



San Joaquin Valley

AIR POLLUTION CONTROL DISTRICT



HEALTHY AIR LIVING

APR 01 2014

Shams Hasan
E&B Natural Resources
34740 Merced Avenue
Bakersfield, CA 93908

RE Notice of Final Action - Authority to Construct
Facility Number S-4034
Project Number S-1134445

Dear Mr Hasan

The Air Pollution Control Officer has issued the Authority to Construct permits to E&B Natural Resources for installing vapor control on four crude oil storage tanks and transferring the location of one crude oil storage tank, at various locations within the Kern County Light Oil Western stationary source. Enclosed are the Authority to Construct permits and a copy of the notice of final action to be published approximately three days from the date of this letter.

Notice of the District's preliminary decision to issue the Authority to Construct permits was published on February 2, 2014. The District's analysis of the proposal was also sent to CARB on January 31, 2014. No comments were received following the District's preliminary decision on this project.

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

Sincerely,

David Warner
Director of Permit Services

DW SDD/st

Enclosures

cc Mike Tollstrup CARB (w/enclosure) via email
cc Gerardo C. Rios, EPA (w/enclosure) via email

Seyed Sadredin
Executive Director/Air Pollution Control Officer

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

Central Region (Main Office)
1990 E. Gettysburg Avenue
Fresno CA 93726 0244
Tel (559) 230 6000 FAX (559) 230 6061

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



San Joaquin Valley
AIR POLLUTION CONTROL DISTRICT


HEALTHY AIR LIVING

AUTHORITY TO CONSTRUCT

PERMIT NO S-4034-13 3

ISSUANCE DATE 03/26/2014

LEGAL OWNER OR OPERATOR E&B NATURAL RESOURCES

MAILING ADDRESS
ATT SHAMS HASAN
1600 NORRIS ROAD
BAKERSFIELD CA 93308

LOCATION LIGHT OIL WESTERN

SECTION 17 TOWNSHIP 30S RANGE 21E

EQUIPMENT DESCRIPTION

MODIFICATION OF 2000 BBL FIXED ROOF CRUDE OIL STOCK TANK #20S179 WITH P/V VALVE (AML LEASE)
INSTALL VAPOR RECOVERY SYSTEM SHARED WITH TANK S-4034 14

CONDITIONS

- 1 Components associated with vapor control system shall comply with all Rule 4409 requirements [District Rule 4409]
- 2 The tank shall be equipped with a vapor control system consisting of a closed vent system that collects all VOCs from the storage tank, and a VOC control device. The vapor control system shall be APCO-approved and maintained in leak-free condition. Vapors shall be discharged to a gas plant or sales gas pipeline [District Rules 2201 and 4623]
- 3 Except as otherwise provided in this permit, the operator shall ensure that the vapor recovery system is functional and is operating as designed at all times [District Rule 2080]
- 4 All piping, valves and fittings shall be constructed and maintained in a leak-free condition [District Rules 2201 and 4623]
- 5 A leak free condition is defined as a condition without a gas leak. A gas leak is defined as a reading in excess of 10 000 ppmv above background as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21. A reading in excess of 10 000 ppmv above background is a violation of this permit and Rule 4623 and shall be reported as a deviation [District Rules 2201 and 4623]
- 6 Any tank gauging or sampling device on a tank vented to the vapor control system shall be equipped with a leak free cover which shall be closed at all times except during gauging or sampling [District Rule 4623]

