



#### AUG 2 5 2017

Mr. Tim Lovley Macpherson Oil Company P.O. Box 5368 Bakersfield, CA 93388

Re:

Notice of Final Action - Title V Permit Renewal

**District Facility # S-1703** Project # S-1160201

Dear Mr. Lovley:

The District has issued the Final Renewed Title V Permit for Macpherson Oil Company (see enclosure). The preliminary decision for this project was made on June 27, 2017. No comments were received subsequent to the District preliminary decision.

The public notice for issuance of the Final Title V Permit will be published approximately three days from the date of this letter.

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

Sincerely.

Arnaud Marjollet

Director of Permit Services

**Enclosures** 

CC: CC: Tung Le, CARB (w/enclosure) via email

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

Seyed Sadredin Executive Director/Air Pollution Control Officer





Facility # S-1703 MACPHERSON OIL CO PO BOX 5368 BAKERSFIELD, CA 93388

## Notice of Permit Issuance

The enclosed permit unit requirements authorize the operation of the equipment as described. These permit unit requirements supersede any and all previous permits for the specified equipment.\* Please insert these documents into the Facility Permit to Operate, and post copies on or near the equipment as required by District Rule 2010.

Please contact any of our Small Business Assistance (SBA) staff at the numbers below if you have any questions:

Modesto:

(209) 557-6446

Fresno:

(559) 230-5888

Bakersfield:

(661) 392-5665

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

<sup>\*</sup>Failure to comply with the permit unit requirements may result in enforcement action.





## **Permit to Operate**

FACILITY: S-1703

EXPIRATION DATE: 07/31/2022

**LEGAL OWNER OR OPERATOR:** 

MACPHERSON OIL CO

**MAILING ADDRESS:** 

PO BOX 5368

BAKERSFIELD, CA 93388

**FACILITY LOCATION:** 

HEAVY OIL CENTRAL STATIONARY SOURCE

CA

**FACILITY DESCRIPTION:** 

OIL AND NATURAL GAS PRODUCTION

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

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

Seyed Sadredin
Executive Director / APCO

Arnaud Marjollet
Director of Permit Services

**FACILITY:** S-1703-0-4 **EXPIRATION DATE:** 07/31/2022

#### **FACILITY-WIDE REQUIREMENTS**

- 1. The owner or operator shall notify the District of any breakdown condition as soon as reasonably possible, but no later than one hour after its detection, unless the owner or operator demonstrates to the District's satisfaction that the longer reporting period was necessary. [District Rule 1100, 6.1; County Rules 110 (Fresno, Stanislaus, San Joaquin); 109 (Merced); 113 (Madera); and 111 (Kern, Tulare, Kings)] Federally Enforceable Through Title V Permit
- 2. The District shall be notified in writing within ten days following the correction of any breakdown condition. The breakdown notification shall include a description of the equipment malfunction or failure, the date and cause of the initial failure, the estimated emissions in excess of those allowed, and the methods utilized to restore normal operations. [District Rule 1100, 7.0; County Rules 110 (Fresno, Stanislaus, San Joaquin); 109 (Merced); 113 (Madera); and 111 (Kern, Tulare, Kings)] Federally Enforceable Through Title V Permit
- 3. The owner or operator of any stationary source operation that emits more than 25 tons per year of nitrogen oxides or reactive organic compounds, shall provide the District annually with a written statement in such form and at such time as the District prescribes, showing actual emissions of nitrogen oxides and reactive organic compounds from that source. [District Rule 1160, 5.0] Federally Enforceable Through Title V Permit
- 4. Any person building, altering or replacing any operation, article, machine, equipment, or other contrivance, the use of which may cause the issuance of air contaminants or the use of which may eliminate, reduce, or control the issuance of air contaminants, shall first obtain an Authority to Construct (ATC) from the District unless exempted by District Rule 2020 (12/20/07). [District Rule 2010, 3.0 and 4.0; and 2020] Federally Enforceable Through Title V Permit
- 5. The permittee must comply with all conditions of the permit including permit revisions originated by the District. All terms and conditions of a permit that are required pursuant to the Clean Air Act (CAA), including provisions to limit potential to emit, are enforceable by the EPA and Citizens under the CAA. Any permit noncompliance constitutes a violation of the CAA and the District Rules and Regulations, and is grounds for enforcement action, for permit termination, revocation, reopening and reissuance, or modification; or for denial of a permit renewal application. [District Rules 2070, 7.0; 2080; and 2520, 9.8.1 and 9.13.1] Federally Enforceable Through Title V Permit
- 6. A Permit to Operate or an Authority to Construct shall not be transferred unless a new application is filed with and approved by the District. [District Rule 2031] Federally Enforceable Through Title V Permit
- 7. Every application for a permit required under Rule 2010 (12/17/92) shall be filed in a manner and form prescribed by the District. [District Rule 2040] Federally Enforceable Through Title V Permit
- 8. The operator shall maintain records of required monitoring that include: 1) the date, place, and time of sampling or measurement; 2) the date(s) analyses were performed; 3) the company or entity that performed the analysis; 4) the analytical techniques or methods used; 5) the results of such analysis; and 6) the operating conditions at the time of sampling or measurement. [District Rule 2520, 9.4.1] Federally Enforceable Through Title V Permit
- 9. The operator shall retain records of all required monitoring data and support information for a period of at least 5 years from the date of the monitoring sample, measurement, or report. Support information includes copies of all reports required by the permit and, for continuous monitoring instrumentation, all calibration and maintenance records and all original strip-chart recordings. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

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

- 10. The operator shall submit reports of any required monitoring at least every six months unless a different frequency is required by an applicable requirement. All instances of deviations from permit requirements must be clearly identified in such reports. [District Rule 2520, 9.5.1] Federally Enforceable Through Title V Permit
- 11. Deviations from permit conditions must be promptly reported, including deviations attributable to upset conditions, as defined in the permit. For the purpose of this condition, promptly means as soon as reasonably possible, but no later than 10 days after detection. The report shall include the probable cause of such deviations, and any corrective actions or preventive measures taken. All required reports must be certified by a responsible official consistent with section 10.0 of District Rule 2520 (6/21/01). [District Rules 2520, 9.5.2 and 1100, 7.0] Federally Enforceable Through Title V Permit
- 12. If for any reason a permit requirement or condition is being challenged for its constitutionality or validity by a court of competent jurisdiction, the outcome of such challenge shall not affect or invalidate the remainder of the conditions or requirements in that permit. [District Rule 2520, 9.7] Federally Enforceable Through Title V Permit
- 13. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit. [District Rule 2520, 9.8.2] Federally Enforceable Through Title V Permit
- 14. The permit may be modified, revoked, reopened and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition. [District Rule 2520, 9.8.3] Federally Enforceable Through Title V Permit
- 15. The permit does not convey any property rights of any sort, or any exclusive privilege. [District Rule 2520, 9.8.4] Federally Enforceable Through Title V Permit
- 16. The Permittee shall furnish to the District, within a reasonable time, any information that the District may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the District copies of records required to be kept by the permit or, for information claimed to be confidential, the permittee may furnish such records directly to EPA along with a claim of confidentiality. [District Rule 2520, 9.8.5] Federally Enforceable Through Title V Permit
- 17. The permittee shall pay annual permit fees and other applicable fees as prescribed in Regulation III of the District Rules and Regulations. [District Rule 2520, 9.9] Federally Enforceable Through Title V Permit
- 18. Upon presentation of appropriate credentials, a permittee shall allow an authorized representative of the District to enter the permittee's premises where a permitted source is located or emissions related activity is conducted, or where records must be kept under condition of the permit. [District Rule 2520, 9.13.2.1] Federally Enforceable Through Title V Permit
- 19. Upon presentation of appropriate credentials, a permittee shall allow an authorized representative of the District to have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit. [District Rule 2520, 9.13.2.2] Federally Enforceable Through Title V Permit
- 20. Upon presentation of appropriate credentials, a permittee shall allow an authorized representative of the District to inspect at reasonable times any facilities, equipment, practices, or operations regulated or required under the permit. [District Rule 2520, 9.13.2.3] Federally Enforceable Through Title V Permit
- 21. Upon presentation of appropriate credentials, a permittee shall allow an authorized representative of the District to sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with the permit or applicable requirements. [District Rule 2520, 9.13.2.4] Federally Enforceable Through Title V Permit
- 22. No air contaminants shall be discharged into the atmosphere for a period or periods aggregating more than 3 minutes in any one hour which is as dark or darker than Ringelmann #1 or equivalent to 20% opacity and greater, unless specifically exempted by District Rule 4101 (02/17/05). If the equipment or operation is subject to a more stringent visible emission standard as prescribed in a permit condition, the more stringent visible emission limit shall supersede this condition. [District Rule 4101, and County Rules 401 (in all eight counties in the San Joaquin Valley)] Federally Enforceable Through Title V Permit

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

- 23. No person shall manufacture, blend, repackage, supply, sell, solicit or apply any architectural coating with a VOC content in excess of the corresponding limit specified in Table of Standards 1 effective until 12/30/10 or Table of Standards 2 effective on and after 1/1/11 of District Rule 4601 (12/17/09) for use or sale within the District. [District Rule 4601, 5.1] Federally Enforceable Through Title V Permit
- 24. All VOC-containing materials subject to Rule 4601 (12/17/09) shall be stored in closed containers when not in use. [District Rule 4601, 5.4] Federally Enforceable Through Title V Permit
- 25. The permittee shall comply with all the Labeling and Test Methods requirements outlined in Rule 4601 sections 6.1 and 6.3 (12/17/09). [District Rule 4601, 6.1 and 6.3] Federally Enforceable Through Title V Permit
- 26. With each report or document submitted under a permit requirement or a request for information by the District or EPA, the permittee shall include a certification of truth, accuracy, and completeness by a responsible official. [District Rule 2520, 9.13.1 and 10.0] Federally Enforceable Through Title V Permit
- 27. If the permittee performs maintenance on, or services, repairs, or disposes of appliances, the permittee shall comply with the standards for Recycling and Emissions Reduction pursuant to 40 CFR Part 82, Subpart F. [40 CFR 82 Subpart F] Federally Enforceable Through Title V Permit
- 28. If the permittee performs service on motor vehicles when this service involves the ozone-depleting refrigerant in the motor vehicle air conditioner (MVAC), the permittee shall comply with the standards for Servicing of Motor Vehicle Air Conditioners pursuant to all the applicable requirements as specified in 40 CFR Part 82, Subpart B. [40 CFR Part 82, Subpart B] Federally Enforceable Through Title V Permit
- 29. Disturbances of soil related to any construction, demolition, excavation, extraction, or other earthmoving activities shall comply with the requirements for fugitive dust control in District Rule 8021 unless specifically exempted under Section 4.0 of Rule 8021 (8/19/2004) or Rule 8011 (8/19/2004). [District Rules 8011 and 8021] Federally Enforceable Through Title V Permit
- 30. Outdoor handling, storage and transport of any bulk material which emits dust shall comply with the requirements of District Rule 8031, unless specifically exempted under Section 4.0 of Rule 8031 (8/19/2004) or Rule 8011 (8/19/2004). [District Rules 8011 and 8031] Federally Enforceable Through Title V Permit
- 31. An owner/operator shall prevent or cleanup any carryout or trackout in accordance with the requirements of District Rule 8041 Section 5.0, unless specifically exempted under Section 4.0 of Rule 8041 (8/19/2004) or Rule 8011 (8/19/2004). [District Rules 8011 and 8041] Federally Enforceable Through Title V Permit
- 32. Whenever open areas are disturbed, or vehicles are used in open areas, the facility shall comply with the requirements of Section 5.0 of District Rule 8051, unless specifically exempted under Section 4.0 of Rule 8051 (8/19/2004) or Rule 8011 (8/19/2004). [District Rules 8011 and 8051] Federally Enforceable Through Title V Permit
- 33. Any paved road or unpaved road shall comply with the requirements of District Rule 8061 unless specifically exempted under Section 4.0 of Rule 8061 (8/19/2004) or Rule 8011 (8/19/2004). [District Rules 8011 and 8061] Federally Enforceable Through Title V Permit
- 34. Any unpaved vehicle/equipment area that anticipates more than 50 Average annual daily Trips (AADT) shall comply with the requirements of Section 5.1.1 of District Rule 8071. Any unpaved vehicle/equipment area that anticipates more than 150 vehicle trips per day (VDT) shall comply with the requirements of Section 5.1.2 of District Rule 8071. On each day that 25 or more VDT with 3 or more axles will occur on an unpaved vehicle/equipment traffic area, the owner/operator shall comply with the requirements of Section 5.1.3 of District Rule 8071. On each day when a special event will result in 1,000 or more vehicles that will travel/park on an unpaved area, the owner/operator shall comply with the requirements of Section 5.1.4 of District Rule 8071. All sources shall comply with the requirements of Section 5.0 of District Rule 8071 unless specifically exempted under Section 4.0 of Rule 8071 (9/16/2004) or Rule 8011 (8/19/2004). [District Rules 8011 and 8071] Federally Enforceable Through Title V Permit
- 35. Any owner or operator of a demolition or renovation activity, as defined in 40 CFR 61.141, shall comply with the applicable inspection, notification, removal, and disposal procedures for asbestos containing materials as specified in 40 CFR 61.145 (Standard for Demolition and Renovation). [40 CFR 61 Subpart M] Federally Enforceable Through Title V Permit

- 36. The permittee shall submit certifications of compliance with the terms and standards contained in Title V permits, including emission limits, standards and work practices, to the District and the EPA annually (or more frequently as specified in an applicable requirement or as specified by the District). The certification shall include the identification of each permit term or condition, the compliance status, whether compliance was continuous or intermittent, the methods used for determining the compliance status, and any other facts required by the District to determine the compliance status of the source. [District Rule 2520, 9.16] Federally Enforceable Through Title V Permit
- 37. The permittee shall submit an application for Title V permit renewal to the District at least six months, but not greater than 18 months, prior to the permit expiration date. [District Rule 2520, 5.2] Federally Enforceable Through Title V Permit
- 38. When a term is not defined in a Title V permit condition, the definition in the rule cited as the origin and authority for the condition in a Title V permits shall apply. [District Rule 2520, 9.1.1] Federally Enforceable Through Title V Permit
- 39. Compliance with permit conditions in the Title V permit shall be deemed in compliance with the following outdated SIP requirements: Rule 401 (Madera, Fresno, Kern, Kings, San Joaquin, Stanislaus, Tulare and Merced), Rule 110 (Fresno, Stanislaus, San Joaquin), Rule 109 (Merced), Rule 113 (Madera), Rule 111 (Kern, Tulare, Kings), and Rule 202 (Fresno, Kern, Tulare, Kings, Madera, Stanislaus, Merced, San Joaquin). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
- 40. Compliance with permit conditions in the Title V permit shall be deemed in compliance with the following applicable requirements: SJVUAPCD Rules 1100, sections 6.1 and 7.0 (12/17/92); 2010, sections 3.0 and 4.0 (12/17/92); 2031 (12/17/92); 2040 (12/17/92); 2070, section 7.0 (12/17/92); 2080 (12/17/92); 4101 (2/17/05); 4601 (12/17/09); 8021 (8/19/2004); 8031 (8/19/2004); 8041 (8/19/2004); 8051 (8/19/2004); 8061 (8/19/2004); and 8071 (9/16/2004). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
- 41. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
- 42. Should the facility, as defined in 40 CFR 68.3, become subject to Part 68, then the owner or operator shall submit a risk management plan (RMP) by the date specified in 40 CFR 68.10. The facility shall certify compliance as part of the annual certification as required by 40 CFR part 70. [40 CFR 68] Federally Enforceable Through Title V Permit
- 43. The reporting periods for the Report of Required Monitoring and the Compliance Certification Report begin every June 1, unless alternative dates are approved by the District Compliance Division. These reports are due within 30 days of the end of each reporting period. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

S-1703-0-4 : Aug 24 2017 4:50PM - VELASCOA

**PERMIT UNIT: S-1703-16-9 EXPIRATION DATE: 07/31/2022** 

SECTION: 20 TOWNSHIP: 278 RANGE: 28E

#### **EQUIPMENT DESCRIPTION:**

500 BBL GALLON FIXED ROOF GAUGE TANK T01-WMP VENTING TO VAPOR CONTROL SYSTEM SERVING TANKS S-1703-16 THROUGH '-26, INCLUDING: ONE GAS/LIQUID SEPARATOR, FIVE VAREC MODEL 2010 PRESSURE RELIEF VALVES WITH FLAME ARRESTORS, AND ONE 25 HP VAPOR RECOVERY COMPRESSOR, ROUTED TO FLARE S-1703-27 (WEST MT POSO UNIT TANK BATTERY)

## PERMIT UNIT REQUIREMENTS

- The operator shall ensure that the vapor recovery system is functional and is operating as designed at all times with the 1. exception of power curtailment events. [District Rule 2201] Federally Enforceable Through Title V Permit
- The tank shall be equipped with a vapor recovery system consisting of a closed vent system that collects all VOCs from the storage tank, and a VOC control device. The vapor recovery system shall be APCO-approved and maintained in leak-free condition. The VOC control device shall be either of the following: a vapor return or condensation system that connects to a gas pipeline distribution system, or an approved VOC destruction device the reduces the inlet VOC emissions by at least 95% by weight as determined by the test method specified in Rule 4623 Section 6.4.7. [District Rule 2201] Federally Enforceable Through Title V Permit
- This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623, 4.4] Federally Enforceable Through Title V Permit
- VOC content of vapor in the tank vapor control system shall not exceed 10% by weight. [District Rule 2201] Federally 4. Enforceable Through Title V Permit
- 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 2080] Federally Enforceable Through Title V Permit
- 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 2080] Federally Enforceable Through Title V Permit

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

Facility Name: MACPHERSON OIL CO

Location: HEAVY OIL CENTRAL STATIONARY SOURCE, CA

S-1703-16-9 : Aug 24 2017 4:50PM - VELASCOA

- 7. 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 2080] Federally Enforceable Through Title V Permit
- 8. 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 2080] Federally Enforceable Through Title V Permit
- 9. 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 2080] Federally Enforceable Through Title V Permit
- 10. Steam cleaning shall only be allowed at locations where wastewater treatment facilities are limited, or during the months of December through March. [District Rule 2080] Federally Enforceable Through Title V Permit
- 11. Operator shall conduct quarterly sampling from the tank vapor control system's common header to the vapor control system sample point to qualify for exemption from fugitive component counts for components handling fluids with less than 10% VOC by weight. If 8 consecutive quarterly samplings show compliance, then sampling frequency shall only be required annually. Such sampling is deemed representative of tanks S-1703-16,-17,-18,-19,-20,-21,-22,-23,-24,-25, and -26 and components associated with emergency flare. [District Rule 2201] Federally Enforceable Through Title V Permit
- 12. VOC content of vapor shall be determined by ASTM D1945, ASTM D1946, EPA Method 18 referenced as methane, or equivalent test method with prior District approval. [District Rule 2201] Federally Enforceable Through Title V Permit
- 13. Tanks water draw-offs except for four weir boxes and four bleed boxes shall consist only of closed piping. [District Rule 2201] Federally Enforceable Through Title V Permit
- 14. Only two weir boxes shall be in use at any one time. [District Rule 2201] Federally Enforceable Through Title V Permit
- 15. All VOC vapors shall be compressed and delivered to flare S-1703-27. [District Rule 2201] Federally Enforceable Through Title V Permit
- 16. Vapor control system compressor shall activate before tanks internal pressure exceeds pressure relief valve setting. [District Rule 2201] Federally Enforceable Through Title V Permit
- 17. Produced water shall be piped to S-91water treatment facilities. [District Rule 2201] Federally Enforceable Through Title V Permit
- 18. 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 2201] Federally Enforceable Through Title V Permit
- 19. 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) operator shall: (a) Eliminate or minimize the leak within 8 hours after detection. (b) 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 detection. (c) In no event shall the total time to minimize and eliminate the leak exceed 56 hours after detection. [District Rule 2201] Federally Enforceable Through Title V Permit
- 20. If any of the tank 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 2201] Federally Enforceable Through Title V Permit

- 21. During a District inspection, any tank, gauge hatch, sampling device, or other component that is not leak free will not be a violation of this permit provided the facility records, tags, and repairs the leak in accordance with the requirements of this permit. [District Rule 2201] Federally Enforceable Through Title V Permit
- 22. 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 4623] Federally Enforceable Through Title V Permit
- 23. 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] Federally Enforceable Through Title V Permit
- 24. 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 4623] Federally Enforceable Through Title V Permit
- 25. The TVP testing shall be conducted at actual storage temperature of the organic liquid in the tank. The permittee shall also conduct an API gravity testing. [District Rule 4623] Federally Enforceable Through Title V Permit
- 26. 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 4623] Federally Enforceable Through Title V Permit
- 27. The permittee shall maintain a written log of the date and duration of each power curtailment event [District Rule 2201] Federally Enforceable Through Title V Permit
- 28. The permittee shall keep written documentation from the power supplier indicating the date, and duration of the curtailment in addition to the beginning and end times. [District Rule 2201] Federally Enforceable Through Title V Permit
- 29. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date of leak detection, and method of detection; 3) Date and emission level of recheck after leak is repaired. [District Rule 2201] Federally Enforceable Through Title V Permit
- 30. Permittee shall maintain a written record of the VOC content of the gas sampled. [District Rule 2201] Federally Enforceable Through Title V Permit

HEAVY OIL CENTRAL STATIONARY SOURCE.CA Location:

S-1703-16-9 : Aug 24 2017 4:50PM -- VELASCOA

**PERMIT UNIT:** S-1703-17-7 **EXPIRATION DATE: 07/31/2022** 

SECTION: 20 TOWNSHIP: 27S RANGE: 28E

**EQUIPMENT DESCRIPTION:** 

500 BBL FIXED ROOF GAUGE TANK T02-WMP VENTING TO VAPOR CONTROL SYSTEM LISTED ON S-1703-16 (WEST MT POSO UNIT TANK BATTERY)

#### PERMIT UNIT REQUIREMENTS

- 1. The operator shall ensure that the vapor recovery system is functional and is operating as designed at all times with the exception of power curtailment events. [District Rule 2201] Federally Enforceable Through Title V Permit
- This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623, 4.4] Federally Enforceable Through Title V Permit
- VOC content of vapor in the tank vapor control system shall not exceed 10% by weight. [District Rule 2201] Federally 3. Enforceable Through Title V Permit
- Tanks water draw-offs except for four weir boxes and four bleed boxes shall consist only of closed piping. [District Rule 2201] Federally Enforceable Through Title V Permit
- 5. Only two weir boxes shall be in use at any one time. [District Rule 2201] Federally Enforceable Through Title V **Permit**
- Produced water shall be piped to S-91 water treatment facilities. [District Rule 2201] Federally Enforceable Through 6. Title V Permit
- 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 2080] Federally Enforceable Through Title V Permit
- 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 2080] Federally Enforceable Through Title V Permit
- 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 2080] Federally Enforceable Through Title V Permit

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

Facility Name: MACPHERSON OIL CO

Location: HEAVY OIL CENTRAL STATIONARY SOURCE, CA S-1703-17-7: Aug 24 2017 4:50PM -- VELASCOA

- 10. 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 2080] Federally Enforceable Through Title V Permit
- 11. 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 2080] Federally Enforceable Through Title V Permit
- 12. Steam cleaning shall only be allowed at locations where wastewater treatment facilities are limited, or during the months of December through March. [District Rule 2080] Federally Enforceable Through Title V Permit
- 13. 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 2201] Federally Enforceable Through Title V Permit
- 14. 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) operator shall: (a) Eliminate or minimize the leak within 8 hours after detection. (b) 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 detection. (c) In no event shall the total time to minimize and eliminate the leak exceed 56 hours after detection. [District Rule 2201] Federally Enforceable Through Title V Permit
- 15. If any of the tank 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 2201] Federally Enforceable Through Title V Permit
- 16. During a District inspection, any tank, gauge hatch, sampling device, or other component that is not leak free will not be a violation of this permit provided the facility records, tags, and repairs the leak in accordance with the requirements of this permit. [District Rule 2201] Federally Enforceable Through Title V Permit
- 17. 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 4623] Federally Enforceable Through Title V Permit
- 18. 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] Federally Enforceable Through Title V Permit
- 19. 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 4623] Federally Enforceable Through Title V Permit
- 20. The TVP testing shall be conducted at actual storage temperature of the organic liquid in the tank. The permittee shall also conduct an API gravity testing. [District Rule 4623] Federally Enforceable Through Title V Permit
- 21. 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 4623] Federally Enforceable Through Title V Permit

- 22. The permittee shall maintain a written log of the date and duration of each power curtailment event [District Rule 2201] Federally Enforceable Through Title V Permit
- 23. The permittee shall keep written documentation from the power supplier indicating the date, and duration of the curtailment in addition to the beginning and end times. [District Rule 2201] Federally Enforceable Through Title V Permit
- 24. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date of leak detection, and method of detection; 3) Date and emission level of recheck after leak is repaired. [District Rule 2201] Federally Enforceable Through Title V Permit
- 25. Permittee shall maintain a written record of the VOC content of the gas sampled. [District Rule 2201] Federally Enforceable Through Title V Permit

Location: HEAVY OIL CENTRAL STATIONARY SOURCE, CA 8-1703-17-7 : Aug 24 2017 4:50PM - VELASCOA

**PERMIT UNIT: S-1703-18-7** 

EXPIRATION DATE: 07/31/2022

SECTION: 20 TOWNSHIP: 27S RANGE: 28E

**EQUIPMENT DESCRIPTION:** 

500 BBL FIXED ROOF GAUGE TANK T03-WMP VENTING TO VAPOR CONTROL SYSTEM LISTED ON S-1703-16 (WEST MT POSO UNIT TANK BATTERY)

#### PERMIT UNIT REQUIREMENTS

- The operator shall ensure that the vapor recovery system is functional and is operating as designed at all times with the 1. exception of power curtailment events. [District Rule 2201] Federally Enforceable Through Title V Permit
- This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all 2. storage conditions. [District Rule 4623, 4.4] Federally Enforceable Through Title V Permit
- 3. VOC content of vapor in the tank vapor control system shall not exceed 10% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
- Tanks water draw-offs except for four weir boxes and four bleed boxes shall consist only of closed piping. [District Rule 2201] Federally Enforceable Through Title V Permit
- 5. Only two weir boxes shall be in use at any one time. [District Rule 2201] Federally Enforceable Through Title V Permit
- 6. Produced water shall be piped to S-91 water treatment facilities. [District Rule 2201] Federally Enforceable Through Title V Permit
- 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 2080] Federally Enforceable Through Title V Permit
- 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 2080] Federally Enforceable Through Title V Permit
- 9. 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 2080] Federally Enforceable Through Title V Permit

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

Facility Name: MACPHERSON OIL CO

HEAVY OIL CENTRAL STATIONARY SOURCE, CA Location: HEAVY OIL CEN S-1703-18-7: Aug 24 2017 4:50PM - VELASCOA

- 10. 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 2080] Federally Enforceable Through Title V Permit
- 11. 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 2080] Federally Enforceable Through Title V Permit
- 12. Steam cleaning shall only be allowed at locations where wastewater treatment facilities are limited, or during the months of December through March. [District Rule 2080] Federally Enforceable Through Title V Permit
- 13. 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 2201] Federally Enforceable Through Title V Permit
- 14. 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) operator shall: (a) Eliminate or minimize the leak within 8 hours after detection. (b) 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 detection. (c) In no event shall the total time to minimize and eliminate the leak exceed 56 hours after detection. [District Rule 2201] Federally Enforceable Through Title V Permit
- 15. If any of the tank 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 2201] Federally Enforceable Through Title V Permit
- 16. During a District inspection, any tank, gauge hatch, sampling device, or other component that is not leak free will not be a violation of this permit provided the facility records, tags, and repairs the leak in accordance with the requirements of this permit. [District Rule 2201] Federally Enforceable Through Title V Permit
- 17. 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 4623] Federally Enforceable Through Title V Permit
- 18. 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] Federally Enforceable Through Title V Permit
- 19. 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 4623] Federally Enforceable Through Title V Permit
- 20. The TVP testing shall be conducted at actual storage temperature of the organic liquid in the tank. The permittee shall also conduct an API gravity testing. [District Rule 4623] Federally Enforceable Through Title V Permit
- 21. 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 4623] Federally Enforceable Through Title V Permit

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- 22. The permittee shall maintain a written log of the date and duration of each power curtailment event [District Rule 2201] Federally Enforceable Through Title V Permit
- 23. The permittee shall keep written documentation from the power supplier indicating the date, and duration of the curtailment in addition to the beginning and end times. [District Rule 2201] Federally Enforceable Through Title V Permit
- 24. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date of leak detection, and method of detection; 3) Date and emission level of recheck after leak is repaired. [District Rule 2201] Federally Enforceable Through Title V Permit
- 25. Permittee shall maintain a written record of the VOC content of the gas sampled. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT: S-1703-19-7 EXPIRATION DATE: 07/31/2022

SECTION: 20 TOWNSHIP: 27S RANGE: 28E

**EQUIPMENT DESCRIPTION:** 

5,000 BBL FIXED ROOF FREE WATER KNOCKOUT TANK T04-WMP VENTING TO VAPOR CONTROL SYSTEM LISTED ON S-1703-16 (WEST MT POSO UNIT TANK BATTERY)

#### PERMIT UNIT REQUIREMENTS

- 1. The operator shall ensure that the vapor recovery system is functional and is operating as designed at all times with the exception of power curtailment events. [District Rule 2201] Federally Enforceable Through Title V Permit
- 2. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623, 4.4] Federally Enforceable Through Title V Permit
- 3. VOC content of vapor in the tank vapor control system shall not exceed 10% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
- 4. Tanks water draw-offs except for four weir boxes and four bleed boxes shall consist only of closed piping. [District Rule 2201] Federally Enforceable Through Title V Permit
- 5. Only two weir boxes shall be in use at any one time. [District Rule 2201] Federally Enforceable Through Title V Permit
- 6. Produced water shall be piped to S-91water treatment facilities. [District Rule 2201] Federally Enforceable Through Title V Permit
- 7. 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 2080] Federally Enforceable Through Title V Permit
- 8. 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 2080] Federally Enforceable Through Title V Permit
- 9. 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 2080] Federally Enforceable Through Title V Permit

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

Facility Name: MACPHERSON OIL CO
Location: HEAVY OIL CENTRAL STATIONARY SOL

Location: HEAVY OIL CENTRAL STATIONARY SOURCE, CA \$-1703-19-7 | Aug 24 2017 | 4:50PM - VELASCOA

- 10. 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 2080] Federally Enforceable Through Title V Permit
- 11. 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 2080] Federally Enforceable Through Title V Permit
- 12. Steam cleaning shall only be allowed at locations where wastewater treatment facilities are limited, or during the months of December through March. [District Rule 2080] Federally Enforceable Through Title V Permit
- 13. 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 2201] Federally Enforceable Through Title V Permit
- 14. 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) operator shall: (a) Eliminate or minimize the leak within 8 hours after detection. (b) 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 detection. (c) In no event shall the total time to minimize and eliminate the leak exceed 56 hours after detection. [District Rule 2201] Federally Enforceable Through Title V Permit
- 15. If any of the tank 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 2201] Federally Enforceable Through Title V Permit
- 16. During a District inspection, any tank, gauge hatch, sampling device, or other component that is not leak free will not be a violation of this permit provided the facility records, tags, and repairs the leak in accordance with the requirements of this permit. [District Rule 2201] Federally Enforceable Through Title V Permit
- 17. 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 4623] Federally Enforceable Through Title V Permit
- 18. 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] Federally Enforceable Through Title V Permit
- 19. 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 4623] Federally Enforceable Through Title V Permit
- 20. The TVP testing shall be conducted at actual storage temperature of the organic liquid in the tank. The permittee shall also conduct an API gravity testing. [District Rule 4623] Federally Enforceable Through Title V Permit
- 21. 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 4623] Federally Enforceable Through Title V Permit

- 22. The permittee shall maintain a written log of the date and duration of each power curtailment event [District Rule 2201] Federally Enforceable Through Title V Permit
- 23. The permittee shall keep written documentation from the power supplier indicating the date, and duration of the curtailment in addition to the beginning and end times. [District Rule 2201] Federally Enforceable Through Title V Permit
- 24. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date of leak detection, and method of detection; 3) Date and emission level of recheck after leak is repaired. [District Rule 2201] Federally Enforceable Through Title V Permit
- 25. Permittee shall maintain a written record of the VOC content of the gas sampled. [District Rule 2201] Federally Enforceable Through Title V Permit

**PERMIT UNIT:** S-1703-20-7 EXPIRATION DATE: 07/31/2022

SECTION: 20 TOWNSHIP: 27S RANGE: 28E

**EQUIPMENT DESCRIPTION:** 

5,000 BBL FIXED ROOF FREE WATER KNOCKOUT TANK T05-WMP VENTING TO VAPOR CONTROL SYSTEM LISTED ON S-1703-16 (WEST MT POSO UNIT TANK BATTERY)

#### PERMIT UNIT REQUIREMENTS

- 1. The operator shall ensure that the vapor recovery system is functional and is operating as designed at all times with the exception of power curtailment events. [District Rule 2201] Federally Enforceable Through Title V Permit
- 2. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623, 4.4] Federally Enforceable Through Title V Permit
- 3. VOC content of vapor in the tank vapor control system shall not exceed 10% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
- 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 2080] Federally Enforceable Through Title V Permit
- 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 2080] Federally Enforceable Through Title V Permit
- 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 2080] Federally Enforceable Through Title V Permit
- 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 2080] Federally Enforceable Through Title V Permit
- 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 2080] Federally Enforceable Through Title V Permit

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

Facility Name: MACPHERSON OIL CO

HEAVY OIL CENTRAL STATIONARY SOURCE CA Location: S-1703-20-7 : Aug 24 2017 4:50PM -- VELASCOA

- Steam cleaning shall only be allowed at locations where wastewater treatment facilities are limited, or during the months of December through March. [District Rule 2080] Federally Enforceable Through Title V Permit
- 10. Tanks water draw-offs except for four weir boxes and four bleed boxes shall consist only of closed piping. [District Rule 2201] Federally Enforceable Through Title V Permit
- 11. Only two weir boxes shall be in use at any one time. [District Rule 2201] Federally Enforceable Through Title V Permit
- 12. Produced water shall be piped to S-91 water treatment facilities. [District Rule 2201] Federally Enforceable Through Title V Permit
- 13. 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 2201] Federally Enforceable Through Title V Permit
- 14. 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) operator shall: (a) Eliminate or minimize the leak within 8 hours after detection. (b) 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 detection. (c) In no event shall the total time to minimize and eliminate the leak exceed 56 hours after detection. [District Rule 2201] Federally Enforceable Through Title V Permit
- 15. If any of the tank 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 2201] Federally Enforceable Through Title V Permit
- 16. During a District inspection, any tank, gauge hatch, sampling device, or other component that is not leak free will not be a violation of this permit provided the facility records, tags, and repairs the leak in accordance with the requirements of this permit. [District Rule 2201] Federally Enforceable Through Title V Permit
- 17. 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 4623] Federally Enforceable Through Title V Permit
- 18. 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] Federally Enforceable Through Title V Permit
- 19. 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 4623] Federally Enforceable Through Title V Permit
- 20. The TVP testing shall be conducted at actual storage temperature of the organic liquid in the tank. The permittee shall also conduct an API gravity testing. [District Rule 4623] Federally Enforceable Through Title V Permit
- 21. 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 4623] Federally Enforceable Through Title V Permit

- 22. The permittee shall maintain a written log of the date and duration of each power curtailment event [District Rule 2201] Federally Enforceable Through Title V Permit
- 23. The permittee shall keep written documentation from the power supplier indicating the date, and duration of the curtailment in addition to the beginning and end times. [District Rule 2201] Federally Enforceable Through Title V Permit
- 24. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date of leak detection, and method of detection; 3) Date and emission level of recheck after leak is repaired. [District Rule 2201] Federally Enforceable Through Title V Permit
- 25. Permittee shall maintain a written record of the VOC content of the gas sampled. [District Rule 2201] Federally Enforceable Through Title V Permit

**PERMIT UNIT:** S-1703-21-7 EXPIRATION DATE: 07/31/2022

SECTION: 20 TOWNSHIP: 27S RANGE: 28E

**EQUIPMENT DESCRIPTION:** 

3,000 BBL FIXED ROOF WASH TANK T06-WMP VENTING TO VAPOR CONTROL SYSTEM LISTED ON S-1703-16 (WEST MT POSO UNIT TANK BATTERY)

## PERMIT UNIT REQUIREMENTS

- 1. The operator shall ensure that the vapor recovery system is functional and is operating as designed at all times with the exception of power curtailment events. [District Rule 2201] Federally Enforceable Through Title V Permit
- 2. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623, 4.4] Federally Enforceable Through Title V Permit
- 3. VOC content of vapor in the tank vapor control system shall not exceed 10% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
- 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 2080] Federally Enforceable Through Title V Permit
- 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 2080] Federally Enforceable Through Title V Permit
- 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 2080] Federally Enforceable Through Title V Permit
- 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 2080] Federally Enforceable Through Title V Permit
- 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 2080] Federally Enforceable Through Title V Permit

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

Facility Name: MACPHERSON OIL CO

Location: HEAVY OIL CENTRAL STATIONARY SOURCE,CA 9-1703-21-7: Aug 24 2017 4:50PM - VELASCOA

- Tanks water draw-offs except for four weir boxes and four bleed boxes shall consist only of closed piping. [District Rule 2201] Federally Enforceable Through Title V Permit
- 10. Only two weir boxes shall be in use at any one time. [District Rule 2201] Federally Enforceable Through Title V Permit
- 11. Produced water shall be piped to S-91 water treatment facilities. [District Rule 2201] Federally Enforceable Through Title V Permit
- 12. 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 2201] Federally Enforceable Through Title V Permit
- 13. 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) operator shall: (a) Eliminate or minimize the leak within 8 hours after detection. (b) 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 detection. (c) In no event shall the total time to minimize and eliminate the leak exceed 56 hours after detection. [District Rule 2201] Federally Enforceable Through Title V Permit
- 14. If any of the tank 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 2201] Federally Enforceable Through Title V Permit
- 15. During a District inspection, any tank, gauge hatch, sampling device, or other component that is not leak free will not be a violation of this permit provided the facility records, tags, and repairs the leak in accordance with the requirements of this permit. [District Rule 2201] Federally Enforceable Through Title V Permit
- 16. 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 4623] Federally Enforceable Through Title V Permit
- 17. 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] Federally Enforceable Through Title V Permit
- 18. 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 4623] Federally Enforceable Through Title V Permit
- 19. The TVP testing shall be conducted at actual storage temperature of the organic liquid in the tank. The permittee shall also conduct an API gravity testing. [District Rule 4623] Federally Enforceable Through Title V Permit
- 20. 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 4623] Federally Enforceable Through Title V Permit
- 21. The permittee shall maintain a written log of the date and duration of each power curtailment event [District Rule 2201] Federally Enforceable Through Title V Permit

- 22. The permittee shall keep written documentation from the power supplier indicating the date, and duration of the curtailment in addition to the beginning and end times. [District Rule 2201] Federally Enforceable Through Title V **Permit**
- 23. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date of leak detection, and method of detection; 3) Date and emission level of recheck after leak is repaired. [District Rule 2201] Federally Enforceable Through Title V Permit
- 24. Permittee shall maintain a written record of the VOC content of the gas sampled. [District Rule 2201] Federally Enforceable Through Title V Permit

**PERMIT UNIT: S-1703-22-7** 

**EXPIRATION DATE: 07/31/2022** 

SECTION: 20 TOWNSHIP: 27S RANGE: 28E

**EQUIPMENT DESCRIPTION:** 

3,000 BBL FIXED ROOF WASH TANK T07-WMP VENTING TO VAPOR CONTROL SYSTEM LISTED ON S-1703-16 (WEST MT POSO UNIT TANK BATTERY)

#### PERMIT UNIT REQUIREMENTS

- 1. The operator shall ensure that the vapor recovery system is functional and is operating as designed at all times with the exception of power curtailment events. [District Rule 2201] Federally Enforceable Through Title V Permit
- This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623, 4.4] Federally Enforceable Through Title V Permit
- 3. VOC content of vapor in the tank vapor control system shall not exceed 10% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
- 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 2080] Federally Enforceable Through Title V Permit
- 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 2080] Federally Enforceable Through Title V Permit
- 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 2080] Federally Enforceable Through Title V Permit
- 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 2080] Federally Enforceable Through Title V Permit
- 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 2080] Federally Enforceable Through Title V Permit

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

Facility Name: MACPHERSON OIL CO

Location: HEAVY OIL CENTRAL STATIONARY SOURCE, CA S-1703-22-7 Aug 24 2017 4:50PM - VELASCOA

- Steam cleaning shall only be allowed at locations where wastewater treatment facilities are limited, or during the months of December through March. [District Rule 2080] Federally Enforceable Through Title V Permit
- 10. Tanks water draw-offs except for four weir boxes and four bleed boxes shall consist only of closed piping. [District Rule 2201] Federally Enforceable Through Title V Permit
- 11. Only two weir boxes shall be in use at any one time. [District Rule 2201] Federally Enforceable Through Title V Permit
- 12. Produced water shall be piped to S-91 water treatment facilities. [District Rule 2201] Federally Enforceable Through Title V Permit
- 13. 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 2201] Federally Enforceable Through Title V Permit
- 14. 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) operator shall: (a) Eliminate or minimize the leak within 8 hours after detection. (b) 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 detection. (c) In no event shall the total time to minimize and eliminate the leak exceed 56 hours after detection. [District Rule 2201] Federally Enforceable Through Title V Permit
- 15. If any of the tank 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 2201] Federally Enforceable Through Title V Permit
- 16. During a District inspection, any tank, gauge hatch, sampling device, or other component that is not leak free will not be a violation of this permit provided the facility records, tags, and repairs the leak in accordance with the requirements of this permit. [District Rule 2201] Federally Enforceable Through Title V Permit
- 17. 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 4623] Federally Enforceable Through Title V Permit
- 18. 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] Federally Enforceable Through Title V Permit
- 19. 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 4623] Federally Enforceable Through Title V Permit
- 20. The TVP testing shall be conducted at actual storage temperature of the organic liquid in the tank. The permittee shall also conduct an API gravity testing. [District Rule 4623] Federally Enforceable Through Title V Permit
- 21. 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 4623] Federally Enforceable Through Title V Permit

- 22. The permittee shall maintain a written log of the date and duration of each power curtailment event [District Rule 2201] Federally Enforceable Through Title V Permit
- 23. The permittee shall keep written documentation from the power supplier indicating the date, and duration of the curtailment in addition to the beginning and end times. [District Rule 2201] Federally Enforceable Through Title V Permit
- 24. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date of leak detection, and method of detection; 3) Date and emission level of recheck after leak is repaired. [District Rule 2201] Federally Enforceable Through Title V Permit
- 25. Permittee shall maintain a written record of the VOC content of the gas sampled. [District Rule 2201] Federally Enforceable Through Title V Permit

**PERMIT UNIT:** S-1703-23-7 EXPIRATION DATE: 07/31/2022

SECTION: 20 TOWNSHIP: 27S RANGE: 28E

**EQUIPMENT DESCRIPTION:** 

2,000 BBL FIXED ROOF STOCK TANK T08-WMP VENTING TO VAPOR CONTROL SYSTEM LISTED ON S-1703-16 (WEST MT POSO UNIT TANK BATTERY)

#### PERMIT UNIT REQUIREMENTS

- 1. The operator shall ensure that the vapor recovery system is functional and is operating as designed at all times with the exception of power curtailment events. [District Rule 2201] Federally Enforceable Through Title V Permit
- 2. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623] Federally Enforceable Through Title V Permit
- VOC content of vapor in the tank vapor control system shall not exceed 10% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
- 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 2080] Federally Enforceable Through Title V Permit
- 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 2080] Federally Enforceable Through Title V Permit
- 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 2080] Federally Enforceable Through Title V Permit
- 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 2080] Federally Enforceable Through Title V Permit
- 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 2080] Federally Enforceable Through Title V Permit

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

Facility Name: MACPHERSON OIL CO

HEAVY OIL CENTRAL STATIONARY SOURCE.CA Location:

