

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1548-489-6

EXPIRATION DATE: 05/31/2016

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

EQUIPMENT DESCRIPTION:

1,700 GALLON (84" DIA X 72" TALL) INDUCED GAS FLOTATION UNIT V-300A VENTED TO VAPOR CONTROL SYSTEM LISTED ON S-1548-148 (DEHY 20)

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PERMIT UNIT REQUIREMENTS

1. The tank shall be equipped with a vapor recovery system consisting of a closed system that collects VOCs from the storage tank. [District Rule 4623, 5.1] Federally Enforceable Through Title V Permit
2. All piping, valves, and fittings shall be constructed and maintained in a leak-free condition. [District Rule 4623, 5.1.3] Federally Enforceable Through Title V Permit
3. A leak is defined as a reading in excess of 10,000 ppmv, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21. A reading in excess of 10,000 ppmv above background is a violation of this permit and Rule 4623 and shall be reported as a deviation. [District Rule 4623, 3.11 and 6.4.8] Federally Enforceable Through Title V Permit
4. Any vessel gauging or sampling device on a vessel vented to the vapor recovery system shall be equipped with a leak free cover which shall be closed at all times except during gauging or sampling. [District Rule 4623, 5.6.2] Federally Enforceable Through Title V Permit
5. All piping, fittings, and valves on this vessel associated with the vapor recovery system shall be inspected annually by the facility operator in accordance with EPA Method 21, with the instrument calibrated with methane, to ensure compliance with the leaking provisions of this permit. [District Rule 4623, 5.7 (Table 3)] Federally Enforceable Through Title V Permit
6. If any of the vessel components are found to be leaking, operator shall immediately affix a tag and maintain records of gas leak detection readings, date/time leak was discovered, and date/time the component was repaired to a leak-free condition [District Rule 4623, 5.7 (Table 3)] Federally Enforceable Through Title V Permit
7. Upon detection of any leaking components (having a gas leak > 10,000 ppmv, measured in accordance with EPA Method 21 by a portable hydrocarbon detection instrument that is calibrated with methane), the operator shall: a. Eliminate the leak within 8 hours after detection; or b. If the leak can not be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices; and c. Eliminate the leak within 48 hours after minimization; and d. In no event that the total time to minimize and eliminate the leak shall exceed 56 hours after detection. [District Rule 4623, 5.7 (Table 3)] Federally Enforceable Through Title V Permit
8. If a component type for a given vessel is found to leak above the leak free standard during an annual inspection, then quarterly inspections of that component type on the vessel or system shall be conducted for four consecutive quarters. After four successful quarterly inspections in which the component type is found to be leak free (<10,000 ppmv), inspections interval may revert to annual. [District Rule 4623, 5.7 (Table 3)] Federally Enforceable Through Title V Permit
9. Any component found to be leaking above the leak free standard on two consecutive annual inspections is considered a violation, even if it is under the voluntary inspection and maintenance program. [District Rule 4623, 5.7 (Table 3)] Federally Enforceable Through Title V Permit

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

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10. This permit authorizes tank cleaning that is not the result of breakdowns or poor maintenance as a routine maintenance activity. [District Rule 2020] Federally Enforceable Through Title V Permit
11. As long as facility is participant in the Rule 4623 Fixed Roof Tank Preventive Inspection and Maintenance Program, and Tank Interior Cleaning Program, leaking components directly affixed to the tank and within five feet of the tank, including but not limited to valves, flanges, connectors, that have been discovered by the operator that have been immediately tagged and repaired within the deadlines specified in the Emissions Minimization requirements, shall not constitute a violation of this rule or permit and do not have to be reported as a deviation.. However, leaking components discovered during inspections by District staff that were not previously identified and/or tagged by the operator, and/or any leaks that were not repaired within deadlines specified in the Emissions Minimization requirements, shall constitute a violation of this rule or permit and do have to be reported as a deviation. [District Rule 4623, 5.7 (Table 3)] Federally Enforceable Through Title V Permit
12. Permittee shall notify the APCO in writing at least three (3) days prior to performing vessel degassing and interior vessel cleaning activities. Written notification shall include the following: 1) the Permit to Operate number and physical location of the vessel being degassed, 2) the date and time that vessel degassing and cleaning activities will begin, 3) the degassing method, as allowed in this permit, to be used, 4) the method to be used to clean the vessel, including any solvents to be used, and 5) the method to be used to dispose of any removed sludge, including methods that will be used to control emissions from the receiving vessel and emissions during transport. [District Rule 4623, 5.7.5.1] Federally Enforceable Through Title V Permit
13. This vessel shall be degassed before commencing interior cleaning by one of the following: 1) exhausting VOCs contained in the vessel vapor space to an APCO-approved vapor recovery system until the organic vapor concentration is 5,000 ppmv or less, or is 10 percent or less of the lower explosion limit (LEL), whichever is less, or; 2) by displacing VOCs contained in the vessel vapor space to an APCO-approved vapor recovery system by filling the vessel with a suitable liquid until 90 percent or more of the maximum operating level of the vessel is filled. Suitable liquids are organic liquids having a TVP of less than 0.5 psia, water, clean produced water. or produced water derived from crude oil having a TVP less than 0.5 psia, or; 3) by displacing VOCs contained in the vessel vapor space to an APCO-approved vapor recovery system by filling the vessel with a suitable gas. Degassing shall continue until the operator has achieved a vapor displacement equivalent to at least 2.3 times the vessel capacity. Suitable gases are air, nitrogen, carbon dioxide, or natural gas containing less than 10 percent VOC by weight. [District Rule 4623, 5.7.5.4] Federally Enforceable Through Title V Permit
14. During vessel degassing, the operator shall discharge or displace organic vapors contained in the vessel vapor space to an APCO-approved vapor recovery system. [District Rule 4623, 5.7.5.4.5] Federally Enforceable Through Title V Permit
15. To facilitate connection to an external APCO-approved recovery system, a suitable vessel fitting, such as a manway, may be temporarily removed for a period of time not to exceed 1 hour. [District Rule 4623, 5.7.5.4.6] Federally Enforceable Through Title V Permit
16. This vessel shall be in compliance with the applicable requirements of District Rule 4623 at all times during draining, degassing, and refilling the tank with an organic liquid having a TVP of 0.5 psia or greater. [District Rule 4623, 5.7.5.4.7] Federally Enforceable Through Title V Permit
17. After a tank has been degassed pursuant to the requirements of this permit, vapor control requirements are not applicable until an organic liquid having a TVP of 0.5 psia or greater is placed, held, or stored in this vessel. [District Rule 4623, 5.7.5.4.10] Federally Enforceable Through Title V Permit
18. While performing vessel cleaning activities, operators may only use the following cleaning agents: diesel, solvents with an initial boiling point of greater than 302 degrees F, solvents with a vapor pressure of less than 0.5 psia, or solvents with 50 grams of VOC per liter or less. [District Rule 4623, 5.7.5.5.1] Federally Enforceable Through Title V Permit
19. Steam cleaning shall only be allowed at locations where wastewater treatment facilities are limited, or during the months of December through March. [District Rule 4623, 5.7.5.5.2] Federally Enforceable Through Title V Permit

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PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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20. If the tank is holding organic liquids with a TVP of 1.5 psia or greater then during sludge removal, the operator shall control emissions from the sludge receiving vessel by operating an APCO-approved vapor control device that reduces emissions of organic vapors by at least 95%. [District Rule 4623, 5.7.5.6.1] Federally Enforceable Through Title V Permit
21. If the tank is holding organic liquids with a TVP of 1.5 psia or greater then permittee shall only transport removed sludge in closed, liquid leak-free containers. [District Rule 4623, 5.7.5.6.2] Federally Enforceable Through Title V Permit
22. If the tank is holding organic liquids with a TVP of 1.5 psia or greater then permittee shall store removed sludge, until final disposal, in vapor leak-free containers, or in tanks complying with the vapor control requirements of District Rule 4623. Sludge that is to be used to manufacture roadmix, as defined in District Rule 2020, is not required to be stored in this manner. Roadmix manufacturing operations exempt pursuant to District Rule 2020 shall maintain documentation of their compliance with Rule 2020, and shall readily make said documentation available for District inspection upon request. [District Rule 4623, 5.7.5.6.3] Federally Enforceable Through Title V Permit
23. Operator shall maintain an inspection log containing the following 1) type of component leaking; 2) date and time of leak detection, and method of detection; 3) date and time of leak repair, and emission level of recheck after leak is repaired; 4) method used to minimize the leak to lowest possible level within 8 hours after leak detection. [District Rule 2520] Federally Enforceable Through Title V Permit
24. This permit authorizes vessel cleaning that is not the result of breakdowns or poor maintenance as a routine maintenance activity. [District NSR Rule] Federally Enforceable Through Title V Permit
25. Vessel may be disconnected from vapor control system during District approved cleaning and maintenance procedures as described in this permit. [District NSR Rule] Federally Enforceable Through Title V Permit
26. Permittee shall maintain an accurate fugitive component count and resultant emissions calculated using emission factors from EPA Document -453/R-95-017, Protocol for Equipment Leak Emissions Estimates. [District NSR Rule] Federally Enforceable Through Title V Permit
27. VOC emission rate from components in gas and light crude oil service associated with this emissions unit shall be less than 8.8 lb/day. [District NSR Rule] Federally Enforceable Through Title V Permit
28. All records shall be maintained and retained on the premises for a period of at least five years and made available for District inspection upon request. [District Rule 1070] Federally Enforceable Through Title V Permit

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San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1548-497-6

EXPIRATION DATE: 05/31/2016

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

EQUIPMENT DESCRIPTION:

1,300 BBL (12 FT DIAMETER BY 65 FT SHELL LENGTH) FREE WATER KNOCK OUT V-201G VENTED TO SHARED VAPOR CONTROL SYSTEM LISTED ON S-1548-148 (DEHY 20)

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PERMIT UNIT REQUIREMENTS

1. Vessel is a pressure vessel as defined by District Rule 4623. [District Rule 4623] Federally Enforceable Through Title V Permit
2. The vessel shall vent only to the vapor control system listed on permit S-1548-148, except during periods of vessel cleaning or maintenance. [District Rule 2201] Federally Enforceable Through Title V Permit
3. A leak is defined as emitting greater than 10,000 ppmv with an instrument calibrated following EPA Method 21. [District Rule 2201] Federally Enforceable Through Title V Permit
4. The control valve on the common vapor-out line from the FWKO vessels shall be set at a sufficient pressure to prevent the backflow of tank vapors into the FWKO vessels. Components (valves, flanges, etc) downstream of this control valve are subject to the requirements of Rule 4623 and, therefore, any leak in excess of 10,000 ppmv detected from components downstream of the control valve shall be reported as a deviation. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
5. VOC fugitives from components in gas service shall not exceed 20.1 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Permittee shall maintain accurate records of fugitive inspection component counts and calculated fugitive emissions using EPA Document -453/R-95-017, Protocol for Equipment Leak Emission Estimates Table 2-4 "Oil and Gas Production Operations Average Emission Factors" (November 1995). Permittee shall make records of component counts, emission factors, and calculations readily available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit
7. All piping, fittings, and valves on this FWKO shall be inspected annually by the facility operator in accordance with EPA Method 21, with the instrument calibrated with methane, to ensure compliance with the leaking provisions of this permit. [District Rule 2201] Federally Enforceable Through Title V Permit
8. If any of the FWKO components are found to be leaking, operator shall immediately affix a tag and maintain records of liquid leak and gas leak detection readings, date/time leak was discovered, and date/time the component was repaired to a leak-free condition. [District Rule 2201] Federally Enforceable Through Title V Permit
9. Upon detection of a liquid leak, defined as a leak rate of greater than or equal to 30 drops per minute, operator shall repair the leak within 8 hours. For leaks with a liquid leak rate of between 3 and 30 drops per minute, the leaking component shall be repaired within 24 hours after detection. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

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10. Comply with the following requirements to repair leaking components that have a gas leak >10,000 ppmv (measured in accordance with EPA Method 21 by a portable hydrocarbon detection instrument that is calibrated with methane):
 - a. Eliminate the leak within 8 hours after detection; or
 - b. If the leak can not be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices; and
 - c. Eliminate the leak within 48 hours after minimization; and
 - d. In no event that the total time to minimize and eliminate the leak shall exceed 56 hours after detection. [District Rule 2201] Federally Enforceable Through Title V Permit
11. If a component type for a given tank is found to leak during an annual inspection, then conduct quarterly inspections of that component type on the tank or tank system for four consecutive quarters. If a component type is found to have no leak after four consecutive quarterly inspections, then revert to annual inspections. [District Rule 2201] Federally Enforceable Through Title V Permit
12. An operator shall reinspect a component for leaks within thirty working days after the date on which the component is repaired. [District Rule 2520] Federally Enforceable Through Title V Permit
13. As long as facility is participant in the Rule 4623 Fixed Roof Tank Preventive Inspection and Maintenance Program, and Tank Interior Cleaning Program, leaking components directly affixed to the tank and within five feet of the tank, including but not limited to valves, flanges, connectors, that have been discovered by the operator that have been immediately tagged and repaired within the deadlines specified in the Emissions Minimization requirements, shall not constitute a violation of this rule or permit and do not have to be reported as a deviation.. However, leaking components discovered during inspections by District staff that were not previously identified and/or tagged by the operator, and/or any leaks that were not repaired within deadlines specified in the Emissions Minimization requirements, shall constitute a violation of this rule or permit and do have to be reported as a deviation. [District Rule 4623, 5.7 (Table 3)] Federally Enforceable Through Title V Permit
14. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date of leak detection, and method of detection; 3) Date and emission level of recheck after leak is repaired; 4) Method used to minimize the leak to lowest possible level within 8 hours after detection. [District Rule 2201] Federally Enforceable Through Title V Permit
15. This permit authorizes vessel cleaning that is not the result of breakdowns or poor maintenance as a routine maintenance activity. [District Rule 2080] Federally Enforceable Through Title V Permit
16. Vessel 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
17. Permittee shall notify the District Compliance Division at least 72 hours (notification period can be less if approved by District Compliance Division) before any vessel cleaning or maintenance which necessitates isolation from the vapor control system. [District Rule 2080] Federally Enforceable Through Title V Permit
18. Prior to opening the vessel for cleaning or maintenance, one of the following procedures must be followed: 1) Prior to venting the vessel to the atmosphere, operate the vapor recovery system/vapor control device for at least 24 hours such that it collects the vapors; or 2) use liquid displacement, conducted using a liquid with a TVP less than 0.5 psia, or conducted by floating the oil pad off by restricting the outflow of water, such that 90% of the vessel volume is displaced; or 3) depressurize vessel to the on-site flare until the vessel reaches atmospheric pressure. [District Rule 2080] Federally Enforceable Through Title V Permit
19. Upon reintroducing crude oil/water to the vessel, the vapor control system shall be reactivated and pressure relief valves closed. [District Rule 2080] Federally Enforceable Through Title V Permit
20. Within 48 hours after refilling the vessel with crude oil/water, the pressure relief valves that discharge to atmosphere and hatch seals shall be inspected for leaks using EPA Method 21 and the regular maintenance and inspection program shall resume. [District Rule 2080] Federally Enforceable Through Title V Permit
21. While performing tank cleaning activities, operators may only use the following cleaning agents: 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 of VOC per liter or less. [District Rule 2201] Federally Enforceable Through Title V Permit
22. Steam cleaning shall only be allowed at locations where wastewater treatment facilities are limited, or during the months of December through March. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

23. If this tank was holding organic liquids with a TVP of 1.5 psia or greater then during sludge removal, the operator shall control emissions from the sludge receiving vessel by operating an APCO-approved vapor control device that reduces emissions of organic vapors by at least 99%. [District Rule 2201] Federally Enforceable Through Title V Permit
24. If this tank was holding organic liquids with a TVP of 1.5 psia or greater then the operator shall only transport removed sludge in closed, liquid leak-free containers. [District Rule 2201] Federally Enforceable Through Title V Permit
25. If this tank was holding organic liquids with a TVP of 1.5 psia or greater then the operator shall store removed sludge, until final disposal, in vapor leak-free containers, or in tanks complying with the vapor control requirements of District Rule 4623. Sludge that is to be used to manufacture roadmix, as defined in District Rule 2020, is not required to be stored in this manner. Roadmix manufacturing operations exempt pursuant to District Rule 2020 shall maintain documentation of their compliance with Rule 2020, and shall readily make said documentation available for District inspection upon request. [District Rules 2020 and 2201] Federally Enforceable Through Title V Permit
26. Permittee shall maintain records of each period of cleaning and maintenance when the vessel is disconnected or isolated from the vapor control system. Records shall include the date that cleaning was initiated, the date cleaning was completed, the procedure used to vent vapors prior to opening, and a description of internal and external repairs and maintenance performed. [District Rule 2080] Federally Enforceable Through Title V Permit
27. All 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

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San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1548-498-6

EXPIRATION DATE: 05/31/2016

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

EQUIPMENT DESCRIPTION:

40,000 BBL FIXED-ROOF CRUDE OIL/PRODUCED WATER STORAGE TANK T-200A VENTED TO SHARED VAPOR CONTROL SYSTEM LISTED ON S-1548-148 (DEHY 20)

PERMIT UNIT REQUIREMENTS

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

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

9. All piping, fittings, and valves directly affixed to the tank or associated with the tank vapor recovery system shall be inspected annually by the facility operator in accordance with EPA Method 21, with the instrument calibrated with methane, to ensure compliance with the provisions of this permit. [District Rule 4623 and 40 CFR 60.112b(a)(3)(i)] Federally Enforceable Through Title V Permit
10. For the purposes of company conducted inspections, if any of the tank components are found to be leaking (>500 ppmv, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21), operator shall immediately affix a tag and maintain records of gas leak detection readings, date/time leak was discovered, and date/time the component was repaired to a leak-free condition. [District Rule 4623 and 40 CFR 60.112b(a)(3)(i)] Federally Enforceable Through Title V Permit
11. Leaks measuring > 500 ppmv and <10,000 ppmv, or leaks measuring >10,000 ppmv from components within five feet of the tank that have been discovered by the operator and have been immediately tagged and repaired within the deadlines specified in the Emissions Minimization requirements, shall not constitute a violation of this permit. However, leaking components > 10,000 ppmv discovered during inspections by District staff that were not previously identified and/or tagged by the operator, and/or any leaks that were not repaired within the deadlines specified in the Emissions Minimization requirements, shall constitute a violation. [District Rule 4623] Federally Enforceable Through Title V Permit
12. Upon detection of any leaks >10,000 ppmv, measured in accordance with EPA Method 21 by a portable hydrocarbon detection instrument that is calibrated with methane, the operator shall: (a) Eliminate the leak within 8 hours after detection; or (b) If the leak can not be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices; (c) Eliminate the leak within 48 hours after minimization; and (d) In no event that the total time to eliminate the leak shall exceed 56 hours after detection. [District Rules Rule 4623] Federally Enforceable Through Title V Permit
13. If a component type for a given tank is found to leak above the 10,000 ppmv during an annual inspection, then quarterly inspections of that component type on the tank or system shall be conducted for four consecutive quarters. After four successful quarterly inspections in which the component type is found to leak less than 10,000 ppmv, inspections interval may revert to annual. [District Rule 4623] Federally Enforceable Through Title V Permit
14. Operator shall maintain an inspection log containing the following (1) type of component leaking; (2) date of leak detection, and method of detection; (3) date and emission level of recheck after leak is repaired; (4) method used to minimize the leak to lowest possible level within 8 hours after leak detection. [District Rule 2520] Federally Enforceable Through Title V Permit
15. This permit authorizes tank cleaning that is not the result of breakdowns or poor maintenance as a routine maintenance activity. [District Rule 2020] Federally Enforceable Through Title V Permit
16. Permittee shall conduct cleaning and maintenance operations in accordance with District approved procedure as described in Rule 4623. [District Rule 4623] Federally Enforceable Through Title V Permit
17. Tank may be disconnected from vapor control system during District approved cleaning and maintenance procedures as described in this permit. [District Rule 2201] Federally Enforceable Through Title V Permit
18. Permittee shall notify the District Compliance division in writing at least three (3) days prior to performing tank degassing and interior tank cleaning activities. Written notification shall include the following: 1) the Permit to Operate number and physical location of the tank being degassed, 2) the date and time that tank degassing and cleaning activities will begin, 3) the degassing method, as allowed in this permit, to be used, 4) the method to be used to clean the tank, including any solvents to be used, and 5) the method to be used to dispose of any removed sludge, including methods that will be used to control emissions from the receiving vessel and emissions during transport. [District Rule 4623] Federally Enforceable Through Title V Permit
19. All records shall be maintained and retained on the premises for a period of at least 5 years and made available for District inspection upon request. [District Rule 1070] Federally Enforceable Through Title V Permit

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

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1548-501-6

EXPIRATION DATE: 05/31/2016

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

EQUIPMENT DESCRIPTION:

55,000 GALLON (12 FT DIAMETER X 65 FT LENGTH) FREE WATER KNOCKOUT VESSEL V-201H WITH VAPOR CONTROL AS DESCRIBED IN S-1548-148 (DEHY 20)

PERMIT UNIT REQUIREMENTS

1. Vessel is a pressure vessel as defined by District Rule 4623. [District Rule 4623] Federally Enforceable Through Title V Permit
2. The vessel shall vent only to the vapor control system listed on permit S-1548-148, except during periods of vessel cleaning or maintenance. [District Rule 2201] Federally Enforceable Through Title V Permit
3. A leak is defined as emitting greater than 10,000 ppmv with an instrument calibrated following EPA Method 21. [District Rule 2201] Federally Enforceable Through Title V Permit
4. The control valve on the common vapor-out line from the FWKO vessels shall be set at a sufficient pressure to prevent the backflow of tank vapors into the FWKO vessels. Components (valves, flanges, etc) downstream of this control valve are subject to the requirements of Rule 4623 and, therefore, any leak in excess of 10,000 ppmv detected from components downstream of the control valve shall be reported as a deviation. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
5. VOC fugitives from components in gas service shall not exceed 20.1 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Permittee shall maintain accurate records of fugitive inspection component counts and calculated fugitive emissions using EPA Document -453/R-95-017, Protocol for Equipment Leak Emission Estimates Table 2-4 "Oil and Gas Production Operations Average Emission Factors" (November 1995). Permittee shall make records of component counts, emission factors, and calculations readily available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit
7. All piping, fittings, and valves on this FWKO shall be inspected annually by the facility operator in accordance with EPA Method 21, with the instrument calibrated with methane, to ensure compliance with the leaking provisions of this permit. [District Rule 2201] Federally Enforceable Through Title V Permit
8. If any of the FWKO components are found to be leaking, operator shall immediately affix a tag and maintain records of liquid leak and gas leak detection readings, date/time leak was discovered, and date/time the component was repaired to a leak-free condition. [District Rule 2201] Federally Enforceable Through Title V Permit
9. Upon detection of a liquid leak, defined as a leak rate of greater than or equal to 30 drops per minute, operator shall repair the leak within 8 hours. For leaks with a liquid leak rate of between 3 and 30 drops per minute, the leaking component shall be repaired within 24 hours after detection. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

