



JUN 26 2017

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

**Re: Final - Authorities to Construct / Certificates of Conformity (Significant Mod)
District Facility # S-1547
Project # 1170828**

Dear Mr. Haley:

The Air Pollution Control Officer has issued Authorities to Construct (ATCs) S-1547-643-21, '-644-10, '-645-10, '-647-10 thru '-649-10, '-652-10, '-653-10, '-654-11 with Certificates of Conformity to Aera Energy LLC at western Kern County, California. The project authorizes modification to nine tanks. Enclosed are the ATCs and a copy of the notice of final action to be published approximately three days from the date of this letter.

Notice of the District's preliminary decision to issue the ATCs was published on May 19, 2017. The District's analysis of the proposal was also sent to CARB and US EPA Region IX on May 16, 2017. No comments were received following the District's preliminary decision on this project.

Prior to operating with the modifications authorized by the ATCs, you must submit an application to modify the Title V permit as an administrative amendment in accordance with District Rule 2520, Section 11.5. Application forms are found on the District's website at www.valleyair.org/permits/TVforms.

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
Tel: (559) 230-6000 FAX: (559) 230-6061

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

Mr. John Haley
Page 2

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

Sincerely,



Arnaud Marjollet
Director of Permit Services

Enclosures

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



Facility # S-1547
AERA ENERGY LLC
PO BOX 11164
BAKERSFIELD, CA 93389-1164

AUTHORITY TO CONSTRUCT (ATC)

QUICK START GUIDE

1. **Pay Invoice:** Please pay enclosed invoice before due date.
2. **Modify Your Title V Permit.** Prior to operating the equipment authorized under this ATC, submit an application to modify your Title V permit. See application forms at <http://www.valleyair.org/busind/pto/ptoforms/1ptoformidx.htm>.
3. **Fully Understand ATC:** Make sure you understand ALL conditions in the ATC prior to construction, modification and/or operation.
4. **Follow ATC:** You must construct, modify and/or operate your equipment as specified on the ATC. Any unspecified changes may require a new ATC.
5. **Notify District:** You must notify the District's Compliance Department, at the telephone numbers below, upon start-up and/or operation under the ATC. Please record the date construction or modification commenced and the date the equipment began operation under the ATC. You may NOT operate your equipment until you have notified the District's Compliance Department. A startup inspection may be required prior to receiving your Permit to Operate.
6. **Source Test:** Schedule and perform any required source testing. See http://www.valleyair.org/busind/comply/source_testing.htm for source testing resources.
7. **Maintain Records:** Maintain all records required by ATC. Records are reviewed during every inspection (or upon request) and must be retained for at least 5 years. Sample record keeping forms can be found at http://www.valleyair.org/busind/comply/compliance_forms.htm.

By operating in compliance, you are doing your part to improve air quality for all Valley residents.

**For assistance, please contact District Compliance staff at
any of the telephone numbers listed below.**

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
Tel: (559) 230-6000 FAX: (559) 230-6061

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



San Joaquin Valley
AIR POLLUTION CONTROL DISTRICT

Due Date
8/21/2017

Amount Due
\$ 2,750.10

Amount Enclosed

ATCFEE S1170828
1547 S134101 6/19/2017

RETURN THIS TOP PORTION ONLY, WITH REMITTANCE TO:

AERA ENERGY LLC
PO BOX 11164
BAKERSFIELD, CA 93389-1164

SJVAPCD
34946 Flyover Court
Bakersfield, CA 93308

Thank You!



San Joaquin Valley
AIR POLLUTION CONTROL DISTRICT

SJVAPCD Tax ID: 77-0262563

Facility ID
S1547

Invoice Date
6/19/2017

Invoice Number
S134101

Invoice Type
Project: S1170828

AERA ENERGY LLC
HEAVY OIL WESTERN STATIONARY SOURCE
KERN COUNTY, CA

PROJECT NUMBER: 1170828

APPLICATION FILING FEES	\$ 711.00
ENGINEERING TIME FEES	\$ 2,039.10
TOTAL FEES	\$ 2,750.10
LESS PREVIOUSLY PAID PROJECT FEES APPLIED TO THIS INVOICE	\$ 0.00
PROJECT FEES DUE (Enclosed is a detailed statement outlining the fees for each item.)	\$ 2,750.10

Late Payment (see Rule 3010, Section 11.0 Late Fees)	
Postmarked	Total Due
After 8/21/2017 through 8/31/2017	\$ 3,025.11
After 8/31/2017	\$ 4,125.15
After 9/20/2017	Permits To Operate MAY BE SUSPENDED

San Joaquin Valley Air Pollution Control District
34946 Flyover Court, Bakersfield, CA 93308, (661) 392-5500, Fax (661) 392-5585

San Joaquin Valley Air Pollution Control District

Invoice Detail

Facility ID: S1547

AERA ENERGY LLC
HEAVY OIL WESTERN STATIONARY SOURCE
KERN COUNTY, CA

Invoice Nbr: S134101
Invoice Date: 6/19/2017
Page: 1

Application Filing Fees

Project Nbr	Permit Number	Description	Application Fee
S1170828	S-1547-643-21	MODIFICATION OF 5,000 BBL (210,000 GAL) FIXED ROOF CRUDE OIL SURGE TANK T-410, 38.6 FT DIAMETER X 25 FT HIGH, WITH SHARED VAPOR CONTROL SYSTEM BETWEEN S-1547-643 TO -645, -647 TO -649, AND -652 TO -654 (WIER CDF): PROVISIONS TO IDLE VCS	\$ 79.00
S1170828	S-1547-644-10	MODIFICATION OF 2,000 BBL (84,000 GALLON) FIXED ROOF, 29.7 FT. DIAMETER X 16 FT. HIGH, CRUDE OIL STOCK TANK T-420, WITH VAPOR CONTROL SYSTEM SHARED BETWEEN S-1547-643 TO -645, -647 TO -649, & -652 TO -654 (WIER CDF): PROVISIONS TO IDLE VCS.	\$ 79.00
S1170828	S-1547-645-10	MODIFICATION OF 2,000 BBL (84,000 GALLON) FIXED ROOF, 29.7 FT. DIAMETER X 16 FT. HIGH, CRUDE OIL CLARIFIER TANK T-430, WITH VAPOR CONTROL SYSTEM SHARED BETWEEN S-1547-643 TO -645, -647 TO -649, & -652 TO -654 (WIER CDF): PROVISIONS TO IDLE VCS	\$ 79.00
S1170828	S-1547-647-10	MODIFICATION OF 5,000 BBL (210,000 GALLON) FIXED ROOF, 38.6 FT. DIAMETER X 24 FT. HIGH, CRUDE OIL SURGE TANK T-460, WITH VAPOR CONTROL SYSTEM SHARED BETWEEN S-1547-643 TO -645, -647 TO -649, & -652 TO -654 (WIER CDF): PROVISIONS TO IDLE VCS	\$ 79.00
S1170828	S-1547-648-10	MODIFICATION OF 2,000 BBL (84,000 GALLON) FIXED ROOF, 29.7 FT. DIAMETER X 16 FT. HIGH, CRUDE OIL STOCK TANK T-470, WITH VAPOR CONTROL SYSTEM SHARED BETWEEN S-1547-643 TO -645, -647 TO -649, & -652 TO -654 (WIER CDF): PROVISIONS TO IDLE VCS	\$ 79.00
S1170828	S-1547-649-10	MODIFICATION OF 2,000 BBL (84,000 GALLON) FIXED ROOF, 29.7 FT. DIAMETER X 16 FT. HIGH, CRUDE OIL CLARIFIER TANK T-480, WITH VAPOR CONTROL SYSTEM SHARED BETWEEN S-1547-643 TO -645, -647 TO -649, & -652 TO -654 (WIER CDF):PROVISIONS TO IDLE VCS	\$ 79.00
S1170828	S-1547-652-10	MODIFICATION OF 5,000 BBL (210,000 GALLON) FIXED ROOF, 38.6 FT. DIAMETER X 24. FT. HIGH, CRUDE OIL SKIM TANK T-600, WITH VAPOR CONTROL SYSTEM SHARED BETWEEN S-1547-643 TO -645, -647 TO -649, & -652 TO -654 (WIER CDF):PROVISIONS TO IDLE VCS	\$ 79.00
S1170828	S-1547-653-10	MODIFICATION OF 500 BBL (21,000 GALLON) FIXED ROOF, 15.3 FT. DIAMETER X 16 FT. HIGH, CRUDE OIL SLOP TANK T-610, WITH VAPOR CONTROL SYSTEM SHARED BETWEEN S-1547-643 TO -645, -647 TO -649, & -652 TO -654 (WIER CDF): PROVISIONS TO IDLE VCS	\$ 79.00
S1170828	S-1547-654-11	MODIFICATION OF 500 BBL (21,000 GALLON) FIXED ROOF, 21.5 FT. DIAMETER X 8 FT. HIGH, CRUDE OIL DRAIN TANK T-700, WITH VAPOR CONTROL SYSTEM SHARED BETWEEN S-1547-643 TO -645, -647 TO -649, & -652 TO -654 (WIER CDF):PROVISIONS TO IDLE VCS	\$ 79.00
Total Application Filing Fees:			\$ 711.00

