



DEC 08 2014

Mr. John Ludwick
Aera Energy LLC
PO Box 11164
Bakersfield, CA 93389

**Re: Proposed Authority to Construct/Certificate of Conformity (Minor Mod)
District Facility # S-1548
Project # S-1142828**

Dear Mr. Ludwick:

Enclosed for your review is the District's analysis of an application for Authorities to Construct for the facility identified above. You requested that Certificates of Conformity with the procedural requirements of 40 CFR Part 70 be issued with this project. The project was to revise the tank cleaning notification requirements from hour to equivalent days to match other tanks at the facility. Initial construction requirements were also removed from one tank that were inadvertently left on the permit.

After addressing all comments made during the 45-day EPA comment period, the District intends to issue the Authorities to Construct with Certificates of Conformity. Prior to operating with modifications authorized by the Authorities to Construct, the facility must submit an application to modify the Title V permit as an administrative amendment, in accordance with District Rule 2520, Section 11.5.

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

Seyed Sadredin
Executive Director/Air Pollution Control Officer

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

Central Region (Main Office)
1990 E. Gettysburg Avenue
Fresno, CA 93726-0244
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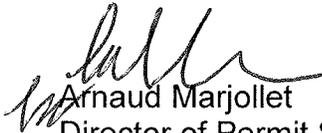
Southern Region
34946 Flyover Court
Bakersfield, CA 93308-9725
Tel: 661-392-5500 FAX: 661-392-5585

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Thank you for your cooperation in this matter.

Sincerely,



Arnaud Marjollet
Director of Permit Services

Enclosures

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

San Joaquin Valley Air Pollution Control District

Authority to Construct Application Review

Facility Name: Aera Energy LLC
Mailing Address: PO Box 11164
Bakersfield, CA 93389
Contact Person: John Ludwick
Telephone: 661-665-4472
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E-Mail: jjludwick@aeraenergy.com
Application #(s): S-1548-482-7, '-483-7, '-503-4, '-504-4
Project #: S-1142828
Deemed Complete: July 8, 2014

Date: November 10, 2014
Engineer: Dan Klevann
Lead Engineer: ~~Richard Karris~~ *ASUR ADE*

NOV 17 2014

I. Proposal

The primary business of Aera Energy LLC (Aera) is oil production. Aera has submitted an Authority to Construct (ATC) application for the following:

- Revise tank cleaning and notification requirement conditions on three tanks. The revision is to change the notification requirement from hours to the equivalent days.
- Remove initial construction requirements from tank S-1548-503 that were inadvertently left on the initial ATC.

Per FYI-111, ATC, Title V, and NSR Applicability Determinations, Item 2, modifying monitoring and record keeping requirements, provided the change does not lessen the stringency of an emissions limit is not a change in the method of operation of the tank cleaning requirements. Modifying the time for notifications from listing in hours to listing in equivalent days is not a modification because there is no change in the allowed time for notifications; therefore, Rule 2201 does not apply. The correction of tank cleaning notification requirements to three days as called out in Rule 4623 also is not a modification.

Aera received their Title V Permit on 1/31/2003. This modification can be classified as a Title V minor modification pursuant to Rule 2520, and can be processed with a Certificate of Conformity (COC). Since the facility has specifically requested that this project be processed in that manner, the 45-day EPA comment period will be satisfied prior to the issuance of the Authority to Construct. Aera must apply to administratively amend their Title V permit.

II. Applicable Rules

Rule 2201	New and Modified Stationary Source Review Rule (4/21/11)
Rule 2410	Prevention of Significant Deterioration (6/16/11)

Rule 2520 Federally Mandated Operating Permits (6/21/01)
 Rule 4001 New Source Performance Standards (4/14/99) is not applicable. This subpart does not apply to vessels with a design capacity $\leq 1,589.874 \text{ m}^3$ ($\leq 420,000$ gallons) used for petroleum or condensate stored, processed, or treated prior to custody transfer. The capacity of these tanks is $\leq 420,000$ gallons, and they store crude oil prior to custody transfer; therefore, this subpart does not apply to the tanks in this project.
 Rule 4002 National Emissions Standards for Hazardous Air Pollutants (5/20/04)
 Rule 4101 Visible Emissions (2/17/05)
 Rule 4102 Nuisance (12/17/92)
 Rule 4623 Storage of Organic Liquids (5/19/05)
 CH&SC 41700 Health Risk Assessment
 CH&SC 42301.6 School Notice
 Public Resources Code 21000-21177: California Environmental Quality Act (CEQA)
 California Code of Regulations, Title 14, Division 6, Chapter 3, Sections 15000-15387: CEQA Guidelines

III. Project Location

The equipment will be located at the Section 2 Dehydration Facility in the Cymric Oil Field, within the SW/4 of Section 2, Township 29S, Range 21E. The equipment is not located within 1,000 feet of the outer boundary of a K-12 school. Therefore, the public notification requirement of California Health and Safety Code 42301.6 is not applicable to this project.

IV. Process Description

The Anderson/Fitzgerald Dehydration Facility handles heavy oil production from the Cymric area. To accomplish this task, free water knockout vessels, surge vessels, induced static flotation units, and tanks serve to separate the crude oil from entrained water.

V. Equipment Listing

Pre-Project Equipment Description:

- S-1548-482-6: 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)
- S-1548-483-6: 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-1548-503-3: 40,000 BBL FIXED-ROOF CLARIFIER TANK T-200B VENTED TO SHARED VAPOR CONTROL SYSTEM LISTED ON S-1548-148 (DEHY 20)
- S-1548-504-3: 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)

Proposed Modification:

Revise the tank cleaning notification periods to reference days instead of hours.

- S-1548-482-7: MODIFICATION OF 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): REVISE TANK CLEANING NOTIFICATION REQUIREMENT
- S-1548-483-7: MODIFICATION OF 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): REVISE TANK CLEANING NOTIFICATION REQUIREMENT
- S-1548-503-4: MODIFICATION OF 40,000 BBL FIXED-ROOF CLARIFIER TANK T-200B VENTED TO SHARED VAPOR CONTROL SYSTEM LISTED ON S-1548-148 (DEHY 20): REMOVE CONSTRUCTION NOTIFICATION CONDITIONS
- S-1548-504-4: MODIFICATION OF 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): REVISE TANK CLEANING NOTIFICATION REQUIREMENT

Post Project Equipment Description:

- S-1548-482-7: 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)
- S-1548-483-7: 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-1548-503-4: 40,000 BBL FIXED-ROOF CLARIFIER TANK T-200B VENTED TO SHARED VAPOR CONTROL SYSTEM LISTED ON S-1548-148 (DEHY 20)
- S-1548-504-4: 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)

VI. Emission Control Technology Evaluation

The vapor control system (VCS) reduces the VOC emissions from the subject equipment by at least 99%. The VCS process routes the collected, uncondensed vapors to either the field gas gathering system or incinerated in the flare. Fugitive component VOC emissions are monitored by a District-approved I&M program.

VII. General Calculations

Per FYI-111, ATC, Title V, and NSR Applicability Determinations, Item 2, Rule 2201 does not apply and calculations are not required.

VIII. Compliance

Rule 2201 New and Modified Stationary Source Review Rule

Per FYI-111, ATC, Title V, and NSR Applicability Determinations, Item 2, modifying monitoring and record keeping requirements, provided the change does not lessen the stringency of an emissions limit is not a change in the method of operation of the tank cleaning requirements. Modifying the time for notifications from listing in hours to listing in equivalent days is not a modification because there is no change in the allowed time for notifications; therefore, Rule 2201 does not apply.

Rule 2520 Federally Mandated Operating Permits

This facility is subject to this Rule, and has received their Title V Operating Permit. The proposed modification is a Minor Modification to the Title V Permit.