S-1703-23-7 : Aug 24 2017 4:50PM - VELASCOA

- Steam cleaning shall only be allowed at locations where wastewater treatment facilities are limited, or during the months of December through March. [District Rule 2080] Federally Enforceable Through Title V Permit
- 10. Tanks water draw-offs except for four weir boxes and four bleed boxes shall consist only of closed piping. [District Rule 2201] Federally Enforceable Through Title V Permit
- 11. Only two weir boxes shall be in use at any one time. [District Rule 2201] Federally Enforceable Through Title V Permit
- 12. Produced water shall be piped to S-91 water treatment facilities. [District Rule 2201] Federally Enforceable Through Title V Permit
- 13. 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 2201] Federally Enforceable Through Title V Permit
- 14. 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) operator shall: (a) Eliminate or minimize the leak within 8 hours after detection. (b) 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 detection. (c) In no event shall the total time to minimize and eliminate the leak exceed 56 hours after detection. [District Rule 2201] Federally Enforceable Through Title V Permit
- 15. If any of the tank 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 2201] Federally Enforceable Through Title V Permit
- 16. During a District inspection, any tank, gauge hatch, sampling device, or other component that is not leak free will not be a violation of this permit provided the facility records, tags, and repairs the leak in accordance with the requirements of this permit. [District Rule 2201] Federally Enforceable Through Title V Permit
- 17. 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 4623] Federally Enforceable Through Title V Permit
- 18. 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] Federally Enforceable Through Title V Permit
- 19. 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 4623] Federally Enforceable Through Title V Permit
- 20. The TVP testing shall be conducted at actual storage temperature of the organic liquid in the tank. The permittee shall also conduct an API gravity testing. [District Rule 4623] Federally Enforceable Through Title V Permit
- 21. 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 4623] Federally Enforceable Through Title V Permit

Ocation: HEAVY OIL CENTRAL STATIONARY SOURCE, CA 1703-23-7: Aug 24 2017 4:50PM -- VELASCOA Location:

- 22. The permittee shall maintain a written log of the date and duration of each power curtailment event [District Rule 2201] Federally Enforceable Through Title V Permit
- 23. The permittee shall keep written documentation from the power supplier indicating the date, and duration of the curtailment in addition to the beginning and end times. [District Rule 2201] Federally Enforceable Through Title V Permit
- 24. Operator shall maintain an inspection log containing the following 1) Type of component leaking: 2) Date of leak detection, and method of detection; 3) Date and emission level of recheck after leak is repaired. [District Rule 2201] Federally Enforceable Through Title V Permit
- 25. Permittee shall maintain a written record of the VOC content of the gas sampled. [District Rule 2201] Federally Enforceable Through Title V Permit

**PERMIT UNIT:** S-1703-24-7 EXPIRATION DATE: 07/31/2022

SECTION: 20 TOWNSHIP: 27S RANGE: 28E

**EQUIPMENT DESCRIPTION:** 

2.000 BBL FIXED ROOF STOCK TANK T09-WMP VENTING TO VAPOR CONTROL SYSTEM LISTED ON S-1703-16 (WEST MT POSO UNIT TANK BATTERY)

#### PERMIT UNIT REQUIREMENTS

- 1. The operator shall ensure that the vapor recovery system is functional and is operating as designed at all times with the exception of power curtailment events. [District Rule 2201] Federally Enforceable Through Title V Permit
- 2. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623] Federally Enforceable Through Title V Permit
- VOC content of vapor in the tank vapor control system shall not exceed 10% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
- 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 2080] Federally Enforceable Through Title V Permit
- 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 2080] Federally Enforceable Through Title V Permit
- 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 2080] Federally Enforceable Through Title V Permit
- 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 2080] Federally Enforceable Through Title V Permit
- 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 2080] Federally Enforceable Through Title V Permit

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

Facility Name: MACPHERSON OIL CO

Location: HEAVY OIL CENTRAL STATIONARY SOURCE,CA S-1703-24-7: Aug 24 2017 4:51PM - VELASCOA

- 9. Steam cleaning shall only be allowed at locations where wastewater treatment facilities are limited, or during the months of December through March. [District Rule 2080] Federally Enforceable Through Title V Permit
- 10. Tanks water draw-offs except for four weir boxes and four bleed boxes shall consist only of closed piping. [District Rule 2201] Federally Enforceable Through Title V Permit
- 11. Only two weir boxes shall be in use at any one time. [District Rule 2201] Federally Enforceable Through Title V Permit
- 12. Produced water shall be piped to S-91 water treatment facilities. [District Rule 2201] Federally Enforceable Through Title V Permit
- 13. 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 2201] Federally Enforceable Through Title V Permit
- 14. 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) operator shall: (a) Eliminate or minimize the leak within 8 hours after detection. (b) 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 detection. (c) In no event shall the total time to minimize and eliminate the leak exceed 56 hours after detection. [District Rule 2201] Federally Enforceable Through Title V Permit
- 15. If any of the tank 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 2201] Federally Enforceable Through Title V Permit
- 16. During a District inspection, any tank, gauge hatch, sampling device, or other component that is not leak free will not be a violation of this permit provided the facility records, tags, and repairs the leak in accordance with the requirements of this permit. [District Rule 2201] Federally Enforceable Through Title V Permit
- 17. 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 4623] Federally Enforceable Through Title V Permit
- 18. 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] Federally Enforceable Through Title V Permit
- 19. 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 4623] Federally Enforceable Through Title V Permit
- 20. The TVP testing shall be conducted at actual storage temperature of the organic liquid in the tank. The permittee shall also conduct an API gravity testing. [District Rule 4623] Federally Enforceable Through Title V Permit
- 21. 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 4623] Federally Enforceable Through Title V Permit

- 22. The permittee shall keep accurate records of each organic liquid stored in the tank including TVP and API gravity. [District Rule 4623, 6.3.6] Federally Enforceable Through Title V Permit
- 23. The permittee shall maintain a written log of the date and duration of each power curtailment event [District Rule 2201] Federally Enforceable Through Title V Permit
- 24. The permittee shall keep written documentation from the power supplier indicating the date, and duration of the curtailment in addition to the beginning and end times. [District Rule 2201] Federally Enforceable Through Title V Permit
- 25. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date of leak detection, and method of detection; 3) Date and emission level of recheck after leak is repaired. [District Rule 2201] Federally Enforceable Through Title V Permit
- 26. Permittee shall maintain a written record of the VOC content of the gas sampled. [District Rule 2201] Federally Enforceable Through Title V Permit

**PERMIT UNIT: S-1703-25-7** EXPIRATION DATE: 07/31/2022

SECTION: 20 TOWNSHIP: 27S RANGE: 28E

**EQUIPMENT DESCRIPTION:** 

2,000 BBL FIXED ROOF WASTE WATER TANK T10-WMP VENTING TO VAPOR CONTROL SYSTEM LISTED ON S-1703-16 (WEST MT POSO UNIT TANK BATTERY)

## PERMIT UNIT REQUIREMENTS

- The operator shall ensure that the vapor recovery system is functional and is operating as designed at all times with the 1. exception of power curtailment events. [District Rule 2201] Federally Enforceable Through Title V Permit
- 2. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623, 4.4] Federally Enforceable Through Title V Permit
- VOC content of vapor in the tank vapor control system shall not exceed 10% by weight. [District Rule 2201] Federally 3. Enforceable Through Title V Permit
- 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 2080] Federally Enforceable Through Title V Permit
- 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 2080] Federally Enforceable Through Title V Permit
- 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 2080] Federally Enforceable Through Title V Permit
- To facilitate connection to an external APCO-approved recovery system, a suitable tank fitting, such as a manway, 7. may be temporarily removed for a period of time not to exceed 1 hour. [District Rule 2080] Federally Enforceable Through Title V Permit
- 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 2080] Federally Enforceable Through Title V Permit

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

Facility Name: MACPHERSON OIL CO

Location: HEAVY OIL CENTRAL STATIONARY SOURCE, CA S-1703-25-7: Aug 24 2017 4:51PM – VELASCOA

- 9. Steam cleaning shall only be allowed at locations where wastewater treatment facilities are limited, or during the months of December through March. [District Rule 2080] Federally Enforceable Through Title V Permit
- 10. Tanks water draw-offs except for four weir boxes and four bleed boxes shall consist only of closed piping. [District Rule 2201] Federally Enforceable Through Title V Permit
- 11. Only two weir boxes shall be in use at any one time. [District Rule 2201] Federally Enforceable Through Title V Permit
- 12. Produced water shall be piped to S-91 water treatment facilities. [District Rule 2201] Federally Enforceable Through Title V Permit
- 13. 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 2201] Federally Enforceable Through Title V Permit
- 14. 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) operator shall: (a) Eliminate or minimize the leak within 8 hours after detection. (b) 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 detection. (c) In no event shall the total time to minimize and eliminate the leak exceed 56 hours after detection. [District Rule 2201] Federally Enforceable Through Title V Permit
- 15. If any of the tank 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 2201] Federally Enforceable Through Title V Permit
- 16. During a District inspection, any tank, gauge hatch, sampling device, or other component that is not leak free will not be a violation of this permit provided the facility records, tags, and repairs the leak in accordance with the requirements of this permit. [District Rule 2201] Federally Enforceable Through Title V Permit
- 17. 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 4623] Federally Enforceable Through Title V Permit
- 18. 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] Federally Enforceable Through Title V Permit
- 19. 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 4623] Federally Enforceable Through Title V Permit
- 20. The TVP testing shall be conducted at actual storage temperature of the organic liquid in the tank. The permittee shall also conduct an API gravity testing. [District Rule 4623] Federally Enforceable Through Title V Permit
- 21. 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 4623] Federally Enforceable Through Title V Permit

Facility Name: MACPHERSON OIL CO

Location: HEAVY OIL CENTRAL STATIONARY SOURCE, CA

S-1703-25-7 : Aug 24 2017 4:51PM - VELASCOA

- 22. The permittee shall maintain a written log of the date and duration of each power curtailment event [District Rule 2201] Federally Enforceable Through Title V Permit
- 23. The permittee shall keep written documentation from the power supplier indicating the date, and duration of the curtailment in addition to the beginning and end times. [District Rule 2201] Federally Enforceable Through Title V Permit
- 24. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date of leak detection, and method of detection; 3) Date and emission level of recheck after leak is repaired. [District Rule 2201] Federally Enforceable Through Title V Permit
- 25. Permittee shall maintain a written record of the VOC content of the gas sampled. [District Rule 2201] Federally Enforceable Through Title V Permit

**PERMIT UNIT:** S-1703-26-7 **EXPIRATION DATE: 07/31/2022** 

SECTION: 20 TOWNSHIP: 278 RANGE: 28E

**EQUIPMENT DESCRIPTION:** 

100 BBL FIXED ROOF SKIM OIL TANK T11-WMP VENTING TO VAPOR CONTROL SYSTEM LISTED ON S-1703-16 (WEST MT POSO UNIT TANK BATTERY)

#### PERMIT UNIT REQUIREMENTS

- 1. The operator shall ensure that the vapor recovery system is functional and is operating as designed at all times with the exception of power curtailment events. [District Rule 2201] Federally Enforceable Through Title V Permit
- 2. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623] Federally Enforceable Through Title V Permit
- 3. VOC content of vapor in the tank vapor control system shall not exceed 10% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
- 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 2080] Federally Enforceable Through Title V Permit
- 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 2080] Federally Enforceable Through Title V Permit
- 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 2080] Federally Enforceable Through Title V Permit
- 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 2080] Federally Enforceable Through Title V Permit
- 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 2080] Federally Enforceable Through Title V Permit

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

Facility Name: MACPHERSON OIL CO

Location: HEAVY OIL CENTRAL STATIONARY SOURCE, CA

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- Steam cleaning shall only be allowed at locations where wastewater treatment facilities are limited, or during the months of December through March. [District Rule 2080] Federally Enforceable Through Title V Permit
- 10. Tanks water draw-offs except for four weir boxes and four bleed boxes shall consist only of closed piping. [District Rule 2201] Federally Enforceable Through Title V Permit
- 11. Only two weir boxes shall be in use at any one time. [District Rule 2201] Federally Enforceable Through Title V Permit
- 12. Produced water shall be piped to S-91 water treatment facilities. [District Rule 2201] Federally Enforceable Through Title V Permit
- 13. 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 2201] Federally Enforceable Through Title V Permit
- 14. Upon detection of any leaking components (having a gas leak >10,000 ppmy, measured in accordance with EPA Method 21 by a portable hydrocarbon detection instrument that is calibrated with methane) operator shall: (a) Eliminate or minimize the leak within 8 hours after detection. (b) 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 detection. (c) In no event shall the total time to minimize and eliminate the leak exceed 56 hours after detection. [District Rule 2201] Federally Enforceable Through Title V Permit
- 15. If any of the tank 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 2201] Federally Enforceable Through Title V Permit
- 16. During a District inspection, any tank, gauge hatch, sampling device, or other component that is not leak free will not be a violation of this permit provided the facility records, tags, and repairs the leak in accordance with the requirements of this permit. [District Rule 2201] Federally Enforceable Through Title V Permit
- 17. 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 4623] Federally Enforceable Through Title V Permit
- 18. 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] Federally Enforceable Through Title V Permit
- 19. 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 4623] Federally Enforceable Through Title V Permit
- 20. The TVP testing shall be conducted at actual storage temperature of the organic liquid in the tank. The permittee shall also conduct an API gravity testing. [District Rule 4623] Federally Enforceable Through Title V Permit
- 21. 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 4623] Federally Enforceable Through Title V Permit

- 22. The permittee shall maintain a written log of the date and duration of each power curtailment event [District Rule 2201] Federally Enforceable Through Title V Permit
- 23. The permittee shall keep written documentation from the power supplier indicating the date, and duration of the curtailment in addition to the beginning and end times. [District Rule 2201] Federally Enforceable Through Title V Permit
- 24. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date of leak detection, and method of detection; 3) Date and emission level of recheck after leak is repaired. [District Rule 2201] Federally Enforceable Through Title V Permit
- 25. Permittee shall maintain a written record of the VOC content of the gas sampled. [District Rule 2201] Federally Enforceable Through Title V Permit

**PERMIT UNIT: S-1703-27-7** 

EXPIRATION DATE: 07/31/2022

SECTION: 20 TOWNSHIP: 27S RANGE: 28E

**EQUIPMENT DESCRIPTION:** 

10.0 MMBTU/HR KALDAIR INC., MARDAN M-200 SMOKELESS FLARE RECEIVING COLLECTED VAPORS FROM S-

1703-16 (WEST MT POSO UNIT)

# PERMIT UNIT REQUIREMENTS

- Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
- Flare shall be designed to provide enough natural draft air for smokeless combustion. [District Rule 2201] Federally Enforceable Through Title V Permit
- Hydrogen sulfide content of gas flared shall not exceed 3 ppmv. [District Rule 2201] Federally Enforceable Through Title V Permit
- Gas flowrate to flare shall not exceed 300,000 scf per day. [District Rule 2201] Federally Enforceable Through Title V Permit
- Flare shall operate with no visible emissions. [District Rule 2201] Federally Enforceable Through Title V Permit
- Emission rates shall not exceed the following: PM-10 0.03 lbm/hr, NO2 1.75 lbm/hr, VOC 0.04 lbm/hr, and CO -0.44 lbm/hr. [District Rule 2201] Federally Enforceable Through Title V Permit
- Demonstration of compliance with the visible emissions limit of this permit shall be conducted at least annually, using EPA Method 22. The observation period shall be 2 hours. [40 CFR 60.18(f)(1)] Federally Enforceable Through Title V Permit
- A trained observer, as defined in EPA Method 22, shall check visible emissions at least once every two weeks 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 Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
- The flare shall be operated according to the manufacturer's specifications, a copy of which shall be maintained on site. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
- 10. Actual flare emissions shall not exceed 20 tons VOC/year. Process information, including fuel usage data for the flare and process rates for operations controlled by the flare, shall be submitted to the District annually to demonstrate compliance with this requirement. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
- 11. Flares shall only be used with the net heating value of the gas being combusted being 200 Btu/scf or greater if the flare is non-assisted; or with the net heating value of the gas being combusted being 300 Btu/scf or greater if the flare is airassisted or steam-assisted. [40 CFR 60.18 (c)(3)] Federally Enforceable Through Title V Permit

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

Facility Name: MACPHERSON OIL CO

Location: HEAVY OIL CENTRAL STATIONARY SOURCE, CA S-1703-27-7: Aug 24 2017 4:51PM – VELASCOA

- 12. The net heating value of the gas being combusted in a flare shall be calculated annually, pursuant to 40 CFR 60.18(f)(3) and using EPA Method 18, ASTM D1946-77, and ASTM D2382-76. [40 CFR 60.18 (f)(3-6)] Federally Enforceable Through Title V Permit
- 13. Air-assisted flares shall be operated with an exit velocity less than Vmax, as determined by the equation specified in paragraph 40 CFR 60.18 (f)(6). [40 CFR 60.18 (c)(5)] Federally Enforceable Through Title V Permit
- 14. Nonassisted and steam-assisted flares shall be operated with an exit velocity, as determined by the methods specified in 40 CFR 60.18 (f)(4), less than 60 ft/sec, except as provided in 40 CFR 60.18 (c)(4)(ii) and (iii). [40 CFR 60.18 (c)(4)(i)] Federally Enforceable Through Title V Permit
- 15. Nonassisted and steam-assisted flares may be operated with an exit velocity, as determined by the methods specified in 40 CFR 60.18 (f)(4), equal to or greater than 60 ft/sec, but less than 400 ft/sec if the net heating value of the gas being combusted is greater than 1,000 Btu/scf. [40 CFR 60.18 (c)(4)(ii)] Federally Enforceable Through Title V Permit
- 16. Nonassisted and steam-assisted flares may be operated with an exit velocity, as determined by the methods specified in 40 CFR 60.18 (f)(4), less than the velocity, Vmax, as determined by the equation specified in paragraph 40 CFR 60.18 (f)(5), and less than 400 ft/sec. [40 CFR 60.18 (c)(4)(iii)] Federally Enforceable Through Title V Permit
- 17. The actual exit velocity of a flare shall be determined by dividing the volumetric flowrate (in units of standard temperature and pressure), as determined by Reference Methods 2, 2A, 2C, or 2D as appropriate; by the unobstructed (free) cross sectional area of the flare tip. [40 CFR 60.18 (f)(4)] Federally Enforceable Through Title V Permit
- 18. Flares shall be operated with a flame present at all times, and kept in operation when emissions may be vented to them. The presence of a flare pilot flame shall be monitored using a thermocouple or any other equivalent device to detect the presence of a flame. [40 CFR 60.18 (c)(2), 60.18 (e), and 60.18 (f)(2)] Federally Enforceable Through Title V Permit
- 19. A flame shall be present at all time when combustible gases are vented through the flare. [District Rule 4311, 5.2] Federally Enforceable Through Title V Permit
- 20. 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
- 21. 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
- 22. 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
- 23. Flares (air-assisted, steam-assisted, or non-assisted) in which the flare gas pressure is less than 5 psig shall be operated in such a manner that meets the provisions of 40 CFR 60.18. [District Rule 4311, 5.6] Federally Enforceable Through Title V Permit
- 24. Flaring is prohibited unless it is consistent with an approved flare minimization plan (FMP), pursuant to District Rule 4311 Section 6.5 and all commitments listed in that plan have been met. [District Rule 4311, 5.8] Federally Enforceable Through Title V Permit
- 25. The operator of a flare subject to flare minimization requirements pursuant to Section 5.8 shall monitor the vent gas flow to the flare with a flow measuring device or other parameters as specified in the Permit to Operate. The operator shall maintain records pursuant to Section 6.1.7. Flares that the operator can verify, based on permit conditions, are not capable of producing reportable flare events pursuant to Section 6.2.2 shall not be required to monitor vent gas flow to the flare. [District Rule 4311, 5.10] Federally Enforceable Through Title V Permit

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- 26. Permittee shall maintain copies of the compliance determination conducted pursuant to Section 6.4.1, copies of the source testing result conducted pursuant to Section 6.4.2, a copy of the approved flare minimization plan pursuant to Section 6.5, effective on and after July 1, 2012, a copy of annual reports submitted to the APCO pursuant to Section 6.2 and monitoring data collected pursuant to Sections 5.10, 6.6, 6.7. 6.8, 6.9 and 6.10. [District Rule 4311, 6.1] Federally Enforceable Through Title V Permit
- 27. 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
- 28. The operator of a flare subject to flare minimization plans pursuant to Section 5.8 of this rule shall notify the APCO of an unplanned flaring event within 24 hours after the start of the next business day or within 24 hours of their discovery. which ever occurs first. The notification shall include the flare source identification, the start date and time, and the end date and time. [District Rule 4311, 6.2.1] Federally Enforceable Through Title V Permit
- 29. 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
- 30. 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 431]. 6.2.3] Federally Enforceable Through Title V Permit
- 31. NOx emissions in pounds per million BTU shall be determined by using EPA Method 19. NOx and O2 concentrations shall be determined by using EPA Method 3A, EPA Method 7E, or ARB 100. [District Rule 4311, 6.3.2 and 6.3.3] Federally Enforceable Through Title V Permit
- 32. 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
- 33. If vent gas composition is monitored with a continuous analyzer employing gas chromatography the minimum sampling frequency shall be one sample every 30 minutes. If vent gas composition is monitored using continuous analyzers not employing gas chromatography, the total reduced sulfur content of vent gas shall be determined by using EPA Method D4468-85, or an alternative method approved by the APCO, ARB and EPA. [District Rule 4311, 6.3.4] Federally Enforceable Through Title V Permit

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- 34. 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
- 35. The operator of flares that are subject to Section 5.6 shall make available, to the APCO, the compliance determination records that demonstrate compliance with the provisions of 40 CFR 60.18, (c)(3) through (c)(5). [District Rule 4311, 6.4.1] Federally Enforceable Through Title V Permit
- 36. The operator of a petroleum refinery flare or any flare that has a flaring capacity of greater than or equal to 5.0 MMBtu per hour shall submit a flare minimization plan (FMP) to the APCO for approval and shall include: 1) A description and technical specifications for each flare and associated knock-out pots, surge drums, water seals and flare gas recovery systems; 2) Detailed process flow diagrams of all upstream equipment and process units venting to each flare, identifying the type and location of all control equipment; 3) A description of equipment, processes, or procedures the operator plans to install or implement to eliminate or minimize flaring and planned date of installation or implementation;; 4) An evaluation of prevention measures to reduce flaring that has occurred or may by expected to occur during planned major maintenance activities, including startup and shutdown;; 5) An evaluation of preventative measures to reduce flaring that may be expected to occur due to issues of gas quantity and quality. The evaluation shall include an audit of the vent gas recovery capacity of each flare system, the storage capacity available for excess vent gases, and the scrubbing capacity available for vent gases including any limitations associated with scrubbing vent gases for use as a fuel; and shall determine the feasibility of reducing flaring through the recovery, treatment and use of the gas or other means; 6) An evaluation of preventative measures to reduce flaring caused by the recurrent failure of air pollution control equipment, process equipment, or a process to operate in a normal or usual manner. The evaluation shall determine the adequacy of existing maintenance schedules and protocols for such equipment. For purposes of this section, a failure is recurrent if it occurs more than twice during any five year period as a result of the same cause as identified in accordance with Section 6.2.2; 7) Any other information requested by the APCO as necessary for determination of compliance with applicable provisions of this rule. [District Rule 4311, 6.5.1] Federally Enforceable Through Title V Permit
- 37. 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
- 38. 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
- 39. When submitting the initial FMP, or updated FMP, the operator shall designate as confidential any information claimed to be exempt from public disclosure under the California Public Records Act, Government Code Section 6250 et seq. and provide a justification for this designation and also submit a separate copy of the document with the information designated confidential redacted. [District Rule 4311, 6.5.4] Federally Enforceable Through Title V Permit
- 40. Permittee shall keep accurate records of the amount of daily gas flow to the flare. Such records shall be made readily available for District inspection upon request. [District Rule 2520, 9.5.2] Federally Enforceable Through Title V Permit
- 41. Hydrogen sulfide content of the gas flared shall be determined using CARB Method 15 or EPA Method 11. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

42. Gas flared shall be tested weekly for hydrogen sulfide. If compliance with hydrogen sulfide emission limits has been demonstrated for 8 consecutive weeks, then the gas flared testing frequency shall be semi-annually. If a semi-annual fuel content source test fails to show compliance, weekly testing shall resume. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

**PERMIT UNIT:** S-1703-76-5

**EXPIRATION DATE: 07/31/2022** 

SECTION: SE14 TOWNSHIP: 28S RANGE: 28E

**EQUIPMENT DESCRIPTION:** 

42,000 GALLON (1,000 BBL) FIXED ROOF PETROLEUM STORAGE TANK #1001

## PERMIT UNIT REQUIREMENTS

- This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623, 4.4] Federally Enforceable Through Title V Permit
- The operator shall determine the true vapor pressure of the petroleum liquid stored in the tank at least once per year in accordance with methods described in 40 CFR 60.113 and section 6.2 of District Rule 4623 (amended 5/19/05). Determinations shall be made annually during the summer and whenever there is a change in the source or type of petroleum entering the tank. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
- The operator shall keep accurate records of types, storage temperature, and TVP of liquids stored to verify continued exemption from District Rule 4623 (amended 5/19/05). [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
- As used in this permit, the term "source or type of petroleum" shall mean petroleum liquids with similar characteristics. The operator shall maintain records of the API gravity of petroleum liquids stored in this unit to determine which oils are from a common source. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

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

Facility Name: MACPHERSON OIL CO

Location: HEAVY OIL CENTRAL STATIONARY SOURCE, CA S-1703-76-5; Aug 24 2017 4:51PM – VELASCOA

**PERMIT UNIT: S-1703-77-5 EXPIRATION DATE: 07/31/2022** 

SECTION: SE14 TOWNSHIP: 28S RANGE: 28E

**EQUIPMENT DESCRIPTION:** 

42,000 GALLON (1,000 BBL) FIXED ROOF PETROLEUM STORAGE TANK #1002

### PERMIT UNIT REQUIREMENTS

- This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions, [District Rule 4623, 4.4] Federally Enforceable Through Title V Permit
- 2. The operator shall determine the true vapor pressure of the petroleum liquid stored in the tank at least once per year in accordance with methods described in 40 CFR 60.113 and section 6.2 of District Rule 4623 (amended 5/19/05). Determinations shall be made annually during the summer and whenever there is a change in the source or type of petroleum entering the tank. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
- The operator shall keep accurate records of types, storage temperature, and TVP of liquids stored to verify continued exemption from District Rule 4623 (amended 5/19/05). [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
- As used in this permit, the term "source or type of petroleum" shall mean petroleum liquids with similar characteristics. The operator shall maintain records of the API gravity of petroleum liquids stored in this unit to determine which oils are from a common source. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

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

Facility Name: MACPHERSON OIL CO

Location: HEAVY OIL CENTRAL STATIONARY SOURCE, CA 8-1703-77-5: Aug 24 2017 4:51PM - VELASCOA

**PERMIT UNIT: S-1703-78-5** 

EXPIRATION DATE: 07/31/2022

SECTION: SE14 TOWNSHIP: 28S RANGE: 28E

**EQUIPMENT DESCRIPTION:** 

42,000 GALLON (1,000 BBL) FIXED ROOF PETROLEUM STORAGE TANK #1003

## PERMIT UNIT REQUIREMENTS

- This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all 1. storage conditions. [District Rule 4623, 4.4] Federally Enforceable Through Title V Permit
- 2. The operator shall determine the true vapor pressure of the petroleum liquid stored in the tank at least once per year in accordance with methods described in 40 CFR 60.113 and section 6.2 of District Rule 4623 (amended 5/19/05). Determinations shall be made annually during the summer and whenever there is a change in the source or type of petroleum entering the tank. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
- The operator shall keep accurate records of types, storage temperature, and TVP of liquids stored to verify continued exemption from District Rule 4623 (amended 5/19/05). [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
- As used in this permit, the term "source or type of petroleum" shall mean petroleum liquids with similar characteristics. The operator shall maintain records of the API gravity of petroleum liquids stored in this unit to determine which oils are from a common source. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V **Permit**

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

Facility Name: MACPHERSON OIL CO

Location: HEAVY OIL CENTRAL STATIONARY SOURCE, CA S-1703-78-5: Aug 24 2017 4:51PM – VELASCOA

**PERMIT UNIT:** S-1703-80-5 EXPIRATION DATE: 07/31/2022

SECTION: SE14 TOWNSHIP: 28S RANGE: 28E

**EQUIPMENT DESCRIPTION:** 

42,000 GALLON (1,000 BBL) FIXED ROOF PETROLEUM STORAGE TANK #1008

### PERMIT UNIT REQUIREMENTS

- This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions, [District Rule 4623, 4.4] Federally Enforceable Through Title V Permit
- The operator shall determine the true vapor pressure of the petroleum liquid stored in the tank at least once per year in accordance with methods described in 40 CFR 60.113 and section 6.2 of District Rule 4623 (amended 5/19/05). Determinations shall be made annually during the summer and whenever there is a change in the source or type of petroleum entering the tank. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
- The operator shall keep accurate records of types, storage temperature, and TVP of liquids stored to verify continued exemption from District Rule 4623 (amended 5/19/05). [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
- As used in this permit, the term "source or type of petroleum" shall mean petroleum liquids with similar characteristics. The operator shall maintain records of the API gravity of petroleum liquids stored in this unit to determine which oils are from a common source. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

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

Facility Name: MACPHERSON OIL CO

Location: HEAVY OIL CENTRAL STATIONARY SOURCE, CA

S-1703-80-5 : Aug 24 2017 4:51PM -- VELASCOA

**PERMIT UNIT:** S-1703-81-5

**EXPIRATION DATE: 07/31/2022** 

SECTION: SE14 TOWNSHIP: 28S RANGE: 28E

**EQUIPMENT DESCRIPTION:** 

105,000 GALLON (2,500 BBL) FIXED ROOF PETROLEUM STORAGE TANK #1012

## PERMIT UNIT REQUIREMENTS

- 1. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623, 4.4] Federally Enforceable Through Title V Permit
- 2. The operator shall determine the true vapor pressure of the petroleum liquid stored in the tank at least once per year in accordance with methods described in 40 CFR 60.113 and section 6.2 of District Rule 4623 (amended 5/19/05). Determinations shall be made annually during the summer and whenever there is a change in the source or type of petroleum entering the tank. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
- 3. The operator shall keep accurate records of types, storage temperature, and TVP of liquids stored to verify continued exemption from District Rule 4623 (amended 5/19/05). [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
- 4. As used in this permit, the term "source or type of petroleum" shall mean petroleum liquids with similar characteristics. The operator shall maintain records of the API gravity of petroleum liquids stored in this unit to determine which oils are from a common source. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

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

Facility Name: MACPHERSON OIL CO
Location: HEAVY OIL CENTRAL STATIONARY SOURCE,CA
8-1703-81-5: Aug 24 2017 4:51PM – VELASCOA

**PERMIT UNIT:** S-1703-82-5

SECTION: SE14 TOWNSHIP: 28S RANGE: 28E

**EQUIPMENT DESCRIPTION:** 

105,000 GALLON (2,500 BBL) FIXED ROOF PETROLEUM STORAGE TANK #1013

### PERMIT UNIT REQUIREMENTS

EXPIRATION DATE: 07/31/2022

- This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623] Federally Enforceable Through Title V Permit
- 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 4623] Federally Enforceable Through Title V Permit
- The TVP testing shall be conducted at actual storage temperature of the organic liquid in the tank. The permittee shall also conduct an API gravity testing. [District Rule 4623] Federally Enforceable Through Title V Permit
- 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 4623] Federally Enforceable Through Title V Permit
- 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] Federally Enforceable Through Title V Permit
- 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 4623] Federally Enforceable Through Title V Permit
- The permittee shall keep accurate records of each organic liquid stored in the tank, including its storage temperature, TVP, and API gravity. [District Rule 4623] Federally Enforceable Through Title V Permit
- 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 4623] Federally Enforceable Through Title V Permit
- 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 Rule 4623] Federally Enforceable Through Title V Permit

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

Facility Name: MACPHERSON OIL CO

Location: HEAVY OIL CENTRAL STATIONARY SOURCE,CA \$-1703-82-5: Aug 24 2017 4:51PM - VELASCOA

**PERMIT UNIT:** S-1703-102-5

**EXPIRATION DATE:** 07/31/2022

SECTION: NW29 TOWNSHIP: 28S RANGE: 29E

**EQUIPMENT DESCRIPTION:** 

4,200 GALLON (100 BBL) OPEN TOP PETROLEUM STORAGE TANK #101

## PERMIT UNIT REQUIREMENTS

- 1. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623, 4.4] Federally Enforceable Through Title V Permit
- 2. The operator shall determine the true vapor pressure of the petroleum liquid stored in the tank at least once per year in accordance with methods described in 40 CFR 60.113 and section 6.2 of District Rule 4623 (amended 5/19/05). Determinations shall be made annually during the summer and whenever there is a change in the source or type of petroleum entering the tank. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
- 3. The operator shall keep accurate records of types, storage temperature, and TVP of liquids stored to verify continued exemption from District Rule 4623 (amended 5/19/05). [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
- 4. As used in this permit, the term "source or type of petroleum" shall mean petroleum liquids with similar characteristics. The operator shall maintain records of the API gravity of petroleum liquids stored in this unit to determine which oils are from a common source. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

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

Facility Name: MACPHERSON OIL CO
Location: HEAVY OIL CENTRAL STATIONARY SOURCE, CA
8-1703-102-5: Aug 24 2017 4:51PM – VELASCOA

**PERMIT UNIT:** S-1703-103-5

EXPIRATION DATE: 07/31/2022

SECTION: NW29 TOWNSHIP: 28S RANGE: 29E

**EQUIPMENT DESCRIPTION:** 

4,200 GALLON (100 BBL) OPEN TOP PETROLEUM STORAGE TANK #102

## PERMIT UNIT REQUIREMENTS

- This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623, 4.4] Federally Enforceable Through Title V Permit
- The operator shall determine the true vapor pressure of the petroleum liquid stored in the tank at least once per year in accordance with methods described in 40 CFR 60.113 and section 6.2 of District Rule 4623 (amended 5/19/05). Determinations shall be made annually during the summer and whenever there is a change in the source or type of petroleum entering the tank. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
- The operator shall keep accurate records of types, storage temperature, and TVP of liquids stored to verify continued exemption from District Rule 4623 (amended 5/19/05). [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
- As used in this permit, the term "source or type of petroleum" shall mean petroleum liquids with similar characteristics. The operator shall maintain records of the API gravity of petroleum liquids stored in this unit to determine which oils are from a common source. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

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

Facility Name: MACPHERSON OIL CO

Location: HEAVY OIL CEN' S-1703-103-5; Aug 24 2017 4:51PM - VELASCOA HEAVY OIL CENTRAL STATIONARY SOURCE, CA

**PERMIT UNIT:** S-1703-104-5 **EXPIRATION DATE:** 07/31/2022

SECTION: NW29 TOWNSHIP: 28S RANGE: 29E

**EQUIPMENT DESCRIPTION:** 

4,200 GALLON (100 BBL) OPEN TOP PETROLEUM STORAGE TANK #103

## PERMIT UNIT REQUIREMENTS

- 1. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623, 4.4] Federally Enforceable Through Title V Permit
- 2. The operator shall determine the true vapor pressure of the petroleum liquid stored in the tank at least once per year in accordance with methods described in 40 CFR 60.113 and section 6.2 of District Rule 4623 (amended 5/19/05). Determinations shall be made annually during the summer and whenever there is a change in the source or type of petroleum entering the tank. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
- 3. The operator shall keep accurate records of types, storage temperature, and TVP of liquids stored to verify continued exemption from District Rule 4623 (amended 5/19/05). [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
- 4. As used in this permit, the term "source or type of petroleum" shall mean petroleum liquids with similar characteristics. The operator shall maintain records of the API gravity of petroleum liquids stored in this unit to determine which oils are from a common source. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

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

Facility Name: MACPHERSON OIL CO
Location: HEAVY OIL CENTRAL STATIONARY SOURCE, CA
9-1703-104-5: Aug 24 2017 4:51PM – VELASCOA

**PERMIT UNIT: S-1703-107-5** 

**EXPIRATION DATE: 07/31/2022** 

SECTION: SW17 TOWNSHIP: 28S RANGE: 29E

**EQUIPMENT DESCRIPTION:** 

105,000 GALLON (2,500 BBL) FIXED ROOF PETROLEUM STORAGE TANK #25S156

## PERMIT UNIT REQUIREMENTS

- This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623, 4.4] Federally Enforceable Through Title V Permit
- The operator shall determine the true vapor pressure of the petroleum liquid stored in the tank at least once per year in accordance with methods described in 40 CFR 60.113 and section 6.2 of District Rule 4623 (amended 5/19/05). Determinations shall be made annually during the summer and whenever there is a change in the source or type of petroleum entering the tank. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
- The operator shall keep accurate records of types, storage temperature, and TVP of liquids stored to verify continued exemption from District Rule 4623 (amended 5/19/05). [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
- As used in this permit, the term "source or type of petroleum" shall mean petroleum liquids with similar characteristics. The operator shall maintain records of the API gravity of petroleum liquids stored in this unit to determine which oils are from a common source. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

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

Facility Name: MACPHERSON OIL CO

HEAVY OIL CENTRAL STATIONARY SOURCE, CA Location:

1703-107-5 : Aug 24 2017 4:51PM - VELASC

**PERMIT UNIT: S-1703-108-5** EXPIRATION DATE: 07/31/2022

SECTION: SW17 TOWNSHIP: 28S RANGE: 29E

**EQUIPMENT DESCRIPTION:** 

105,000 GALLON (2,500 BBL) FIXED ROOF PETROLEUM STORAGE TANK #25S158

#### PERMIT UNIT REQUIREMENTS

- This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623, 4.4] Federally Enforceable Through Title V Permit
- The operator shall determine the true vapor pressure of the petroleum liquid stored in the tank at least once per year in accordance with methods described in 40 CFR 60.113 and section 6.2 of District Rule 4623 (amended 5/19/05). Determinations shall be made annually during the summer and whenever there is a change in the source or type of petroleum entering the tank. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
- The operator shall keep accurate records of types, storage temperature, and TVP of liquids stored to verify continued exemption from District Rule 4623 (amended 5/19/05). [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
- As used in this permit, the term "source or type of petroleum" shall mean petroleum liquids with similar characteristics. The operator shall maintain records of the API gravity of petroleum liquids stored in this unit to determine which oils are from a common source. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

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

Facility Name: MACPHERSON OIL CO Location: HEAVY OIL CENTRAL STATIONARY SOURCE, CA S-1703-108-5: Aug 24 2017 4.51PM – VELASCOA

**PERMIT UNIT:** S-1703-113-5 **EXPIRATION DATE:** 07/31/2022

SECTION: SW20 TOWNSHIP: 28S RANGE: 29E

**EQUIPMENT DESCRIPTION:** 

42,000 GALLON (1,000 BBL) FIXED ROOF PETROLEUM STORAGE TANK #10S640

## PERMIT UNIT REQUIREMENTS

- 1. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623, 4.4] Federally Enforceable Through Title V Permit
- 2. The operator shall determine the true vapor pressure of the petroleum liquid stored in the tank at least once per year in accordance with methods described in 40 CFR 60.113 and section 6.2 of District Rule 4623 (amended 5/19/05). Determinations shall be made annually during the summer and whenever there is a change in the source or type of petroleum entering the tank. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
- 3. The operator shall keep accurate records of types, storage temperature, and TVP of liquids stored to verify continued exemption from District Rule 4623 (amended 5/19/05). [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
- 4. As used in this permit, the term "source or type of petroleum" shall mean petroleum liquids with similar characteristics. The operator shall maintain records of the API gravity of petroleum liquids stored in this unit to determine which oils are from a common source. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

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

Facility Name: MACPHERSON OIL CO

Location: HEAVY OIL CENTRAL STATIONARY SOURCE,CA s-1703-113-5: Aug 24 2017 4:51PM - VELASCOA

PERMIT UNIT: S-1703-114-5 EXPIRATION DATE: 07/31/2022

SECTION: SW20 TOWNSHIP: 28S RANGE: 29E

**EQUIPMENT DESCRIPTION:** 

105,000 GALLON (2,500 BBL) FIXED ROOF PETROLEUM STORAGE TANK #25S157

### PERMIT UNIT REQUIREMENTS

- 1. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623, 4.4] Federally Enforceable Through Title V Permit
- 2. The operator shall determine the true vapor pressure of the petroleum liquid stored in the tank at least once per year in accordance with methods described in 40 CFR 60.113 and section 6.2 of District Rule 4623 (amended 5/19/05). Determinations shall be made annually during the summer and whenever there is a change in the source or type of petroleum entering the tank. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
- 3. The operator shall keep accurate records of types, storage temperature, and TVP of liquids stored to verify continued exemption from District Rule 4623 (amended 5/19/05). [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
- 4. As used in this permit, the term "source or type of petroleum" shall mean petroleum liquids with similar characteristics. The operator shall maintain records of the API gravity of petroleum liquids stored in this unit to determine which oils are from a common source. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

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

Facility Name: MACPHERSON OIL CO

Location: HEAVY OIL CENTRAL STATIONARY SOURCE, CA 8-1703-114-5 : Aug 24 2017 4:51PM -- VELASCOA

**PERMIT UNIT:** S-1703-118-5

EXPIRATION DATE: 07/31/2022

SECTION: NE7 TOWNSHIP: 28S RANGE: 29E

**EQUIPMENT DESCRIPTION:** 

21,000 GALLON (500 BBL) FIXED ROOF PETROLEUM STORAGE TANK #5S129

### PERMIT UNIT REQUIREMENTS

- 1. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623, 4.4] Federally Enforceable Through Title V Permit
- 2. The operator shall determine the true vapor pressure of the petroleum liquid stored in the tank at least once per year in accordance with methods described in 40 CFR 60.113 and section 6.2 of District Rule 4623 (amended 5/19/05). Determinations shall be made annually during the summer and whenever there is a change in the source or type of petroleum entering the tank. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
- 3. The operator shall keep accurate records of types, storage temperature, and TVP of liquids stored to verify continued exemption from District Rule 4623 (amended 5/19/05). [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
- 4. As used in this permit, the term "source or type of petroleum" shall mean petroleum liquids with similar characteristics. The operator shall maintain records of the API gravity of petroleum liquids stored in this unit to determine which oils are from a common source. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

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

Facility Name: MACPHERSON OIL CO

Location: HEAVY OIL CENTRAL STATIONARY SOURCE, CA

S-1703-118-5 : Aug 24 2017 4:51PM - VELASCOA

**PERMIT UNIT:** S-1703-119-5 **EXPIRATION DATE:** 07/31/2022

SECTION: NE7 TOWNSHIP: 28S RANGE: 29E

**EQUIPMENT DESCRIPTION:** 

21,000 GALLON (500 BBL) FIXED ROOF PETROLEUM STORAGE TANK #5S595

## PERMIT UNIT REQUIREMENTS

- 1. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623, 4.4] Federally Enforceable Through Title V Permit
- 2. The operator shall determine the true vapor pressure of the petroleum liquid stored in the tank at least once per year in accordance with methods described in 40 CFR 60.113 and section 6.2 of District Rule 4623 (amended 5/19/05). Determinations shall be made annually during the summer and whenever there is a change in the source or type of petroleum entering the tank. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
- The operator shall keep accurate records of types, storage temperature, and TVP of liquids stored to verify continued exemption from District Rule 4623 (amended 5/19/05). [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
- As used in this permit, the term "source or type of petroleum" shall mean petroleum liquids with similar characteristics. The operator shall maintain records of the API gravity of petroleum liquids stored in this unit to determine which oils are from a common source. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

