERTER AND AIR/FUEL RATIO CONTROLLER POWERING A FLUID PUMP - YOWLUMNE 85X-33
S-1548-376-0	162 hp IC engine	3020-10 B	1	143.00	143.00	D	162 HP WAUKESHA 1197 NATURAL GAS-FIRED IC ENGINE WITH CATALYTIC CONVERTER AND AIR/FUEL RATIO CONTROLLER POWERING A GAS COMPRESSOR - YOWLUMNE 86X-32
S-1548-377-0	162 hp IC engine	3020-10 B	1	143.00	143.00	D	162 HP WAUKESHA 1197 NATURAL GAS-FIRED IC ENGINE WITH CATALYTIC CONVERTER AND AIR/FUEL RATIO CONTROLLER POWERING A GAS COMPRESSOR - YOWLUMNE 88-11
S-1548-378-0	162 hp IC engine	3020-10 B	1	143.00	143.00	D	162 HP WAUKESHA 1197 NATURAL GAS-FIRED IC ENGINE WITH CATALYTIC CONVERTER AND AIR/FUEL RATIO CONTROLLER POWERING A FLUID PUMP - YOWLUMNE 88X-32
S-1548-379-0	330 BRAKE HP	3020-10 C	1	290.00	290.00	D	330 BHP CLARK GAS-FIRED I. C. ENGINE (SERIAL 55021). (SHAREHOLDER - LOST HILLS)
S-1548-380-0	360 BHP	3020-10 C	1	290.00	290.00	D	360 BHP AJAX GAS-FIRED INTERNAL COMBUSTION ENGINE #5 (SERIAL #78372). (SHAREHOLDER - LOST HILLS)
S-1548-381-0	400 HP	3020-10 D	1	577.00	577.00	D	400 BHP COOPER-BESSEMER GAS-FIRED I.C. ENGINE #4 (SERIAL 43691). (SHAREHOLDER - LOST HILLS)
S-1548-382-0	250 BRAKE HP	3020-10 C	1	290.00	290.00	D	250 BHP CLARK GAS-FIRED I. C. ENGINE #3 (SERIAL #55526). (WESTSIDE - SHAREHOLDER)
S-1548-383-0	1 NOZZLE	3020-11 A	1	42.00	42.00	D	12,000 GALLON UNDERGROUND GASOLINE STORAGE & DISPENSING TANK SERVED BY PHASE I VAPOR RECOVERY SYSTEM (G-70-97) & ONE NOZZLE SERVED BY EMCO WHEATON PHASE II VAPOR RECOVERY SYSTEM (G-70-52) **EQUIPMENT REMOVED PER DISTRICT INSPECTION, HAR 10/25/99**
S-1548-384-5	420,000 GALLONS	3020-05 E	1	296.00	296.00	D	10,000 BBL WASH TANK WITH VAPOR RECOVERY. (LOST HILLS)
S-1548-385-10	420,000 gallons	3020-05 E	1	296.00	296.00	Α	420,000 GALLON FIXED ROOF TANK VENTED TO VAPOR CONTROL SYSTEM LISTED ON PERMIT S-1548-120:
S-1548-386-10	420,000 gallons	3020-05 E	1	296.00	296.00	Α	420,000 GALLON FIXED ROOF TANK VENTED TO VAPOR CONTROL SYSTEM LISTED ON PERMIT S-1548-120:
S-1548-387-5	420,000 GALLONS	3020-05 E	1	296.00	296.00	D	10,000 BBL FIXED-ROOF WASTE WATER TANK (#10GL3) WITH VAPOR RECOVERY. (LOST HILLS)

PERMIT NUMBER	FEE DESCRIPTION	FEE RULE	QTY	FÉE AMOUNT	FEE TOTAL	PERMIT STATUS	EQUIPMENT DESCRIPTION