10. Comply with the following requirements to repair leaking components that have a gas leak >10,000 ppmv (measured in accordance with EPA Method 21 by a portable hydrocarbon detection instrument that is calibrated with methane):
 - a. Eliminate the leak within 8 hours after detection; or
 - b. If the leak can not be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices; and
 - c. Eliminate the leak within 48 hours after minimization; and
 - d. In no event that the total time to minimize and eliminate the leak shall exceed 56 hours after detection. [District Rule 2201] Federally Enforceable Through Title V Permit
11. If a component type for a given tank is found to leak during an annual inspection, then conduct quarterly inspections of that component type on the tank or tank system for four consecutive quarters. If a component type is found to have no leak after four consecutive quarterly inspections, then revert to annual inspections. [District Rule 2201] Federally Enforceable Through Title V Permit
12. An operator shall reinspect a component for leaks within thirty working days after the date on which the component is repaired. [District Rule 2520] Federally Enforceable Through Title V Permit
13. This permit authorizes tank cleaning that is not the result of breakdowns or poor maintenance as a routine maintenance activity. [District Rule 2020] Federally Enforceable Through Title V Permit
14. As long as facility is participant in the Rule 4623 Fixed Roof Tank Preventive Inspection and Maintenance Program, and Tank Interior Cleaning Program, leaking components directly affixed to the tank and within five feet of the tank, including but not limited to valves, flanges, connectors, that have been discovered by the operator that have been immediately tagged and repaired within the deadlines specified in the Emissions Minimization requirements, shall not constitute a violation of this rule or permit and do not have to be reported as a deviation.. However, leaking components discovered during inspections by District staff that were not previously identified and/or tagged by the operator, and/or any leaks that were not repaired within deadlines specified in the Emissions Minimization requirements, shall constitute a violation of this rule or permit and do have to be reported as a deviation. [District Rule 4623, 5.7 (Table 3)] Federally Enforceable Through Title V Permit
15. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date of leak detection, and method of detection; 3) Date and emission level of recheck after leak is repaired; 4) Method used to minimize the leak to lowest possible level within 8 hours after detection. [District Rule 2201] Federally Enforceable Through Title V Permit
16. This permit authorizes vessel 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
17. Vessel may be disconnected from vapor control system during District approved cleaning and maintenance procedures as described in this permit. [District Rule 2080] Federally Enforceable Through Title V Permit
18. Permittee shall notify the District Compliance Division at least 72 hours (notification period can be less if approved by District Compliance Division) before any vessel cleaning or maintenance which necessitates isolation from the vapor control system. [District Rule 2080] Federally Enforceable Through Title V Permit
19. Prior to opening the vessel for cleaning or maintenance, one of the following procedures must be followed: 1) Prior to venting the vessel to the atmosphere, operate the vapor recovery system/vapor control device for at least 24 hours such that it collects the vapors; or 2) use liquid displacement, conducted using a liquid with a TVP less than 0.5 psia, or conducted by floating the oil pad off by restricting the outflow of water, such that 90% of the vessel volume is displaced; or 3) depressurize vessel to the on-site flare until the vessel reaches atmospheric pressure. [District Rule 2080] Federally Enforceable Through Title V Permit
20. Upon reintroducing crude oil/water to the vessel, the vapor control system shall be reactivated and pressure relief valves closed. [District Rule 2080] Federally Enforceable Through Title V Permit
21. Within 48 hours after refilling the vessel with crude oil/water, the pressure relief valves that discharge to atmosphere and hatch seals shall be inspected for leaks using EPA Method 21 and the regular maintenance and inspection program shall resume. [District Rule 2080] Federally Enforceable Through Title V Permit
22. While performing tank cleaning activities, operators may only use the following cleaning agents: 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 of VOC per liter or less. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

23. Steam cleaning shall only be allowed at locations where wastewater treatment facilities are limited, or during the months of December through March. [District Rule 2201] Federally Enforceable Through Title V Permit
24. If this tank was holding organic liquids with a TVP of 1.5 psia or greater then during sludge removal, the operator shall control emissions from the sludge receiving vessel by operating an APCO-approved vapor control device that reduces emissions of organic vapors by at least 99%. [District Rule 2201] Federally Enforceable Through Title V Permit
25. If this tank was holding organic liquids with a TVP of 1.5 psia or greater then the operator shall only transport removed sludge in closed, liquid leak-free containers. [District Rule 2201] Federally Enforceable Through Title V Permit
26. If this tank was holding organic liquids with a TVP of 1.5 psia or greater then the operator shall store removed sludge, until final disposal, in vapor leak-free containers, or in tanks complying with the vapor control requirements of District Rule 4623. Sludge that is to be used to manufacture roadmix, as defined in District Rule 2020, is not required to be stored in this manner. Roadmix manufacturing operations exempt pursuant to District Rule 2020 shall maintain documentation of their compliance with Rule 2020, and shall readily make said documentation available for District inspection upon request. [District Rules 2020 and 2201] Federally Enforceable Through Title V Permit
27. Permittee shall maintain records of each period of cleaning and maintenance when the vessel is disconnected or isolated from the vapor control system. Records shall include the date that cleaning was initiated, the date cleaning was completed, the procedure used to vent vapors prior to opening, and a description of internal and external repairs and maintenance performed. [District Rule 2080] Federally Enforceable Through Title V Permit
28. All 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

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

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San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1548-503-3

EXPIRATION DATE: 05/31/2016

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

EQUIPMENT DESCRIPTION:

40,000 BBL FIXED-ROOF CLARIFIER TANK T-200B VENTED TO SHARED VAPOR CONTROL SYSTEM LISTED ON S-1548-148 (DEHY 20)

PERMIT UNIT REQUIREMENTS

1. All piping, valves and fittings shall be constructed and maintained in a leak-free (<10,000 ppmv, measured in accordance with EPA Method 21 by a portable hydrocarbon detection instrument that is calibrated with methane) condition except as provided below. [District Rule 4623 and 40 CFR 60.112b(a)(3)(i)] Federally Enforceable Through Title V Permit
2. For leak detection and repair (LDAR) monitoring, a leak is defined as a reading in excess of 500 ppmv, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21. [District Rule 2201 and 40 CFR 60.112b(a)(3)(i)] Federally Enforceable Through Title V Permit
3. Any tank gauging or sampling device on a tank vented to the vapor recovery system shall be equipped with a leak-free (<10,000 ppmv, measured in accordance with EPA Method 21 by a portable hydrocarbon detection instrument that is calibrated with methane) cover which shall be closed at all times except during gauging or sampling. [District Rule 4623 and 40 CFR 60.112b(a)(3)(i)] Federally Enforceable Through Title V Permit
4. Permittee shall maintain an accurate fugitive component count and resultant emissions calculated using emission factors from EPA Publication 453/R-95-017 Protocol for Equipment Leak Emission Estimates Table 2-4 Oil and Gas Production Operations Average Emission Factors (kg/hr/source). [District Rule 2201] Federally Enforceable Through Title V Permit
5. VOC emission rate from components in gas and light crude oil service associated with this emission unit shall be less than 9.2 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
6. All piping, fittings, and valves directly affixed to the tank or associated with the tank vapor recovery system shall be inspected annually by the facility operator in accordance with EPA Method 21, with the instrument calibrated with methane, to ensure compliance with the provisions of this permit. [District Rule 4623 and 40 CFR 60.112b(a)(3)(i)] Federally Enforceable Through Title V Permit
7. For the purposes of company conducted inspections, if any of the tank components are found to be leaking (>500 ppmv, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21), operator shall immediately affix a tag and maintain records of gas leak detection readings, date/time leak was discovered, and date/time the component was repaired to a leak-free condition. [District Rules 4623 and 40 CFR 60.112b(a)(3)(i)] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

8. Leaks measuring > 500 ppmv and <10,000 ppmv, or leaks measuring >10,000 ppmv from components within five feet of the tank that have been discovered by the operator and have been immediately tagged and repaired within the deadlines specified in the Emissions Minimization requirements, shall not constitute a violation of this permit. However, leaking components > 10,000 ppmv discovered during inspections by District staff that were not previously identified and/or tagged by the operator, and/or any leaks that were not repaired within the deadlines specified in the Emissions Minimization requirements, shall constitute a violation. [District Rule 4623] Federally Enforceable Through Title V Permit
9. Upon detection of any leaks >10,000 ppmv, measured in accordance with EPA Method 21 by a portable hydrocarbon detection instrument that is calibrated with methane, the operator shall: a. Eliminate the leak within 8 hours after detection; or b. If the leak can not be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices; c. Eliminate the leak within 48 hours after minimization; and d. In no event that the total time to eliminate the leak shall exceed 56 hours after detection. [District Rules Rule 4623] Federally Enforceable Through Title V Permit
10. If a component type for a given tank is found to leak above the 10,000 ppmv during an annual inspection, then quarterly inspections of that component type on the tank or system shall be conducted for four consecutive quarters. After four successful quarterly inspections in which the component type is found to leak less than 10,000 ppmv, inspections interval may revert to annual. [District Rule 4623] Federally Enforceable Through Title V Permit
11. Operator shall maintain an inspection log containing the following 1) type of component leaking; 2) date of leak detection, and method of detection; 3) date and emission level of recheck after leak is repaired; 4) method used to minimize the leak to lowest possible level within 8 hours after leak detection. [District Rule 2520] Federally Enforceable Through Title V Permit
12. This permit authorizes tank cleaning that is not the result of breakdowns or poor maintenance as a routine maintenance activity. [District Rule 2020] Federally Enforceable Through Title V Permit
13. Permittee shall conduct cleaning and maintenance operations in accordance with District approved procedure as described in Rule 4623. [District Rule 4623] Federally Enforceable Through Title V Permit
14. Tank may be disconnected from vapor control system during District approved cleaning and maintenance procedures as described in this permit. [District Rule 2201] Federally Enforceable Through Title V Permit
15. Permittee shall notify the District Compliance division in writing at least three (3) days prior to performing tank degassing and interior tank cleaning activities. Written notification shall include the following: 1) the Permit to Operate number and physical location of the tank being degassed, 2) the date and time that tank degassing and cleaning activities will begin, 3) the degassing method, as allowed in this permit, to be used, 4) the method to be used to clean the tank, including any solvents to be used, and 5) the method to be used to dispose of any removed sludge, including methods that will be used to control emissions from the receiving vessel and emissions during transport. [District Rule 4623] Federally Enforceable Through Title V Permit
16. Operator shall notify the EPA and District of the date construction is commenced postmarked no later than 30 days after such date. Notification shall include the District-approved Operating Plan. [40 CFR 60.113b(c)(1)] Federally Enforceable Through Title V Permit
17. Operator shall notify the EPA and the District of the actual date of initial startup postmarked within 15 days of such date. [40 CFR 60.7(a)(3)] Federally Enforceable Through Title V Permit
18. All records shall be maintained and retained on the premises for a period of at least 5 years and made available for District inspection upon request. [District Rule 1070] Federally Enforceable Through Title V Permit

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

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San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1548-504-3

EXPIRATION DATE: 05/31/2016

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

EQUIPMENT DESCRIPTION:

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

PERMIT UNIT REQUIREMENTS

1. The vessel and APCO-approved vapor control system, including piping, valves, and fittings, shall be maintained leak-free, except during periods of vessel cleaning. A leak-free condition is defined as a condition without a gas leak. A gas leak is defined as a reading in excess of 10,000 ppmv, as methane, above background on a portable hydrocarbon detection instrument that is calibrated as methane in accordance with EPA Test Method 21. [District Rule 2201 & 2520] Federally Enforceable Through Title V Permit
2. Tank gauging or sampling devices shall be equipped with a leak-free cover which shall be closed at all times except during gauging or sampling. [District Rule 2201]
3. The induced static flotation unit is a pressure vessel as defined by District Rule 4623, Section 3.20. [District Rule 4623]
4. When in service, the vessel shall vent only to the vapor control system listed in S-1548-148, except during periods of vessel cleaning. [District Rule 2201] Federally Enforceable Through Title V Permit
5. VOC fugitive emissions from the vapor control components associated with this unit shall not exceed 13.3 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
6. All components attached to this vessel shall be identified and categorized according to the following equipment types: connectors, flanges, open-ended lines (sample connections, drains, bleed valves, etc.), pump seals, valves with visible actuators, and other (pressure relief devices, compressor seals, meters, etc.). Components shall be further identified and categorized according to the following types of service: gas/light liquid, light oil and heavy oil. [District Rules 2201 and 4409] Federally Enforceable Through Title V Permit
7. Flanges shall be monitored with a portable hydrocarbon detection instrument along the entire circumference of the flange-gasket interface. Threaded connections, tubing fittings, and other types of non-permanent joints shall be monitored along the entire circumference of joint interface. [District Rule 2201] Federally Enforceable Through Title V Permit
8. All components containing VOCs shall be inspected annually by the facility operator to ensure compliance with the provisions of this permit. However, if two (2) percent or more of the components of any type subject to the requirements of this permit are found to leak during an annual inspection, the inspection frequency for that component type shall be changed from annual to quarterly. If less than two percent of the components of that type are subsequently found to be leaking during five consecutive inspections, the inspection frequency may be changed from quarterly to annual. Components located in inaccessible (over 15 feet above ground when access is required from the ground or over 6 feet away from a platform when access is required from the platform) locations shall be inspected at least annually and components located in unsafe areas shall be inspected and repaired at the next process unit turnaround (the scheduled shutdown of a unit for maintenance and repair work). [District Rules 2201 and 4409] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

9. A facility operator, upon detection of a leaking component, shall affix to that component not immediately repaired a weatherproof readily visible tag bearing the date on which the leak is detected. The tag shall remain in place until the leaking component is repaired, reinspected, and found to be in compliance with the requirements of this permit. [District Rules 2201 and 4409] Federally Enforceable Through Title V Permit
10. An operator shall reinspect a component for leaks within thirty working days after the date on which the component is repaired. [District Rules 2201 4409] Federally Enforceable Through Title V Permit
11. Emissions from components which have been tagged by the facility operator for repair within 15 calendar days or which have been repaired and are awaiting re-inspection shall not be in violation of this permit. [District Rules 2201 and 4409] Federally Enforceable Through Title V Permit
12. Permittee shall maintain accurate records of fugitive inspection component counts and calculated fugitive emissions using EPA Document -453/R-95-017, Protocol for Equipment Leak Emission Estimates Table 2-4 "Oil and Gas Production Operations Average Emission Factors" (November 1995). Permittee shall make records of component counts, emission factors, and calculations readily available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit
13. If the leaking component is an essential part of a critical process unit which cannot be immediately shut down for repairs, the operator shall 1) Minimize the leak within 1 hour after detection of leak; and 2) If the leak which has been minimized still exceeds the concentration allowed by this permit, the essential component shall be repaired to eliminate the leak during the next process unit turnaround, but in no case later than one year from the date of the original leak detection. A critical process unit is any process unit which would result in the automatic shutdown of other process units if it were shut down. [District Rules 2201 and 4409 Sec. 5.3.6]
14. Operator shall maintain an inspection log containing the following 1) Number and type of component leaking; 2) Date of leak detection, and method of detection; 3) Date of repair, replacement or removal from operation of leaking component; 4) Date and emission level of recheck after leak is repaired; 5) Identification and location of essential parts of critical process units found leaking that cannot be repaired until the next process unit turnaround; and 6) Method used to minimize the leak from essential parts of critical process units which cannot be repaired until the next process unit turnaround. The operator shall sign and date the inspection log certifying the accuracy of the information recorded in the log. [District Rules 2201 4409 Sec 6.2]
15. This permit authorizes induced flotation unit cleaning that is not the result of breakdowns or poor maintenance as a routine maintenance activity. [District Rule 2080] Federally Enforceable Through Title V Permit
16. Permittee shall conduct induced flotation unit cleaning and maintenance operations in accordance with District approved procedures as described in this permit. [District Rule 2080] Federally Enforceable Through Title V Permit
17. Induced flotation unit may be disconnected from vapor control system during District approved cleaning and maintenance procedures as described in this permit. [District Rule 2080] Federally Enforceable Through Title V Permit
18. Permittee shall notify the District Compliance Division at least 24 hours before tank cleaning and vapor control system disconnection and within 72 hours after restoring crude oil flow to the tank. [District Rule 2080] Federally Enforceable Through Title V Permit
19. Prior to opening the induced static flotation unit to allow tank cleaning one of the following options must be followed: 1) operate the vapor recovery system for at least 24 hours after all the liquid in the induced static flotation unit has been drained to the maximum extent feasible, 2) displace vapors floating the oil pad off with water such that 90% of the induced static flotation unit liquid capacity is displaced, 3) vent the induced static flotation unit to the vapor control system until the vapor concentration is less than 10% of the lower explosive limit (LEL) or 5,000 ppmv whichever is less; or 4) vent the induced static flotation unit to the vapor control system for a length of time determined by the following relationship: $t = 2.3 V/Q$, where t = time, V = induced static flotation unit volume (cubic feet), and Q = flow rate to the vapor control system as determined using appropriate engineering calculations. [District Rule 2080] Federally Enforceable Through Title V Permit

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PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

20. The induced static flotation unit shall be cleaned using one of the following methods: water, hot water, solvents with an initial boiling point of greater than 302 F, solvents with a vapor pressure of less than 0.5 psia, or solvents with 50 grams VOC per liter or less. The tank sediment may be used for road mix as allowed by Section 6.17 of District Rule 2020. [District Rule 2080] Federally Enforceable Through Title V Permit
21. Steam cleaning shall be allowed only during December through March, or at locations where wastewater treatment facilities are limited. [District Rule 2080] Federally Enforceable Through Title V Permit
22. Prior to reintroducing crude oil/water to the induced static flotation unit, the induced static flotation unit shall be filled to the maximum possible level with water or an organic liquid with a TVP less than 0.5 psia, the tank vapor control system shall be reactivated, and the liquid level shall be adjusted as necessary. Pressure/relief valve shall not open during filling of the induced static flotation unit. [District Rule 2080] Federally Enforceable Through Title V Permit
23. Within 48 hours after refilling the induced flotation unit with crude oil/water, the pressure relief valve seats and hatch seals shall be inspected for leaks using EPA method 21 and the regular tank maintenance and inspection program shall resume. [District Rule 2080] Federally Enforceable Through Title V Permit
24. Permittee shall maintain records of each period of cleaning and maintenance when the induced static flotation unit is disconnected or isolated from the vapor control system. Records shall include the date the cleaning was initiated, the date cleaning was completed, the method of cleaning used, and a description of internal and external induced static flotation unit repairs and maintenance performed. Such records shall be retained for a period of at least 5 years and shall be made available for District inspection upon request. [District Rule 2080] Federally Enforceable Through Title V Permit
25. All records shall be maintained and retained on the premises for a period of at least five years and made available for District inspection upon request. [District Rule 1070] Federally Enforceable Through Title V Permit

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

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Attachment B
Authorities to Construct

AUTHORITY TO CONSTRUCT

PERMIT NO: S-1548-148-6

ISSUANCE DATE: 06/12/2012

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

LOCATION: LIGHT OIL WESTERN STATIONARY SOURCE
CA

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

EQUIPMENT DESCRIPTION:

MODIFICATION OF 40,000 BBL FIXED ROOF STORAGE TANK #T211 WITH VAPOR CONTROL DESCRIBED IN S-1548-144 - DEHY 20: ADD VAPOR CONTROL SYSTEM LISTED ON S-1548-144 (COMPRESSOR(S), COOLER(S), LIQUID KNOCKOUT(S) & PIPING TO FIELD GAS SYSTEM OR AIR ASSISTED KALDAIR FLARE W/PLA-18 FLARE TIP)

CONDITIONS

1. The facility shall submit an application to modify the Title V permit in accordance with the timeframes and procedures of District Rule 2520. [District Rule 2520] Federally Enforceable Through Title V Permit
2. Tank shall vent only to vapor control system. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Vapor control system shall consist of vapor piping from vessels and tanks S-1548-148, '149, '418, '419, '428, '429, '439, '440, '441, '442, '463, '476, and '-478 through '-484, '486 through '489, '497, '498, '501, '503, and '504. [District Rule 2201] Federally Enforceable Through Title V Permit
4. Except during maintenance activities and power outages, operator shall continuously monitor the discharge pressure of the vapor recovery system to ensure its proper operation. The monitoring system shall be programmed to alarm the operator when the discharge pressure increases to where the flare activates. [District Rule 2201 and 40 CFR 60.113b(c)(1)(ii)] Federally Enforceable Through Title V Permit
5. Drain valves shall only drain into covered containers which shall be emptied into tanks with vapor control systems. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Permittee shall maintain an accurate fugitive component count and resultant emissions calculated using U.S. EPA Publication 453/R-95-017, or other factors approved by the district. [District Rule 2201] Federally Enforceable Through Title V Permit

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

DAVID WARNER, Director of Permit Services

S-1548-148-6 : Jun 22 2012 2:58PM -- EDGEHILR : Joint Inspection NOT Required

Southern Regional Office • 34946 Flyover Court • Bakersfield, CA 93308 • (661) 392-5500 • Fax (661) 392-5585

7. The vapor control system shall be capable of reducing VOC emissions by at least 99% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Total VOC emission rate from S-1548-148 (excluding the flare), S-1548-149, S-1548-428, S-1548-429, S-1548-439, S-1548-440, S-1548-441, and S-1548-442 shall not exceed 140.4 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
9. The tank shall be equipped with a fixed roof with no holes or openings [District Rule 2201] Federally Enforceable Through Title V Permit
10. Collected vapors shall be compressed to the field gas system or incinerated in the flare. [District Rule 2201] Federally Enforceable Through Title V Permit
11. The tank shall be equipped with a vapor recovery system consisting of a closed system that collects VOCs from the storage tank. [District Rule 4623, 5.1] Federally Enforceable Through Title V Permit
12. All piping, valves, and fittings shall be constructed and maintained in a leak-free condition. [District Rule 4623, 5.1.3] Federally Enforceable Through Title V Permit
13. A leak is defined as a reading in excess of 10,000 ppmv, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21. A reading in excess of 10,000 ppmv above background is a violation of this permit and Rule 4623 and shall be reported as a deviation. [District Rule 4623, 3.11 and 6.4.8] Federally Enforceable Through Title V Permit
14. Any vessel gauging or sampling device on a vessel vented to the vapor recovery system shall be equipped with a leak free cover which shall be closed at all times except during gauging or sampling. [District Rule 4623, 5.6.2] Federally Enforceable Through Title V Permit
15. All piping, fittings, and valves on this vessel associated with the vapor recovery system shall be inspected annually by the facility operator in accordance with EPA Method 21, with the instrument calibrated with methane, to ensure compliance with the leaking provisions of this permit. [District Rule 4623, 5.7 (Table 3)] Federally Enforceable Through Title V Permit
16. If any of the vessel components are found to be leaking, operator shall immediately affix a tag and maintain records of gas leak detection readings, date/time leak was discovered, and date/time the component was repaired to a leak-free condition [District Rule 4623, 5.7 (Table 3)] Federally Enforceable Through Title V Permit
17. Upon detection of any leaking components (having a gas leak > 10,000 ppmv, measured in accordance with EPA Method 21 by a portable hydrocarbon detection instrument that is calibrated with methane), the operator shall: a. Eliminate the leak within 8 hours after detection; or b. If the leak can not be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices; and c. Eliminate the leak within 48 hours after minimization; and d. In no event that the total time to minimize and eliminate the leak shall exceed 56 hours after detection. [District Rule 4623, 5.7 (Table 3)] Federally Enforceable Through Title V Permit
18. Leaking components directly affixed to the tank and within five feet of the tank, including but not limited to valves, flanges, connectors, that have been discovered by the operator that have been immediately tagged and repaired within the deadlines specified in the Emissions Minimization requirements, shall not constitute a violation of this rule or permit and does not have to be reported as a deviation.. However, leaking components discovered during inspections by District staff that were not previously identified and/or tagged by the operator, and/or any leaks that were not repaired within deadlines specified in the Emissions Minimization requirements, shall constitute a violation of this rule or permit and does not have to be reported as a deviation. [District Rule 4623, 5.7 (Table 3)] Federally Enforceable Through Title V Permit
19. If a component type for a given vessel is found to leak above the leak free standard during an annual inspection, then quarterly inspections of that component type on the vessel or system shall be conducted for four consecutive quarters. After four successful quarterly inspections in which the component type is found to be leak free (<10,000 ppmv), inspections interval may revert to annual. [District Rule 4623, 5.7 (Table 3)] Federally Enforceable Through Title V Permit
20. Any component found to be leaking above the leak free standard on two consecutive annual inspections is considered a violation, even if it is under the voluntary inspection and maintenance program. [District Rule 4623, 5.7 (Table 3)] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