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

Facility Name: MACPHERSON OIL CO

Location: HEAVY OIL CENTRAL STATIONARY SOURCE, CA 8-1703-119-5: Aug 24 2017 4-51PM - VELASCOA

**PERMIT UNIT: S-1703-120-5** 

EXPIRATION DATE: 07/31/2022

SECTION: NE7 TOWNSHIP: 28S RANGE: 29E

**EQUIPMENT DESCRIPTION:** 

105,000 GALLON (2,500 BBL) FIXED ROOF PETROLEUM STORAGE TANK #25S700

### PERMIT UNIT REQUIREMENTS

- 1. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623, 4.4] Federally Enforceable Through Title V Permit
- The operator shall determine the true vapor pressure of the petroleum liquid stored in the tank at least once per year in accordance with methods described in 40 CFR 60.113 and section 6.2 of District Rule 4623 (amended 5/19/05). Determinations shall be made annually during the summer and whenever there is a change in the source or type of petroleum entering the tank. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
- The operator shall keep accurate records of types, storage temperature, and TVP of liquids stored to verify continued exemption from District Rule 4623 (amended 5/19/05). [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
- As used in this permit, the term "source or type of petroleum" shall mean petroleum liquids with similar characteristics. The operator shall maintain records of the API gravity of petroleum liquids stored in this unit to determine which oils are from a common source. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

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

Facility Name: MACPHERSON OIL CO

Location: HEAVY OIL CENTRAL STATIONARY SOURCE, CA 8-1703-120-5: Aug 24 2017 4:51PM – VELASCOA

**PERMIT UNIT:** S-1703-126-5

**EXPIRATION DATE:** 07/31/2022

SECTION: SW6 TOWNSHIP: 28S RANGE: 29E

**EQUIPMENT DESCRIPTION:** 

42,000 GALLON (1,000 BBL) OPEN TOP PETROLEUM STORAGE TANK #10S124

### PERMIT UNIT REQUIREMENTS

- 1. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623, 4.4] Federally Enforceable Through Title V Permit
- 2. The operator shall determine the true vapor pressure of the petroleum liquid stored in the tank at least once per year in accordance with methods described in 40 CFR 60.113 and section 6.2 of District Rule 4623 (amended 5/19/05). Determinations shall be made annually during the summer and whenever there is a change in the source or type of petroleum entering the tank. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
- 3. The operator shall keep accurate records of types, storage temperature, and TVP of liquids stored to verify continued exemption from District Rule 4623 (amended 5/19/05). [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
- 4. As used in this permit, the term "source or type of petroleum" shall mean petroleum liquids with similar characteristics. The operator shall maintain records of the API gravity of petroleum liquids stored in this unit to determine which oils are from a common source. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

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

Facility Name: MACPHERSON OIL CO

Location: HEAVY OIL CENTRAL STATIONARY SOURCE, CA s-1703-126-5: Aug 24 2017 4:51PM – VELASCOA

**PERMIT UNIT:** S-1703-128-5 **EXPIRATION DATE: 07/31/2022** 

SECTION: SW6 TOWNSHIP: 28S RANGE: 29E

**EQUIPMENT DESCRIPTION:** 

63,000 GALLON (1,500 BBL) FIXED ROOF PETROLEUM STORAGE TANK #15S125

## PERMIT UNIT REQUIREMENTS

- 1. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623, 4.4] Federally Enforceable Through Title V Permit
- The operator shall determine the true vapor pressure of the petroleum liquid stored in the tank at least once per year in accordance with methods described in 40 CFR 60.113 and section 6.2 of District Rule 4623 (amended 5/19/05). Determinations shall be made annually during the summer and whenever there is a change in the source or type of petroleum entering the tank. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
- The operator shall keep accurate records of types, storage temperature, and TVP of liquids stored to verify continued exemption from District Rule 4623 (amended 5/19/05). [District Rule 2520, 9,4.2] Federally Enforceable Through Title V Permit
- As used in this permit, the term "source or type of petroleum" shall mean petroleum liquids with similar characteristics. The operator shall maintain records of the API gravity of petroleum liquids stored in this unit to determine which oils are from a common source. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

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

Facility Name: MACPHERSON OIL CO

Location: HEAVY OIL CENTRAL STATIONARY SOURCE, CA S-1703-128-5: Aug 24 2017 4:51PM – VELASCOA

**PERMIT UNIT:** S-1703-129-5

**EXPIRATION DATE: 07/31/2022** 

SECTION: SW6 TOWNSHIP: 28S RANGE: 29E

**EQUIPMENT DESCRIPTION:** 

63,000 GALLON (1,500 BBL) FIXED ROOF PETROLEUM STORAGE TANK #TOC1

### PERMIT UNIT REQUIREMENTS

- This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623, 4.4] Federally Enforceable Through Title V Permit
- The operator shall determine the true vapor pressure of the petroleum liquid stored in the tank at least once per year in accordance with methods described in 40 CFR 60.113 and section 6.2 of District Rule 4623 (amended 5/19/05). Determinations shall be made annually during the summer and whenever there is a change in the source or type of petroleum entering the tank. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
- The operator shall keep accurate records of types, storage temperature, and TVP of liquids stored to verify continued exemption from District Rule 4623 (amended 5/19/05). [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
- As used in this permit, the term "source or type of petroleum" shall mean petroleum liquids with similar characteristics. The operator shall maintain records of the API gravity of petroleum liquids stored in this unit to determine which oils are from a common source. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

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

Facility Name: MACPHERSON OIL CO

Location: HEAVY OIL CENTRAL STATIONARY SOURCE, CA 8-1703-129-5: Aug 24 2017 4-51PM -- VELASCOA

**PERMIT UNIT:** S-1703-130-5 EXPIRATION DATE: 07/31/2022

SECTION: SW6 TOWNSHIP: 28S RANGE: 29E

**EQUIPMENT DESCRIPTION:** 

84,000 GALLON (2,000 BBL) FIXED ROOF PETROLEUM STORAGE TANK #20S150

## PERMIT UNIT REQUIREMENTS

- This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623, 4.4] Federally Enforceable Through Title V Permit
- The operator shall determine the true vapor pressure of the petroleum liquid stored in the tank at least once per year in accordance with methods described in 40 CFR 60.113 and section 6.2 of District Rule 4623 (amended 5/19/05). Determinations shall be made annually during the summer and whenever there is a change in the source or type of petroleum entering the tank. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
- The operator shall keep accurate records of types, storage temperature, and TVP of liquids stored to verify continued exemption from District Rule 4623 (amended 5/19/05). [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
- As used in this permit, the term "source or type of petroleum" shall mean petroleum liquids with similar characteristics. The operator shall maintain records of the API gravity of petroleum liquids stored in this unit to determine which oils are from a common source. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

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

Facility Name: MACPHERSON OIL CO

astion: HEAVY OIL CENTRAL STATIONARY SOURCE, CA 03-130-5: Aug 24 2017 4:51PM - VELASCOA Location:

**PERMIT UNIT:** S-1703-131-5 **EXPIRATION DATE:** 07/31/2022

SECTION: SW6 TOWNSHIP: 28S RANGE: 29E

**EQUIPMENT DESCRIPTION:** 

105,000 GALLON (2,500 BBL) OPEN TOP PETROLEUM STORAGE TANK #25S168

## PERMIT UNIT REQUIREMENTS

- 1. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623, 4.4] Federally Enforceable Through Title V Permit
- 2. The operator shall determine the true vapor pressure of the petroleum liquid stored in the tank at least once per year in accordance with methods described in 40 CFR 60.113 and section 6.2 of District Rule 4623 (amended 5/19/05). Determinations shall be made annually during the summer and whenever there is a change in the source or type of petroleum entering the tank. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
- 3. The operator shall keep accurate records of types, storage temperature, and TVP of liquids stored to verify continued exemption from District Rule 4623 (amended 5/19/05). [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
- 4. As used in this permit, the term "source or type of petroleum" shall mean petroleum liquids with similar characteristics. The operator shall maintain records of the API gravity of petroleum liquids stored in this unit to determine which oils are from a common source. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

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

Facility Name: MACPHERSON OIL CO

Location: HEAVY OIL CENTRAL STATIONARY SOURCE, CA S-1703-131-5: Aug 24 2017 4:51PM - VELASCOA

PERMIT UNIT: S-1703-132-5 EXPIRATION DATE: 07/31/2022

SECTION: SW6 TOWNSHIP: 28S RANGE: 29E

**EQUIPMENT DESCRIPTION:** 

105,000 GALLON (2,500 BBL) FIXED ROOF PETROLEUM STORAGE TANK #ACT

## PERMIT UNIT REQUIREMENTS

- 1. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623, 4.4] Federally Enforceable Through Title V Permit
- 2. The operator shall determine the true vapor pressure of the petroleum liquid stored in the tank at least once per year in accordance with methods described in 40 CFR 60.113 and section 6.2 of District Rule 4623 (amended 5/19/05). Determinations shall be made annually during the summer and whenever there is a change in the source or type of petroleum entering the tank. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
- 3. The operator shall keep accurate records of types, storage temperature, and TVP of liquids stored to verify continued exemption from District Rule 4623 (amended 5/19/05). [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
- 4. As used in this permit, the term "source or type of petroleum" shall mean petroleum liquids with similar characteristics. The operator shall maintain records of the API gravity of petroleum liquids stored in this unit to determine which oils are from a common source. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

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

Facility Name: MACPHERSON OIL CO

Location: HEAVY OIL CENTRAL STATIONARY SOURCE, CA 8-1703-132-5: Aug 24 2017 4:51PM - VELASCOA

**PERMIT UNIT: S-1703-133-5** EXPIRATION DATE: 07/31/2022

SECTION: SW6 TOWNSHIP: 28S RANGE: 29E

**EQUIPMENT DESCRIPTION:** 

105,000 GALLON (2,500 BBL) FIXED ROOF PETROLEUM STORAGE TANK #25S110

### PERMIT UNIT REQUIREMENTS

- This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623, 4.4] Federally Enforceable Through Title V Permit
- The operator shall determine the true vapor pressure of the petroleum liquid stored in the tank at least once per year in accordance with methods described in 40 CFR 60.113 and section 6.2 of District Rule 4623 (amended 5/19/05). Determinations shall be made annually during the summer and whenever there is a change in the source or type of petroleum entering the tank. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
- The operator shall keep accurate records of types, storage temperature, and TVP of liquids stored to verify continued exemption from District Rule 4623 (amended 5/19/05). [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
- As used in this permit, the term "source or type of petroleum" shall mean petroleum liquids with similar characteristics. The operator shall maintain records of the API gravity of petroleum liquids stored in this unit to determine which oils are from a common source. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

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

Facility Name: MACPHERSON OIL CO

HEAVY OIL CENTRAL STATIONARY SOURCE, CA S-1703-133-5 : Aug 24 2017 4:51PM -- VELASCOA

**PERMIT UNIT:** S-1703-134-7 EXPIRATION DATE: 07/31/2022

SECTION: 18 TOWNSHIP: 27S RANGE: 28E

**EQUIPMENT DESCRIPTION:** 

THERMALLY ENHANCED OIL RECOVERY (TEOR) OPERATION WITH UP TO 6 STEAM DRIVE WELLS, OPERATING WITH CLOSED CASING VENTS (WEST MT POSO UNIT TANK BATTERY)

#### PERMIT UNIT REQUIREMENTS

- The crude oil production from wells associated with this permit unit shall not lie within 1000 feet of an air injection well used for in-situ combustion. [District Rule 4407, 2.0, 3.4, and 3.5] Federally Enforceable Through Title V Permit
- All required source testing shall conform to the compliance testing procedures described in District Rule 1081(as amended December 16, 1993). [District Rule 1081] Federally Enforceable Through Title V Permit
- All fluids and gas produced from steam drive wells shall be piped to tank battery S-1703-16 thru '-26 only. [District 2201 Rule] Federally Enforceable Through Title V Permit
- VOC emission rate shall not exceed 0.77 lb/hr. [District 2201 Rule] Federally Enforceable Through Title V Permit
- A gas leak is defined as the detection of a concentration of total organic compounds, above background (measured in accordance with EPA Method 21) that exceeds the following values: 1) A major gas leak is a detection of greater than 10,000 ppmv as methane; and 2) A minor gas leak is a detection of 400 to 10,000 ppmv as methane for pressure relief devices (PRDs) and 2,000 to 10,000 for components other than PRDs. [District Rule 4401, 3.20] Federally Enforceable Through Title V Permit
- A liquid leak is defined as the dripping of VOC-containing liquid. A major liquid leak is a visible mist or a continuous flow of liquid that is not seal lubricant. A minor liquid leak is a liquid leak that is not a major liquid leak and drips liquid at a rate of more than three drops per minute, except for seal lubricant. [District Rule 4401, 3.20] Federally Enforceable Through Title V Permit
- During the time any steam-enhanced crude oil production well is undergoing service or repair while the well is not producing, it shall be exempt from the emission control requirements of District Rule 4401, 5.0. [District Rule 4401] 4.1] Federally Enforceable Through Title V Permit
- Permittee shall not operate a steam-enhanced crude oil production well unless they comply with one of the following requirements: 1) Permittee shall keep the steam-enhanced crude oil production well vents closed and the front line production equipment downstream of the wells that carry produced fluids (crude oil or mixture of crude oil and water) shall be connected to a VOC collection and control system. The well vent may be temporarily opened during periods of attended service or repair of the well provided such activity is done as expeditiously as possible with minimal spillage of material and VOC emissions to the atmosphere; or 2) Permittee shall install and maintain an APCOapproved VOC collection and control system that is not open to the atmosphere and that is composed of hard-piping, ductwork connections and, if necessary, flow inducing devices that transport gas or vapor from a piece or pieces of equipment to an APCO-approved control device that has a VOC destruction or removal efficiency of at least 99%, or that transports gases or vapors back to a process system. [District Rules 2201 and 4401, 5.1.1, and 5.1.2] Federally Enforceable Through Title V Permit

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

Facility Name: MACPHERSON OIL CO

Location: HEAVY OIL CENTRAL STATIONARY SOURCE, CA 8-1703-134-7 : Aug 24 2017 4:51PM – VELASCOA

- During District compliance inspection, the following conditions shall be used to determination of a violation: 1) Existence of an open-ended line or a valve located at the end of the line that is not sealed with a blind flange, plug, cap, or a second closed valve that is not closed at all times, except during attended operations requiring process fluid flow through the open-ended lines. Attended operations include draining or degassing operations, connection of temporary process equipment, sampling of process streams, emergency venting, and other normal operational needs, provided such operations are done as expeditiously as possible and with minimal spillage of material and VOC emissions to the atmosphere; 2) Existence of a component with a major liquid leak; 3) Existence of a component with a gas leak greater than 50,000 ppmv; or 4) Existence of a component leak consisting of a minor liquid or gas leak, or a gas leak greater than 10,000 ppmv up to 50,000 ppmv, in excess of the allowable number of leaks specified in Table 3 of Rule 4401. [District Rule 4401, 5.2.2] Federally Enforceable Through Title V Permit
- 10. The permittee shall not use any components that leak in excess of the applicable leak standards as specified in this permit. Components that have been found leaking in excess of the applicable leak standards of this rule may be used provided such leaking components have been identified with a tag for repair, are repaired, or are awaiting re-inspection after being repaired, within the applicable time period specified in this permit. [District Rule 4401, 5.3.1] Federally Enforceable Through Title V Permit
- 11. Permittee shall keep all hatches closed at all times except during sampling or adding of process material through the hatch, or during attended repair, replacement, or maintenance operations, provided such activities are done as expeditiously as possible with minimal spillage of material and VOC emissions to the atmosphere. [District Rule 4401, 5.3.2] Federally Enforceable Through Title V Permit
- 12. Except for pipes and unsafe-to-monitor components, permittee shall visually inspect all pipes at least once every year. Any visual inspection of pipes that indicates a leak that cannot be immediately repaired to meet the leak standards of Rule 4401 shall be inspected within 24 hours after detecting the leak. If a leak is found, the leak shall be repaired as soon as practicable but not later than the time frame specified in Table 4 of Rule 4401. [District Rule 4401, 5.4.1 & 5.4.2] Federally Enforceable Through Title V Permit
- 13. Permittee shall inspect audio-visually (by hearing and by sight) for leaks all accessible operating pumps, compressors, and pressure relief devices (PRDs) in service at least once each calendar week. [District Rule 4401, 5.4.3] Federally Enforceable Through Title V Permit
- 14. Any audio-visual inspection of an accessible operating pump, compressor, and PRD performed by an operator that indicates a leak that cannot be immediately repaired to meet the leak standards of Rule 4401 shall be inspected not later than 24 hours after conducting the audio-visual inspection. If a leak is found, the leak shall be repaired as soon as practicable but not later than the time frame specified in Table 3 of Rule 4401. [District Rule 4401, 5.4.3] Federally Enforceable Through Title V Permit
- 15. Permittee shall initially inspect a PRD that releases to the atmosphere as soon as practicable but not later than 24 hours after the discovery of the release. Permittee shall re-inspect the PRD not earlier than 24 hours after the initial inspection but not later than 15 calendar days after the initial inspection. [District Rule 4401, 5.4.4] Federally Enforceable Through Title V Permit
- 16. Permittee shall inspect all new, replaced, or repaired fittings, flanges, and threaded connections within 72 hours of placing the component in service. [District Rule 4401, 5.4.4] Federally Enforceable Through Title V Permit
- 17. Except for PRDs, permittee shall inspect a component that has been repaired or replaced not later than 15 calendar days after the component was repaired or replaced. [District Rule 4401, 5.4.4] Federally Enforceable Through Title V Permit
- 18. Permittee shall inspect all unsafe-to-monitor components during each turnaround. [District Rule 4401, 5.4.5] Federally Enforceable Through Title V Permit
- 19. Permittee shall affix a readily visible weatherproof tag to a leaking component upon detection of the leak. The following information shall be included on the tag: 1) the date and time of leak detection; 2) the date and time of leak measurement; 3) leak concentration in ppmv for a gaseous leak; 4) description of whether it is a major liquid leak or a minor liquid leak; and 5) whether the component is an essential component, an unsafe-to-monitor component, or a critical component. [District Rule 4401, 5.5.1] Federally Enforceable Through Title V Permit

- 20. Permittee shall keep the tag affixed to the component until all of the following conditions have been met: 1) the leaking component has been repaired or replaced, and 2) the component has been re-inspected using the test methods described in this permit; and 3) the component is found to be in compliance with the requirements of Rule 4401. [District Rule 4401, 5.5.2] Federally Enforceable Through Title V Permit
- 21. Permittee shall minimize a component leak in order to stop or reduce leakage to the atmosphere immediately to the extent possible, but not later than one (1) hour after detection of the leak. [District Rule 4401, 5.5.3] Federally Enforceable Through Title V Permit
- 22. Except for leaking critical components or leaking essential components, if the operator has minimized a leak but the leak still exceeds the applicable leak limits, the operator shall comply with at least one of the following requirements as soon as practicable but not later than the time period specified in Table 3 of Rule 4401: 1) repair or replace the leaking component; 2) vent the leaking component to a VOC collection and control system; or 3) remove the leaking component from operation. [District Rule 4401, 5.5.4] Federally Enforceable Through Title V Permit
- 23. The leak rate, measured after leak minimization has been performed, shall be used to determine the applicable repair period specified in Table 3 of Rule 4401 and the time of initial leak detection shall be the start of the repair period specified in Table 4 of Rule 4401. [District Rule 4401, 5.5.5, and 5.5.6] Federally Enforceable Through Title V Permit
- 24. If the leaking component is an essential component or a critical component that cannot be immediately shut down for repairs, and if the leak has been minimized but the leak still exceeds the applicable leak standard of this rule, the operator shall repair or replace the essential component or critical component to eliminate the leak during the next process unit turnaround, but in no case later than one year from the date of the original leak detection, whichever comes earlier. [District Rule 4401, 5.5.7] Federally Enforceable Through Title V Permit
- 25. All records of required monitoring data and support information required by this permit shall be retained for a period of at least five years and shall be made available for District inspection upon request. [District Rules 2520, 9.4.2, and 4401, 6.1] Federally Enforceable Through Title V Permit
- 26. Permittee shall maintain monitoring records of the date and well identification where steam injection or well stimulation occurs. [District Rule 4401, 6.1.1] Federally Enforceable Through Title V Permit
- 27. Unless waived by the District, permittee shall maintain source test records which show that the control efficiency requirements of the VOC collection and control system have been satisfied. [District Rule 4401, 6.1] Federally Enforceable Through Title V Permit
- 28. Records shall be maintained of each calibration of the portable hydrocarbon detection instrument utilized for inspecting components. The records shall include a copy of the current calibration gas certification from the vendor of the calibration gas cylinder, the date of calibration, the concentration of calibration gas, the instrument reading of calibration gas before adjustment, the instrument reading of calibration gas after adjustment, the calibration gas expiration date, and the calibration gas cylinder pressure at the time of calibration. [District Rule 4401, 6.1.6] Federally Enforceable Through Title V Permit
- 29. Permittee shall maintain a copy of the latest APCO-approved Operator Management Plan (OMP) at the facility and make it available to the APCO, ARB, and US EPA upon request. [District Rule 4401, 6.1.8] Federally Enforceable Through Title V Permit
- 30. Annual control efficiency compliance tests shall be performed by source testers certified by the California Air Resource Board (CARB) on all vapor collection and control systems used to control emissions from steam-enhanced crude oil production wells. Testing shall be performed during June, July, August, or September of each year if the system's control efficiency is dependent upon ambient air temperature. The APCO may waive these source testing requirements if the vapor control system does not exhaust to atmosphere, or if all uncondensed VOC emissions collected by the vapor collection and control system are incinerated in fuel burning equipment, an internal combustion engine, or in a smokeless flare. [District Rule 4401, 6.2.1 & 6.2.2] Federally Enforceable Through Title V Permit

- 31. The control efficiency of any VOC control device, measured and calculated as carbon, shall be determined by EPA Method 25, except when the outlet concentration must be below 50 ppm in order to meet the standard, in which case EPA Method 25a may be used. EPA Method 18 may be used in lieu of EPA Method 25 or EPA Method 25a provided the identity and approximate concentrations of the analytes/compounds in the sample gas stream are known before analysis with the gas chromatograph and the gas chromatograph is calibrated for each of those known analyte/compound to ensure that the VOC concentrations are neither under- or over-reported. [District Rule 4401, 6.3.1] Federally Enforceable Through Title V Permit
- 32. VOC content shall be determined using the latest revision of ASTM Method E168, E169, or E260 as applicable. Halogenated exempt compounds shall be determined by ARB Method 432. [District Rule 4401, 6.3.2] Federally Enforceable Through Title V Permit
- 33. Permittee shall perform leak inspections at least annually, using a portable hydrocarbon detection instrument in accordance with USEPA Method 21. Where safety is a concern, such as measuring leaks from compressor seals or pump seals when the shaft is rotating, a person shall measure leaks by placing the instrument probe inlet at a distance of one centimeter or less from the surface of the component interface. [District Rule 4401, 6.3.3] Federally Enforceable Through Title V Permit
- 34. VOC content by weight percent (wt.%) shall be determined using American Society of Testing and Materials (ASTM) D1945 for gases and South Coast Air Quality Management District (SCAQMD) Method 304-91 or the latest revision of ASTM Method E168, E169 or E260 for liquids. [District Rule 4401, 6.3.4] Federally Enforceable Through Title V Permit
- 35. Permittee shall maintain an inspection log in which, at a minimum, all of the following information shall be recorded for each inspection performed: 1) The total number of components inspected, and the total number and percentage of leaking components found by component type; 2) The location, type, and name or description of each leaking component and description of any unit where the leaking component is found; 3) The date of leak detection and the method of leak detection; 4) For gaseous leaks, the leak concentration in ppmv, and for liquid leaks record whether the leak is a major liquid leak or a minor liquid leak; 5) The date of repair, replacement, or removal from operation of leaking components; 6) The identify and location of essential components and critical components found leaking that cannot be repaired until the next process unit turnaround or not later than one year after leak detection, whichever comes earlier; 7) The methods used to minimize the leak from essential components and critical components found leaking that cannot be repaired until the next process unit turnaround or not later than one year after leak detection, whichever comes earlier; 8) The date of re-inspection and the leak concentration in ppmy after the component is repaired or is replaced; 9) The inspector's name, business mailing address, and business telephone number; and 10) The date and signature of the facility operator responsible for the inspection and repair program certifying the accuracy of the information recorded in the log. [District Rule 4401, 6.1.5 & 6.4] Federally Enforceable Through Title V Permit
- 36. Permittee shall establish and implement an employee training program for inspecting and repairing components and recordkeeping procedures, as necessary. Permittee shall maintain at the facility the copies of the training records of the training program. [District Rule 4401, 6.1.7 & 6.5] Federally Enforceable Through Title V Permit
- 37. In accordance with the approved OMP, permittee shall meet all applicable operating, leak standards, inspection and reinspection, leak repair, record keeping, and notification requirements of Rule 4401. [District Rule 4401, 6.6] Federally Enforceable Through Title V Permit
- 38. By January 30 of each year, permittee shall submit to the APCO for approval, in writing, an annual report indicating any changes to the existing, approved OMP. [District Rule 4401, 5.3.3, and 6.7] Federally Enforceable Through Title V Permit
- 39. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rule 1070] Federally Enforceable Through Title V Permit

**PERMIT UNIT:** S-1703-139-14 **EXPIRATION DATE: 07/31/2022** 

SECTION: NW20 TOWNSHIP: 28S RANGE: 29E

**EQUIPMENT DESCRIPTION:** 

420,000 GALLON FIXED ROOF PETROLEUM STORAGE TANK ID# 10RM105-U.S.L. LEASE WITH VAPOR CONTROL SYSTEM SERVING TANKS S-1703-139, '-140, '-171, AND '-191 VENTING TO TEOR SYSTEM LISTED ON '-143 (U.S.L. LEASE)

### PERMIT UNIT REQUIREMENTS

- The tank shall be equipped with a fixed roof with no holes or openings. [District Rule 2201] Federally Enforceable Through Title V Permit
- 2. The tank vapors may be introduced into TEOR system S-1703-143 at either the main trunk line, or immediately upstream of the H2S scrubber system. [District Rule 2201] Federally Enforceable Through Title V Permit
- 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. The VOC control device shall be either of the following: a vapor return or condensation system that connects to a gas pipeline distribution system, or an approved VOC destruction device the reduces the inlet VOC emissions by at least 95% by weight as determined by the test method specified in Section 6.4.7. [District Rule 4623] Federally Enforceable Through Title V Permit
- All piping, valves, and fittings shall be constructed and maintained in a leak-free condition. [District Rule 4623] Federally Enforceable Through Title V Permit
- 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 Rule 4623] Federally Enforceable Through Title V Permit
- Any tank gauging or sampling device on a tank vented to the vapor recovery system shall be equipped with a leak-free cover which shall be closed at all times except during gauging or sampling. [District Rule 4623] Federally Enforceable Through Title V Permit
- 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] Federally Enforceable Through Title V Permit
- The VOC content of the gas shall not exceed 10% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
- Operator shall conduct quarterly gas sampling for gas exiting the separator pressure vessel to qualify for exemption from fugitive component counts for components handling fluids with VOC content equal to or less than 10% by weight. If gas samples are equal to or less than 10% VOC by weight for 8 consecutive quarterly samplings, sampling frequency shall only be required annually. [District Rule 2201] Federally Enforceable Through Title V Permit
- 10. VOC content of gas shall be determined by ASTM D1945, ASTM D1946, EPA Method 18 referenced as methane, or equivalent test method with prior District approval. [District Rule 2201] Federally Enforceable Through Title V Permit PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

Facility Name: MACPHERSON OIL CO

Location: HEAVY OIL CENTRAL STATIONARY SOURCE, CA 8-1703-139-14: Aug 24 2017 4:51PM - VELASCOA

- 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. Leaks over 10,000 ppmv shall be reported as a deviation. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 12. 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 1070] Federally Enforceable Through Title V Permit

PERMIT UNIT: S-1703-140-10 EXPIRATION DATE: 07/31/2022

SECTION: NW20 TOWNSHIP: 28S RANGE: 29E

**EQUIPMENT DESCRIPTION:** 

252,000 GALLON FIXED ROOF PETROLEUM STORAGE TANK ID # 6RM107-U.S.L. LEASE VENTING TO VAPOR

CONTROL SYSTEM LISTED ON '-139:

## PERMIT UNIT REQUIREMENTS

- 1. The operator shall ensure that the vapor recovery system is functional and is operating as designed at all times with the exception of power curtailment events. [District Rule 2201] Federally Enforceable Through Title V Permit
- This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623] Federally Enforceable Through Title V Permit
- VOC content of vapor in the tank vapor control system shall not exceed 10% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
- Operator shall conduct quarterly sampling from the tank vapor control system's common header to the vapor control system sample point to qualify for exemption from fugitive component counts for components handling fluids with less than 10% VOC by weight. If 8 consecutive quarterly samplings show compliance, then sampling frequency shall only be required annually. [District Rule 2201] Federally Enforceable Through Title V Permit
- VOC content of vapor shall be determined by ASTM D1945, ASTM D1946, EPA Method 18 referenced as methane, or equivalent test method with prior District approval. [District Rule 2201] Federally Enforceable Through Title V Permit
- 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 2201] Federally Enforceable Through Title V Permit
- Upon detection of any leaking components (having a gas leak >10,000 ppmv, measured in accordance with EPA Method 21 by a portable hydrocarbon detection instrument that is calibrated with methane) operator shall: (a) Eliminate or minimize the leak within 8 hours after detection. (b) 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 detection. (c) In no event shall the total time to minimize and eliminate the leak exceed 56 hours after detection. [District Rule 2201] Federally Enforceable Through Title V Permit
- If any of the tank 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 2201] Federally Enforceable Through Title V Permit

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

Facility Name: MACPHERSON OIL CO

Location: HEAVY OIL CENTRAL STATIONARY SOURCE, CA s-1703-140-10: Aug 24 2017 4:51PM - VELASCOA

- 9. During a District inspection, any tank, gauge hatch, sampling device, or other component that is not leak free will not be a violation of this permit provided the facility records, tags, and repairs the leak in accordance with the requirements of this permit. [District Rule 2201] Federally Enforceable Through Title V Permit
- 10. Permittee shall notify the APCO in writing at least (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 2080] Federally Enforceable Through Title V Permit
- 11. 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 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 2080] Federally Enforceable Through Title V Permit
- 12. 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 2080] Federally Enforceable Through Title V Permit
- 13. To facilitate connection to an 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 2080] Federally Enforceable Through Title V Permit
- 14. 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 solvent with 50 grams of VOC per liter or less. [District Rule 2080] Federally Enforceable Through Title V Permit
- 15. Steam cleaning shall only be allowed at locations where wastewater treatment facilities are limited, or during the months of December through March. [District Rule 2080] Federally Enforceable Through Title V Permit
- 16. 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 4623] Federally Enforceable Through Title V Permit
- 17. The API gravity of crude oil or petroleum distillate shall be determined by using ASTM Method D 287 el "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] Federally Enforceable Through Title V Permit
- 18. 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 4623] Federally Enforceable Through Title V Permit
- 19. The TVP testing shall be conducted at actual storage temperature of the organic liquid in the tank. The permittee shall also conduct an API gravity testing. [District Rule 4623] Federally Enforceable Through Title V Permit
- 20. 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 4623] Federally Enforceable Through Title V Permit

Facility Name: MACPHERSON OIL CO

Location: HEAVY OIL CENTRAL STATIONARY SOURCE, CA 8-1709-140-10: Aug 24 2017 4:51PM - VELASCOA

- 21. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date of leak detection, and method of detection; 3) Date and emission level of recheck after leak is repaired. [District Rule 2201] Federally Enforceable Through Title V Permit
- 22. The permittee shall maintain a written log of the date and duration of each power curtailment event. [District Rule 2201] Federally Enforceable Through Title V Permit
- 23. The permittee shall keep written documentation from the power supplier indicating the date, and duration of the curtailment in addition to the beginning and end times. [District Rule 2201] Federally Enforceable Through Title V Permit
- 24. Permittee shall maintain a written record of the VOC content of the gas sampled. [District Rule 2201] Federally Enforceable Through Title V Permit
- 25. All records shall be retained for a period of at least 5 years and shall be made available for District inspection upon request. [District Rule1070] Federally Enforceable Through Title V Permit

**PERMIT UNIT:** S-1703-141-5

EXPIRATION DATE: 07/31/2022

SECTION: SE18 TOWNSHIP: 28S RANGE: 29E

**EQUIPMENT DESCRIPTION:** 

210,000 GALLON FIXED ROOF WASH TANK ID # 5RM102 - U.S.L. LEASE

#### PERMIT UNIT REQUIREMENTS

- This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions, [District Rule 4623, 4.4] Federally Enforceable Through Title V Permit
- The operator shall determine the true vapor pressure of the petroleum liquid stored in the tank at least once per year in accordance with methods described in 40 CFR 60.113 and section 6.2 of District Rule 4623 (amended 5/19/05). Determinations shall be made annually during the summer and whenever there is a change in the source or type of petroleum entering the tank. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
- The operator shall keep accurate records of types, storage temperature, and TVP of liquids stored to verify continued exemption from District Rule 4623 (amended 5/19/05). [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
- As used in this permit, the term "source or type of petroleum" shall mean petroleum liquids with similar characteristics. The operator shall maintain records of the API gravity of petroleum liquids stored in this unit to determine which oils are from a common source. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

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

Facility Name: MACPHERSON OIL CO

Location: HEAVY OIL CENTRAL STATIONARY SOURCE, CA 8-1703-141-5 : Aug 24 2017 4:51PM - VELASCOA

**PERMIT UNIT:** S-1703-143-22 EXPIRATION DATE: 07/31/2022

SECTION: NE20 TOWNSHIP: 28S RANGE: 29E

#### **EQUIPMENT DESCRIPTION:**

THERMALLY ENHANCED OIL RECOVERY (TEOR) OPERATION SERVING UP TO 600 WELLS INCLUDING HEAT EXCHANGERS, SEPARATORS, KNOCKOUTS AND COMPRESSOR STATIONS WITH OPEN OR CLOSED CASING VENTS CONNECTED TO WELL VENT VAPOR CONTROL SYSTEM AND TANK VAPOR CONTROL SYSTEMS S-1703-139, -144, -184, AND -211 WITH H2S SCRUBBER SYSTEM AND COMPRESSED VAPOR PIPING TO STEAM GENERATORS S-1703-157, '-158, '-159, '-160, '-161, AND '-162 FOR INCINERATION OF NONCONDENSIBLE VAPORS OR TO GAS DISPOSAL WELL

# PERMIT UNIT REQUIREMENTS

- TEOR wells are authorized at Sections 7, 17, 18, 19, 20, and 29 T28S/R29E and at Sections 12 and 13 T28S/R28E. [District Rule 2201] Federally Enforceable Through Title V Permit
- The operation shall be equipped with heat exchangers, free water knockouts, gas liquid separators, vapor compressors with electric motors, and compressed vapor piping to any of the following steam generators S-1703-157, -158, -159, -160, -161, or '-162. [District NSR Rule] Federally Enforceable Through Title V Permit
- Noncondensibles shall be incinerated in steam generators S-1703-157, -158, -159, -160, -161, or '-162 or injected into DOGGR-approved disposal well. [District NSR Rule] Federally Enforceable Through Title V Permit
- During the time any steam-enhanced crude oil production well is undergoing service or repair while the well is not producing, it shall be exempt from the emission control requirements of District Rule 4401, 5.0 (as amended January 15, 1998). [District Rule 4401, 4.1] Federally Enforceable Through Title V Permit
- The crude oil production from wells associated with this permit unit shall not lie within 1000 feet of an air injection well used for in-situ combustion. [District Rule 4407, 2.0, 3.4, and 3.5] Federally Enforceable Through Title V Permit
- All required source testing shall conform to the compliance testing procedures described in District Rule 1081(as amended December 16, 1993). [District Rule 1081] Federally Enforceable Through Title V Permit
- The VOC content of the gas shall not exceed 10% by weight. [District Rule 2201] Federally Enforceable Through Title 7. V Permit
- Operator shall conduct quarterly gas sampling for gas exiting the separator pressure vessel to qualify for exemption from fugitive component counts for components handling fluids with VOC content equal to or less than 10% by weight. If gas samples are equal to or less than 10% VOC by weight for 8 consecutive quarterly samplings, sampling frequency shall only be required annually. [District Rule 2201] Federally Enforceable Through Title V Permit
- VOC content of gas shall be determined by ASTM D1945, ASTM D1946, EPA Method 18 referenced as methane, or equivalent test method with prior District approval. [District Rule 2201] Federally Enforceable Through Title V Permit
- 10. Gas and liquid leaks are as defined in Section 3.20 of Rule 4401. [District Rule 4401 3.20] Federally Enforceable Through Title V Permit

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

Facility Name: MACPHERSON OIL CO

Location: HEAVY OIL CENTRAL STATIONARY SOURCE, CA 8-1703-143-22: Aug 24 2017 4:51PM - VELASCOA

- 11. An operator shall not operate a steam-enhanced crude oil production well unless the operator complies with either of the following requirements: The steam-enhanced crude oil production well vent is closed and the front line production equipment downstream of the wells that carry produced fluids (crude oil or mixture of crude oil and water) is connected to a VOC collection and control system as defined in Section 3.0 of Rule 4401, the well vent may be temporarily opened during periods of attended service or repair of the well provided such activity is done as expeditiously as possible with minimal spillage of material and VOC emissions to the atmosphere, or the steam-enhanced crude oil production well vent is open and the well vent is connected to a VOC collection and control system as defined in Section 3.0 of Rule 4401. [District Rule 4401, 5.5.1 and 5.5.2] Federally Enforceable Through Title V Permit
- 12. An operator shall be in violation of this rule if any District inspection demonstrates or if any operator inspection conducted pursuant to Section 5.8 of Rule 4401 demonstrates the existence of an open-ended line or a valve located at the end of the line that is not sealed with a blind flange, plug, cap, or a second closed valve that is not closed at all times, except during attended operations as defined by Section 5.6.2.1 of Rule 4401 requiring process fluid flow through the open-ended lines, a component with a major liquid leak, or a component with a gas leak greater than 50,000 ppmv. [District Rule 4401 5.6.2] Federally Enforceable Through Title V Permit
- 13. An operator shall be in violation of this rule if any District inspection demonstrates or if any operator inspection conducted pursuant to Section 5.8 of Rule 4401 demonstrates the existence of any combination of components with minor liquid leaks, minor gas leaks, or a gas leaks greater than 10,000 ppmv up to 50,000 ppmv that totals more than number of leaks allowed by Table 3 of Rule 4401. [District Rule 4401 5.6.2] Federally Enforceable Through Title V Permit
- 14. An operator shall not use any component with a leak as defined in Section 3.0 of Rule 4401, or that is found to be in violation of the provisions of Section 5.6.2 of Rule 4401. However, components that were found leaking may be used provided such leaking components have been identified with a tag for repair, are repaired, or awaiting re-inspection after being repaired within the applicable time frame specified in Section 5.9 of Rule 4401. [District Rule 4401 5.7.1] Federally Enforceable Through Title V Permit
- 15. Each hatch shall be closed at all times except during sampling or adding of process material through the hatch, or during attended repair, replacement, or maintenance operations, provided such activities are done as expeditiously as possible with minimal spillage of material and VOC emissions to the atmosphere. [District Rule 4401 5.7.2] Federally Enforceable Through Title V Permit
- 16. An operator shall comply with the requirements of Section 6.7 of Rule 4401 if there is any change in the description of major components or critical components. [District Rule 4401 5.7.3] Federally Enforceable Through Title V Permit
- 17. The annual inspection requirements of Section 5.8.1 through Section 5.8.5 of Rule 4401 shall not apply to components exclusively handling gas/vapor or liquid with a VOC content of ten percent by weight (10 wt %) or less, as determined by the test methods in Section 6.3.5 of Rule 4401. [District Rule 4401 4.9] Federally Enforceable Through Title V Permit
- 18. Except for pipes and unsafe-to-monitor components, an operator shall inspect all other components pursuant to the requirements of Section 6.3.3 of Rule 4401 at least once every year. [District Rule 4401 5.8.1] Federally Enforceable Through Title V Permit
- 19. An operator shall visually inspect all pipes at least once every year. Any visual inspection of pipes that indicates a leak that cannot be immediately repaired to meet the leak standards of this rule shall be inspected within 24 hours after detecting the leak. If a leak is found, the leak shall be repaired as soon as practicable but not later than the time frame specified in Table 4 of Rule 4401. [District Rule 4401 5.8.2] Federally Enforceable Through Title V Permit

- 20. In addition to the inspections required by Section 5.8.1 of Rule 4401, an operator shall inspect for leaks all accessible operating pumps, compressors, and PRDs in service as follows: An operator shall audio-visually (by hearing and by sight) inspect for leaks all accessible operating pumps, compressors, and PRDs in service at least once each calendar week. Any audio-visual inspection of an accessible operating pump, compressor, and PRD performed by an operator that indicates a leak that cannot be immediately repaired to meet the leak standards of this rule shall be inspected not later than 24 hours after conducting the audio-visual inspection. If a leak is found, the leak shall be repaired as soon as practicable but not later than the time frame specified in Table 4 of Rule 4401. [District Rule 4401 5.8.3] Federally Enforceable Through Title V Permit
- 21. In addition to the inspections required by Sections 5.8.1, 5.8.2 and 5.8.3 of Rule 4401, operator shall perform the following: initially inspect a PRD that releases to the atmosphere as soon as practicable but not later than 24 hours after the discovery of the release, re-inspect the PRD not earlier than 24 hours after the initial inspection but not later than 15 calendar days after the initial inspection, inspect all new, replaced, or repaired fittings, flanges, and threaded connections within 72 hours of placing the component in service. Except for PRDs subject to the requirements of Section 5.8.4.1 of Rule 4401, an operator shall inspect a component that has been repaired or replaced not later than 15 calendar days after the component was repaired or replaced. [District Rule 4401 5.8.4] Federally Enforceable Through Title V Permit
- 22. An operator shall inspect all unsafe-to-monitor components during each turnaround. [District Rule 4401 5.8.5] Federally Enforceable Through Title V Permit
- 23. District inspection in no way fulfills any of the mandatory inspection requirements that are placed upon operators and cannot be used or counted as an inspection required of an operator. [District Rule 4401 5.8.6] Federally Enforceable Through Title V Permit
- 24. An operator shall affix a readily visible weatherproof tag to a leaking component upon detection of the leak and shall include the following information on the tag: date and time of leak detection, date and time of leak measurement, for a gaseous leak, the leak concentration in ppmv, for a liquid leak, whether it is a major liquid leak or a minor liquid leak, whether the component is an essential component, an unsafe-to monitor component, or a critical component. [District Rule 4401 5.9.1] Federally Enforceable Through Title V Permit
- 25. An operator shall keep the tag affixed to the component until an operator has met all of the following conditions: repaired or replaced the leaking component, re-inspected the component using the test method in Section 6.3.3, and 5.9.2.3 of Rule 4401, or the component is found to be in compliance with the requirements of this rule. [District Rule 4401 5.9.2] Federally Enforceable Through Title V Permit
- 26. An operator shall minimize a component leak in order to stop or reduce leakage to the atmosphere immediately to the extent possible, but not later than one (1) hour after detection of the leak. [District Rule 4401 5.9.3] Federally Enforceable Through Title V Permit
- 27. Except for leaking critical components or leaking essential components subject to the requirements of Section 5.9.7 of Rule 4401, if an operator has minimized a leak but the leak still exceeds the applicable leak limits as defined in Section 3.0 of Rule 4401, an operator shall comply with at least one of the following requirements as soon as practicable but not later than the time period specified in Table 4 of Rule 4401: Repair or replace the leaking component; or vent the leaking component to a VOC collection and control system as defined in Section 3.0 of Rule 4401, or remove the leaking component from operation. [District Rule 4401 5.9.4] Federally Enforceable Through Title V Permit
- 28. The repair period in calendar days shall not exceed 14 days for minor gas leaks, 5 days for major gas leaks less than or equal to 50,000 ppmv, 2 days for gas leak greater than 50,000 ppmv, 3 days for minor liquid leaks, 2 days for major liquid leaks. [District Rule 4401 5.9.4] Federally Enforceable Through Title V Permit
- 29. The leak rate measured after leak minimization has been performed shall be the leak rate used to determine the applicable repair period specified in Table 4 of Rule 4401. [District Rule 4401 5.9.5] Federally Enforceable Through Title V Permit
- 30. The time of the initial leak detection shall be the start of the repair period specified in Table 4 of Rule 4401. [District Rule 4401 5.9.6] Federally Enforceable Through Title V Permit