S-1548-388-3	31,500 GALLONS	3020-05 C	1	165.00	165.00	D	750 BBL FIXED-ROOF PETROLEUM STORAGE TANK WITH VAPOR RECOVERY INCLUDING ONE 15 HP GARDNER-DENVER, MODEL #ACS-1006, GAS COMPRESSOR AND VAPOR PIPING TO VAPOR CONTROL SYSTEM. (WESTSIDE)
S-1548-389-8	225 MMBtu/hr	3020-02 H	1	1,238.00	1,238.00	Α	223,125,000 BTU/HR COANDA EFFECT SAFETY FLARE (WESTSIDE)
S-1548-390-0	360 BRAKE HP	3020-10 C	1	290.00	290.00	D	360 BHP GAS-FIRED AJAX I. C. ENGINE (SERIAL #75412). (SHAREHOLDER- LOST HILLS)
S-1548-391-1	10,500 GALLONS	3020-05 B	1	113.00	113.00	D	10,500 GALLON FIXED ROOF CRUDE OIL GAUGE TANK (SEC 23 LEASE)
S-1548-392-1	10,500 GALLONS	3020-05 B	1	113.00	113.00	D	10,500 GALLON FIXED ROOF CRUDE OIL GAUGE TANK (SEC 23 LEASE)
S-1548-393-2	84,000 GALLONS	3020-05 D	1	223.00	223.00	D	84,000 GALLON FIXED ROOF PETROLEUM STORAGE TANK #10415 WITH VAPOR RECOVERY SYSTEM SERVING TANKS S-1548-393 THROUGH S-1548 399 (SOUTH BELRIDGE DIATOMITE DEHYDRATION FACILITY)
S-1548-394-1	84,000 GALLONS	3020-05 D	1	223.00	223.00	D	84,000 GALLON FIXED ROOF PETROLEUM STORAGE TANK #10414 WITH PIPING TO VAPOR RECOVERY SYSTEM LISTED ON PERMIT S- 1548-393 (SOUTH BELRIDGE DIATOMITE DEHYDRATION FACILITY)
S-1548-395-1	84,000 GALLONS	3020-05 D	1	223.00	223.00	D	84,000 GALLON FIXED ROOF PETROLEUM STORAGE TANK #10456 WITH PIPING TO VAPOR RECOVERY SYSTEM LISTED ON PERMIT S- 1548-393 (SOUTH BELRIDGE DIATOMITE DEHYDRATION FACILITY)
S-1548-396-1	67,200 GALLONS	3020-05 D	1	223.00	223.00	D	67,200 GALLON FIXED ROOF PETROLEUM STORAGE TANK #19E-P53 WITH PIPING TO VAPOR RECOVERY SYSTEM LISTED ON PERMIT S- 1548-393 (SOUTH BELRIDGE DEHYDRATION FACILITY)
S-1548-397-1	500 BBL SUMP REPLACEMENT TANK	3020-05 C	1	165.00	165.00	D	21,000 GALLON FIXED ROOF SUMP REPLACEMENT TANK #19E-D58 WITH PIPING TO VAPOR RECOVERY SYSTEM LISTED ON PERMIT S- 1548-393 (SOUTH BELRIDGE DIATOMITE DEHYDRATION FACILITY)
S-1548-398-1	500 BBL SUMP REPLACEMENT TANK	3020-05 C	1	165.00	165.00	D	21,000 GALLON FIXED ROOF SUMP REPLACEMENT TANK #19E-D58 WITH PIPING TO VAPOR RECOVERY SYSTEM LISTED ON PERMIT S- 1548-393 (SOUTH BELRIDGE DIATOMITE DEHYDRATION FACILITY)
S-1548-399-1	2400 BBL WASH TANK	3020-05 E	1	296.00	296.00	D	100,800 GALLON FIXED ROOF LIGHT OIL WASH TANK #19E-W54 WITH PIPING TO VAPOR RECOVERY SYSTEM LISTED ON PERMIT S-1548- 393 (SOUTH BELRIDGE DIATOMITE DEHYDRATION FACILITY)