Engineering Time Fees

Project Nbr	Quantity	Rate	Description	Fee
S1170828	6.3 hours	\$ 141.00 /h	After-Hours Engineering Time(OverTime)	\$ 888.30
			Less Credit For Application Filing Fees	(\$ 711.00)
			After-Hours Engineering Time(OverTime) SubTotal	\$ 177.30
S1170828	17.4 hours	\$ 107.00 /h	Standard Engineering Time	\$ 1,861.80
Total Engineering Time Fees:				\$ 2,039.10

San Joaquin Valley Air Pollution Control District

Account Summary

Facility ID: S1547

AERA ENERGY LLC
HEAVY OIL WESTERN STATIONARY SOURCE
KERN COUNTY, CA

Statement Date: 6/19/2017

Invoice Date	Invoice Number	Invoice Due Date	Description of Fees		Amount Due
07/11/2016	S127846	08/10/2016	Project: S1162553	Fees Invoiced	\$ 106.00
				Payments	<u>(\$ 75.00)</u>
				Balance Due	\$ 31.00
04/11/2017	S132912	06/12/2017	Project: S1170778	Fees Invoiced	\$ 743.10
				Late Charges	<u>\$ 74.31</u>
				Balance Due	\$ 817.41
06/19/2017	S134101	08/21/2017	Project: S1170828		\$ 2,750.10
				Total Outstanding Balance:	<u><u>\$ 3,598.51</u></u>

As of 6/19/2017, our records indicate you have unallocated credits of (\$ 39.81) which could be applied to outstanding invoices. If you would like to apply any unallocated credits to outstanding invoices, please contact the SJVAPCD Finance department at (661) 392-5500.



AUTHORITY TO CONSTRUCT

PERMIT NO: S-1547-643-21

ISSUANCE DATE: 06/19/2017

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

LOCATION: HEAVY OIL WESTERN STATIONARY SOURCE
KERN COUNTY, CA

SECTION: SW22 **TOWNSHIP:** 31S **RANGE:** 22E

EQUIPMENT DESCRIPTION:

MODIFICATION OF 5,000 BBL (210,000 GAL) FIXED ROOF CRUDE OIL SURGE TANK T-410, 38.6 FT DIAMETER X 25 FT HIGH, WITH SHARED VAPOR CONTROL SYSTEM BETWEEN S-1547-643 TO '-645, '-647 TO '-649, AND '-652 TO '-654 (WIER CDF): PROVISIONS TO IDLE VCS

CONDITIONS

1. 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. 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. When tank and vapor control system are idle (non-operational) oil inlet valve to tank shall remain closed. [District Rules 2080 and 2201] Federally Enforceable Through Title V Permit
4. Permittee shall submit written notification to the District upon designating the tank as idle or operational. [District Rules 2080 and 2201] Federally Enforceable Through Title V Permit
5. When tank and VCS are idle, the tank shall vent through a PV relief valve set to within 10% of maximum allowable pressure of the tank, no oil shall be introduced into tank, and the TVP of residual (standing) oil shall not exceed 0.05 psia. Prior to introducing crude oil or produced water, the VCS must be reactivated and shall have a VOC control efficiency of at least 99%. [District Rules 2201 and 4623] 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

S-1547-643-21 : Jun 19 2017 2:33PM - EDGEHLR : Joint Inspection NOT Required

6. When tank and vapor control system are idle, only biennial true vapor pressure measurements shall be taken. No additional monitoring and recordkeeping is required. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
7. When tank and vapor control system are idle, VOC emission rate from the tank shall not exceed 2.0 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Records of tank throughput when idle, all dates and times that this unit is idle and operational, and copies of all corresponding notices to the District, shall be maintained, retained for a period of at least five years, and made available for District inspection upon request. [District Rule 1070] Federally Enforceable Through Title V Permit
9. Vapor control system shall include vapor piping from free water knockouts, tanks S-1547-643 to '645, '647 to '649, & '652 to '654, with pressure relief vents (for emergency atmospheric release) located on the collection line. [District Rule 2201] Federally Enforceable Through Title V Permit
10. Vapor control system shall include vapor compressors with suction and discharge knockout vessels, serving tanks and vessels described above. [District Rule 2201] Federally Enforceable Through Title V Permit
11. Vapor piping from free water knockout may connect upstream or downstream of vapor compressors to accommodate operational needs. [District Rule 2201] Federally Enforceable Through Title V Permit
12. During power-switching events, no produced fluids shall be introduced into any tank at the Weir tank battery. All production into the tanks shall cease prior to shutting down the tank vapor control system. [District Rule 2201] Federally Enforceable Through Title V Permit
13. Each power-switching event shall not exceed 2 hours, and total annual hours of vapor control system shutdown during power-switching shall not exceed 96 hours. [District Rule 2201] Federally Enforceable Through Title V Permit
14. Prior to disconnecting power from the TVR systems, during a power-switching event, AERA shall monitor the pressure in the shutdown TVR system to determine pressure relief valve(s) pressure settings are not exceeded. [District Rule 2201] Federally Enforceable Through Title V Permit
15. During power-switching events, there shall be no leaks (> 10,000 ppmv) from any vapor component in the TVR system. [District Rule 2201] Federally Enforceable Through Title V Permit
16. During power-switching events, permittee shall monitor TVR system piping and vapor components to ensure there are no leaks (> 10,000 ppmv). [District Rule 2201] Federally Enforceable Through Title V Permit
17. Vapor compressor(s) may be operated continuously or as required by demand. [District Rule 2201] Federally Enforceable Through Title V Permit
18. Operator shall monitor vapor control system pressures on a quarterly basis to ensure that system pressure does not exceed pressure relief valve setting. [District Rule 2520] Federally Enforceable Through Title V Permit
19. Vapor control system pressure transmitters shall be inspected and maintained in good operating condition. The inspections shall be conducted on a quarterly basis. Replacing and repairing of each pressure transmitter shall not exceed one hour per day. [District Rule 2201] Federally Enforceable Through Title V Permit
20. Vapor disposal shall be limited to injection into the formation. [District Rule 2201] Federally Enforceable Through Title V Permit
21. Disposal of tank vapor by injection into the formation shall only be performed using DOGGR approved wells. [District Rule 2201] Federally Enforceable Through Title V Permit
22. VOC fugitive emissions from the components in gas service on the tank, FWKO vessels, tank vapor collection piping and vapor control system shall not exceed 12.9 lb-VOC/day (includes 0.46 lb/day, 0.46 lb-VOC/quarter for VRS sensor maintenance). [District Rule 2201] Federally Enforceable Through Title V Permit
23. Permittee shall maintain an accurate fugitive component count and resultant emissions calculated using U.S. EPA Publication 453/R-95-017, Table 2-4, Oil and Gas Production Average Emission Factors. [District Rule 2201] Federally Enforceable Through Title V Permit
24. VOC content of hydrocarbons (VOC/THC) in collected vapors shall not exceed 25% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

25. VOC content of THC in collected vapors shall be sampled not less than annually. [District Rule 2201] Federally Enforceable Through Title V Permit
26. Fixed roof tank shall be fully enclosed and shall be maintained in a leak-free condition. The APCO-approved vapor control system consists of a closed vent system that collects all VOCs from the storage tank and vents them to DOGGR approved disposal well(s). The vapor control system shall be maintained in a leak-free condition. Vapor control system shall reduce VOC emissions by at least 99% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
27. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) less than 0.50 psia under all storage conditions. [District Rule 4623] Federally Enforceable Through Title V Permit
28. All tank gauges, hatches, sampling ports, pressure relief valves, vapor control system components, etc. shall be closed and leak-free except during sampling or attended maintenance. [District Rule 2201] Federally Enforceable Through Title V Permit
29. Tank seams, welds, joints, piping, valves, and fittings shall be inspected and maintained in a leak-free condition. [District Rule 2201] Federally Enforceable Through Title V Permit
30. "Leak-free" shall be defined as emitting no more than 10,000 ppm of methane measured in accordance with EPA Method 21. Emissions in excess of this is considered a leak. [District Rule 2201] Federally Enforceable Through Title V Permit
31. Tank shall be designed and maintained to vent only to vapor control system, except during periods of tank cleaning, inspections, and maintenance allowed by this permit. [District Rule 2201] Federally Enforceable Through Title V Permit
32. 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
33. Permittee shall conduct tank cleaning and maintenance operations in accordance with District approved procedures as described in this permit. [District Rule 2080] Federally Enforceable Through Title V Permit
34. 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
35. Prior to opening the tank to allow tank cleaning one of the following procedures must be followed: 1) operate the vapor recovery system for at least 2 hours after all of the liquid in the tank has been drained, 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
36. Allowable methods of cleaning include using water, steam, diesel, 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/liter VOC content or less. Steam cleaning shall be allowed at locations where wastewater treatment facilities are limited or during December through March. [District Rule 2080] Federally Enforceable Through Title V Permit
37. Tank pressure/vacuum valve (Varec) shall be inspected on an annual basis. During the varec inspections, the varec can be removed from the tank and replaced if necessary. The permittee shall minimize emissions from the opening by plugging the opening during the removal of varec valve. [District Rule 2080] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