CONDITIONS CONTINUE ON NEXT PAGE

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

Sayed Sadredin, Executive Director / APCO

DAVID WARNER Director of Permit Services

S-4034-13-3 Mar 20 2014 9:18AM DAVID0806 J L p for NOT Required

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

- 7 VOC fugitive emissions from the components in gas service on tank and tank vapor collection system shall not exceed 0.9 lb/day [District Rule 2201]
- 8 Permittee shall maintain accurate component count for tank according to CAPCOA's "California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities," Table IV 2c (Feb 1999), Screening Value Range emission factors < 10,000 ppmv. Permittee shall update such records when new components are approved and installed [District Rule 2201]
- 9 All piping, fittings, and valves on this tank shall be inspected annually by the facility operator in accordance with EPA Method 21, with the instrument calibrated with methane to ensure compliance with the leaking provisions of this permit [District Rule 2201 & 4623]
- 10 Any component found to be leaking on two consecutive annual inspections is in violation of the District Rule 4623, even if it is under the voluntary inspection and maintenance program [District Rule 2201 & 4623]
- 11 Operator shall visually inspect tank shell, hatches, seals, seams, cable seals, valves, flanges, connectors, and any other piping components directly affixed to the tank and within five feet of the tank at least once per year for liquid leaks and with a portable hydrocarbon detection instrument conducted in accordance with EPA Method 21 for gas leaks. Operator shall also visually or ultrasonically inspect as appropriate, the external shells and roofs of uninsulated tanks for structural integrity annually [District Rules 2201 & 4623]
- 12 Upon detection of a liquid leak, defined as a leak rate of greater than or equal to 30 drops per minute, operator shall repair the leak within 8 hours. For leaks with a liquid leak rate of between 3 and 30 drops per minute, the leaking component shall be repaired within 24 hours after detection [District Rules 2201 & 4623]
- 13 Upon detection of a gas leak, defined as a VOC concentration of greater than 10,000 ppmv measured in accordance with EPA Method 21, operator shall take one of the following actions: 1) eliminate the leak within 8 hours after detection, or 2) if the leak cannot be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices and eliminate the leak within 48 hours after minimization. In no event shall the total time to minimize and eliminate a leak exceed 56 hours after detection [District Rules 2201 & 4623]
- 14 Components found to be leaking either liquids or gases shall be immediately affixed with a tag showing the component to be leaking. Operator shall maintain records of the liquid or gas leak detection readings, date/time the leak was discovered, and date/time the component was repaired to a leak-free condition [District Rules 2201 & 4623]
- 15 Leaking components that have been discovered by the operator that have been immediately tagged and repaired within the timeframes specified in District Rule 4623, Table 3 shall not constitute a violation of this rule. Leaking components as defined by District Rule 4623 discovered by District staff that were not previously identified and/or tagged by the operator and/or any leaks that were not repaired within the timeframes specified in District Rule 4623, Table 3 shall constitute a violation of this rule [District Rules 2201 & 4623]
- 16 If a component type for a given tank is found to leak during an annual inspection, operator shall conduct quarterly inspections of that component type on the tank or tank system for four consecutive quarters. If no components are found to leak after four consecutive quarters, the operator may revert to annual inspections [District Rules 2201 & 4623]
- 17 Any component found to be leaking on two consecutive annual inspections is in violation of this rule, even if covered under the voluntary inspection and maintenance program [District Rules 2201 & 4623]
- 18 Permittee shall notify the APCO in writing at least three (3) days prior to performing tank degassing and interior tank cleaning activities. Written notification shall include the following: 1) the Permit to Operate number and physical location of the tank being degassed, 2) the date and time that tank degassing and cleaning activities will begin, 3) the degassing method, as allowed in this permit, to be used, 4) the method to be used to clean the tank, including any solvents to be used, and 5) the method to be used to dispose of any removed sludge, including methods that will be used to control emissions from the receiving vessel and emissions during transport [District Rule 4623]