S-1548-400-17	498 bhp	3020-10 D	1	577.00	577.00	А	498 BHP CATERPILLAR GAS FIRED/FIELD GAS FIRED IC ENGINE WITH THREE-WAY CATALYTIC CONVERTER AND O2 CONTROLLER DRIVING A GAS COMPRESSOR (COMPRESSOR STATION 49)
S-1548-401-1	498 HP	3020-10 D	1	577.00	577.00	D	498 BRAKE HP CATERPILLAR EMERGENCY STANDBY I.C. ENGINE (GAS FIRED)
S-1548-402-1	498 HP	3020-10 D	1	577.00	577.00	D	498 BRAKE HP CATERPILLAR I.C. ENGINE (GAS FIRED) WITH ECS LO- NOX CATALYTIC CONVERTER AND FURLARAC CONTROLLER (EAST YARD)

PERMIT NUMBER	FEE DESCRIPTION	FEE RULE	QTY	FÉE AMOUNT	FEE TOTAL	PERMIT STATUS	EQUIPMENT DESCRIPTION
S-1548-403-1	210,000 GALLONS	3020-05 E	1	296.00	296.00	D	210,000 GALLON LIGHT OIL TANK #5GL6 WITH VAPOR RECOVERY SYSTEM SERVING PERMIT NUMBERS S-1548-403 THROUGH S-1548- 408 INCLUDING PIPING AND 25 HP VAPOR COMPRESSOR
S-1548-404-1	210,000 GALLONS	3020-05 E	1	296.00	296.00	D	210,000 GALLON LIGHT OIL TANK #5GL7 WITH PIPING TO VAPOR RECOVERY SYSTEM UNDER PERMIT S-1548-403
S-1548-405-1	210,000 GALLONS	3020-05 E	1	296.00	296.00	D	210,000 GALLON LIGHT OIL TANK #5GL8 WITH PIPING TO VAPOR RECOVERY SYSTEM UNDER PERMIT S-1548-403
S-1548-406-1	210,000 GALLONS	3020-05 E	1	296.00	296.00	D	210,000 GALLON LIGHT OIL TANK #5GL9 WITH PIPING TO VAPOR RECOVERY SYSTEM UNDER PERMIT S-1548-403
S-1548-407-1	210,000 GALLONS	3020-05 E	1	296.00	296.00	D	210,000 GALLON LIGHT OIL TANK #5GL10 WITH PIPING TO VAPOR RECOVERY SYSTEM UNDER PERMIT S-1548-403
S-1548-408-1	210,000 GALLONS	3020-05 E	1	296.00	296.00	D	210,000 GALLON LIGHT OIL TANK #5GL11 WITH PIPING TO VAPOR RECOVERY SYSTEM UNDER PERMIT S-1548-403
S-1548-409-0	460 HP	3020-10 D	1	577.00	577.00	D	460 BRAKE HP WAUKESHA (GAS FIRED/FIELD GAS FIRED) WITH ECS LO-NOX CATALYTIC CONVERTER AND FURLARAC CONTROLLER (EAST FLOOD)
S-1548-410-0	330 BRAKE HP	3020-10 C	1	290.00	290.00	D	330 BRAKE HP CATERPILLAR I.C. ENGINE (GAS FIRED/FIELD GAS FIRED) WITH ECS LO-NOX CATALYTIC CONVERTER AND FURLARAC CONTROLLER (WEST FLOOD)
S-1548-411-17	498 bhp	3020-10 D	1	577.00	577.00	Α	498 BHP CATERPILLAR GAS FIRED/FIELD GAS FIRED IC ENGINE WITH THREE-WAY CATALYTIC CONVERTER AND O2 CONTROLLER DRIVING A GAS COMPRESSOR (COMPRESSOR STATION 49)
S-1548-415-0	1000 BBL TANK	3020-05 C	1	165.00	165.00	D	1,000 BBL FIXED ROOF CRUDE OIL STORAGE TANK SERVED BY VAPOR RECOVERY SYSTEM.