38. All piping, fittings, and valves 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 Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
39. A facility operator, upon detection of a leaking component, shall affix to that component 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 rule. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
40. An operator shall re-inspect a component for leaks within thirty working days after the date on which the component is repaired. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
41. 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 Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
42. 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 99 percent efficient as measured by EPA Method 18 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 99% control efficiency as measured by EPA Method 18 at least annually. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
43. 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, 9.3.2] Federally Enforceable Through Title V Permit
44. 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) 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, 9.3.2] Federally Enforceable Through Title V Permit
45. True vapor pressure shall be measured at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored using the latest version of the Lawrence Berkeley National Laboratory "Test Method for Vapor Pressure of Reactive Organic Compounds in Heavy Crude Oil Using Gas Chromatograph", as approved by ARB and EPA. [District Rule 2520, 9.3.2 and 4623] Federally Enforceable Through Title V Permit
46. The API gravity of crude oil or petroleum distillate shall be determined by using ASTM Method D287 - "Standard Test Method for API Gravity of Crude Petroleum and Petroleum Products (Hydrometer Method)". Sampling for API gravity shall be performed in accordance with ASTM Method D 4057 "Standard Practices from Manual Sampling of Petroleum and Petroleum Products". [District Rule 2520, 9.3.2 and 4623] Federally Enforceable Through Title V Permit
47. This unit has a storage capacity less than 420,000 gallons and is used for petroleum or condensate stored, processed and/or treated at a drilling and production facility prior to custody transfer. Therefore, the requirements of 40CFR 60 Subpart K, Ka and Kb do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

48. 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 procedure used to vent tank vapors prior to opening, the method of tank cleaning used, and a description of internal and external tank repairs and maintenance performed. [District Rules 1070 and 2520, 9.4.2] Federally Enforceable Through Title V Permit
49. Permittee shall maintain records of DOGGR approved injection wells connected to this vapor control system, % VOC of THC in collected vapors, the date and duration of vapor control system maintenance operations, and all records of required monitoring data and support information. [District Rule 2520, 9.4.2 and 4623, 6.3] Federally Enforceable Through Title V Permit
50. Permittee shall maintain records of date and duration of each power switching event. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
51. All records required by this permit shall be maintained and retained for a period of at least 5 years and shall be made readily available for District inspection upon request. [District Rule 1070 and 4623, 6.3] Federally Enforceable Through Title V Permit



AUTHORITY TO CONSTRUCT

PERMIT NO: S-1547-644-10

ISSUANCE DATE: 06/19/2017

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

LOCATION: HEAVY OIL WESTERN STATIONARY SOURCE
KERN COUNTY, CA

SECTION: SW22 **TOWNSHIP:** 31S **RANGE:** 22E

EQUIPMENT DESCRIPTION:

MODIFICATION OF 2,000 BBL (84,000 GALLON) FIXED ROOF, 29.7 FT. DIAMETER X 16 FT. HIGH, CRUDE OIL STOCK TANK T-420, WITH VAPOR CONTROL SYSTEM SHARED BETWEEN S-1547-643 TO -645, -647 TO -649, & -652 TO -654 (WIER CDF): PROVISIONS TO IDLE VCS

CONDITIONS

1. 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. 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. When tank and vapor control system are idle (non-operational) oil inlet valve to tank shall remain closed. [District Rules 2080 and 2201] Federally Enforceable Through Title V Permit
4. Permittee shall submit written notification to the District upon designating the tank as idle or operational. [District Rules 2080 and 2201] Federally Enforceable Through Title V Permit
5. When tank and VCS are idle, the tank shall vent through a PV relief valve set to within 10% of maximum allowable pressure of the tank, no oil shall be introduced into tank, and the TVP of residual (standing) oil shall not exceed 0.05 psia. Prior to introducing crude oil or produced water, the VCS must be reactivated and shall have a VOC control efficiency of at least 99%. [District Rules 2201 and 4623] 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

S-1547-644-10 Jun 19 2017 2:33PM - EDGEHLR Joint Inspection NOT Required

6. When tank and vapor control system are idle, only biennial true vapor pressure measurements shall be taken. No additional monitoring and recordkeeping is required. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
7. When tank and vapor control system are idle, VOC emission rate from the tank shall not exceed 0.7 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Records of tank throughput when idle, all dates and times that this unit is idle and operational, and copies of all corresponding notices to the District, shall be maintained, retained for a period of at least five years, and made available for District inspection upon request. [District Rule 1070] Federally Enforceable Through Title V Permit
9. Tank shall be vented to vapor control system listed on S-1547-643. [District Rule 2201] Federally Enforceable Through Title V Permit
10. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) less than 0.50 psia under all storage conditions. [District Rule 4623, 2.0 and 4.4] Federally Enforceable Through Title V Permit
11. Tank shall be designed and maintained to vent only to vapor control system, except during periods of tank cleaning, inspections, and maintenance allowed by this permit. [District Rule 2201] Federally Enforceable Through Title V Permit
12. All tank gauges, hatches, sampling ports, pressure relief valves, vapor control system components, etc. shall be closed and leak-free except during sampling or attended maintenance. [District Rule 2201] Federally Enforceable Through Title V Permit
13. Tank seams, welds, joints, piping, valves, and fittings shall be inspected and maintained in a leak-free condition. [District Rule 2201] Federally Enforceable Through Title V Permit
14. "Leak-free" shall be defined as emitting no more than 10,000 ppm of methane measured in accordance with EPA Method 21. Emissions in excess of this is considered a leak. [District Rule 2201] Federally Enforceable Through Title V Permit
15. During power-switching events, no fluids shall be introduced into this tank and there shall be no leaks (> 10,000 ppmv) from any TVR vapor piping or components. [District Rule 2201] Federally Enforceable Through Title V Permit
16. VOC fugitive emissions from the components in gas service on the tank shall not exceed 1.6 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
17. Permittee shall maintain an accurate fugitive component count and resultant emissions calculated using U.S. EPA Publication 453/R-95-017, Table 2-4, Oil and Gas Production Average Emission Factors. [District Rule 2201] Federally Enforceable Through Title V Permit
18. VOC content of hydrocarbons (VOC/THC) in collected vapors shall not exceed 25% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
19. 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
20. Permittee shall conduct tank cleaning and maintenance operations in accordance with District approved procedures as described in this permit. [District Rule 2080] Federally Enforceable Through Title V Permit
21. 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
22. Prior to opening the tank to allow tank cleaning one of the following procedures must be followed: 1) operate the vapor recovery system for at least 2 hours after all of the liquid in the tank has been drained, 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

CONDITIONS CONTINUE ON NEXT PAGE

23. Allowable methods of cleaning include using water, steam, diesel, 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/liter VOC content or less. Steam cleaning shall be allowed at locations where wastewater treatment facilities are limited or during December through March. [District Rule 2080] Federally Enforceable Through Title V Permit
24. Tank pressure/vacuum valve (Varec) shall be inspected on an annual basis. During the varec inspections, the varec can be removed from the tank and replaced if necessary. The permittee shall minimize emissions from the opening by plugging the opening during the removal of varec valve. [District Rule 2080] Federally Enforceable Through Title V Permit
25. All piping, fittings, and valves 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 Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
26. A facility operator, upon detection of a leaking component, shall affix to that component 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 rule. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
27. An operator shall re-inspect a component for leaks within thirty working days after the date on which the component is repaired. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
28. 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 Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
29. 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 99 percent efficient as measured by EPA Method 18 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 99% control efficiency as measured by EPA Method 18 at least annually. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
30. 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, 9.3.2] Federally Enforceable Through Title V Permit
31. 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) 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, 9.3.2] Federally Enforceable Through Title V Permit
32. True vapor pressure shall be measured at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored using the latest version of the Lawrence Berkeley National Laboratory "Test Method for Vapor Pressure of Reactive Organic Compounds in Heavy Crude Oil Using Gas Chromatograph", as approved by ARB and EPA. [District Rules 2520, 9.3.2 and 4623, 6.2.2] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

33. The API gravity of crude oil or petroleum distillate shall be determined by using ASTM Method D287 - "Standard Test Method for API Gravity of Crude Petroleum and Petroleum Products (Hydrometer Method)". Sampling for API gravity shall be performed in accordance with ASTM Method D 4057 "Standard Practices from Manual Sampling of Petroleum and Petroleum Products". [District Rule 2520, 9.3.2 and 4623, 6.4] Federally Enforceable Through Title V Permit
34. This unit has a storage capacity less than 420,000 gallons and is used for petroleum or condensate stored, processed and/or treated at a drilling and production facility prior to custody transfer. Therefore, the requirements of 40CFR 60 Subpart K, Ka and Kb do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
35. 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 procedure used to vent tank vapors prior to opening, the method of tank cleaning used, and a description of internal and external tank 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
36. The operator shall maintain records of % VOC of THC in collected vapors, and all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rules 2520, 9.4.2 and 4623, 6.3] Federally Enforceable Through Title V Permit



AUTHORITY TO CONSTRUCT

PERMIT NO: S-1547-645-10

ISSUANCE DATE: 06/19/2017

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

LOCATION: HEAVY OIL WESTERN STATIONARY SOURCE
KERN COUNTY, CA

SECTION: SW22 **TOWNSHIP:** 31S **RANGE:** 22E

EQUIPMENT DESCRIPTION:

MODIFICATION OF 2,000 BBL (84,000 GALLON) FIXED ROOF, 29.7 FT. DIAMETER X 16 FT. HIGH, CRUDE OIL CLARIFIER TANK T-430, WITH VAPOR CONTROL SYSTEM SHARED BETWEEN S-1547-643 TO -645, -647 TO -649, & -652 TO -654 (WIER CDF): PROVISIONS TO IDLE VCS

CONDITIONS

1. 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. 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. When tank and vapor control system are idle (non-operational) oil inlet valve to tank shall remain closed. [District Rules 2080 and 2201] Federally Enforceable Through Title V Permit
4. Permittee shall submit written notification to the District upon designating the tank as idle or operational. [District Rules 2080 and 2201] Federally Enforceable Through Title V Permit
5. When tank and VCS are idle, the tank shall vent through a PV relief valve set to within 10% of maximum allowable pressure of the tank, no oil shall be introduced into tank, and the TVP of residual (standing) oil shall not exceed 0.05 psia. Prior to introducing crude oil or produced water, the VCS must be reactivated and shall have a VOC control efficiency of at least 99%. [District Rules 2201 and 4623] 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

Renaud Marjollet, Director of Permit Services
S-1547-645-10; Jun 19 2017 2:33PM - EDGEHLR : Joint Inspection NOT Required

6. When tank and vapor control system are idle, only biennial true vapor pressure measurements shall be taken. No additional monitoring and recordkeeping is required. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
7. When tank and vapor control system are idle, VOC emission rate from the tank shall not exceed 0.7 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Records of tank throughput when idle, all dates and times that this unit is idle and operational, and copies of all corresponding notices to the District, shall be maintained, retained for a period of at least five years, and made available for District inspection upon request. [District Rule 1070] Federally Enforceable Through Title V Permit
9. Tank shall be vented to vapor control system listed on S-1547-643. [District Rule 2201] Federally Enforceable Through Title V Permit
10. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) less than 0.50 psia under all storage conditions. [District Rule 4623, 2.0 and 4.4] Federally Enforceable Through Title V Permit
11. Tank shall be designed and maintained to vent only to vapor control system, except during periods of tank cleaning, inspections, and maintenance allowed by this permit. [District Rule 2201] Federally Enforceable Through Title V Permit
12. All tank gauges, hatches, sampling ports, pressure relief valves, vapor control system components, etc. shall be closed and leak-free except during sampling or attended maintenance. [District Rule 2201] Federally Enforceable Through Title V Permit
13. Tank seams, welds, joints, piping, valves, and fittings shall be inspected and maintained in a leak-free condition. [District Rule 2201] Federally Enforceable Through Title V Permit
14. "Leak-free" shall be defined as emitting no more than 10,000 ppm of methane measured in accordance with EPA Method 21. Emissions in excess of this is considered a leak. [District Rule 2201] Federally Enforceable Through Title V Permit
15. During power-switching events, no fluids shall be introduced into this tank and there shall be no leaks ($> 10,000$ ppmv) from any TVR vapor piping or components. [District Rule 2201] Federally Enforceable Through Title V Permit
16. VOC fugitive emissions from the components in gas service on the tank shall not exceed 3.1 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
17. Permittee shall maintain an accurate fugitive component count and resultant emissions calculated using U.S. EPA Publication 453/R-95-017, Table 2-4, Oil and Gas Production Average Emission Factors. [District Rule 2201] Federally Enforceable Through Title V Permit
18. VOC content of hydrocarbons (VOC/THC) in collected vapors shall not exceed 25% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
19. 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
20. Permittee shall conduct tank cleaning and maintenance operations in accordance with District approved procedures as described in this permit. [District Rule 2080] Federally Enforceable Through Title V Permit
21. 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
22. Prior to opening the tank to allow tank cleaning one of the following procedures must be followed: 1) operate the vapor recovery system for at least 2 hours after all of the liquid in the tank has been drained, 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

CONDITIONS CONTINUE ON NEXT PAGE

23. Allowable methods of cleaning include using water, steam, diesel, 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/liter VOC content or less. Steam cleaning shall be allowed at locations where wastewater treatment facilities are limited or during December through March. [District Rule 2080] Federally Enforceable Through Title V Permit
24. Tank pressure/vacuum valve (Varec) shall be inspected on an annual basis. During the varec inspections, the varec can be removed from the tank and replaced if necessary. The permittee shall minimize emissions from the opening by plugging the opening during the removal of varec valve. [District Rule 2080] Federally Enforceable Through Title V Permit
25. All piping, fittings, and valves 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 Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
26. A facility operator, upon detection of a leaking component, shall affix to that component 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 rule. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
27. An operator shall re-inspect a component for leaks within thirty working days after the date on which the component is repaired. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
28. 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 Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
29. 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 99 percent efficient as measured by EPA Method 18 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 99% control efficiency as measured by EPA Method 18 at least annually. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
30. 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, 9.3.2] Federally Enforceable Through Title V Permit
31. 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) 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, 9.3.2] Federally Enforceable Through Title V Permit
32. True vapor pressure shall be measured at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored using the latest version of the Lawrence Berkeley National Laboratory "Test Method for Vapor Pressure of Reactive Organic Compounds in Heavy Crude Oil Using Gas Chromatograph", as approved by ARB and EPA. [District Rule 2520, 9.3.2 and 4623] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

33. The API gravity of crude oil or petroleum distillate shall be determined by using ASTM Method D287 - "Standard Test Method for API Gravity of Crude Petroleum and Petroleum Products (Hydrometer Method)". Sampling for API gravity shall be performed in accordance with ASTM Method D 4057 "Standard Practices from Manual Sampling of Petroleum and Petroleum Products". [District Rule 2520, 9.3.2 and 4623] Federally Enforceable Through Title V Permit
34. This unit has a storage capacity less than 420,000 gallons and is used for petroleum or condensate stored, processed and/or treated at a drilling and production facility prior to custody transfer. Therefore, the requirements of 40CFR 60 Subpart K, Ka and Kb do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
35. 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 procedure used to vent tank vapors prior to opening, the method of tank cleaning used, and a description of internal and external tank 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
36. The operator shall maintain records of % VOC of THC in collected vapors, and all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rules 2520, 9.4.2 and 4623, 6.3] Federally Enforceable Through Title V Permit



AUTHORITY TO CONSTRUCT

PERMIT NO: S-1547-647-10

ISSUANCE DATE: 06/19/2017

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

LOCATION: HEAVY OIL WESTERN STATIONARY SOURCE
KERN COUNTY, CA

SECTION: SW22 **TOWNSHIP:** 31S **RANGE:** 22E

EQUIPMENT DESCRIPTION:

MODIFICATION OF 5,000 BBL (210,000 GALLON) FIXED ROOF, 38.6 FT. DIAMETER X 24 FT. HIGH, CRUDE OIL SURGE TANK T-460, WITH VAPOR CONTROL SYSTEM SHARED BETWEEN S-1547-643 TO -645, -647 TO -649, & -652 TO -654 (WIER CDF): PROVISIONS TO IDLE VCS

CONDITIONS

1. 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. 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. When tank and vapor control system are idle (non-operational) oil inlet valve to tank shall remain closed. [District Rules 2080 and 2201] Federally Enforceable Through Title V Permit
4. Permittee shall submit written notification to the District upon designating the tank as idle or operational. [District Rules 2080 and 2201] Federally Enforceable Through Title V Permit
5. When tank and VCS are idle, the tank shall vent through a PV relief valve set to within 10% of maximum allowable pressure of the tank, no oil shall be introduced into tank, and the TVP of residual (standing) oil shall not exceed 0.05 psia. Prior to introducing crude oil or produced water, the VCS must be reactivated and shall have a VOC control efficiency of at least 99%. [District Rules 2201 and 4623] 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-1547-647-10 - Jun 19 2017 2:34PM - EDGEHILR : Joint Inspection NOT Required