In accordance with Rule 2520, these modifications:

1. Do not violate requirements of any applicable federally enforceable local or federal requirement;
2. Do not relax monitoring, reporting, or recordkeeping requirements in the permit and are not significant changes in existing monitoring permit terms or conditions;
3. Do not require or change a case-by-case determination of an emission limitation or other standard, or a source-specific determination for temporary sources of ambient impacts, or a visibility or increment analysis;
4. Do not seek to establish or change a permit term or condition for which there is no corresponding underlying applicable requirement and that the source has assumed to avoid an applicable requirement to which the source would otherwise be subject. Such terms and conditions include:
 - a. A federally enforceable emission cap assumed to avoid classification as a modification under any provisions of Title I of the Federal Clean Air Act; and
 - b. An alternative emissions limit approved pursuant to regulations promulgated under section 112(i)(5) of the Federal Clean Air Act; and
5. Are not Title I modifications as defined in District Rule 2520 or modifications as defined in section 111 or 112 of the Federal Clean Air Act; and
6. Do not seek to consolidate overlapping applicable requirements.

As discussed above, the facility has applied for a Certificate of Conformity (COC) and supplied the Title V compliance certification (Appendix B). Therefore, the facility must apply to modify their Title V permit with an administrative amendment, prior to operating with the proposed modifications. Continued compliance with this rule is expected. The facility may

construct/operate under the ATC upon submittal of the Title V administrative amendment/minor modification application.

Rule 4001 New Source Performance Standards (NSPS)

This rule incorporates the New Source Performance Standards from 40 CFR Part 60. 40 CFR Part 60, Subparts, K, Ka and Kb could potentially apply to the storage tanks located at this facility. However, pursuant to 40 CFR 60.110 (b), 60.110(a) (b), and 60.110(b) (b), these subparts do not apply to storage vessels less than 10,000 bbls, used for petroleum or condensate, that is stored, processed, and/or treated at a drilling and production facility prior to custody transfer.

Therefore, the requirements of this subpart are not applicable to this project.

Rule 4002 National Emission Standards for Hazardous Air Pollutants (NESHAPs)

This rule incorporates NESHAPs from Part 61, Chapter I, Subchapter C, Title 40, CFR and the NESHAPs from Part 63, Chapter I, Subchapter C, Title 40, CFR; and applies to all sources of hazardous air pollution listed in 40 CFR Part 61 or 40 CFR Part 63. However, no subparts of 40 CFR Part 61 or 40 CFR Part 63 apply to this project for oilfield tanks and production operations.

Rule 4101 Visible Emissions

Rule 4101 states that no person shall discharge into the atmosphere emissions of any air contaminant aggregating more than 3 minutes in any hour which is as dark as or darker than Ringelmann 1 (or 20% opacity). As long as the equipment is properly maintained and operated, compliance with visible emissions limits is expected under normal operating conditions.

Rule 4102 Nuisance

Rule 4102 prohibits discharge of air contaminants which could cause injury, detriment, nuisance or annoyance to the public. Public nuisance conditions are not expected as a result of these operations, provided the equipment is well maintained. Therefore, compliance with this rule is expected.

California Health & Safety Code 41700 (Health Risk Assessment)

District Policy APR 1905 – *Risk Management Policy for Permitting New and Modified Sources* specifies that for an increase in emissions associated with a proposed new source or modification, the District perform an analysis to determine the possible impact to the nearest resident or worksite.

As demonstrated above, there are no increases in emissions associated with this project, therefore a health risk assessment is not necessary and no further risk analysis is required.

Rule 4623 Storage of Organic Liquids

This rule limits volatile organic compound (VOC) emissions from the storage of organic liquids with true vapor pressures (TVP) of 0.5 psia or greater in any tank with a design capacity of 1,100 gallons or greater. The tank is currently in compliance with this rule. The administrative changes proposed in this project will not affect the compliance status of the rule. Continued compliance is expected.

California Health & Safety Code 42301.6 (School Notice)

The District has verified that this site is not located within 1,000 feet of a school. Therefore, pursuant to California Health and Safety Code 42301.6, a school notice is not required.

California Environmental Quality Act (CEQA)

CEQA requires each public agency to adopt objectives, criteria, and specific procedures consistent with CEQA Statutes and the CEQA Guidelines for administering its responsibilities under CEQA, including the orderly evaluation of projects and preparation of environmental documents. The District adopted its *Environmental Review Guidelines* (ERG) in 2001. The basic purposes of CEQA are to:

- Inform governmental decision-makers and the public about the potential, significant environmental effects of proposed activities;
- Identify the ways that environmental damage can be avoided or significantly reduced;
- Prevent significant, avoidable damage to the environment by requiring changes in projects through the use of alternatives or mitigation measures when the governmental agency finds the changes to be feasible; and
- Disclose to the public the reasons why a governmental agency approved the project in the manner the agency chose if significant environmental effects are involved.

The District performed an Engineering Evaluation (this document) for the proposed project and determined that all project specific emission unit(s) are exempt from Best Available Control Technology (BACT) requirements. Furthermore, the District has determined that potential emission increases would have a less than significant health impact on sensitive receptors.

Issuance of permits for emissions units not subject to BACT requirements and with health impact less than significant is a matter of ensuring conformity with applicable District rules and regulations and does not require discretionary judgment or deliberation. Thus, the District concludes that this permitting action constitutes a ministerial approval. Section 21080 of the Public Resources Code exempts from the application of CEQA those projects over which a public agency exercises only

ministerial approval. Therefore, the District finds that this project is exempt from the provisions of CEQA.

IX. Recommendation

Compliance with all applicable rules and regulations is expected. Issue ATC's S-1548-482-7, S-1548-483-7, S-1548-503-4 and S-1548-504-4 subject to the permit conditions on the attached draft ATC's in **Appendix C**.

X. Billing Information

Annual Permit Fees			
Permit Number	Fee Schedule	Fee Description	Annual Fee
S-1548-482-7	3020-05-F	630,000 gallons	\$301.00
S-1548-483-7	3020-05-F	630,000 gallons	\$301.00
S-1548-503-4	3020-05-G	1,680,000 gallons	\$382.00
S-1548-504-4	3020-05-B	14,000 gallons	\$93.00

Appendixes

- A: Current PTO's
- B: Compliance Certification
- C: Draft ATC's

APPENDIX A
Current PTOs

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1548-482-6

EXPIRATION DATE: 05/31/2016

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. Tank gauging or sampling devices shall be equipped with a leak free cover which shall be closed at all times except during gauging or sampling. All piping, valves and fittings shall be constructed and maintained in a gas tight condition, except during periods of vessel interior cleaning or inspection. [District NSR Rule] Federally Enforceable Through Title V Permit
4. A leak-free condition is defined as a condition without a gas leak. A gas leak is defined as a reading in excess of 10,000 ppmv, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21. [District NSR Rule] Federally Enforceable Through Title V Permit
5. When in service, tank shall vent to vapor control system listed in S-1548-148 , except during periods of vessel interior cleaning. Prior to disconnecting the tank from the vapor control system, operator shall drain all liquid from the tank to the maximum extent feasible and shall operate the vapor control system for 24 hours. The vapor control system connection(s) shall be blinded off when disconnected from the tank. [District NSR Rule] Federally Enforceable Through Title V Permit
6. 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
7. 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
8. 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. If any of the tank components are found to leak during an annual inspection, the inspection frequency for that component type shall be changed from annual to quarterly. If no tank components are subsequently found to be leaking during five consecutive inspections, the inspection frequency may be changed from quarterly to annual. Components located in inaccessible (over 15 feet above ground when access is required from the ground or over 6 feet away from a platform when access is required from the platform) locations shall be inspected at least annually and components located in unsafe areas shall be inspected and repaired at the next process unit turnaround (the scheduled shutdown of a unit for maintenance and repair work). [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.