21. Permittee shall notify the APCO in writing at least three (3) days prior to performing vessel degassing and interior vessel cleaning activities. Written notification shall include the following: 1) the Permit to Operate number and physical location of the vessel being degassed, 2) the date and time that vessel degassing and cleaning activities will begin, 3) the degassing method, as allowed in this permit, to be used, 4) the method to be used to clean the vessel, including any solvents to be used, and 5) the method to be used to dispose of any removed sludge, including methods that will be used to control emissions from the receiving vessel and emissions during transport. [District Rule 4623, 5.7.5.1] Federally Enforceable Through Title V Permit
22. This vessel shall be degassed before commencing interior cleaning by one of the following: 1) exhausting VOCs contained in the vessel vapor space to an APCO-approved vapor recovery system until the organic vapor concentration is 5,000 ppmv or less, or is 10 percent or less of the lower explosion limit (LEL), whichever is less, or; 2) by displacing VOCs contained in the vessel vapor space to an APCO-approved vapor recovery system by filling the vessel with a suitable liquid until 90 percent or more of the maximum operating level of the vessel is filled. Suitable liquids are organic liquids having a TVP of less than 0.5 psia, water, clean produced water, or produced water derived from crude oil having a TVP less than 0.5 psia, or; 3) by displacing VOCs contained in the vessel vapor space to an APCO-approved vapor recovery system by filling the vessel with a suitable gas. Degassing shall continue until the operator has achieved a vapor displacement equivalent to at least 2.3 times the vessel capacity. Suitable gases are air, nitrogen, carbon dioxide, or natural gas containing less than 10 percent VOC by weight. [District Rule 4623, 5.7.5.4] Federally Enforceable Through Title V Permit
23. During vessel degassing, the operator shall discharge or displace organic vapors contained in the vessel vapor space to an APCO-approved vapor recovery system. [District Rule 4623, 5.7.5.4.5] Federally Enforceable Through Title V Permit
24. To facilitate connection to an external APCO-approved recovery system, a suitable vessel fitting, such as a manway, may be temporarily removed for a period of time not to exceed 1 hour. [District Rule 4623, 5.7.5.4.6] Federally Enforceable Through Title V Permit
25. This vessel shall be in compliance with the applicable requirements of District Rule 4623 at all times during draining, degassing, and refilling the tank with an organic liquid having a TVP of 0.5 psia or greater. [District Rule 4623, 5.7.5.4.7] Federally Enforceable Through Title V Permit
26. After a tank has been degassed pursuant to the requirements of this permit, vapor control requirements are not applicable until an organic liquid having a TVP of 0.5 psia or greater is placed, held, or stored in this vessel. [District Rule 4623, 5.7.5.4.10] Federally Enforceable Through Title V Permit
27. While performing vessel cleaning activities, operators may only use the following cleaning agents: diesel, solvents with an initial boiling point of greater than 302 degrees F, solvents with a vapor pressure of less than 0.5 psia, or solvents with 50 grams of VOC per liter or less. [District Rule 4623, 5.7.5.5.1] Federally Enforceable Through Title V Permit
28. Steam cleaning shall only be allowed at locations where wastewater treatment facilities are limited, or during the months of December through March. [District Rule 4623, 5.7.5.5.2] Federally Enforceable Through Title V Permit
29. If the tank is holding organic liquids with a TVP of 1.5 psia or greater then during sludge removal, the operator shall control emissions from the sludge receiving vessel by operating an APCO-approved vapor control device that reduces emissions of organic vapors by at least 95%. [District Rule 4623, 5.7.5.6.1] Federally Enforceable Through Title V Permit
30. If the tank is holding organic liquids with a TVP of 1.5 psia or greater then permittee shall only transport removed sludge in closed, liquid leak-free containers. [District Rule 4623, 5.7.5.6.2] Federally Enforceable Through Title V Permit
31. If the tank is holding organic liquids with a TVP of 1.5 psia or greater then permittee shall store removed sludge, until final disposal, in vapor leak-free containers, or in tanks complying with the vapor control requirements of District Rule 4623. Sludge that is to be used to manufacture roadmix, as defined in District Rule 2020, is not required to be stored in this manner. Roadmix manufacturing operations exempt pursuant to District Rule 2020 shall maintain documentation of their compliance with Rule 2020, and shall readily make said documentation available for District inspection upon request. [District Rule 4623, 5.7.5.6.3] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

32. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date and time of leak detection, and method of detection; 3) Date and time of leak repair, and emission level of recheck after leak is repaired; 4) Method used to minimize the leak to lowest possible level within 8 hours after detection. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
33. The operator of a fixed roof tank shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
34. The requirements of SJVUAPCD Rule 4661 (Amended December 17, 1992), and Rule 4801 (Amended December 17, 1992) do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
35. Flare shall be operated with a flame present at all times. Presence of a flame shall be monitored using a thermocouple or equivalent device. Kaldair Inc.'s KEP-100 Ignition System is an approved monitoring device. [District Rule 4001 and 4311] Federally Enforceable Through Title V Permit
36. Flare pilot fuel shall be LPG or natural gas with sulfur content less than 0.75 grains/100 scf. [District NSR Rule] Federally Enforceable Through Title V Permit
37. Records shall be maintained of all periods when the flare pilot flame is absent. [District Rule 40CFR 60.115(d)(2)] Federally Enforceable Through Title V Permit
38. Semi-annual reports of all periods without the presence of a flare pilot flame shall be furnished to the District Compliance Division and EPA. [District Rule 4001 40CFR 60.115b(d)(3)] Federally Enforceable Through Title V Permit
39. Flare air-assist blower shall be maintained and operated for smokeless combustion, i.e. no visible emissions in excess of 5% opacity or 1/4 Ringelmann except for periods not to exceed a total of 5 minutes during any 2 consecutive hours. [District Rules 2201 and 4001] Federally Enforceable Through Title V Permit
40. Flare shall be equipped with flare gas volume flowmeter. [District Rule 2201] Federally Enforceable Through Title V Permit
41. Net heating value of the gas being combusted by flare shall be 300 Btu/scf or greater. [District Rule 4001 and 4311] Federally Enforceable Through Title V Permit
42. Total sulfur concentration of gas incinerated in flare shall not exceed 2000 ppmv. [District Rules 2201 and 4801] Federally Enforceable Through Title V Permit
43. Maximum amount of gas combusted shall not exceed any of the following: 5,000,000 scf/day, 25 MMscf/quarter, 100 MMscf/year. [District Rule 2201] Federally Enforceable Through Title V Permit
44. Emissions from the flare shall not exceed any of the following (based on total gas combusted): PM-10: 0.008 lb/MMBtu; NO_x (as NO₂): 0.068 lb/MMBtu; VOC: 0.063 lb/MMBtu; or CO: 0.37 lb/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
45. Permittee shall measure sulfur content of gas incinerated in flare at least once every year. Such data shall be submitted to the District within 60 days of sample collection. [District Rules 2201 and 4801] Federally Enforceable Through Title V Permit
46. Permittee shall keep accurate records of daily, quarterly, and annual quantity of gas combusted. Such records shall be retained for a period of five years and made readily available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit
47. A trained observer, as defined in EPA Method 22, shall check visible emissions at least once annually for a period of 15 minutes. If visible emissions are detected at any time during this period, the observation period shall be extended to two hours. A record containing the results of these observations shall be maintained, which also includes company name, process unit, observer's name and affiliation, date, estimated wind speed and direction, sky condition, and the observer's location relative to the source and sun. [District Rules 2201 and 2520, 9.3.2] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

48. The outlet shall be equipped with an automatic ignition system, or, shall be operated with a pilot flame present at all times when combustible gases are vented through the flare, except during purge periods for automatic-ignition equipped flares. [District Rule 4311, 5.3] Federally Enforceable Through Title V Permit
49. Except for flares equipped with a flow-sensing ignition system, a heat sensing device such as a thermocouple, ultraviolet beam sensor, infrared sensor, or an equivalent device, capable of continuously detecting at least one pilot flame or the flare flame is present shall be installed and operated. [District Rule 4311, 5.4] Federally Enforceable Through Title V Permit
50. Flares that use flow-sensing automatic ignition systems and which do not use a continuous flame pilot shall use purge gas for purging. [District Rule 4311, 5.5] Federally Enforceable Through Title V Permit
51. Flaring is prohibited unless it is consistent with an approved flare minimization plan (FMP), pursuant to District Rule 4311 Section 6.5 and all commitments listed in that plan have been met. [District Rule 4311, 5.8] Federally Enforceable Through Title V Permit
52. Permittee shall maintain copies of the compliance determination conducted pursuant to Section 6.4.1, copies of the source testing result conducted pursuant to Section 6.4.2, effective on and after July 1, 2011, a copy of the approved flare minimization plan pursuant to Section 6.5, effective on and after July 1, 2012, a copy of annual reports submitted to the APCO pursuant to Section 6.2 and effective on and after July 1, 2011, monitoring data collected pursuant to Sections 5.10, 6.6, 6.7, 6.8, 6.9 and 6.10. [District Rule 4311, 6.1] Federally Enforceable Through Title V Permit
53. All records shall be maintained, retained on-site for a minimum of five years, and made available to the APCO, ARB, and EPA upon request. [District Rule 4311, 6.1] Federally Enforceable Through Title V Permit
54. The operator of a flare subject to flare minimization plans pursuant to Section 5.8 of this rule shall notify the APCO of an unplanned flaring event within 24 hours after the start of the next business day or within 24 hours of their discovery, whichever occurs first. The notification shall include the flare source identification, the start date and time, and the end date and time. [District Rule 4311, 6.2.1] Federally Enforceable Through Title V Permit
55. Effective on and after July 1, 2012, and annually thereafter, the operator shall submit an annual report to the APCO that summarizes all Reportable Flaring Events that occurred during the previous 12 month period. The report shall be submitted within 30 days following the end of the twelve month period of the previous year and shall include: 1) the results of an investigation to determine the primary cause and contributing factors of the flaring event; 2) Any prevention measures considered or implemented to prevent recurrence together with a justification for rejecting any measures that were considered but not implemented; 3) If appropriate, an explanation of why the flaring was an emergency and necessary to prevent accident, hazard or release of vent gas to the atmosphere, or where, due to a regulatory mandate to vent a flare, it cannot be recovered, treated and used as a fuel gas at the facility; and 4) The date, time and duration of the flaring event. [District Rule 4311, 6.2.2] Federally Enforceable Through Title V Permit
56. Effective on and after July 1, 2012, and annually thereafter, the operator shall submit an annual report to the APCO within 30 days following the end of each 12 month period include: 1) The total volumetric flow of vent gas in standard cubic feet for each day; 2) Hydrogen sulfide content, methane content, and hydrocarbon content of vent gas composition pursuant to Section 6.6; 3) If vent gas composition is monitored by a continuous analyzer or analyzers pursuant to Section 5.11, average total hydrocarbon content by volume, average methane content by volume, and depending upon the analytical method used pursuant to Section 6.3.4, total reduced sulfur content by volume or hydrogen sulfide content by volume of vent gas flared for each hour of the month; 4) If the flow monitor used pursuant to Section 5.10 measures molecular weight, the average molecular weight for each hour of each month; 5) For any pilot and purge gas used, the type of gas used, the volumetric flow for each day and for each month, and the means used to determine flow; 6) Flare monitoring system downtime periods, including dates and times; 7) For each day and for each month provide calculated sulfur dioxide emissions; 8) A flow verification report for each flare subject to this rule. The flow verification report shall include flow verification testing pursuant to Section 6.3.5. [District Rule 4311, 6.2.3] Federally Enforceable Through Title V Permit
57. Total hydrocarbon content and methane content of vent gas shall be determined using ASTM Method D 1945-96, ASTM Method UOP 539-97, EPA Method 18, EPA Method 25A or 25B, or an alternative method approved by the APCO, ARB and EPA. Hydrogen sulfide content of vent gas shall be determined using ASTM Method D 1945-96, ASTM Method UOP 539-97, ASTM Method D 4084-94, ASTM Method D 4810-88, or an alternative method approved by the APCO, ARB and EPA. [District Rule 4311, 6.3.4] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

58. Vent gas flow shall be determined using one of the following: EPA Methods 1 and 2; a verification method recommended by the manufacturer of the flow monitoring equipment; tracer gas dilution or velocity; other flow monitors or process monitors that can provide comparison data on a vent stream that is being directed past the ultrasonic flow meter; or an alternative method approved by the APCO, ARB, and EPA. [District Rule 4311, 6.3.5] Federally Enforceable Through Title V Permit
59. Every five years after the initial FMP submittal, the operator shall submit an updated FMP for each flare to the APCO for approval. The current FMP shall remain in effect until the updated FMP is approved by the APCO. If the operator fails to submit an updated FMP as required by this section, the existing FMP shall no longer be considered an approved plan. [District Rule 4311, 6.5.2] Federally Enforceable Through Title V Permit
60. An updated FMP shall be submitted by the operator addressing new or modified equipment, prior to installing the equipment only if: 1) The equipment change would require an Authority To Construct (ATC) and would impact the emissions for the flare; 2) The ATC is deemed complete after June 18, 2009; 3) The modification is not solely the removal or decommissioning of equipment that is listed in the FMP and has no associated increase in flare emissions. [District Rule 4311, 6.5.3] Federally Enforceable Through Title V Permit
61. When submitting the initial FMP, or updated FMP, the operator shall designate as confidential any information claimed to be exempt from public disclosure under the California Public Records Act, Government Code Section 6250 et seq. and provide a justification for this designation and also submit a separate copy of the document with the information designated confidential redacted. [District Rule 4311, 6.5.4]
62. The operator shall monitor vent gas composition using one of the five methods pursuant to Section 6.6.1 through Section 6.6.5 in District Rule 4311. [District Rule 4311, 6.6] Federally Enforceable Through Title V Permit
63. The operator shall monitor the volumetric flows of purge and pilot gases with flow measuring devices or other parameters as specified on the Permit to Operate so that volumetric flows of pilot and purge gas may be calculated based on pilot design and the parameters monitored. [District Rule 4311, 6.7] Federally Enforceable Through Title V Permit
64. Periods of flare monitoring system inoperation greater than 24 continuous hours shall be reported by the following working day, followed by notification of resumption of monitoring. Periods of inoperation of monitoring equipment shall not exceed 14 days per any 18-consecutive-month period. Periods of flare monitoring system inoperation do not include the periods when the system feeding the flare is not operating. [District Rule 4311, 6.9.1] Federally Enforceable Through Title V Permit
65. During periods of inoperation of continuous analyzers or auto-samplers installed pursuant to Section 6.6, operators responsible for monitoring shall take one sample within 30 minutes of the commencement of flaring, from the flare header or from an alternate location at which samples are representative of vent gas composition and have samples analyzed pursuant to Section 6.3.4. During periods of inoperation of flow monitors required by Section 5.10, flow shall be calculated using good engineering practices. [District Rule 4311, 6.9.2] Federally Enforceable Through Title V Permit
66. Permittee shall maintain and calibrate all required monitors and recording devices in accordance with the applicable manufacturer's specifications. In order to claim that a manufacturer's specification is not applicable, the person responsible for emissions must have, and follow, a written maintenance policy that was developed for the device in question. The written policy must explain and justify the difference between the written procedure and the manufacturer's procedure. [District Rule 4311, 6.9.3] Federally Enforceable Through Title V Permit
67. PTOs S-1548-144-38, '-145-5, '-146-5, and '-147-5 shall be canceled upon implementation of ATC. [District Rule 2201] Federally Enforceable Through Title V Permit

AUTHORITY TO CONSTRUCT

PERMIT NO: S-1548-149-6

ISSUANCE DATE: 06/12/2012

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

LOCATION: LIGHT OIL WESTERN STATIONARY SOURCE
CA

SECTION: NW20 TOWNSHIP: 28S RANGE: 21E

EQUIPMENT DESCRIPTION:

MODIFICATION OF 2,000 BBL CRUDE OIL SKIM TANK #T242 WITH VAPOR CONTROL DESCRIBED IN S-1548-144 - DEHY 20: CHANGE S-1548-144 VAPOR CONTROL REFERENCE TO S-1548-148

CONDITIONS

1. The facility shall submit an application to modify the Title V permit in accordance with the timeframes and procedures of District Rule 2520. [District Rule 2520] Federally Enforceable Through Title V Permit
2. The tank shall be equipped with a vapor recovery system consisting of a closed system that collects VOCs from the storage tank. [District Rule 4623, 5.1] Federally Enforceable Through Title V Permit
3. All piping, valves, and fittings shall be constructed and maintained in a leak-free condition. [District Rule 4623, 5.1.3] Federally Enforceable Through Title V Permit
4. A leak is defined as a reading in excess of 10,000 ppmv, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21. A reading in excess of 10,000 ppmv above background is a violation of this permit and Rule 4623 and shall be reported as a deviation. [District Rule 4623, 3.11 and 6.4.8] Federally Enforceable Through Title V Permit
5. Any vessel gauging or sampling device on a vessel vented to the vapor recovery system shall be equipped with a leak free cover which shall be closed at all times except during gauging or sampling. [District Rule 4623, 5.6.2] Federally Enforceable Through Title V Permit

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

DAVID WARNER, Director of Permit Services

S-1548-149-6 : Jun 22 2012 2:59PM -- EDGEHILL : Joint Inspection NOT Required

Southern Regional Office • 34946 Flyover Court • Bakersfield, CA 93308 • (661) 392-5500 • Fax (661) 392-5585

6. All piping, fittings, and valves on this vessel associated with the vapor recovery system shall be inspected annually by the facility operator in accordance with EPA Method 21, with the instrument calibrated with methane, to ensure compliance with the leaking provisions of this permit. [District Rule 4623, 5.7 (Table 3)] Federally Enforceable Through Title V Permit
7. If any of the vessel components are found to be leaking, operator shall immediately affix a tag and maintain records of gas leak detection readings, date/time leak was discovered, and date/time the component was repaired to a leak-free condition [District Rule 4623, 5.7 (Table 3)] Federally Enforceable Through Title V Permit
8. Upon detection of any leaking components (having a gas leak > 10,000 ppmv, measured in accordance with EPA Method 21 by a portable hydrocarbon detection instrument that is calibrated with methane), the operator shall: a. Eliminate the leak within 8 hours after detection; or b. If the leak can not be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices; and c. Eliminate the leak within 48 hours after minimization; and d. In no event that the total time to minimize and eliminate the leak shall exceed 56 hours after detection. [District Rule 4623, 5.7 (Table 3)] Federally Enforceable Through Title V Permit
9. Leaking components directly affixed to the tank and within five feet of the tank, including but not limited to valves, flanges, connectors, that have been discovered by the operator that have been immediately tagged and repaired within the deadlines specified in the Emissions Minimization requirements, shall not constitute a violation of this rule or permit and does not have to be reported as a deviation.. However, leaking components discovered during inspections by District staff that were not previously identified and/or tagged by the operator, and/or any leaks that were not repaired within deadlines specified in the Emissions Minimization requirements, shall constitute a violation of this rule or permit and does not have to be reported as a deviation. [District Rule 4623, 5.7 (Table 3)] Federally Enforceable Through Title V Permit
10. If a component type for a given vessel is found to leak above the leak free standard during an annual inspection, then quarterly inspections of that component type on the vessel or system shall be conducted for four consecutive quarters. After four successful quarterly inspections in which the component type is found to be leak free (<10,000 ppmv), inspections interval may revert to annual. [District Rule 4623, 5.7 (Table 3)] Federally Enforceable Through Title V Permit
11. Any component found to be leaking above the leak free standard on two consecutive annual inspections is considered a violation, even if it is under the voluntary inspection and maintenance program. [District Rule 4623, 5.7 (Table 3)] Federally Enforceable Through Title V Permit
12. Permittee shall notify the APCO in writing at least three (3) days prior to performing vessel degassing and interior vessel cleaning activities. Written notification shall include the following: 1) the Permit to Operate number and physical location of the vessel being degassed, 2) the date and time that vessel degassing and cleaning activities will begin, 3) the degassing method, as allowed in this permit, to be used, 4) the method to be used to clean the vessel, including any solvents to be used, and 5) the method to be used to dispose of any removed sludge, including methods that will be used to control emissions from the receiving vessel and emissions during transport. [District Rule 4623, 5.7.5.1] Federally Enforceable Through Title V Permit
13. This vessel shall be degassed before commencing interior cleaning by one of the following: 1) exhausting VOCs contained in the vessel vapor space to an APCO-approved vapor recovery system until the organic vapor concentration is 5,000 ppmv or less, or is 10 percent or less of the lower explosion limit (LEL), whichever is less, or; 2) by displacing VOCs contained in the vessel vapor space to an APCO-approved vapor recovery system by filling the vessel with a suitable liquid until 90 percent or more of the maximum operating level of the vessel is filled. Suitable liquids are organic liquids having a TVP of less than 0.5 psia, water, clean produced water. or produced water derived from crude oil having a TVP less than 0.5 psia, or; 3) by displacing VOCs contained in the vessel vapor space to an APCO-approved vapor recovery system by filling the vessel with a suitable gas. Degassing shall continue until the operator has achieved a vapor displacement equivalent to at least 2.3 times the vessel capacity. Suitable gases are air, nitrogen, carbon dioxide, or natural gas containing less than 10 percent VOC by weight. [District Rule 4623, 5.7.5.4] Federally Enforceable Through Title V Permit
14. During vessel degassing, the operator shall discharge or displace organic vapors contained in the vessel vapor space to an APCO-approved vapor recovery system. [District Rule 4623, 5.7.5.4.5] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

15. To facilitate connection to an external APCO-approved recovery system, a suitable vessel fitting, such as a manway, may be temporarily removed for a period of time not to exceed 1 hour. [District Rule 4623, 5.7.5.4.6] Federally Enforceable Through Title V Permit
16. This vessel shall be in compliance with the applicable requirements of District Rule 4623 at all times during draining, degassing, and refilling the tank with an organic liquid having a TVP of 0.5 psia or greater. [District Rule 4623, 5.7.5.4.7] Federally Enforceable Through Title V Permit
17. After a tank has been degassed pursuant to the requirements of this permit, vapor control requirements are not applicable until an organic liquid having a TVP of 0.5 psia or greater is placed, held, or stored in this vessel. [District Rule 4623, 5.7.5.4.10] Federally Enforceable Through Title V Permit
18. While performing vessel cleaning activities, operators may only use the following cleaning agents: diesel, solvents with an initial boiling point of greater than 302 degrees F, solvents with a vapor pressure of less than 0.5 psia, or solvents with 50 grams of VOC per liter or less. [District Rule 4623, 5.7.5.5.1] Federally Enforceable Through Title V Permit
19. Steam cleaning shall only be allowed at locations where wastewater treatment facilities are limited, or during the months of December through March. [District Rule 4623, 5.7.5.5.2] Federally Enforceable Through Title V Permit
20. If the tank is holding organic liquids with a TVP of 1.5 psia or greater then during sludge removal, the operator shall control emissions from the sludge receiving vessel by operating an APCO-approved vapor control device that reduces emissions of organic vapors by at least 95%. [District Rule 4623, 5.7.5.6.1] Federally Enforceable Through Title V Permit
21. If the tank is holding organic liquids with a TVP of 1.5 psia or greater then permittee shall only transport removed sludge in closed, liquid leak-free containers. [District Rule 4623, 5.7.5.6.2] Federally Enforceable Through Title V Permit
22. If the tank is holding organic liquids with a TVP of 1.5 psia or greater then permittee shall store removed sludge, until final disposal, in vapor leak-free containers, or in tanks complying with the vapor control requirements of District Rule 4623. Sludge that is to be used to manufacture roadmix, as defined in District Rule 2020, is not required to be stored in this manner. Roadmix manufacturing operations exempt pursuant to District Rule 2020 shall maintain documentation of their compliance with Rule 2020, and shall readily make said documentation available for District inspection upon request. [District Rule 4623, 5.7.5.6.3] Federally Enforceable Through Title V Permit
23. Fugitive VOC emission rate shall not exceed that listed in S-1548-148. [District NSR Rule] Federally Enforceable Through Title V Permit
24. The tank shall be equipped with a fixed roof with no holes or openings [District NSR Rule] Federally Enforceable Through Title V Permit
25. Drain valves shall only drain into covered containers which shall be emptied into tanks with vapor control system. [District NSR Rule] Federally Enforceable Through Title V Permit
26. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date and time of leak detection, and method of detection; 3) Date and time of leak repair, and emission level of recheck after leak is repaired; 4) Method used to minimize the leak to lowest possible level within 8 hours after detection. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
27. The operator of a fixed roof tank shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
28. Compliance with permit conditions in the Title V permit shall be deemed compliance with SJVUAPCD Rule 4623 (Amended December 17, 1992). A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
29. 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