- 31. If the leaking component is an essential component or a critical component that cannot be immediately shut down for repairs, and if the leak has been minimized but the leak still exceeds the applicable leak standard of this rule, the operator shall repair or replace the essential component or critical component to eliminate the leak during the next process unit turnaround, but in no case later than one year from the date of the original leak detection, whichever comes earlier. [District Rule 4401 5.9.7] Federally Enforceable Through Title V Permit
- 32. The operator of any steam-enhanced crude oil production well shall maintain records of the date and well identification where steam injection or well stimulation occurs. [District Rule 4401 6.1.1] Federally Enforceable Through Title V Permit
- 33. An operator of any steam-enhanced crude oil production well shall keep source test records which demonstrate compliance with the control efficiency requirements of the VOC collection and control system as defined in Section 3.0 of Rule 4401. [District Rule 4401 6.1.3] Federally Enforceable Through Title V Permit
- 34. The results of source tests conducted pursuant to Section 4.6.2 of Rule 4401 shall be submitted to the APCO within 60 days after the completion of the source test. [District Rule 4401 6.1.4] Federally Enforceable Through Title V Permit
- 35. Operator of any steam-enhanced crude oil production well shall keep an inspection log maintained pursuant to Section 6.4 of Rule 4401. [District Rule 4401 6.1.5] Federally Enforceable Through Title V Permit
- 36. Records of each calibration of the portable hydrocarbon detection instrument utilized for inspecting components, including a copy of current calibration gas certification from the vendor of said calibration gas cylinder, the date of calibration, concentration of calibration gas, instrument reading of calibration gas before adjustment, instrument reading of calibration gas after adjustment, calibration gas expiration date, and calibration gas cylinder pressure at the time of calibration shall be maintained. [District Rule 4401 6.1.6] Federally Enforceable Through Title V Permit
- 37. An operator shall maintain copies at the facility of the training records of the training program operated pursuant to Section 6.5 of Rule 4401. [District Rule 4401 6.1.7] Federally Enforceable Through Title V Permit
- 38. Operator shall keep a copy of the APCO-approved Operator Management Plan at the facility. [District Rule 4401 6.1.8] Federally Enforceable Through Title V Permit
- 39. Operator shall submit to the APCO not later than June 14, 2007 a list of all gauge tanks, as defined in Section 3.17. The list shall contain the size, identification number, the location of each gauge tank and specify whether the gauge tank is upstream of all front line production equipment. [District Rule 4401 6.1.9] Federally Enforceable Through Title V Permit
- 40. The results of gauge tank TVP testing conducted pursuant to Section 6.2.5 shall be submitted to the APCO within 60 days after the completion of the testing. [District Rule 4401 6.1.10] Federally Enforceable Through Title V Permit
- 41. An operator that discovers that a PRD has released shall record the date that the release was discovered, and the identity and location of the PRD that released. An operator shall submit such information recorded during the calendar year to the APCO no later than 60 days after the end of the calendar year. [District Rule 4401 6.1.11] Federally Enforceable Through Title V Permit
- 42. An operator shall source test annually all vapor collection and control systems used to control emissions from steamenhanced crude oil production well vents to determine the control efficiency of the device(s) used for destruction or removal of VOC. Compliance testing shall be performed annually by source testers certified by ARB. Testing shall be performed during June, July, August, or September of each year if the system's control efficiency is dependent upon ambient air temperature. [District Rule 4401 6.2.1] Federally Enforceable Through Title V Permit
- 43. If approved by EPA, ARB, and the APCO, an operator need not comply with the annual testing requirement of Section 6.2.1 if all uncondensed VOC emissions collected by a vapor collection and control system are incinerated in fuel burning equipment, an internal combustion engine or in a smokeless flare. [District Rule 4401 6.2.2] Federally Enforceable Through Title V Permit
- 44. If approved by EPA, ARB, and the APCO, an operator need not comply with the annual testing requirement of Section 6.2.1 for a vapor control system which does not have a VOC destruction device. [District Rule 4401 6.2.3] Federally Enforceable Through Title V Permit

- 45. An operator seeking approval pursuant to Section 6.2.2 or Section 6.2.3 shall submit a written request and supporting information to the APCO. The District shall evaluate the request and if approved by the APCO, the District shall provide EPA and ARB with a copy of the evaluation and shall request EPA and ARB approval. The District evaluation and the APCO request shall be deemed approved unless EPA or ARB objects to such approval in writing within 45 days of the receipt of the APCO request. [District Rule 4401 6.2.4] Federally Enforceable Through Title V Permit
- 46. An operator shall comply with the following requirements for each gauge tank, as defined in Section 3.17 of Rule 4401: Conduct an initial TVP testing of the produced fluid in each gauge tank not later than June 14, 2007. Thereafter, an operator shall conduct periodic TVP testing of each gauge tank at least once every 24 months during summer (July -September), and whenever there is a change in the source or type of produced fluid in the gauge tank. The TVP testing shall be conducted at the actual storage temperature of the produced fluid in the gauge tank using the applicable TVP test method specified in Section 6.4 of Rule 4623 (Storage of Organic Liquids). The operator shall submit the TVP testing results to the APCO as specified in Section 6.1.10 of Rule 4401. [District Rule 4401 6.2.5] Federally Enforceable Through Title V Permit
- 47. The control efficiency of any VOC control device, measured and calculated as carbon, shall be determined by EPA Method 25, except when the outlet concentration must be below 50 ppm in order to meet the standard, in which case EPA Method 25a may be used. EPA Method 18 may be used in lieu of EPA Method 25 or EPA Method 25a provided the identity and approximate concentrations of the analytes/compounds in the sample gas stream are known before analysis with the gas chromatograph and the gas chromatograph is calibrated for each of those known analyte/compound to ensure that the VOC concentrations are neither under- or over-reported. [District Rule 4401 6.3.1] Federally Enforceable Through Title V Permit
- 48. VOC content shall be analyzed by using the latest revision of ASTM Method E168, E169, or E260 as applicable. Analysis of halogenated exempt compounds shall be performed by using ARB Method 432. [District Rule 4401 6.3.2] Federally Enforceable Through Title V Permit
- 49. Leak inspection, other than audio-visual, and measurements of gaseous leak concentrations shall be conducted according to EPA Method 21 using an appropriate portable hydrocarbon detection instrument calibrated with methane. The instrument shall be calibrated in accordance with the procedures specified in EPA Method 21 or the manufacturer's instruction, as appropriate, not more than 30 days prior to its use. The operator shall record the calibration date of the instrument. Where safety is a concern, such as measuring leaks from compressor seals or pump seals when the shaft is rotating, a person shall measure leaks by placing the instrument probe inlet at a distance of one (1) centimeter or less from the surface of the component interface. [District Rule 4401 6.3.3] Federally Enforceable Through Title V Permit
- 50. The VOC content by weight percent (wt.%) shall be determined using American Society of Testing and Materials (ASTM) D1945 for gases and South Coast Air Quality Management District (SCAQMD) Method 304-91 or the latest revision of ASTM Method E168, E169 or E260 for liquids. [District Rule 4401 6.3.5] Federally Enforceable Through Title V Permit
- 51. Operator shall maintain an inspection log in which an operator records, at a minimum, all of the following information for each inspection performed: The total number of components inspected, total number and percentage of leaking components found by component type, location, type, and name or description of each leaking component and description of any unit where the leaking component is found, date of leak detection and the method of leak detection. For gaseous leaks, the leak concentration in ppmv, and for liquid leaks record whether the leak is a major liquid leak or a minor liquid leak, the date of repair, replacement, or removal from operation of leaking components, identify and location of essential components and critical components found leaking that cannot be repaired until the next process unit turnaround or not later than one year after leak detection, whichever comes earlier, methods used to minimize the leak from essential components and critical components found leaking that cannot be repaired until the next process unit turnaround or not later than one year after leak detection, whichever comes earlier, the date of re-inspection and the leak concentration in ppmv after the component is repaired or is replaced, the inspector's name, business mailing address, and business telephone number, date and signature of the facility operator responsible for the inspection and repair program certifying the accuracy of the information recorded in the log. [District Rule 4401 6.4] Federally Enforceable Through Title V Permit

52. All records shall be maintained and retained on-site for a period of at least 5 years and shall be made available for District inspection upon request. [District Rule 1070] Federally Enforceable Through Title V Permit

PERMIT UNIT: S-1703-144-22

EXPIRATION DATE: 07/31/2022

SECTION: 18 TOWNSHIP: 28S RANGE: 29E

#### **EQUIPMENT DESCRIPTION:**

2,000 BBL FIXED ROOF PETROLEUM STORAGE TANK #T-240 SERVED BY VAPOR CONTROL SYSTEM SHARED WITH S-1703-145, '-146, '-150, '-152, '-195, '-197, '-209, '-214 AND '-215 VENTING TO VAPOR CONTROL SYSTEM PERMITTED UNDER S-1703-143 AND/OR DIRECTLY TO STEAM GENERATORS S-1703-157, '-158, '-159, '-160, '-161, AND '-162 FOR INCINERATION

### PERMIT UNIT REQUIREMENTS

- The operator shall ensure that the vapor recovery system is functional and is operating as designed at all times with the exception of power curtailment events. [District Rule 2201] Federally Enforceable Through Title V Permit
- This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623] Federally Enforceable Through Title V Permit
- Maximum VOC content of vapor in the tank vapor control system shall not exceed 10% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
- The tank vapors may be introduced into TEOR system S-1703-143 at either the main trunk line, or immediately upstream of the H2S scrubber system. [District Rule 2201] Federally Enforceable Through Title V Permit
- 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 to prevent leaks. The vapors shall be incinerated to reduce the inlet VOC emissions by at least 99% by weight as determined by the test method specified in Section 6.4 of Rule 4623 in any of the following steam generators: S-1703-157, -158, -159, -160, -161, or -162; or vapors shall be injected into DOGGR approved wells listed on permit S-1703-143. [District Rule 2201] Federally Enforceable Through Title V Permit
- Upon detection of any leaking components (having a gas leak >10,000 ppmv, measured in accordance with EPA Method 21 by a portable hydrocarbon detection instrument that is calibrated with methane) operator shall: (a) Eliminate or minimize the leak within 8 hours after detection. (b) 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 detection. (c) In no event shall the total time to minimize and eliminate the leak exceed 56 hours after detection. [District Rule 2201] Federally Enforceable Through Title V Permit
- If any of the tank 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 2201] Federally Enforceable Through Title V Permit
- During a District inspection, any tank, gauge hatch, sampling device, or other component that is not leak free will not be a violation of this permit provided the facility records, tags, and repairs the leak in accordance with the requirements of this permit. [District Rule 2201] Federally Enforceable Through Title V Permit

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

Facility Name: MACPHERSON OIL CO

Location: HEAVY OIL CENTRAL STATIONARY SOURCE, CA 8-1703-144-22 : Aug 24 2017 4:51PM -- VELASCOA

- 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 2201] Federally Enforceable Through Title V Permit
- 10. 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 2080] Federally Enforceable Through Title V Permit
- 11. 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 2080] Federally Enforceable Through Title V Permit
- 12. 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 2080] Federally Enforceable Through Title V Permit
- 13. 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 2080] Federally Enforceable Through Title V Permit
- 14. 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 2080] Federally Enforceable Through Title V Permit
- 15. Steam cleaning shall only be allowed at locations where wastewater treatment facilities are limited, or during the months of December through March. [District Rule 2080] Federally Enforceable Through Title V Permit
- 16. Before disposal of VOC vapors by well injection, the applicant shall obtain written notification from DOGGR that the wells are approvable for injection. [District Rule 2201] Federally Enforceable Through Title V Permit
- 17. 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 4623] Federally Enforceable Through Title V Permit
- 18. 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] Federally Enforceable Through Title V Permit

- 19. 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 4623] Federally Enforceable Through Title V Permit
- 20. The TVP testing shall be conducted at actual storage temperature of the organic liquid in the tank. The permittee shall also conduct an API gravity testing. [District Rule 4623] Federally Enforceable Through Title V Permit
- 21. 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 4623] Federally Enforceable Through Title V Permit
- 22. Operator shall conduct quarterly gas sampling after TVR compressor (prior to connection to any other vapor control system) and at either the first line tank or at any secondary tank which is heated above ambient temperature. If gas samples are less than 10% VOC by weight for 8 consecutive quarterly samplings, sampling frequency shall only be required annually and whenever there is a change in source or type of petroleum processed. Samples shall be collected during periods of normal operation, and not be within 48 hours after routine maintenance or repair. [District Rule 2201] Federally Enforceable Through Title V Permit
- 23. VOC content of gas shall be measured using ASTM D-1945, EPA Method 18 referenced as methane, or equivalent test method with prior District approval. [District Rule 2201] Federally Enforceable Through Title V Permit
- 24. 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 Rule 2201] Federally Enforceable Through Title V Permit
- 25. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date of leak detection, and method of detection; 3) Date and emission level of recheck after leak is repaired. [District Rule 2201] Federally Enforceable Through Title V Permit
- 26. Permittee shall maintain records of the VOC content of vapor in the tank vapor control system, including date and test results. [District Rule 2201] Federally Enforceable Through Title V Permit
- 27. The permittee shall maintain a written log of the date and duration of each power curtailment event. [District Rule 2201] Federally Enforceable Through Title V Permit
- 28. The permittee shall keep written documentation from the power supplier indicating the date, and duration of the curtailment in addition to the beginning and end times. [District Rule 2201] Federally Enforceable Through Title V Permit
- 29. 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 1070] Federally Enforceable Through Title V Permit

PERMIT UNIT: S-1703-146-11

EXPIRATION DATE: 07/31/2022

SECTION: SE18 TOWNSHIP: 28S RANGE: 29E

**EQUIPMENT DESCRIPTION:** 

10,000 BBL FIXED ROOF CRUDE OIL WASH TANK T-110 VENTING TO VAPOR CONTROL SYSTEM LISTED ON '-144:

## PERMIT UNIT REQUIREMENTS

- The operator shall ensure that the vapor recovery system is functional and is operating as designed at all times with the exception of power curtailment events. [District Rule 2201] Federally Enforceable Through Title V Permit
- 2. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623] Federally Enforceable Through Title V Permit
- The fugitive VOC emission rate does not include piping and components handling produced fluids having less than 3. 10% VOC by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
- Operator shall conduct quarterly sampling from the tank vapor control system's common header to the vapor control system sample point to qualify for exemption from fugitive component counts for components handling fluids with less than 10% VOC by weight. If 8 consecutive quarterly samplings show compliance, then sampling frequency shall only be required annually. [District Rule 2201] Federally Enforceable Through Title V Permit
- VOC content of vapor shall be determined by ASTM D1945, ASTM D1946, EPA Method 18 referenced as methane, or equivalent test method with prior District approval. [District Rule 2201] Federally Enforceable Through Title V Permit
- 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 2201] Federally Enforceable Through Title V Permit
- Upon detection of any leaking components (having a gas leak >10,000 ppmy, measured in accordance with EPA Method 21 by a portable hydrocarbon detection instrument that is calibrated with methane) operator shall: (a) Eliminate or minimize the leak within 8 hours after detection. (b) 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 detection. (c) In no event shall the total time to minimize and eliminate the leak exceed 56 hours after detection. [District Rule 2201] Federally Enforceable Through Title V Permit
- If any of the tank 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 2201] Federally Enforceable Through Title V Permit

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

Facility Name: MACPHERSON OIL CO

Location: HEAVY OIL CENT 8-1703-146-11 : Aug 24 2017 4:51PM - VELASCOA HEAVY OIL CENTRAL STATIONARY SOURCE, CA

- 9. During a District inspection, any tank, gauge hatch, sampling device, or other component that is not leak free will not be a violation of this permit provided the facility records, tags, and repairs the leak in accordance with the requirements of this permit. [District Rule 2201] Federally Enforceable Through Title V Permit
- 10. 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 2080] Federally Enforceable Through Title V Permit
- 11. 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 2080] Federally Enforceable Through Title V Permit
- 12. 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 2080] Federally Enforceable Through Title V Permit
- 13. 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 2080] Federally Enforceable Through Title V Permit
- 14. 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 2080] Federally Enforceable Through Title V Permit
- 15. Steam cleaning shall only be allowed at locations where wastewater treatment facilities are limited, or during the months of December through March. [District Rule 2080] Federally Enforceable Through Title V Permit
- 16. 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 4623] Federally Enforceable Through Title V Permit
- 17. The TVP testing shall be conducted at actual storage temperature of the organic liquid in the tank. The permittee shall also conduct an API gravity testing. [District Rule 4623] Federally Enforceable Through Title V Permit
- 18. 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] Federally Enforceable Through Title V Permit
- 19. 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 4623] Federally Enforceable Through Title V Permit

Location: HEAVY OIL CENTRAL STATIONARY SOURCE, CA

5-1703-146-11 : Aug 24 2017 4:51PM - VELASCO

- 20. 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 4623] Federally Enforceable Through Title V Permit
- 21. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date of leak detection, and method of detection; 3) Date and emission level of recheck after leak is repaired. [District Rule 2201] Federally Enforceable Through Title V Permit
- 22. The permittee shall maintain a written log of the date and duration of each power curtailment event. [District Rule 2201] Federally Enforceable Through Title V Permit
- 23. The permittee shall keep written documentation from the power supplier indicating the date, and duration of the curtailment in addition to the beginning and end times. [District Rule 2201] Federally Enforceable Through Title V Permit
- 24. Permittee shall maintain a written record of the VOC content of the gas sampled. [District Rule 2201] Federally Enforceable Through Title V Permit
- 25. All records shall be maintained and retained on-site for a period of at least 5 years and shall be made available for District inspection upon request. [District Rule 1070] Federally Enforceable Through Title V Permit

**PERMIT UNIT: S-1703-152-10** EXPIRATION DATE: 07/31/2022

SECTION: SE18 TOWNSHIP: 28S RANGE: 29E

**EQUIPMENT DESCRIPTION:** 

2,500 BBL FIXED ROOF SLOP TANK T-320A VENTING TO VAPOR CONTROL SYSTEM LISTED ON '-144:

#### PERMIT UNIT REQUIREMENTS

- The operator shall ensure that the vapor recovery system is functional and is operating as designed at all times with the 1. exception of power curtailment events. [District Rule 2201] Federally Enforceable Through Title V Permit
- This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623] Federally Enforceable Through Title V Permit
- The fugitive VOC emission rate does not include piping and components handling produced fluids having less than 10% VOC by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
- Operator shall conduct quarterly sampling from the tank vapor control system's common header to the vapor control system sample point to qualify for exemption from fugitive component counts for components handling fluids with less than 10% VOC by weight. If 8 consecutive quarterly samplings show compliance, then sampling frequency shall only be required annually. [District Rule 2201] Federally Enforceable Through Title V Permit
- 5. VOC content of vapor shall be determined by ASTM D1945, ASTM D1946, EPA Method 18 referenced as methane, or equivalent test method with prior District approval. [District Rule 2201] Federally Enforceable Through Title V Permit
- 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 2201] Federally Enforceable Through Title V Permit
- Upon detection of any leaking components (having a gas leak >10,000 ppmv, measured in accordance with EPA Method 21 by a portable hydrocarbon detection instrument that is calibrated with methane) operator shall: (a) Eliminate or minimize the leak within 8 hours after detection. (b) 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 detection. (c) In no event shall the total time to minimize and eliminate the leak exceed 56 hours after detection. [District Rule 2201] Federally Enforceable Through Title V Permit
- If any of the tank 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 2201] Federally Enforceable Through Title V Permit

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

Facility Name: MACPHERSON OIL CO

Location: HEAVY OIL CENTRAL STATIONARY SOURCE, CA 8-1703-152-10: Aug 24 2017 4:51PM - VELASCOA

- During a District inspection, any tank, gauge hatch, sampling device, or other component that is not leak free will not be a violation of this permit provided the facility records, tags, and repairs the leak in accordance with the requirements of this permit. [District Rule 2201] Federally Enforceable Through Title V Permit
- 10. 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 2080] Federally Enforceable Through Title V Permit
- 11. 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 2080] Federally Enforceable Through Title V Permit
- 12. 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 2080] Federally Enforceable Through Title V Permit
- 13. 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 2080] Federally Enforceable Through Title V Permit
- 14. 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 2080] Federally Enforceable Through Title V Permit
- 15. Steam cleaning shall only be allowed at locations where wastewater treatment facilities are limited, or during the months of December through March. [District Rule 2080] Federally Enforceable Through Title V Permit
- 16. 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 4623] Federally Enforceable Through Title V Permit
- 17. 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] Federally Enforceable Through Title V Permit
- 18. 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 4623] Federally Enforceable Through Title V Permit
- 19. The TVP testing shall be conducted at actual storage temperature of the organic liquid in the tank. The permittee shall also conduct an API gravity testing. [District Rule 4623] Federally Enforceable Through Title V Permit

- 20. 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 4623] Federally Enforceable Through Title V Permit
- 21. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date of leak detection, and method of detection; 3) Date and emission level of recheck after leak is repaired. [District Rule 2201] Federally Enforceable Through Title V Permit
- 22. The permittee shall maintain a written log of the date and duration of each power curtailment event. [District Rule 2201] Federally Enforceable Through Title V Permit
- 23. The permittee shall keep written documentation from the power supplier indicating the date, and duration of the curtailment in addition to the beginning and end times. [District Rule 2201] Federally Enforceable Through Title V Permit
- 24. Permittee shall maintain a written record of the VOC content of the gas sampled. [District Rule 2201] Federally Enforceable Through Title V Permit
- 25. All records shall be maintained and retained on-site for a period of at least 5 years and shall be made available for District inspection upon request. [District Rule 1070] Federally Enforceable Through Title V Permit

**PERMIT UNIT:** S-1703-156-5

**EXPIRATION DATE: 07/31/2022** 

SECTION: 18 TOWNSHIP: 28S RANGE: 29E

**EQUIPMENT DESCRIPTION:** 

210,000 GALLON FREE WATER KNOCKOUT TANK 5RM101

### PERMIT UNIT REQUIREMENTS

- This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623, 4.4] Federally Enforceable Through Title V Permit
- The operator shall determine the true vapor pressure of the petroleum liquid stored in the tank at least once per year in accordance with methods described in 40 CFR 60.113 and section 6.2 of District Rule 4623 (amended 5/19/05). Determinations shall be made annually during the summer and whenever there is a change in the source or type of petroleum entering the tank. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
- The operator shall keep accurate records of types, storage temperature, and TVP of liquids stored to verify continued exemption from District Rule 4623 (amended 5/19/05). [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
- As used in this permit, the term "source or type of petroleum" shall mean petroleum liquids with similar characteristics. The operator shall maintain records of the API gravity of petroleum liquids stored in this unit to determine which oils are from a common source. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

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Facility Name: MACPHERSON OIL CO

Location: HEAVY OIL CENTRAL STATIONARY SOURCE, CA 8-1703-156-5: Aug 24 2017 4:51PM -- VELASCOA

**PERMIT UNIT:** S-1703-157-15

EXPIRATION DATE: 07/31/2022

**SECTION:** SE12 **TOWNSHIP:** 28S RANGE: 28E

#### **EQUIPMENT DESCRIPTION:**

62.5 MMBTU/HR NATURAL GAS-FIRED STEAM GENERATOR #610 WITH COEN QLN LOW NOX BURNER AND FGR. FIRING TEOR GAS AND TVR GAS FROM S-1703-143 AND/OR TANK VAPOR CONTROL GAS FROM S-1703-139, '-144 OR '-184

### PERMIT UNIT REQUIREMENTS

- Burner shall be equipped with fuel gas volume flowmeter (a master meter for a group of generators is acceptable upon District approval). [District Rule 4351, 5.6.1; District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
- Emission rates shall not exceed any of the following: NOx (as NO2) 7 ppmv @ 3% 02 or 0.008 lb/MMBtu; CO 25 ppmv @ 3% 02; or PM10 - 0.006 lb/MMBtu; VOC - 0.003 lb/MMBtu. [District Rules 2201, 4305, 4306, 4320 and 4351] Federally Enforceable Through Title V Permit
- Fuel gas sulfur content shall not exceed 1 grain of sulfur per 100 dscf. [District Rule 2201 and 4320] Federally Enforceable Through Title V Permit
- Permittee shall conduct sample analysis of noncertified (non-PUC/FERC regulated ) fuel gas monthly. [District Rule 2201] Federally Enforceable Through Title V Permit
- All emissions measurements shall be made with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. Unless otherwise specified in the Permit to Operate, no determination of compliance shall be established within two hours after a continuous period in which fuel flow to the unit is shut off for 30 minutes or longer, or within 30 minutes after a re-ignition as defined in Section 3.0 of District Rule 4306. [District Rule 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
- Source testing to measure NOx and CO emissions from this unit shall be conducted at least once every twelve (12) months. After demonstrating compliance on two (2) consecutive annual source tests, the unit shall be tested not less than once every thirty-six (36) months. If the result of the 36-month source test demonstrates that the unit does not meet the applicable emission limits, the source testing frequency shall revert to at least once every twelve (12) months. [District Rule 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
- Source test results from an individual unit that is identical to this unit, in terms of rated capacity, operational conditions, fuel used, and control method, as approved by the APCO, will satisfy the NOx and CO source testing requirement. [District Rule 4305, 6.3; District Rule 4351,6.3; District Rule 2520, 9.4.21] Federally Enforceable Through Title V Permit
- Source testing shall be conducted by District witnessed, or authorized, sample collection by ARB certified testing laboratory. [District Rule 1081] Federally Enforceable Through Title V Permit
- Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified 30 days prior to any compliance source test, and a source test plan must be submitted for approval 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
- 10. The source test plan shall identify which basis (ppmy or lb/MMBtu) will be used to demonstrate compliance. [District Rule 4305, 4306 and 4320] Federally Enforceable Through Title V Permit

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

Facility Name: MACPHERSON OIL CO

Location: HEAVY OIL CENT S-1703-157-15 Aug 24 2017 4:51PM – VELASCOA HEAVY OIL CENTRAL STATIONARY SOURCE, CA

- 11. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
- 12. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
- 13. The following test methods shall be used: NOx (ppmv) EPA Method 7E or ARE Method 100, NOx (Ib/MMBtu) -EPA Method 19; CO (ppmv) - EPA Method 10 or ARB Method 100; stack gas oxygen - EPA Method 3 or 3A or ABS Method 100; and fuel gas sulfur content - ASTM D3246 or double GC for H2S and mercaptans. [District Rule 1081; 4305, 6.2; 4320, and 4351, 6.2] Federally Enforceable Through Title V Permit
- 14. The permittee shall monitor and record the stack concentration of NOx, CO, and 02 at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless monitoring has been performed within the last month. [District Rule 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
- 15. If either the NOx or CO concentrations corrected to 3% 02, as measured by the portable analyzer, exceed the allowable emissions concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than I hour of operation after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 1 hour of operation after detection, the permittee shall notify the District within the following I hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of performing the notification and testing required by this condition. [District Rule4305, 4306 and 4320] Federally Enforceable Through Title V Permit
- 16. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. The analyzer shall be calibrated. maintained, and operated in accordance with the manufacturers specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rule 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
- 17. The permittee shall maintain records of: (I) the date and time of NOx, CO, and 02 measurements, (2) the 02 concentration in percent and the measured NOx and CO concentrations corrected to 3% 02, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rule 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
- 18. Permittee shall maintain records of noncertified (non-PUC/FERC regulated ) fuel gas sulfur content. [District NSR Rule] Federally Enforceable Through Title V Permit
- 19. All required source testing shall conform to the compliance testing procedures described in District Rule 1081 (Amended December 16, 1993). [District Rule 1081, and County Rules 108 (Kings), 108.1 (Fresno, Merced, San Joaquin, Tulare, Kern, and Stanislaus), and 110 (Madera) Federally Enforceable Through Title V Permit
- 20. Copies of all fuel invoices, gas purchase contracts, supplier certifications, and test results used to determine compliance with the conditions of this permit shall be maintained. The operator shall record daily amount and type(s) of fuel(s)combusted and all dates on which unit is fired on any noncertified fuel [District Rule 2520, 9.4.2 and 40 CFR 60.48c(g)] Federally Enforceable Through Title V Permit

- 21. Emissions of sulfur compounds from this unit shall not exceed 200 lb per hour, calculated as S02. Compliance with this requirement may be demonstrated by firing the unit only on PUC or FERC regulated natural gas; or by testing the sulfur content of each fuel and determining the maximum hourly emissions of sulfur compounds by multiplying the sulfur content of each fuel in lb/MMBtu by the maximum heat input rating of the unit; or by source testing in combination with fuel analysis. [District Rule 2520, 9.4.2 and Rule 4301, 5.2.1] Federally Enforceable Through Title V Permit
- 22. When complying with sulfur emission limits by fuel analysis or by a combination of source testing and fuel analysis. each fuel source shall be tested weekly for sulfur content and higher heating value. If compliance with the fuel sulfur content limit and sulfur emission limits has been demonstrated for 8 consecutive weeks for a fuel source, then the fuel testing frequency shall be monthly. If a monthly fuel content source test fails to show compliance, weekly testing shall resume. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
- 23. When complying with SOx emission limits by testing of stack emissions, testing shall be performed not less than once every 12 months using EPA Method 6B; or Method 8; or, for units using gaseous fuel scrubbed for sulfur precombustion, a grab sample analysis by GC-FPD/TCD performed in the laboratory and EPA Method 19 to calculated emissions. Gaseous fuel fired units demonstrating compliance on two consecutive annual source tests shall be tested not less than once every thirty-six months, however annual source testing shall resume if any test fails to show compliance. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
- 24. If the unit is fired on noncertified gaseous fuel and compliance with SOx emission limits is achieved through fuel sulfur content limitations, then the sulfur content of the gaseous fuel being fired in the unit shall be determined using ASTM D 1072-80, D 3031-81, D 4084-82, D 3246-81 or grab sample analysis by GC-FPD/TCD performed in the laboratory. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
- 25. If fuel analysis is used to demonstrate compliance with conditions of this permit, the fuel higher heating value for each fuel shall be certified by a third party fuel supplier or determined by ASTM D 1826-88 or D 1945-81 in conjunction with ASTM D 3588-89 for gaseous fuels. [District Rule 2520, 9.4.2; 4305, 6.2.1; and 4351, 6.2.1] Federally Enforceable Through Title V Permit
- 26. Test results submitted to the District from unit(s) representing a group of units may be used to demonstrate compliance with NOx limits for that group, provided the selection of the representative unit(s) is approved by the APCO prior to testing. Should any of the representative units exceed the required NOx emission limits of this permit, each of the units in the group shall demonstrate compliance by emissions testing within 90 days of the failed test. [District Rule 4305, 6.3.2 and 4351, 6.3; District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
- 27. The following conditions must be met for representative unit(s) used to demonstrate compliance for NOx limits for a group of units: I) all units are initially source tested and emissions from all units in group are similar, 2) all units in group are similar in terms of rated heat input, make and series, operation conditions, fuel used, and control method, 3) the group is owned by a single owner and located at a single stationary source, and gall units in the group shall have received the same maintenance and tune-up procedures as the representative unit(s). [District Rule 4305, 6.3.2; District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
- 28. The number of representative units source tested to demonstrate compliance for NOx limits shall be at least 30% of the total number of units in the group. The units included in the 30% shall be rotated, so that when 3 source test cycles have been completed, all units in the entire group will have been tested. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
- 29. Nitrogen oxide (N0x) emission concentrations in ppmv shall be referenced at dry stack gas conditions, and shall be calculated to 3.00 percent by volume stack gas oxygen and avenged over 60 minutes, and lb/MMBtu rates shall be calculated as lb NO2/MMBtu of heat input (hhv). [District Rule 4305, 5.0, 8.2 and/or 4351, 8.1; District Rule 2520. 9.4.2] Federally Enforceable Through Title V Permit
- 30. All records shall be maintained and retained on-site for a period of at least 5 years and shall be made available for District inspection upon request. [District Rule 1070, 4305, 4306 AND 4320] Federally Enforceable Through Title V Permit

S-1703-157-15 : Aug 24 2017 4:51PM -- VELASCOA

**PERMIT UNIT:** S-1703-158-13

EXPIRATION DATE: 07/31/2022

SECTION: SE18 TOWNSHIP: 28S RANGE: 29E

#### **EQUIPMENT DESCRIPTION:**

62.5 MMBTU/HR NATURAL GAS-FIRED STEAM GENERATOR #620 WITH COEN QLN LOW NOX BURNER AND FGR. FIRING TEOR GAS AND TVR GAS FROM S-1703-143 AND/OR TANK VAPOR CONTROL GAS FROM S-1703-139, '-144 OR '-184

## PERMIT UNIT REQUIREMENTS

- Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
- Burner shall be equipped with fuel gas volume flowmeter (a master meter for a group of generators is acceptable upon District approval). [District Rule 4351, 5.6.1; District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
- Fuel gas sulfur content shall not exceed 2.0 grains of sulfur per 100 dscf. [District Rule 2201] Federally Enforceable Through Title V Permit
- Emission rates shall not exceed any of the following: NOx (as NO2) 7 ppmv @ 3% O2 or 0.008 lb/MMBtu; CO 25 ppmv @ 3% O2; or SOx (as SO2) - 0.0057 lb/MMBtu; PM10 - 0.0076 lb/MMBtu; or VOC - 0.003 lb/MMBtu. [District Rules 2201, 4305, 4306, 4320 and 4351] Federally Enforceable Through Title V Permit
- All required source testing shall conform to the compliance testing procedures described in District Rule 1081 (Amended December 16, 1993). [District Rule 1081] Federally Enforceable Through Title V Permit
- Permittee shall conduct sample analysis of noncertified (non-PUC/FERC regulated ) fuel gas monthly. [District Rule 2201]
- Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
- Source testing to measure natural gas-combustion NOx and CO emissions from this unit shall be conducted at least once every twelve (12) months. After demonstrating compliance on two (2) consecutive annual source tests, the unit shall be tested not less than once every thirty-six (36) months. If the result of the 36-month source test demonstrates that the unit does not meet the applicable emission limits, the source testing frequency shall revert to at least once every twelve (12) months. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
- For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
- 10. All emissions measurements shall be made with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. Unless otherwise specified in the Permit to Operate, no determination of compliance shall be established within two hours after a continuous period in which fuel flow to the unit is shut off for 30 minutes or longer, or within 30 minutes after a re-ignition as defined in Section 3.0 of Rule 4320. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit

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

Facility Name: MACPHERSON OIL CO

Location: HEAVY OIL CENTRAL STATIONARY SOURCE, CA 8-1703-158-13: Aug 24 2017 4:51PM - VELASCOA

- 11. The source test plan shall identify which basis (ppmv or lb/MMBtu) will be used to demonstrate compliance. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- 12. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
- 13. The following test methods shall be used: NOx (ppmv) EPA Method 7E or ARB Method 100, NOx (lb/MMBtu) EPA Method 19; CO (ppmv) EPA Method 10 or ARB Method 100; stack gas oxygen EPA Method 3 or 3A or ARB Method 100; and fuel gas sulfur content ASTM D3246 or double GC for H2S and mercaptans. [District Rules 1081, 4305, 4320 and 4351] Federally Enforceable Through Title V Permit
- 14. Annual test results submitted to the District from unit(s) representing a group of units may be used to measure NOx and CO emissions of this permit for that group, provided the selection of the representative unit(s) is approved by the APCO prior to testing. Should any of the representative units exceed the required NOx or CO emissions limits of this permit, each of the units in the group shall demonstrate compliance by emissions testing within 90 days of the failed test. (This requirement shall not supercede a more stringent NSR or PSD permit testing requirement). [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
- 15. The following conditions must be met for representative unit(s) to be used to test for NOx and CO limits for a group of units: 1) all units are initially source tested and emissions from each unit in group are less than 90% of the permitted value and vary 25% or less from the average of all runs, 2) all units in group are similar in terms of rated heat input (rating not to exceed 100 MMBtu/hr), make and series, operation conditions, and control method, and 3) the group is owned by a single owner and located at a single stationary source. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
- 16. All units in a group for which representative units are source tested for NOx and CO emissions shall have received the same maintenance and tune-up procedures as the representative unit(s). Records shall be maintained for each unit of the group including all preventative and corrective maintenance work done. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
- 17. All units in a group for which representative units are source tested to for NOx and CO emissions of this permit shall be fired on the same fuel type during the entire compliance period. If a unit switches for any time to an alternate fuel type then that unit shall not be considered part of the group and shall be required to undergo a source test for all fuel types used, within one year of the switch. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
- 18. The number of representative units source tested for NOx and CO emissions shall be at least 30% of the total number of units in the group. The units included in the 30% shall be rotated, so that in 3 years, all units in the entire group will have been tested at least once. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
- 19. Emissions of sulfur compounds from this unit shall not exceed 200 lb per hour, calculated as SO2. Compliance with this requirement may be demonstrated by firing the unit only on PUC or FERC regulated natural gas; or by testing the sulfur content of each fuel and determining the maximum hourly emissions of sulfur compounds by multiplying the sulfur content of each fuel in lb/MMBtu by the maximum heat input rating of the unit; or by source testing in combination with fuel analysis. [District Rules 2201; 2520, 9.4.2 and 4301, 5.2.1] Federally Enforceable Through Title V Permit
- 20. When complying with sulfur emission limits by fuel analysis or by a combination of source testing and fuel analysis, each fuel source shall be tested weekly for sulfur content and higher heating value. If compliance with the fuel sulfur content limit and sulfur emission limits has been demonstrated for 8 consecutive weeks for a fuel source, then the fuel testing frequency shall be monthly. If a monthly fuel content source test fails to show compliance, weekly testing shall resume. [District Rules 2201 and 2520, 9.4.2] Federally Enforceable Through Title V Permit
- 21. When complying with SOx emission limits by testing of stack emissions, testing shall be performed not less than once every 12 months using EPA Method 6B; or Method 8; or, for units using gaseous fuel scrubbed for sulfur precombustion, a grab sample analysis by GC-FPD/TCD performed in the laboratory and EPA Method 19 to calculated emissions. Gaseous fuel fired units demonstrating compliance on two consecutive annual source tests shall be tested not less than once every thirty-six months, however annual source testing shall resume if any test fails to show compliance. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

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

Facility Name: MACPHERSON OIL CO
Location: HEAVY OIL CENTRAL STATIONARY SOURCE, CA
\$-1703-158-13: Aug 24 2017 4:51PM-VELASCOA

- 22. If the unit is fired on noncertified gaseous fuel and compliance with SOx emission limits is achieved through fuel sulfur content limitations, then the sulfur content of the gaseous fuel being fired in the unit shall be determined using ASTM D 1072-80, D 3031-81, D 4084-82, D 3246-81 or grab sample analysis by GC-FPD/TCD performed in the laboratory. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
- 23. If fuel analysis is used to demonstrate compliance with conditions of this permit, the fuel higher heating value for each fuel shall be certified by a third party fuel supplier or determined by ASTM D 1826-88 or D 1945-81 in conjunction with ASTM D 3588-89 for gaseous fuels. [District Rule 2520, 9.4.2; 4305, 6.2.1; and 4351, 6.2.1] Federally Enforceable Through Title V Permit
- 24. The permittee shall monitor and record the stack concentration of NOx, CO, and O2 at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless monitoring has been performed within the last month. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
- 25. If either the NOx or CO concentrations corrected to 3% O2, as measured by the portable analyzer, exceed the allowable emissions concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
- 26. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
- 27. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 3% O2, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
- 28. Permittee shall maintain records of noncertified fuel gas sulfur content. [District Rule 2201] Federally Enforceable Through Title V Permit
- 29. Copies of all fuel invoices, gas purchase contracts, supplier certifications, and test results used to determine compliance with the conditions of this permit shall be maintained. The operator shall record daily amount and type(s) of fuel(s) combusted and all dates on which unit is fired on any noncertified fuel. [District Rule 2520, 9.4.2 and 40 CFR 60.48c(g)] Federally Enforceable Through Title V Permit
- 30. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070, 4305, 4306 and 4320] Federally Enforceable Through Title V Permit

**PERMIT UNIT:** S-1703-159-18

EXPIRATION DATE: 07/31/2022

SECTION: SE18 TOWNSHIP: 28S RANGE: 29E

#### **EQUIPMENT DESCRIPTION:**

62.5 MMBTU/HR NATURAL GAS FIRED STEAM GENERATOR #630 WITH GIDEON MGW 63V2 LOW NOX BURNER. FIRING TEOR GAS AND TVR GAS FROM S-1703-143 AND/OR TANK VAPOR CONTROL GAS FROM S-1703-139, '-144. AND '-184:

#### PERMIT UNIT REQUIREMENTS

- All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District Rule 2201] Federally Enforceable Through Title V Permit
- Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
- Emissions from the natural gas-fired unit shall not exceed any of the following limits: 7 ppmvd NOX @ 3% O2 or 0.008 lb-NOX/MMBtu; 0.00285 lb-SOX/MMBtu; 0.006 lb-PM10/MMBtu; 25 ppmvd CO @ 3% O2 or 0.019 lb-CO/MMBtu, or 0.003 lb-VOC/MMBtu. [District Rules 2201, 4305, 4306, 4320 and 4351] Federally Enforceable Through Title V Permit
- Fuel gas sulfur content shall not exceed 1 grains of sulfur per 100 dscf. [District NSR Rule] Federally Enforceable Through Title V Permit
- All emissions measurements shall be made with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. Unless otherwise specified in the Permit to Operate, no determination of compliance shall be established within two hours after a continuous period in which fuel flow to the unit is shut off for 30 minutes or longer, or within 30 minutes after a re-ignition as defined in Section 3.0 of District Rule 4320. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
- Source testing to measure natural gas-combustion NOx and CO emissions from this unit shall be conducted at least once every twelve (12) months. After demonstrating compliance on two (2) consecutive annual source tests, the unit shall be tested not less than once every thirty-six (36) months. If the result of the 36-month source test demonstrates that the unit does not meet the applicable emission limits, the source testing frequency shall revert to at least once every twelve (12) months. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
- Test results submitted to the District from unit(s) representing a group of units may be used to demonstrate compliance with NOx limits for that group, provided the selection of the representative unit(s) is approved by the APCO prior to testing. Should any of the representative units exceed the required NOx emission limits of this permit, each of the units in the group shall demonstrate compliance by emissions testing within 90 days of the failed test. [District Rules 2520, 9.4, 4305, 6.3.2, 4306, 6.3.2 and 4351, 6.3] Federally Enforceable Through Title V Permit
- The following conditions must be met for representative unit(s) used to demonstrate compliance for NOx limits for a group of units: 1) all units are initially source tested and emissions from all units in group are similar, 2) all units in group are similar in terms of rated heat input, make and series, operation conditions, fuel used, and control method, 3) the group is owned by a single owner and located at a single stationary source, and 4) all units in the group shall have received the same maintenance and tune-up procedures as the representative unit(s). [District Rules 2520, 9.4.2, 4305, 6.3.2, and 4306, 6.3.2] Federally Enforceable Through Title V Permit