S-1548-416-0	1000 BBL TANK	3020-05 C	1	165.00	165.00	D	1000 BBL FIXED ROOF CRUDE OIL STORAGE TANK SERVED BY VAPOR RECOVERY SYSTEM
S-1548-417-0	1000 BBL TANK	3020-05 C	1	165.00	165.00	D	1000 BBL FIXED ROOF CRUDE OIL STORAGE TANK SERVED BY VAPOR RECOVERY SYSTEM
S-1548-418-11	357,000 gallons	3020-05 E	1	296.00	296.00	Α	8,500 BBL WATER STORAGE TANK T-231A SERVED BY VAPOR CONTROL SYSTEM DESCRIBED IN S-1548-148
S-1548-419-11	357,000 gallons	3020-05 E	1	296.00	296.00	Α	8,500 BBL WATER STORAGE TANK T-231B SERVED BY VAPOR CONTROL SYSTEM DESCRIBED IN S-1548-148
S-1548-420-9	24,300 gallons	3020-05 C	1	165.00	165.00	А	24,300 GALLON (10 FT. DIA BY 40 FT. LONG SHELL) FREE WATER KNOCKOUT VESSEL V-3004 WITH VAPOR PIPING TO VAPOR CONTROL SYSTEM LISTED ON S-1548-120:
S-1548-423-10	1600 wells	3020-09 B	1600	11.23	1,681.00	Α	1,600 THERMALLY ENHANCED PRODUCTION WELLS WITH CLOSED CASING VENTS
S-1548-424-8	825 MMBtu/hr	3020-02 H	1	1,238.00	1,238.00	Α	825 MMBTU/HR KALDAIR INDAIR MODEL I-15-H-VS LIMITED USE FLARE WITH COANDA EFFECT FLARE TIP (COMPRESSOR STATION 49)

PERMIT NUMBER	FEE DESCRIPTION	FEE RULE	QTY	FÉE AMOUNT	FEE TOTAL	PERMIT STATUS	EQUIPMENT DESCRIPTION
S-1548-426-2	400 HORSEPOWER ELECTRIC MOTOR	3020-01 F	1	731.00	731.00	А	COOPER-BESSEMER FUEL GAS COMPRESSOR WITH FUEL GAS DRUM AND SURGE DRUM POWERED BY A 400 HP GE ELECTRIC MOTOR - STATION #26
S-1548-427-2	800 HORSEPOWER	3020-01 G	1	980.00	980.00	Α	COOPER-BESSEMER FUEL GAS COMPRESSOR WITH FUEL GAS DRUM AND SURGE DRUM POWERED BY A 800 HP GE ELECTRIC MOTOR - STATION #50
S-1548-428-9	25,900 GALLONS	3020-05 C	1	165.00	165.00	Α	617 BBL INDUCED STATIC FLOTATION CELL V-240 WITH VAPOR CONTROL AS DESCRIBED IN S-1548-148 - DEHY 20
S-1548-429-10	5900 GALLONS	3020-05 B	1	113.00	113.00	Α	140 BBL CRUDE OIL PROCESS DRAIN VESSEL V-244 WITH VAPOR CONTROL AS DESCRIBED IN S-1548-148 - DEHY 20
S-1548-433-7	1,680 BHP	3020-10 F	1	900.00	900.00	Α	1,680 BHP WAUKESHA MODEL 7044 GSI NATURAL GAS-FIRED IC ENGINE EQUIPPED WITH PCV, O2 CONTROLLER, AND 3-WAY CATALYST POWERING A GAS COMPRESSOR
S-1548-434-7	1,680 BHP	3020-10 F	1	900.00	900.00	Α	1,680 BHP WAUKESHA MODEL 7044 GSI NATURAL GAS-FIRED IC ENGINE EQUIPPED WITH PCV, O2 CONTROLLER, AND 3-WAY CATALYST POWERING A GAS COMPRESSOR
S-1548-435-7	1,680 BHP	3020-10 F	1	900.00	900.00	Α	1,680 HP WAUKESHA MODEL 7044 GSI NATURAL GAS-FIRED IC ENGINE EQUIPPED WITH PCV, O2 CONTROLLER, AND 3-WAY CATALYST POWERING A GAS COMPRESSOR
S-1548-439-13	55,000 GALLONS	3020-05 D	1	223.00	223.00	Α	1310 BBL FREE WATER KNOCKOUT VESSEL V-201A WITH VAPOR CONTROL AS DESCRIBED IN S-1548-148- DEHY 20
S-1548-440-13	55,000 GALLONS	3020-05 D	1	223.00	223.00	Α	1310 BBL FREE WATER KNOCKOUT VESSEL V-201B WITH VAPOR CONTROL AS DESCRIBED IN S-1548-148- DEHY 20