9. The facility operator upon detection of a component having a reading greater than 10,000 ppmv shall record the reading for that component and affix a weatherproof readily visible tag bearing the date on which the reading is detected. The tag shall remain in place until the component is repaired, reinspected and found to be in compliance with the requirements of this permit. [District NSR Rule] Federally Enforceable Through Title V Permit
10. An operator shall reinspect a component for leaks within thirty working days after the date on which the component is repaired. [District NSR Rule] Federally Enforceable Through Title V Permit
11. Emissions from components which have been tagged by the facility operator for repair within 15 calendar days or which have been repaired and are awaiting re-inspection shall not be in violation of this permit. [District NSR Rule] Federally Enforceable Through Title V Permit
12. Any component leak shall be repaired to a leak-free condition or vented to a flare satisfying the requirements of 40 CFR 60.18 or to a vapor control device that is at least 95 percent efficient as measured by EPA Method 25 within fifteen (15) calendar days of detection. The APCO may grant a ten (10) calendar day extension provided the operator demonstrates that necessary and sufficient actions are being taken to correct the leak within this time period. Any vapor control device, other than a flare, used to comply with this condition shall demonstrate at least 95% control efficiency as measured by EPA Method 25 at least annually. [District NSR Rule] Federally Enforceable Through Title V Permit
13. If the leaking component is an essential part of a critical process unit which cannot be immediately shut down for repairs, the operator shall 1) Minimize the leak within 15 calendar days; and 2) If the leak which has been minimized still exceeds the concentration allowed by this permit, the essential component shall be repaired 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. A critical process unit is any process unit which would result in the automatic shutdown of other process units if it were shut down. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
14. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Leak rate in ppmv; 3) Date of leak detection, and method of detection; 3) Date and emission level of recheck after leak is repaired; 4) Identification and location of essential parts of critical process units found leaking that cannot be repaired until the next process unit turnaround; and 5) Method used to minimize the leak from essential parts of critical process units which cannot be repaired until the next process unit turnaround. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
15. This permit authorizes tank cleaning that is not the result of breakdowns or poor maintenance as a routine maintenance activity. [District Rule 2080] Federally Enforceable Through Title V Permit
16. Permittee shall conduct tank cleaning and maintenance operations in accordance with District approved procedure as described in this permit. [District Rule 2080] Federally Enforceable Through Title V Permit
17. Tank may be disconnected from vapor control system during District approved cleaning and maintenance procedures as described in this permit. [District Rule 2080] Federally Enforceable Through Title V Permit
18. Permittee shall notify the District Compliance division at least 48 hours before tank cleaning and vapor control system disconnection and within 72 hours after returning the tank to service. [District Rule 2080] Federally Enforceable Through Title V Permit
19. Prior to opening the tank to allow tank cleaning one of the following options must be followed: 1) operate the vapor control system for at least 24 hours after all the liquid in the tank has been drained to the maximum extent feasible, 2) displace vapors floating the oil pad off with water such that 90% of the tank liquid capacity is displaced, 3) vent the tank to the vapor control system until the vapor concentration is less than 10% of the lower explosive limit (LEL) or 5,000 ppmv whichever is less; or 4) vent the tank to the vapor control system for a length of time determined by the following relationship: $t = 2.3 V/Q$, where t = time, V = tank volume (cubic feet), and Q = flow rate to the vapor control system as determined using appropriate engineering calculations. [District Rule 2080] 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.

20. The tank shall be cleaned using water, hot water, solvents with an initial boiling point of greater than 302 F, solvents with a vapor pressure of less than 0.5 psia, or solvents with 50 grams VOC per liter or less. Sediment may be used for road mix as allowed by Section 6.17 of District Rule 2020. Steam cleaning shall be allowed only during December through March, or at locations where wastewater treatment facilities are limited. [District Rule 2080] Federally Enforceable Through Title V Permit
21. Prior to reintroducing crude oil/water to the tank, the tank shall be filled to the maximum possible level with water or an organic liquid with a TVP less than 0.5 psia, the tank vapor control system shall be reactivated, and the liquid level shall be adjusted as necessary. Pressure/relief valve shall not open during filling of the tank. [District Rule 2080] Federally Enforceable Through Title V Permit
22. Within 48 hours after refilling the tank with crude oil/water, the pressure relief valve seats and hatch seals shall be inspected for leaks using EPA method 21 and the regular tank maintenance and inspection program shall resume. [District Rule 2080] Federally Enforceable Through Title V Permit
23. Permittee shall maintain records of each period of cleaning and maintenance when the tank is disconnected or isolated from the vapor control system. Records shall include the date that tank cleaning was initiated, the date tank cleaning was completed, the method of tank cleaning used, and a description of internal and external tank repairs and maintenance performed. [District Rule 2080] Federally Enforceable Through Title V Permit
24. 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
25. All records shall be maintained and retained on the premises 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

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

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1548-483-6

EXPIRATION DATE: 05/31/2016

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. Tank gauging or sampling devices shall be equipped with a leak free cover which shall be closed at all times except during gauging or sampling. All piping, valves and fittings shall be constructed and maintained in a leak free condition, except during periods of vessel interior cleaning or inspection. [District NSR Rule] Federally Enforceable Through Title V Permit
4. A leak-free condition is defined as a condition without a gas leak. A gas leak is defined as a reading in excess of 10,000 ppmv, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21. [District NSR Rule] Federally Enforceable Through Title V Permit
5. When in service, tank shall vent to vapor control system listed in S-1548-148 , except during periods of vessel interior cleaning. Prior to disconnecting the tank from the vapor control system, operator shall drain all liquid from the tank to the maximum extent feasible and shall operate the vapor control system for 24 hours. The vapor control system connection(s) shall be blinded off when disconnected from the tank. [District NSR Rule] Federally Enforceable Through Title V Permit
6. 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
7. 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
8. 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. If any of the tank components are found to leak during an annual inspection, the inspection frequency for that component type shall be changed from annual to quarterly. If no tank components are subsequently found to be leaking during five consecutive inspections, the inspection frequency may be changed from quarterly to annual. Components located in inaccessible (over 15 feet above ground when access is required from the ground or over 6 feet away from a platform when access is required from the platform) locations shall be inspected at least annually and components located in unsafe areas shall be inspected and repaired at the next process unit turnaround (the scheduled shutdown of a unit for maintenance and repair work). [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.

9. The facility operator upon detection of a component having a reading greater than 10,000 ppmv shall record the reading for that component and affix a weatherproof readily visible tag bearing the date on which the reading is detected. The tag shall remain in place until the component is repaired, reinspected and found to be in compliance with the requirements of this permit. [District NSR Rule] Federally Enforceable Through Title V Permit
10. An operator shall reinspect a component for leaks within thirty working days after the date on which the component is repaired. [District NSR Rule] Federally Enforceable Through Title V Permit
11. Emissions from components which have been tagged by the facility operator for repair within 15 calendar days or which have been repaired and are awaiting re-inspection shall not be in violation of this permit. [District NSR Rule] Federally Enforceable Through Title V Permit
12. Any component leak shall be repaired to a leak-free condition or vented to a flare satisfying the requirements of 40 CFR 60.18 or to a vapor control device that is at least 95 percent efficient as measured by EPA Method 25 within fifteen (15) calendar days of detection. The APCO may grant a ten (10) calendar day extension provided the operator demonstrates that necessary and sufficient actions are being taken to correct the leak within this time period. Any vapor control device, other than a flare, used to comply with this condition shall demonstrate at least 95% control efficiency as measured by EPA Method 25 at least annually. [District NSR Rule] Federally Enforceable Through Title V Permit
13. If the leaking component is an essential part of a critical process unit which cannot be immediately shut down for repairs, the operator shall 1) Minimize the leak within 15 calendar days; and 2) If the leak which has been minimized still exceeds the concentration allowed by this permit, the essential component shall be repaired 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. A critical process unit is any process unit which would result in the automatic shutdown of other process units if it were shut down. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
14. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Leak rate in ppmv; 3) Date of leak detection, and method of detection; 3) Date and emission level of recheck after leak is repaired; 4) Identification and location of essential parts of critical process units found leaking that cannot be repaired until the next process unit turnaround; and 5) Method used to minimize the leak from essential parts of critical process units which cannot be repaired until the next process unit turnaround. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
15. This permit authorizes tank cleaning that is not the result of breakdowns or poor maintenance as a routine maintenance activity. [District Rule 2080] Federally Enforceable Through Title V Permit
16. Permittee shall conduct tank cleaning and maintenance operations in accordance with District approved procedure as described in this permit. [District Rule 2080] Federally Enforceable Through Title V Permit
17. Tank may be disconnected from vapor control system during District approved cleaning and maintenance procedures as described in this permit. [District Rule 2080] Federally Enforceable Through Title V Permit
18. Permittee shall notify the District Compliance division at least 48 hours before tank cleaning and vapor control system disconnection and within 72 hours after returning the tank to service. [District Rule 2080] Federally Enforceable Through Title V Permit
19. Prior to opening the tank to allow tank cleaning one of the following options must be followed: 1) operate the vapor control system for at least 24 hours after all the liquid in the tank has been drained to the maximum extent feasible, 2) displace vapors floating the oil pad off with water such that 90% of the tank liquid capacity is displaced, 3) vent the tank to the vapor control system until the vapor concentration is less than 10% of the lower explosive limit (LEL) or 5,000 ppmv whichever is less; or 4) vent the tank to the vapor control system for a length of time determined by the following relationship: $t = 2.3 V/Q$, where t = time, V = tank volume (cubic feet), and Q = flow rate to the vapor control system as determined using appropriate engineering calculations. [District Rule 2080] 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.