6. When tank and vapor control system are idle, only biennial true vapor pressure measurements shall be taken. No additional monitoring and recordkeeping is required. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
7. When tank and vapor control system are idle, VOC emission rate from the tank shall not exceed 1.9 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Records of tank throughput when idle, all dates and times that this unit is idle and operational, and copies of all corresponding notices to the District, shall be maintained, retained for a period of at least five years, and made available for District inspection upon request. [District Rule 1070] Federally Enforceable Through Title V Permit
9. Tank shall be vented to vapor control system listed on S-1547-643. [District Rule 2201] Federally Enforceable Through Title V Permit
10. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) less than 0.50 psia under all storage conditions. [District Rule 4623, 2.0 and 4.4] Federally Enforceable Through Title V Permit
11. Tank shall be designed and maintained to vent only to vapor control system, except during periods of tank cleaning, inspections, and maintenance allowed by this permit. [District Rule 2201] Federally Enforceable Through Title V Permit
12. All tank gauges, hatches, sampling ports, pressure relief valves, vapor control system components, etc. shall be closed and leak-free except during sampling or attended maintenance. [District Rule 2201] Federally Enforceable Through Title V Permit
13. Tank seams, welds, joints, piping, valves, and fittings shall be inspected and maintained in a leak-free condition. [District Rule 2201] Federally Enforceable Through Title V Permit
14. "Leak-free" shall be defined as emitting no more than 10,000 ppm of methane measured in accordance with EPA Method 21. Emissions in excess of this is considered a leak. [District Rule 2201] Federally Enforceable Through Title V Permit
15. During power-switching events, no fluids shall be introduced into this tank and there shall be no leaks (> 10,000 ppmv) from any TVR vapor piping or components. [District Rule 2201] Federally Enforceable Through Title V Permit
16. VOC fugitive emissions from the components in gas service on the tank shall not exceed 2.6 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
17. Permittee shall maintain an accurate fugitive component count and resultant emissions calculated using U.S. EPA Publication 453/R-95-017, Table 2-4, Oil and Gas Production Average Emission Factors. [District Rule 2201] Federally Enforceable Through Title V Permit
18. VOC content of hydrocarbons (VOC/THC) in collected vapors shall not exceed 25% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
19. 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
20. Permittee shall conduct tank cleaning and maintenance operations in accordance with District approved procedures as described in this permit. [District Rule 2080] Federally Enforceable Through Title V Permit
21. 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
22. Prior to opening the tank to allow tank cleaning one of the following procedures must be followed: 1) operate the vapor recovery system for at least 2 hours after all of the liquid in the tank has been drained, 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

CONDITIONS CONTINUE ON NEXT PAGE

23. Allowable methods of cleaning include using water, steam, diesel, 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/liter VOC content or less. Steam cleaning shall be allowed at locations where wastewater treatment facilities are limited or during December through March. [District Rule 2080] Federally Enforceable Through Title V Permit
24. Tank pressure/vacuum valve (Varec) shall be inspected on an annual basis. During the varec inspections, the varec can be removed from the tank and replaced if necessary. The permittee shall minimize emissions from the opening by plugging the opening during the removal of varec valve. [District Rule 2080] Federally Enforceable Through Title V Permit
25. All piping, fittings, and valves 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 Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
26. A facility operator, upon detection of a leaking component, shall affix to that component 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 rule. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
27. An operator shall re-inspect a component for leaks within thirty working days after the date on which the component is repaired. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
28. 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 Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
29. 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 99 percent efficient as measured by EPA Method 18 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 99% control efficiency as measured by EPA Method 18 at least annually. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
30. 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, 9.3.2] Federally Enforceable Through Title V Permit
31. 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) 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, 9.3.2] Federally Enforceable Through Title V Permit
32. True vapor pressure shall be measured at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored using the latest version of the Lawrence Berkeley National Laboratory "Test Method for Vapor Pressure of Reactive Organic Compounds in Heavy Crude Oil Using Gas Chromatograph", as approved by ARB and EPA. [District Rule 2520, 9.3.2 and 4623] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

33. The API gravity of crude oil or petroleum distillate shall be determined by using ASTM Method D287 - "Standard Test Method for API Gravity of Crude Petroleum and Petroleum Products (Hydrometer Method)". Sampling for API gravity shall be performed in accordance with ASTM Method D 4057 "Standard Practices from Manual Sampling of Petroleum and Petroleum Products". [District Rule 2520, 9.3.2 and 4623] Federally Enforceable Through Title V Permit
34. This unit has a storage capacity less than 420,000 gallons and is used for petroleum or condensate stored, processed and/or treated at a drilling and production facility prior to custody transfer. Therefore, the requirements of 40CFR 60 Subpart K, Ka and Kb do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
35. 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 procedure used to vent tank vapors prior to opening, the method of tank cleaning used, and a description of internal and external tank 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
36. The operator shall maintain records of % VOC of THC in collected vapors, and all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rules 2520, 9.4.2 and 4623, 6.3] Federally Enforceable Through Title V Permit



AUTHORITY TO CONSTRUCT

PERMIT NO: S-1547-648-10

ISSUANCE DATE: 06/19/2017

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

LOCATION: HEAVY OIL WESTERN STATIONARY SOURCE
KERN COUNTY, CA

SECTION: SW22 **TOWNSHIP:** 31S **RANGE:** 22E

EQUIPMENT DESCRIPTION:

MODIFICATION OF 2,000 BBL (84,000 GALLON) FIXED ROOF, 29.7 FT. DIAMETER X 16 FT. HIGH, CRUDE OIL STOCK TANK T-470, WITH VAPOR CONTROL SYSTEM SHARED BETWEEN S-1547-643 TO -645, -647 TO -649, & -652 TO -654 (WIER CDF): PROVISIONS TO IDLE VCS

CONDITIONS

1. 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. 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. When tank and vapor control system are idle (non-operational) oil inlet valve to tank shall remain closed. [District Rules 2080 and 2201] Federally Enforceable Through Title V Permit
4. Permittee shall submit written notification to the District upon designating the tank as idle or operational. [District Rules 2080 and 2201] Federally Enforceable Through Title V Permit
5. When tank and VCS are idle, the tank shall vent through a PV relief valve set to within 10% of maximum allowable pressure of the tank, no oil shall be introduced into tank, and the TVP of residual (standing) oil shall not exceed 0.05 psia. Prior to introducing crude oil or produced water, the VCS must be reactivated and shall have a VOC control efficiency of at least 99%. [District Rules 2201 and 4623] 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

S-1547-648-10 Jun 19 2017 2:34PM - EDGEHLR : Joint Inspection NOT Required

6. When tank and vapor control system are idle, only biennial true vapor pressure measurements shall be taken. No additional monitoring and recordkeeping is required. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
7. When tank and vapor control system are idle, VOC emission rate from the tank shall not exceed 0.7 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Records of tank throughput when idle, all dates and times that this unit is idle and operational, and copies of all corresponding notices to the District, shall be maintained, retained for a period of at least five years, and made available for District inspection upon request. [District Rule 1070] Federally Enforceable Through Title V Permit
9. Tank shall be vented to vapor control system listed on S-1547-643. [District Rule 2201] Federally Enforceable Through Title V Permit
10. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) less than 0.50 psia under all storage conditions. [District Rule 4623, 2.0 and 4.4] Federally Enforceable Through Title V Permit
11. Tank shall be designed and maintained to vent only to vapor control system, except during periods of tank cleaning, inspections, and maintenance allowed by this permit. [District Rule 2201] Federally Enforceable Through Title V Permit
12. All tank gauges, hatches, sampling ports, pressure relief valves, vapor control system components, etc. shall be closed and leak-free except during sampling or attended maintenance. [District Rule 2201] Federally Enforceable Through Title V Permit
13. Tank seams, welds, joints, piping, valves, and fittings shall be inspected and maintained in a leak-free condition. [District Rule 2201] Federally Enforceable Through Title V Permit
14. "Leak-free" shall be defined as emitting no more than 10,000 ppm of methane measured in accordance with EPA Method 21. Emissions in excess of this is considered a leak. [District Rule 2201] Federally Enforceable Through Title V Permit
15. During power-switching events, no fluids shall be introduced into this tank and there shall be no leaks ($> 10,000$ ppmv) from any TVR vapor piping or components. [District Rule 2201] Federally Enforceable Through Title V Permit
16. VOC fugitive emissions from the components in gas service on the tank shall not exceed 2.6 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
17. Permittee shall maintain an accurate fugitive component count and resultant emissions calculated using U.S. EPA Publication 453/R-95-017, Table 2-4, Oil and Gas Production Average Emission Factors. [District Rule 2201] Federally Enforceable Through Title V Permit
18. VOC content of hydrocarbons (VOC/THC) in collected vapors shall not exceed 25% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
19. 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
20. Permittee shall conduct tank cleaning and maintenance operations in accordance with District approved procedures as described in this permit. [District Rule 2080] Federally Enforceable Through Title V Permit
21. 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
22. Prior to opening the tank to allow tank cleaning one of the following procedures must be followed: 1) operate the vapor recovery system for at least 2 hours after all of the liquid in the tank has been drained, 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

CONDITIONS CONTINUE ON NEXT PAGE

23. Allowable methods of cleaning include using water, steam, diesel, 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/liter VOC content or less. Steam cleaning shall be allowed at locations where wastewater treatment facilities are limited or during December through March. [District Rule 2080] Federally Enforceable Through Title V Permit
24. Tank pressure/vacuum valve (Varec) shall be inspected on an annual basis. During the varec inspections, the varec can be removed from the tank and replaced if necessary. The permittee shall minimize emissions from the opening by plugging the opening during the removal of varec valve. [District Rule 2080] Federally Enforceable Through Title V Permit
25. All piping, fittings, and valves 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 Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
26. A facility operator, upon detection of a leaking component, shall affix to that component 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 rule. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
27. An operator shall re-inspect a component for leaks within thirty working days after the date on which the component is repaired. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
28. 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 Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
29. 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 99 percent efficient as measured by EPA Method 18 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 99% control efficiency as measured by EPA Method 18 at least annually. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
30. 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, 9.3.2] Federally Enforceable Through Title V Permit
31. 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) 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, 9.3.2] Federally Enforceable Through Title V Permit
32. True vapor pressure shall be measured at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored using the latest version of the Lawrence Berkeley National Laboratory "Test Method for Vapor Pressure of Reactive Organic Compounds in Heavy Crude Oil Using Gas Chromatograph", as approved by ARB and EPA. [District Rule 2520, 9.3.2 and 4623] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