30. The requirements of SJVUAPCD Rule 4661 (Amended December 17, 1992) and Rule 4801 (Amended December 17, 1992) do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
31. ATC shall be implemented concurrently with or subsequent to ATC S-1548-148-6. [District Rule 2201] Federally Enforceable Through Title V Permit

AUTHORITY TO CONSTRUCT

PERMIT NO: S-1548-418-7

ISSUANCE DATE: 06/12/2012

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

LOCATION: LIGHT OIL WESTERN STATIONARY SOURCE
CA

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

EQUIPMENT DESCRIPTION:

MODIFICATION OF 8,500 BBL WATER STORAGE TANK T-231A SERVED BY VAPOR CONTROL SYSTEM DESCRIBED IN S-1548-144: CHANGE S-1548-144 VAPOR CONTROL REFERENCE TO S-1548-148

CONDITIONS

1. The facility shall submit an application to modify the Title V permit in accordance with the timeframes and procedures of District Rule 2520. [District Rule 2520] Federally Enforceable Through Title V Permit
2. The tank shall be equipped with a vapor recovery system consisting of a closed system that collects VOCs from the storage tank. [District Rule 4623, 5.1] Federally Enforceable Through Title V Permit
3. All piping, valves, and fittings shall be constructed and maintained in a leak-free condition. [District Rule 4623, 5.1.3] Federally Enforceable Through Title V Permit
4. A leak is defined as a reading in excess of 10,000 ppmv, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21. A reading in excess of 10,000 ppmv above background is a violation of this permit and Rule 4623 and shall be reported as a deviation. [District Rule 4623, 3.11 and 6.4.8] Federally Enforceable Through Title V Permit
5. Any vessel gauging or sampling device on a vessel vented to the vapor recovery system shall be equipped with a leak free cover which shall be closed at all times except during gauging or sampling. [District Rule 4623, 5.6.2] Federally Enforceable Through Title V Permit

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

DAVID WARNER, Director of Permit Services
S-1548-418-7: Jun 22 2012 2:59PM -- EDGEHILR : Joint Inspection NOT Required

6. All piping, fittings, and valves on this vessel associated with the vapor recovery system shall be inspected annually by the facility operator in accordance with EPA Method 21, with the instrument calibrated with methane, to ensure compliance with the leaking provisions of this permit. [District Rule 4623, 5.7 (Table 3)] Federally Enforceable Through Title V Permit
7. If any of the vessel components are found to be leaking, operator shall immediately affix a tag and maintain records of gas leak detection readings, date/time leak was discovered, and date/time the component was repaired to a leak-free condition [District Rule 4623, 5.7 (Table 3)] Federally Enforceable Through Title V Permit
8. Upon detection of any leaking components (having a gas leak > 10,000 ppmv, measured in accordance with EPA Method 21 by a portable hydrocarbon detection instrument that is calibrated with methane), the operator shall: a. Eliminate the leak within 8 hours after detection; or b. If the leak can not be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices; and c. Eliminate the leak within 48 hours after minimization; and d. In no event that the total time to minimize and eliminate the leak shall exceed 56 hours after detection. [District Rule 4623, 5.7 (Table 3)] Federally Enforceable Through Title V Permit
9. Leaking components directly affixed to the tank and within five feet of the tank, including but not limited to valves, flanges, connectors, that have been discovered by the operator that have been immediately tagged and repaired within the deadlines specified in the Emissions Minimization requirements, shall not constitute a violation of this rule or permit and does not have to be reported as a deviation.. However, leaking components discovered during inspections by District staff that were not previously identified and/or tagged by the operator, and/or any leaks that were not repaired within deadlines specified in the Emissions Minimization requirements, shall constitute a violation of this rule or permit and does not have to be reported as a deviation. [District Rule 4623, 5.7 (Table 3)] Federally Enforceable Through Title V Permit
10. If a component type for a given vessel is found to leak above the leak free standard during an annual inspection, then quarterly inspections of that component type on the vessel or system shall be conducted for four consecutive quarters. After four successful quarterly inspections in which the component type is found to be leak free (<10,000 ppmv), inspections interval may revert to annual. [District Rule 4623, 5.7 (Table 3)] Federally Enforceable Through Title V Permit
11. Any component found to be leaking above the leak free standard on two consecutive annual inspections is considered a violation, even if it is under the voluntary inspection and maintenance program. [District Rule 4623, 5.7 (Table 3)] Federally Enforceable Through Title V Permit
12. Permittee shall notify the APCO in writing at least three (3) days prior to performing vessel degassing and interior vessel cleaning activities. Written notification shall include the following: 1) the Permit to Operate number and physical location of the vessel being degassed, 2) the date and time that vessel degassing and cleaning activities will begin, 3) the degassing method, as allowed in this permit, to be used, 4) the method to be used to clean the vessel, including any solvents to be used, and 5) the method to be used to dispose of any removed sludge, including methods that will be used to control emissions from the receiving vessel and emissions during transport. [District Rule 4623, 5.7.5.1] Federally Enforceable Through Title V Permit
13. This vessel shall be degassed before commencing interior cleaning by one of the following: 1) exhausting VOCs contained in the vessel vapor space to an APCO-approved vapor recovery system until the organic vapor concentration is 5,000 ppmv or less, or is 10 percent or less of the lower explosion limit (LEL), whichever is less, or; 2) by displacing VOCs contained in the vessel vapor space to an APCO-approved vapor recovery system by filling the vessel with a suitable liquid until 90 percent or more of the maximum operating level of the vessel is filled. Suitable liquids are organic liquids having a TVP of less than 0.5 psia, water, clean produced water. or produced water derived from crude oil having a TVP less than 0.5 psia, or; 3) by displacing VOCs contained in the vessel vapor space to an APCO-approved vapor recovery system by filling the vessel with a suitable gas. Degassing shall continue until the operator has achieved a vapor displacement equivalent to at least 2.3 times the vessel capacity. Suitable gases are air, nitrogen, carbon dioxide, or natural gas containing less than 10 percent VOC by weight. [District Rule 4623, 5.7.5.4] Federally Enforceable Through Title V Permit
14. During vessel degassing, the operator shall discharge or displace organic vapors contained in the vessel vapor space to an APCO-approved vapor recovery system. [District Rule 4623, 5.7.5.4.5] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

15. To facilitate connection to an external APCO-approved recovery system, a suitable vessel fitting, such as a manway, may be temporarily removed for a period of time not to exceed 1 hour. [District Rule 4623, 5.7.5.4.6] Federally Enforceable Through Title V Permit
16. This vessel shall be in compliance with the applicable requirements of District Rule 4623 at all times during draining, degassing, and refilling the tank with an organic liquid having a TVP of 0.5 psia or greater. [District Rule 4623, 5.7.5.4.7] Federally Enforceable Through Title V Permit
17. After a tank has been degassed pursuant to the requirements of this permit, vapor control requirements are not applicable until an organic liquid having a TVP of 0.5 psia or greater is placed, held, or stored in this vessel. [District Rule 4623, 5.7.5.4.10] Federally Enforceable Through Title V Permit
18. While performing vessel cleaning activities, operators may only use the following cleaning agents: diesel, solvents with an initial boiling point of greater than 302 degrees F, solvents with a vapor pressure of less than 0.5 psia, or solvents with 50 grams of VOC per liter or less. [District Rule 4623, 5.7.5.5.1] Federally Enforceable Through Title V Permit
19. Steam cleaning shall only be allowed at locations where wastewater treatment facilities are limited, or during the months of December through March. [District Rule 4623, 5.7.5.5.2] Federally Enforceable Through Title V Permit
20. If the tank is holding organic liquids with a TVP of 1.5 psia or greater then during sludge removal, the operator shall control emissions from the sludge receiving vessel by operating an APCO-approved vapor control device that reduces emissions of organic vapors by at least 95%. [District Rule 4623, 5.7.5.6.1] Federally Enforceable Through Title V Permit
21. If the tank is holding organic liquids with a TVP of 1.5 psia or greater then permittee shall only transport removed sludge in closed, liquid leak-free containers. [District Rule 4623, 5.7.5.6.2] Federally Enforceable Through Title V Permit
22. If the tank is holding organic liquids with a TVP of 1.5 psia or greater then permittee shall store removed sludge, until final disposal, in vapor leak-free containers, or in tanks complying with the vapor control requirements of District Rule 4623. Sludge that is to be used to manufacture roadmix, as defined in District Rule 2020, is not required to be stored in this manner. Roadmix manufacturing operations exempt pursuant to District Rule 2020 shall maintain documentation of their compliance with Rule 2020, and shall readily make said documentation available for District inspection upon request. [District Rule 4623, 5.7.5.6.3] Federally Enforceable Through Title V Permit
23. The tank shall be equipped with a fixed roof with no holes or openings [District NSR Rule] Federally Enforceable Through Title V Permit
24. Fugitive VOC emission rate shall not exceed 4.4 lb/day. [District NSR Rule] Federally Enforceable Through Title V Permit
25. Permittee shall maintain an accurate fugitive component count and resultant emissions calculated using U.S. EPA Publication 453/R-95-017, or other factors approved by the district. [District NSR Rule] Federally Enforceable Through Title V Permit
26. Tank shall vent to vapor control system listed in S-1548-148. [District NSR Rule] Federally Enforceable Through Title V Permit
27. Liquid stored in tank shall have a maximum VOC content of up to 10% by weight as determined by EPA Test Method 413.2, or 418.1 and/or, if necessary, EPA Test Method 8240. Hydrocarbons heavier than C14, as determined by Test Method ASTM E260-85, may be excluded from the total concentration. [District Rule 2201] Federally Enforceable Through Title V Permit
28. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date and time of leak detection, and method of detection; 3) Date and time of leak repair, and emission level of recheck after leak is repaired; 4) Method used to minimize the leak to lowest possible level within 8 hours after detection. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
29. The operator of a fixed roof tank shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

30. Records of the VOC content of liquid stored in the tank must be kept for a period of 5 years and made readily available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit
31. ATC shall be implemented concurrently with or subsequent to ATC S-1548-148-6. [District Rule 2201] Federally Enforceable Through Title V Permit

AUTHORITY TO CONSTRUCT

PERMIT NO: S-1548-419-7

ISSUANCE DATE: 06/12/2012

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

LOCATION: LIGHT OIL WESTERN STATIONARY SOURCE
CA

SECTION: NW20 TOWNSHIP: 28S RANGE: 21E

EQUIPMENT DESCRIPTION:
MODIFICATION OF 8,500 BBL WATER STORAGE TANK T-231B SERVED BY VAPOR CONTROL SYSTEM
DESCRIBED IN S-1548-144: CHANGE S-1548-144 VAPOR CONTROL REFERENCE TO S-1548-148

CONDITIONS

1. The facility shall submit an application to modify the Title V permit in accordance with the timeframes and procedures of District Rule 2520. [District Rule 2520] Federally Enforceable Through Title V Permit
2. The tank shall be equipped with a vapor recovery system consisting of a closed system that collects VOCs from the storage tank. [District Rule 4623, 5.1] Federally Enforceable Through Title V Permit
3. All piping, valves, and fittings shall be constructed and maintained in a leak-free condition. [District Rule 4623, 5.1.3] Federally Enforceable Through Title V Permit
4. A leak is defined as a reading in excess of 10,000 ppmv, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21. A reading in excess of 10,000 ppmv above background is a violation of this permit and Rule 4623 and shall be reported as a deviation. [District Rule 4623, 3.11 and 6.4.8] Federally Enforceable Through Title V Permit
5. Any vessel gauging or sampling device on a vessel vented to the vapor recovery system shall be equipped with a leak free cover which shall be closed at all times except during gauging or sampling. [District Rule 4623, 5.6.2] Federally Enforceable Through Title V Permit

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

DAVID WARNER, Director of Permit Services

S-1548-419-7 : Jun 22 2012 2:59PM - EDGEHLR : Joint Inspection NOT Required

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6. All piping, fittings, and valves on this vessel associated with the vapor recovery system shall be inspected annually by the facility operator in accordance with EPA Method 21, with the instrument calibrated with methane, to ensure compliance with the leaking provisions of this permit. [District Rule 4623, 5.7 (Table 3)] Federally Enforceable Through Title V Permit
7. If any of the vessel components are found to be leaking, operator shall immediately affix a tag and maintain records of gas leak detection readings, date/time leak was discovered, and date/time the component was repaired to a leak-free condition [District Rule 4623, 5.7 (Table 3)] Federally Enforceable Through Title V Permit
8. Upon detection of any leaking components (having a gas leak > 10,000 ppmv, measured in accordance with EPA Method 21 by a portable hydrocarbon detection instrument that is calibrated with methane), the operator shall: a. Eliminate the leak within 8 hours after detection; or b. If the leak can not be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices; and c. Eliminate the leak within 48 hours after minimization; and d. In no event that the total time to minimize and eliminate the leak shall exceed 56 hours after detection. [District Rule 4623, 5.7 (Table 3)] Federally Enforceable Through Title V Permit
9. Leaking components directly affixed to the tank and within five feet of the tank, including but not limited to valves, flanges, connectors, that have been discovered by the operator that have been immediately tagged and repaired within the deadlines specified in the Emissions Minimization requirements, shall not constitute a violation of this rule or permit and does not have to be reported as a deviation.. However, leaking components discovered during inspections by District staff that were not previously identified and/or tagged by the operator, and/or any leaks that were not repaired within deadlines specified in the Emissions Minimization requirements, shall constitute a violation of this rule or permit and does not have to be reported as a deviation. [District Rule 4623, 5.7 (Table 3)] Federally Enforceable Through Title V Permit
10. If a component type for a given vessel is found to leak above the leak free standard during an annual inspection, then quarterly inspections of that component type on the vessel or system shall be conducted for four consecutive quarters. After four successful quarterly inspections in which the component type is found to be leak free (<10,000 ppmv), inspections interval may revert to annual. [District Rule 4623, 5.7 (Table 3)] Federally Enforceable Through Title V Permit
11. Any component found to be leaking above the leak free standard on two consecutive annual inspections is considered a violation, even if it is under the voluntary inspection and maintenance program. [District Rule 4623, 5.7 (Table 3)] Federally Enforceable Through Title V Permit
12. Permittee shall notify the APCO in writing at least three (3) days prior to performing vessel degassing and interior vessel cleaning activities. Written notification shall include the following: 1) the Permit to Operate number and physical location of the vessel being degassed, 2) the date and time that vessel degassing and cleaning activities will begin, 3) the degassing method, as allowed in this permit, to be used, 4) the method to be used to clean the vessel, including any solvents to be used, and 5) the method to be used to dispose of any removed sludge, including methods that will be used to control emissions from the receiving vessel and emissions during transport. [District Rule 4623, 5.7.5.1] Federally Enforceable Through Title V Permit
13. This vessel shall be degassed before commencing interior cleaning by one of the following: 1) exhausting VOCs contained in the vessel vapor space to an APCO-approved vapor recovery system until the organic vapor concentration is 5,000 ppmv or less, or is 10 percent or less of the lower explosion limit (LEL), whichever is less, or; 2) by displacing VOCs contained in the vessel vapor space to an APCO-approved vapor recovery system by filling the vessel with a suitable liquid until 90 percent or more of the maximum operating level of the vessel is filled. Suitable liquids are organic liquids having a TVP of less than 0.5 psia, water, clean produced water. or produced water derived from crude oil having a TVP less than 0.5 psia, or; 3) by displacing VOCs contained in the vessel vapor space to an APCO-approved vapor recovery system by filling the vessel with a suitable gas. Degassing shall continue until the operator has achieved a vapor displacement equivalent to at least 2.3 times the vessel capacity. Suitable gases are air, nitrogen, carbon dioxide, or natural gas containing less than 10 percent VOC by weight. [District Rule 4623, 5.7.5.4] Federally Enforceable Through Title V Permit
14. During vessel degassing, the operator shall discharge or displace organic vapors contained in the vessel vapor space to an APCO-approved vapor recovery system. [District Rule 4623, 5.7.5.4.5] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

15. To facilitate connection to an external APCO-approved recovery system, a suitable vessel fitting, such as a manway, may be temporarily removed for a period of time not to exceed 1 hour. [District Rule 4623, 5.7.5.4.6] Federally Enforceable Through Title V Permit
16. This vessel shall be in compliance with the applicable requirements of District Rule 4623 at all times during draining, degassing, and refilling the tank with an organic liquid having a TVP of 0.5 psia or greater. [District Rule 4623, 5.7.5.4.7] Federally Enforceable Through Title V Permit
17. After a tank has been degassed pursuant to the requirements of this permit, vapor control requirements are not applicable until an organic liquid having a TVP of 0.5 psia or greater is placed, held, or stored in this vessel. [District Rule 4623, 5.7.5.4.10] Federally Enforceable Through Title V Permit
18. While performing vessel cleaning activities, operators may only use the following cleaning agents: diesel, solvents with an initial boiling point of greater than 302 degrees F, solvents with a vapor pressure of less than 0.5 psia, or solvents with 50 grams of VOC per liter or less. [District Rule 4623, 5.7.5.5.1] Federally Enforceable Through Title V Permit
19. Steam cleaning shall only be allowed at locations where wastewater treatment facilities are limited, or during the months of December through March. [District Rule 4623, 5.7.5.5.2] Federally Enforceable Through Title V Permit
20. If the tank is holding organic liquids with a TVP of 1.5 psia or greater then during sludge removal, the operator shall control emissions from the sludge receiving vessel by operating an APCO-approved vapor control device that reduces emissions of organic vapors by at least 95%. [District Rule 4623, 5.7.5.6.1] Federally Enforceable Through Title V Permit
21. If the tank is holding organic liquids with a TVP of 1.5 psia or greater then permittee shall only transport removed sludge in closed, liquid leak-free containers. [District Rule 4623, 5.7.5.6.2] Federally Enforceable Through Title V Permit
22. If the tank is holding organic liquids with a TVP of 1.5 psia or greater then permittee shall store removed sludge, until final disposal, in vapor leak-free containers, or in tanks complying with the vapor control requirements of District Rule 4623. Sludge that is to be used to manufacture roadmix, as defined in District Rule 2020, is not required to be stored in this manner. Roadmix manufacturing operations exempt pursuant to District Rule 2020 shall maintain documentation of their compliance with Rule 2020, and shall readily make said documentation available for District inspection upon request. [District Rule 4623, 5.7.5.6.3] Federally Enforceable Through Title V Permit
23. The tank shall be equipped with a fixed roof with no holes or openings [District NSR Rule] Federally Enforceable Through Title V Permit
24. Tank shall vent to vapor control system listed in S-1548-148. [District NSR Rule] Federally Enforceable Through Title V Permit
25. Liquid stored in tank shall have a maximum VOC content of up to 10% by weight as determined by EPA Test Method 413.2, or 418.1 and/or, if necessary, EPA Test Method 8240. Hydrocarbons heavier than C14, as determined by Test Method ASTM E260-85, may be excluded from the total concentration. [District Rule 2201] Federally Enforceable Through Title V Permit
26. Fugitive VOC emission rate shall not exceed 5.5 lb/day. [District NSR Rule] Federally Enforceable Through Title V Permit
27. Permittee shall maintain an accurate fugitive component count and resultant emissions calculated using U.S. EPA Publication 453/R-95-017, or other factors approved by the district. [District NSR Rule] Federally Enforceable Through Title V Permit
28. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date and time of leak detection, and method of detection; 3) Date and time of leak repair, and emission level of recheck after leak is repaired; 4) Method used to minimize the leak to lowest possible level within 8 hours after detection. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
29. The operator of a fixed roof tank shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

30. Records of the VOC content of liquid stored in the tank must be kept for a period of 5 years and made readily available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit
31. ATC shall be implemented concurrently with or subsequent to ATC S-1548-148-6. [District Rule 2201] Federally Enforceable Through Title V Permit

AUTHORITY TO CONSTRUCT

PERMIT NO: S-1548-428-7

ISSUANCE DATE: 06/12/2012

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

LOCATION: LIGHT OIL WESTERN STATIONARY SOURCE
CA

SECTION: NW20 TOWNSHIP: 28S RANGE: 21E

EQUIPMENT DESCRIPTION:

MODIFICATION OF 617 BBL INDUCED STATIC FLOTATION CELL V-240 WITH VAPOR CONTROL AS DESCRIBED IN S-1548-144 - DEHY 20: CHANGE S-1548-144 VAPOR CONTROL REFERENCE TO S-1548-148

CONDITIONS

1. The facility shall submit an application to modify the Title V permit in accordance with the timeframes and procedures of District Rule 2520. [District Rule 2520] Federally Enforceable Through Title V Permit
2. Vessel is a pressure vessel as defined by District Rule 4623 Section 3.20. [District Rule 4623] Federally Enforceable Through Title V Permit
3. Vessel shall vent to vapor control system listed in S-1548-148, except during periods of vessel interior cleaning. [District Rule 2201] Federally Enforceable Through Title V Permit
4. Vessel appurtenances and vapor control piping shall be maintained leak free (as defined by Rule 4623), except during periods of vessel interior cleaning. [District Rules 4623 and 2201] Federally Enforceable Through Title V Permit
5. Prior to opening vessel for interior cleaning, operator shall drain all liquid from the vessel to the maximum extent feasible and shall operate the vapor control system for at least 24 hours. [District Rule 2201] Federally Enforceable Through Title V Permit
6. This permit authorizes tank cleaning that is not the result of breakdowns or poor maintenance as a routine maintenance activity. [District Rule 2020] Federally Enforceable Through Title V Permit
7. Drain valves shall only drain into covered containers which shall be emptied into tanks with vapor control system. [District Rule 2201] Federally Enforceable Through Title V Permit

