San Joaquin Valley
AIR POLLUTION CONTROL DISTRICT

HEALTHY AIR LIVING™

OCT 31 2013

Mr. Daniel Beck
Chevron USA
P O Box 1392
Bakersfield, CA 93302

Re: Notice of Minor Title V Permit Modification
District Facility # S-1131
Project # S-1132604

Dear Mr. Beck:

Enclosed is the District's analysis of your application for minor Title V permit modification for the facility identified above. You proposed a Title V minor permit modification to incorporate recently issued Authorities to Construct (ATC) S-1131-885-27, '-886-20, '-891-19, '-892-19, '-1128-1, '-1129-1, '-1130-1, '-1131-1, '-1132-1, and '-1133-1 into the Title V operating permit. The ATCs allowed the following modifications:

1) Closing the casing vents on the 20 Thermally Enhanced Oil Recovery (TEOR) wells listed on permit S-1131-1131.
2) Allowing crude oil to be sent from the TEOR wells listed on permit S-1131-1131 to the tanks listed on permits S-1131-885, '886, '891, and '892.
3) Allowing the tanks listed on permits S-1131-885, '886, '891, and '892 to receive crude oil production from the TEOR wells listed on permit S-1131-1131.
4) Designating the tanks listed on PTO permits S-1131-1128, '1129, '1130, '1132, and '1133 as compliant dormant emission units (DEU).

Enclosed is the engineering evaluation with the following attachments: proposed modified Title V permit, recently issued S-1131-885-27, '-886-20, '-891-19, '-892-19, '-1128-1, '-1129-1, '-1130-1, '-1131-1, '-1132-1, and '-1133-1, emission increases, application, and previous Title V permit. This project will be subject to a 45-day EPA commenting period prior to the District taking final action.

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

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www.valleyair.org www.healthyairliving.com

OCT 31 2013

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

Thank you for your cooperation in this matter.

Sincerely,

for David Warner
Director of Permit Services

Enclosures

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

TITLE V APPLICATION REVIEW

Minor Modification
Project #: S-1132604

Engineer: Steve Davidson
Date: October 28, 2013
Lead Engineer: ~~Rich Karrs~~ AP SUPR AQE
Date: OCT 29 2013

Facility Number: S-1131
Facility Name: Chevron USA
Mailing Address: PO Box 1392
Bakersfield, CA 93302

Contact Name: Daniel Beck
Phone: (661) 654-7141

Responsible Official: Patricia O'Neill
Title: Kern River Operational Supervisor

I. PROPOSAL

Chevron USA, Inc is proposing a Title V minor permit modification to incorporate Authority to Construct (ATC) #S-1131-885-27, '-886-20, '-891-19, '-892-19, '-1128-1, '-1129-1, '-1130-1, '-1131-1, '-1132-1, and '-1133-1 into Chevron's Title V permit. The ATCs allowed the following modifications:

1) Closing the casing vents on the 20 Thermally Enhanced Oil Recovery (TEOR) wells listed on permit S-1131-1131.
2) Allowing crude oil to be sent from the TEOR wells listed on permit S-1131-1131 to the tanks listed on permits S-1131-885, '886, '891, and '892.
3) Allowing the tanks listed on permits S-1131-885, '886, '891, and '892 to receive crude oil production from the TEOR wells listed on permit S-1131-1131.
4) Designating the tanks listed on PTO permits S-1131-1128, '1129, '1130, '1132, and '1133 as compliant dormant emission units (DEU).

The purpose of this evaluation is to identify all applicable requirements, determine if the facility will comply with the applicable requirements, and to provide the legal and factual basis for the proposed revisions.

II. FACILITY LOCATION

The equipment is located within the Heavy Oil Central Stationary Source in Kern County.

Permit	Section	Township	Range
S-1131-885-28	SW 03	29S	28E
S-1131-886-21	SW 03	29S	28E
S-1131-891-20	SE 04	29S	28E
S-1131-892-20	SE 04	29S	28E
S-1131-1128-2	NW 09	29S	28E
S-1131-1129-2	NW 09	29S	28E
S-1131-1130-2	NW 09	29S	28E
S-1131-1131-2	NW 09	29S	28E
S-1131-1132-2	NW 09	29S	28E
S-1131-1133-2	NW 09	29S	28E

III. EQUIPMENT DESCRIPTION

Proposed Permit #	Post-Project Equipment Description
S-1131-885-28	5,000 BBL FIXED ROOF PETROLEUM STORAGE TANK #3K-L75 WITH VAPOR CONTROL SYSTEM
S-1131-886-21	5,000 BBL FIXED ROOF PETROLEUM STORAGE TANK #3K-S76 WITH VAPOR CONTROL SYSTEM LISTED ON S-1131-885
S-1131-891-20	5,000 BBL FIXED ROOF PETROLEUM STORAGE TANK WITH VAPOR CONTROL SYSTEM LISTED ON S-1131-885
S-1131-892-20	5,000 BBL FIXED ROOF PETROLEUM STORAGE TANK WITH VAPOR CONTROL SYSTEM LISTED ON S-1131-885
S-1131-1128-2	1,000 BBL FIXED ROOF PETROLEUM STORAGE TANK #7 WITH VAPOR CONTROL SYSTEM SHARED WITH TANKS S-1131-1129, -1130, -1132, AND -1133 (KCLC LEASE)
S-1131-1129-2	500 BBL FIXED ROOF CRUDE OIL STOCK TANK #2 SERVED BY VAPOR CONTROL SYSTEM LISTED ON S-1131-1128 (KCLC LEASE)
S-1131-1130-2	1,000 BBL FIXED ROOF CRUDE OIL STOCK TANK SERVED BY VAPOR CONTROL SYSTEM LISTED ON S-1131-1128 (KCLC LEASE)
S-1131-1131-2	THERMALLY ENHANCED OIL RECOVERY OPERATION WITH 20 CYCLIC WELLS WITH CLOSED CASING VENTS (KCLC LEASE)

Current Permit #	Post-Project Equipment Description
S-1131-1132-2	1,500 BBL FIXED ROOF CRUDE OIL WASH TANK WITH P/V VALVE SERVED BY VAPOR CONTROL SYSTEM LISTED ON S-1131-1128 (KCLC LEASE)
S-1131-1133-2	1,000 BBL FIXED ROOF CRUDE OIL STORAGE TANK SERVED BY VAPOR CONTROL SYSTEM LISTED ON S-1131-1128 (KCLC LEASE)

IV. SCOPE OF EPA AND PUBLIC REVIEW

This change to the Title V permits is considered to be a minor modification and, as such, requires no public review.

V. APPLICABLE REQUIREMENTS

District Rule 2520, Federally Mandated Operating Permits (Adopted June 21, 2001)

VI. DESCRIPTION OF PROPOSED MODIFICATIONS

In project S-1131580, Chevron applied for an Authority to Construct (ATC) permit to allow the following:

1) Closing the casing vents on the 20 Thermally Enhanced Oil Recovery (TEOR) wells listed on permit S-1131-1131.
2) Allowing crude oil to be sent from the TEOR wells listed on permit S-1131-1131 to the tanks listed on permits S-1131-885, '886, '891, and '892.
3) Allowing the tanks listed on permits S-1131-885, '886, '891, and '892 to receive crude oil production from the TEOR wells listed on permit S-1131-1131.
4) Designating the tanks listed on PTO permits S-1131-1128, '1129, '1130, '1132, and '1133 as compliant dormant emission units (DEU).