20. The tank shall be cleaned using water, hot water, solvents with an initial boiling point of greater than 302 F, solvents with a vapor pressure of less than 0.5 psia, or solvents with 50 grams VOC per liter or less. Sediment may be used for road mix as allowed by Section 6.17 of District Rule 2020. Steam cleaning shall be allowed only during December through March, or at locations where wastewater treatment facilities are limited. [District Rule 2080] Federally Enforceable Through Title V Permit
21. Prior to reintroducing crude oil/water to the tank, the tank shall be filled to the maximum possible level with water or an organic liquid with a TVP less than 0.5 psia, the tank vapor control system shall be reactivated, and the liquid level shall be adjusted as necessary. Pressure/relief valve shall not open during filling of the tank. [District Rule 2080] Federally Enforceable Through Title V Permit
22. Within 48 hours after refilling the tank with crude oil/water, the pressure relief valve seats and hatch seals shall be inspected for leaks using EPA method 21 and the regular tank maintenance and inspection program shall resume. [District Rule 2080] Federally Enforceable Through Title V Permit
23. Permittee shall maintain records of each period of cleaning and maintenance when the tank is disconnected or isolated from the vapor control system. Records shall include the date that tank cleaning was initiated, the date tank cleaning was completed, the method of tank cleaning used, and a description of internal and external tank repairs and maintenance performed. [District Rule 2080] Federally Enforceable Through Title V Permit
24. 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
25. All records shall be maintained and retained on the premises 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

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

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1548-503-3

EXPIRATION DATE: 05/31/2016

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 2201 and 40 CFR 60.112b(a)(3)(i)] Federally Enforceable Through Title V Permit
3. Any tank gauging or sampling device on a tank vented to the vapor recovery system shall be equipped with a leak-free (<10,000 ppmv, measured in accordance with EPA Method 21 by a portable hydrocarbon detection instrument that is calibrated with methane) cover which shall be closed at all times except during gauging or sampling. [District Rule 4623 and 40 CFR 60.112b(a)(3)(i)] Federally Enforceable Through Title V Permit
4. 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
5. 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
6. 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
7. 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 Rules 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.

8. 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
9. 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 Rules Rule 4623] Federally Enforceable Through Title V Permit
10. 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
11. 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
12. This permit authorizes tank cleaning that is not the result of breakdowns or poor maintenance as a routine maintenance activity. [District Rule 2020] Federally Enforceable Through Title V Permit
13. Permittee shall conduct cleaning and maintenance operations in accordance with District approved procedure as described in Rule 4623. [District Rule 4623] Federally Enforceable Through Title V Permit
14. Tank may be disconnected from vapor control system during District approved cleaning and maintenance procedures as described in this permit. [District Rule 2201] Federally Enforceable Through Title V Permit
15. Permittee shall notify the District Compliance division in writing at least three (3) days prior to performing tank degassing and interior tank cleaning activities. Written notification shall include the following: 1) the Permit to Operate number and physical location of the tank being degassed, 2) the date and time that tank degassing and cleaning activities will begin, 3) the degassing method, as allowed in this permit, to be used, 4) the method to be used to clean the tank, including any solvents to be used, and 5) the method to be used to dispose of any removed sludge, including methods that will be used to control emissions from the receiving vessel and emissions during transport. [District Rule 4623] Federally Enforceable Through Title V Permit
16. Operator shall notify the EPA and District of the date construction is commenced postmarked no later than 30 days after such date. Notification shall include the District-approved Operating Plan. [40 CFR 60.113b(c)(1)] Federally Enforceable Through Title V Permit
17. Operator shall notify the EPA and the District of the actual date of initial startup postmarked within 15 days of such date. [40 CFR 60.7(a)(3)] Federally Enforceable Through Title V Permit
18. All records shall be maintained and retained on the premises for a period of at least 5 years and made available for District inspection upon request. [District Rule 1070] Federally Enforceable Through Title V Permit

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

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1548-504-3

EXPIRATION DATE: 05/31/2016

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 vessel and APCO-approved vapor control system, including piping, valves, and fittings, shall be maintained leak-free, except during periods of vessel cleaning. 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, as methane, above background on a portable hydrocarbon detection instrument that is calibrated as methane in accordance with EPA Test Method 21. [District Rule 2201& 2520] Federally Enforceable Through Title V Permit
2. Tank gauging or sampling devices shall be equipped with a leak-free cover which shall be closed at all times except during gauging or sampling. [District Rule 2201]
3. The induced static flotation unit is a pressure vessel as defined by District Rule 4623, Section 3.20. [District Rule 4623]
4. 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
5. 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
6. All components attached to this vessel 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 Rules 2201 and 4409] Federally Enforceable Through Title V Permit
7. 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
8. All components containing VOCs shall be inspected annually by the facility operator to ensure compliance with the provisions of this permit. However, if two (2) percent or more of the components of any type subject to the requirements of this permit are found to leak during an annual inspection, the inspection frequency for that component type shall be changed from annual to quarterly. If less than two percent of the components of that type are subsequently found to be leaking during five consecutive inspections, the inspection frequency may be changed from quarterly to annual. Components located in inaccessible (over 15 feet above ground when access is required from the ground or over 6 feet away from a platform when access is required from the platform) locations shall be inspected at least annually and components located in unsafe areas shall be inspected and repaired at the next process unit turnaround (the scheduled shutdown of a unit for maintenance and repair work). [District Rules 2201 and 4409] 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.