33. The API gravity of crude oil or petroleum distillate shall be determined by using ASTM Method D287 - "Standard Test Method for API Gravity of Crude Petroleum and Petroleum Products (Hydrometer Method)". Sampling for API gravity shall be performed in accordance with ASTM Method D 4057 "Standard Practices from Manual Sampling of Petroleum and Petroleum Products". [District Rule 2520, 9.3.2 and 4623] Federally Enforceable Through Title V Permit
34. This unit has a storage capacity less than 420,000 gallons and is used for petroleum or condensate stored, processed and/or treated at a drilling and production facility prior to custody transfer. Therefore, the requirements of 40CFR 60 Subpart K, Ka and Kb do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
35. 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 procedure used to vent tank vapors prior to opening, the method of tank cleaning used, and a description of internal and external tank 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
36. The operator shall maintain records of % VOC of THC in collected vapors, and all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rules 2520, 9.4.2 and 4623, 6.3] Federally Enforceable Through Title V Permit



AUTHORITY TO CONSTRUCT

PERMIT NO: S-1547-649-10

ISSUANCE DATE: 06/19/2017

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

LOCATION: HEAVY OIL WESTERN STATIONARY SOURCE
KERN COUNTY, CA

SECTION: SW22 TOWNSHIP: 31S RANGE: 22E

EQUIPMENT DESCRIPTION:

MODIFICATION OF 2,000 BBL (84,000 GALLON) FIXED ROOF, 29.7 FT. DIAMETER X 16 FT. HIGH, CRUDE OIL CLARIFIER TANK T-480, WITH VAPOR CONTROL SYSTEM SHARED BETWEEN S-1547-643 TO -645, -647 TO -649, & -652 TO -654 (WIER CDF):PROVISIONS TO IDLE VCS

CONDITIONS

1. 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. 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. When tank and vapor control system are idle (non-operational) oil inlet valve to tank shall remain closed. [District Rules 2080 and 2201] Federally Enforceable Through Title V Permit
4. Permittee shall submit written notification to the District upon designating the tank as idle or operational. [District Rules 2080 and 2201] Federally Enforceable Through Title V Permit
5. When tank and VCS are idle, the tank shall vent through a PV relief valve set to within 10% of maximum allowable pressure of the tank, no oil shall be introduced into tank, and the TVP of residual (standing) oil shall not exceed 0.05 psia. Prior to introducing crude oil or produced water, the VCS must be reactivated and shall have a VOC control efficiency of at least 99%. [District Rules 2201 and 4623] 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

S-1547-649-10; Jun 19 2017 2:34PM - EDGEHLR : Joint Inspection NOT Required

6. When tank and vapor control system are idle, only biennial true vapor pressure measurements shall be taken. No additional monitoring and recordkeeping is required. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
7. When tank and vapor control system are idle, VOC emission rate from the tank shall not exceed 0.7 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Records of tank throughput when idle, all dates and times that this unit is idle and operational, and copies of all corresponding notices to the District, shall be maintained, retained for a period of at least five years, and made available for District inspection upon request. [District Rule 1070] Federally Enforceable Through Title V Permit
9. Tank shall be vented to vapor control system listed on S-1547-643. [District Rule 2201] Federally Enforceable Through Title V Permit
10. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) less than 0.50 psia under all storage conditions. [District Rule 4623, 2.0 and 4.4] Federally Enforceable Through Title V Permit
11. Tank shall be designed and maintained to vent only to vapor control system, except during periods of tank cleaning, inspections, and maintenance allowed by this permit. [District Rule 2201] Federally Enforceable Through Title V Permit
12. All tank gauges, hatches, sampling ports, pressure relief valves, vapor control system components, etc. shall be closed and leak-free except during sampling or attended maintenance. [District Rule 2201] Federally Enforceable Through Title V Permit
13. Tank seams, welds, joints, piping, valves, and fittings shall be inspected and maintained in a leak-free condition. [District Rule 2201] Federally Enforceable Through Title V Permit
14. "Leak-free" shall be defined as emitting no more than 10,000 ppm of methane measured in accordance with EPA Method 21. Emissions in excess of this is considered a leak. [District Rule 2201] Federally Enforceable Through Title V Permit
15. During power-switching events, no fluids shall be introduced into this tank and there shall be no leaks (> 10,000 ppmv) from any TVR vapor piping or components. [District Rule 2201] Federally Enforceable Through Title V Permit
16. VOC fugitive emissions from the components in gas service on the tank shall not exceed 3.2 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
17. Permittee shall maintain an accurate fugitive component count and resultant emissions calculated using U.S. EPA Publication 453/R-95-017, Table 2-4, Oil and Gas Production Average Emission Factors. [District Rule 2201] Federally Enforceable Through Title V Permit
18. VOC content of hydrocarbons (VOC/THC) in collected vapors shall not exceed 25% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
19. 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
20. Permittee shall conduct tank cleaning and maintenance operations in accordance with District approved procedures as described in this permit. [District Rule 2080] Federally Enforceable Through Title V Permit
21. 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
22. Prior to opening the tank to allow tank cleaning one of the following procedures must be followed: 1) operate the vapor recovery system for at least 2 hours after all of the liquid in the tank has been drained, 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

CONDITIONS CONTINUE ON NEXT PAGE

23. Allowable methods of cleaning include using water, steam, diesel, 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/liter VOC content or less. Steam cleaning shall be allowed at locations where wastewater treatment facilities are limited or during December through March. [District Rule 2080] Federally Enforceable Through Title V Permit
24. Tank pressure/vacuum valve (Varec) shall be inspected on an annual basis. During the varec inspections, the varec can be removed from the tank and replaced if necessary. The permittee shall minimize emissions from the opening by plugging the opening during the removal of varec valve. [District Rule 2080] Federally Enforceable Through Title V Permit
25. All piping, fittings, and valves 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 Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
26. A facility operator, upon detection of a leaking component, shall affix to that component 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 rule. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
27. An operator shall re-inspect a component for leaks within thirty working days after the date on which the component is repaired. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
28. 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 Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
29. 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 99 percent efficient as measured by EPA Method 18 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 99% control efficiency as measured by EPA Method 18 at least annually. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
30. 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, 9.3.2] Federally Enforceable Through Title V Permit
31. 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) 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, 9.3.2] Federally Enforceable Through Title V Permit
32. True vapor pressure shall be measured at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored using the latest version of the Lawrence Berkeley National Laboratory "Test Method for Vapor Pressure of Reactive Organic Compounds in Heavy Crude Oil Using Gas Chromatograph", as approved by ARB and EPA. [District Rule 2520, 9.3.2 and 4623] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

33. The API gravity of crude oil or petroleum distillate shall be determined by using ASTM Method D287 - "Standard Test Method for API Gravity of Crude Petroleum and Petroleum Products (Hydrometer Method)". Sampling for API gravity shall be performed in accordance with ASTM Method D 4057 "Standard Practices from Manual Sampling of Petroleum and Petroleum Products". [District Rule 2520, 9.3.2 and 4623] Federally Enforceable Through Title V Permit
34. This unit has a storage capacity less than 420,000 gallons and is used for petroleum or condensate stored, processed and/or treated at a drilling and production facility prior to custody transfer. Therefore, the requirements of 40CFR 60 Subpart K, Ka and Kb do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
35. 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 procedure used to vent tank vapors prior to opening, the method of tank cleaning used, and a description of internal and external tank 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
36. The operator shall maintain records of % VOC of THC in collected vapors, and all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rules 2520, 9.4.2 and 4623, 6.3] Federally Enforceable Through Title V Permit



AUTHORITY TO CONSTRUCT

PERMIT NO: S-1547-652-10

ISSUANCE DATE: 06/19/2017

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

LOCATION: HEAVY OIL WESTERN STATIONARY SOURCE
KERN COUNTY, CA

SECTION: SW22 TOWNSHIP: 31S RANGE: 22E

EQUIPMENT DESCRIPTION:

MODIFICATION OF 5,000 BBL (210,000 GALLON) FIXED ROOF, 38.6 FT. DIAMETER X 24. FT. HIGH, CRUDE OIL SKIM TANK T-600, WITH VAPOR CONTROL SYSTEM SHARED BETWEEN S-1547-643 TO -645, -647 TO -649, & -652 TO -654 (WIER CDF):PROVISIONS TO IDLE VCS

CONDITIONS

1. 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. 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. When tank and vapor control system are idle (non-operational) oil inlet valve to tank shall remain closed. [District Rules 2080 and 2201] Federally Enforceable Through Title V Permit
4. Permittee shall submit written notification to the District upon designating the tank as idle or operational. [District Rules 2080 and 2201] Federally Enforceable Through Title V Permit
5. When tank and VCS are idle, the tank shall vent through a PV relief valve set to within 10% of maximum allowable pressure of the tank, no oil shall be introduced into tank, and the TVP of residual (standing) oil shall not exceed 0.05 psia. Prior to introducing crude oil or produced water, the VCS must be reactivated and shall have a VOC control efficiency of at least 99%. [District Rules 2201 and 4623] 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 Marjôlet, Director of Permit Services