CONDITIONS CONTINUE ON NEXT PAGE

- 19 This tank shall be degassed before commencing interior cleaning by following one of the following options 1) exhausting VOCs contained in the tank vapor space to an APCO approved vapor recovery system until the organic vapor concentration is 5 000 ppmv or less, or is 10 percent or less of the lower explosion limit (LEL) whichever is less, or 2) by displacing VOCs contained in the tank vapor space to an APCO approved vapor recovery system by filling the tank with a suitable liquid until 90 percent or more of the maximum operating level of the tank is filled Suitable liquids are organic liquids having a TVP of less than 0.5 psia, water clean produced water or produced water derived from crude oil having a TVP less than 0.5 psia, or 3) by displacing VOCs contained in the tank vapor space to an APCO-approved vapor recovery system by filling the tank with a suitable gas Degassing shall continue until the operator has achieved a vapor displacement equivalent to at least 2.3 times the tank capacity Suitable gases are air nitrogen carbon dioxide, or natural gas containing less than 10 percent VOC by weight [District Rule 4623]
- 20 The permittee shall keep accurate records of the dates of inspection and monitoring and the components inspected and monitored [District Rule 2201]
- 21 During tank degassing, the operator shall discharge or displace organic vapors contained in the tank vapor space to an APCO approved vapor recovery system [District Rule 4623]
- 22 To facilitate connection to an external APCO-approved recovery system, a suitable tank fitting, such as a manway may be temporarily removed for a period of time not to exceed 1 hour [District Rule 4623]
- 23 While performing tank cleaning activities operators may only use the following cleaning agents diesel solvents with an initial boiling point of greater than 302 degrees F, solvents with a vapor pressure of less than 0.5 psia or solvents with 50 grams of VOC per liter or less [District Rule 4623]
- 24 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]
- 25 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]
- 26 Permittee shall only transport removed sludge in closed liquid leak free containers [District Rule 4623]
- 27 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]
- 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 4623]
- 29 All records required to be maintained by this permit shall be maintained for a period of at least five years and shall be made readily available for District inspection upon request [District Rules 2201 & 4623]



San Joaquin Valley
AIR POLLUTION CONTROL DISTRICT


HEALTHY AIR LIVING

AUTHORITY TO CONSTRUCT

PERMIT NO S-4034 14-4

ISSUANCE DATE 03/26/2014

LEGAL OWNER OR OPERATOR E&B NATURAL RESOURCES

MAILING ADDRESS
ATT SHAMS HASAN
1600 NORRIS ROAD
BAKERSFIELD CA 93308

LOCATION LIGHT OIL WESTERN

SECTION 17 TOWNSHIP 30S RANGE 21E

EQUIPMENT DESCRIPTION

MODIFICATION OF 2000 BBL FIXED ROOF CRUDE OIL STOCK TANK #20S180 WITH P/V VALVE AND TRUCK LOADOUT CONNECTION WITH DRY BREAK COUPLERS AND VAPOR BALANCE PIPING (AML LEASE) INSTALL VAPOR RECOVERY SYSTEM SHARED WITH TANK S-4034-13

CONDITIONS

- 1 Components associated with vapor control system shall comply with all Rule 4409 requirements [District Rule 4409]
- 2 The tank shall be equipped with a vapor control system consisting of a closed vent system that collects all VOCs from the storage tank, and a VOC control device. The vapor control system shall be APCO-approved and maintained in leak free condition. Vapors shall be discharged to a gas plant or sales gas pipeline [District Rules 2201 and 4623]
- 3 Except as otherwise provided in this permit, the operator shall ensure that the vapor recovery system is functional and is operating as designed at all times [District Rule 2080]
- 4 All piping, valves and fittings shall be constructed and maintained in a leak free condition [District Rule 2201 and 4623]
- 5 A leak-free condition is defined as a condition without a gas leak. A gas leak is defined as a reading in excess of 10 000 ppmv, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21. A reading in excess of 10 000 ppmv above background is a violation of this permit and Rule 4623 and shall be reported as a deviation [District Rules 2201 and 4623]
- 6 Any tank gauging or sampling device on a tank vented to the vapor control system shall be equipped with a leak-free cover which shall be closed at all times except during gauging or sampling [District Rule 4623]

CONDITIONS CONTINUE ON NEXT PAGE

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Sayed Sadredin Executive Director / APCO