9. A facility operator, upon detection of a leaking component, shall affix to that component not immediately repaired a weatherproof readily visible tag bearing the date on which the leak is detected. The tag shall remain in place until the leaking component is repaired, reinspected, and found to be in compliance with the requirements of this permit. [District Rules 2201 and 4409] Federally Enforceable Through Title V Permit
10. An operator shall reinspect a component for leaks within thirty working days after the date on which the component is repaired. [District Rules 2201 4409] Federally Enforceable Through Title V Permit
11. Emissions from components which have been tagged by the facility operator for repair within 15 calendar days or which have been repaired and are awaiting re-inspection shall not be in violation of this permit. [District Rules 2201 and 4409] Federally Enforceable Through Title V Permit
12. 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
13. If the leaking component is an essential part of a critical process unit which cannot be immediately shut down for repairs, the operator shall 1) Minimize the leak within 1 hour after detection of leak; and 2) If the leak which has been minimized still exceeds the concentration allowed by this permit, the essential component shall be repaired 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. A critical process unit is any process unit which would result in the automatic shutdown of other process units if it were shut down. [District Rules 2201 and 4409 Sec. 5.3.6]
14. Operator shall maintain an inspection log containing the following 1) Number and type of component leaking; 2) Date of leak detection, and method of detection; 3) Date of repair, replacement or removal from operation of leaking component; 4) Date and emission level of recheck after leak is repaired; 5) Identification and location of essential parts of critical process units found leaking that cannot be repaired until the next process unit turnaround; and 6) Method used to minimize the leak from essential parts of critical process units which cannot be repaired until the next process unit turnaround. The operator shall sign and date the inspection log certifying the accuracy of the information recorded in the log. [District Rules 2201 4409 Sec 6.2]
15. This permit authorizes induced flotation unit cleaning that is not the result of breakdowns or poor maintenance as a routine maintenance activity. [District Rule 2080] Federally Enforceable Through Title V Permit
16. Permittee shall conduct induced flotation unit cleaning and maintenance operations in accordance with District approved procedures as described in this permit. [District Rule 2080] Federally Enforceable Through Title V Permit
17. Induced flotation unit may be disconnected from vapor control system during District approved cleaning and maintenance procedures as described in this permit. [District Rule 2080] Federally Enforceable Through Title V Permit
18. Permittee shall notify the District Compliance Division at least 24 hours before tank cleaning and vapor control system disconnection and within 72 hours after restoring crude oil flow to the tank. [District Rule 2080] Federally Enforceable Through Title V Permit
19. Prior to opening the induced static flotation unit to allow tank cleaning one of the following options must be followed: 1) operate the vapor recovery system for at least 24 hours after all the liquid in the induced static flotation unit has been drained to the maximum extent feasible, 2) displace vapors floating the oil pad off with water such that 90% of the induced static flotation unit liquid capacity is displaced, 3) vent the induced static flotation unit to the vapor control system until the vapor concentration is less than 10% of the lower explosive limit (LEL) or 5,000 ppmv whichever is less; or 4) vent the induced static flotation unit to the vapor control system for a length of time determined by the following relationship: $t = 2.3 V/Q$, where t = time, V = induced static flotation unit volume (cubic feet), and Q = flow rate to the vapor control system as determined using appropriate engineering calculations. [District Rule 2080] 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.

20. The induced static flotation unit shall be cleaned using one of the following methods: water, hot water, 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 VOC per liter or less. The tank sediment may be used for road mix as allowed by Section 6.17 of District Rule 2020. [District Rule 2080] Federally Enforceable Through Title V Permit
21. Steam cleaning shall be allowed only during December through March, or at locations where wastewater treatment facilities are limited. [District Rule 2080] Federally Enforceable Through Title V Permit
22. Prior to reintroducing crude oil/water to the induced static flotation unit, the induced static flotation unit shall be filled to the maximum possible level with water or an organic liquid with a TVP less than 0.5 psia, the tank vapor control system shall be reactivated, and the liquid level shall be adjusted as necessary. Pressure/relief valve shall not open during filling of the induced static flotation unit. [District Rule 2080] Federally Enforceable Through Title V Permit
23. Within 48 hours after refilling the induced flotation unit with crude oil/water, the pressure relief valve seats and hatch seals shall be inspected for leaks using EPA method 21 and the regular tank maintenance and inspection program shall resume. [District Rule 2080] Federally Enforceable Through Title V Permit
24. Permittee shall maintain records of each period of cleaning and maintenance when the induced static flotation unit is disconnected or isolated from the vapor control system. Records shall include the date the cleaning was initiated, the date cleaning was completed, the method of cleaning used, and a description of internal and external induced static flotation unit repairs and maintenance performed. Such records shall be retained for a period of at least 5 years and shall be made available for District inspection upon request. [District Rule 2080] Federally Enforceable Through Title V Permit
25. All records shall be maintained and retained on the premises 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

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

APPENDIX B
Compliance Certification

San Joaquin Valley
Unified Air Pollution Control District

RECEIVED
JUN 19 2014
SJVAPCD
Southern Region

TITLE V COMPLIANCE CERTIFICATION FORM

Tank cleaning and notification revisions

I. TYPE OF PERMIT ACTION (Check appropriate box)

- SIGNIFICANT PERMIT MODIFICATION ADMINISTRATIVE
 MINOR PERMIT MODIFICATION AMENDMENT

COMPANY NAME: Aera Energy LLC	FACILITY ID: ⁵⁻¹⁵⁴⁷² S-1548
1. Type of Organization: <input checked="" type="checkbox"/> Corporation <input type="checkbox"/> Sole Ownership <input type="checkbox"/> Government <input type="checkbox"/> Partnership <input type="checkbox"/> Utility	
2. Owner's Name: Aera Energy LLC	
3. Agent to the Owner: N/A	

II. COMPLIANCE CERTIFICATION (Read each statement carefully and initial each circle for confirmation):

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

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



Signature of Responsible Official

6-18-14

Date

Adrian Vega

Name of Responsible Official (please print)

Process Supervisor

Title of Responsible Official (please print)

APPENDIX C
Draft ATC's

San Joaquin Valley
Air Pollution Control District

AUTHORITY TO CONSTRUCT

ISSUANCE DATE: DRAFT

PERMIT NO: S-1548-482-7

LEGAL OWNER OR OPERATOR: AERA ENERGY LLC
MAILING ADDRESS: PO BOX 11164
BAKERSFIELD, CA 93389-1164

LOCATION: LIGHT OIL WESTERN STATIONARY SOURCE
CA

SECTION: NW20 TOWNSHIP: 28S RANGE: 21E

EQUIPMENT DESCRIPTION:

MODIFICATION OF 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); REVISE TANK CLEANING NOTIFICATION REQUIREMENT

CONDITIONS

1. {1830} This Authority to Construct serves as a written certificate of conformity with the procedural requirements of 40 CFR 70.7 and 70.8 and with the compliance requirements of 40 CFR 70.6(c). [District Rule 2201] Federally Enforceable Through Title V Permit
2. {1831} Prior to operating with modifications authorized by this Authority to Construct, the facility shall submit an application to modify the Title V permit with an administrative amendment in accordance with District Rule 2520 Section 5.3.4. [District Rule 2520, 5.3.4] Federally Enforceable Through Title V Permit
3. 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
4. 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
5. Tank gauging or sampling devices shall be equipped with a leak free cover which shall be closed at all times except during gauging or sampling. All piping, valves and fittings shall be constructed and maintained in a gas tight condition, except during periods of vessel interior cleaning or inspection. [District NSR Rule] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