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

Facility Name: MACPHERSON OIL CO

Location: HEAVY OIL CENTRAL STATIONARY SOURCE, CA 8-1703-159-18: Aug 24 2017 4:51PM - VELASCOA

- The number of representative units source tested to demonstrate compliance for NOx limits shall be at least 30% of the total number of units in the group. The units included in the 30% shall be rotated, so that when 3 source test cycles have been completed, all units in the entire group will have been tested. [District Rules 2520, 9.4.2, 4305, 6.3.2, and 4306, 6.3.2] Federally Enforceable Through Title V Permit
- 10. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
- 11. The source test plan shall identify which basis (ppmv or lb/MMBtu) will be used to demonstrate compliance. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
- 12. The following test methods shall be used: NOx (ppmv) EPA Method 7E or ARB Method 100, NOx (lb/MMBtu) -EPA Method 19, CO (ppmv) - EPA Method 10 or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, and fuel gas sulfur content - ASTM D3246 or double GC for H2S and mercaptans. [District Rules 1081, 4305, 4320 and 4351] Federally Enforceable Through Title V Permit
- 13. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
- 14. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
- 15. Emissions of sulfur compounds from this unit shall not exceed 200 lb per hour, calculated as SO2. Compliance with this requirement may be demonstrated by firing the unit only on PUC or FERC regulated natural gas; or by testing the sulfur content of each fuel and determining the maximum hourly emissions of sulfur compounds by multiplying the sulfur content of each fuel in lb/MMBtu by the maximum heat input rating of the unit; or by source testing in combination with fuel analysis. [District Rules 2520, 9.4.2 and Rule 4301, 5.2.1] Federally Enforceable Through Title V Permit
- 16. When complying with sulfur emission limits by fuel analysis or by a combination of source testing and fuel analysis. each fuel source shall be tested weekly for sulfur content and higher heating value. If compliance with the fuel sulfur content limit and sulfur emission limits has been demonstrated for 8 consecutive weeks for a fuel source, then the fuel testing frequency shall be monthly. If a monthly fuel content source test fails to show compliance, weekly testing shall resume. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
- 17. When complying with SOx emission limits by testing of stack emissions, testing shall be performed not less than once every 12 months using EPA Method 6B; or Method 8; or, for units using gaseous fuel scrubbed for sulfur precombustion, a grab sample analysis by GC-FPD/TCD performed in the laboratory and EPA Method 19 to calculated emissions. Gaseous fuel fired units demonstrating compliance on two consecutive annual source tests shall be tested not less than once every thirty-six months, however annual source testing shall resume if any test fails to show compliance. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
- 18. If the unit is fired on noncertified gaseous fuel and compliance with SOx emission limits is achieved through fuel sulfur content limitations, then the sulfur content of the gaseous fuel being fired in the unit shall be determined using ASTM D 1072-80, D 3031-81, D 4084-82, D 3246-81 or grab sample analysis by GC-FPD/TCD performed in the laboratory. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
- 19. If fuel analysis is used to demonstrate compliance with conditions of this permit, the fuel higher heating value for each fuel shall be certified by a third party fuel supplier or determined by ASTM D 1826-88 or D 1945-81 in conjunction with ASTM D 3588-89 for gaseous fuels. [District Rule 2520, 9.4.2; 4305, 6.2.1; and 4351, 6.2.1] Federally Enforceable Through Title V Permit
- 20. Permittee shall conduct sample analysis of noncertified (non-PUC/FERC regulated ) fuel gas monthly. [District NSR Rule] Federally Enforceable Through Title V Permit

- 21. The permittee shall monitor and record the stack concentration of NOx, CO, and O2 at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless monitoring has been performed within the last month. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
- 22. If either the NOx or CO concentrations corrected to 3% O2, as measured by the portable analyzer, exceed the allowable emissions concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
- 23. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
- 24. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 3% O2, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
- 25. Permittee shall maintain records of noncertified fuel gas sulfur content. [District NSR Rule] Federally Enforceable Through Title V Permit
- 26. Copies of all fuel invoices, gas purchase contracts, supplier certifications, and test results used to determine compliance with the conditions of this permit shall be maintained. The operator shall record daily amount and type(s) of fuel(s) combusted and all dates on which unit is fired on any noncertified fuel. [District Rule 2520, 9.4.2 and 40] CFR 60.48c(g)] Federally Enforceable Through Title V Permit
- 27. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070, 4305, 4306 and 4320] Federally Enforceable Through Title V Permit

**PERMIT UNIT: S-1703-160-15 EXPIRATION DATE: 07/31/2022** 

SECTION: SE18 TOWNSHIP: 28S RANGE: 29E

**EQUIPMENT DESCRIPTION:** 

62.5 MMBTU/HR NATURAL GAS FIRED STEAM GENERATOR #640 WITH COEN QLN LOW NOX BURNER AND FGR. FIRING TEOR GAS AND TVR GAS FROM S-1703-143 AND/OR TANK VAPOR CONTROL GAS FROM S-1703-139, '-144. AND '-184

#### PERMIT UNIT REQUIREMENTS

- All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District Rule 2201] Federally Enforceable Through Title V Permit
- Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
- Burner shall be equipped with fuel gas volume flowmeter (a master meter for a group of generators is acceptable upon District approval). [District Rule 4351, 5.6.1; District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
- Emissions from the natural gas-fired unit shall not exceed any of the following limits: 7 ppmvd NOX @ 3% O2 or 0.008 lb-NOX/MMBtu, 0.00285 lb-SOX/MMBtu, 0.006 lb-PM10/MMBtu, 25 ppmvd CO @ 3% O2 or 0.019 lb-CO/MMBtu, or 0.003 lb-VOC/MMBtu. [District Rules 2201, 4305, 4306, 4320 and 4351] Federally Enforceable Through Title V Permit
- Fuel gas sulfur content shall not exceed 1 grains of sulfur per 100 dscf. [District NSR Rule] Federally Enforceable Through Title V Permit
- All emissions measurements shall be made with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. Unless otherwise specified in the Permit to Operate, no determination of compliance shall be established within two hours after a continuous period in which fuel flow to the unit is shut off for 30 minutes or longer, or within 30 minutes after a re-ignition as defined in Section 3.0 of District Rule 4320. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
- Source testing to measure natural gas-combustion NOx and CO emissions from this unit shall be conducted at least once every twelve (12) months. After demonstrating compliance on two (2) consecutive annual source tests, the unit shall be tested not less than once every thirty-six (36) months. If the result of the 36-month source test demonstrates that the unit does not meet the applicable emission limits, the source testing frequency shall revert to at least once every twelve (12) months. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
- Test results submitted to the District from unit(s) representing a group of units may be used to demonstrate compliance with NOx limits for that group, provided the selection of the representative unit(s) is approved by the APCO prior to testing. Should any of the representative units exceed the required NOx emission limits of this permit, each of the units in the group shall demonstrate compliance by emissions testing within 90 days of the failed test. [District Rules 2520, 9.4, 4305, 6.3.2, 4306, 6.3.2 and 4351, 6.3] Federally Enforceable Through Title V Permit

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

Facility Name: MACPHERSON OIL CO

HEAVY OIL CENTRAL STATIONARY SOURCE, CA Location:

- 9. The following conditions must be met for representative unit(s) used to demonstrate compliance for NOx limits for a group of units: 1) all units are initially source tested and emissions from all units in group are similar, 2) all units in group are similar in terms of rated heat input, make and series, operation conditions, fuel used, and control method, 3) the group is owned by a single owner and located at a single stationary source, and 4) all units in the group shall have received the same maintenance and tune-up procedures as the representative unit(s). [District Rules 2520, 9.4.2, 4305, 6.3.2, and 4306, 6.3.2] Federally Enforceable Through Title V Permit
- 10. The number of representative units source tested to demonstrate compliance for NOx limits shall be at least 30% of the total number of units in the group. The units included in the 30% shall be rotated, so that when 3 source test cycles have been completed, all units in the entire group will have been tested. [District Rules 2520, 9.4.2, 4305, 6.3.2, and 4306, 6.3.2] Federally Enforceable Through Title V Permit
- 11. The source test plan shall identify which basis (ppmv or lb/MMBtu) will be used to demonstrate compliance. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
- 12. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
- 13. The following test methods shall be used: NOx (ppmv) EPA Method 7E or ARB Method 100, NOx (lb/MMBtu) EPA Method 19, CO (ppmv) EPA Method 10 or ARB Method 100, stack gas oxygen EPA Method 3 or 3A or ARB Method 100, and fuel gas sulfur content ASTM D3246 or double GC for H2S and mercaptans. [District Rules 1081, 4305, 4320 and 4351] Federally Enforceable Through Title V Permit
- 14. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
- 15. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
- 16. Emissions of sulfur compounds from this unit shall not exceed 200 lb per hour, calculated as SO2. Compliance with this requirement may be demonstrated by firing the unit only on PUC or FERC regulated natural gas; or by testing the sulfur content of each fuel and determining the maximum hourly emissions of sulfur compounds by multiplying the sulfur content of each fuel in lb/MMBtu by the maximum heat input rating of the unit; or by source testing in combination with fuel analysis. [District Rules 2520, 9.4.2 and Rule 4301, 5.2.1] Federally Enforceable Through Title V Permit
- 17. When complying with sulfur emission limits by fuel analysis or by a combination of source testing and fuel analysis, each fuel source shall be tested weekly for sulfur content and higher heating value. If compliance with the fuel sulfur content limit and sulfur emission limits has been demonstrated for 8 consecutive weeks for a fuel source, then the fuel testing frequency shall be monthly. If a monthly fuel content source test fails to show compliance, weekly testing shall resume. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
- 18. When complying with SOx emission limits by testing of stack emissions, testing shall be performed not less than once every 12 months using EPA Method 6B; or Method 8; or, for units using gaseous fuel scrubbed for sulfur precombustion, a grab sample analysis by GC-FPD/TCD performed in the laboratory and EPA Method 19 to calculated emissions. Gaseous fuel fired units demonstrating compliance on two consecutive annual source tests shall be tested not less than once every thirty-six months, however annual source testing shall resume if any test fails to show compliance. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
- 19. If the unit is fired on noncertified gaseous fuel and compliance with SOx emission limits is achieved through fuel sulfur content limitations, then the sulfur content of the gaseous fuel being fired in the unit shall be determined using ASTM D 1072-80, D 3031-81, D 4084-82, D 3246-81 or grab sample analysis by GC-FPD/TCD performed in the laboratory. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

- 20. If fuel analysis is used to demonstrate compliance with conditions of this permit, the fuel higher heating value for each fuel shall be certified by a third party fuel supplier or determined by ASTM D 1826-88 or D 1945-81 in conjunction with ASTM D 3588-89 for gaseous fuels. [District Rule 2520, 9.4.2; 4305, 6.2.1; and 4351, 6.2.1] Federally Enforceable Through Title V Permit
- 21. Permittee shall conduct sample analysis of noncertified (non-PUC/FERC regulated ) fuel gas monthly. [District NSR Rule] Federally Enforceable Through Title V Permit
- 22. The permittee shall monitor and record the stack concentration of NOx, CO, and O2 at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless monitoring has been performed within the last month. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
- 23. If either the NOx or CO concentrations corrected to 3% O2, as measured by the portable analyzer, exceed the allowable emissions concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
- 24. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
- 25. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 3% O2, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
- 26. Permittee shall maintain records of noncertified fuel gas sulfur content. [District NSR Rule] Federally Enforceable Through Title V Permit
- 27. Copies of all fuel invoices, gas purchase contracts, supplier certifications, and test results used to determine compliance with the conditions of this permit shall be maintained. The operator shall record daily amount and type(s) of fuel(s) combusted and all dates on which unit is fired on any noncertified fuel. [District Rule 2520, 9.4.2 and 40 CFR 60.48c(g)] Federally Enforceable Through Title V Permit
- 28. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070, 4305, 4306 and 4320] Federally Enforceable Through Title V Permit

**PERMIT UNIT:** S-1703-161-18 EXPIRATION DATE: 07/31/2022

SECTION: SE18 TOWNSHIP: 28S RANGE: 29E

**EQUIPMENT DESCRIPTION:** 

62.5 MMBTU/HR NATURAL GAS FIRED STEAM GENERATOR #650 WITH WITH COEN QLN LOW NOX BURNER AND FGR, FIRING TEOR GAS AND TVR GAS FROM S-1703-143 AND/OR TANK VAPOR CONTROL GAS FROM S-1703-139, -144, AND -184

### PERMIT UNIT REQUIREMENTS

- All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District Rule 2201] Federally Enforceable Through Title V Permit
- No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101] Federally Enforceable Through Title V Permit
- Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
- Burner shall be equipped with fuel gas volume flowmeter (a master meter for a group of generators is acceptable upon District approval). [District Rule 4351, 5.6.1; District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
- Emissions from the natural gas-fired unit shall not exceed any of the following limits: 7 ppmvd NOX @ 3% O2 or 0.0085 lb-NOX/MMBtu, 0.00285 lb-SOX/MMBtu, 0.006 lb-PM10/MMBtu, 25 ppmvd CO @ 3% O2 or 0.019 lb-CO/MMBtu, or 0.003 lb-VOC/MMBtu. [District Rules 2201, 4305, 4306, 4320 and 4351] Federally Enforceable Through Title V Permit
- Fuel gas sulfur content shall not exceed 1 grains of sulfur per 100 dscf. [District NSR Rule] Federally Enforceable Through Title V Permit
- All emissions measurements shall be made with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. No determination of compliance shall be established within two hours after a continuous period in which fuel flow to the unit is shut off for 30 minutes or longer, or within 30 minutes after a re-ignition as defined in Section 3.0 of District Rule 4306. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
- Source testing to measure NOx and CO emissions from this unit while fired on natural gas shall be conducted at least once every twelve (12) months. After demonstrating compliance on two (2) consecutive annual source tests, the unit shall be tested not less than once every thirty-six (36) months. If the result of the 36-month source test demonstrates that the unit does not meet the applicable emission limits, the source testing frequency shall revert to at least once every twelve (12) months. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
- Test results submitted to the District from unit(s) representing a group of units may be used to demonstrate compliance with NOx limits for that group, provided the selection of the representative unit(s) is approved by the APCO prior to testing. Should any of the representative units exceed the required NOx emission limits of this permit, each of the units in the group shall demonstrate compliance by emissions testing within 90 days of the failed test. [District Rules 2520, 9.4, 4305, 6.3.2, 4306, 6.3.2 and 4351, 6.3] Federally Enforceable Through Title V Permit

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

Facility Name: MACPHERSON OIL CO

Location: HEAVY OIL CENTRAL STATIONARY SOURCE, CA s-1703-161-18: Aug 24 2017 4:51PM - VELASCOA

- 10. The following conditions must be met for representative unit(s) used to demonstrate compliance for NOx limits for a group of units: 1) all units are initially source tested and emissions from all units in group are similar, 2) all units in group are similar in terms of rated heat input, make and series, operation conditions, fuel used, and control method, 3) the group is owned by a single owner and located at a single stationary source, and 4) all units in the group shall have received the same maintenance and tune-up procedures as the representative unit(s). [District Rules 2520, 9.4.2, 4305, 6.3.2, and 4306, 6.3.2] Federally Enforceable Through Title V Permit
- 11. The number of representative units source tested to demonstrate compliance for NOx limits shall be at least 30% of the total number of units in the group. The units included in the 30% shall be rotated, so that when 3 source test cycles have been completed, all units in the entire group will have been tested. [District Rules 2520, 9.4.2, 4305, 6.3.2, and 4306, 6.3.2] Federally Enforceable Through Title V Permit
- 12. The source test plan shall identify which basis (ppmv or lb/MMBtu) will be used to demonstrate compliance. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
- 13. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
- 14. NOx emissions for source test purposes shall be determined using EPA Method 7E or ARB Method 100 on a ppmv basis, or EPA Method 19 on a heat input basis. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
- 15. CO emissions for source test purposes shall be determined using EPA Method 10 or ARB Method 100. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
- 16. Stack gas oxygen (O2) shall be determined using EPA Method 3 or 3A or ARB Method 100. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
- 17. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
- 18. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
- 19. Emissions of sulfur compounds from this unit shall not exceed 200 lb per hour, calculated as SO2. Compliance with this requirement may be demonstrated by firing the unit only on PUC or FERC regulated natural gas; or by testing the sulfur content of each fuel and determining the maximum hourly emissions of sulfur compounds by multiplying the sulfur content of each fuel in lb/MMBtu by the maximum heat input rating of the unit; or by source testing in combination with fuel analysis. [District Rules 2520, 9.4.2 and Rule 4301, 5.2.1] Federally Enforceable Through Title V Permit
- 20. When complying with sulfur emission limits by fuel analysis or by a combination of source testing and fuel analysis. each fuel source shall be tested weekly for sulfur content and higher heating value. If compliance with the fuel sulfur content limit and sulfur emission limits has been demonstrated for 8 consecutive weeks for a fuel source, then the fuel testing frequency shall be monthly. If a monthly fuel content source test fails to show compliance, weekly testing shall resume. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
- 21. When complying with SOx emission limits by testing of stack emissions, testing shall be performed not less than once every 12 months using EPA Method 6B; or Method 8; or, for units using gaseous fuel scrubbed for sulfur precombustion, a grab sample analysis by GC-FPD/TCD performed in the laboratory and EPA Method 19 to calculated emissions. Gaseous fuel fired units demonstrating compliance on two consecutive annual source tests shall be tested not less than once every thirty-six months, however annual source testing shall resume if any test fails to show compliance. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
- 22. If the unit is fired on noncertified gaseous fuel and compliance with SOx emission limits is achieved through fuel sulfur content limitations, then the sulfur content of the gaseous fuel being fired in the unit shall be determined using ASTM D 1072-80, D 3031-81, D 4084-82, D 3246-81 or grab sample analysis by GC-FPD/TCD performed in the laboratory. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

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

Facility Name: MACPHERSON OIL CO

- 23. If fuel analysis is used to demonstrate compliance with conditions of this permit, the fuel higher heating value for each fuel shall be certified by a third party fuel supplier or determined by ASTM D 1826-88 or D 1945-81 in conjunction with ASTM D 3588-89 for gaseous fuels. [District Rule 2520, 9.4.2; 4305, 6.2.1; and 4351, 6.2.1] Federally Enforceable Through Title V Permit
- 24. Permittee shall conduct sample analysis of noncertified fuel gas monthly. [District NSR Rule] Federally Enforceable Through Title V Permit
- 25. The permittee shall monitor and record the stack concentration of NOx, CO, and O2 at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless monitoring has been performed within the last month. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
- 26. If either the NOx or CO concentrations corrected to 3% O2, as measured by the portable analyzer, exceed the allowable emissions concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
- 27. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
- 28. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 3% O2, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
- 29. Permittee shall maintain records of fuel gas sulfur content of noncertified fuel gas. [District NSR Rule] Federally Enforceable Through Title V Permit
- 30. Copies of all fuel invoices, gas purchase contracts, supplier certifications, and test results used to determine compliance with the conditions of this permit shall be maintained. The operator shall record daily amount and type(s) of fuel(s) combusted and all dates on which unit is fired on any noncertified fuel. [District Rule 2520, 9.4.2 and 40 CFR 60.48c(g)] Federally Enforceable Through Title V Permit
- 31. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070, 4305, and 4306] Federally Enforceable Through Title V Permit

PERMIT UNIT: S-1703-162-14 **EXPIRATION DATE: 07/31/2022** 

SECTION: SE18 TOWNSHIP: 28S RANGE: 29E

#### **EQUIPMENT DESCRIPTION:**

62.5 MMBTU/HR NATURAL GAS FIRED STEAM GENERATOR #660 WITH COEN QLN LOW NOX BURNER AND FGR. FIRING TEOR GAS AND TVR GAS FROM S-1703-143 AND/OR TANK VAPOR CONTROL GAS FROM S-1703-139, -144, AND -184

### PERMIT UNIT REQUIREMENTS

- All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District Rule 2201] Federally Enforceable Through Title V Permit
- No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101] Federally Enforceable Through Title V Permit
- Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
- Burner shall be equipped with fuel gas volume flowmeter (a master meter for a group of generators is acceptable upon District approval). [District Rule 4351, 5.6.1; District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
- Emission rates shall not exceed any of the following: NOx (as NO2): 0.0085 lb/MMBtu or 7 ppmy @ 3% O2, Sox (as SO2): 0.00285 lb/MMBtu, PM10: 0.0076 lb/MMBtu, CO: 0.019 lb/MMBtu or 25 ppmv @ 3% O2, or VOC: 0.003 lb/MMBtu. [District Rules 2201, 4305, 4306, 4320 and 4351] Federally Enforceable Through Title V Permit
- All emissions measurements shall be made with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. No determination of compliance shall be established within two hours after a continuous period in which fuel flow to the unit is shut off for 30 minutes or longer, or within 30 minutes after a re-ignition as defined in Section 3.0 of District Rule 4306. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- Source testing to measure NOx and CO emissions from this unit while fired on natural gas shall be conducted at least once every twelve (12) months. After demonstrating compliance on two (2) consecutive annual source tests, the unit shall be tested not less than once every thirty-six (36) months. If the result of the 36-month source test demonstrates that the unit does not meet the applicable emission limits, the source testing frequency shall revert to at least once every twelve (12) months. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- Test results submitted to the District from unit(s) representing a group of units may be used to demonstrate compliance with NOx limits for that group, provided the selection of the representative unit(s) is approved by the APCO prior to testing. Should any of the representative units exceed the required NOx emission limits of this permit, each of the units in the group shall demonstrate compliance by emissions testing within 90 days of the failed test. [District Rules 2520, 9.4, 4305, 6.3.2, 4306, 6.3.2 and 4351, 6.3, and 4320] Federally Enforceable Through Title V Permit

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

Facility Name: MACPHERSON OIL CO

Location: HEAVY OIL CENTRAL STATIONARY SOURCE, CA S-1703-162-14: Aug 24 2017 4:51PM - VELASCOA

- The following conditions must be met for representative unit(s) used to demonstrate compliance for NOx limits for a group of units: 1) all units are initially source tested and emissions from all units in group are similar, 2) all units in group are similar in terms of rated heat input, make and series, operation conditions, fuel used, and control method, 3) the group is owned by a single owner and located at a single stationary source, and 4) all units in the group shall have received the same maintenance and tune-up procedures as the representative unit(s). [District Rules 2520, 9.4.2, 4305, 6.3.2, and 4306, 6.3.2, and 4320] Federally Enforceable Through Title V Permit
- 10. The number of representative units source tested to demonstrate compliance for NOx limits shall be at least 30% of the total number of units in the group. The units included in the 30% shall be rotated, so that when 3 source test cycles have been completed, all units in the entire group will have been tested. [District Rules 2520, 9.4.2, 4305, 6.3.2, and 4306, 6.3.2, and 4320] Federally Enforceable Through Title V Permit
- 11. The source test plan shall identify which basis (ppmv or lb/MMBtu) will be used to demonstrate compliance. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- 12. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
- 13. The following test methods shall be used: NOx (ppmv) EPA Method 7E or ARB Method 100, NOx (lb/MMBtu) -EPA Method 19, CO (ppmv) - EPA Method 10 or 10B or ARB Method 100, stack gas oxygen - EPA Method 3 or 3Aor ARB Method 100, SOx (lb/MMBtu) - ARB Method 100 or EPA Method 6, 6C or fuel gas sulfur content analysis and EPA Method 19, fuel gas sulfur content - EPA Method 11 or 15, ASTM D3246 or double GC for H2S and mercaptans performed in a laboratory, fuel gas hhv - ASTM D1826 or D1945 in conjunction with ASTM D3588. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- 14. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- 15. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
- 16. Emissions of sulfur compounds from this unit shall not exceed 200 lb per hour, calculated as SO2. Compliance with this requirement may be demonstrated by firing the unit only on PUC or FERC regulated natural gas; or by testing the sulfur content of each fuel and determining the maximum hourly emissions of sulfur compounds by multiplying the sulfur content of each fuel in lb/MMBtu by the maximum heat input rating of the unit; or by source testing in combination with fuel analysis. [District Rules 2520, 9.4.2 and Rule 4301, 5.2.1] Federally Enforceable Through Title V Permit
- 17. When complying with sulfur emission limits by fuel analysis or by a combination of source testing and fuel analysis. each fuel source shall be tested weekly for sulfur content and higher heating value. If compliance with the fuel sulfur content limit and sulfur emission limits has been demonstrated for 8 consecutive weeks for a fuel source, then the fuel testing frequency shall be monthly. If a monthly fuel content source test fails to show compliance, weekly testing shall resume. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
- 18. When complying with SOx emission limits by testing of stack emissions, testing shall be performed not less than once every 12 months using EPA Method 6B; or Method 8; or, for units using gaseous fuel scrubbed for sulfur precombustion, a grab sample analysis by GC-FPD/TCD performed in the laboratory and EPA Method 19 to calculated emissions. Gaseous fuel fired units demonstrating compliance on two consecutive annual source tests shall be tested not less than once every thirty-six months, however annual source testing shall resume if any test fails to show compliance. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
- 19. If the unit is fired on noncertified gaseous fuel and compliance with SOx emission limits is achieved through fuel sulfur content limitations, then the sulfur content of the gaseous fuel being fired in the unit shall be determined using ASTM D 1072-80, D 3031-81, D 4084-82, D 3246-81 or grab sample analysis by GC-FPD/TCD performed in the laboratory. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

- 20. If fuel analysis is used to demonstrate compliance with conditions of this permit, the fuel higher heating value for each fuel shall be certified by a third party fuel supplier or determined by ASTM D 1826-88 or D 1945-81 in conjunction with ASTM D 3588-89 for gaseous fuels. [District Rule 2520, 9.4.2; 4305, 6.2.1; and 4351, 6.2.1] Federally Enforceable Through Title V Permit
- 21. The permittee shall monitor and record the stack concentration of NOX, CO, and O2 at least once every month (in which a source test is not performed) using a portable analyzer that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless monitoring has been performed within the last month. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- 22. If either the NOX or CO concentrations corrected to 3% O2, as measured by the portable analyzer, exceed the allowable emissions concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- 23. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the permit-to-operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V
- 24. The permittee shall maintain records of: (1) the date and time of NOX, CO, and O2 measurements, (2) the O2 concentration in percent by volume and the measured NOX and CO concentrations corrected to 3% O2, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- 25. Copies of all fuel invoices, gas purchase contracts, supplier certifications, and test results used to determine compliance with the conditions of this permit shall be maintained. The operator shall record daily amount and type(s) of fuel(s) combusted and all dates on which unit is fired on any noncertified fuel. [District Rule 2520, 9.4.2 and 40 CFR 60.48c(g)] Federally Enforceable Through Title V Permit
- 26. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit

**PERMIT UNIT: S-1703-163-5** 

EXPIRATION DATE: 07/31/2022

SECTION: SW17 TOWNSHIP: 28S RANGE: 29E

**EQUIPMENT DESCRIPTION:** 

5,000 BBL FIXED ROOF CRUDE OIL/WASTE WATER STORAGE TANK #50S106

### PERMIT UNIT REQUIREMENTS

- This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all 1. storage conditions. [District Rule 4623, 4.4] Federally Enforceable Through Title V Permit
- 2. The operator shall determine the true vapor pressure of the petroleum liquid stored in the tank at least once per year in accordance with methods described in 40 CFR 60.113 and section 6.2 of District Rule 4623 (amended 5/19/05). Determinations shall be made annually during the summer and whenever there is a change in the source or type of petroleum entering the tank. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
- The operator shall keep accurate records of types, storage temperature, and TVP of liquids stored to verify continued exemption from District Rule 4623 (amended 5/19/05). [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
- As used in this permit, the term "source or type of petroleum" shall mean petroleum liquids with similar characteristics. The operator shall maintain records of the API gravity of petroleum liquids stored in this unit to determine which oils are from a common source. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

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

Facility Name: MACPHERSON OIL CO

Location: HEAVY OIL CENTRAL STATIONARY SOURCE, CA S-1703-163-5: Aug 24 2017 4:51PM - VELASCOA

**PERMIT UNIT:** S-1703-164-5

EXPIRATION DATE: 07/31/2022

SECTION: NE7 TOWNSHIP: 28S RANGE: 29E

**EQUIPMENT DESCRIPTION:** 

31,500 GALLON/750 BARREL OPEN TOP WASTEWATER TANK [TANK #TOC002]

### PERMIT UNIT REQUIREMENTS

- This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all 1. storage conditions. [District Rule 4623, 4.4] Federally Enforceable Through Title V Permit
- The operator shall determine the true vapor pressure of the petroleum liquid stored in the tank at least once per year in accordance with methods described in 40 CFR 60.113 and section 6.2 of District Rule 4623 (amended 5/19/05). Determinations shall be made annually during the summer and whenever there is a change in the source or type of petroleum entering the tank. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
- The operator shall keep accurate records of types, storage temperature, and TVP of liquids stored to verify continued exemption from District Rule 4623 (amended 5/19/05). [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
- As used in this permit, the term "source or type of petroleum" shall mean petroleum liquids with similar characteristics. The operator shall maintain records of the API gravity of petroleum liquids stored in this unit to determine which oils are from a common source. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

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

Facility Name: MACPHERSON OIL CO

Location: HEAVY OIL CENTRAL STATIONARY SOURCE, CA s-1703-184-5: Aug 24 2017 4:51PM - VELASCOA

**PERMIT UNIT:** S-1703-165-5

EXPIRATION DATE: 07/31/2022

SECTION: NE7 TOWNSHIP: 28S RANGE: 29E

**EQUIPMENT DESCRIPTION:** 

42,000 GALLON/1,000 BBL FIXED ROOF WASTEWATER TANK ITANK #TOC0031

#### PERMIT UNIT REQUIREMENTS

- This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623, 4.4] Federally Enforceable Through Title V Permit
- The operator shall determine the true vapor pressure of the petroleum liquid stored in the tank at least once per year in accordance with methods described in 40 CFR 60.113 and section 6.2 of District Rule 4623 (amended 5/19/05). Determinations shall be made annually during the summer and whenever there is a change in the source or type of petroleum entering the tank. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
- The operator shall keep accurate records of types, storage temperature, and TVP of liquids stored to verify continued exemption from District Rule 4623 (amended 5/19/05). [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
- As used in this permit, the term "source or type of petroleum" shall mean petroleum liquids with similar characteristics. The operator shall maintain records of the API gravity of petroleum liquids stored in this unit to determine which oils are from a common source. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

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

Facility Name: MACPHERSON OIL CO

Location: HEAVY OIL CENTRAL STATIONARY SOURCE, CA \$-1703-165-5: Aug 24 2017 4:51PM - VELASCOA

**PERMIT UNIT:** S-1703-166-5

EXPIRATION DATE: 07/31/2022

SECTION: NE7 TOWNSHIP: 28S RANGE: 29E

**EQUIPMENT DESCRIPTION:** 

4,200 GALLON/100 BBL OPEN TOP TEST TANK [TANK #ES1]

### PERMIT UNIT REQUIREMENTS

- This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623, 4.4] Federally Enforceable Through Title V Permit
- The operator shall determine the true vapor pressure of the petroleum liquid stored in the tank at least once per year in accordance with methods described in 40 CFR 60.113 and section 6.2 of District Rule 4623 (amended 5/19/05). Determinations shall be made annually during the summer and whenever there is a change in the source or type of petroleum entering the tank. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
- The operator shall keep accurate records of types, storage temperature, and TVP of liquids stored to verify continued exemption from District Rule 4623 (amended 5/19/05). [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
- As used in this permit, the term "source or type of petroleum" shall mean petroleum liquids with similar characteristics. The operator shall maintain records of the API gravity of petroleum liquids stored in this unit to determine which oils are from a common source. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

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

Facility Name: MACPHERSON OIL CO

Location: HEAVY OIL CENT 8-1703-166-5 Aug 24 2017 4:51PM -- VELASCOA HEAVY OIL CENTRAL STATIONARY SOURCE, CA

**PERMIT UNIT:** S-1703-167-5

EXPIRATION DATE: 07/31/2022

SECTION: SW6 TOWNSHIP: 28S RANGE: 29E

**EQUIPMENT DESCRIPTION:** 

105,000 GALLON/2,500 BBL FIXED ROOF WASTEWATER TANK [TANK #25S105]

#### PERMIT UNIT REQUIREMENTS

- This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623, 4.4] Federally Enforceable Through Title V Permit
- The operator shall determine the true vapor pressure of the petroleum liquid stored in the tank at least once per year in accordance with methods described in 40 CFR 60.113 and section 6.2 of District Rule 4623 (amended 5/19/05). Determinations shall be made annually during the summer and whenever there is a change in the source or type of petroleum entering the tank. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
- The operator shall keep accurate records of types, storage temperature, and TVP of liquids stored to verify continued exemption from District Rule 4623 (amended 5/19/05). [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
- As used in this permit, the term "source or type of petroleum" shall mean petroleum liquids with similar characteristics. The operator shall maintain records of the API gravity of petroleum liquids stored in this unit to determine which oils are from a common source. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

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

Facility Name: MACPHERSON OIL CO

Location: HEAVY OIL CENTRAL STATIONARY SOURCE, CA 8-1703-167-5 : Aug 24 2017 4:51PM - VELASCOA

**PERMIT UNIT:** S-1703-168-5

EXPIRATION DATE: 07/31/2022

SECTION: NW29 TOWNSHIP: 28S RANGE: 29E

**EQUIPMENT DESCRIPTION:** 

105,000 GALLON/2,500 BBL FIXED ROOF WASTEWATER TANK [TANK #25S190]

### PERMIT UNIT REQUIREMENTS

- This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all 1. storage conditions. [District Rule 4623, 4.4] Federally Enforceable Through Title V Permit
- 2. The operator shall determine the true vapor pressure of the petroleum liquid stored in the tank at least once per year in accordance with methods described in 40 CFR 60.113 and section 6.2 of District Rule 4623 (amended 5/19/05). Determinations shall be made annually during the summer and whenever there is a change in the source or type of petroleum entering the tank. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
- The operator shall keep accurate records of types, storage temperature, and TVP of liquids stored to verify continued exemption from District Rule 4623 (amended 5/19/05). [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
- As used in this permit, the term "source or type of petroleum" shall mean petroleum liquids with similar characteristics. The operator shall maintain records of the API gravity of petroleum liquids stored in this unit to determine which oils are from a common source. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

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

Facility Name: MACPHERSON OIL CO

Location: HEAVY OIL CENTRAL STATIONARY SOURCE, CA 8-1703-168-5 : Aug 24 2017 4:51PM - VELASCOA

**PERMIT UNIT:** S-1703-169-5 **EXPIRATION DATE:** 07/31/2022

SECTION: NW29 TOWNSHIP: 28S RANGE: 29E

**EQUIPMENT DESCRIPTION:** 

4,200 GALLON/100 BARREL FIXED ROOF BLEED TANK [TANK #J-1]

#### PERMIT UNIT REQUIREMENTS

- 1. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623, 4.4] Federally Enforceable Through Title V Permit
- 2. The operator shall determine the true vapor pressure of the petroleum liquid stored in the tank at least once per year in accordance with methods described in 40 CFR 60.113 and section 6.2 of District Rule 4623 (amended 5/19/05). Determinations shall be made annually during the summer and whenever there is a change in the source or type of petroleum entering the tank. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
- 3. The operator shall keep accurate records of types, storage temperature, and TVP of liquids stored to verify continued exemption from District Rule 4623 (amended 5/19/05). [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
- 4. As used in this permit, the term "source or type of petroleum" shall mean petroleum liquids with similar characteristics. The operator shall maintain records of the API gravity of petroleum liquids stored in this unit to determine which oils are from a common source. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

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

Facility Name: MACPHERSON OIL CO

Location: HEAVY OIL CENTRAL STATIONARY SOURCE, CA S-1703-169-5 : Aug 24 2017 4:51PM - VELASCOA

**PERMIT UNIT:** S-1703-177-5

**EXPIRATION DATE: 07/31/2022** 

SECTION: NE18 TOWNSHIP: 28S RANGE: 29E

**EQUIPMENT DESCRIPTION:** 

21,000 GALLON/500 BBL OPEN TOP TEST TANK [TANK #STA2-1]

#### PERMIT UNIT REQUIREMENTS

- 1. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623, 4.4] Federally Enforceable Through Title V Permit
- 2. The operator shall determine the true vapor pressure of the petroleum liquid stored in the tank at least once per year in accordance with methods described in 40 CFR 60.113 and section 6.2 of District Rule 4623 (amended 5/19/05). Determinations shall be made annually during the summer and whenever there is a change in the source or type of petroleum entering the tank. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
- 3. The operator shall keep accurate records of types, storage temperature, and TVP of liquids stored to verify continued exemption from District Rule 4623 (amended 5/19/05). [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
- 4. As used in this permit, the term "source or type of petroleum" shall mean petroleum liquids with similar characteristics. The operator shall maintain records of the API gravity of petroleum liquids stored in this unit to determine which oils are from a common source. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

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

Facility Name: MACPHERSON OIL CO

Location: HEAVY OIL CENTRAL STATIONARY SOURCE, CA 8-1703-177-5: Aug 24 2017 4:51PM - VELASCOA

**PERMIT UNIT:** S-1703-178-5

EXPIRATION DATE: 07/31/2022

SECTION: NE18 TOWNSHIP: 28S RANGE: 29E

**EQUIPMENT DESCRIPTION:** 

21,000 GALLON/500 BBL OPEN TOP TEST TANK [TANK #STA2-2]

### PERMIT UNIT REQUIREMENTS

- This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all 1. storage conditions. [District Rule 4623, 4.4] Federally Enforceable Through Title V Permit
- The operator shall determine the true vapor pressure of the petroleum liquid stored in the tank at least once per year in 2. accordance with methods described in 40 CFR 60.113 and section 6.2 of District Rule 4623 (amended 5/19/05). Determinations shall be made annually during the summer and whenever there is a change in the source or type of petroleum entering the tank. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
- The operator shall keep accurate records of types, storage temperature, and TVP of liquids stored to verify continued exemption from District Rule 4623 (amended 5/19/05). [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
- As used in this permit, the term "source or type of petroleum" shall mean petroleum liquids with similar characteristics. The operator shall maintain records of the API gravity of petroleum liquids stored in this unit to determine which oils are from a common source. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

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

Facility Name: MACPHERSON OIL CO

Location: HEAVY OIL CENTRAL STATIONARY SOURCE, CA 8-1703-178-5 : Aug 24 2017 4:51PM - VELASCOA

**PERMIT UNIT: S-1703-179-6** 

EXPIRATION DATE: 07/31/2022

SECTION: NE18 TOWNSHIP: 28S RANGE: 29E

**EQUIPMENT DESCRIPTION:** 

126,000 GALLON/3,000 BBL OPEN TOP WASTEWATER TANK [TANK #3RM104]

#### PERMIT UNIT REQUIREMENTS

- This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623, 4.4] Federally Enforceable Through Title V Permit
- The operator shall determine the true vapor pressure of the petroleum liquid stored in the tank at least once per year in accordance with methods described in 40 CFR 60.113 and section 6.2 of District Rule 4623 (amended 5/19/05). Determinations shall be made annually during the summer and whenever there is a change in the source or type of petroleum entering the tank. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
- The operator shall keep accurate records of types, storage temperature, and TVP of liquids stored to verify continued exemption from District Rule 4623 (amended 5/19/05). [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
- As used in this permit, the term "source or type of petroleum" shall mean petroleum liquids with similar characteristics. The operator shall maintain records of the API gravity of petroleum liquids stored in this unit to determine which oils are from a common source. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

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

Facility Name: MACPHERSON OIL CO

Location: HEAVY OIL CENTRAL STATIONARY SOURCE, CA S-1703-179-6; Aug 24 2017 4:51PM - VELASCOA

**PERMIT UNIT: S-1703-180-17** EXPIRATION DATE: 07/31/2022

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

**EQUIPMENT DESCRIPTION:** 

62.5 MM BTU/HR THERMOTICS NATURAL GAS-FIRED STEAM GENERATOR #730 WITH LO-NOX BURNER, OXYGEN

CONTROLLER/ANALYZER

# PERMIT UNIT REQUIREMENTS

- All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District Rule 2201] Federally Enforceable Through Title V Permit
- No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
- No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101] Federally Enforceable Through Title V Permit
- Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
- Burner shall be equipped with fuel gas volume flowmeter (a master meter for a group of generators is acceptable upon District approval). [District Rule 4351] Federally Enforceable Through Title V Permit
- Unit shall be fired on PUC-regulated quality natural gas only. No TEOR or TVR gas may be combusted. [District Rule 2201] Federally Enforceable Through Title V Permit
- Emission rates shall not exceed any of the following: NOx (as NO2): 0.0085 lb/MMBtu or 7 ppmv @ 3% O2, Sox (as SO2): 0.00285 lb/MMBtu, PM10: 0.009 lb/MMBtu, CO: 0.019 lb/MMBtu or 25 ppmv @ 3% O2, or VOC: 0.003 lb/MMBtu. [District Rules 2201, 4305, 4306, 4320 and 4351] Federally Enforceable Through Title V Permit
- All emissions measurements shall be made with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. No determination of compliance shall be established within two hours after a continuous period in which fuel flow to the unit is shut off for 30 minutes or longer, or within 30 minutes after a re-ignition as defined in Section 3.0 of District Rule 4306. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- Source testing to measure NOx and CO emissions from this unit while fired on natural gas shall be conducted at least once every twelve (12) months. After demonstrating compliance on two (2) consecutive annual source tests, the unit shall be tested not less than once every thirty-six (36) months. If the result of the 36-month source test demonstrates that the unit does not meet the applicable emission limits, the source testing frequency shall revert to at least once every twelve (12) months. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- 10. Test results submitted to the District from unit(s) representing a group of units may be used to demonstrate compliance with NOx limits for that group, provided the selection of the representative unit(s) is approved by the APCO prior to testing. Should any of the representative units exceed the required NOx emission limits of this permit, each of the units in the group shall demonstrate compliance by emissions testing within 90 days of the failed test. [District Rules 2520, 9.4, 4305, 6.3.2, 4306, 6.3.2 and 4351, 6.3, and 4320] Federally Enforceable Through Title V Permit

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

Facility Name: MACPHERSON OIL CO

Location: HEAVY OIL CENTRAL STATIONARY SOURCE, CA 8-1703-180-17 : Aug 24 2017 4:51PM - VELASCOA

- 11. The following conditions must be met for representative unit(s) used to demonstrate compliance for NOx limits for a group of units: 1) all units are initially source tested and emissions from all units in group are similar, 2) all units in group are similar in terms of rated heat input, make and series, operation conditions, fuel used, and control method, 3) the group is owned by a single owner and located at a single stationary source, and 4) all units in the group shall have received the same maintenance and tune-up procedures as the representative unit(s). [District Rules 2520, 9.4.2, 4305, 6.3.2, and 4306, 6.3.2, and 4320] Federally Enforceable Through Title V Permit
- 12. The number of representative units source tested to demonstrate compliance for NOx limits shall be at least 30% of the total number of units in the group. The units included in the 30% shall be rotated, so that when 3 source test cycles have been completed, all units in the entire group will have been tested. [District Rules 2520, 9.4.2, 4305, 6.3.2, and 4306, 6.3.2, and 4320] Federally Enforceable Through Title V Permit
- 13. The source test plan shall identify which basis (ppmv or lb/MMBtu) will be used to demonstrate compliance. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- 14. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
- 15. The following test methods shall be used: NOx (ppmv) EPA Method 7E or ARB Method 100, NOx (lb/MMBtu) -EPA Method 19, CO (ppmv) - EPA Method 10 or 10B or ARB Method 100, stack gas oxygen - EPA Method 3 or 3Aor ARB Method 100, SOx (lb/MMBtu) - ARB Method 100 or EPA Method 6, 6C or fuel gas sulfur content analysis and EPA Method 19, fuel gas sulfur content - EPA Method 11 or 15, ASTM D3246 or double GC for H2S and mercaptans performed in a laboratory, fuel gas hhv - ASTM D1826 or D1945 in conjunction with ASTM D3588. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- 16. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- 17. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
- 18. Emissions of sulfur compounds from this unit shall not exceed 200 lb per hour, calculated as SO2. Compliance with this requirement may be demonstrated by firing the unit only on PUC or FERC regulated natural gas; or by testing the sulfur content of each fuel and determining the maximum hourly emissions of sulfur compounds by multiplying the sulfur content of each fuel in lb/MMBtu by the maximum heat input rating of the unit; or by source testing in combination with fuel analysis. [District Rules 2520, 9.4.2 and Rule 4301, 5.2.1] Federally Enforceable Through Title V Permit
- 19. When complying with sulfur emission limits by fuel analysis or by a combination of source testing and fuel analysis, each fuel source shall be tested weekly for sulfur content and higher heating value. If compliance with the fuel sulfur content limit and sulfur emission limits has been demonstrated for 8 consecutive weeks for a fuel source, then the fuel testing frequency shall be monthly. If a monthly fuel content source test fails to show compliance, weekly testing shall resume. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
- 20. When complying with SOx emission limits by testing of stack emissions, testing shall be performed not less than once every 12 months using EPA Method 6B; or Method 8; or, for units using gaseous fuel scrubbed for sulfur precombustion, a grab sample analysis by GC-FPD/TCD performed in the laboratory and EPA Method 19 to calculated emissions. Gaseous fuel fired units demonstrating compliance on two consecutive annual source tests shall be tested not less than once every thirty-six months, however annual source testing shall resume if any test fails to show compliance. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
- 21. If the unit is fired on noncertified gaseous fuel and compliance with SOx emission limits is achieved through fuel sulfur content limitations, then the sulfur content of the gaseous fuel being fired in the unit shall be determined using ASTM D 1072-80, D 3031-81, D 4084-82, D 3246-81 or grab sample analysis by GC-FPD/TCD performed in the laboratory. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