S-1548-441-13	55,000 GALLONS	3020-05 D	1	223.00	223.00	Α	1310 BBL FREE WATER KNOCKOUT VESSEL V-201C WITH VAPOR CONTROL AS DESCRIBED IN S-1548-148- DEHY 20
S-1548-442-13	55,000 GALLONS	3020-05 D	1	223.00	223.00	Α	1310 BBL FREE WATER KNOCKOUT VESSEL V-201D WITH VAPOR CONTROL AS DESCRIBED IN S-1548-148- DEHY 20
S-1548-443-5	24,300-GALLON VESSEL	3020-05 C	1	165.00	165.00	Α	24,300 GALLON (10 FT. DIA. BY 40 FT. LONG SHELL) FREE WATER KNOCKOUT VESSEL V-3005 WITH VAPOR PIPING TO VAPOR CONTROL SYSTEM LISTED ON S-1548-120:
S-1548-444-5	29,400 gallons	3020-05 C	1	165.00	165.00	A	29,400 GALLON FREE WATER KNOCKOUT VESSEL (V-300) WITH VAPOR PIPING TO GAS COMPRESSORS (S-1548-172, '-173, '-174, '-175, AND '-427) AND CONNECTED TO S-1547-1079 CASING VENT VAPOR RECOVERY AND CONTROL SYSTEM
S-1548-445-3	42,300 gallons	3020-05 C	1	165.00	165.00	Α	42,300 GALLON FREE WATER KNOCKOUT VESSEL (V-100) WITH VAPOR PIPING TO GAS COMPRESSORS (S-1548-171 AND '-426)

PERMIT NUMBER	FEE DESCRIPTION	FEE RULE	QTY	FÉE AMOUNT	FEE TOTAL	PERMIT STATUS	EQUIPMENT DESCRIPTION
S-1548-451-4	2,500 Gallons	3020-05 A	1	91.00	91.00	А	HYDROGEN SULFIDE (H2S) SCAVENGER CHEMICAL STORAGE AND INJECTION OPERATION APPROVED TO OPERATE AT VARIOUS UNSPECIFIED LOCATIONS IN THE LIGHT OIL WESTERN STATIONARY SOURCE UTILIZING UP TO 5 CHEMICAL STORAGE TANKS (CAPACITY OF 500 GALLONS OR LESS) EACH EQUIPPED WITH A CATCH BASIN AND ASSOCIATED COMPONENTS INCLUDING LIQUID TRANSFER PUMP(S), VALVES, FLANGES, THREADED CONNECTIONS, FLEXIBLE PIPING, AND STINGER-TYPE INJECTION FITTINGS ON PRODUCED GAS PIPELINES
S-1548-455-0	930 bhp	3020-10 E	1	723.00	723.00	D	930 BHP CATERPILLAR MODEL 399TAA, NATURAL GAS-FIRED INTERNAL COMBUSTION ENGINE WITH A 3-WAY CATALYTIC CONVERTER AND AIR/FUEL CONTROLLER DRIVING A GAS COMPRESSOR, AUTHORIZED FOR THE FOLLOWING VARIOUS SPECIFIED LOCATIONS: SECTIONS 33 & 34, T28S, R21E; SECTIONS 11 & 12, T29S, R21E; THE N1/2 OF THE 2-3 SECTION LINE IN T29S, R21E; AND THE DEL SUR COMP SITE IN THE NW ¬ SEC 2, T29S, R21E IN THE BELRIDGE OILFIELD
S-1548-463-9	55,020 gallons	3020-05 D	1	223.00	223.00	Α	1310 BBL FREE WATER KNOCKOUT VESSEL V-201E WITH VAPOR CONTROL AS DESCRIBED IN S-1548-148 - DEHY 20
S-1548-470-12	400 Wells, large producer	3020-09 A	400	11.23	4,492.00	Α	400 CYCLIC STEAM ENHANCED WELLS WITH CLOSED CASING VENTS
S-1548-471-0	470 Gallon Pressure Vessel	3020-05 A	1	91.00	91.00	D	600 GALLON SEPARATOR PRESSURE VESSEL (V-100, LOTS #2963)
S-1548-472-0	590 Gallon Pressure Vessel	3020-05 A	1	91.00	91.00	D	600 GALLON SEPARATOR PRESSURE VESSEL (V-105, LOTS #2963)
S-1548-475-3	9,900 gal	3020-05 B	1	113.00	113.00	D	LIGHT OIL TEST STATION (LOTS) SEPARATOR VESSELS (LOST HILLS)