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

Seyed Sadredin, Executive Director APCO

Arnaud Marjolle, Director of Permit Services

S-1548-482-7 : Nov 10 2014 2:14PM -- KLEVANND : Joint Inspection NOT Required

6. A leak-free condition is defined as a condition without a gas leak. A gas leak is defined as a reading in excess of 10,000 ppmv, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21. [District NSR Rule] Federally Enforceable Through Title V Permit
7. When in service, tank shall vent to vapor control system listed in S-1548-148 , except during periods of vessel interior cleaning. Prior to disconnecting the tank from the vapor control system, operator shall drain all liquid from the tank to the maximum extent feasible and shall operate the vapor control system for 24 hours. The vapor control system connection(s) shall be blinded off when disconnected from the tank. [District NSR Rule] Federally Enforceable Through Title V Permit
8. 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
9. 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
10. 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. If any of the tank components are found to leak during an annual inspection, the inspection frequency for that component type shall be changed from annual to quarterly. If no tank components are subsequently found to be leaking during five consecutive inspections, the inspection frequency may be changed from quarterly to annual. Components located in inaccessible (over 15 feet above ground when access is required from the ground or over 6 feet away from a platform when access is required from the platform) locations shall be inspected at least annually and components located in unsafe areas shall be inspected and repaired at the next process unit turnaround (the scheduled shutdown of a unit for maintenance and repair work). [District NSR Rule] Federally Enforceable Through Title V Permit
11. The facility operator upon detection of a component having a reading greater than 10,000 ppmv shall record the reading for that component and affix a weatherproof readily visible tag bearing the date on which the reading is detected. The tag shall remain in place until the component is repaired, reinspected and found to be in compliance with the requirements of this permit. [District NSR Rule] Federally Enforceable Through Title V Permit
12. An operator shall reinspect a component for leaks within thirty working days after the date on which the component is repaired. [District NSR Rule] Federally Enforceable Through Title V Permit
13. Emissions from components which have been tagged by the facility operator for repair within 15 calendar days or which have been repaired and are awaiting re-inspection shall not be in violation of this permit. [District NSR Rule] Federally Enforceable Through Title V Permit
14. Any component leak shall be repaired to a leak-free condition or vented to a flare satisfying the requirements of 40 CFR 60.18 or to a vapor control device that is at least 95 percent efficient as measured by EPA Method 25 within fifteen (15) calendar days of detection. The APCO may grant a ten (10) calendar day extension provided the operator demonstrates that necessary and sufficient actions are being taken to correct the leak within this time period. Any vapor control device, other than a flare, used to comply with this condition shall demonstrate at least 95% control efficiency as measured by EPA Method 25 at least annually. [District NSR Rule] Federally Enforceable Through Title V Permit
15. If the leaking component is an essential part of a critical process unit which cannot be immediately shut down for repairs, the operator shall 1) Minimize the leak within 15 calendar days; and 2) If the leak which has been minimized still exceeds the concentration allowed by this permit, the essential component shall be repaired 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. A critical process unit is any process unit which would result in the automatic shutdown of other process units if it were shut down. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

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CONDITIONS CONTINUE ON NEXT PAGE

16. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Leak rate in ppmv; 3) Date of leak detection, and method of detection; 3) Date and emission level of recheck after leak is repaired; 4) Identification and location of essential parts of critical process units found leaking that cannot be repaired until the next process unit turnaround; and 5) Method used to minimize the leak from essential parts of critical process units which cannot be repaired until the next process unit turnaround. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
17. This permit authorizes tank cleaning that is not the result of breakdowns or poor maintenance as a routine maintenance activity. [District Rule 2080] Federally Enforceable Through Title V Permit
18. Permittee shall conduct tank cleaning and maintenance operations in accordance with District approved procedure as described in this permit. [District Rule 2080] Federally Enforceable Through Title V Permit
19. Tank may be disconnected from vapor control system during District approved cleaning and maintenance procedures as described in this permit. [District Rule 2080] Federally Enforceable Through Title V Permit
20. Permittee shall notify the District Compliance division at least two(2) days before any tank/vessel cleaning or maintenance which necessitates isolation from the vapor control system. [District Rule 2080] Federally Enforceable Through Title V Permit
21. Prior to opening the tank to allow tank cleaning one of the following options must be followed: 1) operate the vapor control system for at least 24 hours after all the liquid in the tank has been drained to the maximum extent feasible, 2) displace vapors floating the oil pad off with water such that 90% of the tank liquid capacity is displaced, 3) vent the tank to the vapor control system until the vapor concentration is less than 10% of the lower explosive limit (LEL) or 5,000 ppmv whichever is less; or 4) vent the tank to the vapor control system for a length of time determined by the following relationship: $t = 2.3 V/Q$, where t = time, V = tank volume (cubic feet), and Q = flow rate to the vapor control system as determined using appropriate engineering calculations. [District Rule 2080] Federally Enforceable Through Title V Permit
22. The tank shall be cleaned using water, hot water, solvents with an initial boiling point of greater than 302 F, solvents with a vapor pressure of less than 0.5 psia, or solvents with 50 grams VOC per liter or less. Sediment may be used for road mix as allowed by Section 6.17 of District Rule 2020. Steam cleaning shall be allowed only during December through March, or at locations where wastewater treatment facilities are limited. [District Rule 2080] Federally Enforceable Through Title V Permit
23. Prior to reintroducing crude oil/water to the tank, the tank shall be filled to the maximum possible level with water or an organic liquid with a TVP less than 0.5 psia, the tank vapor control system shall be reactivated, and the liquid level shall be adjusted as necessary. Pressure/relief valve shall not open during filling of the tank. [District Rule 2080] Federally Enforceable Through Title V Permit
24. Within 48 hours after refilling the tank with crude oil/water, the pressure relief valve seats and hatch seals shall be inspected for leaks using EPA method 21 and the regular tank maintenance and inspection program shall resume. [District Rule 2080] Federally Enforceable Through Title V Permit
25. Permittee shall maintain records of each period of cleaning and maintenance when the tank is disconnected or isolated from the vapor control system. Records shall include the date that tank cleaning was initiated, the date tank cleaning was completed, the method of tank cleaning used, and a description of internal and external tank repairs and maintenance performed. [District Rule 2080] Federally Enforceable Through Title V Permit
26. 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
27. All records shall be maintained and retained on the premises 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

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San Joaquin Valley
Air Pollution Control District

AUTHORITY TO CONSTRUCT

ISSUANCE DATE: DRAFT

PERMIT NO: S-1548-483-7

LEGAL OWNER OR OPERATOR: AERA ENERGY LLC
MAILING ADDRESS: PO BOX 11164
BAKERSFIELD, CA 93389-1164

LOCATION: LIGHT OIL WESTERN STATIONARY SOURCE
CA

SECTION: NW20 TOWNSHIP: 28S RANGE: 21E

EQUIPMENT DESCRIPTION:

MODIFICATION OF 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): REVISE TANK CLEANING NOTIFICATION REQUIREMENT

CONDITIONS

1. {1830} This Authority to Construct serves as a written certificate of conformity with the procedural requirements of 40 CFR 70.7 and 70.8 and with the compliance requirements of 40 CFR 70.6(c). [District Rule 2201] Federally Enforceable Through Title V Permit
2. {1831} Prior to operating with modifications authorized by this Authority to Construct, the facility shall submit an application to modify the Title V permit with an administrative amendment in accordance with District Rule 2520 Section 5.3.4. [District Rule 2520, 5.3.4] Federally Enforceable Through Title V Permit
3. 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
4. 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
5. Tank gauging or sampling devices shall be equipped with a leak free cover which shall be closed at all times except during gauging or sampling. All piping, valves and fittings shall be constructed and maintained in a leak free condition, except during periods of vessel interior cleaning or inspection. [District NSR Rule] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