The following tables list the condition changes associated with the modification of the permit units in project S-1131580:

Condition # on PTO S-1131-885-21	Condition # on Propose PTO S-1131-885-28	Condition is New, Modified, or Removed	Reason for Change from Current PTO
16-25	16-24	Modified	Updated tank cleaning condition per District Policy SSP 2210, Organic Liquid Storage Tanks – Cleaning Requirements

Condition # on PTO S-1131-886-18	Condition # on Propose PTO S-1131-886-21	Condition is New, Modified, or Removed	Reason for Change from Current PTO
8-17	8-17	Modified	Updated tank cleaning condition per District Policy SSP 2210, Organic Liquid Storage Tanks – Cleaning Requirements

Condition # on PTO S-1131-891-17	Condition # on Propose PTO S-1131-891-20	Condition is New, Modified, or Removed	Reason for Change from Current PTO
8-17	8-17	Modified	Updated tank cleaning condition per District Policy SSP 2210, Organic Liquid Storage Tanks – Cleaning Requirements

Condition # on PTO S-1131-892-17	Condition # on Propose PTO S-1131-892-20	Condition is New, Modified, or Removed	Reason for Change from Current PTO
8-17	8-17	Modified	Updated tank cleaning condition per District Policy SSP 2210, Organic Liquid Storage Tanks – Cleaning Requirements

Condition # on PTO S-1131-1128-0	Condition # on Propose PTO S-1131-1128-2	Condition is New, Modified, or Removed	Reason for Change from Current PTO
1	-	Removed	Condition requiring permitted to submit information identifying the sulfur control equipment removed from the permit.
--	1 through 8	New	Complaint dormant conditions added to the permit
2, 3, 4, 5, and 6	--	Removed	Conditions authorizing tank vapors to be combusted in a 1.9 Mmbtu/hr and 0.8 Mmbtu/hr heaters removed from permit.
--	9	New	Condition listing steam generators authorized to serve the vapor control system added to the permit.
7 and 8	10, 11, and 12	Modified	"Gas tight" conditions updated to current "leak free" verbage.
--	14	New	Condition requiring vapor control system to be functioning and operational at all times added to the permit.
14, 15, 16, and 17	21 through 27	Modified	Standard inspection and maintenance conditions updated to reflect current standard wording.
21, 22, and 23	29 through 39	Modified	Replace tank degassing and cleaning conditions with current District approved wording.

Condition # on PTO S-1131-1129-0	Condition # on Propose PTO S-1131-1129-2	Condition is New, Modified, or Removed	Reason for Change from Current PTO
--	1 through 8	New	Complaint dormant conditions added to the permit
--	10	New	Condition requiring vapor control system to be "leak free" and vented to a 99% effiecent contol device added to the permit.
2	11, 12, and 13	Modified	"Gas tight" condition updated to current "leak free" verbage.
--	14	New	Condition requiring vapor control system to be functioning and operational at all times added to the permit.
7, 8, 9, and 10	20 through 25	Modified	Standard leak inspection and maintenance conditions updated to reflect current standard wording.
14, 15, and 16	27 through 37	Modified	Replace tank degassing and cleaning conditions with current District approved wording.

Condition # on PTO S-1131-1130-0	Condition # on Propose PTO S-1131-1130-2	Condition is New, Modified, or Removed	Reason for Change from Current PTO
--	1 through 8	New	Complaint dormant conditions added to the permit
--	10	New	Condition requiring vapor control system to be "leak free" and vented to a 99% effiecent contol device added to the permit.
2	11 and 12	Modified	"Gas tight" condition updated to current "leak free" verbage.
--	14	New	Condition requiring vapor control system to be functioning and operational at all times added to the permit.
7, 8, 9, and 10	20 through 26	Modified	Standard inspection and maintenance conditions updated to reflect current standard wording.
14, 15, and 16	28 through 38	Modified	Replace tank degassing and cleaning conditions with current District approved wording.

Condition # on PTO S-1131-1131-0	Condition # on Propose PTO S-1131-1131-2	Condition is New, Modified, or Removed	Reason for Change from Current PTO
1	--	Removed	Condition requiring the vapors only to be combusted in a 0.8 MMBtu/hr heater removed from the permit
--	1	New	Condition requiring fluids produced from these steam-enhanced wells with closed casing vents shall be introduced only to tanks or vessels vented to a District approved vapor collection and control system that has a destruction or removal efficiency of at least 99%, or to permit exempt storage equipment, added to the permit
2	-	Removed	Condition requiring vapors to contain no more that 5% by weight hydrocarbons heavier than butane and no more than 1.0 gr of total sulfur per 100 standard cubic feet of gas remover from the permit.
6-7	5, 6, 10, 12-16	Modified	Permitted leak requirements up dated to reflect current District practice
--	9	Modified	Condition stating that for components exclusively handling gas/vapor or liquid with a VOC content of ten percent by weight (10 wt %) or less that inspection and maintance conditons do not apply.
11	7	Modified	Condition stating a well undergoing service or repair while the well is not producing is exempt ffrom the emissions control requirements of District Rule 4401, Section 5.0 clarified.
15	17-30	Modified	Inspection and Maintenance conditions updated to current District approved conditions.
--	31	New	Condition requiring facility to keep records of the date and well identification where steam injection or well stimulation occurs added to the permit.

Condition # on PTO S-1131-1131-0	Condition # on Propose PTO S-1131-1131-2	Condition is New, Modified, or Removed	Reason for Change from Current PTO
--	32	New	Condition requiring facility to keep source test records which demonstrate compliance with the control efficiency requirements of the VOC collection and control system added to the permit.
--	33	New	Condition requiring facility to keep an inspection log added to the permit.
--	34	New	Condition requiring facility to keep records of each calibration of the portable hydrocarbon detection instrument utilized for inspecting components
--	35	New	Condition requiring facility to keep records of operator training program removed from the permit
--	36	New	Condition requiring Operator Management Plan to be maintained at the facility added to the permit.
9	37 and 38	New	Annual source testing requirements modified to reflect current district wording.
10	39	Modified	Condition stating approved methods to determining the VOC control efficiency updated to current District wording.
--	41	New	Condition stating the requirements of EPA Method 21 added to the permit.
17	40 and 42	Modified	Condition identifying VOC content testing procedures updated to current District wording.
16	43	Modified	Replace inspection log conditions with current District approved condition.
--	44	New	Condition requiring establishment and implementation of employee training program added to the permit.
12, 13, and 14	45, 46, and 47	Modified	Replace Operator Maintenance Plan conditions with current District approved conditions.
20	--	Removed	Condition requiring permittee to maintain records of total sulfur and VOC in the TEOR gas removed from the permit

Condition # on PTO S-1131-1132-0	Condition # on Propose PTO S-1131-1132-2	Condition is New, Modified, or Removed	Reason for Change from Current PTO
--	1 through 8	New	Complaint dormant conditions added to the permit
2	10, 11, and 12	Modified	"Gas tight" conditions updated to current "leak free" verbage.
--	14	New	Condition requiring vapor control system to be functioning and operational at all times added to the permit.
7 through 10	20 through 26	Modified	Standard inspection and maintenance conditions updated to reflect current standard wording.
14, 15, and 16	28 through 38	Modified	Replace tank degassing and cleaning conditions with current District approved wording.

Condition # on PTO S-1131-1133-0	Condition # on Propose PTO S-1131-1133-2	Condition is New, Modified, or Removed	Reason for Change from Current PTO
--	1 through 8	New	Complaint dormant conditions added to the permit
2	10, 11, and 12	Modified	"Gas tight" conditions updated to current "leak free" verbiage.
--	14	New	Condition requiring vapor control system to be functioning and operational at all times added to the permit.
7 through 10	20 through 26	Modified	Standard inspection and maintenance conditions updated to reflect current standard wording.
14, 15, and 16	28 through 38	Modified	Replace tank degassing and cleaning conditions with current District approved wording.

VII. COMPLIANCE

In accordance with Rule 2520, 3.20, these modifications:

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

Because these permit revisions meet all the above criteria, this is a Minor Modification.