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

DAVID WARNER, Director of Permit Services

S-1548-428-7 : Jun 22 2012 3:00PM -- EDGEHILL : Joint Inspection NOT Required

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8. Fugitive VOC emission rate shall not exceed that listed in S-1548-144. [District Rule 2201] Federally Enforceable Through Title V Permit
9. All vessel and vapor control system piping, fittings, and valves shall be inspected annually by the facility operator in accordance with EPA Method 21, with the instrument calibrated to methane, to ensure compliance with the provisions of this permit. If any of the vessel 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 vessel 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 ft 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 upon detection. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
10. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date of leak detection, and method of detection; 3) Date and emission level of recheck after leak is repaired. Leaks over 10,000 ppmv from vapor control system components (downstream of control valve between vessel and vapor control system piping) shall be reported as a deviation [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
11. Records of annual tank inspections, maintenance, and cleaning shall be maintained at the facility for a period of 5 years and shall be made readily available for District inspection upon request. [District Rule 1070] Federally Enforceable Through Title V Permit
12. ATC shall be implemented concurrently with or subsequent to ATC S-1548-148-6. [District Rule 2201] Federally Enforceable Through Title V Permit

AUTHORITY TO CONSTRUCT

PERMIT NO: S-1548-429-8

ISSUANCE DATE: 06/12/2012

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

LOCATION: LIGHT OIL WESTERN STATIONARY SOURCE
CA

SECTION: NW20 TOWNSHIP: 28S RANGE: 21E

EQUIPMENT DESCRIPTION:

MODIFICATION OF 140 BBL CRUDE OIL PROCESS DRAIN VESSEL V-244 WITH VAPOR CONTROL AS DESCRIBED IN S-1548-144 - DEHY 20: CHANGE S-1548-144 VAPOR CONTROL REFERENCE TO S-1548-148

CONDITIONS

1. The facility shall submit an application to modify the Title V permit in accordance with the timeframes and procedures of District Rule 2520. [District Rule 2520] Federally Enforceable Through Title V Permit
2. Vessel is a pressure vessel as defined by District Rule 4623 Section 3.20. [District Rule 4623] Federally Enforceable Through Title V Permit
3. Vessel shall vent to vapor control system listed in S-1548-148, except during periods of vessel interior cleaning. [District Rule 2201] Federally Enforceable Through Title V Permit
4. Vessel appurtenances and vapor control piping shall be maintained gas-tight (as defined by Rule 4623), except during periods of vessel interior cleaning. [District Rules 4623 and 2201] Federally Enforceable Through Title V Permit
5. Prior to opening vessel for interior cleaning, operator shall drain all liquid from the vessel to the maximum extent feasible and shall operate the vapor control system for at least 24 hours. [District Rule 2201] Federally Enforceable Through Title V Permit
6. This permit authorizes tank cleaning that is not the result of breakdowns or poor maintenance as a routine maintenance activity. [District Rule 2020] Federally Enforceable Through Title V Permit
7. Drain valves shall only drain into covered containers which shall be emptied into tanks with vapor control system. [District Rule 2201] Federally Enforceable Through Title V Permit

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

DAVID WARNER, Director of Permit Services

S-1548-429-8 : Jun 22 2012 3:00PM -- EDGEHILR : Joint Inspection NOT Required

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8. Fugitive VOC emission rate shall not exceed that listed in S-1548-148. [District Rule 2201] Federally Enforceable Through Title V Permit
9. All vessel and vapor control system piping, fittings, and valves shall be inspected annually by the facility operator in accordance with EPA Method 21, with the instrument calibrated to methane, to ensure compliance with the provisions of this permit. If any of the vessel 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 vessel 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 ft 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 upon detection. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
10. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date of leak detection, and method of detection; 3) Date and emission level of recheck after leak is repaired. Leaks over 10,000 ppmv from vessel and vapor control system components (downstream of control valve between vessel and vapor control system piping) shall be reported as a deviation [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
11. Records of annual tank inspections, maintenance, and cleaning shall be maintained at the facility for a period of 5 years and shall be made readily available for District inspection upon request. [District Rule 1070] Federally Enforceable Through Title V Permit
12. ATC shall be implemented concurrently with or subsequent to ATC S-1548-148-6. [District Rule 2201] Federally Enforceable Through Title V Permit

AUTHORITY TO CONSTRUCT

PERMIT NO: S-1548-439-9

ISSUANCE DATE: 06/12/2012

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

LOCATION: LIGHT OIL WESTERN STATIONARY SOURCE
CA

SECTION: NW20 TOWNSHIP: 28S RANGE: 21E

EQUIPMENT DESCRIPTION:

MODIFICATION OF 1310 BBL FREE WATER KNOCKOUT VESSEL V-201A WITH VAPOR CONTROL AS DESCRIBED IN S-1548-144- DEHY 20: CHANGE S-1548-144 VAPOR CONTROL REFERENCE TO S-1548-148

CONDITIONS

1. The facility shall submit an application to modify the Title V permit in accordance with the timeframes and procedures of District Rule 2520. [District Rule 2520] Federally Enforceable Through Title V Permit
2. Vessel is a pressure vessel as defined by District Rule 4623. [District Rule 4623] Federally Enforceable Through Title V Permit
3. The vessel shall vent only to the vapor control system listed on permit S-1548-148, except during periods of vessel cleaning or maintenance. [District Rule 2201] Federally Enforceable Through Title V Permit
4. A leak is defined as emitting greater than 10,000 ppmv with an instrument calibrated following EPA Method 21. [District Rule 2201] Federally Enforceable Through Title V Permit
5. The control valve on the common vapor-out line from the FWKO vessels shall be set at a sufficient pressure to prevent the backflow of tank vapors into the FWKO vessels. Components (valves, flanges, etc) downstream of this control valve are subject to the requirements of Rule 4623 and, therefore, any leak in excess of 10,000 ppmv detected from components downstream of the control valve shall be reported as a deviation. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
6. Fugitive VOC emission rate shall not exceed that listed in S-1548-148. [District Rule 2201] 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

DAVID WARNER, Director of Permit Services

S-1548-439-9 : Jun 22 2012 3:00PM -- EDGEHILL : Joint Inspection NOT Required

7. All piping, fittings, and valves on this FWKO shall be inspected annually by the facility operator in accordance with EPA Method 21, with the instrument calibrated with methane, to ensure compliance with the leaking provisions of this permit. [District Rule 2201] Federally Enforceable Through Title V Permit
8. If any of the FWKO components are found to be leaking, operator shall immediately affix a tag and maintain records of liquid leak and gas leak detection readings, date/time leak was discovered, and date/time the component was repaired to a leak-free condition. [District Rule 2201] Federally Enforceable Through Title V Permit
9. Upon detection of a liquid leak, defined as a leak rate of greater than or equal to 30 drops per minute, operator shall repair the leak within 8 hours. For leaks with a liquid leak rate of between 3 and 30 drops per minute, the leaking component shall be repaired within 24 hours after detection. [District Rule 2201] Federally Enforceable Through Title V Permit
10. Comply with the following requirements to repair leaking components that have a gas leak >10,000 ppmv (measured in accordance with EPA Method 21 by a portable hydrocarbon detection instrument that is calibrated with methane):
 - a. Eliminate the leak within 8 hours after detection; or
 - b. If the leak can not be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices; and
 - c. Eliminate the leak within 48 hours after minimization; and
 - d. In no event that the total time to minimize and eliminate the leak shall exceed 56 hours after detection. [District Rule 2201] Federally Enforceable Through Title V Permit
11. If a component type for a given tank is found to leak during an annual inspection, then conduct quarterly inspections of that component type on the tank or tank system for four consecutive quarters. If a component type is found to have no leak after four consecutive quarterly inspections, then revert to annual inspections. [District Rule 2201] Federally Enforceable Through Title V Permit
12. An operator shall reinspect a component for leaks within thirty working days after the date on which the component is repaired. [District Rule 2520] Federally Enforceable Through Title V Permit
13. Leaking components directly affixed to the tank and within five feet of the tank, including but not limited to valves, flanges, connectors, that have been discovered by the operator that have been immediately tagged and repaired within the deadlines specified in the Emissions Minimization requirements, shall not constitute a violation of this rule or permit and does not have to be reported as a deviation. However, leaking components discovered during inspections by District staff that were not previously identified and/or tagged by the operator, and/or any leaks that were not repaired within deadlines specified in the Emissions Minimization requirements, shall constitute a violation of this rule or permit and does not have to be reported as a deviation. [District Rule 4623, 5.7 (Table 3)] Federally Enforceable Through Title V Permit
14. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date of leak detection, and method of detection; 3) Date and emission level of recheck after leak is repaired; 4) Method used to minimize the leak to lowest possible level within 8 hours after detection. [District Rule 2201] Federally Enforceable Through Title V Permit
15. This permit authorizes vessel cleaning that is not the result of breakdowns or poor maintenance as a routine maintenance activity. [District Rule 2080] Federally Enforceable Through Title V Permit
16. Vessel 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
17. Permittee shall notify the District Compliance Division at least 72 hours (notification period can be less if approved by District Compliance Division) before any vessel cleaning or maintenance which necessitates isolation from the vapor control system. [District Rule 2080] Federally Enforceable Through Title V Permit
18. Prior to opening the vessel for cleaning or maintenance, one of the following procedures must be followed: 1) Prior to venting the vessel to the atmosphere, operate the vapor recovery system/vapor control device for at least 24 hours such that it collects the vapors; or 2) use liquid displacement, conducted using a liquid with a TVP less than 0.5 psia, or conducted by floating the oil pad off by restricting the outflow of water, such that 90% of the vessel volume is displaced; or 3) depressurize vessel to the on-site flare until the vessel reaches atmospheric pressure. [District Rule 2080] Federally Enforceable Through Title V Permit
19. Upon reintroducing crude oil/water to the vessel, the vapor control system shall be reactivated and pressure relief valves closed. [District Rule 2080] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

20. Within 48 hours after refilling the vessel with crude oil/water, the pressure relief valves that discharge to atmosphere and hatch seals shall be inspected for leaks using EPA Method 21 and the regular maintenance and inspection program shall resume. [District Rule 2080] Federally Enforceable Through Title V Permit
21. While performing tank cleaning activities, operators may only use the following cleaning agents: 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 of VOC per liter or less. [District Rule 2201] Federally Enforceable Through Title V Permit
22. Steam cleaning shall only be allowed at locations where wastewater treatment facilities are limited, or during the months of December through March. [District Rule 2201] Federally Enforceable Through Title V Permit
23. If this tank was holding organic liquids with a TVP of 1.5 psia or greater then during sludge removal, the operator shall control emissions from the sludge receiving vessel by operating an APCO-approved vapor control device that reduces emissions of organic vapors by at least 99%. [District Rule 2201] Federally Enforceable Through Title V Permit
24. If this tank was holding organic liquids with a TVP of 1.5 psia or greater then the operator shall only transport removed sludge in closed, liquid leak-free containers. [District Rule 2201] Federally Enforceable Through Title V Permit
25. If this tank was holding organic liquids with a TVP of 1.5 psia or greater then the operator shall store removed sludge, until final disposal, in vapor leak-free containers, or in tanks complying with the vapor control requirements of District Rule 4623. Sludge that is to be used to manufacture roadmix, as defined in District Rule 2020, is not required to be stored in this manner. Roadmix manufacturing operations exempt pursuant to District Rule 2020 shall maintain documentation of their compliance with Rule 2020, and shall readily make said documentation available for District inspection upon request. [District Rules 2020 and 2201] Federally Enforceable Through Title V Permit
26. Permittee shall maintain records of each period of cleaning and maintenance when the vessel is disconnected or isolated from the vapor control system. Records shall include the date that cleaning was initiated, the date cleaning was completed, the procedure used to vent vapors prior to opening, and a description of internal and external repairs and maintenance performed. [District Rule 2080] Federally Enforceable Through Title V Permit
27. All 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
28. ATC shall be implemented concurrently with or subsequent to ATC S-1548-148-6. [District Rule 2201] Federally Enforceable Through Title V Permit

AUTHORITY TO CONSTRUCT

PERMIT NO: S-1548-440-9

ISSUANCE DATE: 06/12/2012

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

LOCATION: LIGHT OIL WESTERN STATIONARY SOURCE
CA

SECTION: NW20 TOWNSHIP: 28S RANGE: 21E

EQUIPMENT DESCRIPTION:

MODIFICATION OF 1310 BBL FREE WATER KNOCKOUT VESSEL V-201B WITH VAPOR CONTROL AS DESCRIBED IN S-1548-144- DEHY 20: CHANGE S-1548-144 VAPOR CONTROL REFERENCE TO S-1548-148

CONDITIONS

1. Vessel is a pressure vessel as defined by District Rule 4623. [District Rule 4623] Federally Enforceable Through Title V Permit
2. The facility shall submit an application to modify the Title V permit in accordance with the timeframes and procedures of District Rule 2520. [District Rule 2520] Federally Enforceable Through Title V Permit
3. The vessel shall vent only to the vapor control system listed on permit S-1548-148, except during periods of vessel cleaning or maintenance. [District Rule 2201] Federally Enforceable Through Title V Permit
4. A leak is defined as emitting greater than 10,000 ppmv with an instrument calibrated following EPA Method 21. [District Rule 2201] Federally Enforceable Through Title V Permit
5. The control valve on the common vapor-out line from the FWKO vessels shall be set at a sufficient pressure to prevent the backflow of tank vapors into the FWKO vessels. Components (valves, flanges, etc) downstream of this control valve are subject to the requirements of Rule 4623 and, therefore, any leak in excess of 10,000 ppmv detected from components downstream of the control valve shall be reported as a deviation. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
6. Fugitive VOC emission rate shall not exceed that listed in S-1548-148. [District Rule 2201] 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

DAVID WARNER, Director of Permit Services

S-1548-440-9 : Jun 22 2012 3:01PM -- EDGEHILR : Joint Inspection NOT Required

Southern Regional Office • 34946 Flyover Court • Bakersfield, CA 93308 • (661) 392-5500 • Fax (661) 392-5585

7. All piping, fittings, and valves on this FWKO shall be inspected annually by the facility operator in accordance with EPA Method 21, with the instrument calibrated with methane, to ensure compliance with the leaking provisions of this permit. [District Rule 2201] Federally Enforceable Through Title V Permit
8. If any of the FWKO components are found to be leaking, operator shall immediately affix a tag and maintain records of liquid leak and gas leak detection readings, date/time leak was discovered, and date/time the component was repaired to a leak-free condition. [District Rule 2201] Federally Enforceable Through Title V Permit
9. Upon detection of a liquid leak, defined as a leak rate of greater than or equal to 30 drops per minute, operator shall repair the leak within 8 hours. For leaks with a liquid leak rate of between 3 and 30 drops per minute, the leaking component shall be repaired within 24 hours after detection. [District Rule 2201] Federally Enforceable Through Title V Permit
10. Comply with the following requirements to repair leaking components that have a gas leak >10,000 ppmv (measured in accordance with EPA Method 21 by a portable hydrocarbon detection instrument that is calibrated with methane):
 - a. Eliminate the leak within 8 hours after detection; or
 - b. If the leak can not be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices; and
 - c. Eliminate the leak within 48 hours after minimization; and
 - d. In no event that the total time to minimize and eliminate the leak shall exceed 56 hours after detection. [District Rule 2201] Federally Enforceable Through Title V Permit
11. If a component type for a given tank is found to leak during an annual inspection, then conduct quarterly inspections of that component type on the tank or tank system for four consecutive quarters. If a component type is found to have no leak after four consecutive quarterly inspections, then revert to annual inspections. [District Rule 2201] Federally Enforceable Through Title V Permit
12. An operator shall reinspect a component for leaks within thirty working days after the date on which the component is repaired. [District Rule 2520] Federally Enforceable Through Title V Permit
13. Leaking components that have been discovered by the operator that have been immediately tagged and repaired within the timeframes specified in this permit shall not constitute a violation. Leaking components discovered by District staff that were not previously identified and/or tagged by the operator, and/or any leaks that were not repaired within the timeframes specified in this permit shall constitute a violation. Any component found to be leaking on two consecutive annual inspections shall constitute a violation. [District Rule 2201] Federally Enforceable Through Title V Permit
14. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date of leak detection, and method of detection; 3) Date and emission level of recheck after leak is repaired; 4) Method used to minimize the leak to lowest possible level within 8 hours after detection. [District Rule 2201] Federally Enforceable Through Title V Permit
15. This permit authorizes vessel cleaning that is not the result of breakdowns or poor maintenance as a routine maintenance activity. [District Rule 2080] Federally Enforceable Through Title V Permit
16. Vessel 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
17. Permittee shall notify the District Compliance Division at least 72 hours (notification period can be less if approved by District Compliance Division) before any vessel cleaning or maintenance which necessitates isolation from the vapor control system. [District Rule 2080] Federally Enforceable Through Title V Permit
18. Prior to opening the vessel for cleaning or maintenance, one of the following procedures must be followed: 1) Prior to venting the vessel to the atmosphere, operate the vapor recovery system/vapor control device for at least 24 hours such that it collects the vapors; or 2) use liquid displacement, conducted using a liquid with a TVP less than 0.5 psia, or conducted by floating the oil pad off by restricting the outflow of water, such that 90% of the vessel volume is displaced; or 3) depressurize vessel to the on-site flare until the vessel reaches atmospheric pressure. [District Rule 2080] Federally Enforceable Through Title V Permit
19. Upon reintroducing crude oil/water to the vessel, the vapor control system shall be reactivated and pressure relief valves closed. [District Rule 2080] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

20. Within 48 hours after refilling the vessel with crude oil/water, the pressure relief valves that discharge to atmosphere and hatch seals shall be inspected for leaks using EPA Method 21 and the regular maintenance and inspection program shall resume. [District Rule 2080] Federally Enforceable Through Title V Permit
21. While performing tank cleaning activities, operators may only use the following cleaning agents: 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 of VOC per liter or less. [District Rule 2201] Federally Enforceable Through Title V Permit
22. Steam cleaning shall only be allowed at locations where wastewater treatment facilities are limited, or during the months of December through March. [District Rule 2201] Federally Enforceable Through Title V Permit
23. If this tank was holding organic liquids with a TVP of 1.5 psia or greater then during sludge removal, the operator shall control emissions from the sludge receiving vessel by operating an APCO-approved vapor control device that reduces emissions of organic vapors by at least 99%. [District Rule 2201] Federally Enforceable Through Title V Permit
24. If this tank was holding organic liquids with a TVP of 1.5 psia or greater then the operator shall only transport removed sludge in closed, liquid leak-free containers. [District Rule 2201] Federally Enforceable Through Title V Permit
25. If this tank was holding organic liquids with a TVP of 1.5 psia or greater then the operator shall store removed sludge, until final disposal, in vapor leak-free containers, or in tanks complying with the vapor control requirements of District Rule 4623. Sludge that is to be used to manufacture roadmix, as defined in District Rule 2020, is not required to be stored in this manner. Roadmix manufacturing operations exempt pursuant to District Rule 2020 shall maintain documentation of their compliance with Rule 2020, and shall readily make said documentation available for District inspection upon request. [District Rules 2020 and 2201] Federally Enforceable Through Title V Permit
26. Permittee shall maintain records of each period of cleaning and maintenance when the vessel is disconnected or isolated from the vapor control system. Records shall include the date that cleaning was initiated, the date cleaning was completed, the procedure used to vent vapors prior to opening, and a description of internal and external repairs and maintenance performed. [District Rule 2080] Federally Enforceable Through Title V Permit
27. All 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
28. ATC shall be implemented concurrently with or subsequent to ATC S-1548-148-6. [District Rule 2201] Federally Enforceable Through Title V Permit

AUTHORITY TO CONSTRUCT

PERMIT NO: S-1548-441-9

ISSUANCE DATE: 06/12/2012

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

LOCATION: LIGHT OIL WESTERN STATIONARY SOURCE
CA

SECTION: NW20 TOWNSHIP: 28S RANGE: 21E

EQUIPMENT DESCRIPTION:
MODIFICATION OF 1310 BBL FREE WATER KNOCKOUT VESSEL V-201C WITH VAPOR CONTROL AS DESCRIBED
IN S-1548-144- DEHY 20: CHANGE S-1548-144 VAPOR CONTROL REFERENCE TO S-1548-148

CONDITIONS

1. The facility shall submit an application to modify the Title V permit in accordance with the timeframes and procedures of District Rule 2520. [District Rule 2520] Federally Enforceable Through Title V Permit
2. Vessel is a pressure vessel as defined by District Rule 4623. [District Rule 4623] Federally Enforceable Through Title V Permit
3. The vessel shall vent only to the vapor control system listed on permit S-1548-148, except during periods of vessel cleaning or maintenance. [District Rule 2201] Federally Enforceable Through Title V Permit
4. A leak is defined as emitting greater than 10,000 ppmv with an instrument calibrated following EPA Method 21. [District Rule 2201] Federally Enforceable Through Title V Permit
5. The control valve on the common vapor-out line from the FWKO vessels shall be set at a sufficient pressure to prevent the backflow of tank vapors into the FWKO vessels. Components (valves, flanges, etc) downstream of this control valve are subject to the requirements of Rule 4623 and, therefore, any leak in excess of 10,000 ppmv detected from components downstream of the control valve shall be reported as a deviation. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
6. Fugitive VOC emission rate shall not exceed that listed in S-1548-148. [District Rule 2201] 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

DAVID WARNER, Director of Permit Services

S-1548-441-9; Jun 22 2012 3:02PM -- EDGEHILR : Joint Inspection NOT Required

Southern Regional Office • 34946 Flyover Court • Bakersfield, CA 93308 • (661) 392-5500 • Fax (661) 392-5585

7. All piping, fittings, and valves on this FWKO shall be inspected annually by the facility operator in accordance with EPA Method 21, with the instrument calibrated with methane, to ensure compliance with the leaking provisions of this permit. [District Rule 2201] Federally Enforceable Through Title V Permit
8. If any of the FWKO components are found to be leaking, operator shall immediately affix a tag and maintain records of liquid leak and gas leak detection readings, date/time leak was discovered, and date/time the component was repaired to a leak-free condition. [District Rule 2201] Federally Enforceable Through Title V Permit
9. Upon detection of a liquid leak, defined as a leak rate of greater than or equal to 30 drops per minute, operator shall repair the leak within 8 hours. For leaks with a liquid leak rate of between 3 and 30 drops per minute, the leaking component shall be repaired within 24 hours after detection. [District Rule 2201] Federally Enforceable Through Title V Permit
10. Comply with the following requirements to repair leaking components that have a gas leak >10,000 ppmv (measured in accordance with EPA Method 21 by a portable hydrocarbon detection instrument that is calibrated with methane):
 - a. Eliminate the leak within 8 hours after detection; or
 - b. If the leak can not be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices; and
 - c. Eliminate the leak within 48 hours after minimization; and
 - d. In no event that the total time to minimize and eliminate the leak shall exceed 56 hours after detection. [District Rule 2201] Federally Enforceable Through Title V Permit
11. If a component type for a given tank is found to leak during an annual inspection, then conduct quarterly inspections of that component type on the tank or tank system for four consecutive quarters. If a component type is found to have no leak after four consecutive quarterly inspections, then revert to annual inspections. [District Rule 2201] Federally Enforceable Through Title V Permit
12. An operator shall reinspect a component for leaks within thirty working days after the date on which the component is repaired. [District Rule 2520] Federally Enforceable Through Title V Permit
13. Leaking components directly affixed to the tank and within five feet of the tank, including but not limited to valves, flanges, connectors, that have been discovered by the operator that have been immediately tagged and repaired within the deadlines specified in the Emissions Minimization requirements, shall not constitute a violation of this rule or permit and does not have to be reported as a deviation.. However, leaking components discovered during inspections by District staff that were not previously identified and/or tagged by the operator, and/or any leaks that were not repaired within deadlines specified in the Emissions Minimization requirements, shall constitute a violation of this rule or permit and does not have to be reported as a deviation. [District Rule 4623, 5.7 (Table 3)] Federally Enforceable Through Title V Permit
14. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date of leak detection, and method of detection; 3) Date and emission level of recheck after leak is repaired; 4) Method used to minimize the leak to lowest possible level within 8 hours after detection. [District Rule 2201] Federally Enforceable Through Title V Permit
15. This permit authorizes vessel cleaning that is not the result of breakdowns or poor maintenance as a routine maintenance activity. [District Rule 2080] Federally Enforceable Through Title V Permit
16. Vessel 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
17. Permittee shall notify the District Compliance Division at least 72 hours (notification period can be less if approved by District Compliance Division) before any vessel cleaning or maintenance which necessitates isolation from the vapor control system. [District Rule 2080] Federally Enforceable Through Title V Permit
18. Prior to opening the vessel for cleaning or maintenance, one of the following procedures must be followed: 1) Prior to venting the vessel to the atmosphere, operate the vapor recovery system/vapor control device for at least 24 hours such that it collects the vapors; or 2) use liquid displacement, conducted using a liquid with a TVP less than 0.5 psia, or conducted by floating the oil pad off by restricting the outflow of water, such that 90% of the vessel volume is displaced; or 3) depressurize vessel to the on-site flare until the vessel reaches atmospheric pressure. [District Rule 2080] Federally Enforceable Through Title V Permit
19. Upon reintroducing crude oil/water to the vessel, the vapor control system shall be reactivated and pressure relief valves closed. [District Rule 2080] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