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

Seyed Sadredin, Executive Director APCO

Arnaud Marjollet, Director of Permit Services

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6. A leak-free condition is defined as a condition without a gas leak. A gas leak is defined as a reading in excess of 10,000 ppmv, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21. [District NSR Rule] Federally Enforceable Through Title V Permit
7. When in service, tank shall vent to vapor control system listed in S-1548-148 , except during periods of vessel interior cleaning. Prior to disconnecting the tank from the vapor control system, operator shall drain all liquid from the tank to the maximum extent feasible and shall operate the vapor control system for 24 hours. The vapor control system connection(s) shall be blinded off when disconnected from the tank. [District NSR Rule] Federally Enforceable Through Title V Permit
8. 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
9. 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
10. 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. If any of the tank components are found to leak during an annual inspection, the inspection frequency for that component type shall be changed from annual to quarterly. If no tank components are subsequently found to be leaking during five consecutive inspections, the inspection frequency may be changed from quarterly to annual. Components located in inaccessible (over 15 feet above ground when access is required from the ground or over 6 feet away from a platform when access is required from the platform) locations shall be inspected at least annually and components located in unsafe areas shall be inspected and repaired at the next process unit turnaround (the scheduled shutdown of a unit for maintenance and repair work). [District NSR Rule] Federally Enforceable Through Title V Permit
11. The facility operator upon detection of a component having a reading greater than 10,000 ppmv shall record the reading for that component and affix a weatherproof readily visible tag bearing the date on which the reading is detected. The tag shall remain in place until the component is repaired, reinspected and found to be in compliance with the requirements of this permit. [District NSR Rule] Federally Enforceable Through Title V Permit
12. An operator shall reinspect a component for leaks within thirty working days after the date on which the component is repaired. [District NSR Rule] Federally Enforceable Through Title V Permit
13. Emissions from components which have been tagged by the facility operator for repair within 15 calendar days or which have been repaired and are awaiting re-inspection shall not be in violation of this permit. [District NSR Rule] Federally Enforceable Through Title V Permit
14. Any component leak shall be repaired to a leak-free condition or vented to a flare satisfying the requirements of 40 CFR 60.18 or to a vapor control device that is at least 95 percent efficient as measured by EPA Method 25 within fifteen (15) calendar days of detection. The APCO may grant a ten (10) calendar day extension provided the operator demonstrates that necessary and sufficient actions are being taken to correct the leak within this time period. Any vapor control device, other than a flare, used to comply with this condition shall demonstrate at least 95% control efficiency as measured by EPA Method 25 at least annually. [District NSR Rule] Federally Enforceable Through Title V Permit
15. If the leaking component is an essential part of a critical process unit which cannot be immediately shut down for repairs, the operator shall 1) Minimize the leak within 15 calendar days; and 2) If the leak which has been minimized still exceeds the concentration allowed by this permit, the essential component shall be repaired 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. A critical process unit is any process unit which would result in the automatic shutdown of other process units if it were shut down. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

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CONDITIONS CONTINUE ON NEXT PAGE

16. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Leak rate in ppmv; 3) Date of leak detection, and method of detection; 3) Date and emission level of recheck after leak is repaired; 4) Identification and location of essential parts of critical process units found leaking that cannot be repaired until the next process unit turnaround; and 5) Method used to minimize the leak from essential parts of critical process units which cannot be repaired until the next process unit turnaround. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
17. This permit authorizes tank cleaning that is not the result of breakdowns or poor maintenance as a routine maintenance activity. [District Rule 2080] Federally Enforceable Through Title V Permit
18. Permittee shall conduct tank cleaning and maintenance operations in accordance with District approved procedure as described in this permit. [District Rule 2080] Federally Enforceable Through Title V Permit
19. Tank may be disconnected from vapor control system during District approved cleaning and maintenance procedures as described in this permit. [District Rule 2080] Federally Enforceable Through Title V Permit
20. Permittee shall notify the District Compliance division at least two(2) days before any tank/vessel cleaning or maintenance which necessitates isolation from the vapor control system. [District Rule 2080] Federally Enforceable Through Title V Permit
21. Prior to opening the tank to allow tank cleaning one of the following options must be followed: 1) operate the vapor control system for at least 24 hours after all the liquid in the tank has been drained to the maximum extent feasible, 2) displace vapors floating the oil pad off with water such that 90% of the tank liquid capacity is displaced, 3) vent the tank to the vapor control system until the vapor concentration is less than 10% of the lower explosive limit (LEL) or 5,000 ppmv whichever is less; or 4) vent the tank to the vapor control system for a length of time determined by the following relationship: $t = 2.3 V/Q$, where t = time, V = tank volume (cubic feet), and Q = flow rate to the vapor control system as determined using appropriate engineering calculations. [District Rule 2080] Federally Enforceable Through Title V Permit
22. The tank shall be cleaned using water, hot water, solvents with an initial boiling point of greater than 302 F, solvents with a vapor pressure of less than 0.5 psia, or solvents with 50 grams VOC per liter or less. Sediment may be used for road mix as allowed by Section 6.17 of District Rule 2020. Steam cleaning shall be allowed only during December through March, or at locations where wastewater treatment facilities are limited. [District Rule 2080] Federally Enforceable Through Title V Permit
23. Prior to reintroducing crude oil/water to the tank, the tank shall be filled to the maximum possible level with water or an organic liquid with a TVP less than 0.5 psia, the tank vapor control system shall be reactivated, and the liquid level shall be adjusted as necessary. Pressure/relief valve shall not open during filling of the tank. [District Rule 2080] Federally Enforceable Through Title V Permit
24. Within 48 hours after refilling the tank with crude oil/water, the pressure relief valve seats and hatch seals shall be inspected for leaks using EPA method 21 and the regular tank maintenance and inspection program shall resume. [District Rule 2080] Federally Enforceable Through Title V Permit
25. Permittee shall maintain records of each period of cleaning and maintenance when the tank is disconnected or isolated from the vapor control system. Records shall include the date that tank cleaning was initiated, the date tank cleaning was completed, the method of tank cleaning used, and a description of internal and external tank repairs and maintenance performed. [District Rule 2080] Federally Enforceable Through Title V Permit
26. 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
27. All records shall be maintained and retained on the premises 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

DRAFT

San Joaquin Valley
Air Pollution Control District

AUTHORITY TO CONSTRUCT

ISSUANCE DATE: DRAFT
DRAFT

PERMIT NO: S-1548-503-4

LEGAL OWNER OR OPERATOR: AERA ENERGY LLC
MAILING ADDRESS: PO BOX 11164
BAKERSFIELD, CA 93389-1164

LOCATION: LIGHT OIL WESTERN STATIONARY SOURCE
CA

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

EQUIPMENT DESCRIPTION:

MODIFICATION OF 40,000 BBL FIXED-ROOF CLARIFIER TANK T-200B VENTED TO SHARED VAPOR CONTROL SYSTEM LISTED ON S-1548-148 (DEHY 20): REMOVE CONSTRUCTION NOTIFICATION CONDITIONS

CONDITIONS

1. {1830} This Authority to Construct serves as a written certificate of conformity with the procedural requirements of 40 CFR 70.7 and 70.8 and with the compliance requirements of 40 CFR 70.6(c). [District Rule 2201] Federally Enforceable Through Title V Permit
2. {1831} Prior to operating with modifications authorized by this Authority to Construct, the facility shall submit an application to modify the Title V permit with an administrative amendment in accordance with District Rule 2520 Section 5.3.4. [District Rule 2520, 5.3.4] Federally Enforceable Through Title V Permit
3. 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
4. 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

CONDITIONS CONTINUE ON NEXT PAGE

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

Seyed Sadredin, Executive Director / APCO

Arnaud Marjollet, Director of Permit Services

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5. Any tank gauging or sampling device on a tank vented to the vapor recovery system shall be equipped with a leak-free (<10,000 ppmv, measured in accordance with EPA Method 21 by a portable hydrocarbon detection instrument that is calibrated with methane) cover which shall be closed at all times except during gauging or sampling. [District Rule 4623 and 40 CFR 60.112b(a)(3)(i)] Federally Enforceable Through Title V Permit
6. 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
7. 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
8. 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
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 Rules 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 Rules 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 permit authorizes tank cleaning that is not the result of breakdowns or poor maintenance as a routine maintenance activity. [District Rule 2020] Federally Enforceable Through Title V Permit
15. Permittee shall conduct cleaning and maintenance operations in accordance with District approved procedure as described in Rule 4623. [District Rule 4623] Federally Enforceable Through Title V Permit
16. Tank may be disconnected from vapor control system during District approved cleaning and maintenance procedures as described in this permit. [District Rule 2201] Federally Enforceable Through Title V Permit

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CONDITIONS CONTINUE ON NEXT PAGE

17. Permittee shall notify the District Compliance division in writing at least three (3) days prior to performing tank degassing and interior tank cleaning activities. Written notification shall include the following: 1) the Permit to Operate number and physical location of the tank being degassed, 2) the date and time that tank degassing and cleaning activities will begin, 3) the degassing method, as allowed in this permit, to be used, 4) the method to be used to clean the tank, including any solvents to be used, and 5) the method to be used to dispose of any removed sludge, including methods that will be used to control emissions from the receiving vessel and emissions during transport. [District Rule 4623] Federally Enforceable Through Title V Permit
18. All records shall be maintained and retained on the premises for a period of at least 5 years and made available for District inspection upon request. [District Rule 1070] Federally Enforceable Through Title V Permit