S-1548-476-9	55,000 gallons	3020-05 D	1	223.00	223.00	Α	55,000 GALLON (12 FT DIAMETER X 65 FT SHELL LENGTH) FREE WATER KNOCKOUT VESSEL V-201F WITH VAPOR CONTROL LISTED ON S-1548-148 (DEHY 20)
S-1548-477-3	19,300 gal	3020-05S B	1	56.00	56.00	D	LIGHT OIL TEST STATION (LOTS) SEPARATOR VESSELS (BELRIDGE)
S-1548-478-6	26,000 GALLON	3020-05 C	1	165.00	165.00	Α	26,000 GALLON (10 FT DIAMETER X 40 FT SHELL LENGTH) INDUCED STATIC FLOTATION CELL V-240B VENTED TO VAPOR CONTROL SYSTEM LISTED ON S-1548-148 (DEHY 20)
S-1548-479-6	26,000 GALLON	3020-05 C	1	165.00	165.00	Α	26,000 GALLON (10 FT DIAMETER X 40 FT SHELL LENGTH) INDUCED STATIC FLOTATION CELL V-240C VENTED TO VAPOR CONTROL SYSTEM LISTED ON S-1548-148 (DEHY 20)
S-1548-480-6	26,000 GALLONS	3020-05 C	1	165.00	165.00	Α	26,000 GALLON (10 FT DIAMETER X 40 FT SHELL LENGTH) INDUCED STATIC FLOTATION CELL V-240D VENTED TO VAPOR CONTROL SYSTEM LISTED ON S-1548-148 (DEHY 20)
S-1548-481-6	26,000 GALLONS	3020-05 C	1	165.00	165.00	А	26,000 GALLON (10 FT DIAMETER X 40 FT SHELL LENGTH) INDUCED STATIC FLOTATION CELL V-240E VENTED TO VAPOR CONTROL SYSTEM LISTED ON S-1548-148 (DEHY 20)
S-1548-482-8	630,000 GALLONS	3020-05 F	1	362.00	362.00	Α	15,000 BBL (60.0 FT DIAMETER BY 32.0 FT SHELL HEIGHT) FILTER SURGE TANK T-220A VENTED TO SHARED VAPOR CONTROL SYSTEM LISTED ON S-1548-148 (DEHY 20)

PERMIT NUMBER	FEE DESCRIPTION	FEE RULE	QTY	FEE AMOUNT	FEE TOTAL	PERMIT STATUS	EQUIPMENT DESCRIPTION
S-1548-483-8	630,000 GALLONS	3020-05 F	1	362.00	362.00	А	15,000 BBL (60.0 FT DIAMETER BY 32.0 FT SHELL HEIGHT) FILTER SURGE TANK T-220B VENTED TO SHARED VAPOR CONTROL SYSTEM LISTED ON S-1548-148 (DEHY 20)
S-1548-484-9	126,000 GALLONS	3020-05 E	1	296.00	296.00	Α	3,000 BBL FIXED ROOF CRUDE OIL/PRODUCED WATER STORAGE TANK T-300A VENTED TO VAPOR CONTROL SYSTEM LISTED ON S- 1548-148 (DEHY 20)
S-1548-486-8	21,000 GALLONS	3020-05 C	1	165.00	165.00	Α	500 BBL FIXED ROOF CRUDE OIL/PRODUCED WATER STORAGE TANK T-310A VENTED TO VAPOR CONTROL SYSTEM LISTED ON S-1548-148 (DEHY 20)
S-1548-487-9	21,000 GALLONS	3020-05 C	1	165.00	165.00	Α	500 BBL FIXED ROOF CRUDE OIL/PRODUCED WATER STORAGE TANK T-320A VENTED TO VAPOR CONTROL SYSTEM LISTED ON S-1548-148 (DEHY 20)
S-1548-488-9	21,000 GALLONS	3020-05 C	1	165.00	165.00	Α	500 BBL FIXED ROOF CRUDE OIL/PRODUCED WATER STORAGE TANK T-330A VENTED TO VAPOR CONTROL SYSTEM LISTED ON S-1548-148 (DEHY 20)
S-1548-489-9	1,700 GALLONS	3020-05 A	1	91.00	91.00	Α	1,700 GALLON (84" DIA X 72" TALL) INDUCED GAS FLOTATION UNIT V- 300A VENTED TO VAPOR CONTROL SYSTEM LISTED ON S-1548-148 (DEHY 20)
S-1548-497-9	54,600 GALLONS	3020-05 D	1	223.00	223.00	Α	1,300 BBL (12 FT DIAMETER BY 65 FT SHELL LENGTH) FREE WATER KNOCK OUT V-201G VENTED TO SHARED VAPOR CONTROL SYSTEM LISTED ON S-1548-148 (DEHY 20)