In accordance with Rule 2520, the application meets the procedural requirements of section 11.4 by including;

1. A description of the change, the emissions resulting from the change, and any new applicable requirements that will apply if the change occurs;
2. The source's suggested draft permit; and
3. Certification by a responsible official that the proposed modification meets the criteria for use of minor permit modification procedures and a request that such procedures be used.

VIII. ATTACHMENTS

A. Current Title V Operating Permit
B. Authority to Construct
C. Emissions Increases
D. Application
E. Proposed Title V Operating Permit

ATTACHMENT A

Current Title V Operating Permit #S-1131-885-21, '-886-18, '-891-17, '-892-17, '-1128-0, '-1129-0, '-1130-0, '-1131-0, '-1132-0, and '-1133-0

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1131-885-21 **EXPIRATION DATE:** 02/28/2017

SECTION: SW03 **TOWNSHIP:** 29S **RANGE:** 28E

EQUIPMENT DESCRIPTION:
5,000 BBL FIXED ROOF PETROLEUM STORAGE TANK #3K-L75 WITH VAPOR CONTROL SYSTEM

PERMIT UNIT REQUIREMENTS

1. Tank is authorized to receive fluids from facilities S-1131 and S-1127. [District Rule 2201] Federally Enforceable Through Title V Permit
2. Well vent vapor control systems S-1131-903, S-1131-909, and S-1131-598 may discharge vapors into compressor suction of this operation. [District Rule 2201] Federally Enforceable Through Title V Permit
3. The overall efficiency of the tank vapor collection and control system shall be maintained at no less than 99%. [District Rule 2201] Federally Enforceable Through Title V Permit
4. Permittee shall maintain records of number and type of components in gas service installed. Permittee shall update such records when new gas handling components are installed. Permittee shall maintain records of components exempted from counting, and the basis for exemption. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Fugitive VOC emission rates shall be calculated using the Oil and Gas Production Operations Average Emission Factors, U.S. EPA Protocol for Equipment Leak Emission Estimates, Table 2-4 (EPA-453/R-95-017) November 1995 and the total number of vapor components. [District Rule 2201] Federally Enforceable Through Title V Permit
6. VOC emission rate from components associated with vapor recovery trunk-line up to and including vapor compressors and approved disposal devices shall not exceed 23.9 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
7. VOC emission rate from vapor service components associated with this tank, up to the tie-in with the vapor recovery unit trunk-line, shall not exceed 5.33 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
8. The fugitive VOC emission rate does not include piping and components handling produced fluids with API gravity less than 30 degrees. [District Rule 2201] Federally Enforceable Through Title V Permit
9. 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
10. The fugitive VOC emission rate does not include components in water/oil service (water content of fluids handled greater than 50%). Permittee shall maintain records of annual testing to demonstrate that such fluid streams have at least 50% water by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
11. Operator shall conduct quarterly sampling from the tank vapor control system's inlet header 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-1131-608, -613, -629, -630, -638, -641, -650, -651, and -1097. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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. Permittee shall maintain a written record of the VOC content of the gas sampled. [District Rule 2201] Federally Enforceable Through Title V Permit
14. Collected VOC vapors shall be incinerated in steam generators S-1131-82, '-95, '-98, '-99, '-859, '-877, '-879, '-880, '-881, '-883, '-884, and '908 or disposed of in Department of Oil, Gas, and Geothermal Resources (DOGGR) approved vapor disposal well(s). [District Rule 2201] Federally Enforceable Through Title V Permit
15. Fluids stored or handled by tank shall be routed exclusively to the vapor-controlled "Surge" tanks at Station 36 (S-1131-598, '-629, '-630, '-638, '-641, '-650, '-651, and '-1097). [District Rule 2201] Federally Enforceable Through Title V Permit
16. This permit authorizes tank cleaning that is not the result of breakdowns or poor maintenance as a routine maintenance activity. [District Rule 2080] Federally Enforceable Through Title V Permit
17. Permittee shall conduct tank cleaning and maintenance operations in accordance with District approved procedure as described in this permit. [District Rule 2080] Federally Enforceable Through Title V Permit
18. Tank may be disconnected from vapor control system during District approved cleaning and maintenance procedures as described in this permit. [District Rule 2010] Federally Enforceable Through Title V Permit
19. Permittee shall notify the District Compliance division at least 24 hours before tank cleaning and vapor control system disconnection and within 72 hours after restoring crude oil flow to the tank. [District Rule 2080] Federally Enforceable Through Title V Permit
20. Prior to opening the tank to allow tank cleaning one of the following procedures must be followed: 1) operate the vapor control system for at least 24 hours after all the liquid in the tank has been drained; or 2) use liquid displacement, conducted by filling the tank with a suitable liquid such as water, clean produced water, or organic liquids with a TVP less than 0.5 psia; or conducted by floating the oil pad off with water such that 90% of the tank liquid capacity is displaced; or 3) vent the tank to the vapor control system until the vapor concentration is less than 10% of the lower explosive limit (LEL) or 5,000 ppmv whichever is less; or 4) displace vapors by filling the tank with a suitable gas, including air, nitrogen, carbon dioxide, or natural gas containing less than 10% VOC by weight, until a vapor displacement equivalent to at least 2.3 times the tank capacity is achieved; or 5) vent the tank to the vapor control system for a length of time determined by the following relationship: $t = 2.3\ V/Q$, where t = time, V = tank volume (cubic feet), and Q= flow rate to the vapor control system as determined using appropriate engineering calculations . [District Rule 2080] Federally Enforceable Through Title V Permit
21. The tank shall be cleaned using one of the following methods: water, hot water, solvents with an initial boiling point of greater than 302 F, solvents with a vapor pressure of less than 0.5 psia, or solvents with 50 grams VOC per liter or less. The tank sediment may be used for road mix as allowed by Section 6.17 of District Rule 2020. [District Rule 2080] Federally Enforceable Through Title V Permit
22. Steam cleaning shall be allowed only during December through March, or at locations where wastewater treatment facilities are limited. [District Rule 2080] Federally Enforceable Through Title V Permit
23. Prior to reintroducing crude oil/water to the tank, the tank shall be filled to the maximum possible level with water, the tank vapor control system shall be reactivated and pressure/relief valves closed, and the liquid level shall be adjusted as necessary. [District Rule 2080] Federally Enforceable Through Title V Permit
24. Within 48 hours after refilling the tank with crude oil/water, the pressure relief valve seats and hatch seals shall be inspected for leaks using EPA method 21 and the regular tank maintenance and inspection program shall resume. [District Rule 2080] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

25. Permittee shall maintain records of each period of cleaning and maintenance when the tank is disconnected or isolated from the vapor control system. Records shall include the date that tank cleaning was initiated, the date tank cleaning was completed, the method of tank cleaning used, and a description of internal and external tank repairs and maintenance performed. Such records shall be retained for a period of at least 5 years and shall be made available for District inspection upon request. [District Rule 2080] Federally Enforceable Through Title V Permit

26. Tank shall be equipped with an operational and calibrated stored liquid temperature indicator. [District Rule 2201] Federally Enforceable Through Title V Permit

27. Tank roof, tank shell, tank vapor space appurtances, vapor control system piping, and vapor control system components shall be inspected and monitored using EPA Method 21 at least monthly. Items found to be not leaking may then be inspected and monitored at least once every 3 months until a leak is detected at which time the inspection and monitoring frequency shall revert to monthly until such time that two consecutive monthly inspections reveal with no leaks at which time the inspection and monitoring frequency shall revert to at least once every 3 months. [District Rule 2201] Federally Enforceable Through Title V Permit

28. A visible mist, liquid dripping at the rate of more than 3 drops per minute, and vapor leaks of 50,000 ppm or greater VOC as methane shall be repaired as expeditiously as possible but in no case beyond 24 hours of detecting the leak and shall be re-monitored using EPA Method 21 upon completion of the repair. Vapor leaks equal to or greater than 10,000 ppm and less than 50,000 ppm VOC as methane shall be repaired within 5 days of detecting the leak and re-monitored using EPA Method 21 upon completion of the repair. Vapor leaks equal to or greater than 1,000 ppm and less than 10,000 ppm VOC as methane shall be repaired within 14 days of leak detection and shall be re-monitored using EPA Method 21 upon completion of the repair. [District Rule 2201] Federally Enforceable Through Title V Permit