20. Within 48 hours after refilling the vessel with crude oil/water, the pressure relief valves that discharge to atmosphere and hatch seals shall be inspected for leaks using EPA Method 21 and the regular maintenance and inspection program shall resume. [District Rule 2080] Federally Enforceable Through Title V Permit
21. While performing tank cleaning activities, operators may only use the following cleaning agents: 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 of VOC per liter or less. [District Rule 2201] Federally Enforceable Through Title V Permit
22. Steam cleaning shall only be allowed at locations where wastewater treatment facilities are limited, or during the months of December through March. [District Rule 2201] Federally Enforceable Through Title V Permit
23. If this tank was holding organic liquids with a TVP of 1.5 psia or greater then during sludge removal, the operator shall control emissions from the sludge receiving vessel by operating an APCO-approved vapor control device that reduces emissions of organic vapors by at least 99%. [District Rule 2201] Federally Enforceable Through Title V Permit
24. If this tank was holding organic liquids with a TVP of 1.5 psia or greater then the operator shall only transport removed sludge in closed, liquid leak-free containers. [District Rule 2201] Federally Enforceable Through Title V Permit
25. If this tank was holding organic liquids with a TVP of 1.5 psia or greater then the operator shall store removed sludge, until final disposal, in vapor leak-free containers, or in tanks complying with the vapor control requirements of District Rule 4623. Sludge that is to be used to manufacture roadmix, as defined in District Rule 2020, is not required to be stored in this manner. Roadmix manufacturing operations exempt pursuant to District Rule 2020 shall maintain documentation of their compliance with Rule 2020, and shall readily make said documentation available for District inspection upon request. [District Rules 2020 and 2201] Federally Enforceable Through Title V Permit
26. Permittee shall maintain records of each period of cleaning and maintenance when the vessel is disconnected or isolated from the vapor control system. Records shall include the date that cleaning was initiated, the date cleaning was completed, the procedure used to vent vapors prior to opening, and a description of internal and external repairs and maintenance performed. [District Rule 2080] Federally Enforceable Through Title V Permit
27. All 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
28. ATC shall be implemented concurrently with or subsequent to ATC S-1548-148-6. [District Rule 2201] Federally Enforceable Through Title V Permit

AUTHORITY TO CONSTRUCT

PERMIT NO: S-1548-442-9

ISSUANCE DATE: 06/12/2012

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

LOCATION: LIGHT OIL WESTERN STATIONARY SOURCE
CA

SECTION: NW20 TOWNSHIP: 28S RANGE: 21E

EQUIPMENT DESCRIPTION:

MODIFICATION OF 1310 BBL FREE WATER KNOCKOUT VESSEL V-201D WITH VAPOR CONTROL AS DESCRIBED IN S-1548-144- DEHY 20: CHANGE S-1548-144 VAPOR CONTROL REFERENCE TO S-1548-148

CONDITIONS

1. The facility shall submit an application to modify the Title V permit in accordance with the timeframes and procedures of District Rule 2520. [District Rule 2520] Federally Enforceable Through Title V Permit
2. Vessel is a pressure vessel as defined by District Rule 4623. [District Rule 4623] Federally Enforceable Through Title V Permit
3. The vessel shall vent only to the vapor control system listed on permit S-1548-148, except during periods of vessel cleaning or maintenance. [District Rule 2201] Federally Enforceable Through Title V Permit
4. A leak is defined as emitting greater than 10,000 ppmv with an instrument calibrated following EPA Method 21. [District Rule 2201] Federally Enforceable Through Title V Permit
5. The control valve on the common vapor-out line from the FWKO vessels shall be set at a sufficient pressure to prevent the backflow of tank vapors into the FWKO vessels. Components (valves, flanges, etc) downstream of this control valve are subject to the requirements of Rule 4623 and, therefore, any leak in excess of 10,000 ppmv detected from components downstream of the control valve shall be reported as a deviation. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
6. Fugitive VOC emission rate shall not exceed that listed in S-1548-148. [District Rule 2201] 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

DAVID WARNER, Director of Permit Services

S-1548-442-9 ; Jun 22 2012 3:02PM -- EDGEHILL : Joint Inspection NOT Required

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7. All piping, fittings, and valves on this FWKO shall be inspected annually by the facility operator in accordance with EPA Method 21, with the instrument calibrated with methane, to ensure compliance with the leaking provisions of this permit. [District Rule 2201] Federally Enforceable Through Title V Permit
8. If any of the FWKO components are found to be leaking, operator shall immediately affix a tag and maintain records of liquid leak and gas leak detection readings, date/time leak was discovered, and date/time the component was repaired to a leak-free condition. [District Rule 2201] Federally Enforceable Through Title V Permit
9. Upon detection of a liquid leak, defined as a leak rate of greater than or equal to 30 drops per minute, operator shall repair the leak within 8 hours. For leaks with a liquid leak rate of between 3 and 30 drops per minute, the leaking component shall be repaired within 24 hours after detection. [District Rule 2201] Federally Enforceable Through Title V Permit
10. Comply with the following requirements to repair leaking components that have a gas leak >10,000 ppmv (measured in accordance with EPA Method 21 by a portable hydrocarbon detection instrument that is calibrated with methane):
 - a. Eliminate the leak within 8 hours after detection; or
 - b. If the leak can not be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices; and
 - c. Eliminate the leak within 48 hours after minimization; and
 - d. In no event that the total time to minimize and eliminate the leak shall exceed 56 hours after detection. [District Rule 2201] Federally Enforceable Through Title V Permit
11. If a component type for a given tank is found to leak during an annual inspection, then conduct quarterly inspections of that component type on the tank or tank system for four consecutive quarters. If a component type is found to have no leak after four consecutive quarterly inspections, then revert to annual inspections. [District Rule 2201] Federally Enforceable Through Title V Permit
12. An operator shall reinspect a component for leaks within thirty working days after the date on which the component is repaired. [District Rule 2520] Federally Enforceable Through Title V Permit
13. Leaking components directly affixed to the tank and within five feet of the tank, including but not limited to valves, flanges, connectors, that have been discovered by the operator that have been immediately tagged and repaired within the deadlines specified in the Emissions Minimization requirements, shall not constitute a violation of this rule or permit and does not have to be reported as a deviation.. However, leaking components discovered during inspections by District staff that were not previously identified and/or tagged by the operator, and/or any leaks that were not repaired within deadlines specified in the Emissions Minimization requirements, shall constitute a violation of this rule or permit and does not have to be reported as a deviation. [District Rule 4623, 5.7 (Table 3)] Federally Enforceable Through Title V Permit
14. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date of leak detection, and method of detection; 3) Date and emission level of recheck after leak is repaired; 4) Method used to minimize the leak to lowest possible level within 8 hours after detection. [District Rule 2201] Federally Enforceable Through Title V Permit
15. This permit authorizes vessel cleaning that is not the result of breakdowns or poor maintenance as a routine maintenance activity. [District Rule 2080] Federally Enforceable Through Title V Permit
16. Vessel 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
17. Permittee shall notify the District Compliance Division at least 72 hours (notification period can be less if approved by District Compliance Division) before any vessel cleaning or maintenance which necessitates isolation from the vapor control system. [District Rule 2080] Federally Enforceable Through Title V Permit
18. Prior to opening the vessel for cleaning or maintenance, one of the following procedures must be followed: 1) Prior to venting the vessel to the atmosphere, operate the vapor recovery system/vapor control device for at least 24 hours such that it collects the vapors; or 2) use liquid displacement, conducted using a liquid with a TVP less than 0.5 psia, or conducted by floating the oil pad off by restricting the outflow of water, such that 90% of the vessel volume is displaced; or 3) depressurize vessel to the on-site flare until the vessel reaches atmospheric pressure. [District Rule 2080] Federally Enforceable Through Title V Permit
19. Upon reintroducing crude oil/water to the vessel, the vapor control system shall be reactivated and pressure relief valves closed. [District Rule 2080] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

20. Within 48 hours after refilling the vessel with crude oil/water, the pressure relief valves that discharge to atmosphere and hatch seals shall be inspected for leaks using EPA Method 21 and the regular maintenance and inspection program shall resume. [District Rule 2080] Federally Enforceable Through Title V Permit
21. While performing tank cleaning activities, operators may only use the following cleaning agents: 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 of VOC per liter or less. [District Rule 2201] Federally Enforceable Through Title V Permit
22. Steam cleaning shall only be allowed at locations where wastewater treatment facilities are limited, or during the months of December through March. [District Rule 2201] Federally Enforceable Through Title V Permit
23. If this tank was holding organic liquids with a TVP of 1.5 psia or greater then during sludge removal, the operator shall control emissions from the sludge receiving vessel by operating an APCO-approved vapor control device that reduces emissions of organic vapors by at least 99%. [District Rule 2201] Federally Enforceable Through Title V Permit
24. If this tank was holding organic liquids with a TVP of 1.5 psia or greater then the operator shall only transport removed sludge in closed, liquid leak-free containers. [District Rule 2201] Federally Enforceable Through Title V Permit
25. If this tank was holding organic liquids with a TVP of 1.5 psia or greater then the operator shall store removed sludge, until final disposal, in vapor leak-free containers, or in tanks complying with the vapor control requirements of District Rule 4623. Sludge that is to be used to manufacture roadmix, as defined in District Rule 2020, is not required to be stored in this manner. Roadmix manufacturing operations exempt pursuant to District Rule 2020 shall maintain documentation of their compliance with Rule 2020, and shall readily make said documentation available for District inspection upon request. [District Rules 2020 and 2201] Federally Enforceable Through Title V Permit
26. Permittee shall maintain records of each period of cleaning and maintenance when the vessel is disconnected or isolated from the vapor control system. Records shall include the date that cleaning was initiated, the date cleaning was completed, the procedure used to vent vapors prior to opening, and a description of internal and external repairs and maintenance performed. [District Rule 2080] Federally Enforceable Through Title V Permit
27. All 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
28. ATC shall be implemented concurrently with or subsequent to ATC S-1548-148-6. [District Rule 2201] Federally Enforceable Through Title V Permit

AUTHORITY TO CONSTRUCT

PERMIT NO: S-1548-463-5

ISSUANCE DATE: 06/12/2012

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

LOCATION: LIGHT OIL WESTERN STATIONARY SOURCE
CA

EQUIPMENT DESCRIPTION:
MODIFICATION OF 1310 BBL FREE WATER KNOCKOUT VESSEL V-201E WITH VAPOR CONTROL AS DESCRIBED
IN S-1548-144 - DEHY 20: CHANGE S-1548-144 VAPOR CONTROL REFERENCE TO S-1548-148

CONDITIONS

1. The facility shall submit an application to modify the Title V permit in accordance with the timeframes and procedures of District Rule 2520. [District Rule 2520] Federally Enforceable Through Title V Permit
2. Vessel is a pressure vessel as defined by District Rule 4623. [District Rule 4623] Federally Enforceable Through Title V Permit
3. The vessel shall vent only to the vapor control system listed on permit S-1548-148, except during periods of vessel cleaning or maintenance. [District Rule 2201] Federally Enforceable Through Title V Permit
4. A leak is defined as emitting greater than 10,000 ppmv with an instrument calibrated following EPA Method 21. [District Rule 2201] Federally Enforceable Through Title V Permit
5. The control valve on the common vapor-out line from the FWKO vessels shall be set at a sufficient pressure to prevent the backflow of tank vapors into the FWKO vessels. Components (valves, flanges, etc) downstream of this control valve are subject to the requirements of Rule 4623 and, therefore, any leak in excess of 10,000 ppmv detected from components downstream of the control valve shall be reported as a deviation. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
6. VOC fugitives from components in gas service shall not exceed 24.1 lb/day. [District Rule 2201] 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

DAVID WARNER, Director of Permit Services
S-1548-463-5 : Jun 22 2012 3:02PM -- EDGEHILL : Joint Inspection NOT Required

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7. Permittee shall maintain accurate records of fugitive inspection component counts and calculated fugitive emissions using EPA Document -453/R-95-017, Protocol for Equipment Leak Emission Estimates Table 2-4 "Oil and Gas Production Operations Average Emission Factors" (November 1995). Permittee shall make records of component counts, emission factors, and calculations readily available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit
8. All piping, fittings, and valves on this FWKO shall be inspected annually by the facility operator in accordance with EPA Method 21, with the instrument calibrated with methane, to ensure compliance with the leaking provisions of this permit. [District Rule 2201] Federally Enforceable Through Title V Permit
9. If any of the FWKO components are found to be leaking, operator shall immediately affix a tag and maintain records of liquid leak and gas leak detection readings, date/time leak was discovered, and date/time the component was repaired to a leak-free condition. [District Rule 2201] Federally Enforceable Through Title V Permit
10. Upon detection of a liquid leak, defined as a leak rate of greater than or equal to 30 drops per minute, operator shall repair the leak within 8 hours. For leaks with a liquid leak rate of between 3 and 30 drops per minute, the leaking component shall be repaired within 24 hours after detection. [District Rule 2201] Federally Enforceable Through Title V Permit
11. Comply with the following requirements to repair leaking components that have a gas leak >10,000 ppmv (measured in accordance with EPA Method 21 by a portable hydrocarbon detection instrument that is calibrated with methane):
 - a. Eliminate the leak within 8 hours after detection; or
 - b. If the leak can not be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices; and
 - c. Eliminate the leak within 48 hours after minimization; and
 - d. In no event that the total time to minimize and eliminate the leak shall exceed 56 hours after detection. [District Rule 2201] Federally Enforceable Through Title V Permit
12. If a component type for a given tank is found to leak during an annual inspection, then conduct quarterly inspections of that component type on the tank or tank system for four consecutive quarters. If a component type is found to have no leak after four consecutive quarterly inspections, then revert to annual inspections. [District Rule 2201] Federally Enforceable Through Title V Permit
13. An operator shall reinspect a component for leaks within thirty working days after the date on which the component is repaired. [District Rule 2520] Federally Enforceable Through Title V Permit
14. Leaking components directly affixed to the tank and within five feet of the tank, including but not limited to valves, flanges, connectors, that have been discovered by the operator that have been immediately tagged and repaired within the deadlines specified in the Emissions Minimization requirements, shall not constitute a violation of this rule or permit and does not have to be reported as a deviation.. However, leaking components discovered during inspections by District staff that were not previously identified and/or tagged by the operator, and/or any leaks that were not repaired within deadlines specified in the Emissions Minimization requirements, shall constitute a violation of this rule or permit and does not have to be reported as a deviation. [District Rule 4623, 5.7 (Table 3)] Federally Enforceable Through Title V Permit
15. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date of leak detection, and method of detection; 3) Date and emission level of recheck after leak is repaired; 4) Method used to minimize the leak to lowest possible level within 8 hours after detection. [District Rule 2201] Federally Enforceable Through Title V Permit
16. This permit authorizes vessel 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
17. Vessel may be disconnected from vapor control system during District approved cleaning and maintenance procedures as described in this permit. [District Rule 2080] Federally Enforceable Through Title V Permit
18. Permittee shall notify the District Compliance Division at least 72 hours (notification period can be less if approved by District Compliance Division) before any vessel cleaning or maintenance which necessitates isolation from the vapor control system. [District Rule 2080] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

19. Prior to opening the vessel for cleaning or maintenance, one of the following procedures must be followed: 1) Prior to venting the vessel to the atmosphere, operate the vapor recovery system/vapor control device for at least 24 hours such that it collects the vapors; or 2) use liquid displacement, conducted using a liquid with a TVP less than 0.5 psia, or conducted by floating the oil pad off by restricting the outflow of water, such that 90% of the vessel volume is displaced; or 3) depressurize vessel to the on-site flare until the vessel reaches atmospheric pressure. [District Rule 2080] Federally Enforceable Through Title V Permit
20. Upon reintroducing crude oil/water to the vessel, the vapor control system shall be reactivated and pressure relief valves closed. [District Rule 2080] Federally Enforceable Through Title V Permit
21. Within 48 hours after refilling the vessel with crude oil/water, the pressure relief valves that discharge to atmosphere and hatch seals shall be inspected for leaks using EPA Method 21 and the regular maintenance and inspection program shall resume. [District Rule 2080] Federally Enforceable Through Title V Permit
22. While performing tank cleaning activities, operators may only use the following cleaning agents: 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 of VOC per liter or less. [District Rule 2201] Federally Enforceable Through Title V Permit
23. Steam cleaning shall only be allowed at locations where wastewater treatment facilities are limited, or during the months of December through March. [District Rule 2201] Federally Enforceable Through Title V Permit
24. If this tank was holding organic liquids with a TVP of 1.5 psia or greater then during sludge removal, the operator shall control emissions from the sludge receiving vessel by operating an APCO-approved vapor control device that reduces emissions of organic vapors by at least 99%. [District Rule 2201] Federally Enforceable Through Title V Permit
25. If this tank was holding organic liquids with a TVP of 1.5 psia or greater then the operator shall only transport removed sludge in closed, liquid leak-free containers. [District Rule 2201] Federally Enforceable Through Title V Permit
26. If this tank was holding organic liquids with a TVP of 1.5 psia or greater then the operator shall store removed sludge, until final disposal, in vapor leak-free containers, or in tanks complying with the vapor control requirements of District Rule 4623. Sludge that is to be used to manufacture roadmix, as defined in District Rule 2020, is not required to be stored in this manner. Roadmix manufacturing operations exempt pursuant to District Rule 2020 shall maintain documentation of their compliance with Rule 2020, and shall readily make said documentation available for District inspection upon request. [District Rules 2020 and 2201] Federally Enforceable Through Title V Permit
27. Permittee shall maintain records of each period of cleaning and maintenance when the vessel is disconnected or isolated from the vapor control system. Records shall include the date that cleaning was initiated, the date cleaning was completed, the procedure used to vent vapors prior to opening, and a description of internal and external repairs and maintenance performed. [District Rule 2080] Federally Enforceable Through Title V Permit
28. All 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
29. ATC shall be implemented concurrently with or subsequent to ATC S-1548-148-6. [District Rule 2201] Federally Enforceable Through Title V Permit

AUTHORITY TO CONSTRUCT

PERMIT NO: S-1548-476-5

ISSUANCE DATE: 06/12/2012

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

LOCATION: LIGHT OIL WESTERN STATIONARY SOURCE
CA

SECTION: 20 TOWNSHIP: 28S RANGE: 21E

EQUIPMENT DESCRIPTION:

MODIFICATION OF 55,000 GALLON (12 FT DIAMETER X 65 FT SHELL LENGTH) FREE WATER KNOCKOUT VESSEL V-201F WITH VAPOR CONTROL LISTED ON S-1548-144 (DEHY 20): CHANGE S-1548-144 VAPOR CONTROL REFERENCE TO S-1548-148

CONDITIONS

1. The facility shall submit an application to modify the Title V permit in accordance with the timeframes and procedures of District Rule 2520. [District Rule 2520] Federally Enforceable Through Title V Permit
2. Vessel is a pressure vessel as defined by District Rule 4623. [District Rule 4623] Federally Enforceable Through Title V Permit
3. The vessel shall vent only to the vapor control system listed on permit S-1548-148, except during periods of vessel cleaning or maintenance. [District Rule 2201] Federally Enforceable Through Title V Permit
4. A leak is defined as emitting greater than 10,000 ppmv with an instrument calibrated following EPA Method 21. [District Rule 2201] Federally Enforceable Through Title V Permit
5. The control valve on the common vapor-out line from the FWKO vessels shall be set at a sufficient pressure to prevent the backflow of tank vapors into the FWKO vessels. Components (valves, flanges, etc) downstream of this control valve are subject to the requirements of Rule 4623 and, therefore, any leak in excess of 10,000 ppmv detected from components downstream of the control valve shall be reported as a deviation. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
6. VOC fugitives from components in gas service shall not exceed 24.1 lb/day. [District Rule 2201] 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

DAVID WARNER, Director of Permit Services

S-1548-476-5 : Jun 22 2012 3:02PM - EDGEHILL : Joint Inspection NOT Required

Southern Regional Office • 34946 Flyover Court • Bakersfield, CA 93308 • (661) 392-5500 • Fax (661) 392-5585

7. Permittee shall maintain accurate records of fugitive inspection component counts and calculated fugitive emissions using EPA Document -453/R-95-017, Protocol for Equipment Leak Emission Estimates Table 2-4 "Oil and Gas Production Operations Average Emission Factors" (November 1995). Permittee shall make records of component counts, emission factors, and calculations readily available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit
8. All piping, fittings, and valves on this FWKO shall be inspected annually by the facility operator in accordance with EPA Method 21, with the instrument calibrated with methane, to ensure compliance with the leaking provisions of this permit. [District Rule 2201] Federally Enforceable Through Title V Permit
9. If any of the FWKO components are found to be leaking, operator shall immediately affix a tag and maintain records of liquid leak and gas leak detection readings, date/time leak was discovered, and date/time the component was repaired to a leak-free condition. [District Rule 2201] Federally Enforceable Through Title V Permit
10. Upon detection of a liquid leak, defined as a leak rate of greater than or equal to 30 drops per minute, operator shall repair the leak within 8 hours. For leaks with a liquid leak rate of between 3 and 30 drops per minute, the leaking component shall be repaired within 24 hours after detection. [District Rule 2201] Federally Enforceable Through Title V Permit
11. Comply with the following requirements to repair leaking components that have a gas leak >10,000 ppmv (measured in accordance with EPA Method 21 by a portable hydrocarbon detection instrument that is calibrated with methane):
 - a. Eliminate the leak within 8 hours after detection; or
 - b. If the leak can not be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices; and
 - c. Eliminate the leak within 48 hours after minimization; and
 - d. In no event that the total time to minimize and eliminate the leak shall exceed 56 hours after detection. [District Rule 2201] Federally Enforceable Through Title V Permit
12. If a component type for a given tank is found to leak during an annual inspection, then conduct quarterly inspections of that component type on the tank or tank system for four consecutive quarters. If a component type is found to have no leak after four consecutive quarterly inspections, then revert to annual inspections. [District Rule 2201] Federally Enforceable Through Title V Permit
13. An operator shall reinspect a component for leaks within thirty working days after the date on which the component is repaired. [District Rule 2520] Federally Enforceable Through Title V Permit
14. Leaking components directly affixed to the tank and within five feet of the tank, including but not limited to valves, flanges, connectors, that have been discovered by the operator that have been immediately tagged and repaired within the deadlines specified in the Emissions Minimization requirements, shall not constitute a violation of this rule or permit and does not have to be reported as a deviation. However, leaking components discovered during inspections by District staff that were not previously identified and/or tagged by the operator, and/or any leaks that were not repaired within deadlines specified in the Emissions Minimization requirements, shall constitute a violation of this rule or permit and does not have to be reported as a deviation. [District Rule 4623, 5.7 (Table 3)] Federally Enforceable Through Title V Permit
15. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date of leak detection, and method of detection; 3) Date and emission level of recheck after leak is repaired; 4) Method used to minimize the leak to lowest possible level within 8 hours after detection. [District Rule 2201] Federally Enforceable Through Title V Permit
16. This permit authorizes vessel 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
17. Vessel may be disconnected from vapor control system during District approved cleaning and maintenance procedures as described in this permit. [District Rule 2080] Federally Enforceable Through Title V Permit
18. Permittee shall notify the District Compliance Division at least 72 hours (notification period can be less if approved by District Compliance Division) before any vessel cleaning or maintenance which necessitates isolation from the vapor control system. [District Rule 2080] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