DAVID WARNER Director of Permit Services

- 7 VOC fugitive emissions from the components in gas service on tank shall not exceed 0.4 lb/day [District Rule 2201]
- 8 Permittee shall maintain accurate component count for tank according to CAPCOA's "California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities" Table IV 2c (Feb 1999) Screening Value Range emission factors < 10,000 ppmv. Permittee shall update such records when new components are approved and installed [District Rule 2201]
- 9 All piping, fittings, and valves on this tank shall be inspected annually by the facility operator in accordance with EPA Method 21, with the instrument calibrated with methane to ensure compliance with the leaking provisions of this permit [District Rule 4623]
- 10 Any component found to be leaking on two consecutive annual inspections is in violation of the District Rule 4623 even if it is under the voluntary inspection and maintenance program [District Rule 4623]
- 11 Operator shall visually inspect tank shell, hatches, seals, seams, cable seals, valves, flanges, connectors, and any other piping components directly affixed to the tank and within five feet of the tank at least once per year for liquid leaks, and with a portable hydrocarbon detection instrument conducted in accordance with EPA Method 21 for gas leaks. Operator shall also visually or ultrasonically inspect as appropriate the external shells and roofs of uninsulated tanks for structural integrity annually [District Rules 2201 & 4623]
- 12 Upon detection of a liquid leak defined as a leak rate of greater than or equal to 30 drops per minute, operator shall repair the leak within 8 hours. For leaks with a liquid leak rate of between 3 and 30 drops per minute, the leaking component shall be repaired within 24 hours after detection [District Rules 2201 & 4623]
- 13 Upon detection of a gas leak, defined as a VOC concentration of greater than 10,000 ppmv measured in accordance with EPA Method 21, operator shall take one of the following actions: 1) eliminate the leak within 8 hours after detection, or 2) if the leak cannot be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices, and eliminate the leak within 48 hours after minimization. In no event shall the total time to minimize and eliminate a leak exceed 56 hours after detection [District Rules 2201 & 4623]
- 14 Components found to be leaking either liquids or gases shall be immediately affixed with a tag showing the component to be leaking. Operator shall maintain records of the liquid or gas leak detection readings, date/time the leak was discovered, and date/time the component was repaired to a leak-free condition [District Rules 2201 & 4623]
- 15 Leaking components that have been discovered by the operator that have been immediately tagged and repaired within the timeframes specified in District Rule 4623, Table 3 shall not constitute a violation of this rule. Leaking components as defined by District Rule 4623 discovered by District staff that were not previously identified and/or tagged by the operator, and/or any leaks that were not repaired within the timeframes specified in District Rule 4623, Table 3 shall constitute a violation of this rule [District Rules 2201 & 4623]
- 16 If a component type for a given tank is found to leak during an annual inspection, operator shall conduct quarterly inspections of that component type on the tank or tank system for four consecutive quarters. If no components are found to leak after four consecutive quarters, the operator may revert to annual inspections [District Rules 2201 & 4623]
- 17 Any component found to be leaking on two consecutive annual inspections is in violation of this rule even if covered under the voluntary inspection and maintenance program [District Rules 2201 & 4623]
- 18 Permittee shall notify the APCO in writing at least three (3) days prior to performing tank degassing and interior tank cleaning activities. Written notification shall include the following: 1) the Permit to Operate number and physical location of the tank being degassed, 2) the date and time that tank degassing and cleaning activities will begin, 3) the degassing method, as allowed in this permit, to be used, 4) the method to be used to clean the tank, including any solvents to be used, and 5) the method to be used to dispose of any removed sludge, including methods that will be used to control emissions from the receiving vessel and emissions during transport [District Rule 4623]

CONDITIONS CONTINUE ON NEXT PAGE

- 19 This tank shall be degassed before commencing interior cleaning by following one of the following options 1) exhausting VOCs contained in the tank vapor space to an APCO-approved vapor recovery system until the organic vapor concentration is 5,000 ppmv or less, or is 10 percent or less of the lower explosion limit (LEL), whichever is less, or 2) by displacing VOCs contained in the tank vapor space to an APCO-approved vapor recovery system by filling the tank with a suitable liquid until 90 percent or more of the maximum operating level of the tank is filled Suitable liquids are organic liquids having a TVP of less than 0.5 psia, water, clean produced water, or produced water derived from crude oil having a TVP less than 0.5 psia or 3) by displacing VOCs contained in the tank vapor space to an APCO-approved vapor recovery system by filling the tank with a suitable gas Degassing shall continue until the operator has achieved a vapor displacement equivalent to at least 2.3 times the tank capacity Suitable gases are air, nitrogen, carbon dioxide, or natural gas containing less than 10 percent VOC by weight [District Rule 4623]
- 20 The permittee shall keep accurate records of the dates of inspection and monitoring and the components inspected and monitored [District Rule 2201]
- 21 During tank degassing, the operator shall discharge or displace organic vapors contained in the tank vapor space to an APCO-approved vapor recovery system [District Rule 4623]
- 22 To facilitate connection to an external APCO-approved recovery system, a suitable tank fitting, such as a manway, may be temporarily removed for a period of time not to exceed 1 hour [District Rule 4623]
- 23 While performing tank cleaning activities, operators may only use the following cleaning agents: diesel solvents with an initial boiling point of greater than 302 degrees F, solvents with a vapor pressure of less than 0.5 psia, or solvents with 50 grams of VOC per liter or less [District Rule 4623]
- 24 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]
- 25 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]
- 26 Permittee shall only transport removed sludge in closed, liquid leak-free containers [District Rule 4623]
- 27 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]
- 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 4623]
- 29 All records required to be maintained by this permit shall be maintained for a period of at least five years and shall be made readily available for District inspection upon request [District Rules 2201 & 4623]