29. Upon detection of a leak, permittee shall tag the leak with a uniquely numbered tag, and shall record the leak location, component leaking, identification tag number, leak magnitude, date of leak detection, date of repair, method of repair, and post-repair monitoring measurement. Such records of leaks shall be maintained current and shall be made readily available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit

30. Components not accessible for EPA Method 21 inspection shall be visually and auditorily checked for leaks at least weekly and shall be monitored using EPA Method 21 at least annually. Any leak detected visually or auditorially shall be recorded and the leak shall be repaired within 14 days of leak detection and shall be re-monitored using EPA Method 21 upon completion of the repair. Any leak detected using EPA Method 21 shall be repaired according the leak magnitude as described above and shall be re-monitored using EPA Method 21 upon completion of the repair. [District Rule 2201] Federally Enforceable Through Title V Permit

31. In addition to the requirements above, pressure relief devices shall be inspected and monitored for leaks within 3 days of any known, likely, or suspected venting of such devices. [District Rule 2201] Federally Enforceable Through Title V Permit

32. True vapor pressure of any liquid introduced in this permit unit shall be less than 0.5 psia at (or before) tank liquid inlet and at tank storage temperature. [District Rule 4623, 4.4] Federally Enforceable Through Title V Permit

33. Permittee shall conduct true vapor pressure (TVP) testing of the organic liquid stored in this tank, or a representative tank as provided in Section 6.2.1.1 of District Rule 4623, 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. [District Rule 4623, 6.2] Federally Enforceable Through Title V Permit

34. 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, 6.4] Federally Enforceable Through Title V Permit

35. 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, 6.4] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

36. True Vapor Pressure (TVP) of any organic liquid, except for crude oil with an API gravity of 20 degrees or less, shall be determined by measuring the Reid Vapor Pressure (RVP) using ASTM D 323, and converting the RVP to TVP at the tank's maximum organic liquid storage temperature. The conversion of RVP to TVP shall be done in accordance with the procedures in Appendix B. Appendix B is an excerpt from the oil and gas section of "California Air Resources Boards (ARB) Technical Guidance Document to the Criteria and Guidelines Regulation for AB 2588", dated August 1989. As an alternative, the TVP of crude oil with an API gravity range of greater than 26 degrees up to 30 degrees may be determined by using other equivalent test methods approved by APCO, ARB and EPA. [District Rule 4623, 6.4] Federally Enforceable Through Title V Permit
37. 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, 6.2] Federally Enforceable Through Title V Permit
38. 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, 6.3] Federally Enforceable Through Title V Permit
39. 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, 6.3] Federally Enforceable Through Title V Permit
40. The permittee shall keep accurate records of the dates of inspection and monitoring and the components inspected and monitored. [District Rule 2201] Federally Enforceable Through Title V Permit
41. Permittee shall provide District with a copy of D.O.G.G.R. approval for each vapor disposal well prior to use for vapor injection. [District Rule 1070] Federally Enforceable Through Title V Permit
42. 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, 6.3] Federally Enforceable Through Title V Permit
43. Formerly S-1143-21. [District Rule 2010] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1131-886-18 **EXPIRATION DATE:** 02/28/2017

SECTION: SW03 **TOWNSHIP:** 29S **RANGE:** 28E

EQUIPMENT DESCRIPTION:
210,000 GALLON FIXED ROOF PETROLEUM STORAGE TANK #3K-S76 WITH VAPOR CONTROL SYSTEM LISTED ON S-1131-885

PERMIT UNIT REQUIREMENTS

1. Tank is authorized to receive fluids from facilities S-1131 and S-1127. [District Rule 2201] Federally Enforceable Through Title V Permit
2. Well vent vapor control systems S-1131-903 and S-1131-909 may discharge vapors into compressor suction of this operation. [District Rule 2201] Federally Enforceable Through Title V Permit
3. The overall efficiency of the tank vapor collection and control system shall be maintained at no less than 99%. [District Rule 2201] Federally Enforceable Through Title V Permit
4. VOC emission rate from vapor service components associated with this tank, up to the tie-in with the vapor recovery unit trunk-line, shall not exceed 5.33 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Permittee shall maintain an accurate fugitive component count and resultant emissions calculated using emission factors from U.S. EPA Publication 453/R-95-017, or other District-approved emission factors. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Steam generators authorized to incinerate collected VOC vapors are S-1131-877,'-880, '-881, '-882, '-883, and '-908. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Fluids stored or handled by tank shall be routed exclusively to the vapor-controlled "Surge" tanks at Station 36 (S-1131-598, '-629, '-630, '-638, '-641, '-650, '-651, and '-1097). [District Rule 2201] Federally Enforceable Through Title V Permit
8. This permit authorizes tank cleaning that is not the result of breakdowns or poor maintenance as a routine maintenance activity. [District Rule 2080] Federally Enforceable Through Title V Permit
9. Permittee shall conduct tank cleaning and maintenance operations in accordance with District approved procedure as described in this permit. [District Rule 2080] Federally Enforceable Through Title V Permit
10. Tank may be disconnected from vapor control system during District approved cleaning and maintenance procedures as described in this permit. [District Rule 2010] Federally Enforceable Through Title V Permit
11. Permittee shall notify the District Compliance division at least 24 hours before tank cleaning and vapor control system disconnection and within 72 hours after restoring crude oil flow to the tank. [District Rule 2080] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

12. Prior to opening the tank to allow tank cleaning one of the following procedures must be followed: 1) operate the vapor control system for at least 24 hours after all the liquid in the tank has been drained; or 2) use liquid displacement, conducted by filling the tank with a suitable liquid such as water, clean produced water, or organic liquids with a TVP less than 0.5 psia; or conducted by floating the oil pad off with water such that 90% of the tank liquid capacity is displaced; or 3) vent the tank to the vapor control system until the vapor concentration is less than 10% of the lower explosive limit (LEL) or 5,000 ppmv whichever is less; or 4) displace vapors by filling the tank with a suitable gas, including air, nitrogen, carbon dioxide, or natural gas containing less than 10% VOC by weight, until a vapor displacement equivalent to at least 2.3 times the tank capacity is achieved; or 5) vent the tank to the vapor control system for a length of time determined by the following relationship: t = 2.3 V/Q, where t = time, V = tank volume (cubic feet), and Q= flow rate to the vapor control system as determined using appropriate engineering calculations . [District Rule 2080] Federally Enforceable Through Title V Permit
13. The tank shall be cleaned using one of the following methods: water, hot water, solvents with an initial boiling point of greater than 302 F, solvents with a vapor pressure of less than 0.5 psia, or solvents with 50 grams VOC per liter or less. The tank sediment may be used for road mix as allowed by Section 6.17 of District Rule 2020. [District Rule 2080] Federally Enforceable Through Title V Permit
14. Steam cleaning shall be allowed only during December through March, or at locations where wastewater treatment facilities are limited. [District Rule 2080] Federally Enforceable Through Title V Permit
15. Prior to reintroducing crude oil/water to the tank, the tank shall be filled to the maximum possible level with water, the tank vapor control system shall be reactivated and pressure/relief valves closed, and the liquid level shall be adjusted as necessary. [District Rule 2080] Federally Enforceable Through Title V Permit
16. Within 48 hours after refilling the tank with crude oil/water, the pressure relief valve seats and hatch seals shall be inspected for leaks using EPA method 21 and the regular tank maintenance and inspection program shall resume. [District Rule 2080] Federally Enforceable Through Title V Permit
17. Permittee shall maintain records of each period of cleaning and maintenance when the tank is disconnected or isolated from the vapor control system. Records shall include the date that tank cleaning was initiated, the date tank cleaning was completed, the method of tank cleaning used, and a description of internal and external tank repairs and maintenance performed. Such records shall be retained for a period of at least 5 years and shall be made available for District inspection upon request. [District Rule 2080] Federally Enforceable Through Title V Permit
18. Tank shall be equipped with an operational and calibrated stored liquid temperature indicator. [District Rule 2201] Federally Enforceable Through Title V Permit
19. Tank roof, tank shell, tank vapor space appurtances, vapor control system piping, and vapor control system components shall be inspected and monitored using EPA Method 21 at least monthly. Items found to be not leaking may then be inspected and monitored at least once every 3 months until a leak is detected at which time the inspection and monitoring frequency shall revert to monthly until such time that two consecutive monthly inspections reveal with no leaks at which time the inspection and monitoring frequency shall revert to at least once every 3 months. [District Rule 2201] Federally Enforceable Through Title V Permit
20. A visible mist, liquid dripping at the rate of more than 3 drops per minute, and vapor leaks of 50,000 ppm or greater VOC as methane shall be repaired as expeditiously as possible but in no case beyond 24 hours of detecting the leak and shall be re-monitored using EPA Method 21 upon completion of the repair. Vapor leaks equal to or greater than 10,000 ppm and less than 50,000 ppm VOC as methane shall be repaired within 5 days of detecting the leak and re-monitored using EPA Method 21 upon completion of the repair. Vapor leaks equal to or greater than 1,000 ppm and less than 10,000 ppm VOC as methane shall be repaired within 14 days of leak detection and shall be re-monitored using EPA Method 21 upon completion of the repair. [District Rule 2201] Federally Enforceable Through Title V Permit
21. Upon detection of a leak, permittee shall tag the leak with a uniquely numbered tag, and shall record the leak location, component leaking, identification tag number, leak magnitude, date of leak detection, date of repair, method of repair, and post-repair monitoring measurement. Such records of leaks shall be maintained current and shall be made readily available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