S-1548-498-8	1,680,000 GALLONS	3020-05 G	1	461.00	461.00	Α	40,000 BBL FIXED-ROOF CRUDE OIL/PRODUCED WATER STORAGE TANK T-200A VENTED TO SHARED VAPOR CONTROL SYSTEM LISTED ON S-1548-148 (DEHY 20)
S-1548-499-5	5000 gallons	3020-05 B	1	113.00	113.00	А	5,000 GALLON OIL/WATER TANK T-410 AND AUXILIARY EQUIPMENT INCLUDING TWO DECANTER CENTRIFUGES, ONE VERTICAL CENTRIFUGE, ONE AUGER, TWO OIL/WATER PUMPS AND FOUR ROLLOFF BINS (DEHY 20)
S-1548-500-0	11,500 kBtu/hr	3020-02 G	1	980.00	980.00	D	PRODUCED GAS FLARE WITH AIR-ASSIST AND ELECTRONIC IGNITION, SERVING AS A TEMPORARY REPLACEMENT EQUIPMENT UNIT (TREU) FOR THE FLARE AUTHORIZED BY S-1548-144
S-1548-501-9	55,000 GALLONS	3020-05 D	1	223.00	223.00	Α	55,000 GALLON (12 FT DIAMETER X 65 FT LENGTH) FREE WATER KNOCKOUT VESSEL V-201H WITH VAPOR CONTROL AS DESCRIBED IN S-1548-148 (DEHY 20)
S-1548-503-5	1,680,000 gallons	3020-05 G	1	461.00	461.00	Α	40,000 BBL FIXED-ROOF CLARIFIER TANK T-200B VENTED TO SHARED VAPOR CONTROL SYSTEM LISTED ON S-1548-148 (DEHY 20)
S-1548-504-5	14,000 gallon	3020-05 B	1	113.00	113.00	Α	14,000 GALLON (7.5 FT DIAMETER X 40 FT LENGTH) INDUCED STATIC FLOTATION CELL V-240F CONNECTED TO VAPOR CONTROL SYSTEM LISTED IN S-1548-148 (DEHY 20)
S-1548-505-3	5000 BBL	3020-05 E	1	296.00	296.00	Α	5,000 BBL FIXED ROOF CRUDE OIL/PRODUCED WATER TANK (T-241) VENTED TO THE SHARED VAPOR CONTROL SYSTEM LISTED ON S- 1548-148 (DEHY 20)

9/14/21 4:21 pm

				FEE	FEE	PERMIT	
PERMIT NUMBER	FEE DESCRIPTION	FEE RULE	QTY	AMOUNT	TOTAL	STATUS	EQUIPMENT DESCRIPTION
S-1548-554-1	100.0 MMBtu/hr	999-99	1	0.00	0.00	Α	100 MMBTU/HR NATURAL/PRODUCED GAS-FIRED STEAM GENERATOR WITH NORTH AMERICAN MAGNA-FLAME GLE ULTRA LOW NOX BURNER (2972 SETTING)
S-1548-621-1	6,500 GALLONS	999-99	1	0.00	0.00	Α	6500 GALLON CHEMICAL STORAGE TANK WITH P/V VALVE AND LIQUID LOADOUT OPERATION (ALSO PERMITTED AS S-1547-1337)
S-1548-622-1	6500 gallons	999-99	1	0.00	0.00	Α	6,500 GALLON OILFIELD CHEMICAL STORAGE TANK #3 - DEHY 20 (ALSO PERMITTED AS S-1547-1338-0)
S-1548-627-2	1,000 hp electric motor	3020-01 G	1	980.00	980.00	А	1,000 HP ELECTRIC MOTOR DRIVEN FUEL GAS COMPRESSOR WITH A FUEL GAS & A SURGE DRUM AND ASSOCIATED PIPING (COMPRESSOR STATION #49)
S-1548-628-4	Misc.	3020-06	1	128.00	128.00	Α	CRUDE OIL TRUCK BOTTOM LOADING RACK WITH DRY BREAK COUPLINGS CONNECTED TO THE VAPOR CONTROL SYSTEM LISTED ON PERMIT S-1548-148-13
S-1548-632-0	140 MMBTU/HR	3020-02 H	1	1,238.00	1,238.00	Α	140 MMBTU/HR AIR-ASSISTED PRODUCED GAS FLARE SERVING VAPOR CONTROL SYSTEM LISTED ON S-510-27
S-1548-633-0	19,740 gallons	3020-05 B	1	113.00	113.00	Α	470 BBL OR LESS BAKER STYLE STORAGE TANK WITH PV RELIEF VALVE (DOW CHANSLOR LEASE)

Number of Facilities Reported: 1