San Joaquin Valley
AIR POLLUTION CONTROL DISTRICT


HEALTHY AIR LIVING

AUTHORITY TO CONSTRUCT

PERMIT NO S-4034-15-3

ISSUANCE DATE 03/26/2014

LEGAL OWNER OR OPERATOR E&B NATURAL RESOURCES
MAILING ADDRESS ATT SHAMS HASAN
1600 NORRIS ROAD
BAKERSFIELD CA 93308

LOCATION LIGHT OIL WESTERN

SECTION 22 TOWNSHIP 30S RANGE 21E

EQUIPMENT DESCRIPTION

MODIFICATION OF 2000 BBL FIXED ROOF CRUDE OIL STOCK TANK #T-2GM20 (CWOD LEASE) INSTALL VAPOR RECOVERY SYSTEM SHARED WITH TANK S-4034-20

CONDITIONS

- 1 Components associated with vapor control system shall comply with all Rule 4409 requirements [District Rule 4409]
- 2 The tank shall be equipped with a vapor control system consisting of a closed vent system that collects all VOCs from the storage tank and a VOC control device. The vapor control system shall be APCO-approved and maintained in leak free condition. Vapors shall be discharged to a gas plant or sales gas pipeline [District Rules 2201 and 4623]
- 3 Except as otherwise provided in this permit, the operator shall ensure that the vapor recovery system is functional and is operating as designed at all times [District Rule 4623]
- 4 All piping, valves, and fittings shall be constructed and maintained in a leak free condition [District Rule 2201 and 4623]
- 5 A leak free condition is defined as a condition without a gas leak. A gas leak is defined as a reading in excess of 10,000 ppmv, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21. A reading in excess of 10,000 ppmv above background is a violation of this permit and Rule 4623 and shall be reported as a deviation [District Rules 2201 and 4623]
- 6 Any tank gauging or sampling device on a tank vented to the vapor control system shall be equipped with a leak free cover which shall be closed at all times except during gauging or sampling [District Rule 4623]

CONDITIONS CONTINUE ON NEXT PAGE

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Sayed Sadredin, Executive Director / APCO

DAVID WARNER, Director of Permit Services

Mar 26 2014 9:19AM DAVIDSOB Joint Inspection NOT Required

- 7 VOC fugitive emissions from the components in gas service on tank and tank vapor collection system shall not exceed 0.9 lb/day [District Rule 2201]
- 8 Permittee shall maintain accurate component count for tank according to CAPCOA's "California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities," Table IV-2c (Feb 1999), Screening Value Range emission factors < 10,000 ppmv. Permittee shall update such records when new components are approved and installed [District Rule 2201]
- 9 All piping, fittings and valves on this tank shall be inspected annually by the facility operator in accordance with EPA Method 21 with the instrument calibrated with methane to ensure compliance with the leaking provisions of this permit [District Rule 4623]
- 10 Any component found to be leaking on two consecutive annual inspections is in violation of the District Rule 4623 even if it is under the voluntary inspection and maintenance program [District Rule 4623]
- 11 Operator shall visually inspect tank shell, hatches, seals, seams, cable seals, valves, flanges, connectors, and any other piping components directly affixed to the tank and within five feet of the tank at least once per year for liquid leaks and with a portable hydrocarbon detection instrument conducted in accordance with EPA Method 21 for gas leaks. Operator shall also visually or ultrasonically inspect as appropriate, the external shells and roofs of uninsulated tanks for structural integrity annually [District Rules 2201 & 4623]
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CONDITIONS CONTINUE ON NEXT PAGE