22. Components not accessible for EPA Method 21 inspection shall be visually and auditorily checked for leaks at least weekly and shall be monitored using EPA Method 21 at least annually. Any leak detected visually or auditorially shall be recorded and the leak shall be repaired within 14 days of leak detection and shall be re-monitored using EPA Method 21 upon completion of the repair. Any leak detected using EPA Method 21 shall be repaired according the leak magnitude as described above and shall be re-monitored using EPA Method 21 upon completion of the repair. [District Rule 2201] Federally Enforceable Through Title V Permit
23. In addition to the requirements above, pressure relief devices shall be inspected and monitored for leaks within 3 days of any known, likely, or suspected venting of such devices. [District Rule 2201] Federally Enforceable Through Title V Permit
24. True vapor pressure of any liquid introduced in this permit unit shall be less than 0.5 psia at (or before) tank liquid inlet and at tank storage temperature. [District Rule 4623] Federally Enforceable Through Title V Permit
25. Permittee shall conduct true vapor pressure (TVP) testing of the organic liquid stored in this tank, or a representative tank as provided in Section 6.2.1.1 of District Rule 4623, 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. [District Rule 4623, 6.2] Federally Enforceable Through Title V Permit
26. 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, 6.4] Federally Enforceable Through Title V Permit
27. 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, 6.4] Federally Enforceable Through Title V Permit
28. True Vapor Pressure (TVP) of any organic liquid, except for crude oil with an API gravity of 20 degrees or less, shall be determined by measuring the Reid Vapor Pressure (RVP) using ASTM D 323, and converting the RVP to TVP at the tank's maximum organic liquid storage temperature. The conversion of RVP to TVP shall be done in accordance with the procedures in Appendix B. Appendix B is an excerpt from the oil and gas section of "California Air Resources Boards (ARB) Technical Guidance Document to the Criteria and Guidelines Regulation for AB 2588", dated August 1989. As an alternative, the TVP of crude oil with an API gravity range of greater than 26 degrees up to 30 degrees may be determined by using other equivalent test methods approved by APCO, ARB and EPA. [District Rule 4623, 6.4] Federally Enforceable Through Title V Permit
29. 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, 6.2] Federally Enforceable Through Title V Permit
30. 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, 6.3] Federally Enforceable Through Title V Permit
31. 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, 6.3] Federally Enforceable Through Title V Permit
32. The permittee shall keep accurate records of the dates of inspection and monitoring and the components inspected and monitored. [District Rule 2201] Federally Enforceable Through Title V Permit
33. Permittee shall provide District with a copy of D.O.G.G.R. approval for each vapor disposal well prior to use for vapor injection. [District Rule 1070] Federally Enforceable Through Title V Permit
34. All records required to be maintained by this permit shall be maintained for a period of at least 5 years and shall be made readily available for District inspection upon request. [District Rule 4623, 6.3] Federally Enforceable Through Title V Permit
35. Formerly S-1143-22. [District Rule 2010] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1131-891-17 **EXPIRATION DATE:** 02/28/2017

SECTION: SE04 **TOWNSHIP:** 29S **RANGE:** 28E

EQUIPMENT DESCRIPTION:
5,000 BBL FIXED ROOF PETROLEUM STORAGE TANK WITH VAPOR CONTROL SYSTEM LISTED ON S-1131-885

PERMIT UNIT REQUIREMENTS

1. Tank is authorized to receive fluids from facilities S-1131 and S-1127. [District Rule 2201] Federally Enforceable Through Title V Permit
2. Well vent vapor control systems S-1131-903 and S-1131-909 may discharge vapors into compressor suction of this operation. [District Rule 2201] Federally Enforceable Through Title V Permit
3. The overall efficiency of the tank vapor collection and control system shall be maintained at no less than 99%. [District Rule 2201] Federally Enforceable Through Title V Permit
4. VOC emission rate from vapor service components associated with this tank, up to the tie-in with the vapor recovery unit trunk-line, shall not exceed 5.33 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Permittee shall maintain an accurate fugitive component count and resultant emissions calculated using emission factors from U.S. EPA Publication 453/R-95-017, or other District-approved emission factors. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Steam generators authorized to incinerate collected VOC vapors are S-1131-877,'-880, '-881, '-882, '-883, and '-908. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Fluids stored or handled by tank shall be routed exclusively to the vapor-controlled "Surge" tanks at Station 36 (S-1131-598, '-629, '-630, '-638, '-641, '-650, '-651, and '-1097). [District Rule 2201] Federally Enforceable Through Title V Permit
8. This permit authorizes tank cleaning that is not the result of breakdowns or poor maintenance as a routine maintenance activity. [District Rule 2080] Federally Enforceable Through Title V Permit
9. Permittee shall conduct tank cleaning and maintenance operations in accordance with District approved procedure as described in this permit. [District Rule 2080] Federally Enforceable Through Title V Permit
10. Tank may be disconnected from vapor control system during District approved cleaning and maintenance procedures as described in this permit. [District Rule 2010] Federally Enforceable Through Title V Permit
11. Permittee shall notify the District Compliance division at least 24 hours before tank cleaning and vapor control system disconnection and within 72 hours after restoring crude oil flow to the tank. [District Rule 2080] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