- 22. If fuel analysis is used to demonstrate compliance with conditions of this permit, the fuel higher heating value for each fuel shall be certified by a third party fuel supplier or determined by ASTM D 1826-88 or D 1945-81 in conjunction with ASTM D 3588-89 for gaseous fuels. [District Rule 2520, 9.4.2; 4305, 6.2.1; and 4351, 6.2.1] Federally Enforceable Through Title V Permit
- 23. Permittee shall conduct sample analysis of noncertified gaseous fuel gas monthly. [District NSR Rule] Federally Enforceable Through Title V Permit
- 24. The permittee shall monitor and record the stack concentration of NOX, CO, and O2 at least once every month (in which a source test is not performed) using a portable analyzer that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless monitoring has been performed within the last month. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- 25. If either the NOX or CO concentrations corrected to 3% O2, as measured by the portable analyzer, exceed the allowable emissions concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- 26. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the permit-to-operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- 27. The permittee shall maintain records of: (1) the date and time of NOX, CO, and O2 measurements, (2) the O2 concentration in percent by volume and the measured NOX and CO concentrations corrected to 3% O2, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- 28. Permittee shall maintain records of sulfur content of noncertified gaseous fuel. [District NSR Rule] Federally Enforceable Through Title V Permit
- 29. Copies of all fuel invoices, gas purchase contracts, supplier certifications, and test results used to determine compliance with the conditions of this permit shall be maintained. The operator shall record daily amount and type(s) of fuel(s) combusted and all dates on which unit is fired on any noncertified fuel. [District Rule 2520, 9.4.2 and 40 CFR 60.48c(g)] Federally Enforceable Through Title V Permit
- 30. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit

**PERMIT UNIT: S-1703-181-13** EXPIRATION DATE: 07/31/2022

SECTION: SE18 TOWNSHIP: 28S RANGE: 29E

**EQUIPMENT DESCRIPTION:** 

62.5 MMBTU/HR THERMOTICS GAS/CASING GAS-FIRED STEAM GENERATOR #680 WITH LO-NOX BURNER AND

FGR, O2 CONTROLLER/ ANALYZER (B-1, DIS# 27529-71)

# PERMIT UNIT REQUIREMENTS

- 1. All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District Rule 2201] Federally Enforceable Through Title V Permit
- Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
- The unit shall only be fired on PUC-regulated natural gas. [District Rule 2201] Federally Enforceable Through Title V Permit
- Burner shall be equipped with fuel gas volume flowmeter (a master meter for a group of generators is acceptable upon District approval). [District Rule 4351, 5.6.1; District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
- Emission rates shall not exceed any of the following: NOx (as NO2) 7 ppmv @ 3% O2 or 0.008 lb/MMBtu; SOx -0.00285 lb/MMBtu; CO - 25 ppmv @ 3% O2; PM10 - 0.0076 lb/MMBtu; or VOC - 0.007 lb/MMBtu. [District Rules 2201, 4305, 4306, 4320 and 4351] Federally Enforceable Through Title V Permit
- All emissions measurements shall be made with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. Unless otherwise specified in the Permit to Operate, no determination of compliance shall be established within two hours after a continuous period in which fuel flow to the unit is shut off for 30 minutes or longer, or within 30 minutes after a re-ignition as defined in Section 3.0 of District Rule 4320. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
- Source testing to measure NOx and CO emissions from this unit while fired on natural gas shall be conducted at least once every twelve (12) months. After demonstrating compliance on two (2) consecutive annual source tests, the unit shall be tested not less than once every thirty-six (36) months. If the result of the 36-month source test demonstrates that the unit does not meet the applicable emission limits, the source testing frequency shall revert to at least once every twelve (12) months. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
- Test results submitted to the District from unit(s) representing a group of units may be used to demonstrate compliance with NOx limits for that group, provided the selection of the representative unit(s) is approved by the APCO prior to testing. Should any of the representative units exceed the required NOx emission limits of this permit, each of the units in the group shall demonstrate compliance by emissions testing within 90 days of the failed test. [District Rules 2520, 9.4, 4305, 6.3.2, 4306, 6.3.2 and 4351, 6.3] Federally Enforceable Through Title V Permit
- The following conditions must be met for representative unit(s) used to demonstrate compliance for NOx limits for a group of units: 1) all units are initially source tested and emissions from all units in group are similar, 2) all units in group are similar in terms of rated heat input, make and series, operation conditions, fuel used, and control method, 3) the group is owned by a single owner and located at a single stationary source, and 4) all units in the group shall have received the same maintenance and tune-up procedures as the representative unit(s). [District Rules 2520, 9.4.2, 4305] 6.3.2, and 4306, 6.3.2] Federally Enforceable Through Title V Permit

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

Facility Name: MACPHERSON OIL CO

Location: HEAVY OIL CENTRAL STATIONARY SOURCE, CA S-1703-181-13: Aug 24 2017 4:51PM -- VELASCOA

- 10. The number of representative units source tested to demonstrate compliance for NOx limits shall be at least 30% of the total number of units in the group. The units included in the 30% shall be rotated, so that when 3 source test cycles have been completed, all units in the entire group will have been tested. [District Rules 2520, 9.4.2, 4305, 6.3.2, and 4306, 6.3.2] Federally Enforceable Through Title V Permit
- 11. The source test plan shall identify which basis (ppmv or lb/MMBtu) will be used to demonstrate compliance. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
- 12. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
- 13. The following test methods shall be used: NOx (ppmv) EPA Method 7E or ARB Method 100, NOx (lb/MMBtu) -EPA Method 19; CO (ppmv) - EPA Method 10 or ARB Method 100; stack gas oxygen - EPA Method 3 or 3A or ARB Method 100; and fuel gas sulfur content - ASTM D3246 or double GC for H2S and mercaptans. [District Rules 1081, 4305, 4320 and 4351] Federally Enforceable Through Title V Permit
- 14. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
- 15. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
- 16. Emissions of sulfur compounds from this unit shall not exceed 200 lb per hour, calculated as SO2. Compliance with this requirement may be demonstrated by firing the unit only on PUC or FERC regulated natural gas; or by testing the sulfur content of each fuel and determining the maximum hourly emissions of sulfur compounds by multiplying the sulfur content of each fuel in lb/MMBtu by the maximum heat input rating of the unit; or by source testing in combination with fuel analysis. [District Rules 2520, 9.4.2 and Rule 4301, 5.2.1] Federally Enforceable Through Title V Permit
- 17. When complying with sulfur emission limits by fuel analysis or by a combination of source testing and fuel analysis. each fuel source shall be tested weekly for sulfur content and higher heating value. If compliance with the fuel sulfur content limit and sulfur emission limits has been demonstrated for 8 consecutive weeks for a fuel source, then the fuel testing frequency shall be monthly. If a monthly fuel content source test fails to show compliance, weekly testing shall resume. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
- 18. When complying with SOx emission limits by testing of stack emissions, testing shall be performed not less than once every 12 months using EPA Method 6B; or Method 8; or, for units using gaseous fuel scrubbed for sulfur precombustion, a grab sample analysis by GC-FPD/TCD performed in the laboratory and EPA Method 19 to calculated emissions. Gaseous fuel fired units demonstrating compliance on two consecutive annual source tests shall be tested not less than once every thirty-six months, however annual source testing shall resume if any test fails to show compliance. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
- 19. If the unit is fired on noncertified gaseous fuel and compliance with SOx emission limits is achieved through fuel sulfur content limitations, then the sulfur content of the gaseous fuel being fired in the unit shall be determined using ASTM D 1072-80, D 3031-81, D 4084-82, D 3246-81 or grab sample analysis by GC-FPD/TCD performed in the laboratory. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
- 20. If fuel analysis is used to demonstrate compliance with conditions of this permit, the fuel higher heating value for each fuel shall be certified by a third party fuel supplier or determined by ASTM D 1826-88 or D 1945-81 in conjunction with ASTM D 3588-89 for gaseous fuels. [District Rule 2520, 9.4.2; 4305, 6.2.1; and 4351, 6.2.1] Federally Enforceable Through Title V Permit
- 21. Permittee shall conduct sample analysis of noncertified gaseous fuel gas monthly. [District NSR Rule] Federally Enforceable Through Title V Permit

S-1703-181-13 : Aug 24 2017 4:51PM - VELASCOA

- 22. The permittee shall monitor and record the stack concentration of NOx, CO, and O2 at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless monitoring has been performed within the last month. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
- 23. If either the NOx or CO concentrations corrected to 3% O2, as measured by the portable analyzer, exceed the allowable emissions concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
- 24. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
- 25. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 3% O2, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
- 26. Permittee shall maintain records of sulfur content of noncertified gaseous fuel. [District NSR Rule] Federally Enforceable Through Title V Permit
- 27. Copies of all fuel invoices, gas purchase contracts, supplier certifications, and test results used to determine compliance with the conditions of this permit shall be maintained. The operator shall record daily amount and type(s) of fuel(s) combusted and all dates on which unit is fired on any noncertified fuel. [District Rule 2520, 9.4.2 and 40] CFR 60.48c(g)] Federally Enforceable Through Title V Permit
- 28. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070, 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
- 29. Formerly S-1109-31.

**PERMIT UNIT:** S-1703-184-12

EXPIRATION DATE: 07/31/2022

SECTION: SE12 TOWNSHIP: 28S RANGE: 28F

#### **EQUIPMENT DESCRIPTION:**

10,000 BARREL FREE WATER KNOCKOUT TANK T-1210 SERVED BY THE VAPOR CONTROL SYSTEM SHARED WITH S-1703-186, -187, -200, -201, AND -203 INCLUDING HEAT EXCHANGERS, FREE WATER KNOCKOUTS, GAS LIQUID SEPARATORS, VAPOR COMPRESSORS WITH ELECTRIC MOTORS, AND COMPRESSED VAPOR PIPING TO ANY OF THE FOLLOWING STEAM GENERATORS: S-1703-157, -158, -159, -160, AND -161

# PERMIT UNIT REQUIREMENTS

- The tank vapors may be introduced into TEOR system S-1703-143 at either the main trunk line, or immediately upstream of the H2S scrubber system. [District Rule 2201] Federally Enforceable Through Title V Permit
- 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 to prevent leaks. The vapors shall be incinerated to reduce the inlet VOC emissions by at least 99% by weight as determined by the test method specified in Section 6.4 of Rule 4623 in any of the following steam generators: S-1703-157, -158, -159, -160, -161, or -162; or vapors shall be injected into DOGGR approved wells listed on permit S-1703-143. [District Rule 2201] Federally Enforceable Through Title V Permit
- Before disposal of VOC vapors by well injection, the applicant shall obtain written notification from DOGGR that the wells are approvable for injection. [District Rule 2201] Federally Enforceable Through Title V Permit
- The operator shall ensure that the vapor recovery system is functional and is operating as designed at all times with the exception of power curtailment events. [District Rule 2201] Federally Enforceable Through Title V Permit
- This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623] Federally Enforceable Through Title V Permit
- VOC content of vapor in the tank vapor control system shall not exceed 10% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
- Permittee shall notify the APCO in writing at least (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 2080] Federally Enforceable Through Title V Permit

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

Facility Name: MACPHERSON OIL CO

Location: HEAVY OIL CENTRAL STATIONARY SOURCE, CA S-1703-184-12 : Aug 24 2017 4:51PM - VELASCOA

- 8. 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 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 2080] Federally Enforceable Through Title V Permit
- 9. 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 2080] Federally Enforceable Through Title V Permit
- 10. To facilitate connection to an 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 2080] Federally Enforceable Through Title V Permit
- 11. 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 solvent with 50 grams of VOC per liter or less. [District Rule 2080] Federally Enforceable Through Title V Permit
- 12. Steam cleaning shall only be allowed at locations where wastewater treatment facilities are limited, or during the months of December through March. [District Rule 2080] Federally Enforceable Through Title V Permit
- 13. 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 4623] Federally Enforceable Through Title V Permit
- 14. 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] Federally Enforceable Through Title V Permit
- 15. 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 4623] Federally Enforceable Through Title V Permit
- 16. The TVP testing shall be conducted at actual storage temperature of the organic liquid in the tank. The permittee shall also conduct an API gravity testing. [District Rule 4623] Federally Enforceable Through Title V Permit
- 17. 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 4623] Federally Enforceable Through Title V Permit
- 18. Operator shall conduct quarterly gas sampling after TVR compressor (prior to connection to any other vapor control system) and at either the first line tank or at any secondary tank which is heated above ambient temperature. If gas samples are less than 10% VOC by weight for 8 consecutive quarterly samplings, sampling frequency shall only be required annually and whenever there is a change in source or type of petroleum processed. Samples shall be collected during periods of normal operation, and not be within 48 hours after routine maintenance or repair. [District Rule 2201] Federally Enforceable Through Title V Permit
- 19. VOC content of gas shall be measured using ASTM D-1945, EPA Method 18 referenced as methane, or equivalent test method with prior District approval. [District Rule 2201] Federally Enforceable Through Title V Permit
- 20. The permittee shall maintain a written log of the date and duration of each power curtailment event. [District Rule 2201] Federally Enforceable Through Title V Permit

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

Facility Name: MACPHERSON OIL CO

Location: HEAVY OIL CENTRAL STATIONARY SOURCE,CA S-1703-184-12: Aug 24 2017 4:51PM - VELASCOA

- 21. The permittee shall keep written documentation from the power supplier indicating the date, and duration of the curtailment in addition to the beginning and end times. [District Rule 2201] Federally Enforceable Through Title V
- 22. Permittee shall maintain records of the VOC content of vapor in the tank vapor control system, including date and test results. [District Rule 2201] Federally Enforceable Through Title V Permit
- 23. All records shall be retained for a period of at least 5 years and shall be made available for District inspection upon request. [District Rule1070] Federally Enforceable Through Title V Permit

**PERMIT UNIT:** S-1703-186-8 EXPIRATION DATE: 07/31/2022

SECTION: SE12 TOWNSHIP: 28S RANGE: 28E

**EQUIPMENT DESCRIPTION:** 

84,000 GALLON (2,000 BBL) STOCK TANK T-1230 SERVED BY THE VAPOR CONTROL SYSTEM LISTED ON PERMIT

S-1703-184:

#### PERMIT UNIT REQUIREMENTS

- 1. The operator shall ensure that the vapor recovery system is functional and is operating as designed at all times with the exception of power curtailment events. [District Rule 2201] Federally Enforceable Through Title V Permit
- VOC content of vapor in the tank vapor control system shall not exceed 10% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
- This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623] Federally Enforceable Through Title V Permit
- Permittee shall notify the APCO in writing at least (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 2080] Federally Enforceable Through Title V Permit
- 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 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 2080] Federally Enforceable Through Title V Permit
- 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 2080] Federally Enforceable Through Title V Permit
- To facilitate connection to an 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 2080] Federally Enforceable Through Title V Permit
- 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 solvent with 50 grams of VOC per liter or less. [District Rule 2080] Federally Enforceable Through Title V Permit

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

Facility Name: MACPHERSON OIL CO

Location: HEAVY OIL CENTRAL STATIONARY SOURCE, CA 9-1703-186-8: Aug 24 2017 4:51PM - VELASCOA

- Steam cleaning shall only be allowed at locations where wastewater treatment facilities are limited, or during the months of December through March. [District Rule 2080] Federally Enforceable Through Title V Permit
- 10. Operator shall conduct quarterly sampling from the tank vapor control system's common header to the vapor control system sample point to qualify for exemption from fugitive component counts for components handling fluids with less than 10% VOC by weight. If 8 consecutive quarterly samplings show compliance, then sampling frequency shall only be required annually. [District Rule 2201] Federally Enforceable Through Title V Permit
- 11. VOC content of vapor shall be determined by ASTM D1945, ASTM D1946, EPA Method 18 referenced as methane, or equivalent test method with prior District approval. [District Rule 2201] Federally Enforceable Through Title V Permit
- 12. 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 2201] Federally Enforceable Through Title V Permit
- 13. 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) operator shall: (a) Eliminate or minimize the leak within 8 hours after detection. (b) 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 detection. (c) In no event shall the total time to minimize and eliminate the leak exceed 56 hours after detection. [District Rule 2201] Federally Enforceable Through Title V Permit
- 14. If any of the tank 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 2201] Federally Enforceable Through Title V Permit
- 15. During a District inspection, any tank, gauge hatch, sampling device, or other component that is not leak free will not be a violation of this permit provided the facility records, tags, and repairs the leak in accordance with the requirements of this permit. [District Rule 2201] Federally Enforceable Through Title V Permit
- 16. 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 4623] Federally Enforceable Through Title V Permit
- 17. 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] Federally Enforceable Through Title V Permit
- 18. 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 4623] Federally Enforceable Through Title V Permit
- 19. The TVP testing shall be conducted at actual storage temperature of the organic liquid in the tank. The permittee shall also conduct an API gravity testing. [District Rule 4623] Federally Enforceable Through Title V Permit
- 20. 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 4623] Federally Enforceable Through Title V Permit

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- 21. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date of leak detection, and method of detection; 3) Date and emission level of recheck after leak is repaired. [District Rule 2201] Federally Enforceable Through Title V Permit
- 22. The permittee shall maintain a written log of the date and duration of each power curtailment event. [District Rule 2201] Federally Enforceable Through Title V Permit
- 23. The permittee shall keep written documentation from the power supplier indicating the date, and duration of the curtailment in addition to the beginning and end times. [District Rule 2201] Federally Enforceable Through Title V Permit
- 24. Permittee shall maintain a written record of the VOC content of the gas sampled. [District Rule 2201] Federally Enforceable Through Title V Permit
- 25. All records shall be retained for a period of at least 5 years and shall be made available for District inspection upon request. [District Rule1070] Federally Enforceable Through Title V Permit

Location: HEAVY OIL CENTRAL STATIONARY SOURCE, CA

S-1703-186-8 : Aug 24 2017 4:51PM -- VELASCOA

**PERMIT UNIT: S-1703-191-5** EXPIRATION DATE: 07/31/2022

SECTION: NW20 TOWNSHIP: 28S RANGE: 29E

**EQUIPMENT DESCRIPTION:** 

500 BBL FIXED ROOF CRUDE OIL TEST TANK SERVED BY VAPOR CONTROL SYSTEM LISTED ON S-1703-139

(U.S.L. LEASE):

### PERMIT UNIT REQUIREMENTS

- The operator shall ensure that the vapor recovery system is functional and is operating as designed at all times with the exception of power curtailment events. [District Rule 2201] Federally Enforceable Through Title V Permit
- VOC content of vapor in the tank vapor control system shall not exceed 10% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
- This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623] Federally Enforceable Through Title V Permit
- Operator shall conduct quarterly sampling from the tank vapor control system's common header to the vapor control system sample point to qualify for exemption from fugitive component counts for components handling fluids with less than 10% VOC by weight. If 8 consecutive quarterly samplings show compliance, then sampling frequency shall only be required annually. [District Rule 2201] Federally Enforceable Through Title V Permit
- VOC content of vapor shall be determined by ASTM D1945, ASTM D1946, EPA Method 18 referenced as methane, or equivalent test method with prior District approval. [District Rule 2201] Federally Enforceable Through Title V Permit
- 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 2201] Federally Enforceable Through Title V Permit
- Upon detection of any leaking components (having a gas leak >10,000 ppmv, measured in accordance with EPA Method 21 by a portable hydrocarbon detection instrument that is calibrated with methane) operator shall: (a) Eliminate or minimize the leak within 8 hours after detection. (b) 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 detection. (c) In no event shall the total time to minimize and eliminate the leak exceed 56 hours after detection. [District Rule 2201] Federally Enforceable Through Title V Permit
- If any of the tank 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 2201] Federally Enforceable Through Title V Permit

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

Facility Name: MACPHERSON OIL CO

HEAVY OIL CENTRAL STATIONARY SOURCE, CA

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- During a District inspection, any tank, gauge hatch, sampling device, or other component that is not leak free will not be a violation of this permit provided the facility records, tags, and repairs the leak in accordance with the requirements of this permit. [District Rule 2201] Federally Enforceable Through Title V Permit
- 10. Permittee shall notify the APCO in writing at least (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 2080] Federally Enforceable Through Title V Permit
- 11. 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 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 2080] Federally Enforceable Through Title V Permit
- 12. 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 2080] Federally Enforceable Through Title V Permit
- 13. To facilitate connection to an 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 2080] Federally Enforceable Through Title V Permit
- 14. 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 solvent with 50 grams of VOC per liter or less. [District Rule 2080] Federally Enforceable Through Title V Permit
- 15. Steam cleaning shall only be allowed at locations where wastewater treatment facilities are limited, or during the months of December through March. [District Rule 2080] Federally Enforceable Through Title V Permit
- 16. 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 4623] Federally Enforceable Through Title V Permit
- 17. 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] Federally Enforceable Through Title V Permit
- 18. 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 4623] Federally Enforceable Through Title V Permit
- 19. The TVP testing shall be conducted at actual storage temperature of the organic liquid in the tank. The permittee shall also conduct an API gravity testing. [District Rule 4623] Federally Enforceable Through Title V Permit
- 20. 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 4623] Federally Enforceable Through Title V Permit

- 21. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date of leak detection, and method of detection; 3) Date and emission level of recheck after leak is repaired. [District Rule 2201] Federally Enforceable Through Title V Permit
- 22. The permittee shall maintain a written log of the date and duration of each power curtailment event. [District Rule 2201] Federally Enforceable Through Title V Permit
- 23. The permittee shall keep written documentation from the power supplier indicating the date, and duration of the curtailment in addition to the beginning and end times. [District Rule 2201] Federally Enforceable Through Title V Permit
- 24. Permittee shall maintain a written record of the VOC content of the gas sampled. [District Rule 2201] Federally Enforceable Through Title V Permit
- 25. All records shall be retained for a period of at least 5 years and shall be made available for District inspection upon request. [District Rule1070] Federally Enforceable Through Title V Permit

**PERMIT UNIT: S-1703-192-4** 

EXPIRATION DATE: 07/31/2022

#### **EQUIPMENT DESCRIPTION:**

62.5 MM BTU/HR STEAM GENERATOR #720 WITH COEN MODEL QLN LOW NOX BURNER, FGR, AND O2 CONTROLLER

#### PERMIT UNIT REQUIREMENTS

- All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District Rule 2201] Federally Enforceable Through Title V Permit
- Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
- The unit shall only be fired on PUC-regulated natural gas. [District Rule 2201] Federally Enforceable Through Title V **Permit**
- Emissions from this unit shall not exceed any of the following limits: 7 ppmvd NOx @ 3% O2 or 0.008 lb-NOX/MMBtu, 0.00285 lb-SOx/MMBtu, 0.0076 lb-PM10/MMBtu, 25 ppmvd CO @ 3% O2 or 0.019 lb-CO/MMBtu, or 0.006 lb-VOC/MMBtu. [District Rules 2201, 4305, 4306, 4320 and 4351] Federally Enforceable Through Title V Permit
- All emissions measurements shall be made with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. Unless otherwise specified in the Permit to Operate, no determination of compliance shall be established within two hours after a continuous period in which fuel flow to the unit is shut off for 30 minutes or longer, or within 30 minutes after a re-ignition as defined in Section 3.0 of District Rule 4320. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
- Source testing to measure NOx and CO emissions from this unit while fired on natural gas shall be conducted at least once every twelve (12) months. After demonstrating compliance on two (2) consecutive annual source tests, the unit shall be tested not less than once every thirty-six (36) months. If the result of the 36-month source test demonstrates that the unit does not meet the applicable emission limits, the source testing frequency shall revert to at least once every twelve (12) months. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
- Test results submitted to the District from unit(s) representing a group of units may be used to demonstrate compliance with NOx limits for that group, provided the selection of the representative unit(s) is approved by the APCO prior to testing. Should any of the representative units exceed the required NOx emission limits of this permit, each of the units in the group shall demonstrate compliance by emissions testing within 90 days of the failed test. [District Rules 2520, 9.4, 4305, 6.3.2, 4306, 6.3.2 and 4351, 6.3] Federally Enforceable Through Title V Permit
- The following conditions must be met for representative unit(s) used to demonstrate compliance for NOx limits for a group of units: 1) all units are initially source tested and emissions from all units in group are similar, 2) all units in group are similar in terms of rated heat input, make and series, operation conditions, fuel used, and control method, 3) the group is owned by a single owner and located at a single stationary source, and 4) all units in the group shall have received the same maintenance and tune-up procedures as the representative unit(s). [District Rules 2520, 9.4.2, 4305, 6.3.2, and 4306, 6.3.2] Federally Enforceable Through Title V Permit

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

Facility Name: MACPHERSON OIL CO

Location: HEAVY OIL CENTRAL STATIONARY SOURCE, CA 8-1703-192-4 : Aug 24 2017 4:51PM - VELASCOA

- The number of representative units source tested to demonstrate compliance for NOx limits shall be at least 30% of the total number of units in the group. The units included in the 30% shall be rotated, so that when 3 source test cycles have been completed, all units in the entire group will have been tested. [District Rules 2520, 9.4.2, 4305, 6.3.2, and 4306, 6.3.2] Federally Enforceable Through Title V Permit
- 10. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
- 11. The source test plan shall identify which basis (ppmv or lb/MMBtu) will be used to demonstrate compliance. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
- 12. The following test methods shall be used: NOx (ppmv) EPA Method 7E or ARB Method 100, NOx (lb/MMBtu) -EPA Method 19; CO (ppmv) - EPA Method 10 or ARB Method 100; stack gas oxygen - EPA Method 3 or 3A or ARB Method 100; and fuel gas sulfur content - ASTM D3246 or double GC for H2S and mercaptans. [District Rules 1081, 4305, 4320 and 4351] Federally Enforceable Through Title V Permit
- 13. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
- 14. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
- 15. Emissions of sulfur compounds from this unit shall not exceed 200 lb per hour, calculated as SO2. Compliance with this requirement may be demonstrated by firing the unit only on PUC or FERC regulated natural gas; or by testing the sulfur content of each fuel and determining the maximum hourly emissions of sulfur compounds by multiplying the sulfur content of each fuel in lb/MMBtu by the maximum heat input rating of the unit; or by source testing in combination with fuel analysis. [District Rules 2520, 9.4.2 and Rule 4301, 5.2.1] Federally Enforceable Through Title V Permit
- 16. When complying with sulfur emission limits by fuel analysis or by a combination of source testing and fuel analysis, each fuel source shall be tested weekly for sulfur content and higher heating value. If compliance with the fuel sulfur content limit and sulfur emission limits has been demonstrated for 8 consecutive weeks for a fuel source, then the fuel testing frequency shall be monthly. If a monthly fuel content source test fails to show compliance, weekly testing shall resume. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
- 17. When complying with SOx emission limits by testing of stack emissions, testing shall be performed not less than once every 12 months using EPA Method 6B; or Method 8; or, for units using gaseous fuel scrubbed for sulfur precombustion, a grab sample analysis by GC-FPD/TCD performed in the laboratory and EPA Method 19 to calculated emissions. Gaseous fuel fired units demonstrating compliance on two consecutive annual source tests shall be tested not less than once every thirty-six months, however annual source testing shall resume if any test fails to show compliance. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
- 18. If the unit is fired on noncertified gaseous fuel and compliance with SOx emission limits is achieved through fuel sulfur content limitations, then the sulfur content of the gaseous fuel being fired in the unit shall be determined using ASTM D 1072-80, D 3031-81, D 4084-82, D 3246-81 or grab sample analysis by GC-FPD/TCD performed in the laboratory. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
- 19. If fuel analysis is used to demonstrate compliance with conditions of this permit, the fuel higher heating value for each fuel shall be certified by a third party fuel supplier or determined by ASTM D 1826-88 or D 1945-81 in conjunction with ASTM D 3588-89 for gaseous fuels. [District Rule 2520, 9.4.2; 4305, 6.2.1; and 4351, 6.2.1] Federally Enforceable Through Title V Permit
- 20. Permittee shall conduct sample analysis of noncertified gaseous fuel gas monthly. [District Rule 2201] Federally Enforceable Through Title V Permit

- 21. The permittee shall monitor and record the stack concentration of NOx, CO, and O2 at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless monitoring has been performed within the last month. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
- 22. If either the NOx or CO concentrations corrected to 3% O2, as measured by the portable analyzer, exceed the allowable emissions concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
- 23. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
- 24. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 3% O2, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
- 25. Permittee shall maintain records of sulfur content of noncertified gaseous fuel. [District Rule 2201] Federally Enforceable Through Title V Permit
- 26. Copies of all fuel invoices, gas purchase contracts, supplier certifications, and test results used to determine compliance with the conditions of this permit shall be maintained. The operator shall record daily amount and type(s) of fuel(s) combusted and all dates on which unit is fired on any noncertified fuel. [District Rule 2520, 9.4.2 and 40 CFR 60.48c(g)] Federally Enforceable Through Title V Permit
- 27. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070, 4305, 4306 and 4320] Federally Enforceable Through Title V Permit

S-1703-192-4 : Aug 24 2017 4:51PM - VELASCO

**PERMIT UNIT:** S-1703-194-2

EXPIRATION DATE: 07/31/2022

#### **EQUIPMENT DESCRIPTION:**

1,000 SQUARE FOOT HEAVY CRUDE OIL SAND REMOVAL BASIN WITH A SUNSCREEN TARP

### PERMIT UNIT REQUIREMENTS

- The sand basin shall be covered by the sunscreen tarp except during maintenance, loading and unloading. [District Rule 2201] Federally Enforceable Through Title V Permit
- Liquid surface area of the sand removal basin shall be less than 1,000 square feet. [District Rules 2201 and 4402] Federally Enforceable Through Title V Permit
- During sand cleaning operations, the liquids shall be removed from the sand basin in a timely manner to minimize VOC emissions. [District Rule 2201] Federally Enforceable Through Title V Permit
- No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102] 4.
- No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101] Federally Enforceable Through Title V Permit
- VOC emissions from the sand removal basin shall not exceed 0.006 lb-VOC per square foot per day. [District Rule 2201] Federally Enforceable Through Title V Permit
- All records shall be maintained and retained on-site for a period of at least 5 years and shall be made available for District inspection upon request. [District Rule 1070]

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

Facility Name: MACPHERSON OIL CO

Location: HEAVY OIL CENT s-1703-194-2: Aug 24 2017 4:51PM - VELASCOA HEAVY OIL CENTRAL STATIONARY SOURCE, CA

**PERMIT UNIT: S-1703-195-3** 

EXPIRATION DATE: 07/31/2022

#### **EQUIPMENT DESCRIPTION:**

10,000 BBL TANK T-300 SERVED BY VAPOR CONTROL SYSTEM LISTED UNDER S-1703-144:

### PERMIT UNIT REQUIREMENTS

- 1. The operator shall ensure that the vapor recovery system is functional and is operating as designed at all times with the exception of power curtailment events. [District Rule 2201] Federally Enforceable Through Title V Permit
- This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all 2. storage conditions. [District Rule 4623] Federally Enforceable Through Title V Permit
- Maximum VOC content of vapor in the tank vapor control system shall not exceed 10% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
- 4. VOC content of gas shall be measured using ASTM D-1945, EPA Method 18 referenced as methane, or equivalent test method with prior District approval. [District Rule 2201] Federally Enforceable Through Title V Permit
- 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 4623] Federally Enforceable Through Title V Permit
- 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] Federally Enforceable Through Title V Permit
- 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 4623] Federally Enforceable Through Title V Permit
- 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 2080] Federally Enforceable Through Title V Permit

Facility Name: MACPHERSON OIL CO

HEAVY OIL CENTRAL STATIONARY SOURCE, CA Location: HEAVY OIL CENT S-1703-195-3: Aug 24 2017 4:51PM - VELASCOA

- 9. 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 2080] Federally Enforceable Through Title V Permit
- 10. 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 2080] Federally Enforceable Through Title V Permit
- 11. 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 2080] Federally Enforceable Through Title V Permit
- 12. 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 2080] Federally Enforceable Through Title V Permit
- 13. Steam cleaning shall only be allowed at locations where wastewater treatment facilities are limited, or during the months of December through March. [District Rule 2080] Federally Enforceable Through Title V Permit
- 14. The TVP testing shall be conducted at actual storage temperature of the organic liquid in the tank. The permittee shall also conduct an API gravity testing. [District Rule 4623] Federally Enforceable Through Title V Permit
- 15. 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 4623] Federally Enforceable Through Title V Permit
- 16. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date of leak detection, and method of detection; 3) Date and emission level of recheck after leak is repaired. [District Rule 4623] Federally Enforceable Through Title V Permit
- 17. Permittee shall maintain records of the VOC content of vapor in the tank vapor control system, including date and test results. [District Rule 2201] Federally Enforceable Through Title V Permit
- 18. The permittee shall maintain a written log of the date and duration of each power curtailment event. [District Rule 2201] Federally Enforceable Through Title V Permit
- 19. The permittee shall keep written documentation from the power supplier indicating the date, and duration of the curtailment in addition to the beginning and end times. [District Rule 2201] Federally Enforceable Through Title V Permit
- 20. 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 1070] Federally Enforceable Through Title V Permit

**PERMIT UNIT:** S-1703-196-1

EXPIRATION DATE: 07/31/2022

#### **EQUIPMENT DESCRIPTION:**

217 BHP PERKINS MODEL 1106D-E66TAG2 TIER 3 CERTIFIED DIESEL-FIRED EMERGENCY STANDBY IC ENGINE POWERING AN ELECTRICAL GENERATOR

#### PERMIT UNIT REQUIREMENTS

- Engine shall only be operated within Macpherson Oil Company's Heavy Oil Central Stationary Source. [District Rule 2201] Federally Enforceable Through Title V Permit
- 2. Unit shall not be located within 1000 feet of any K-12 school. [CH&SC 42301.6]
- 3. This engine shall not operate within 5,320 feet of a receptor. A receptor is defined as any residence or any business (not including permittee). Permittee shall maintain records to demonstrate compliance with this requirement. [District Rule 41021
- Permittee shall notify the District Compliance Division of each location at which the unit is located in excess of 24 hours. Such notification shall be made no later than 48 hours after starting operation at the location. [District Rule 1070]
- Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
- No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101] Federally Enforceable Through Title V Permit
- No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
- The exhaust stack shall vent vertically upward. The vertical exhaust flow shall not be impeded by a rain cap (flapper ok), roof overhang, or any other obstruction. [District Rule 4102]
- This engine shall be equipped with an operational non-resettable elapsed time meter or other APCO approved alternative. [District Rule 4702, 17 CCR 93115, and 40 CFR 60 Subpart IIII] Federally Enforceable Through Title V Permit
- 10. Only CARB certified diesel fuel containing not more than 0.0015% sulfur by weight is to be used. [District Rules 2201 and 4801, 17 CCR 93115, 40 CFR Part 60 Subpart IIII] Federally Enforceable Through Title V Permit
- 11. Emissions from this IC engine shall not exceed any of the following limits: 2.55 g-NOx/bhp-hr, 1.34 g-CO/bhp-hr, or 0.13 g-VOC/bhp-hr. [District Rule 2201, 17 CCR 93115, and 40 CFR Part 60 Subpart IIII] Federally Enforceable Through Title V Permit
- 12. Emissions from this IC engine shall not exceed 0.13 g-PM10/bhp-hr based on USEPA certification using ISO 8178 test procedure. [District Rules 2201 and 4102, 17 CCR 93115, and 40 CFR Part 60 Subpart IIII] Federally Enforceable Through Title V Permit
- 13. This engine shall be operated and maintained in proper operating condition as recommended by the engine manufacturer or emissions control system supplier. [District Rule 4702 and 40 CFR 60 Subpart IIII] Federally Enforceable Through Title V Permit

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

Facility Name: MACPHERSON OIL CO

Location: HEAVY OIL CENTRAL STATIONARY SOURCE, CA \$-1703-196-1 : Aug 24 2017 4:51PM -- VELASCOA

- 14. During periods of operation for maintenance, testing, and required regulatory purposes, the permittee shall monitor the operational characteristics of the engine as recommended by the manufacturer or emission control system supplier (for example: check engine fluid levels, battery, cables and connections; change engine oil and filters; replace engine coolant; and/or other operational characteristics as recommended by the manufacturer or supplier). [District Rule 4702] Federally Enforceable Through Title V Permit
- 15. An emergency situation is an unscheduled electrical power outage caused by sudden and reasonably unforeseen natural disasters or sudden and reasonably unforeseen events beyond the control of the permittee. [District Rule 4702] Federally Enforceable Through Title V Permit
- 16. This engine shall not be used to produce power for the electrical distribution system, as part of a voluntary utility demand reduction program, or for an interruptible power contract. [District Rule 4702] Federally Enforceable Through Title V Permit
- 17. The permittee shall maintain monthly records of emergency and non-emergency operation. Records shall include the number of hours of emergency operation, the date and number of hours of all testing and maintenance operations, the purpose of the operation (for example: load testing, weekly testing, rolling blackout, general area power outage, etc.) and records of operational characteristics monitoring. For units with automated testing systems, the operator may, as an alternative to keeping records of actual operation for testing purposes, maintain a readily accessible written record of the automated testing schedule. [District Rule 4702] Federally Enforceable Through Title V Permit
- 18. This engine shall be operated only for testing and maintenance of the engine, required regulatory purposes, and during emergency situations. Operation of the engine for maintenance, testing, and required regulatory purposes shall not exceed 50 hours per calendar year. [District Rule 4702, 17 CCR 93115 and 40 CFR Part 60 Subpart IIII] Federally Enforceable Through Title V Permit
- 19. U.S. EPA administers the requirements of 40 CFR Part 60 Subpart IIII. The owner or operator shall comply with the emission and operating limitations, testing requirements, initial and continuous compliance requirements as specified in this subpart. The owner or operator shall submit all applicable notifications, reports, and records to the administrator by the required compliance dates. [District Rule 4001]
- 20. The permittee shall maintain monthly records of the type of fuel purchased. [District Rule 4702 and 17 CCR 93115] Federally Enforceable Through Title V Permit
- 21. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rule 4702 and 17 CCR 93115] Federally Enforceable Through Title V Permit

**PERMIT UNIT:** S-1703-197-2

EXPIRATION DATE: 07/31/2022

#### **EQUIPMENT DESCRIPTION:**

10,000 BBL FREE WATER KNOCKOUT TANK SERVED BY VAPOR CONTROL SYSTEM LISTED ON S-1703-144

## PERMIT UNIT REQUIREMENTS

- 1. 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. [District Rule 2201] Federally Enforceable Through Title V Permit
- Maximum VOC content of vapor in the tank vapor control system shall not exceed 10% by weight. [District Rule 2. 2201] Federally Enforceable Through Title V Permit
- VOC content of gas shall be measured using ASTM D-1945, EPA Method 18 referenced as methane, or equivalent test method with prior District approval. [District Rule 2201] Federally Enforceable Through Title V Permit
- This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623] Federally Enforceable Through Title V Permit
- 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 4623] Federally Enforceable Through Title V Permit
- 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] Federally Enforceable Through Title V Permit
- 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 4623] Federally Enforceable Through Title V Permit
- The TVP testing shall be conducted at actual storage temperature of the organic liquid in the tank. The permittee shall also conduct an API gravity testing. [District Rule 4623] Federally Enforceable Through Title V Permit
- 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 4623] Federally Enforceable Through Title V Permit
- 10. The permittee shall keep accurate records of each organic liquid stored in the tank including TVP and API gravity. [District Rule 4623, 6.3.6] 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. [District Rule 4623] Federally Enforceable Through Title V Permit
- 12. Permittee shall maintain records of the VOC content of vapor in the tank vapor control system, including date and test results. [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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Location: HEAVY OIL CENTRAL STATIONARY SOURCE, CA \$-1703-197-2: Aug 24 2017 4:51PM - VELASCOA

13. 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]

**PERMIT UNIT:** S-1703-198-1

**EXPIRATION DATE: 07/31/2022** 

SECTION: 18 TOWNSHIP: 25S RANGE: 29E

**EQUIPMENT DESCRIPTION:** 

85 MMBTU/HR NATURAL GAS/VAPOR RECOVERY GAS-FIRED STEAM GENERATOR WITH COEN QLN-II ULTRA LOW-NOX BURNER AND A FLUE GAS RECIRCULATION (FGR) SYSTEM

## PERMIT UNIT REQUIREMENTS

- This unit shall be equipped with horizontal convection section with at least 235 square feet of bare tube surface area (or thermodynamically equivalent number of square feet of finned tube) per MMBtu/hr of heat input and variable frequency drive high efficiency electrical motors driving the blower and water pump. Documentation showing this unit is so equipped shall be retained on site. [Public Resources Code 21000-21177: California Environmental Quality Act]
- No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101] Federally Enforceable Through Title V Permit
- Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
- Natural gas and/or TEOR and TVR gas combusted in this unit shall have a sulfur content no greater than 1 gr S/100 scf. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
- Permittee shall test annually the sulfur content of noncertified (non-PUC/FERC regulated) fuel gas combusted in steam generator using ASTM method D1072, D3031, D4084, or D3246 and make test results readily available for District inspection. [District Rules 2520, 9.3.2 and 4320] Federally Enforceable Through Title V Permit
- Emissions rates from unit shall not exceed any of the following limits: 6 ppmv NOx @ 3% O2 or 0.007 lb-NOx/MMBtu, 0.003 lb-PM10/MMBtu, 25 ppmv CO @ 3% O2 or 0.0185 lb-CO/MMBtu, or 0.0055 lb-VOC/MMBtu. [District Rules 2201, 4301, 4305, 4306, 4320, and 40 CFR 60.43c(e)(1)] Federally Enforceable Through Title V Permit
- Source testing to measure NOx and CO emissions from this unit shall be conducted at least once every twelve (12) months. After demonstrating compliance on two (2) consecutive annual source tests, the unit shall be tested not less than once every thirty-six (36) months. If the result of the 36-month source test demonstrates that the unit does not meet the applicable emission limits, the source testing frequency shall revert to at least once every twelve (12) months. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
- All emissions measurements shall be made with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. Unless otherwise specified in the Permit to Operate, no determination of compliance shall be established within two hours after a continuous period in which fuel flow to the unit is shut off for 30 minutes or longer, or within 30 minutes after a re-ignition as defined in Section 3.0 of District Rule 4320. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
- The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit

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

Facility Name: MACPHERSON OIL CO

Location: HEAVY OIL CENTRAL STATIONARY SOURCE, CA 8-1703-198-1 : Aug 24 2017 4:51PM -- VELASCOA

- 10. The source test plan shall identify which basis (ppmv or lb/MMBtu) will be used to demonstrate compliance. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
- 11. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
- 12. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rules 4305, 5.5.5, 4306, 5.5.5, and 4320] Federally Enforceable Through Title V Permit
- 13. The following test methods shall be used: NOX (ppmv) EPA Method 7E or ARB Method 100, NOx (lb/MMBtu) -EPA Method 19; CO (ppmv) - EPA Method 10 or ARB Method 100; Stack gas oxygen (O2) - EPA Method 3 or 3A or ARB Method 100; stack gas velocities - EPA Method 2; Stack gas moisture content - EPA Method 4; SOx - EPA Method 6C or 8 or ARB Method 100; fuel gas sulfur as H2S content - EPA Method 11 or 15; and fuel hhv (MMBtu) -ASTM D 1826 or D 1945 in conjunction with ASTM D 3588. [District Rule 1081, 4305, 4306, 4320, and 4351] Federally Enforceable Through Title V Permit
- 14. All emissions measurements shall be made with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. No determination of compliance shall be established within two hours after a continuous period in which fuel flow to the unit is shut off for 30 minutes or longer, or within 30 minutes after a re-ignition as defined in Section 3.0 of District Rule 4306. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
- 15. The permittee shall monitor and record the stack concentration of NOx, CO, and O2 at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless monitoring has been performed within the last month. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
- 16. If either the NOx or CO concentrations corrected to 3% O2, as measured by the portable analyzer, exceed the allowable emissions concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
- 17. All NOx, CO, and O2 emission emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
- 18. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 3% O2, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit

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- 19. PUC quality natural gas is any gaseous fuel where the sulfur content is no more than one-fourth (0.25) grain of hydrogen sulfide per one hundred (100) standard cubic feet, no more than five (5) grains of total sulfur per one hundred (100) standard cubic feet, and at least 80% methane by volume. [District Rule 4320] Federally Enforceable Through Title V Permit
- 20. If the steam generator is not fired on PUC-regulated natural gas and compliance is achieved through fuel sulfur content limitations, then the sulfur content of the fuel shall be determined by testing sulfur content at a location after all fuel sources are combined prior to incineration, or by performing mass balance calculations based on monitoring the sulfur content and volume of each fuel source. The sulfur content of the fuel shall be determined using the test methods referenced in this permit. [District Rule 4320] Federally Enforceable Through Title V Permit
- 21. Permittee shall maintain records of noncertified (non-PUC/FERC regulated) fuel gas sulfur compound measurements. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
- 22. If the unit is fired on PUC-regulated natural gas, valid purchase contracts, supplier certifications, tariff sheets, or transportation contracts may be used to satisfy the fuel sulfur content analysis, provided they establish the fuel sulfur concentration and higher heating value. [District Rule 4320] Federally Enforceable Through Title V Permit
- 23. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070, 4305, 4306 and 4320] Federally Enforceable Through Title V Permit

**PERMIT UNIT:** S-1703-199-2

EXPIRATION DATE: 07/31/2022

SECTION: SE 18 TOWNSHIP: 28E RANGE: 29E

#### **EQUIPMENT DESCRIPTION:**

GASOLINE DISPENSING OPERATION WITH ONE 3,000 GALLON SPLIT (2,000 GALLON GASOLINE/1,000 GALLON DIESEL) INSULATED FIREGUARD ABOVEGROUND STORAGE TANK SERVED BY TWO-POINT PHASE I VAPOR RECOVERY SYSTEM (VR-402-A), AND 1 FUELING POINT WITH 1 GASOLINE DISPENSING NOZZLE SERVED BY BALANCE PHASE II VAPOR RECOVERY SYSTEM (G-70-52-AM), AND STANDING LOSS CONTROL (VR-302-C)

## PERMIT UNIT REQUIREMENTS

- The Phase I, Phase II, and Standing Loss Control Vapor recovery systems shall be installed and maintained in accordance with the manufacturer specifications and the ARB Executive Orders specified in this permit, including applicable rules and regulations of the Division of Measurement Standards of the Department of Food and Agriculture, the Office of the State Fire Marshal of the Department of Forestry and Fire Protection, the Division of Occupational Safety and Health of the Department of Industrial Relations, and the Division of Water Quality of the State Water Resources Control Board that have been made conditions of the certification. [District Rules 4621 and 4622 and CH&SC 41950]
- This gasoline storage and dispensing equipment shall not be used in retail sales, where gasoline dispensed by the unit is subject to payment of California sales tax on gasoline sales. [District Rule 4622]
- No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102] 3.
- The storage container(s) shall be installed, maintained, and operated such that they are leak-free. [District Rule 4621] 4.
- The permittee shall have all underground storage container installations and all underground piping configurations inspected by the APCO prior to backfilling. The permittee shall notify the District by telephone or other Districtapproved method and obtain a confirmation number at least three business days prior to the backfilling. [District Rules 4621 and 4622]
- The Phase I and Phase II vapor recovery systems and gasoline dispensing equipment shall be maintained without leaks as determined in accordance with the test method specified in this permit. [District Rules 4621 and 4622]
- A leak is defined as the dripping of VOC-containing liquid at a rate of more than three (3) drops per minute, or the detection of any gaseous or vapor emissions with a concentration of total organic compound greater than 10,000 ppmy, as methane, above background when measured in accordance with EPA Test Method 21. [District Rules 4621 and 4622]
- No gasoline delivery vessel shall be operated or be allowed to operate unless valid State of California decals are displayed on the cargo container, which attest to the vapor integrity of the container. [District Rule 4621]
- No person shall operate any ARB certified Phase II vapor recovery system or any portion thereof that has a major defect or an equipment defect that is identified in any applicable ARB Executive Order until the following conditions have been met: 1) the defect has been repaired, replaced, or adjusted as necessary to correct the defect; 2) the District has been notified, and the District has reinspected the system or authorized the system for use (such authorization shall not include the authority to operate the equipment prior to the correction of the defective components); and 3) all major defects, after repair, are duly entered into the Operations and Maintenance (O&M) manual. [District Rule 4622]

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- 10. Upon identification of any major defects, the permittee shall tag "Out-of-Order" all dispensing equipment for which vapor recovery has been impaired. Tagged equipment shall be rendered inoperable and the tag(s) shall not be removed until the defective equipment has been repaired, replaced, or adjusted, as necessary. In the case of defects identified by the District, tagged equipment shall be rendered inoperable, and the tag shall not be removed until the District has been notified of the repairs, and the District has either reinspected the system or authorized the tagged equipment for use. [District Rule 4622]
- 11. The permittee shall implement a periodic maintenance inspection program for the certified Phase II vapor recovery system consistent with the requirements of this permit. The program shall be documented in an operation and maintenance (O&M) manual and shall at a minimum contain the following information: 1) copies of all vapor recovery performance tests; 2) all applicable ARB Executive Orders, Approval Letters, and District Permits; 3) the manufacturer's specifications and instructions for installation, operation, repair, and maintenance required pursuant to ARB Certification Procedure CP-201, and any additional instruction provided by the manufacturer; 4) system and/or component testing requirements, including test schedules and passing criteria for each of the standard tests required by this permit (the owner/operator may include any non-ARB required diagnostic and other tests as part of the testing requirements), and 5) additional O&M instructions, if any, that are designed to ensure compliance with the applicable rules, regulations, ARB Executive Orders, and District permit conditions, including replacement schedules for failure or wear prone components. [District Rule 4622]
- 12. The permittee shall conduct periodic maintenance inspections based on the greatest monthly throughput of gasoline dispensed by the facility in the previous year as follows: A) less than 2,500 gallons - one day per month; B) 2,500 to less than 25,000 gallons - one day per week; or C) 25,000 gallons or greater - five days per week. All inspections shall be documented within the O & M Manual. [District Rules 4621 and 4622]
- 13. Periodic maintenance inspections of the Phase I vapor recovery system shall include, at a minimum, verification that 1) the fill caps and vapor caps are not missing, damaged, or loose; 2) the fill cap gasket and vapor cap gaskets are not missing or damaged; 3) the fill adapter and vapor adapter are securely attached to the risers; 4) where applicable, the spring-loaded submerged fill tube seals properly against the coaxial tubing; 5) the dry break (poppet-valve) is not missing or damaged; and 6) the submerged fill tube is not missing or damaged. [District Rule 4621]
- 14. Periodic maintenance inspections of the Phase II vapor recovery system shall include, at a minimum, verification that 1) the following nozzle components are in place and in good condition as specified in ARB Executive Order as applicable: faceplate/facecone, bellows, latching device spring, vapor check valve, spout (proper diameter/vapor collection holes), insertion interlock mechanism, automatic shut-off mechanism, and hold open latch (unless prohibited by law or the local fire control authority); 2) the hoses are not torn, flattened or crimped; 3) the vapor path of the coaxial hoses associated with bellows equipped nozzles does not contain more than 100 ml of liquid if applicable; and 4) the vapor processing unit is functioning properly, for operations that are required to have or possess such a unit. [District Rule 4622]
- 15. In the event of a separation due to a drive off, the permittee shall, unless otherwise specified in the applicable ARB Executive Order, conduct a visual inspection of the affected equipment and either 1) perform qualified repairs on any damaged components and conduct applicable re-verification tests pursuant to the requirements of this permit, or 2) replace the affected nozzles, coaxial hoses, breakaway couplings, and any other damaged components with new or certified rebuilt components that are ARB certified. The activities shall be documented in accordance with the requirements of this permit before placing the affected equipment back in service. [District Rule 4622]
- 16. The gasoline throughput for this permit unit shall not exceed 50,000 gallons in any one calendar year. [District Rule 2201]
- 17. The permittee shall conduct all periodic vapor recovery system performance tests specified in this permit, no more than 30 days before or after the required compliance testing date, unless otherwise required under the applicable ARB Executive Order. [District Rules 4621 and 4622]
- 18. The permittee shall perform and pass a Static Leak Test "Determination of Static Pressure Performance of Vapor Recovery Systems at Gasoline Dispensing Facilities with Aboveground Tanks" in accordance with the Executive Order specified in this permit for the Phase I Vapor Recovery System at least once every 12 months thereafter. [District Rules 4621 and 4622]

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- 19. For certified Phase II vapor recovery systems with liquid removal devices, the permittee shall perform and pass an ARB TP-201.6 Liquid Removal Test whenever the liquid in the vapor path exceeds 100 ml of liquid. The amount of liquid in the vapor path shall be measured by lowering the gasoline dispensing nozzle into a container until such time that no more liquid drains from the nozzle. The amount of liquid drained into the container shall be measured using a graduated cylinder or graduated beaker. The vapor path shall be inspected once per month if monthly throughput is below 2,500 gallons, or once per week otherwise. [District Rule 4622]
- 20. A person conducting testing of, or repairs to, a certified vapor recovery system shall be in compliance with District Rule 1177 (Gasoline Dispensing Facility Tester Certification). [District Rules 4621 and 4622]
- 21. A person performing installation of, or maintenance on, a certified Phase I or Phase II vapor recovery system shall be certified by the ICC for Vapor Recovery System Installation and Repair, or work under the direct and personal supervision of an individual physically present at the work site who is certified. The ICC certification shall be renewed every 24 months. [District Rules 4621 and 4622]
- 22. Proof of the ICC certification and all other certifications required by the Executive Order and installation and operation manual shall be made available onsite. [District Rules 4621 and 4622]
- 23. The permittee shall notify the District at least 7 days prior to each performance test. The test results shall be submitted to the District no later than 30 days after the completion of each test. [District Rule 4621]
- 24. The permittee shall maintain a copy of all test results. The test results shall be dated and shall contain the name, address, and telephone number of the company responsible for system installation and testing. [District Rule 4622]
- 25. The permittee shall maintain on the premises a log of any repairs made to the certified Phase I or Phase II vapor recovery system. The repair log shall include the following: 1) date and time of each repair; 2) the name and applicable certification numbers of the person(s) who performed the repair, and if applicable, the name, address and phone number of the person's employer; 3) description of service performed; 4) each component that was repaired, serviced, or removed; 5) each component that was installed as replacement, if applicable; and 6) receipts or other documents for parts used in the repair and, if applicable, work orders which shall include the name and signature of the person responsible for performing the repairs. [District Rule 4622]
- 26. The O&M manual shall be kept at the dispensing operation and made available to any person who operates, inspects, maintains, repairs, or tests the equipment at the operation as well as to District personnel upon request. [District Rule 46221
- 27. The permittee shall maintain monthly and annual gasoline throughput records. [District Rules 4621 and 4622]
- 28. All records required by this permit shall be retained on-site for a period of at least five years and shall be made available for District inspection upon request. [District Rules 4621 and 4622]

**PERMIT UNIT:** S-1703-200-3 EXPIRATION DATE: 07/31/2022

SECTION: SE12 TOWNSHIP: 28S RANGE: 28E

**EQUIPMENT DESCRIPTION:** 

10,000 BARREL FIXED ROOF CRUDE OIL WASH TANK #T-1220 SERVED BY VAPOR CONTROL SYSTEM LISTED ON

PERMIT S-1703-184

## PERMIT UNIT REQUIREMENTS

- The operator shall ensure that the vapor recovery system is functional and is operating as designed at all times with the exception of power curtailment events. [District Rule 2201] Federally Enforceable Through Title V Permit
- VOCs collected from tank shall vent only to vapor control system listed on this permit S-1703-184. [District Rule 2201] Federally Enforceable Through Title V Permit
- 3. Tank shall be equipped with a fixed roof with no holes or openings. [District Rule 2201] Federally Enforceable Through Title V Permit
- Any tank gauging or sampling device on a tank vented to the vapor recovery system shall be equipped with a cover which shall be closed at all times except during gauging or sampling. [District Rule 2201] Federally Enforceable Through Title V Permit
- VOC content of vapor in the tank vapor control system shall not exceed 10% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
- This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623] Federally Enforceable Through Title V Permit
- Permittee shall notify the APCO in writing at least (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 2080] Federally Enforceable Through Title V Permit
- 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 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 2080] Federally Enforceable Through Title V Permit
- 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 2080] Federally Enforceable Through Title V Permit

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

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- 10. To facilitate connection to an 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 2080] Federally Enforceable Through Title V Permit
- 11. 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 solvent with 50 grams of VOC per liter or less. [District Rule 2080] Federally Enforceable Through Title V Permit
- 12. Steam cleaning shall only be allowed at locations where wastewater treatment facilities are limited, or during the months of December through March [District Rule 2080] Federally Enforceable Through Title V Permit
- 13. 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 4623] Federally Enforceable Through Title V Permit
- 14. The API gravity of crude oil or petroleum distillate shall be determined by using ASTM Method D 287 el "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] Federally Enforceable Through Title V Permit
- 15. 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 4623] Federally Enforceable Through Title V Permit
- 16. The TVP testing shall be conducted at actual storage temperature of the organic liquid in the tank. The permittee shall also conduct an API gravity testing. [District Rule 4623] Federally Enforceable Through Title V Permit
- 17. 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 4623] Federally Enforceable Through Title V Permit
- 18. The permittee shall maintain a written log of the date and duration of each power curtailment event. [District Rule 2201] Federally Enforceable Through Title V Permit
- 19. The permittee shall keep written documentation from the power supplier indicating the date, and duration of the curtailment in addition to the beginning and end times. [District Rule 2201] Federally Enforceable Through Title V Permit
- 20. All records shall be retained for a period of at least 5 five years and made available for District inspection upon request. [District Rule 1070] Federally Enforceable Through Title V Permit

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**PERMIT UNIT:** S-1703-201-2

**EXPIRATION DATE: 07/31/2022** 

SECTION: SE12 TOWNSHIP: 28S RANGE: 28E

**EQUIPMENT DESCRIPTION:** 

906 BBL WEMCO DEPURATOR MODEL 120X 1+1 CONNECTED TO A VAPOR CONTROL SYSTEM LISTED UNDER S-1703-184

## PERMIT UNIT REQUIREMENTS

- VOCs collected from tank shall vent only to vapor control system listed on this permit S-1703-184. [District Rule 2201] Federally Enforceable Through Title V Permit
- Tank shall be equipped with a fixed roof with no holes or openings. [District Rule 2201] Federally Enforceable Through Title V Permit
- Any tank gauging or sampling device on a tank vented to the vapor recovery system shall be equipped with a cover which shall be closed at all times except during gauging or sampling. [District Rule 2201] Federally Enforceable Through Title V Permit
- VOC fugitive emissions from the tank and gas components serving the tank shall not exceed 0 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
- VOC content of vapor in the tank vapors shall not exceed 10%. Permittee shall maintain a written record of VOC content (sampled not less than annually) and shall make such records available for District inspection upon request for a period of five years. [District NSR Rule] Federally Enforceable Through Title V Permit
- This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623] Federally Enforceable Through Title V Permit
- 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 4623] Federally Enforceable Through Title V Permit
- 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] Federally Enforceable Through Title V Permit
- 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 4623] Federally Enforceable Through Title V Permit
- 10. The TVP testing shall be conducted at actual storage temperature of the organic liquid in the tank. The permittee shall also conduct an API gravity testing. [District Rule 4623] Federally Enforceable Through Title V Permit

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- 11. 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 4623] Federally Enforceable Through Title V Permit
- 12. The permittee shall keep accurate records of each organic liquid stored in the tank, including its storage temperature, TVP, and API gravity. [District Rule 4623] Federally Enforceable Through Title V Permit
- 13. All records shall be retained for a period of at least 5 five years and made available for District inspection upon request. [District Rule 2080] Federally Enforceable Through Title V Permit

PERMIT UNIT: S-1703-202-2 EXPIRATION DATE: 07/31/2022

SECTION: SE12 TOWNSHIP: 28S RANGE: 28F

**EQUIPMENT DESCRIPTION:** 

906 BBL WEMCO DEPURATOR MODEL 120X 1+1 CONNECTED TO A VAPOR CONTROL SYSTEM LISTED UNDER S-

1703-184

## PERMIT UNIT REQUIREMENTS

- VOCs collected from tank shall vent only to vapor control system listed on this permit S-1703-184. [District Rule 2201] Federally Enforceable Through Title V Permit
- Tank shall be equipped with a fixed roof with no holes or openings. [District Rule 2201] Federally Enforceable Through Title V Permit
- Any tank gauging or sampling device on a tank vented to the vapor recovery system shall be equipped with a cover which shall be closed at all times except during gauging or sampling. [District Rule 2201] Federally Enforceable Through Title V Permit
- VOC fugitive emissions from the tank and gas components serving the tank shall not exceed 0 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
- VOC content of vapor in the tank vapors shall not exceed 10%. Permittee shall maintain a written record of VOC content (sampled not less than annually) and shall make such records available for District inspection upon request for a period of five years. [District Rule 2201] Federally Enforceable Through Title V Permit
- This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623] Federally Enforceable Through Title V Permit
- 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 4623] Federally Enforceable Through Title V Permit
- 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] Federally Enforceable Through Title V Permit
- 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 4623] Federally Enforceable Through Title V Permit
- 10. The TVP testing shall be conducted at actual storage temperature of the organic liquid in the tank. The permittee shall also conduct an API gravity testing. [District Rule 4623] Federally Enforceable Through Title V Permit

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- 11. 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 4623] Federally Enforceable Through Title V Permit
- 12. The permittee shall keep accurate records of each organic liquid stored in the tank, including its storage temperature, TVP, and API gravity. [District Rule 4623] Federally Enforceable Through Title V Permit
- 13. All records shall be retained for a period of at least 5 five years and made available for District inspection upon request. [District Rule 2080] Federally Enforceable Through Title V Permit

**PERMIT UNIT:** S-1703-203-3 EXPIRATION DATE: 07/31/2022

SECTION: SE12 TOWNSHIP: 28S RANGE: 28F

**EQUIPMENT DESCRIPTION:** 

1,000 BBL FIXED ROOF SLOP OIL TANK SERVED BY VAPOR CONTROL SYSTEM LISTED ON PERMIT S-1703-184

### PERMIT UNIT REQUIREMENTS

- The operator shall ensure that the vapor recovery system is functional and is operating as designed at all times with the exception of power curtailment events. [District Rule 2201] Federally Enforceable Through Title V Permit
- 2. VOCs collected from tank shall vent only to vapor control system listed on this permit S-1703-184. [District Rule 2201] Federally Enforceable Through Title V Permit
- 3. Tank shall be equipped with a fixed roof with no holes or openings. [District Rule 2201] Federally Enforceable Through Title V Permit
- Any tank gauging or sampling device on a tank vented to the vapor recovery system shall be equipped with a cover which shall be closed at all times except during gauging or sampling. [District Rule 2201] Federally Enforceable Through Title V Permit
- VOC content of vapor in the tank vapor control system shall not exceed 10% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
- This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623] Federally Enforceable Through Title V Permit
- Permittee shall notify the APCO in writing at least (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 2080] Federally Enforceable Through Title V Permit
- 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 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 2080] Federally Enforceable Through Title V Permit
- 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 2080] Federally Enforceable Through Title V Permit

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

Facility Name: MACPHERSON OIL CO

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- 10. To facilitate connection to an 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 2080] Federally Enforceable Through Title V Permit
- 11. 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 solvent with 50 grams of VOC per liter or less. [District Rule 2080] Federally Enforceable Through Title V Permit
- 12. Steam cleaning shall only be allowed at locations where wastewater treatment facilities are limited, or during the months of December through March. [District Rule 2080] Federally Enforceable Through Title V Permit
- 13. 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 4623] Federally Enforceable Through Title V Permit
- 14. 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] Federally Enforceable Through Title V Permit
- 15. 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 4623] Federally Enforceable Through Title V Permit
- 16. The TVP testing shall be conducted at actual storage temperature of the organic liquid in the tank. The permittee shall also conduct an API gravity testing. [District Rule 4623] Federally Enforceable Through Title V Permit
- 17. 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 4623] Federally Enforceable Through Title V Permit
- 18. All records shall be retained for a period of at least 5 five years and made available for District inspection upon request. [District Rule 1070] Federally Enforceable Through Title V Permit
- 19. The permittee shall maintain a written log of the date and duration of each power curtailment event. [District Rule 2201] Federally Enforceable Through Title V Permit
- 20. The permittee shall keep written documentation from the power supplier indicating the date, and duration of the curtailment in addition to the beginning and end times. [District Rule 2201] Federally Enforceable Through Title V Permit

**PERMIT UNIT:** S-1703-204-1

**EXPIRATION DATE:** 07/31/2022

#### **EQUIPMENT DESCRIPTION:**

85.0 MMBTU/HR NATURAL GAS -FIRED STEAM GENERATOR WITH COEN MODEL QLN-II ULTRA-LOW NOX BURNER AND A FLUE GAS RECIRCULATION (FGR) SYSTEM

#### PERMIT UNIT REQUIREMENTS

- 1. The exhaust stack shall vent vertically upward. The vertical exhaust flow shall not be impeded by a rain cap (flapper ok), roof overhang, or any other obstruction. [District Rule 4102]
- 2. This unit shall be equipped with horizontal convection section with at least 235 square feet of bare tube surface area (or thermodynamically equivalent number of square feet of finned tube) per MMBtu/hr of heat input and variable frequency drive high efficiency electrical motors driving the blower and water pump. Documentation showing this unit is so equipped shall be retained on site. [Public Resources Code 21000-21177, CEQA]
- 3. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
- 4. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101] Federally Enforceable Through Title V Permit
- 5. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
- 6. The unit shall only be fired on PUC-quality natural gas with a maximum sulfur content of 1.0 gr S/100 scf. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
- 7. Permittee shall determine sulfur content of combusted gas annually or shall demonstrate that the combusted gas is provided from a PUC or FERC regulated source. [District Rules 1081 and 4320] Federally Enforceable Through Title V Permit
- 8. Emissions rates from unit shall not exceed any of the following limits: 6 ppmv NOx @ 3% O2 or 0.007 lb-NOx/MMBtu, 0.003 lb-PM10/MMBtu, 25 ppmv CO @ 3% O2 or 0.0185 lb-CO/MMBtu, or 0.0055 lb-VOC/MMBtu. [District Rules 2201, 4301, 4305, 4306, 4320, and 40 CFR 60.43c(e)(1)] Federally Enforceable Through Title V Permit
- 9. Source testing to measure NOx and CO emissions from this unit shall be conducted at least once every twelve (12) months. After demonstrating compliance on two (2) consecutive annual source tests, the unit shall be tested not less than once every thirty-six (36) months. If the result of the 36-month source test demonstrates that the unit does not meet the applicable emission limits, the source testing frequency shall revert to at least once every twelve (12) months. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
- 10. All emissions measurements shall be made with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. Unless otherwise specified in the Permit to Operate, no determination of compliance shall be established within two hours after a continuous period in which fuel flow to the unit is shut off for 30 minutes or longer, or within 30 minutes after a re-ignition as defined in Section 3.0 of District Rule 4320. [District Rules 4305, 4306 and 4320] 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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Location: HEAVY OIL CENTRAL STATIONARY SOURCE, CA 8-1703-204-1 : Aug 24 2017 4:51PM - VELASCOA

- 11. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
- 12. The source test plan shall identify which basis (ppmv or lb/MMBtu) will be used to demonstrate compliance. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
- 13. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
- 14. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rules 4305, 5.5.5, 4306, 5.5.5, and 4320] Federally Enforceable Through Title V Permit
- 15. The following test methods shall be used: NOX (ppmv) EPA Method 7E or ARB Method 100, NOx (lb/MMBtu) -EPA Method 19; CO (ppmv) - EPA Method 10 or ARB Method 100; Stack gas oxygen (O2) - EPA Method 3 or 3A or ARB Method 100; stack gas velocities - EPA Method 2; Stack gas moisture content - EPA Method 4; SOx - EPA Method 6C or 8 or ARB Method 100; fuel gas sulfur as H2S content - EPA Method 11 or 15; and fuel hhv (MMBtu) -ASTM D 1826 or D 1945 in conjunction with ASTM D 3588. [District Rule 1081, 4305, 4306, 4320, and 4351] Federally Enforceable Through Title V Permit
- 16. The permittee shall monitor and record the stack concentration of NOx, CO, and O2 at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless monitoring has been performed within the last month. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
- 17. If either the NOx or CO concentrations corrected to 3% O2, as measured by the portable analyzer, exceed the allowable emissions concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
- 18. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the permit-to-operate. The analyzer shall be calibrated. maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
- 19. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 3% O2, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
- 20. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070, 4305, 4306 and 4320] Federally Enforceable Through Title V Permit

**PERMIT UNIT:** S-1703-205-2 **EXPIRATION DATE: 07/31/2022** 

SECTION: NW20 TOWNSHIP: 28S RANGE: 29E

**EQUIPMENT DESCRIPTION:** 

1.000 BBL CRUDE OIL STOCK TANK SERVED BY VAPOR CONTROL SYSTEM LISTED ON S-1703-139 (U.S.L LEASE):

### PERMIT UNIT REQUIREMENTS

- VOCs collected from tank shall vent only to vapor control system listed on this permit S-1703-139. [District Rule 22011 Federally Enforceable Through Title V Permit
- The operator shall ensure that the vapor recovery system is functional and is operating as designed at all times with the exception of power curtailment events. [District Rule 2201] Federally Enforceable Through Title V Permit
- VOC content of vapor in the tank vapor control system shall not exceed 10% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
- The tank shall be equipped with a fixed roof with no holes or openings. [District Rule 2201] Federally Enforceable 4. Through Title V Permit
- This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623] Federally Enforceable Through Title V Permit
- Operator shall conduct quarterly gas sampling for gas exiting the separator pressure vessel to quality for exemption from fugitive component counts for components handling fluids with VOC content equal to or less than I 0% by weight. If gas samples are equal to or less than 1 0% VOC by weight for 8 consecutive quarterly samplings, sampling frequency shall only be required annually. [District Rule 2201] Federally Enforceable Through Title V Permit
- Permittee shall notify the APCO in writing at least (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 2080] Federally Enforceable Through Title V Permit
- 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 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 2080] Federally Enforceable Through Title V Permit
- 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 2080] Federally Enforceable Through Title V Permit

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

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HEAVY OIL CENTRAL STATIONARY SOURCE, CA

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- 10. To facilitate connection to an 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 2080] Federally Enforceable Through Title V Permit
- 11. 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 solvent with 50 grams of VOC per liter or less. [District Rule 2080] Federally Enforceable Through Title V Permit
- 12. Steam cleaning shall only be allowed at locations where wastewater treatment facilities are limited, or during the months of December through March. [District Rule 2080] Federally Enforceable Through Title V Permit
- 13. 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 4623] Federally Enforceable Through Title V Permit
- 14. 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 4623] Federally Enforceable Through Title V Permit
- 15. The API gravity of crude oil or petroleum distillate shall be determined by using ASTM Method D 287 el "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] Federally Enforceable Through Title V Permit
- 16. 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 4623] Federally Enforceable Through Title V Permit
- 17. The permittee shall maintain a written log of the date and duration of each power curtailment event. [District Rule 2201] Federally Enforceable Through Title V Permit
- 18. The permittee shall keep written documentation from the power supplier indicating the date, and duration of the curtailment in addition to the beginning and end times. [District Rule 2201] Federally Enforceable Through Title V Permit
- 19. 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 Rule 1070] Federally Enforceable Through Title V Permit

HEAVY OIL CENTRAL STATIONARY SOURCE, CA S-1703-205-2 : Aug 24 2017 4:51PM -- VELASCOA

**PERMIT UNIT:** S-1703-206-2 EXPIRATION DATE: 07/31/2022

SECTION: NW20 TOWNSHIP: 28S RANGE: 29E

**EQUIPMENT DESCRIPTION:** 

500 BBL SLOP OIL STORAGE TANK SERVED BY VAPOR CONTROL SYSTEM LISTED ON S-1703-139 (U.S.L LEASE):

### PERMIT UNIT REQUIREMENTS

- VOCs collected from tank shall vent only to vapor control system listed on this permit S-1703-139. [District Rule 2201] Federally Enforceable Through Title V Permit
- The operator shall ensure that the vapor recovery system is functional and is operating as designed at all times with the exception of power curtailment events. [District Rule 2201] Federally Enforceable Through Title V Permit
- The tank shall be equipped with a fixed roof with no holes or openings. [District Rule 2201] Federally Enforceable 3. Through Title V Permit
- VOC content of vapor in the tank vapor control system shall not exceed 10% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
- This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623] Federally Enforceable Through Title V Permit
- Permittee shall notify the APCO in writing at least (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 2080] Federally Enforceable Through Title V Permit
- 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 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 2080] Federally Enforceable Through Title V Permit
- 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 2080] Federally Enforceable Through Title V Permit
- To facilitate connection to an 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 2080] Federally Enforceable Through Title V Permit

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

Facility Name: MACPHERSON OIL CO

Location: HEAVY OIL CENTS-1703-206-2: Aug 24 2017 4:51PM - VELASCOA HEAVY OIL CENTRAL STATIONARY SOURCE, CA

- 10. 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 solvent with 50 grams of VOC per liter or less. [District Rule 2080] Federally Enforceable Through Title V Permit
- 11. Steam cleaning shall only be allowed at locations where wastewater treatment facilities are limited, or during the months of December through March. [District Rule 2080] Federally Enforceable Through Title V Permit
- 12. Operator shall conduct quarterly gas sampling for gas exiting the separator pressure vessel to qualify for exemption from fugitive component counts for components handling fluids with VOC content equal to or less than 10% by weight. If gas samples are equal to or less than 10% VOC by weight for 8 consecutive quarterly samplings, sampling frequency shall only be required annually. [District Rule 2201] Federally Enforceable Through Title V Permit
- 13. 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 4623] Federally Enforceable Through Title V Permit
- 14. 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 4623] Federally Enforceable Through Title V Permit
- 15. 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] Federally Enforceable Through Title V Permit
- 16. 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 4623] Federally Enforceable Through Title V Permit
- 17. The permittee shall maintain a written log of the date and duration of each power curtailment event. [District Rule 2201] Federally Enforceable Through Title V Permit
- 18. The permittee shall keep written documentation from the power supplier indicating the date, and duration of the curtailment in addition to the beginning and end times. [District Rule 2201] Federally Enforceable Through Title V Permit
- 19. 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 Rule 1070] Federally Enforceable Through Title V Permit

**PERMIT UNIT:** S-1703-207-1

EXPIRATION DATE: 07/31/2022

SECTION: NW20 TOWNSHIP: 28S RANGE: 29E

**EQUIPMENT DESCRIPTION:** 

906 BBL WEMCO DEPURATOR MODEL 120X 1+1 SERVED BY VAPOR CONTROL SYSTEM LISTED ON S-1703-139

(U.S.L LEASE)

## PERMIT UNIT REQUIREMENTS

- 1. VOCs collected from tank shall vent only to vapor control system listed on this permit S-1703-139. [District Rule 2201] Federally Enforceable Through Title V Permit
- The VOC content of the gas shall not exceed 10% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
- VOC fugitive emissions from the tank and gas components serving the tank shall not exceed 0.0 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
- The tank shall be equipped with a fixed roof with no holes or openings. [District Rule 2201] Federally Enforceable Through Title V Permit
- All piping, valves, and fittings shall be constructed and maintained in a leak-free condition. [District Rule 4623] Federally Enforceable Through Title V Permit
- This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623] Federally Enforceable Through Title V Permit
- Operator shall conduct quarterly gas sampling for gas exiting the separator pressure vessel to qualify for exemption from fugitive component counts for components handling fluids with VOC content equal to or less than 10% by weight. If gas samples are equal to or less than 10% VOC by weight for 8 consecutive quarterly samplings, sampling frequency shall only be required annually. [District Rule 2201] Federally Enforceable Through Title V Permit
- 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 4623] Federally Enforceable Through Title V Permit
- 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 4623] Federally Enforceable Through Title V Permit
- 10. 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] 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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- 11. 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 4623] Federally Enforceable Through Title V Permit
- 12. 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 Rule 4623] Federally Enforceable Through Title V Permit
- 13. The permittee shall keep accurate records of each organic liquid stored in the tank, including its storage temperature, TVP, and API gravity. [District Rule 4623] Federally Enforceable Through Title V Permit
- 14. All records required to be maintained by this permit shall be maintained for a period of at least five years and shall be made readily available for District inspection upon request. [District Rule 1070] Federally Enforceable Through Title V Permit

**PERMIT UNIT:** S-1703-208-0 **EXPIRATION DATE: 07/31/2022** 

SECTION: SW 17 TOWNSHIP: 28S RANGE: 29E

**EQUIPMENT DESCRIPTION:** 

1500 BBL FREE WATER KNOCKOUT (FWKO) TANK

# PERMIT UNIT REQUIREMENTS

- FWKO shall operate at a constant level. [District Rule 2201]
- Crude oil throughput shall not exceed 3000 barrels per day based on a monthly average. [District Rules 2201 & 4623] 2.
- This FWKO shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.2 psia under 3. all storage conditions. [District Rules 2201 & 4623]
- Permittee shall conduct true vapor pressure (TVP) testing of the organic liquid stored in this FWKO within 60 days of startup and 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 FWKO in order to maintain exemption from the rule. [District Rules 2201 and 46231
- The TVP testing shall be conducted at actual storage temperature of the organic liquid in the FWKO. The permittee shall also conduct API gravity testing. [District Rules 2201 and 4623]
- 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 Rules 2201 and 4623]
- 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 Rules 2201 and 4623]
- Permittee shall submit the records of TVP and API gravity testing to the APCO within 30 days of startup typ testing and within 45 days after the date of each testing. The records shall include the FWKO 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 Rules 2201 & 4623]
- The permittee shall keep accurate records of each organic liquid stored in the FWKO, including its storage temperature, TVP, and API gravity. [District Rules 2201 and 4623]
- 10. Permittee shall maintain monthly records of average daily crude oil throughput and shall keep accurate records of each organic liquid stored in the FWKO, including its storage temperature, TVP, and API gravity. [District Rules 2201 & 46231
- 11. 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 Rule 1070]

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

Facility Name: MACPHERSON OIL CO

HEAVY OIL CENTRAL STATIONARY SOURCE, CA

S-1703-208-0 : Aug 24 2017 4:51PM -- VELASCOA

**PERMIT UNIT:** S-1703-209-3 **EXPIRATION DATE:** 07/31/2022

#### **EQUIPMENT DESCRIPTION:**

6,200 BBL WASH TANK CONNECTED TO VAPOR RECOVERY SYSTEM LISTED ON '-144

## PERMIT UNIT REQUIREMENTS

- 1. The operator shall ensure that the vapor recovery system is functional and is operating as designed at all times with the exception of power curtailment events. [District Rule 2520] Federally Enforceable Through Title V Permit
- 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. [District Rule 2201] Federally Enforceable Through Title V Permit
- 3. Maximum VOC content of vapor in the tank vapor control system shall not exceed 10% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
- 4. VOC content of gas shall be measured using ASTM D-1945, EPA Method 18 referenced as methane, or equivalent test method with prior District approval. [District Rule 2201] Federally Enforceable Through Title V Permit
- 5. "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 2080] Federally Enforceable Through Title V Permit
- 6. 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 2080] Federally Enforceable Through Title V Permit
- 7. 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 2080] Federally Enforceable Through Title V Permit
- 8. 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 2080] Federally Enforceable Through Title V Permit
- 9. 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 2080] Federally Enforceable Through Title V Permit

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

Facility Name: MACPHERSON OIL CO

Location: HEAVY OIL CENTRAL STATIONARY SOURCE, CA S-1703-209-3: Aug 24 2017 4:51PM -- VELASCOA

- 10. Steam cleaning shall only be allowed at locations where wastewater treatment facilities are limited, or during the months of December through March. [District Rule 2080] Federally Enforceable Through Title V Permit
- 11. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623] Federally Enforceable Through Title V Permit
- 12. Operator shall conduct quarterly gas sampling after TVR compressor (prior to connection to any other vapor control system) and at either the first line tank or at any secondary tank which is heated above ambient temperature. If gas samples are less than 10% VOC by weight for 8 consecutive quarterly samplings, sampling frequency shall only be required annually and whenever there is a change in source or type of petroleum processed. Samples shall be collected during periods of normal operation, and not be within 48 hours after routine maintenance or repair. [District Rule 2201] Federally Enforceable Through Title V Permit
- 13. 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 2201] Federally Enforceable Through Title V Permit
- 14. 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) operator shall: (a) Eliminate or minimize the leak within 8 hours after detection. (b) 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 detection. (c) In no event shall the total time to minimize and eliminate the leak exceed 56 hours after detection. [District Rule 2201] Federally Enforceable Through Title V Permit
- 15. If any of the tank 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 2201] Federally Enforceable Through Title V Permit
- 16. During a District inspection, any tank, gauge hatch, sampling device, or other component that is not leak free will not be a violation of this permit provided the facility records, tags, and repairs the leak in accordance with the requirements of this permit. [District Rule 2201] Federally Enforceable Through Title V Permit
- 17. 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 4623] Federally Enforceable Through Title V Permit
- 18. 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] Federally Enforceable Through Title V Permit
- 19. 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 4623] Federally Enforceable Through Title V Permit
- 20. The TVP testing shall be conducted at actual storage temperature of the organic liquid in the tank. The permittee shall also conduct an API gravity testing. [District Rule 4623] Federally Enforceable Through Title V Permit

Location: HEAVY OIL CENT S-1703-209-3: Aug 24 2017 4:51PM - VELASCOA HEAVY OIL CENTRAL STATIONARY SOURCE, CA

- 21. 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 4623] Federally Enforceable Through Title V Permit
- 22. The permittee shall keep accurate records of each organic liquid stored in the tank including TVP and API gravity. [District Rule 4623] Federally Enforceable Through Title V Permit
- 23. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date of leak detection, and method of detection; 3) Date and emission level of recheck after leak is repaired. [District Rule 2201] Federally Enforceable Through Title V Permit
- 24. Permittee shall maintain records of the VOC content of vapor in the tank vapor control system, including date and test results. [District Rule 2201] Federally Enforceable Through Title V Permit
- 25. The permittee shall maintain a written log of the date and duration of each power curtailment event. [District Rule 2201] Federally Enforceable Through Title V Permit
- 26. The permittee shall keep written documentation from the power supplier indicating the date, and duration of the curtailment in addition to the beginning and end times. [District Rule 2201] 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]

**PERMIT UNIT:** S-1703-210-1

EXPIRATION DATE: 07/31/2022

SECTION: SE18 TOWNSHIP: 28S RANGE: 29E

**EQUIPMENT DESCRIPTION:** 

85 MMBTU/HR NATURAL GAS-FIRED STEAM GENERATOR WITH A COEN QLN-II ULTRA LOW-NOX BURNER AND A FLUE GAS RECIRCULATION (FGR) SYSTEM

## PERMIT UNIT REQUIREMENTS

- This unit shall be equipped with horizontal convection section with at least 235 square feet of bare tube surface area (or thermodynamically equivalent number of square feet of finned tube) per MMBtu/hr of heat input and variable frequency drive high efficiency electrical motors driving the blower and water pump. Documentation showing this unit is so equipped shall be retained on site. [Public Resources Code 21000-21177, California Environmental Quality
- No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102] 2.
- No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101] Federally Enforceable Through Title V Permit
- Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
- A non-resettable, totalizing mass or volumetric fuel flow meter to measure the amount of fuel combusted in the unit shall be installed, utilized and maintained. [District Rule 2201 and 40 CFR 60.48c (g)] Federally Enforceable Through Title V Permit
- The unit shall only be fired on natural gas with a maximum sulfur content of 1.0 gr S/100 scf. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
- If the unit is not fired on PUC-regulated natural gas, the sulfur content of each fuel source shall be tested weekly except that if compliance with the fuel sulfur content limit has been demonstrated for 8 consecutive weeks for a fuel source, then the testing frequency shall be quarterly. If a test shows noncompliance with the sulfur content requirement, the source must return to weekly testing until eight consecutive weeks show compliance. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
- If the unit is not fired on PUC-regulated natural gas, then the sulfur content of the natural gas being fired in the unit shall be determined using ASTM method D 1072, D 3031, D 4084 or D 3246. [District Rule 2201] Federally Enforceable Through Title V Permit
- Emissions rates from unit shall not exceed any of the following limits: 6 ppmv NOx @ 3% O2 or 0.007 lb-NOx/MMBtu, 0.00299 lb-PM10/MMBtu, 25 ppmv CO @ 3% O2 or 0.0182 lb-CO/MMBtu, or 0.0055 lb-VOC/MMBtu. [District Rules 2201, 4305, 4306, 4320] Federally Enforceable Through Title V Permit

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

Facility Name: MACPHERSON OIL CO

HEAVY OIL CENTRAL STATIONARY SOURCE, CA Location: 1703-210-1 : Aug 24 2017 4:51PM - VELASCOA

- 10. Source testing to measure NOx and CO emissions from this unit shall be conducted at least once every twelve (12) months. After demonstrating compliance on two (2) consecutive annual source tests, the unit shall be tested not less than once every thirty-six (36) months. If the result of the 36-month source test demonstrates that the unit does not meet the applicable emission limits, the source testing frequency shall revert to at least once every twelve (12) months. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
- 11. All emissions measurements shall be made with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. Unless otherwise specified in the Permit to Operate, no determination of compliance shall be established within two hours after a continuous period in which fuel flow to the unit is shut off for 30 minutes or longer, or within 30 minutes after a re-ignition as defined in Section 3.0 of District Rule 4320. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
- 12. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
- 13. The source test plan shall identify which basis (ppmv or lb/MMBtu) will be used to demonstrate compliance. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
- 14. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
- 15. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- 16. The following test methods shall be used: NOx (ppmv) EPA Method 7E or ARB Method 100, NOx (lb/MMBtu) -EPA Method 19; CO (ppmv) - EPA Method 10 or ARB Method 100; Stack gas oxygen (O2) - EPA Method 3 or 3A or ARB Method 100; stack gas velocities - EPA Method 2; Stack gas moisture content - EPA Method 4; SOx - EPA Method 6C or 8 or ARB Method 100; fuel gas sulfur as H2S content - EPA Method 11 or 15; and fuel hhv (MMBtu) -ASTM D 1826 or D 1945 in conjunction with ASTM D 3588. [District Rule 1081, 4305, 4306, 4320, and 4351] Federally Enforceable Through Title V Permit
- 17. The permittee shall monitor and record the stack concentration of NOx, CO, and O2 at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless monitoring has been performed within the last month. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
- 18. If either the NOx or CO concentrations corrected to 3% O2, as measured by the portable analyzer, exceed the allowable emissions concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
- 19. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the permit-to-operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V **Permit**

Location: HEAVY OIL CENT S-1703-210-1: Aug 24 2017 4:51PM – VELASCOA HEAVY OIL CENTRAL STATIONARY SOURCE, CA

- 20. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 3% O2, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
- 21. Operator shall provide that fuel hhv be certified by third party fuel supplier or determined annually by ASTM D 1826 or D 1945 in conjunction with ASTM D 3588. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- 22. Permittee shall maintain daily records of the type and quantity of fuel combusted by the steam generator. [District Rule 2201 and 40 CFR 60.48c (g)] Federally Enforceable Through Title V Permit
- 23. If the unit is fired on PUC-regulated natural gas, then maintain on file copies of all natural gas bills. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
- 24. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070, 4305, 4306, 4320, and 40 CFR 60.48c (i)] Federally Enforceable Through Title V Permit