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San Joaquin Valley
AIR POLLUTION CONTROL DISTRICT


HEALTHY AIR LIVING

AUTHORITY TO CONSTRUCT

PERMIT NO S 4034-20 1

ISSUANCE DATE 03/26/2014

LEGAL OWNER OR OPERATOR E&B NATURAL RESOURCES
MAILING ADDRESS ATT SHAMS HASAN
1600 NORRIS ROAD
BAKERSFIELD CA 93308

LOCATION LIGHT OIL WESTERN

SECTION NW 22 TOWNSHIP 30S RANGE 21E

EQUIPMENT DESCRIPTION

MODIFICATION OF 1000 BBL FIXED ROOF CRUDE OIL STORAGE TANK T 1GM43 WITH P/V RELIEF VALVE (F E SMITH LEASE) TRANSFER LOCATION TO NW/4 SEC 22 T30S/R21E AND INSTALL VAPOR RECOVERY SYSTEM SHARED WITH TANK 15


CONDITIONS

- 1 Components associated with vapor control system shall comply with all Rule 4409 requirements [District Rule 4409]
- 2 The tank shall be equipped with a vapor control system consisting of a closed vent system that collects all VOCs from the storage tank, and a VOC control device. The vapor control system shall be APCO-approved and maintained in leak-free condition. Vapors shall be discharged to a gas plant or sales gas pipeline [District Rules 2201 and 4623]
- 3 Except as otherwise provided in this permit, the operator shall ensure that the vapor recovery system is functional and is operating as designed at all times [District Rule 2080]
- 4 All piping, valves, and fittings shall be constructed and maintained in a leak free condition [District Rule 2201 and 4623]
- 5 A leak-free condition is defined as a condition without a gas leak. A gas leak is defined as a reading in excess of 10,000 ppmv above background as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21. A reading in excess of 10,000 ppmv above background is a violation of this permit and Rule 4623 and shall be reported as a deviation [District Rules 2201 and 4623]
- 6 Any tank gauging or sampling device on a tank vented to the vapor control system shall be equipped with a leak free cover which shall be closed at all times except during gauging or sampling [District Rule 4623]