S-1547-652-10 - Jun 19 2017 2:34PM - EDGEHILR - Joint Inspection NOT Required

6. When tank and vapor control system are idle, only biennial true vapor pressure measurements shall be taken. No additional monitoring and recordkeeping is required. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
7. When tank and vapor control system are idle, VOC emission rate from the tank shall not exceed 1.9 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Records of tank throughput when idle, all dates and times that this unit is idle and operational, and copies of all corresponding notices to the District, shall be maintained, retained for a period of at least five years, and made available for District inspection upon request. [District Rule 1070] Federally Enforceable Through Title V Permit
9. Tank shall be vented to vapor control system listed on S-1547-643. [District Rule 2201] Federally Enforceable Through Title V Permit
10. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) less than 0.50 psia under all storage conditions. [District Rule 4623, 2.0 and 4.4] Federally Enforceable Through Title V Permit
11. Tank shall be designed and maintained to vent only to vapor control system, except during periods of tank cleaning, inspections, and maintenance allowed by this permit. [District Rule 2201] Federally Enforceable Through Title V Permit
12. All tank gauges, hatches, sampling ports, pressure relief valves, vapor control system components, etc. shall be closed and leak-free except during sampling or attended maintenance. [District Rule 2201] Federally Enforceable Through Title V Permit
13. Tank seams, welds, joints, piping, valves, and fittings shall be inspected and maintained in a leak-free condition. [District Rule 2201] Federally Enforceable Through Title V Permit
14. "Leak-free" shall be defined as emitting no more than 10,000 ppm of methane measured in accordance with EPA Method 21. Emissions in excess of this is considered a leak. [District Rule 2201] Federally Enforceable Through Title V Permit
15. During power-switching events, no fluids shall be introduced into this tank and there shall be no leaks ($> 10,000$ ppmv) from any TVR vapor piping or components. [District Rule 2201] Federally Enforceable Through Title V Permit
16. VOC fugitive emissions from the components in gas service on the tank shall not exceed 3.2 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
17. Permittee shall maintain an accurate fugitive component count and resultant emissions calculated using U.S. EPA Publication 453/R-95-017, Table 2-4, Oil and Gas Production Average Emission Factors. [District Rule 2201] Federally Enforceable Through Title V Permit
18. VOC content of hydrocarbons (VOC/THC) in collected vapors shall not exceed 25% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
19. 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
20. Permittee shall conduct tank cleaning and maintenance operations in accordance with District approved procedures as described in this permit. [District Rule 2080] Federally Enforceable Through Title V Permit
21. 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
22. Prior to opening the tank to allow tank cleaning one of the following procedures must be followed: 1) operate the vapor recovery system for at least 2 hours after all of the liquid in the tank has been drained, 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

CONDITIONS CONTINUE ON NEXT PAGE

23. Allowable methods of cleaning include using water, steam, diesel, 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/liter VOC content or less. Steam cleaning shall be allowed at locations where wastewater treatment facilities are limited or during December through March. [District Rule 2080] Federally Enforceable Through Title V Permit
24. Tank pressure/vacuum valve (Varec) shall be inspected on an annual basis. During the varec inspections, the varec can be removed from the tank and replaced if necessary. The permittee shall minimize emissions from the opening by plugging the opening during the removal of varec valve. [District Rule 2080] Federally Enforceable Through Title V Permit
25. All piping, fittings, and valves 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 Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
26. A facility operator, upon detection of a leaking component, shall affix to that component 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 rule. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
27. An operator shall re-inspect a component for leaks within thirty working days after the date on which the component is repaired. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
28. 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 Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
29. 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 99 percent efficient as measured by EPA Method 18 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 99% control efficiency as measured by EPA Method 18 at least annually. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
30. 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, 9.3.2] Federally Enforceable Through Title V Permit
31. 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) 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, 9.3.2] Federally Enforceable Through Title V Permit
32. True vapor pressure shall be measured at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored using the latest version of the Lawrence Berkeley National Laboratory "Test Method for Vapor Pressure of Reactive Organic Compounds in Heavy Crude Oil Using Gas Chromatograph", as approved by ARB and EPA. [District Rule 2520, 9.3.2 and 4623] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

33. The API gravity of crude oil or petroleum distillate shall be determined by using ASTM Method D287 - "Standard Test Method for API Gravity of Crude Petroleum and Petroleum Products (Hydrometer Method)". Sampling for API gravity shall be performed in accordance with ASTM Method D 4057 "Standard Practices from Manual Sampling of Petroleum and Petroleum Products". [District Rule 2520, 9.3.2 and 4623] Federally Enforceable Through Title V Permit
34. This unit has a storage capacity less than 420,000 gallons and is used for petroleum or condensate stored, processed and/or treated at a drilling and production facility prior to custody transfer. Therefore, the requirements of 40CFR 60 Subpart K, Ka and Kb do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
35. 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 procedure used to vent tank vapors prior to opening, the method of tank cleaning used, and a description of internal and external tank 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
36. The operator shall maintain records of % VOC of THC in collected vapors, and all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rules 2520, 9.4.2 and 4623, 6.3] Federally Enforceable Through Title V Permit



AUTHORITY TO CONSTRUCT

PERMIT NO: S-1547-653-10

ISSUANCE DATE: 06/19/2017

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

LOCATION: HEAVY OIL WESTERN STATIONARY SOURCE
KERN COUNTY, CA

SECTION: SW22 **TOWNSHIP:** 31S **RANGE:** 22E

EQUIPMENT DESCRIPTION:

MODIFICATION OF 500 BBL (21,000 GALLON) FIXED ROOF, 15.3 FT. DIAMETER X 16 FT. HIGH, CRUDE OIL SLOP TANK T-610, WITH VAPOR CONTROL SYSTEM SHARED BETWEEN S-1547-643 TO -645, -647 TO -649, & -652 TO -654 (WIER CDF): PROVISIONS TO IDLE VCS

CONDITIONS

1. 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. 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. When tank and vapor control system are idle (non-operational) oil inlet valve to tank shall remain closed. [District Rules 2080 and 2201] Federally Enforceable Through Title V Permit
4. Permittee shall submit written notification to the District upon designating the tank as idle or operational. [District Rules 2080 and 2201] Federally Enforceable Through Title V Permit
5. When tank and VCS are idle, the tank shall vent through a PV relief valve set to within 10% of maximum allowable pressure of the tank, no oil shall be introduced into tank, and the TVP of residual (standing) oil shall not exceed 0.05 psia. Prior to introducing crude oil or produced water, the VCS must be reactivated and shall have a VOC control efficiency of at least 99%. [District Rules 2201 and 4623] 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

S-1547-653-10 : Jun 19 2017 2:34PM - EDGEHILR : Joint Inspection NOT Required

6. When tank and vapor control system are idle, only biennial true vapor pressure measurements shall be taken. No additional monitoring and recordkeeping is required. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
7. When tank and vapor control system are idle, VOC emission rate from the tank shall not exceed 0.2 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Records of tank throughput when idle, all dates and times that this unit is idle and operational, and copies of all corresponding notices to the District, shall be maintained, retained for a period of at least five years, and made available for District inspection upon request. [District Rule 1070] Federally Enforceable Through Title V Permit
9. Tank shall be vented to vapor control system listed on S-1547-643. [District Rule 2201] Federally Enforceable Through Title V Permit
10. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) less than 0.50 psia under all storage conditions. [District Rule 4623, 2.0 and 4.4] Federally Enforceable Through Title V Permit
11. Tank shall be designed and maintained to vent only to vapor control system, except during periods of tank cleaning, inspections, and maintenance allowed by this permit. [District Rule 2201] Federally Enforceable Through Title V Permit
12. All tank gauges, hatches, sampling ports, pressure relief valves, vapor control system components, etc. shall be closed and leak-free except during sampling or attended maintenance. [District Rule 2201] Federally Enforceable Through Title V Permit
13. Tank seams, welds, joints, piping, valves, and fittings shall be inspected and maintained in a leak-free condition. [District Rule 2201] Federally Enforceable Through Title V Permit
14. "Leak-free" shall be defined as emitting no more than 10,000 ppm of methane measured in accordance with EPA Method 21. Emissions in excess of this is considered a leak. [District Rule 2201] Federally Enforceable Through Title V Permit
15. During power-switching events, no fluids shall be introduced into this tank and there shall be no leaks ($> 10,000$ ppmv) from any TVR vapor piping or components. [District Rule 2201] Federally Enforceable Through Title V Permit
16. VOC fugitive emissions from the components in gas service on the tank shall not exceed 3.2 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
17. Permittee shall maintain an accurate fugitive component count and resultant emissions calculated using U.S. EPA Publication 453/R-95-017, Table 2-4, Oil and Gas Production Average Emission Factors. [District Rule 2201] Federally Enforceable Through Title V Permit
18. VOC content of hydrocarbons (VOC/THC) in collected vapors shall not exceed 25% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
19. 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
20. Permittee shall conduct tank cleaning and maintenance operations in accordance with District approved procedures as described in this permit. [District Rule 2080] Federally Enforceable Through Title V Permit
21. 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
22. Prior to opening the tank to allow tank cleaning one of the following procedures must be followed: 1) operate the vapor recovery system for at least 2 hours after all of the liquid in the tank has been drained, 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