19. Prior to opening the vessel for cleaning or maintenance, one of the following procedures must be followed: 1) Prior to venting the vessel to the atmosphere, operate the vapor recovery system/vapor control device for at least 24 hours such that it collects the vapors; or 2) use liquid displacement, conducted using a liquid with a TVP less than 0.5 psia, or conducted by floating the oil pad off by restricting the outflow of water, such that 90% of the vessel volume is displaced; or 3) depressurize vessel to the on-site flare until the vessel reaches atmospheric pressure. [District Rule 2080] Federally Enforceable Through Title V Permit
20. Upon reintroducing crude oil/water to the vessel, the vapor control system shall be reactivated and pressure relief valves closed. [District Rule 2080] Federally Enforceable Through Title V Permit
21. Within 48 hours after refilling the vessel with crude oil/water, the pressure relief valves that discharge to atmosphere and hatch seals shall be inspected for leaks using EPA Method 21 and the regular maintenance and inspection program shall resume. [District Rule 2080] Federally Enforceable Through Title V Permit
22. While performing tank cleaning activities, operators may only use the following cleaning agents: 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 of VOC per liter or less. [District Rule 2201] Federally Enforceable Through Title V Permit
23. Steam cleaning shall only be allowed at locations where wastewater treatment facilities are limited, or during the months of December through March. [District Rule 2201] Federally Enforceable Through Title V Permit
24. If this tank was holding organic liquids with a TVP of 1.5 psia or greater then during sludge removal, the operator shall control emissions from the sludge receiving vessel by operating an APCO-approved vapor control device that reduces emissions of organic vapors by at least 99%. [District Rule 2201] Federally Enforceable Through Title V Permit
25. If this tank was holding organic liquids with a TVP of 1.5 psia or greater then the operator shall only transport removed sludge in closed, liquid leak-free containers. [District Rule 2201] Federally Enforceable Through Title V Permit
26. If this tank was holding organic liquids with a TVP of 1.5 psia or greater then the operator shall store removed sludge, until final disposal, in vapor leak-free containers, or in tanks complying with the vapor control requirements of District Rule 4623. Sludge that is to be used to manufacture roadmix, as defined in District Rule 2020, is not required to be stored in this manner. Roadmix manufacturing operations exempt pursuant to District Rule 2020 shall maintain documentation of their compliance with Rule 2020, and shall readily make said documentation available for District inspection upon request. [District Rules 2020 and 2201] Federally Enforceable Through Title V Permit
27. Permittee shall maintain records of each period of cleaning and maintenance when the vessel is disconnected or isolated from the vapor control system. Records shall include the date that cleaning was initiated, the date cleaning was completed, the procedure used to vent vapors prior to opening, and a description of internal and external repairs and maintenance performed. [District Rule 2080] Federally Enforceable Through Title V Permit
28. All 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
29. ATC shall be implemented concurrently with or subsequent to ATC S-1548-148-6. [District Rule 2201] Federally Enforceable Through Title V Permit

AUTHORITY TO CONSTRUCT

PERMIT NO: S-1548-478-4

ISSUANCE DATE: 06/12/2012

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

LOCATION: LIGHT OIL WESTERN STATIONARY SOURCE
CA

SECTION: NW20 TOWNSHIP: 28S RANGE: 21E

EQUIPMENT DESCRIPTION:

MODIFICATION OF 26,000 GALLON (10 FT DIAMETER X 40 FT SHELL LENGTH) INDUCED STATIC FLOTATION CELL V-240B VENTED TO VAPOR CONTROL SYSTEM LISTED ON S-1548-144 (DEHY 20): CHANGE S-1548-144 VAPOR CONTROL REFERENCE TO S-1548-148

CONDITIONS

1. The facility shall submit an application to modify the Title V permit in accordance with the timeframes and procedures of District Rule 2520. [District Rule 2520] Federally Enforceable Through Title V Permit
2. Tank gauging or sampling devices shall be equipped with a gas-tight cover which shall be closed at all times except during gauging or sampling. [District NSR Rule] Federally Enforceable Through Title V Permit
3. All piping valves and fittings shall be constructed and maintained in a gas tight condition, except during periods of vessel interior cleaning or inspection. A gas-tight condition is defined as a condition without a gas leak. A gas leak is defined as a reading in excess of 10,000 ppmv, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21. [District NSR Rule] Federally Enforceable Through Title V Permit
4. Vessel is a pressure vessel as defined by District Rule 4623, Section 3.20. [District Rule 4623] Federally Enforceable Through Title V Permit
5. When in service, vessel shall vent to vapor control system listed in S-1548-148 , except during periods of vessel interior cleaning. [District NSR Rule] Federally Enforceable Through Title V Permit
6. VOC emission rate from vapor control components associated with this emissions unit shall not exceed 30.0 lb/day. [District NSR Rule] Federally Enforceable Through Title V Permit

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

7. Permittee shall maintain an accurate fugitive component count and resultant emissions calculated using emission factors from U.S. EPA Publication 453/R-95-017, or other District approved factors. [District NSR Rule] Federally Enforceable Through Title V Permit
8. Except for periods of vessel cleaning or inspection, the operator shall ensure that the vapor recovery system is functional and is operating as designed at all times and shall monitor vapor recovery compressor activation and shut off manometer pressures on quarterly basis to ensure that compressor activation pressure does not exceed pressure relief valve setting. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
9. All piping, fittings, and valves directly affixed to the tank or associated with the tank vapor recovery system shall be inspected annually by the facility operator in accordance with EPA Method 21, with the instrument calibrated with methane, to ensure compliance with the provisions of this permit. If any of the tank components are found to leak during an annual inspection, the inspection frequency for that component type shall be changed from annual to quarterly. If no tank components are subsequently found to be leaking during five consecutive inspections, the inspection frequency may be changed from quarterly to annual. Components located in inaccessible (over 15 feet above ground when access is required from the ground or over 6 feet away from a platform when access is required from the platform) locations shall be inspected at least annually and components located in unsafe areas shall be inspected and repaired at the next process unit turnaround (the scheduled shutdown of a unit for maintenance and repair work). [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
10. 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, 9.4.2] Federally Enforceable Through Title V Permit
11. An operator shall reinspect 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
12. 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, 9.4.2] Federally Enforceable Through Title V Permit
13. Any component leak shall be repaired to a leak-free condition or vented to a flare satisfying the requirements of 40 CFR 60.18 or to a vapor control device that is at least 95 percent efficient as measured by EPA Method 25 within fifteen (15) calendar days of detection. The APCO may grant a ten (10) calendar day extension provided the operator demonstrates that necessary and sufficient actions are being taken to correct the leak within this time period. Any vapor control device, other than a flare, used to comply with this condition shall demonstrate at least 95% control efficiency as measured by EPA Method 25 at least annually. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
14. If the leaking component is an essential part of a critical process unit which cannot be immediately shut down for repairs, the operator shall 1) Minimize the leak within 15 calendar days; and 2) If the leak which has been minimized still exceeds the concentration allowed by this permit, the essential component shall be repaired to eliminate the leak during the next process unit turnaround, but in no case later than one year from the date of the original leak detection. A critical process unit is any process unit which would result in the automatic shutdown of other process units if it were shut down. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
15. 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, 9.4.2] Federally Enforceable Through Title V Permit
16. This permit authorizes induced static flotation unit cleaning that is not the result of breakdowns or poor maintenance as a routine maintenance activity. [District Rule 2080] Federally Enforceable Through Title V Permit
17. Vessel 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

CONDITIONS CONTINUE ON NEXT PAGE

18. Permittee shall notify the District Compliance Division at least 72 hours (notification period can be less if approved by District Compliance Division) before any vessel cleaning or maintenance which necessitates isolation from the vapor control system. [District Rule 2080] Federally Enforceable Through Title V Permit
19. Prior to opening the vessel for cleaning or maintenance, one of the following procedures must be followed: 1) Prior to venting the vessel to the atmosphere, operate the vapor recovery system/vapor control device for at least 24 hours such that it collects the vapors; or 2) use liquid displacement, conducted using a liquid with a TVP less than 0.5 psia, or conducted by floating the oil pad off by restricting the outflow of water, such that 90% of the vessel volume is displaced; or 3) depressurize vessel to the on-site flare until the vessel reaches atmospheric pressure. [District Rule 2080] Federally Enforceable Through Title V Permit
20. Upon reintroducing crude oil/water to the vessel, the vapor control system shall be reactivated and pressure relief valves closed. [District Rule 2080] Federally Enforceable Through Title V Permit
21. Within 48 hours after refilling the vessel with crude oil/water, the pressure relief valves that discharge to atmosphere and hatch seals shall be inspected for leaks using EPA Method 21 and the regular maintenance and inspection program shall resume. [District Rule 2080] Federally Enforceable Through Title V Permit
22. While performing tank cleaning activities, operators may only use the following cleaning agents: 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 of VOC per liter or less. [District Rule 2201] Federally Enforceable Through Title V Permit
23. Steam cleaning shall only be allowed at locations where wastewater treatment facilities are limited, or during the months of December through March. [District Rule 2201] Federally Enforceable Through Title V Permit
24. If this tank was holding organic liquids with a TVP of 1.5 psia or greater then during sludge removal, the operator shall control emissions from the sludge receiving vessel by operating an APCO-approved vapor control device that reduces emissions of organic vapors by at least 95%. [District Rule 2201] Federally Enforceable Through Title V Permit
25. If this tank was holding organic liquids with a TVP of 1.5 psia or greater then the operator shall only transport removed sludge in closed, liquid leak-free containers. [District Rule 2201] Federally Enforceable Through Title V Permit
26. If this tank was holding organic liquids with a TVP of 1.5 psia or greater then the operator shall store removed sludge, until final disposal, in vapor leak-free containers, or in tanks complying with the vapor control requirements of District Rule 4623. Sludge that is to be used to manufacture roadmix, as defined in District Rule 2020, is not required to be stored in this manner. Roadmix manufacturing operations exempt pursuant to District Rule 2020 shall maintain documentation of their compliance with Rule 2020, and shall readily make said documentation available for District inspection upon request. [District Rules 2020 and 2201] Federally Enforceable Through Title V Permit
27. Permittee shall maintain records of each period of cleaning and maintenance when the vessel is disconnected or isolated from the vapor control system. Records shall include the date that cleaning was initiated, the date cleaning was completed, the procedure used to vent vapors prior to opening, and a description of internal and external repairs and maintenance performed. [District Rule 2080] Federally Enforceable Through Title V Permit
28. All 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
29. ATC shall be implemented concurrently with or subsequent to ATC S-1548-148-6. [District Rule 2201] Federally Enforceable Through Title V Permit

AUTHORITY TO CONSTRUCT

PERMIT NO: S-1548-479-4

ISSUANCE DATE: 06/12/2012

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

LOCATION: LIGHT OIL WESTERN STATIONARY SOURCE
CA

SECTION: NW20 TOWNSHIP: 28S RANGE: 21E

EQUIPMENT DESCRIPTION:

MODIFICATION OF 26,000 GALLON (10 FT DIAMETER X 40 FT SHELL LENGTH) INDUCED STATIC FLOTATION CELL V-240C VENTED TO VAPOR CONTROL SYSTEM LISTED ON S-1548-144 (DEHY 20): CHANGE S-1548-144 VAPOR CONTROL REFERENCE TO S-1548-148

CONDITIONS

1. The facility shall submit an application to modify the Title V permit in accordance with the timeframes and procedures of District Rule 2520. [District Rule 2520] Federally Enforceable Through Title V Permit
2. Tank gauging or sampling devices shall be equipped with a gas-tight cover which shall be closed at all times except during gauging or sampling. [District NSR Rule] Federally Enforceable Through Title V Permit
3. All piping valves and fittings shall be constructed and maintained in a gas tight condition, except during periods of vessel interior cleaning or inspection. A gas-tight condition is defined as a condition without a gas leak. A gas leak is defined as a reading in excess of 10,000 ppmv, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21. [District NSR Rule] Federally Enforceable Through Title V Permit
4. Vessel is a pressure vessel as defined by District Rule 4623, Section 3.20. [District Rule 4623] Federally Enforceable Through Title V Permit
5. When in service, vessel shall vent to vapor control system listed in S-1548-148 , except during periods of vessel interior cleaning. [District NSR Rule] Federally Enforceable Through Title V Permit
6. VOC emission rate from vapor control components associated with this emissions unit shall not exceed 30.0 lb/day. [District NSR Rule] Federally Enforceable Through Title V Permit

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

DAVID WARNER, Director of Permit Services

S-1548-479-4 : Jun 22 2012 3:02PM -- EDGEHILR : Joint Inspection NOT Required

Southern Regional Office • 34946 Flyover Court • Bakersfield, CA 93308 • (661) 392-5500 • Fax (661) 392-5585

7. Permittee shall maintain an accurate fugitive component count and resultant emissions calculated using emission factors from U.S. EPA Publication 453/R-95-017, or other District approved factors. [District NSR Rule] Federally Enforceable Through Title V Permit
8. Except for periods of vessel cleaning or inspection, the operator shall ensure that the vapor recovery system is functional and is operating as designed at all times and shall monitor vapor recovery compressor activation and shut off manometer pressures on quarterly basis to ensure that compressor activation pressure does not exceed pressure relief valve setting. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
9. All piping, fittings, and valves directly affixed to the tank or associated with the tank vapor recovery system shall be inspected annually by the facility operator in accordance with EPA Method 21, with the instrument calibrated with methane, to ensure compliance with the provisions of this permit. If any of the tank components are found to leak during an annual inspection, the inspection frequency for that component type shall be changed from annual to quarterly. If no tank components are subsequently found to be leaking during five consecutive inspections, the inspection frequency may be changed from quarterly to annual. Components located in inaccessible (over 15 feet above ground when access is required from the ground or over 6 feet away from a platform when access is required from the platform) locations shall be inspected at least annually and components located in unsafe areas shall be inspected and repaired at the next process unit turnaround (the scheduled shutdown of a unit for maintenance and repair work). [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
10. 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, 9.4.2] Federally Enforceable Through Title V Permit
11. An operator shall reinspect 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
12. 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, 9.4.2] Federally Enforceable Through Title V Permit
13. Any component leak shall be repaired to a leak-free condition or vented to a flare satisfying the requirements of 40 CFR 60.18 or to a vapor control device that is at least 95 percent efficient as measured by EPA Method 25 within fifteen (15) calendar days of detection. The APCO may grant a ten (10) calendar day extension provided the operator demonstrates that necessary and sufficient actions are being taken to correct the leak within this time period. Any vapor control device, other than a flare, used to comply with this condition shall demonstrate at least 95% control efficiency as measured by EPA Method 25 at least annually. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
14. If the leaking component is an essential part of a critical process unit which cannot be immediately shut down for repairs, the operator shall 1) Minimize the leak within 15 calendar days; and 2) If the leak which has been minimized still exceeds the concentration allowed by this permit, the essential component shall be repaired to eliminate the leak during the next process unit turnaround, but in no case later than one year from the date of the original leak detection. A critical process unit is any process unit which would result in the automatic shutdown of other process units if it were shut down. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
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16. This permit authorizes induced static flotation unit cleaning that is not the result of breakdowns or poor maintenance as a routine maintenance activity. [District Rule 2080] Federally Enforceable Through Title V Permit
17. Vessel 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

CONDITIONS CONTINUE ON NEXT PAGE

18. Permittee shall notify the District Compliance Division at least 72 hours (notification period can be less if approved by District Compliance Division) before any vessel cleaning or maintenance which necessitates isolation from the vapor control system. [District Rule 2080] Federally Enforceable Through Title V Permit
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20. Upon reintroducing crude oil/water to the vessel, the vapor control system shall be reactivated and pressure relief valves closed. [District Rule 2080] Federally Enforceable Through Title V Permit
21. Within 48 hours after refilling the vessel with crude oil/water, the pressure relief valves that discharge to atmosphere and hatch seals shall be inspected for leaks using EPA Method 21 and the regular maintenance and inspection program shall resume. [District Rule 2080] Federally Enforceable Through Title V Permit
22. While performing tank cleaning activities, operators may only use the following cleaning agents: 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 of VOC per liter or less. [District Rule 2201] Federally Enforceable Through Title V Permit
23. Steam cleaning shall only be allowed at locations where wastewater treatment facilities are limited, or during the months of December through March. [District Rule 2201] Federally Enforceable Through Title V Permit
24. If this tank was holding organic liquids with a TVP of 1.5 psia or greater then during sludge removal, the operator shall control emissions from the sludge receiving vessel by operating an APCO-approved vapor control device that reduces emissions of organic vapors by at least 95%. [District Rule 2201] Federally Enforceable Through Title V Permit
25. If this tank was holding organic liquids with a TVP of 1.5 psia or greater then the operator shall only transport removed sludge in closed, liquid leak-free containers. [District Rule 2201] Federally Enforceable Through Title V Permit
26. If this tank was holding organic liquids with a TVP of 1.5 psia or greater then the operator shall store removed sludge, until final disposal, in vapor leak-free containers, or in tanks complying with the vapor control requirements of District Rule 4623. Sludge that is to be used to manufacture roadmix, as defined in District Rule 2020, is not required to be stored in this manner. Roadmix manufacturing operations exempt pursuant to District Rule 2020 shall maintain documentation of their compliance with Rule 2020, and shall readily make said documentation available for District inspection upon request. [District Rules 2020 and 2201] Federally Enforceable Through Title V Permit
27. Permittee shall maintain records of each period of cleaning and maintenance when the vessel is disconnected or isolated from the vapor control system. Records shall include the date that cleaning was initiated, the date cleaning was completed, the procedure used to vent vapors prior to opening, and a description of internal and external repairs and maintenance performed. [District Rule 2080] Federally Enforceable Through Title V Permit
28. All 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
29. ATC shall be implemented concurrently with or subsequent to ATC S-1548-148-6. [District Rule 2201] Federally Enforceable Through Title V Permit

AUTHORITY TO CONSTRUCT

PERMIT NO: S-1548-480-4

ISSUANCE DATE: 06/12/2012

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

LOCATION: LIGHT OIL WESTERN STATIONARY SOURCE
CA

SECTION: NW20 TOWNSHIP: 28S RANGE: 21E

EQUIPMENT DESCRIPTION:

MODIFICATION OF 26,000 GALLON (10 FT DIAMETER X 40 FT SHELL LENGTH) INDUCED STATIC FLOTATION CELL V-240D VENTED TO VAPOR CONTROL SYSTEM LISTED ON S-1548-144 (DEHY 20): CHANGE S-1548-144 VAPOR CONTROL REFERENCE TO S-1548-148

CONDITIONS

1. The facility shall submit an application to modify the Title V permit in accordance with the timeframes and procedures of District Rule 2520. [District Rule 2520] Federally Enforceable Through Title V Permit
2. Tank gauging or sampling devices shall be equipped with a gas-tight cover which shall be closed at all times except during gauging or sampling. [District NSR Rule] Federally Enforceable Through Title V Permit
3. All piping valves and fittings shall be constructed and maintained in a gas tight condition, except during periods of vessel interior cleaning or inspection. A gas-tight condition is defined as a condition without a gas leak. A gas leak is defined as a reading in excess of 10,000 ppmv, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21. [District NSR Rule] Federally Enforceable Through Title V Permit
4. Vessel is a pressure vessel as defined by District Rule 4623, Section 3.20. [District Rule 4623] Federally Enforceable Through Title V Permit
5. When in service, vessel shall vent to vapor control system listed in S-1548-148 , except during periods of vessel interior cleaning. [District NSR Rule] Federally Enforceable Through Title V Permit
6. VOC emission rate from vapor control components associated with this emissions unit shall not exceed 30.0 lb/day. [District NSR Rule] Federally Enforceable Through Title V Permit

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

DAVID WARNER, Director of Permit Services

S-1548-480-4 : Jun 22 2012 3:03PM -- EDGEHILR : Joint Inspection NOT Required

Southern Regional Office • 34946 Flyover Court • Bakersfield, CA 93308 • (661) 392-5500 • Fax (661) 392-5585

7. Permittee shall maintain an accurate fugitive component count and resultant emissions calculated using emission factors from U.S. EPA Publication 453/R-95-017, or other District approved factors. [District NSR Rule] Federally Enforceable Through Title V Permit
8. Except for periods of vessel cleaning or inspection, the operator shall ensure that the vapor recovery system is functional and is operating as designed at all times and shall monitor vapor recovery compressor activation and shut off manometer pressures on quarterly basis to ensure that compressor activation pressure does not exceed pressure relief valve setting. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
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11. An operator shall reinspect 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
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16. This permit authorizes induced static flotation unit cleaning that is not the result of breakdowns or poor maintenance as a routine maintenance activity. [District Rule 2080] Federally Enforceable Through Title V Permit
17. Vessel 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

CONDITIONS CONTINUE ON NEXT PAGE

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22. While performing tank cleaning activities, operators may only use the following cleaning agents: 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 of VOC per liter or less. [District Rule 2201] Federally Enforceable Through Title V Permit
23. Steam cleaning shall only be allowed at locations where wastewater treatment facilities are limited, or during the months of December through March. [District Rule 2201] Federally Enforceable Through Title V Permit
24. If this tank was holding organic liquids with a TVP of 1.5 psia or greater then during sludge removal, the operator shall control emissions from the sludge receiving vessel by operating an APCO-approved vapor control device that reduces emissions of organic vapors by at least 95%. [District Rule 2201] Federally Enforceable Through Title V Permit
25. If this tank was holding organic liquids with a TVP of 1.5 psia or greater then the operator shall only transport removed sludge in closed, liquid leak-free containers. [District Rule 2201] Federally Enforceable Through Title V Permit
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28. All 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
29. ATC shall be implemented concurrently with or subsequent to ATC S-1548-148-6. [District Rule 2201] Federally Enforceable Through Title V Permit

AUTHORITY TO CONSTRUCT

PERMIT NO: S-1548-481-4

ISSUANCE DATE: 06/12/2012

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

LOCATION: LIGHT OIL WESTERN STATIONARY SOURCE
CA

SECTION: NW20 TOWNSHIP: 28S RANGE: 21E

EQUIPMENT DESCRIPTION:

MODIFICATION OF 26,000 GALLON (10 FT DIAMETER X 40 FT SHELL LENGTH) INDUCED STATIC FLOTATION CELL V-240E VENTED TO VAPOR CONTROL SYSTEM LISTED ON S-1548-144 (DEHY 20): CHANGE S-1548-144 VAPOR CONTROL REFERENCE TO S-1548-148