CONDITIONS CONTINUE ON NEXT PAGE

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

Seyed Sadredin Executive Director / APCO


DAVID WARNER Director of Permit Services
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- 7 VOC fugitive emissions from the components in gas service on tank and tank vapor collection system shall not exceed 0.4 lb/day [District Rule 2201]
- 8 Permittee shall maintain accurate component count for tank according to CAPCOA's "California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities " Table IV 2c (Feb 1999) Screening Value Range emission factors < 10,000 ppmv. Permittee shall update such records when new components are approved and installed [District Rule 2201]
- 9 All piping, fittings, and valves on this tank shall be inspected annually by the facility operator in accordance with EPA Method 21, with the instrument calibrated with methane, to ensure compliance with the leaking provisions of this permit [District Rule 4623]
- 10 Any component found to be leaking on two consecutive annual inspections is in violation of the District Rule 4623 even if it is under the voluntary inspection and maintenance program [District Rule 4623]
- 11 Operator shall visually inspect tank shell, hatches, seals, seams, cable seals, valves, flanges, connectors, and any other piping components directly affixed to the tank and within five feet of the tank at least once per year for liquid leaks and with a portable hydrocarbon detection instrument conducted in accordance with EPA Method 21 for gas leaks. Operator shall also visually or ultrasonically inspect as appropriate, the external shells and roofs of uninsulated tanks for structural integrity annually [District Rules 2201 & 4623]
- 12 Upon detection of a liquid leak defined as a leak rate of greater than or equal to 30 drops per minute, operator shall repair the leak within 8 hours. For leaks with a liquid leak rate of between 3 and 30 drops per minute, the leaking component shall be repaired within 24 hours after detection [District Rules 2201 & 4623]
- 13 Upon detection of a gas leak, defined as a VOC concentration of greater than 10,000 ppmv measured in accordance with EPA Method 21, operator shall take one of the following actions: 1) eliminate the leak within 8 hours after detection, or 2) if the leak cannot be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices and eliminate the leak within 48 hours after minimization. In no event shall the total time to minimize and eliminate a leak exceed 56 hours after detection [District Rules 2201 & 4623]
- 14 Components found to be leaking either liquids or gases shall be immediately affixed with a tag showing the component to be leaking. Operator shall maintain records of the liquid or gas leak detection readings, date/time the leak was discovered, and date/time the component was repaired to a leak-free condition [District Rules 2201 & 4623]
- 15 Leaking components that have been discovered by the operator that have been immediately tagged and repaired within the timeframes specified in District Rule 4623, Table 3 shall not constitute a violation of this rule. Leaking components as defined by District Rule 4623 discovered by District staff that were not previously identified and/or tagged by the operator and/or any leaks that were not repaired within the timeframes specified in District Rule 4623, Table 3 shall constitute a violation of this rule [District Rules 2201 & 4623]
- 16 If a component type for a given tank is found to leak during an annual inspection, operator shall conduct quarterly inspections of that component type on the tank or tank system for four consecutive quarters. If no components are found to leak after four consecutive quarters, the operator may revert to annual inspections [District Rules 2201 & 4623]
- 17 Any component found to be leaking on two consecutive annual inspections is in violation of this rule, even if covered under the voluntary inspection and maintenance program [District Rules 2201 & 4623]
- 18 Permittee shall notify the APCO in writing at least three (3) days prior to performing tank degassing and interior tank cleaning activities. Written notification shall include the following: 1) the Permit to Operate number and physical location of the tank being degassed, 2) the date and time that tank degassing and cleaning activities will begin, 3) the degassing method, as allowed in this permit, to be used, 4) the method to be used to clean the tank, including any solvents to be used, and 5) the method to be used to dispose of any removed sludge, including methods that will be used to control emissions from the receiving vessel and emissions during transport [District Rule 4623]

CONDITIONS CONTINUE ON NEXT PAGE

- 19 This tank shall be degassed before commencing interior cleaning by following one of the following options 1) exhausting VOCs contained in the tank vapor space to an APCO-approved vapor recovery system until the organic vapor concentration is 5,000 ppmv or less, or is 10 percent or less of the lower explosion limit (LEL) whichever is less, or 2) by displacing VOCs contained in the tank vapor space to an APCO approved vapor recovery system by filling the tank with a suitable liquid until 90 percent or more of the maximum operating level of the tank is filled Suitable liquids are organic liquids having a TVP of less than 0.5 psia water clean produced water, or produced water derived from crude oil having a TVP less than 0.5 psia or 3) by displacing VOCs contained in the tank vapor space to an APCO-approved vapor recovery system by filling the tank with a suitable gas Degassing shall continue until the operator has achieved a vapor displacement equivalent to at least 2.3 times the tank capacity Suitable gases are air nitrogen, carbon dioxide or natural gas containing less than 10 percent VOC by weight [District Rule 4623]
- 20 The permittee shall keep accurate records of the dates of inspection and monitoring and the components inspected and monitored [District Rule 2201]
- 21 During tank degassing the operator shall discharge or displace organic vapors contained in the tank vapor space to an APCO-approved vapor recovery system [District Rule 4623]
- 22 To facilitate connection to an external APCO approved recovery system, a suitable tank fitting, such as a manway, may be temporarily removed for a period of time not to exceed 1 hour [District Rule 4623]
- 23 While performing tank cleaning activities operators may only use the following cleaning agents diesel solvents with an initial boiling point of greater than 302 degrees F solvents with a vapor pressure of less than 0.5 psia, or solvents with 50 grams of VOC per liter or less [District Rule 4623]
- 24 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]
- 25 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]
- 26 Permittee shall only transport removed sludge in closed liquid leak-free containers [District Rule 4623]
- 27 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]
- 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 4623]
- 29 All records required to be maintained by this permit shall be maintained for a period of at least five years and shall be made readily available for District inspection upon request [District Rules 2201 & 4623]