Location: HEAVY OIL CENT 8-1703-210-1 : Aug 24 2017 4:51PM ~ VELASCOA HEAVY OIL CENTRAL STATIONARY SOURCE, CA

PERMIT UNIT: S-1703-211-2 EXPIRATION DATE: 07/31/2022

SECTION: SW 17 TOWNSHIP: 28S RANGE: 29E

**EQUIPMENT DESCRIPTION:** 

7000 BBL CRUDE OIL WASH TANK SERVED BY VAPOR CONTROL SYSTEM LISTED ON S-1703-143

## PERMIT UNIT REQUIREMENTS

- 1. Maximum VOC content of vapor in the tank vapor control system shall not exceed 10% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
- 2. VOC content of gas shall be measured using ASTM D-1945, EPA Method 18 referenced as methane, or equivalent test method with prior District approval. [District Rule 2201] Federally Enforceable Through Title V Permit
- 3. Operator shall conduct quarterly gas sampling after TVR compressor (prior to connection to any other vapor control system) and at either the first line tank or at any secondary tank which is heated above ambient temperature. If gas samples are less than 10% VOC by weight for 8 consecutive quarterly samplings, sampling frequency shall only be required annually and whenever there is a change in source or type of petroleum processed. Samples shall be collected during periods of normal operation, and not be within 48 hours after routine maintenance or repair. [District Rule 2201] Federally Enforceable Through Title V Permit
- 4. 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 2201] Federally Enforceable Through Title V Permit
- 5. 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) operator shall: (a) Eliminate or minimize the leak within 8 hours after detection. (b) 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 detection. (c) In no event shall the total time to minimize and eliminate the leak exceed 56 hours after detection. [District Rule 2201] Federally Enforceable Through Title V Permit
- 6. If any of the tank 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 2201] Federally Enforceable Through Title V Permit
- 7. During a District inspection, any tank, gauge hatch, sampling device, or other component that is not leak free will not be a violation of this permit provided the facility records, tags, and repairs the leak in accordance with the requirements of this permit. [District Rule 2201] Federally Enforceable Through Title V Permit

Facility Name: MACPHERSON OIL CO

Location: HEAVY OIL CENTRAL STATIONARY SOURCE, CA 8-1703-211-2 : Aug 24 2017 4:51PM -- VELASCOA

- Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date of leak detection, and method of detection; 3) Date and emission level of recheck after leak is repaired. [District Rule 2201] Federally Enforceable Through Title V Permit
- Permittee shall maintain records of the VOC content of vapor in the tank vapor control system, including date and test results. [District Rule 2201] Federally Enforceable Through Title V Permit
- 10. 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

PERMIT UNIT: S-1703-212-1

**EXPIRATION DATE: 07/31/2022** 

#### **EQUIPMENT DESCRIPTION:**

85.0 MMBTU/HR NATURAL GAS-FIRED STEAM GENERATOR WITH COEN QLN-II ULTRA LOW-NOX BURNER (OR EQUIVALENT), AND FLUE GAS RECIRCULATION (FGR)

#### PERMIT UNIT REQUIREMENTS

- The exhaust stack shall vent vertically upward. The vertical exhaust flow shall not be impeded by a rain cap (flapper ok), roof overhang, or any other obstruction. [District Rule 4102] Federally Enforceable Through Title V Permit
- This unit shall be equipped with horizontal convection section with at least 235 square feet of bare tube surface area (or thermodynamically equivalent number of square feet of finned tube) per MMBtu/hr of heat input and variable frequency drive high efficiency electrical motors driving the blower and water pump. Documentation showing this unit is so equipped shall be retained on site. [California Environmental Quality Act]
- No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101] Federally Enforceable Through Title V Permit
- All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District Rule 2201] Federally Enforceable Through Title V Permit
- The unit shall only be fired on PUC-regulated natural gas. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
- PUC quality natural gas is any gaseous fuel where the sulfur content is no more than one-fourth (0.25) grain of hydrogen sulfide per one hundred (100) standard cubic feet, no more than five (5) grains of total sulfur per one hundred (100) standard cubic feet, and at least 80% methane by volume. [District Rule 4320] Federally Enforceable Through Title V Permit
- Emissions from the natural gas-fired unit shall not exceed any of the following limits: 6 ppmvd NOx @ 3% O2 or 0.007 lb-NOx/MMBtu, 0.00285 lb-SOx/MMBtu, 0.003 lb-PM10/MMBtu, 25 ppmvd CO @ 3% O2 or 0.019 lb-CO/MMBtu, or 0.0055 lb-VOC/MMBtu. [District Rules 2201, 4305, 4306, 4320 and 4351] Federally Enforceable Through Title V Permit
- Source testing to measure natural gas-combustion NOx and CO emissions from this unit shall be conducted at least once every twelve (12) months (no more than 30 days before or after the required annual source test date). After demonstrating compliance on two (2) consecutive annual source tests, the unit shall be tested not less than once every thirty-six (36) months (no more than 30 days before or after the required 36-month source test date). If the result of the 36-month source test demonstrates that the unit does not meet the applicable emission limits, the source testing frequency shall revert to at least once every twelve (12) months. [District Rules 2201, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- The source test plan shall identify which basis (ppmv or lb/MMBtu) will be used to demonstrate compliance. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- 10. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit

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

Facility Name: MACPHERSON OIL CO

Location: HEAVY OIL CENT S-1703-212-1: Aug 24 2017 4:51PM -- VELASCOA HEAVY OIL CENTRAL STATIONARY SOURCE.CA

- 11. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
- 12. NOx emissions for source test purposes shall be determined using EPA Method 7E or ARB Method 100 on a ppmv basis, or EPA Method 19 on a heat input basis. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
- 13. CO emissions for source test purposes shall be determined using EPA Method 10 or ARB Method 100. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
- 14. Stack gas oxygen (O2) shall be determined using EPA Method 3 or 3A or ARB Method 100. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
- 15. Fuel sulfur content shall be determined using EPA Method 11 or Method 15. [District Rule 4320] Federally Enforceable Through Title V Permit
- 16. All emissions measurements shall be made with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. No determination of compliance shall be established within two hours after a continuous period in which fuel flow to the unit is shut off for 30 minutes or longer, or within 30 minutes after a re-ignition as defined in Section 3.0 of District Rule 4306. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- 17. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- 18. The permittee shall monitor and record the stack concentration of NOx, CO, and O2 at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless monitoring has been performed within the last month. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- 19. If either the NOx or CO concentrations corrected to 3% O2, as measured by the portable analyzer, exceed the allowable emissions concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- 20. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- 21. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 3% O2, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit

- 22. Copies of all fuel invoices, gas purchase contracts and supplier certifications shall be maintained. The operator shall record daily amount and type(s) of fuel(s) combusted. [District Rules 2201, 2520, 9.4.2 and 40 CFR 60.48c(g)] Federally Enforceable Through Title V Permit
- 23. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit

**PERMIT UNIT:** S-1703-213-1

EXPIRATION DATE: 07/31/2022

#### **EQUIPMENT DESCRIPTION:**

85.0 MMBTU/HR NATURAL GAS-FIRED STEAM GENERATOR WITH COEN QLN-II ULTRA LOW-NOX BURNER AND FLUE GAS RECIRCULATION (FGR)

## PERMIT UNIT REQUIREMENTS

- 1. The exhaust stack shall vent vertically upward. The vertical exhaust flow shall not be impeded by a rain cap (flapper ok), roof overhang, or any other obstruction. [District Rule 4102] Federally Enforceable Through Title V Permit
- 2. This unit shall be equipped with horizontal convection section with at least 235 square feet of bare tube surface area (or thermodynamically equivalent number of square feet of finned tube) per MMBtu/hr of heat input and variable frequency drive high efficiency electrical motors driving the blower and water pump. Documentation showing this unit is so equipped shall be retained on site. [California Environmental Quality Act]
- 3. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101] Federally Enforceable Through Title V Permit
- 4. All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District Rule 2201] Federally Enforceable Through Title V Permit
- 5. The unit shall only be fired on PUC-regulated natural gas. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
- 6. PUC quality natural gas is any gaseous fuel where the sulfur content is no more than one-fourth (0.25) grain of hydrogen sulfide per one hundred (100) standard cubic feet, no more than five (5) grains of total sulfur per one hundred (100) standard cubic feet, and at least 80% methane by volume. [District Rule 4320] Federally Enforceable Through Title V Permit
- 7. Emissions from the natural gas-fired unit shall not exceed any of the following limits: 6 ppmvd NOx @ 3% O2 or 0.007 lb-NOx/MMBtu, 0.00285 lb-SOx/MMBtu, 0.003 lb-PM10/MMBtu, 25 ppmvd CO @ 3% O2 or 0.019 lb-CO/MMBtu, or 0.0055 lb-VOC/MMBtu. [District Rules 2201, 4305, 4306, 4320 and 4351] Federally Enforceable Through Title V Permit
- 8. Source testing to measure natural gas-combustion NOx and CO emissions from this unit shall be conducted at least once every twelve (12) months (no more than 30 days before or after the required annual source test date). After demonstrating compliance on two (2) consecutive annual source tests, the unit shall be tested not less than once every thirty-six (36) months (no more than 30 days before or after the required 36-month source test date). If the result of the 36-month source test demonstrates that the unit does not meet the applicable emission limits, the source testing frequency shall revert to at least once every twelve (12) months. [District Rules 2201, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- 9. The source test plan shall identify which basis (ppmv or lb/MMBtu) will be used to demonstrate compliance. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- 10. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit

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

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- 11. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
- 12. NOx emissions for source test purposes shall be determined using EPA Method 7E or ARB Method 100 on a ppmv basis, or EPA Method 19 on a heat input basis. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
- 13. CO emissions for source test purposes shall be determined using EPA Method 10 or ARB Method 100. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
- 14. Stack gas oxygen (O2) shall be determined using EPA Method 3 or 3A or ARB Method 100. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
- 15. Fuel sulfur content shall be determined using EPA Method 11 or Method 15. [District Rule 4320] Federally Enforceable Through Title V Permit
- 16. All emissions measurements shall be made with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. No determination of compliance shall be established within two hours after a continuous period in which fuel flow to the unit is shut off for 30 minutes or longer, or within 30 minutes after a re-ignition as defined in Section 3.0 of District Rule 4306. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- 17. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- 18. The permittee shall monitor and record the stack concentration of NOx, CO, and O2 at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless monitoring has been performed within the last month. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- 19. If either the NOx or CO concentrations corrected to 3% O2, as measured by the portable analyzer, exceed the allowable emissions concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- 20. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- 21. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 3% O2, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit

Location: HEAVY OIL CENTRAL STATIONARY SOURCE, CA S-1703-213-1 : Aug 24 2017 4:51PM -- VELASCOA

- 22. Copies of all fuel invoices, gas purchase contracts and supplier certifications shall be maintained. The operator shall record daily amount and type(s) of fuel(s) combusted. [District Rules 2201, 2520, 9.4.2 and 40 CFR 60.48c(g)] Federally Enforceable Through Title V Permit
- 23. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit

**PERMIT UNIT:** S-1703-214-4

EXPIRATION DATE: 07/31/2022

SECTION: SE 18 TOWNSHIP: 28S RANGE: 29E

**EQUIPMENT DESCRIPTION:** 

10,000 BBL CRUDE OIL WASH TANK SERVED BY VAPOR CONTROL SYSTEM LISTED ON S-1703-144

### PERMIT UNIT REQUIREMENTS

- Maximum VOC content of vapor in the tank vapor control system shall not exceed 10% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
- VOC content of gas shall be measured using ASTM D-1945, EPA Method 18 referenced as methane, or equivalent test method with prior District approval. [District Rule 2201] Federally Enforceable Through Title V Permit
- This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623] Federally Enforceable Through Title V Permit
- Operator shall conduct quarterly gas sampling after TVR compressor (prior to connection to any other vapor control system) and at either the first line tank or at any secondary tank which is heated above ambient temperature. If gas samples are less than 10% VOC by weight for 8 consecutive quarterly samplings, sampling frequency shall only be required annually and whenever there is a change in source or type of petroleum processed. Samples shall be collected during periods of normal operation, and not be within 48 hours after routine maintenance or repair. [District Rule 2201] Federally Enforceable Through Title V Permit
- 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 2201] Federally Enforceable Through Title V Permit
- Upon detection of any leaking components (having a gas leak >10,000 ppmv, measured in accordance with EPA Method 21 by a portable hydrocarbon detection instrument that is calibrated with methane) operator shall: (a) Eliminate or minimize the leak within 8 hours after detection. (b) 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 detection. (c) In no event shall the total time to minimize and eliminate the leak exceed 56 hours after detection. [District Rule 2201] Federally Enforceable Through Title V Permit
- If any of the tank 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 2201] Federally Enforceable Through Title V Permit
- During a District inspection, any tank, gauge hatch, sampling device, or other component that is not leak free will not be a violation of this permit provided the facility records, tags, and repairs the leak in accordance with the requirements of this permit. [District Rule 2201] Federally Enforceable Through Title V Permit

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

Facility Name: MACPHERSON OIL CO

Location: HEAVY OIL CENTRAL STATIONARY SOURCE, CA 8-1703-214-4, Aug 24 2017 4:52PM - VELASCOA

- 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 4623] Federally Enforceable Through Title V Permit
- 10. The API gravity of crude oil or petroleum distillate shall be determined by using ASTM Method D 287 el "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] Federally Enforceable Through Title V Permit
- 11. 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 4623] Federally Enforceable Through Title V Permit
- 12. The TVP testing shall be conducted at actual storage temperature of the organic liquid in the tank. The permittee shall also conduct an API gravity testing. [District Rule 4623] Federally Enforceable Through Title V Permit
- 13. 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 2080] Federally Enforceable Through Title V Permit
- 14. 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 2080] Federally Enforceable Through Title V Permit
- 15. 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 2080] Federally Enforceable Through Title V Permit
- 16. 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 2080] Federally Enforceable Through Title V Permit
- 17. 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 2080] Federally Enforceable Through Title V Permit
- 18. Steam cleaning shall only be allowed at locations where wastewater treatment facilities are limited, or during the months of December through March. [District Rule 2080] Federally Enforceable Through Title V Permit
- 19. 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 4623] Federally Enforceable Through Title V Permit
- 20. The permittee shall keep accurate records of each organic liquid stored in the tank including TVP and API gravity. [District Rule 4623] Federally Enforceable Through Title V Permit

- 21. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date of leak detection, and method of detection; 3) Date and emission level of recheck after leak is repaired. [District Rule 2201] Federally Enforceable Through Title V Permit
- 22. Permittee shall maintain records of the VOC content of vapor in the tank vapor control system, including date and test results. [District Rule 2201] Federally Enforceable Through Title V Permit
- 23. 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] Federally Enforceable Through Title V Permit

**PERMIT UNIT:** S-1703-215-2 **EXPIRATION DATE: 07/31/2022** 

SECTION: SE 18 TOWNSHIP: 28S RANGE: 29F

**EQUIPMENT DESCRIPTION:** 

4,000 BBL CRUDE OIL WASH TANK SERVED BY VAPOR CONTROL SYSTEM LISTED ON S-1703-144

### PERMIT UNIT REQUIREMENTS

- Maximum VOC content of vapor in the tank vapor control system shall not exceed 10% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
- 2. VOC content of gas shall be measured using ASTM D-1945, EPA Method 18 referenced as methane, or equivalent test method with prior District approval. [District Rule 2201] Federally Enforceable Through Title V Permit
- 3. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623] Federally Enforceable Through Title V Permit
- Operator shall conduct quarterly gas sampling after TVR compressor (prior to connection to any other vapor control system) and at either the first line tank or at any secondary tank which is heated above ambient temperature. If gas samples are less than 10% VOC by weight for 8 consecutive quarterly samplings, sampling frequency shall only be required annually and whenever there is a change in source or type of petroleum processed. Samples shall be collected during periods of normal operation, and not be within 48 hours after routine maintenance or repair. [District Rule 2201] Federally Enforceable Through Title V Permit
- 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 2201] Federally Enforceable Through Title V Permit
- Upon detection of any leaking components (having a gas leak >10,000 ppmv, measured in accordance with EPA Method 21 by a portable hydrocarbon detection instrument that is calibrated with methane) operator shall: (a) Eliminate or minimize the leak within 8 hours after detection. (b) 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 detection. (c) In no event shall the total time to minimize and eliminate the leak exceed 56 hours after detection. [District Rule 2201] Federally Enforceable Through Title V Permit
- If any of the tank 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 2201] Federally Enforceable Through Title V Permit
- During a District inspection, any tank, gauge hatch, sampling device, or other component that is not leak free will not be a violation of this permit provided the facility records, tags, and repairs the leak in accordance with the requirements of this permit. [District Rule 2201] Federally Enforceable Through Title V Permit

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

Facility Name: MACPHERSON OIL CO

HEAVY OIL CENTRAL STATIONARY SOURCE, CA

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- 9. 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 4623] Federally Enforceable Through Title V Permit
- 10. 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] Federally Enforceable Through Title V Permit
- 11. 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 4623] Federally Enforceable Through Title V Permit
- 12. The TVP testing shall be conducted at actual storage temperature of the organic liquid in the tank. The permittee shall also conduct an API gravity testing. [District Rule 4623] Federally Enforceable Through Title V Permit
- 13. 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 2080] Federally Enforceable Through Title V Permit
- 14. 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 2080] Federally Enforceable Through Title V Permit
- 15. 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 2080] Federally Enforceable Through Title V Permit
- 16. 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 2080] Federally Enforceable Through Title V Permit
- 17. 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 2080] Federally Enforceable Through Title V Permit
- 18. Steam cleaning shall only be allowed at locations where wastewater treatment facilities are limited, or during the months of December through March. [District Rule 2080] Federally Enforceable Through Title V Permit
- 19. 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 4623] Federally Enforceable Through Title V Permit
- 20. The permittee shall keep accurate records of each organic liquid stored in the tank including TVP and API gravity. [District Rule 4623] Federally Enforceable Through Title V Permit

- 21. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date of leak detection, and method of detection; 3) Date and emission level of recheck after leak is repaired. [District Rule 2201] Federally Enforceable Through Title V Permit
- 22. Permittee shall maintain records of the VOC content of vapor in the tank vapor control system, including date and test results. [District Rule 2201] Federally Enforceable Through Title V Permit
- 23. 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] Federally Enforceable Through Title V Permit

**PERMIT UNIT:** S-1703-216-1 **EXPIRATION DATE: 07/31/2022** 

SECTION: 12 TOWNSHIP: 28S RANGE: 28E

**EQUIPMENT DESCRIPTION:** 

85.0 MMBTU/HR NATURAL GAS-FIRED STEAM GENERATOR WITH JOHN ZINC QLN-II ULTRA LOW-NOX BURNER (OR EQUIVALENT), AND FLUE GAS RECIRCULATION (FGR)

## PERMIT UNIT REQUIREMENTS

- No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101] Federally Enforceable Through Title V Permit
- All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District Rule 2201] Federally Enforceable Through Title V Permit
- The unit shall only be fired on PUC-regulated natural gas. [District Rules 2201 and 4320] Federally Enforceable 3. Through Title V Permit
- PUC quality natural gas is any gaseous fuel where the sulfur content is no more than one-fourth (0.25) grain of hydrogen sulfide per one hundred (100) standard cubic feet, no more than five (5) grains of total sulfur per one hundred (100) standard cubic feet, and at least 80% methane by volume. [District Rule 4320] Federally Enforceable Through Title V Permit
- Emissions from the natural gas-fired unit shall not exceed any of the following limits: 6 ppmvd NOx @ 3% O2 or 0.007 lb-NOx/MMBtu, 0.00285 lb-SOx/MMBtu, 0.003 lb-PM10/MMBtu, 25 ppmvd CO @ 3% O2 or 0.019 lb-CO/MMBtu, or 0.0055 lb-VOC/MMBtu. [District Rules 2201, 4305, 4306, 4320 and 4351] Federally Enforceable Through Title V Permit
- Source testing to measure natural gas-combustion NOx and CO emissions from this unit shall be conducted at least once every twelve (12) months (no more than 30 days before or after the required annual source test date). After demonstrating compliance on two (2) consecutive annual source tests, the unit shall be tested not less than once every thirty-six (36) months (no more than 30 days before or after the required 36-month source test date). If the result of the 36-month source test demonstrates that the unit does not meet the applicable emission limits, the source testing frequency shall revert to at least once every twelve (12) months. [District Rules 2201, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- The source test plan shall identify which basis (ppmv or lb/MMBtu) will be used to demonstrate compliance. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
- NOx emissions for source test purposes shall be determined using EPA Method 7E or ARB Method 100 on a ppmv basis, or EPA Method 19 on a heat input basis. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit

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

Facility Name: MACPHERSON OIL CO

Location: HEAVY OIL CENT S-1703-216-1: Aug 24 2017 4:52PM -- VELASCOA HEAVY OIL CENTRAL STATIONARY SOURCE.CA

- 10. CO emissions for source test purposes shall be determined using EPA Method 10 or ARB Method 100. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
- 11. Stack gas oxygen (O2) shall be determined using EPA Method 3 or 3A or ARB Method 100. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
- 12. Fuel sulfur content shall be determined using EPA Method 11 or Method 15. [District Rule 4320] Federally Enforceable Through Title V Permit
- 13. All emissions measurements shall be made with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. No determination of compliance shall be established within two hours after a continuous period in which fuel flow to the unit is shut off for 30 minutes or longer, or within 30 minutes after a re-ignition as defined in Section 3.0 of District Rule 4306. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- 14. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- 15. The permittee shall monitor and record the stack concentration of NOx, CO, and O2 at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless monitoring has been performed within the last month. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- 16. If either the NOx or CO concentrations corrected to 3% O2, as measured by the portable analyzer, exceed the allowable emissions concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- 17. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- 18. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 3% O2, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
- 19. Copies of all fuel invoices, gas purchase contracts and supplier certifications shall be maintained. The operator shall record daily amount and type(s) of fuel(s) combusted. [District Rules 2201, 2520, 9.4.2 and 40 CFR 60.48c(g)] Federally Enforceable Through Title V Permit
- 20. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit

**PERMIT UNIT:** S-1703-218-0 EXPIRATION DATE: 07/31/2022

SECTION: SE18 TOWNSHIP: 28S RANGE: 29E

**EQUIPMENT DESCRIPTION:** 

356 BBL WEMCO SERVED BY VAPOR CONTROL SYSTEM LISTED ON S-1703-144

## PERMIT UNIT REQUIREMENTS

- This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623] Federally Enforceable Through Title V Permit
- Maximum VOC content of vapor in the tank vapor control system shall not exceed 10% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
- Upon detection of any leaking components (having a gas leak >10,000 ppmv, measured in accordance with EPA Method 21 by a portable hydrocarbon detection instrument that is calibrated with methane) operator shall: (a) Eliminate or minimize the leak within 8 hours after detection. (b) 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 detection. (c) In no event shall the total time to minimize and eliminate the leak exceed 56 hours after detection. [District Rule 2201] Federally Enforceable Through Title V Permit
- If any of the tank 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 2201] Federally Enforceable Through Title V Permit
- During a District inspection, any tank, gauge hatch, sampling device, or other component that is not leak free will not be a violation of this permit provided the facility records, tags, and repairs the leak in accordance with the requirements of this permit. [District Rule 2201] Federally Enforceable Through Title V Permit
- 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 2201] Federally Enforceable Through Title V Permit
- 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 2080] Federally Enforceable Through Title V Permit

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

Facility Name: MACPHERSON OIL CO

Location: HEAVY OIL CENTRAL STATIONARY SOURCE, CA S-1703-218-0 Aug 24 2017 4:52PM -- VELASCOA

- 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 2080] Federally Enforceable Through Title V Permit
- 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 2080] Federally Enforceable Through Title V Permit
- 10. 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 2080] Federally Enforceable Through Title V Permit
- 11. 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 2080] Federally Enforceable Through Title V Permit
- 12. Steam cleaning shall only be allowed at locations where wastewater treatment facilities are limited, or during the months of December through March. [District Rule 2080] Federally Enforceable Through Title V Permit
- 13. Before disposal of VOC vapors by well injection, the applicant shall obtain written notification from DOGGR that the wells are approvable for injection. [District Rule 2201] Federally Enforceable Through Title V Permit
- 14. 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 4623] Federally Enforceable Through Title V Permit
- 15. 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] Federally Enforceable Through Title V Permit
- 16. 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 4623] Federally Enforceable Through Title V Permit
- 17. The TVP testing shall be conducted at actual storage temperature of the organic liquid in the tank. The permittee shall also conduct an API gravity testing. [District Rule 4623] Federally Enforceable Through Title V Permit
- 18. 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 4623] Federally Enforceable Through Title V Permit
- 19. Operator shall conduct quarterly gas sampling after TVR compressor (prior to connection to any other vapor control system) and at either the first line tank or at any secondary tank which is heated above ambient temperature. If gas samples are less than 10% VOC by weight for 8 consecutive quarterly samplings, sampling frequency shall only be required annually and whenever there is a change in source or type of petroleum processed. Samples shall be collected during periods of normal operation, and not be within 48 hours after routine maintenance or repair. [District Rule 2201] Federally Enforceable Through Title V Permit

- 20. VOC content of gas shall be measured using ASTM D-1945, EPA Method 18 referenced as methane, or equivalent test method with prior District approval. [District Rule 2201] Federally Enforceable Through Title V Permit
- 21. 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 Rule 2201] Federally Enforceable Through Title V Permit
- 22. Operator shall maintain an inspection log containing the following 1) Type of component leaking: 2) Date of leak detection, and method of detection; 3) Date and emission level of recheck after leak is repaired. [District Rule 2201] Federally Enforceable Through Title V Permit
- 23. Permittee shall maintain records of the VOC content of vapor in the tank vapor control system, including date and test results. [District Rule 2201] Federally Enforceable Through Title V Permit
- 24. The permittee shall maintain a written log of the date and duration of each power curtailment event. [District Rule 2201] Federally Enforceable Through Title V Permit
- 25. The permittee shall keep written documentation from the power supplier indicating the date, and duration of the curtailment in addition to the beginning and end times. [District Rule 2201] Federally Enforceable Through Title V Permit
- 26. 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 1070] Federally Enforceable Through Title V Permit

PERMIT UNIT: S-1703-219-0 EXPIRATION DATE: 07/31/2022

SECTION: SE18 TOWNSHIP: 28S RANGE: 29E

**EQUIPMENT DESCRIPTION:** 

268 BBL WEMCO SERVED BY VAPOR CONTROL SYSTEM LISTED ON S-1703-144

## PERMIT UNIT REQUIREMENTS

- 1. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623] Federally Enforceable Through Title V Permit
- 2. Maximum VOC content of vapor in the tank vapor control system shall not exceed 10% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
- 3. 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) operator shall: (a) Eliminate or minimize the leak within 8 hours after detection. (b) 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 detection. (c) In no event shall the total time to minimize and eliminate the leak exceed 56 hours after detection. [District Rule 2201] Federally Enforceable Through Title V Permit
- 4. If any of the tank 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 2201] Federally Enforceable Through Title V Permit
- 5. During a District inspection, any tank, gauge hatch, sampling device, or other component that is not leak free will not be a violation of this permit provided the facility records, tags, and repairs the leak in accordance with the requirements of this permit. [District Rule 2201] Federally Enforceable Through Title V Permit
- 6. 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 2201] Federally Enforceable Through Title V Permit
- 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 2080] Federally Enforceable Through Title V Permit

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

Facility Name: MACPHERSON OIL CO

Location: HEAVY OIL CENTRAL STATIONARY SOURCE, CA 8-1703-219-0 Aug 24 2017 4:52PM - VELASCOA

- 8. 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 2080] Federally Enforceable Through Title V Permit
- 9. 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 2080] Federally Enforceable Through Title V Permit
- 10. 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 2080] Federally Enforceable Through Title V Permit
- 11. 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 2080] Federally Enforceable Through Title V Permit
- 12. Steam cleaning shall only be allowed at locations where wastewater treatment facilities are limited, or during the months of December through March. [District Rule 2080] Federally Enforceable Through Title V Permit
- 13. Before disposal of VOC vapors by well injection, the applicant shall obtain written notification from DOGGR that the wells are approvable for injection. [District Rule 2201] Federally Enforceable Through Title V Permit
- 14. 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 4623] Federally Enforceable Through Title V Permit
- 15. 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] Federally Enforceable Through Title V Permit
- 16. 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 4623] Federally Enforceable Through Title V Permit
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- 20. VOC content of gas shall be measured using ASTM D-1945, EPA Method 18 referenced as methane, or equivalent test method with prior District approval. [District Rule 2201] Federally Enforceable Through Title V Permit
- 21. 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 Rule 2201] Federally Enforceable Through Title V Permit
- 22. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date of leak detection, and method of detection; 3) Date and emission level of recheck after leak is repaired. [District Rule 2201] Federally Enforceable Through Title V Permit
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- 24. The permittee shall maintain a written log of the date and duration of each power curtailment event. [District Rule 2201] Federally Enforceable Through Title V Permit
- 25. The permittee shall keep written documentation from the power supplier indicating the date, and duration of the curtailment in addition to the beginning and end times. [District Rule 2201] Federally Enforceable Through Title V Permit
- 26. 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 1070] Federally Enforceable Through Title V Permit

S-1703-219-0 : Aug 24 2017 4:52PM - VELASCO

**PERMIT UNIT:** S-1703-220-0

EXPIRATION DATE: 07/31/2022

SECTION: SE18 TOWNSHIP: 28S RANGE: 29E

**EQUIPMENT DESCRIPTION:** 

268 BBL WEMCO SERVED BY VAPOR CONTROL SYSTEM LISTED ON S-1703-144

## PERMIT UNIT REQUIREMENTS

- This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623] Federally Enforceable Through Title V Permit
- Maximum VOC content of vapor in the tank vapor control system shall not exceed 10% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
- Upon detection of any leaking components (having a gas leak >10,000 ppmv, measured in accordance with EPA Method 21 by a portable hydrocarbon detection instrument that is calibrated with methane) operator shall: (a) Eliminate or minimize the leak within 8 hours after detection. (b) 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 detection. (c) In no event shall the total time to minimize and eliminate the leak exceed 56 hours after detection. [District Rule 2201] Federally Enforceable Through Title V Permit
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- During a District inspection, any tank, gauge hatch, sampling device, or other component that is not leak free will not be a violation of this permit provided the facility records, tags, and repairs the leak in accordance with the requirements of this permit. [District Rule 2201] Federally Enforceable Through Title V Permit
- 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 2201] 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.

Facility Name: MACPHERSON OIL CO

HEAVY OIL CENTRAL STATIONARY SOURCE.CA S-1703-220-0 : Aug 24 2017 4:52PM -- VELASCOA

- 8. 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 2080] Federally Enforceable Through Title V Permit
- 9. 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 2080] Federally Enforceable Through Title V Permit
- 10. 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 2080] Federally Enforceable Through Title V Permit
- 11. 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 2080] Federally Enforceable Through Title V Permit
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- 13. Before disposal of VOC vapors by well injection, the applicant shall obtain written notification from DOGGR that the wells are approvable for injection. [District Rule 2201] Federally Enforceable Through Title V Permit
- 14. 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 4623] Federally Enforceable Through Title V Permit
- 15. 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] Federally Enforceable Through Title V Permit
- 16. 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 4623] Federally Enforceable Through Title V Permit
- 17. The TVP testing shall be conducted at actual storage temperature of the organic liquid in the tank. The permittee shall also conduct an API gravity testing. [District Rule 4623] Federally Enforceable Through Title V Permit
- 18. 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 4623] Federally Enforceable Through Title V Permit
- 19. Operator shall conduct quarterly gas sampling after TVR compressor (prior to connection to any other vapor control system) and at either the first line tank or at any secondary tank which is heated above ambient temperature. If gas samples are less than 10% VOC by weight for 8 consecutive quarterly samplings, sampling frequency shall only be required annually and whenever there is a change in source or type of petroleum processed. Samples shall be collected during periods of normal operation, and not be within 48 hours after routine maintenance or repair. [District Rule 2201] Federally Enforceable Through Title V Permit

- 20. VOC content of gas shall be measured using ASTM D-1945, EPA Method 18 referenced as methane, or equivalent test method with prior District approval. [District Rule 2201] Federally Enforceable Through Title V Permit
- 21. 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 Rule 2201] Federally Enforceable Through Title V Permit
- 22. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date of leak detection, and method of detection; 3) Date and emission level of recheck after leak is repaired. [District Rule 2201] Federally Enforceable Through Title V Permit
- 23. Permittee shall maintain records of the VOC content of vapor in the tank vapor control system, including date and test results. [District Rule 2201] Federally Enforceable Through Title V Permit
- 24. The permittee shall maintain a written log of the date and duration of each power curtailment event. [District Rule 2201] Federally Enforceable Through Title V Permit
- 25. The permittee shall keep written documentation from the power supplier indicating the date, and duration of the curtailment in addition to the beginning and end times. [District Rule 2201] Federally Enforceable Through Title V Permit
- 26. 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 1070] Federally Enforceable Through Title V Permit

# PERMIT-EXEMPT EQUIPMENT REGISTRATION (PEER)

PEER NO: S-1703-2-0 EXPIRATION DATE: 03/28/2018

LEGAL OWNER OR OPERATOR: MACPHERSON OIL CO

MAILING ADDRESS: PO BOX 5368

BAKERSFIELD, CA 93388

FACILITY LOCATION: HEAVY OIL CENTRAL STATIONARY SOURCE

CA

#### **EQUIPMENT DESCRIPTION:**

4.9 MMBTU/HR AJAX BOILER INC MODEL WRFG-5250-W NATURAL GAS-FIRED PROCESS HEATER WITH AN AMERICAN COMBUSTION TECHNOLOGIES MODEL ACT 040GMF S/N 00388 LOW NOX BURNER

#### CONDITIONS

- 1. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
- 2. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201]
- 3. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101]
- 4. This unit shall be fired exclusively on Public Utilities Commission (PUC) regulated natural gas. [District Rules 4307 and 4801]
- 5. The unit shall not exceed any of the following emission limits: 30 ppmvd-NOx @ 3% O2 or 0.036 lb-NOx/MMBtu, or 400 ppmvd-CO @ 3% O2. [District Rule 4307]
- 6. The owner/operator shall monitor, at least once a month, the operational characteristics recommended by the manufacturer and approved by the APCO. [District Rule 4307]
- 7. The owner/operator shall have unit tuned at least twice each calendar year, from four to eight months apart, in which it operates, by a technician that is qualified, to the satisfaction of the APCO, in accordance with the procedure described in Rule 4304 (Equipment Tuning Procedure for Boilers, Steam Generators, and Process Heaters). [District Rule 4307]
- 8. If the unit does not operate throughout a continuous six-month period within a calendar year, only one tune-up is required for that calendar year. No tune-up is required for any unit that is not operated during that calendar year; this unit may be test fired to verify availability of the unit for its intended use, but once the test firing is completed the unit shall be shutdown. [District Rule 4307]

#### CONDITIONS CONTINUE ON NEXT PAGE

This PEER remains valid through the expiration date listed above, subject to payment of the annual registration fees and compliance with the PEER conditions and all applicable local, state, and federal regulations. This PEER is valid only within the San Joaquin Valley Air Pollution Control District. Any equipment or operation change may require a PEER application be filed with the District.

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Director of Permit Services

- 9. In lieu of tuning the unit twice each calendar year, the owner/operator shall monitor the emissions with a portable NOx analyzer at least twice each calendar year and adjust the unit's operating parameters accordingly to assure compliance with the emission limits of this rule. [District Rule 4307]
- 10. Source testing to measure NOx and CO emissions from this unit shall be conducted no later than 60 days after issuance of this PEER or installation, whichever is later. [District Rule 4307]
- 11. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081]
- 12. NOx emissions for source test purposes shall be determined using EPA Method 7E or ARB Method 100 on a ppmv basis, or EPA Method 19 on a heat input basis. [District Rule 4307]
- 13. CO emissions for source test purposes shall be determined using EPA Method 10 or ARB Method 100. [District Rule 4307]
- 14. Stack gas oxygen (O2) shall be determined using EPA Method 3 or 3A or ARB Method 100. [District Rule 4307]
- 15. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 4307]
- 16. The owner/operator shall maintain records to verify that the required monitoring of the operational characteristics, and tune-ups or portable NOx analyzing has been performed. [District Rule 4307]
- 17. Tune-up records shall include: 1) date of tune-up, 2) name of technician performing tune-up, and 3) reason that they are qualified. [District Rule 4307]
- 18. Portable analyzer records shall include: 1) date of emissions analyzing, 2) results of emissions analyzing, 3) name of technician performing analyzing, 4) make and model of analyzer, 5) date of last calibration of the analyzer, and 6) a description of any adjustments made to the unit's operating parameters for the purposes of assuring compliance. [District Rule 4307]
- 19. All records shall be maintained and retained on-site for a period of at least 5 years and shall be made available for District inspection upon request. [District Rules 4307]

# PERMIT-EXEMPT EQUIPMENT REGISTRATION (PEER)

PEER NO: S-1703-3-0 EXPIRATION DATE: 08/01/2017

LEGAL OWNER OR OPERATOR: MACPHERSON OIL CO

MAILING ADDRESS: PO BOX 5368

BAKERSFIELD, CA 93388

FACILITY LOCATION: HEAVY OIL CENTRAL STATIONARY SOURCE

CA

#### **EQUIPMENT DESCRIPTION:**

3.77 MMBTU/HR AJAX BOILER INC. MODEL WRFG-3770-W NATURAL GAS-FIRED PROCESS HEATER WITH A POWER FLAME MODEL C3-G-20 LOW NOX BURNER

### CONDITIONS

- 1. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
- 2. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201]
- 3. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101]
- 4. The unit shall not exceed any of the following emission limits: 9 ppmvd-NOx @ 3% O2 or 0.011 lb-NOx/MMBtu, or 400 ppmvd-CO @ 3% O2. [District Rule 4307]
- 5. The owner/operator shall monitor, at least once a month, the operational characteristics recommended by the manufacturer and approved by the APCO. [District Rule 4307]
- 6. The owner/operator shall have unit tuned at least twice each calendar year, from four to eight months apart, in which it operates, by a technician that is qualified, to the satisfaction of the APCO, in accordance with the procedure described in Rule 4304 (Equipment Tuning Procedure for Boilers, Steam Generators, and Process Heaters). [District Rule 4307]
- 7. If the unit does not operate throughout a continuous six-month period within a calendar year, only one tune-up is required for that calendar year. No tune-up is required for any unit that is not operated during that calendar year; this unit may be test fired to verify availability of the unit for its intended use, but once the test firing is completed the unit shall be shutdown. [District Rule 4307]
- 8. In lieu of tuning the unit twice each calendar year, the owner/operator shall monitor the emissions with a portable NOx analyzer at least twice each calendar year and adjust the unit's operating parameters accordingly to assure compliance with the emission limits of this rule. [District Rule 4307]

#### CONDITIONS CONTINUE ON NEXT PAGE

This PEER remains valid through the expiration date listed above, subject to payment of the annual registration fees and compliance with the PEER conditions and all applicable local, state, and federal regulations. This PEER is valid only within the San Joaquin Valley Air Pollution Control District. Any equipment or operation change may require a PEER application be filed with the District.

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- 9. Source testing to measure NOx and CO emissions from this unit shall be conducted no later than 60 days after issuance of this PEER or installation, whichever is later. [District Rule 4307]
- 10. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081]
- 11. NOx emissions for source test purposes shall be determined using EPA Method 7E or ARB Method 100 on a ppmv basis, or EPA Method 19 on a heat input basis. [District Rule 4307]
- 12. CO emissions for source test purposes shall be determined using EPA Method 10 or ARB Method 100. [District Rule 4307]
- 13. Stack gas oxygen (O2) shall be determined using EPA Method 3 or 3A or ARB Method 100. [District Rule 4307]
- 14. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 4307]
- 15. The owner/operator shall maintain records to verify that the required monitoring of the operational characteristics, and tune-ups or portable NOx analyzing has been performed. [District Rule 4307]
- 16. Tune-up records shall include: 1) date of tune-up, 2) name of technician performing tune-up, and 3) reason that they are qualified. [District Rule 4307]
- 17. Portable analyzer records shall include: 1) date of emissions analyzing, 2) results of emissions analyzing, 3) name of technician performing analyzing, 4) make and model of analyzer, 5) date of last calibration of the analyzer, and 6) a description of any adjustments made to the unit's operating parameters for the purposes of assuring compliance. [District Rule 4307]
- 18. All records shall be maintained and retained on-site for a period of at least 5 years and shall be made available for District inspection upon request. [District Rules 4307]

# PERMIT-EXEMPT EQUIPMENT REGISTRATION (PEER)

PEER NO: S-1703-4-0 EXPIRATION DATE: 05/14/2019

LEGAL OWNER OR OPERATOR: MACPHERSON OIL CO

MAILING ADDRESS: PO BOX 5368

BAKERSFIELD, CA 93388

FACILITY LOCATION: HEAVY OIL CENTRAL STATIONARY SOURCE

CA

#### **EQUIPMENT DESCRIPTION:**

4.9 MMBTU/HR AJAX MODEL WRFG-5250-W S/N 72500 NATURAL GAS-FIRED PROCESS HEATER WITH A POWER FLAME MODEL LNICR4-G-25 LOW NOX BURNER

## CONDITIONS

- 1. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
- 2. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201]
- 3. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101]
- This unit shall be fired exclusively on Public Utilities Commission (PUC) regulated natural gas. [District Rules 4307 and 4801]
- 5. The unit shall not exceed any of the following emission limits: 30 ppmvd-NOx @ 3% O2 or 0.036 lb-NOx/MMBtu, or 400 ppmvd-CO @ 3% O2. [District Rule 4307]
- 6. The owner/operator shall monitor, at least once a month, the operational characteristics recommended by the manufacturer and approved by the APCO. [District Rule 4307]
- 7. The owner/operator shall have unit tuned at least twice each calendar year, from four to eight months apart, in which it operates, by a technician that is qualified, to the satisfaction of the APCO, in accordance with the procedure described in Rule 4304 (Equipment Tuning Procedure for Boilers, Steam Generators, and Process Heaters). [District Rule 4307]
- 8. If the unit does not operate throughout a continuous six-month period within a calendar year, only one tune-up is required for that calendar year. No tune-up is required for any unit that is not operated during that calendar year; this unit may be test fired to verify availability of the unit for its intended use, but once the test firing is completed the unit shall be shutdown. [District Rule 4307]

#### CONDITIONS CONTINUE ON NEXT PAGE

This PEER remains valid through the expiration date listed above, subject to payment of the annual registration fees and compliance with the PEER conditions and all applicable local, state, and federal regulations. This PEER is valid only within the San Joaquin Valley Air Pollution Control District. Any equipment or operation change may require a PEER application be filed with the District.

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Director of Permit Services

Executive Director / APCO S-1703-4-0: 08/24/2017 - VELASCOA Joint Inspection NOT Required

- 9. In lieu of tuning the unit twice each calendar year, the owner/operator shall monitor the emissions with a portable NOx analyzer at least twice each calendar year and adjust the unit's operating parameters accordingly to assure compliance with the emission limits of this rule. [District Rule 4307]
- 10. Source testing to measure NOx and CO emissions from this unit shall be conducted no later than 60 days after issuance of this PEER or installation, whichever is later. [District Rule 4307]
- 11. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081]
- 12. NOx emissions for source test purposes shall be determined using EPA Method 7E or ARB Method 100 on a ppmv basis, or EPA Method 19 on a heat input basis. [District Rule 4307]
- 13. CO emissions for source test purposes shall be determined using EPA Method 10 or ARB Method 100. [District Rule 4307]
- 14. Stack gas oxygen (O2) shall be determined using EPA Method 3 or 3A or ARB Method 100. [District Rule 4307]
- 15. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 4307]
- 16. The owner/operator shall maintain records to verify that the required monitoring of the operational characteristics, and tune-ups or portable NOx analyzing has been performed. [District Rule 4307]
- 17. Tune-up records shall include: 1) date of tune-up, 2) name of technician performing tune-up, and 3) reason that they are qualified. [District Rule 4307]
- 18. Portable analyzer records shall include: 1) date of emissions analyzing, 2) results of emissions analyzing, 3) name of technician performing analyzing, 4) make and model of analyzer, 5) date of last calibration of the analyzer, and 6) a description of any adjustments made to the unit's operating parameters for the purposes of assuring compliance. [District Rule 4307]
- 19. All records shall be maintained and retained on-site for a period of at least 5 years and shall be made available for District inspection upon request. [District Rules 4307]