12. Prior to opening the tank to allow tank cleaning one of the following procedures must be followed: 1) operate the vapor control system for at least 24 hours after all the liquid in the tank has been drained; or 2) use liquid displacement, conducted by filling the tank with a suitable liquid such as water, clean produced water, or organic liquids with a TVP less than 0.5 psia; or conducted by floating the oil pad off with water such that 90% of the tank liquid capacity is displaced; or 3) vent the tank to the vapor control system until the vapor concentration is less than 10% of the lower explosive limit (LEL) or 5,000 ppmv whichever is less; or 4) displace vapors by filling the tank with a suitable gas, including air, nitrogen, carbon dioxide, or natural gas containing less than 10% VOC by weight, until a vapor displacement equivalent to at least 2.3 times the tank capacity is achieved; or 5) vent the tank to the vapor control system for a length of time determined by the following relationship: $t = 2.3\ V/Q$, where t = time, V = tank volume (cubic feet), and Q= flow rate to the vapor control system as determined using appropriate engineering calculations . [District Rule 2080] Federally Enforceable Through Title V Permit
13. The tank shall be cleaned using one of the following methods: water, hot water, solvents with an initial boiling point of greater than 302 F, solvents with a vapor pressure of less than 0.5 psia, or solvents with 50 grams VOC per liter or less. The tank sediment may be used for road mix as allowed by Section 6.17 of District Rule 2020. [District Rule 2080] Federally Enforceable Through Title V Permit
14. Steam cleaning shall be allowed only during December through March, or at locations where wastewater treatment facilities are limited. [District Rule 2080] Federally Enforceable Through Title V Permit
15. Prior to reintroducing crude oil/water to the tank, the tank shall be filled to the maximum possible level with water, the tank vapor control system shall be reactivated and pressure/relief valves closed, and the liquid level shall be adjusted as necessary. [District Rule 2080] Federally Enforceable Through Title V Permit
16. Within 48 hours after refilling the tank with crude oil/water, the pressure relief valve seats and hatch seals shall be inspected for leaks using EPA method 21 and the regular tank maintenance and inspection program shall resume. [District Rule 2080] Federally Enforceable Through Title V Permit
17. Permittee shall maintain records of each period of cleaning and maintenance when the tank is disconnected or isolated from the vapor control system. Records shall include the date that tank cleaning was initiated, the date tank cleaning was completed, the method of tank cleaning used, and a description of internal and external tank repairs and maintenance performed. Such records shall be retained for a period of at least 5 years and shall be made available for District inspection upon request. [District Rule 2080] Federally Enforceable Through Title V Permit
18. Tank shall be equipped with an operational and calibrated stored liquid temperature indicator. [District Rule 2201] Federally Enforceable Through Title V Permit
19. Tank roof, tank shell, tank vapor space appurtances, vapor control system piping, and vapor control system components shall be inspected and monitored using EPA Method 21 at least monthly. Items found to be not leaking may then be inspected and monitored at least once every 3 months until a leak is detected at which time the inspection and monitoring frequency shall revert to monthly until such time that two consecutive monthly inspections reveal with no leaks at which time the inspection and monitoring frequency shall revert to at least once every 3 months. [District Rule 2201] Federally Enforceable Through Title V Permit
20. A visible mist, liquid dripping at the rate of more than 3 drops per minute, and vapor leaks of 50,000 ppm or greater VOC as methane shall be repaired as expeditiously as possible but in no case beyond 24 hours of detecting the leak and shall be re-monitored using EPA Method 21 upon completion of the repair. Vapor leaks equal to or greater than 10,000 ppm and less than 50,000 ppm VOC as methane shall be repaired within 5 days of detecting the leak and re-monitored using EPA Method 21 upon completion of the repair. Vapor leaks equal to or greater than 1,000 ppm and less than 10,000 ppm VOC as methane shall be repaired within 14 days of leak detection and shall be re-monitored using EPA Method 21 upon completion of the repair. [District Rule 2201] Federally Enforceable Through Title V Permit
21. Upon detection of a leak, permittee shall tag the leak with a uniquely numbered tag, and shall record the leak location, component leaking, identification tag number, leak magnitude, date of leak detection, date of repair, method of repair, and post-repair monitoring measurement. Such records of leaks shall be maintained current and shall be made readily available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

22. Components not accessible for EPA Method 21 inspection shall be visually and auditorily checked for leaks at least weekly and shall be monitored using EPA Method 21 at least annually. Any leak detected visually or auditorially shall be recorded and the leak shall be repaired within 14 days of leak detection and shall be re-monitored using EPA Method 21 upon completion of the repair. Any leak detected using EPA Method 21 shall be repaired according the leak magnitude as described above and shall be re-monitored using EPA Method 21 upon completion of the repair. [District Rule 2201] Federally Enforceable Through Title V Permit
23. In addition to the requirements above, pressure relief devices shall be inspected and monitored for leaks within 3 days of any known, likely, or suspected venting of such devices. [District Rule 2201] Federally Enforceable Through Title V Permit
24. True vapor pressure of any liquid introduced in this permit unit shall be less than 0.5 psia at (or before) tank liquid inlet and at tank storage temperature. [District Rule 4623, 4.4] Federally Enforceable Through Title V Permit
25. Permittee shall conduct true vapor pressure (TVP) testing of the organic liquid stored in this tank, or a representative tank as provided in Section 6.2.1.1 of District Rule 4623, 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. [District Rule 4623, 6.2] Federally Enforceable Through Title V Permit
26. 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, 6.4] Federally Enforceable Through Title V Permit
27. 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, 6.4] Federally Enforceable Through Title V Permit
28. True Vapor Pressure (TVP) of any organic liquid, except for crude oil with an API gravity of 20 degrees or less, shall be determined by measuring the Reid Vapor Pressure (RVP) using ASTM D 323, and converting the RVP to TVP at the tank's maximum organic liquid storage temperature. The conversion of RVP to TVP shall be done in accordance with the procedures in Appendix B. Appendix B is an excerpt from the oil and gas section of "California Air Resources Boards (ARB) Technical Guidance Document to the Criteria and Guidelines Regulation for AB 2588", dated August 1989. As an alternative, the TVP of crude oil with an API gravity range of greater than 26 degrees up to 30 degrees may be determined by using other equivalent test methods approved by APCO, ARB and EPA. [District Rule 4623, 6.4] Federally Enforceable Through Title V Permit
29. 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, 6.2] Federally Enforceable Through Title V Permit
30. 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, 6.3] Federally Enforceable Through Title V Permit
31. 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, 6.3] Federally Enforceable Through Title V Permit
32. The permittee shall keep accurate records of the dates of inspection and monitoring and the components inspected and monitored. [District Rule 2201] Federally Enforceable Through Title V Permit
33. Permittee shall provide District with a copy of D.O.G.G.R. approval for each vapor disposal well prior to use for vapor injection. [District Rule 1070] Federally Enforceable Through Title V Permit
34. All records required to be maintained by this permit shall be maintained for a period of at least 5 years and shall be made readily available for District inspection upon request. [District Rule 4623, 6.3] Federally Enforceable Through Title V Permit
35. Formerly S-1143-27. [District Rule 2010] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1131-892-17 **EXPIRATION DATE:** 02/28/2017

SECTION: SE04 **TOWNSHIP:** 29S **RANGE:** 28E

EQUIPMENT DESCRIPTION:
5,000 BBL FIXED ROOF PETROLEUM STORAGE TANK WITH VAPOR CONTROL SYSTEM LISTED ON S-1131-885

PERMIT UNIT REQUIREMENTS

1. Tank is authorized to receive fluids from facilities S-1131 and S-1127. [District Rule 2201] Federally Enforceable Through Title V Permit
2. Well vent vapor control systems S-1131-903 and S-1131-909 may discharge vapors into compressor suction of this operation. [District Rule 2201] Federally Enforceable Through Title V Permit
3. The overall efficiency of the tank vapor collection and control system shall be maintained at no less than 99%. [District Rule 2201] Federally Enforceable Through Title V Permit
4. VOC emission rate from vapor service components associated with this tank, up to the tie-in with the vapor recovery unit trunk-line, shall not exceed 5.33 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Permittee shall maintain an accurate fugitive component count and resultant emissions calculated using emission factors from U.S. EPA Publication 453/R-95-017, or other District-approved emission factors. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Steam generators authorized to incinerate collected VOC vapors are S-1131-877,'-880, '-881, '-882, '-883, and '-908. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Fluids stored or handled by tank shall be routed exclusively to the vapor-controlled "Surge" tanks at Station 36 (S-1131-598, '-629, '-630, '-638, '-641, '-650, '-651, and '-1097). [District Rule 2201] Federally Enforceable Through Title V Permit
8. This permit authorizes tank cleaning that is not the result of breakdowns or poor maintenance as a routine maintenance activity. [District Rule 2080] Federally Enforceable Through Title V Permit
9. Permittee shall conduct tank cleaning and maintenance operations in accordance with District approved procedure as described in this permit. [District Rule 2080] Federally Enforceable Through Title V Permit
10. Tank may be disconnected from vapor control system during District approved cleaning and maintenance procedures as described in this permit. [District Rule 2010] Federally Enforceable Through Title V Permit
11. Permittee shall notify the District Compliance division at least 24 hours before tank cleaning and vapor control system disconnection and within 72 hours after restoring crude oil flow to the tank. [District Rule 2080] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