San Joaquin Valley
AIR POLLUTION CONTROL DISTRICT


HEALTHY AIR LIVING™

AUTHORITY TO CONSTRUCT

PERMIT NO S-4034-31 0

ISSUANCE DATE 03/26/2014

LEGAL OWNER OR OPERATOR E&B NATURAL RESOURCES
MAILING ADDRESS ATT SHAMS HASAN
1600 NORRIS ROAD
BAKERSFIELD CA 93308

LOCATION LIGHT OIL WESTERN

SECTION NE 23 TOWNSHIP 30S RANGE 21E

EQUIPMENT DESCRIPTION
300 BBL FIXED ROOF CRUDE OIL STOCK TANK WITH P/V RELIEF VALVE (FE SMITH LEASE)

CONDITIONS

- 1 This tank shall only store place or hold organic liquid with a true vapor pressure (TVP) of less than (insert proposed TVP) 2 0 psia under all storage conditions [District Rules 2201 & 4623]
- 2 The tank shall be equipped with a fixed roof with no holes or openings [District Rule 2201]
- 3 This tank shall be equipped with a pressure-vacuum (PV) relief valve set to within 10% of the maximum allowable working pressure of the tank, permanently labeled with the operating pressure settings, properly maintained in good operating order in accordance with the manufacturer's instructions, and shall remain in leak free condition except when the operating pressure exceeds the valve's set pressure [District Rules 2201 & 4623]
- 4 VOC emission rate from the tank shall not exceed 2 3 lb/day [District Rule 2201]
- 5 Permittee shall conduct true vapor pressure (TVP) testing of the organic liquid stored in this tank at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored in this tank in order to maintain exemption from the rule [District Rule 2201]
- 6 The TVP testing shall be conducted at actual storage temperature of the organic liquid in the tank [District Rule 2201]
- 7 Crude oil throughput shall not exceed 100 barrels per day based on a monthly average [District Rule 2201]
- 8 All piping, fittings, and valves on this tank shall be inspected annually by the facility operator in accordance with EPA Method 21, with the instrument calibrated with methane to ensure compliance with the leaking provisions of this permit [District Rule 4623]

CONDITIONS CONTINUE ON NEXT PAGE

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- 9 Any component found to be leaking on two consecutive annual inspections is in violation of the District Rule 4623 even if it is under the voluntary inspection and maintenance program [District Rule 2201]
- 10 For crude oil with an API gravity of 26 degrees or less the TVP shall be determined using the latest version of the Lawrence Berkeley National Laboratory "test Method for Vapor pressure of Reactive Organic Compounds in Heavy Crude Oil Using Gas Chromatograph" as approved by ARB and EPA [District Rule 2201 and 4623]
- 11 The API gravity of crude oil or petroleum distillate shall be determined by using ASTM Method D 287 e1 "Standard Test Method for API Gravity of Crude Petroleum and Petroleum Products (Hydrometer Method) Sampling for API gravity shall be performed in accordance with ASTM Method D 4057 "Standard Practices for Manual Sampling of Petroleum and Petroleum Products " [District Rule 4623]
- 12 Permittee shall submit the records of TVP and API gravity testing to the APCO within 45 days after the date of testing The records shall include the tank identification number Permit to Operate number, type of stored organic liquid, TVP and API gravity of the organic liquid test methods used and a copy of the test results [District Rule 2201]
- 13 Operator shall maintain an inspection log containing the following 1) Type of component leaking, 2) Date and time of leak detection and method of detection 3) Date and time of leak repair, and emission level of recheck after leak is repaired, 4) Method used to minimize the leak to lowest possible level within 8 hours after detection [District Rules 2201 & 4623]
- 14 Permittee shall maintain monthly records of average daily crude oil throughput and shall keep accurate records of each organic liquid stored in the tank, including its storage temperature TVP, and API gravity [District Rule 2201 and 4623]
- 15 All records required to be maintained by this permit shall be maintained for a period of at least five years and shall be made readily available for District inspection upon request [District Rules 2201 and 4623]