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San Joaquin Valley
Air Pollution Control District

AUTHORITY TO CONSTRUCT

ISSUANCE DATE: DRAFT
DRAFT

PERMIT NO: S-1548-504-4

LEGAL OWNER OR OPERATOR: AERA ENERGY LLC
MAILING ADDRESS: PO BOX 11164
BAKERSFIELD, CA 93389-1164

LOCATION: LIGHT OIL WESTERN STATIONARY SOURCE
CA

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

EQUIPMENT DESCRIPTION:

MODIFICATION OF 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): REVISE TANK CLEANING NOTIFICATION REQUIREMENT

CONDITIONS

1. {1830} This Authority to Construct serves as a written certificate of conformity with the procedural requirements of 40 CFR 70.7 and 70.8 and with the compliance requirements of 40 CFR 70.6(c). [District Rule 2201] Federally Enforceable Through Title V Permit
2. {1831} Prior to operating with modifications authorized by this Authority to Construct, the facility shall submit an application to modify the Title V permit with an administrative amendment in accordance with District Rule 2520 Section 5.3.4. [District Rule 2520, 5.3.4] Federally Enforceable Through Title V Permit
3. The vessel and APCO-approved vapor control system, including piping, valves, and fittings, shall be maintained leak-free, except during periods of vessel cleaning. 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, as methane, above background on a portable hydrocarbon detection instrument that is calibrated as methane in accordance with EPA Test Method 21. [District Rule 2201& 2520] Federally Enforceable Through Title V Permit
4. Tank gauging or sampling devices shall be equipped with a leak-free cover which shall be closed at all times except during gauging or sampling. [District Rule 2201]
5. The induced static flotation unit is a pressure vessel as defined by District Rule 4623, Section 3.20. [District Rule 4623]

CONDITIONS CONTINUE ON NEXT PAGE

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

Seyed Sadredin, Executive Director APCO

Arnaud Marjollet, Director of Permit Services
S-1548-504-4 : Nov 10 2014 2:14PM - KLEVANNND : Joint Inspection NOT Required

6. 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
7. 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
8. All components attached to this vessel 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 Rules 2201 and 4409] Federally Enforceable Through Title V Permit
9. 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
10. All components containing VOCs shall be inspected annually by the facility operator to ensure compliance with the provisions of this permit. However, if two (2) percent or more of the components of any type subject to the requirements of this permit are found to leak during an annual inspection, the inspection frequency for that component type shall be changed from annual to quarterly. If less than two percent of the components of that type are subsequently found to be leaking during five consecutive inspections, the inspection frequency may be changed from quarterly to annual. Components located in inaccessible (over 15 feet above ground when access is required from the ground or over 6 feet away from a platform when access is required from the platform) locations shall be inspected at least annually and components located in unsafe areas shall be inspected and repaired at the next process unit turnaround (the scheduled shutdown of a unit for maintenance and repair work). [District Rules 2201 and 4409] Federally Enforceable Through Title V Permit
11. A facility operator, upon detection of a leaking component, shall affix to that component not immediately repaired a weatherproof readily visible tag bearing the date on which the leak is detected. The tag shall remain in place until the leaking component is repaired, reinspected, and found to be in compliance with the requirements of this permit. [District Rules 2201 and 4409] Federally Enforceable Through Title V Permit
12. An operator shall reinspect a component for leaks within thirty working days after the date on which the component is repaired. [District Rules 2201 4409] Federally Enforceable Through Title V Permit
13. Emissions from components which have been tagged by the facility operator for repair within 15 calendar days or which have been repaired and are awaiting re-inspection shall not be in violation of this permit. [District Rules 2201 and 4409] Federally Enforceable Through Title V Permit
14. 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
15. If the leaking component is an essential part of a critical process unit which cannot be immediately shut down for repairs, the operator shall 1) Minimize the leak within 1 hour after detection of leak; and 2) If the leak which has been minimized still exceeds the concentration allowed by this permit, the essential component shall be repaired 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. A critical process unit is any process unit which would result in the automatic shutdown of other process units if it were shut down. [District Rules 2201 and 4409 Sec. 5.3.6]
16. Operator shall maintain an inspection log containing the following 1) Number and type of component leaking; 2) Date of leak detection, and method of detection; 3) Date of repair, replacement or removal from operation of leaking component; 4) Date and emission level of recheck after leak is repaired; 5) Identification and location of essential parts of critical process units found leaking that cannot be repaired until the next process unit turnaround; and 6) Method used to minimize the leak from essential parts of critical process units which cannot be repaired until the next process unit turnaround. The operator shall sign and date the inspection log certifying the accuracy of the information recorded in the log. [District Rules 2201 4409 Sec 6.2]

CONDITIONS CONTINUE ON NEXT PAGE

17. This permit authorizes induced flotation unit cleaning that is not the result of breakdowns or poor maintenance as a routine maintenance activity. [District Rule 2080] Federally Enforceable Through Title V Permit
18. Permittee shall conduct induced flotation unit cleaning and maintenance operations in accordance with District approved procedures as described in this permit. [District Rule 2080] Federally Enforceable Through Title V Permit
19. Induced flotation unit may be disconnected from vapor control system during District approved cleaning and maintenance procedures as described in this permit. [District Rule 2080] Federally Enforceable Through Title V Permit
20. Permittee shall notify the District Compliance division at least one(1) day before any tank/vessel cleaning or maintenance which necessitates isolation from the vapor control system. [District Rule 2080] Federally Enforceable Through Title V Permit
21. Prior to opening the induced static flotation unit to allow tank cleaning one of the following options must be followed: 1) operate the vapor recovery system for at least 24 hours after all the liquid in the induced static flotation unit has been drained to the maximum extent feasible, 2) displace vapors floating the oil pad off with water such that 90% of the induced static flotation unit liquid capacity is displaced, 3) vent the induced static flotation unit to the vapor control system until the vapor concentration is less than 10% of the lower explosive limit (LEL) or 5,000 ppmv whichever is less; or 4) vent the induced static flotation unit to the vapor control system for a length of time determined by the following relationship: $t = 2.3 V/Q$, where t = time, V = induced static flotation unit volume (cubic feet), and Q = flow rate to the vapor control system as determined using appropriate engineering calculations. [District Rule 2080] Federally Enforceable Through Title V Permit
22. The induced static flotation unit shall be cleaned using one of the following methods: water, hot water, 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 VOC per liter or less. The tank sediment may be used for road mix as allowed by Section 6.17 of District Rule 2020. [District Rule 2080] Federally Enforceable Through Title V Permit
23. Steam cleaning shall be allowed only during December through March, or at locations where wastewater treatment facilities are limited. [District Rule 2080] Federally Enforceable Through Title V Permit
24. Prior to reintroducing crude oil/water to the induced static flotation unit, the induced static flotation unit shall be filled to the maximum possible level with water or an organic liquid with a TVP less than 0.5 psia, the tank vapor control system shall be reactivated, and the liquid level shall be adjusted as necessary. Pressure/relief valve shall not open during filling of the induced static flotation unit. [District Rule 2080] Federally Enforceable Through Title V Permit
25. Within 48 hours after refilling the induced flotation unit with crude oil/water, the pressure relief valve seats and hatch seals shall be inspected for leaks using EPA method 21 and the regular tank maintenance and inspection program shall resume. [District Rule 2080] Federally Enforceable Through Title V Permit
26. Permittee shall maintain records of each period of cleaning and maintenance when the induced static flotation unit is disconnected or isolated from the vapor control system. Records shall include the date the cleaning was initiated, the date cleaning was completed, the method of cleaning used, and a description of internal and external induced static flotation unit repairs and maintenance performed. Such records shall be retained for a period of at least 5 years and shall be made available for District inspection upon request. [District Rule 2080] Federally Enforceable Through Title V Permit
27. All records shall be maintained and retained on the premises 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

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