12. Prior to opening the tank to allow tank cleaning one of the following procedures must be followed: 1) operate the vapor control system for at least 24 hours after all the liquid in the tank has been drained; or 2) use liquid displacement, conducted by filling the tank with a suitable liquid such as water, clean produced water, or organic liquids with a TVP less than 0.5 psia; or conducted by floating the oil pad off with water such that 90% of the tank liquid capacity is displaced; or 3) vent the tank to the vapor control system until the vapor concentration is less than 10% of the lower explosive limit (LEL) or 5,000 ppmv whichever is less; or 4) displace vapors by filling the tank with a suitable gas, including air, nitrogen, carbon dioxide, or natural gas containing less than 10% VOC by weight, until a vapor displacement equivalent to at least 2.3 times the tank capacity is achieved; or 5) vent the tank to the vapor control system for a length of time determined by the following relationship: t = 2.3 V/Q, where t = time, V = tank volume (cubic feet), and Q= flow rate to the vapor control system as determined using appropriate engineering calculations . [District Rule 2080] Federally Enforceable Through Title V Permit
13. The tank shall be cleaned using one of the following methods: water, hot water, solvents with an initial boiling point of greater than 302 F, solvents with a vapor pressure of less than 0.5 psia, or solvents with 50 grams VOC per liter or less. The tank sediment may be used for road mix as allowed by Section 6.17 of District Rule 2020. [District Rule 2080] Federally Enforceable Through Title V Permit
14. Steam cleaning shall be allowed only during December through March, or at locations where wastewater treatment facilities are limited. [District Rule 2080] Federally Enforceable Through Title V Permit
15. Prior to reintroducing crude oil/water to the tank, the tank shall be filled to the maximum possible level with water, the tank vapor control system shall be reactivated and pressure/relief valves closed, and the liquid level shall be adjusted as necessary. [District Rule 2080] Federally Enforceable Through Title V Permit
16. Within 48 hours after refilling the tank with crude oil/water, the pressure relief valve seats and hatch seals shall be inspected for leaks using EPA method 21 and the regular tank maintenance and inspection program shall resume. [District Rule 2080] Federally Enforceable Through Title V Permit
17. Permittee shall maintain records of each period of cleaning and maintenance when the tank is disconnected or isolated from the vapor control system. Records shall include the date that tank cleaning was initiated, the date tank cleaning was completed, the method of tank cleaning used, and a description of internal and external tank repairs and maintenance performed. Such records shall be retained for a period of at least 5 years and shall be made available for District inspection upon request. [District Rule 2080] Federally Enforceable Through Title V Permit
18. Tank shall be equipped with an operational and calibrated stored liquid temperature indicator. [District Rule 2201] Federally Enforceable Through Title V Permit
19. Tank roof, tank shell, tank vapor space appurtances, vapor control system piping, and vapor control system components shall be inspected and monitored using EPA Method 21 at least monthly. Items found to be not leaking may then be inspected and monitored at least once every 3 months until a leak is detected at which time the inspection and monitoring frequency shall revert to monthly until such time that two consecutive monthly inspections reveal with no leaks at which time the inspection and monitoring frequency shall revert to at least once every 3 months. [District Rule 2201] Federally Enforceable Through Title V Permit
20. A visible mist, liquid dripping at the rate of more than 3 drops per minute, and vapor leaks of 50,000 ppm or greater VOC as methane shall be repaired as expeditiously as possible but in no case beyond 24 hours of detecting the leak and shall be re-monitored using EPA Method 21 upon completion of the repair. Vapor leaks equal to or greater than 10,000 ppm and less than 50,000 ppm VOC as methane shall be repaired within 5 days of detecting the leak and re-monitored using EPA Method 21 upon completion of the repair. Vapor leaks equal to or greater than 1,000 ppm and less than 10,000 ppm VOC as methane shall be repaired within 14 days of leak detection and shall be re-monitored using EPA Method 21 upon completion of the repair. [District Rule 2201] Federally Enforceable Through Title V Permit
21. Upon detection of a leak, permittee shall tag the leak with a uniquely numbered tag, and shall record the leak location, component leaking, identification tag number, leak magnitude, date of leak detection, date of repair, method of repair, and post-repair monitoring measurement. Such records of leaks shall be maintained current and shall be made readily available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

22. Components not accessible for EPA Method 21 inspection shall be visually and auditorily checked for leaks at least weekly and shall be monitored using EPA Method 21 at least annually. Any leak detected visually or auditorially shall be recorded and the leak shall be repaired within 14 days of leak detection and shall be re-monitored using EPA Method 21 upon completion of the repair. Any leak detected using EPA Method 21 shall be repaired according the leak magnitude as described above and shall be re-monitored using EPA Method 21 upon completion of the repair. [District Rule 2201] Federally Enforceable Through Title V Permit
23. In addition to the requirements above, pressure relief devices shall be inspected and monitored for leaks within 3 days of any known, likely, or suspected venting of such devices. [District Rule 2201] Federally Enforceable Through Title V Permit
24. True vapor pressure of any liquid introduced in this permit unit shall be less than 0.5 psia at (or before) tank liquid inlet and at tank storage temperature. [District Rule 4623, 4.4] Federally Enforceable Through Title V Permit
25. Permittee shall conduct true vapor pressure (TVP) testing of the organic liquid stored in this tank, or a representative tank as provided in Section 6.2.1.1 of District Rule 4623, 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. [District Rule 4623, 6.2] Federally Enforceable Through Title V Permit
26. 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, 6.4] Federally Enforceable Through Title V Permit
27. 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, 6.4] Federally Enforceable Through Title V Permit
28. True Vapor Pressure (TVP) of any organic liquid, except for crude oil with an API gravity of 20 degrees or less, shall be determined by measuring the Reid Vapor Pressure (RVP) using ASTM D 323, and converting the RVP to TVP at the tank's maximum organic liquid storage temperature. The conversion of RVP to TVP shall be done in accordance with the procedures in Appendix B. Appendix B is an excerpt from the oil and gas section of "California Air Resources Boards (ARB) Technical Guidance Document to the Criteria and Guidelines Regulation for AB 2588", dated August 1989. As an alternative, the TVP of crude oil with an API gravity range of greater than 26 degrees up to 30 degrees may be determined by using other equivalent test methods approved by APCO, ARB and EPA. [District Rule 4623, 6.4] Federally Enforceable Through Title V Permit
29. 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, 6.2] Federally Enforceable Through Title V Permit
30. 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, 6.3] Federally Enforceable Through Title V Permit
31. 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, 6.3] Federally Enforceable Through Title V Permit
32. The permittee shall keep accurate records of the dates of inspection and monitoring and the components inspected and monitored. [District Rule 2201] Federally Enforceable Through Title V Permit
33. Permittee shall provide District with a copy of D.O.G.G.R. approval for each vapor disposal well prior to use for vapor injection. [District Rule 1070] Federally Enforceable Through Title V Permit
34. All records required to be maintained by this permit shall be maintained for a period of at least 5 years and shall be made readily available for District inspection upon request. [District Rule 4623, 6.3] Federally Enforceable Through Title V Permit
35. Formerly S-1143-28. [District Rule 2010] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1131-1128-0 **EXPIRATION DATE:** 02/28/2017