CONDITIONS CONTINUE ON NEXT PAGE

23. Allowable methods of cleaning include using water, steam, diesel, 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/liter VOC content or less. Steam cleaning shall be allowed at locations where wastewater treatment facilities are limited or during December through March. [District Rule 2080] Federally Enforceable Through Title V Permit
24. Tank pressure/vacuum valve (Varec) shall be inspected on an annual basis. During the varec inspections, the varec can be removed from the tank and replaced if necessary. The permittee shall minimize emissions from the opening by plugging the opening during the removal of varec valve. [District Rule 2080] Federally Enforceable Through Title V Permit
25. All piping, fittings, and valves 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 Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
26. A facility operator, upon detection of a leaking component, shall affix to that component 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 rule. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
27. An operator shall re-inspect a component for leaks within thirty working days after the date on which the component is repaired. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
28. 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 Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
29. 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 99 percent efficient as measured by EPA Method 18 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 99% control efficiency as measured by EPA Method 18 at least annually. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
30. 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, 9.3.2] Federally Enforceable Through Title V Permit
31. 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) 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, 9.3.2] Federally Enforceable Through Title V Permit
32. True vapor pressure shall be measured at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored using the latest version of the Lawrence Berkeley National Laboratory "Test Method for Vapor Pressure of Reactive Organic Compounds in Heavy Crude Oil Using Gas Chromatograph", as approved by ARB and EPA. [District Rule 2520, 9.3.2 and 4623] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

33. The API gravity of crude oil or petroleum distillate shall be determined by using ASTM Method D287 - "Standard Test Method for API Gravity of Crude Petroleum and Petroleum Products (Hydrometer Method)". Sampling for API gravity shall be performed in accordance with ASTM Method D 4057 "Standard Practices from Manual Sampling of Petroleum and Petroleum Products". [District Rule 2520, 9.3.2 and 4623] Federally Enforceable Through Title V Permit
34. This unit has a storage capacity less than 420,000 gallons and is used for petroleum or condensate stored, processed and/or treated at a drilling and production facility prior to custody transfer. Therefore, the requirements of 40CFR 60 Subpart K, Ka and Kb do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
35. 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 procedure used to vent tank vapors prior to opening, the method of tank cleaning used, and a description of internal and external tank 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
36. The operator shall maintain records of % VOC of THC in collected vapors, and all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rules 2520, 9.4.2 and 4623, 6.3] Federally Enforceable Through Title V Permit



AUTHORITY TO CONSTRUCT

PERMIT NO: S-1547-654-11

ISSUANCE DATE: 06/19/2017

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

LOCATION: HEAVY OIL WESTERN STATIONARY SOURCE
KERN COUNTY, CA

SECTION: SW22 TOWNSHIP: 31S RANGE: 22E

EQUIPMENT DESCRIPTION:

MODIFICATION OF 500 BBL (21,000 GALLON) FIXED ROOF, 21.5 FT. DIAMETER X 8 FT. HIGH, CRUDE OIL DRAIN TANK T-700, WITH VAPOR CONTROL SYSTEM SHARED BETWEEN S-1547-643 TO -645, -647 TO -649, & -652 TO -654 (WIER CDF):PROVISIONS TO IDLE VCS

CONDITIONS

1. 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. 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. When tank and vapor control system are idle (non-operational) oil inlet valve to tank shall remain closed. [District Rules 2080 and 2201] Federally Enforceable Through Title V Permit
4. Permittee shall submit written notification to the District upon designating the tank as idle or operational. [District Rules 2080 and 2201] Federally Enforceable Through Title V Permit
5. When tank and VCS are idle, the tank shall vent through a PV relief valve set to within 10% of maximum allowable pressure of the tank, no oil shall be introduced into tank, and the TVP of residual (standing) oil shall not exceed 0.05 psia. Prior to introducing crude oil or produced water, the VCS must be reactivated and shall have a VOC control efficiency of at least 99%. [District Rules 2201 and 4623] 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

S-1547-654-11 : Jun 19 2017 2:34PM - EDGEHILR : Joint Inspection NOT Required

6. When tank and vapor control system are idle, only biennial true vapor pressure measurements shall be taken. No additional monitoring and recordkeeping is required. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
7. When tank and vapor control system are idle, VOC emission rate from the tank shall not exceed 0.2 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Records of tank throughput when idle, all dates and times that this unit is idle and operational, and copies of all corresponding notices to the District, shall be maintained, retained for a period of at least five years, and made available for District inspection upon request. [District Rule 1070] Federally Enforceable Through Title V Permit
9. Tank shall be vented to vapor control system listed on S-1547-643. [District Rule 2201] Federally Enforceable Through Title V Permit
10. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) less than 0.50 psia under all storage conditions. [District Rule 4623, 2.0 and 4.4] Federally Enforceable Through Title V Permit
11. Tank shall be designed and maintained to vent only to vapor control system, except during periods of tank cleaning, inspections, and maintenance allowed by this permit. [District Rule 2201] Federally Enforceable Through Title V Permit
12. All tank gauges, hatches, sampling ports, pressure relief valves, vapor control system components, etc. shall be closed and leak-free except during sampling or attended maintenance. [District Rule 2201] Federally Enforceable Through Title V Permit
13. Tank seams, welds, joints, piping, valves, and fittings shall be inspected and maintained in a leak-free condition. [District Rule 2201] Federally Enforceable Through Title V Permit
14. "Leak-free" shall be defined as emitting no more than 10,000 ppm of methane measured in accordance with EPA Method 21. Emissions in excess of this is considered a leak. [District Rule 2201] Federally Enforceable Through Title V Permit
15. During power-switching events, no fluids shall be introduced into this tank and there shall be no leaks ($> 10,000$ ppmv) from any TVR vapor piping or components. [District Rule 2201] Federally Enforceable Through Title V Permit
16. VOC fugitive emissions from the components in gas service on the tank shall not exceed 3.2 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
17. Permittee shall maintain an accurate fugitive component count and resultant emissions calculated using U.S. EPA Publication 453/R-95-017, Table 2-4, Oil and Gas Production Average Emission Factors. [District Rule 2201] Federally Enforceable Through Title V Permit
18. VOC content of hydrocarbons (VOC/THC) in collected vapors shall not exceed 25% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
19. 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
20. Permittee shall conduct tank cleaning and maintenance operations in accordance with District approved procedures as described in this permit. [District Rule 2080] Federally Enforceable Through Title V Permit
21. 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
22. Prior to opening the tank to allow tank cleaning one of the following procedures must be followed: 1) operate the vapor recovery system for at least 2 hours after all of the liquid in the tank has been drained, 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

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23. Allowable methods of cleaning include using water, steam, diesel, 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/liter VOC content or less. Steam cleaning shall be allowed at locations where wastewater treatment facilities are limited or during December through March. [District Rule 2080] Federally Enforceable Through Title V Permit
24. Tank pressure/vacuum valve (Varec) shall be inspected on an annual basis. During the varec inspections, the varec can be removed from the tank and replaced if necessary. The permittee shall minimize emissions from the opening by plugging the opening during the removal of varec valve. [District Rule 2080] Federally Enforceable Through Title V Permit
25. All piping, fittings, and valves 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 Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
26. A facility operator, upon detection of a leaking component, shall affix to that component 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 rule. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
27. An operator shall re-inspect a component for leaks within thirty working days after the date on which the component is repaired. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
28. 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 Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
29. 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 99 percent efficient as measured by EPA Method 18 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 99% control efficiency as measured by EPA Method 18 at least annually. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
30. 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, 9.3.2] Federally Enforceable Through Title V Permit
31. 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) 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, 9.3.2] Federally Enforceable Through Title V Permit
32. True vapor pressure shall be measured at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored using the latest version of the Lawrence Berkeley National Laboratory "Test Method for Vapor Pressure of Reactive Organic Compounds in Heavy Crude Oil Using Gas Chromatograph", as approved by ARB and EPA. [District Rule 2520, 9.3.2 and 4623] Federally Enforceable Through Title V Permit

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33. The API gravity of crude oil or petroleum distillate shall be determined by using ASTM Method D287 - "Standard Test Method for API Gravity of Crude Petroleum and Petroleum Products (Hydrometer Method)". Sampling for API gravity shall be performed in accordance with ASTM Method D 4057 "Standard Practices from Manual Sampling of Petroleum and Petroleum Products". [District Rule 2520, 9.3.2 and 4623] Federally Enforceable Through Title V Permit
34. This unit has a storage capacity less than 420,000 gallons and is used for petroleum or condensate stored, processed and/or treated at a drilling and production facility prior to custody transfer. Therefore, the requirements of 40CFR 60 Subpart K, Ka and Kb do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
35. 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 procedure used to vent tank vapors prior to opening, the method of tank cleaning used, and a description of internal and external tank 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
36. The operator shall maintain records of % VOC of THC in collected vapors, and all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rules 2520, 9.4.2 and 4623, 6.3] Federally Enforceable Through Title V Permit