CONDITIONS

1. The facility shall submit an application to modify the Title V permit in accordance with the timeframes and procedures of District Rule 2520. [District Rule 2520] Federally Enforceable Through Title V Permit
2. Tank gauging or sampling devices shall be equipped with a gas-tight cover which shall be closed at all times except during gauging or sampling. [District NSR Rule] Federally Enforceable Through Title V Permit
3. All piping valves and fittings shall be constructed and maintained in a gas tight condition, except during periods of vessel interior cleaning or inspection. A gas-tight condition is defined as a condition without a gas leak. A gas leak is defined as a reading in excess of 10,000 ppmv, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21. [District NSR Rule] Federally Enforceable Through Title V Permit
4. Vessel is a pressure vessel as defined by District Rule 4623, Section 3.20. [District Rule 4623] Federally Enforceable Through Title V Permit
5. When in service, vessel shall vent to vapor control system listed in S-1548-148 , except during periods of vessel interior cleaning. [District NSR Rule] Federally Enforceable Through Title V Permit
6. VOC emission rate from vapor control components associated with this emissions unit shall not exceed 30.0 lb/day. [District NSR Rule] Federally Enforceable Through Title V Permit

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

DAVID WARNER, Director of Permit Services

S-1548-481-4 : Jun 22 2012 3:03PM -- EDGEHILR : Joint Inspection NOT Required

7. Permittee shall maintain an accurate fugitive component count and resultant emissions calculated using emission factors from U.S. EPA Publication 453/R-95-017, or other District approved factors. [District NSR Rule] Federally Enforceable Through Title V Permit
8. Except for periods of vessel cleaning or inspection, the operator shall ensure that the vapor recovery system is functional and is operating as designed at all times and shall monitor vapor recovery compressor activation and shut off manometer pressures on quarterly basis to ensure that compressor activation pressure does not exceed pressure relief valve setting. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
9. All piping, fittings, and valves directly affixed to the tank or associated with the tank vapor recovery system shall be inspected annually by the facility operator in accordance with EPA Method 21, with the instrument calibrated with methane, to ensure compliance with the provisions of this permit. If any of the tank components are found to leak during an annual inspection, the inspection frequency for that component type shall be changed from annual to quarterly. If no tank components are subsequently found to be leaking during five consecutive inspections, the inspection frequency may be changed from quarterly to annual. Components located in inaccessible (over 15 feet above ground when access is required from the ground or over 6 feet away from a platform when access is required from the platform) locations shall be inspected at least annually and components located in unsafe areas shall be inspected and repaired at the next process unit turnaround (the scheduled shutdown of a unit for maintenance and repair work). [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
10. 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, 9.4.2] Federally Enforceable Through Title V Permit
11. An operator shall reinspect 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
12. 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, 9.4.2] Federally Enforceable Through Title V Permit
13. Any component leak shall be repaired to a leak-free condition or vented to a flare satisfying the requirements of 40 CFR 60.18 or to a vapor control device that is at least 95 percent efficient as measured by EPA Method 25 within fifteen (15) calendar days of detection. The APCO may grant a ten (10) calendar day extension provided the operator demonstrates that necessary and sufficient actions are being taken to correct the leak within this time period. Any vapor control device, other than a flare, used to comply with this condition shall demonstrate at least 95% control efficiency as measured by EPA Method 25 at least annually. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
14. If the leaking component is an essential part of a critical process unit which cannot be immediately shut down for repairs, the operator shall 1) Minimize the leak within 15 calendar days; and 2) If the leak which has been minimized still exceeds the concentration allowed by this permit, the essential component shall be repaired to eliminate the leak during the next process unit turnaround, but in no case later than one year from the date of the original leak detection. A critical process unit is any process unit which would result in the automatic shutdown of other process units if it were shut down. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
15. 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, 9.4.2] Federally Enforceable Through Title V Permit
16. This permit authorizes induced static flotation unit cleaning that is not the result of breakdowns or poor maintenance as a routine maintenance activity. [District Rule 2080] Federally Enforceable Through Title V Permit
17. Vessel 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

CONDITIONS CONTINUE ON NEXT PAGE

18. Permittee shall notify the District Compliance Division at least 72 hours (notification period can be less if approved by District Compliance Division) before any vessel cleaning or maintenance which necessitates isolation from the vapor control system. [District Rule 2080] Federally Enforceable Through Title V Permit
19. Prior to opening the vessel for cleaning or maintenance, one of the following procedures must be followed: 1) Prior to venting the vessel to the atmosphere, operate the vapor recovery system/vapor control device for at least 24 hours such that it collects the vapors; or 2) use liquid displacement, conducted using a liquid with a TVP less than 0.5 psia, or conducted by floating the oil pad off by restricting the outflow of water, such that 90% of the vessel volume is displaced; or 3) depressurize vessel to the on-site flare until the vessel reaches atmospheric pressure. [District Rule 2080] Federally Enforceable Through Title V Permit
20. Upon reintroducing crude oil/water to the vessel, the vapor control system shall be reactivated and pressure relief valves closed. [District Rule 2080] Federally Enforceable Through Title V Permit
21. Within 48 hours after refilling the vessel with crude oil/water, the pressure relief valves that discharge to atmosphere and hatch seals shall be inspected for leaks using EPA Method 21 and the regular maintenance and inspection program shall resume. [District Rule 2080] Federally Enforceable Through Title V Permit
22. While performing tank cleaning activities, operators may only use the following cleaning agents: 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 of VOC per liter or less. [District Rule 2201] Federally Enforceable Through Title V Permit
23. Steam cleaning shall only be allowed at locations where wastewater treatment facilities are limited, or during the months of December through March. [District Rule 2201] Federally Enforceable Through Title V Permit
24. If this tank was holding organic liquids with a TVP of 1.5 psia or greater then during sludge removal, the operator shall control emissions from the sludge receiving vessel by operating an APCO-approved vapor control device that reduces emissions of organic vapors by at least 95%. [District Rule 2201] Federally Enforceable Through Title V Permit
25. If this tank was holding organic liquids with a TVP of 1.5 psia or greater then the operator shall only transport removed sludge in closed, liquid leak-free containers. [District Rule 2201] Federally Enforceable Through Title V Permit
26. If this tank was holding organic liquids with a TVP of 1.5 psia or greater then the operator shall store removed sludge, until final disposal, in vapor leak-free containers, or in tanks complying with the vapor control requirements of District Rule 4623. Sludge that is to be used to manufacture roadmix, as defined in District Rule 2020, is not required to be stored in this manner. Roadmix manufacturing operations exempt pursuant to District Rule 2020 shall maintain documentation of their compliance with Rule 2020, and shall readily make said documentation available for District inspection upon request. [District Rules 2020 and 2201] Federally Enforceable Through Title V Permit
27. Permittee shall maintain records of each period of cleaning and maintenance when the vessel is disconnected or isolated from the vapor control system. Records shall include the date that cleaning was initiated, the date cleaning was completed, the procedure used to vent vapors prior to opening, and a description of internal and external repairs and maintenance performed. [District Rule 2080] Federally Enforceable Through Title V Permit
28. All 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
29. ATC shall be implemented concurrently with or subsequent to ATC S-1548-148-6. [District Rule 2201] Federally Enforceable Through Title V Permit

AUTHORITY TO CONSTRUCT

PERMIT NO: S-1548-482-5

ISSUANCE DATE: 06/12/2012

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

LOCATION: LIGHT OIL WESTERN STATIONARY SOURCE
CA

SECTION: NW20 TOWNSHIP: 28S RANGE: 21E

EQUIPMENT DESCRIPTION:

MODIFICATION OF 15,000 BBL (60.0 FT DIAMETER BY 32.0 FT SHELL HEIGHT) FILTER SURGE TANK T-220A VENTED TO SHARED VAPOR CONTROL SYSTEM LISTED ON S-1548-144 (DEHY 20): CHANGE S-1548-144 VAPOR CONTROL REFERENCE TO S-1548-148

CONDITIONS

1. The facility shall submit an application to modify the Title V permit in accordance with the timeframes and procedures of District Rule 2520. [District Rule 2520] Federally Enforceable Through Title V Permit
2. Only water with a maximum VOC content of 35 milligram/liter shall be placed or stored in this tank. [District Rule 4623] Federally Enforceable Through Title V Permit
3. VOC content of the water stored or placed in this tank shall be determined annually by sample analysis using one of the approved methods listed in Rule 1020 or other District approved method. [District Rules 1020 and 4623] Federally Enforceable Through Title V Permit
4. Tank gauging or sampling devices shall be equipped with a leak free cover which shall be closed at all times except during gauging or sampling. All piping, valves and fittings shall be constructed and maintained in a gas tight condition, except during periods of vessel interior cleaning or inspection. [District NSR Rule] Federally Enforceable Through Title V Permit
5. A gas-tight condition is defined as a condition without a gas leak. A gas leak is defined as a reading in excess of 10,000 ppmv, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21. [District NSR Rule] Federally Enforceable Through Title V Permit

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

DAVID WARNER, Director of Permit Services

S-1548-482-5 : Jun 22 2012 3:03PM -- EDGEHILR : Joint Inspection NOT Required

Southern Regional Office • 34946 Flyover Court • Bakersfield, CA 93308 • (661) 392-5500 • Fax (661) 392-5585

6. When in service, tank shall vent to vapor control system listed in S-1548-144 , except during periods of vessel interior cleaning. Prior to disconnecting the tank from the vapor control system, operator shall drain all liquid from the tank to the maximum extent feasible and shall operate the vapor control system for 24 hours. The vapor control system connection(s) shall be blinded off when disconnected from the tank. [District NSR Rule] Federally Enforceable Through Title V Permit
7. VOC emission rate from components in gas and light crude oil service associated with this emissions unit shall be less than 7.1 lb/day. [District NSR Rule] Federally Enforceable Through Title V Permit
8. Permittee shall maintain an accurate fugitive component count and resultant emissions calculated using emission factors from EPA Document 453/R-95-017, Protocol for Equipment Leak Emissions Estimates. [District NSR Rule] Federally Enforceable Through Title V Permit
9. All piping, fittings, and valves directly affixed to the tank or associated with the tank vapor recovery system shall be inspected annually by the facility operator in accordance with EPA Method 21, with the instrument calibrated with methane, to ensure compliance with the provisions of this permit. If any of the tank components are found to leak during an annual inspection, the inspection frequency for that component type shall be changed from annual to quarterly. If no tank components are subsequently found to be leaking during five consecutive inspections, the inspection frequency may be changed from quarterly to annual. Components located in inaccessible (over 15 feet above ground when access is required from the ground or over 6 feet away from a platform when access is required from the platform) locations shall be inspected at least annually and components located in unsafe areas shall be inspected and repaired at the next process unit turnaround (the scheduled shutdown of a unit for maintenance and repair work). [District NSR Rule] Federally Enforceable Through Title V Permit
10. The facility operator upon detection of a component having a reading greater than 10,000 ppmv shall record the reading for that component and affix a weatherproof readily visible tag bearing the date on which the reading is detected. The tag shall remain in place until the component is repaired, reinspected and found to be in compliance with the requirements of this permit. [District NSR Rule] Federally Enforceable Through Title V Permit
11. An operator shall reinspect a component for leaks within thirty working days after the date on which the component is repaired. [District NSR Rule] Federally Enforceable Through Title V Permit
12. Emissions from components which have been tagged by the facility operator for repair within 15 calendar days or which have been repaired and are awaiting re-inspection shall not be in violation of this permit. [District NSR Rule] Federally Enforceable Through Title V Permit
13. Any component leak shall be repaired to a leak-free condition or vented to a flare satisfying the requirements of 40 CFR 60.18 or to a vapor control device that is at least 95 percent efficient as measured by EPA Method 25 within fifteen (15) calendar days of detection. The APCO may grant a ten (10) calendar day extension provided the operator demonstrates that necessary and sufficient actions are being taken to correct the leak within this time period. Any vapor control device, other than a flare, used to comply with this condition shall demonstrate at least 95% control efficiency as measured by EPA Method 25 at least annually. [District NSR Rule] Federally Enforceable Through Title V Permit
14. If the leaking component is an essential part of a critical process unit which cannot be immediately shut down for repairs, the operator shall 1) Minimize the leak within 15 calendar days; and 2) If the leak which has been minimized still exceeds the concentration allowed by this permit, the essential component shall be repaired to eliminate the leak during the next process unit turnaround, but in no case later than one year from the date of the original leak detection. A critical process unit is any process unit which would result in the automatic shutdown of other process units if it were shut down. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
15. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Leak rate in ppmv; 3) Date of leak detection, and method of detection; 3) Date and emission level of recheck after leak is repaired; 4) Identification and location of essential parts of critical process units found leaking that cannot be repaired until the next process unit turnaround; and 5) Method used to minimize the leak from essential parts of critical process units which cannot be repaired until the next process unit turnaround. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
16. 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

CONDITIONS CONTINUE ON NEXT PAGE

17. Permittee shall conduct tank cleaning and maintenance operations in accordance with District approved procedure as described in this permit. [District Rule 2080] Federally Enforceable Through Title V Permit
18. 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
19. Permittee shall notify the District Compliance division at least 48 hours before tank cleaning and vapor control system disconnection and within 72 hours after returning the tank to service. [District Rule 2080] Federally Enforceable Through Title V Permit
20. Prior to opening the tank to allow tank cleaning one of the following options must be followed: 1) operate the vapor control system for at least 24 hours after all the liquid in the tank has been drained to the maximum extent feasible, 2) displace vapors floating the oil pad off with water such that 90% of the tank liquid capacity is displaced, 3) vent the tank to the vapor control system until the vapor concentration is less than 10% of the lower explosive limit (LEL) or 5,000 ppmv whichever is less; or 4) vent the tank to the vapor control system for a length of time determined by the following relationship: $t = 2.3 V/Q$, where t = time, V = tank volume (cubic feet), and Q = flow rate to the vapor control system as determined using appropriate engineering calculations. [District Rule 2080] Federally Enforceable Through Title V Permit
21. The tank shall be cleaned using water, hot water, solvents with an initial boiling point of greater than 302 F, solvents with a vapor pressure of less than 0.5 psia, or solvents with 50 grams VOC per liter or less. Sediment may be used for road mix as allowed by Section 6.17 of District Rule 2020. Steam cleaning shall be allowed only during December through March, or at locations where wastewater treatment facilities are limited. [District Rule 2080] Federally Enforceable Through Title V Permit
22. Prior to reintroducing crude oil/water to the tank, the tank shall be filled to the maximum possible level with water or an organic liquid with a TVP less than 0.5 psia, the tank vapor control system shall be reactivated, and the liquid level shall be adjusted as necessary. Pressure/relief valve shall not open during filling of the tank. [District Rule 2080] Federally Enforceable Through Title V Permit
23. Within 48 hours after refilling the tank with crude oil/water, the pressure relief valve seats and hatch seals shall be inspected for leaks using EPA method 21 and the regular tank maintenance and inspection program shall resume. [District Rule 2080] Federally Enforceable Through Title V Permit
24. Permittee shall maintain records of each period of cleaning and maintenance when the tank is disconnected or isolated from the vapor control system. Records shall include the date that tank cleaning was initiated, the date tank cleaning was completed, the method of tank cleaning used, and a description of internal and external tank repairs and maintenance performed. [District Rule 2080] Federally Enforceable Through Title V Permit
25. Permittee shall maintain a record of the lab analysis, sampling date and VOC content of the water in milligrams per liter. [District Rule 2080] Federally Enforceable Through Title V Permit
26. All records shall be maintained and retained on the premises for a period of at least five years and made available for District inspection upon request. [District Rule 1070] Federally Enforceable Through Title V Permit
27. ATC shall be implemented concurrently with or subsequent to ATC S-1548-148-6. [District Rule 2201] Federally Enforceable Through Title V Permit

AUTHORITY TO CONSTRUCT

PERMIT NO: S-1548-483-5

ISSUANCE DATE: 06/12/2012

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

LOCATION: LIGHT OIL WESTERN STATIONARY SOURCE
CA

SECTION: NW20 TOWNSHIP: 28S RANGE: 21E

EQUIPMENT DESCRIPTION:

MODIFICATION OF 15,000 BBL (60.0 FT DIAMETER BY 32.0 FT SHELL HEIGHT) FILTER SURGE TANK T-220B VENTED TO SHARED VAPOR CONTROL SYSTEM LISTED ON S-1548-144 (DEHY 20); CHANGE S-1548-144 VAPOR CONTROL REFERENCE TO S-1548-148

CONDITIONS

1. The facility shall submit an application to modify the Title V permit in accordance with the timeframes and procedures of District Rule 2520. [District Rule 2520] Federally Enforceable Through Title V Permit
2. Only water with a maximum VOC content of 35 milligram/liter shall be placed or stored in this tank. [District Rule 4623] Federally Enforceable Through Title V Permit
3. VOC content of the water stored or placed in this tank shall be determined annually by sample analysis using one of the approved methods listed in Rule 1020 or other District approved method. [District Rules 1020 and 4623] Federally Enforceable Through Title V Permit
4. Tank gauging or sampling devices shall be equipped with a leak free cover which shall be closed at all times except during gauging or sampling. All piping, valves and fittings shall be constructed and maintained in a leak free condition, except during periods of vessel interior cleaning or inspection. [District NSR Rule] Federally Enforceable Through Title V Permit
5. A gas-tight condition is defined as a condition without a gas leak. A gas leak is defined as a reading in excess of 10,000 ppmv, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21. [District NSR Rule] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

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Seyed Sadredin, Executive Director / APCO

DAVID WARNER, Director of Permit Services

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6. When in service, tank shall vent to vapor control system listed in S-1548-144 , except during periods of vessel interior cleaning. Prior to disconnecting the tank from the vapor control system, operator shall drain all liquid from the tank to the maximum extent feasible and shall operate the vapor control system for 24 hours. The vapor control system connection(s) shall be blinded off when disconnected from the tank. [District NSR Rule] Federally Enforceable Through Title V Permit
7. VOC emission rate from components in gas and light crude oil service associated with this emissions unit shall be less than 7.1 lb/day. [District NSR Rule] Federally Enforceable Through Title V Permit
8. Permittee shall maintain an accurate fugitive component count and resultant emissions calculated using emission factors from EPA Document 453/R-95-017, Protocol for Equipment Leak Emissions Estimates. [District NSR Rule] Federally Enforceable Through Title V Permit
9. All piping, fittings, and valves directly affixed to the tank or associated with the tank vapor recovery system shall be inspected annually by the facility operator in accordance with EPA Method 21, with the instrument calibrated with methane, to ensure compliance with the provisions of this permit. If any of the tank components are found to leak during an annual inspection, the inspection frequency for that component type shall be changed from annual to quarterly. If no tank components are subsequently found to be leaking during five consecutive inspections, the inspection frequency may be changed from quarterly to annual. Components located in inaccessible (over 15 feet above ground when access is required from the ground or over 6 feet away from a platform when access is required from the platform) locations shall be inspected at least annually and components located in unsafe areas shall be inspected and repaired at the next process unit turnaround (the scheduled shutdown of a unit for maintenance and repair work). [District NSR Rule] Federally Enforceable Through Title V Permit
10. The facility operator upon detection of a component having a reading greater than 10,000 ppmv shall record the reading for that component and affix a weatherproof readily visible tag bearing the date on which the reading is detected. The tag shall remain in place until the component is repaired, reinspected and found to be in compliance with the requirements of this permit. [District NSR Rule] Federally Enforceable Through Title V Permit
11. An operator shall reinspect a component for leaks within thirty working days after the date on which the component is repaired. [District NSR Rule] Federally Enforceable Through Title V Permit
12. Emissions from components which have been tagged by the facility operator for repair within 15 calendar days or which have been repaired and are awaiting re-inspection shall not be in violation of this permit. [District NSR Rule] Federally Enforceable Through Title V Permit
13. Any component leak shall be repaired to a leak-free condition or vented to a flare satisfying the requirements of 40 CFR 60.18 or to a vapor control device that is at least 95 percent efficient as measured by EPA Method 25 within fifteen (15) calendar days of detection. The APCO may grant a ten (10) calendar day extension provided the operator demonstrates that necessary and sufficient actions are being taken to correct the leak within this time period. Any vapor control device, other than a flare, used to comply with this condition shall demonstrate at least 95% control efficiency as measured by EPA Method 25 at least annually. [District NSR Rule] Federally Enforceable Through Title V Permit
14. If the leaking component is an essential part of a critical process unit which cannot be immediately shut down for repairs, the operator shall 1) Minimize the leak within 15 calendar days; and 2) If the leak which has been minimized still exceeds the concentration allowed by this permit, the essential component shall be repaired to eliminate the leak during the next process unit turnaround, but in no case later than one year from the date of the original leak detection. A critical process unit is any process unit which would result in the automatic shutdown of other process units if it were shut down. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
15. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Leak rate in ppmv; 3) Date of leak detection, and method of detection; 3) Date and emission level of recheck after leak is repaired; 4) Identification and location of essential parts of critical process units found leaking that cannot be repaired until the next process unit turnaround; and 5) Method used to minimize the leak from essential parts of critical process units which cannot be repaired until the next process unit turnaround. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
16. 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

CONDITIONS CONTINUE ON NEXT PAGE

17. Permittee shall conduct tank cleaning and maintenance operations in accordance with District approved procedure as described in this permit. [District Rule 2080] Federally Enforceable Through Title V Permit
18. 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
19. Permittee shall notify the District Compliance division at least 48 hours before tank cleaning and vapor control system disconnection and within 72 hours after returning the tank to service. [District Rule 2080] Federally Enforceable Through Title V Permit
20. Prior to opening the tank to allow tank cleaning one of the following options must be followed: 1) operate the vapor control system for at least 24 hours after all the liquid in the tank has been drained to the maximum extent feasible, 2) displace vapors floating the oil pad off with water such that 90% of the tank liquid capacity is displaced, 3) vent the tank to the vapor control system until the vapor concentration is less than 10% of the lower explosive limit (LEL) or 5,000 ppmv whichever is less; or 4) vent the tank to the vapor control system for a length of time determined by the following relationship: $t = 2.3 V/Q$, where t = time, V = tank volume (cubic feet), and Q = flow rate to the vapor control system as determined using appropriate engineering calculations. [District Rule 2080] Federally Enforceable Through Title V Permit
21. The tank shall be cleaned using water, hot water, solvents with an initial boiling point of greater than 302 F, solvents with a vapor pressure of less than 0.5 psia, or solvents with 50 grams VOC per liter or less. Sediment may be used for road mix as allowed by Section 6.17 of District Rule 2020. Steam cleaning shall be allowed only during December through March, or at locations where wastewater treatment facilities are limited. [District Rule 2080] Federally Enforceable Through Title V Permit
22. Prior to reintroducing crude oil/water to the tank, the tank shall be filled to the maximum possible level with water or an organic liquid with a TVP less than 0.5 psia, the tank vapor control system shall be reactivated, and the liquid level shall be adjusted as necessary. Pressure/relief valve shall not open during filling of the tank. [District Rule 2080] Federally Enforceable Through Title V Permit
23. Within 48 hours after refilling the tank with crude oil/water, the pressure relief valve seats and hatch seals shall be inspected for leaks using EPA method 21 and the regular tank maintenance and inspection program shall resume. [District Rule 2080] Federally Enforceable Through Title V Permit
24. Permittee shall maintain records of each period of cleaning and maintenance when the tank is disconnected or isolated from the vapor control system. Records shall include the date that tank cleaning was initiated, the date tank cleaning was completed, the method of tank cleaning used, and a description of internal and external tank repairs and maintenance performed. [District Rule 2080] Federally Enforceable Through Title V Permit
25. Permittee shall maintain a record of the lab analysis, sampling date and VOC content of the water in milligrams per liter. [District Rule 2080] Federally Enforceable Through Title V Permit
26. All records shall be maintained and retained on the premises for a period of at least five years and made available for District inspection upon request. [District Rule 1070] Federally Enforceable Through Title V Permit
27. ATC shall be implemented concurrently with or subsequent to ATC S-1548-148-6. [District Rule 2201] Federally Enforceable Through Title V Permit