SECTION: NW09 **TOWNSHIP:** 29S **RANGE:** 28E

EQUIPMENT DESCRIPTION:
1000 BBL FIXED ROOF PETROLEUM STORAGE TANK #7 WITH VAPOR CONTROL SYSTEM SHARED WITH TANKS S-1131-1129, -1130, -1132, AND -1133 (KCLC LEASE)

PERMIT UNIT REQUIREMENTS

1. Permittee shall inform District upon startup of make, model, and manufacturer of sulfur control equipment if installed. [District Rule 2201]
2. Tank vapors shall only be combusted in permit exempt 1.9 MMBtu/hr and 0.8 MMBtu/hr heaters. [District Rule 2201]
3. Gas combusted in 1.9 MMBtu/hr and 0.8 MMBtu/hr heaters shall contain no more that 5% by weight hydrocarbons heavier than butane and no more than 1.0 gr of total sulfur per 100 standard cubic feet of gas. [District Rule 2020]
4. Permittee shall determine concentration of VOC and sulfur in vapor control gas weekly for eight consecutive weeks. After demonstrating compliance for eight consecutive weeks testing may be conducted on a quarterly basis. [District Rule 1081 and 2201]
5. Weekly gas sampling for sulfur shall be performed using Draeger tubes and quarterly gas analysis using ASTM method D3246 or double GC for H2S and mercaptans. First of the weekly sulfur analyses shall be done using ASTM method D3246 or double GC for H2S and mercaptans. [District Rule 2201]
6. VOC content of gas shall be determined using ASTM D-3588, EPA Method 18, or EPA Method 25A. [District Rule 2201]
7. The tank shall be equipped with a vapor loss prevention system capable of collecting all VOC emissions and preventing their emissions to the atmosphere at an efficiency of at least 99% by weight. [District Rules 2201 and 4623, 5.3.1]
8. All tank gauging or sampling device on a tank vented to the vapor recovery system shall be equipped with a gas tight cover which shall be closed at all times except during gauging or sampling. [District Rule 4623, 5.3.2]
9. Fugitive VOC emissions rate shall be, calculated using CAPCOA California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities Table IV-2c, Oil and Gas Production Screening Value Ranges Emission Factors (Feb 1999), from the total number of components from this tank. [District Rule 2201]
10. VOC fugitive emissions from the components in gas service on the tank shall not exceed 0.1 lb/day. [District Rule 2201]
11. VOC fugitive emissions from the components in gas service on vapor control system including separator and scrubber shall not exceed 0.5 lb/day. [District Rule 2201]
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 shall be reported as a deviation. [District Rule 2201]

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

13. 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, 5.7 (Table 3)]
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 4623, 5.7 (Table 3)]
15. 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 can not 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 that the total time to minimize and eliminate the leak shall exceed 56 hours after detection. [District Rule 4623, 5.7 (Table 3)]
16. Leaking tank components affixed to the tank or within five feet of the tank that have been discovered by the operator and that have been immediately tagged and repaired within the specified deadlines, shall not constitute a violation of the District Rule 4623. However, leaking components discovered during inspections by District staff that were not previously identified and/or tagged by the operator, and/or any leaks that were not repaired within specified deadlines, shall constitute a violation of the District Rule 4623. [District Rule 4623, 5.7 (Table 3)]
17. If a component type for a given tank is found to leak during an annual inspection, then conduct quarterly inspections of that component type on the tank or tank system for four consecutive quarters. If a component type is found to have no leak after four consecutive quarterly inspections, then revert to annual inspections. [District Rule 4623, 5.7 (Table 3)]
18. Any component found to be leaking on two consecutive annual inspections is in violation of the District Rule 4623, even if it is under the voluntary inspection and maintenance program. [District Rule 4623, 5.7 (Table 3)]
19. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date and time of leak detection, and method of detection; 3) Date and time of leak repair, and emission level of recheck after leak is repaired; 4) Method used to minimize the leak to lowest possible level within 8 hours after detection. [District Rule 4623]
20. Permittee shall maintain records of number and type of components installed and calculated fugitive emissions. Permittee shall update such records when new components are installed. [District Rule NSR]
21. This permit authorizes tank cleaning that is not the result of breakdowns or poor maintenance as a routine maintenance activity. [District Rule 2020]
22. Interior tank cleaning shall be performed in accordance with provisions specified in Table 6 of Rule 4623. [District Rules 2201 & 4623]
23. Permittee shall keep in their facility at all times a copy of the letter sent to the APCO requesting participation in the Rule 4623 Fixed Roof Tank Preventive Inspection and Maintenance Program, and Tank Interior Cleaning Program, and maintain the records of annual tank inspections, maintenance, and cleaning to document the participation in the program. [District Rule 4623, 5.7]
24. The operator of a fixed roof tank shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 1070]
25. Formerly permit S-1624-53

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1131-1129-0 **EXPIRATION DATE:** 02/28/2017

SECTION: NW09 **TOWNSHIP:** 29S **RANGE:** 28E

EQUIPMENT DESCRIPTION:
500 BBL FIXED ROOF CRUDE OIL STOCK TANK #2 SERVED BY VAPOR CONTROL SYSTEM LISTED ON S-1131-1128 (KCLC LEASE)

PERMIT UNIT REQUIREMENTS

1. Tank shall only vent to vapor control system listed on S-1131-1128. [District Rules 2201]
2. All tank gauging or sampling device on a tank vented to the vapor recovery system shall be equipped with a gas tight cover which shall be closed at all times except during gauging or sampling. [District Rule 4623, 5.3.2]
3. Fugitive VOC emissions rate shall be, calculated using CAPCOA California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities Table IV-2c, Oil and Gas Production Screening Value Ranges Emission Factors (Feb 1999), from the total number of components from this tank. [District Rule 2201]
4. VOC fugitive emissions from the components in gas service on the tank shall not exceed 0.1 lb/day. [District Rule 2201]
5. A leak-free condition is defined as a condition without a gas leak. A gas leak is defined as a reading in excess of 10,000 ppmv, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21. A reading in excess of 10,000 ppmv above background is a violation of this permit and shall be reported as a deviation. [District Rule 2201]
6. 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, 5.7 (Table 3)]
7. 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 4623, 5.7 (Table 3)]
8. Upon detection of any leaking components (having a gas leak >10,000 ppmv, measured in accordance with EPA Method 21 by a portable hydrocarbon detection instrument that is calibrated with methane) operator shall: (a) Eliminate or minimize the leak within 8 hours after detection. (b) If the leak can not be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices; and eliminate the leak within 48 hours after detection. (c) In no event that the total time to minimize and eliminate the leak shall exceed 56 hours after detection. [District Rule 4623, 5.7 (Table 3)]
9. Leaking tank components affixed to the tank or within five feet of the tank that have been discovered by the operator and that have been immediately tagged and repaired within the specified deadlines, shall not constitute a violation of the District Rule 4623. However, leaking components discovered during inspections by District staff that were not previously identified and/or tagged by the operator, and/or any leaks that were not repaired within specified deadlines, shall constitute a violation of the District Rule 4623. [District Rule 4623, 5.7 (Table 3)]

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

10. If a component type for a given tank is found to leak during an annual inspection, then conduct quarterly inspections of that component type on the tank or tank system for four consecutive quarters. If a component type is found to have no leak after four consecutive quarterly inspections, then revert to annual inspections. [District Rule 4623, 5.7 (Table 3)]
11. Any component found to be leaking on two consecutive annual inspections is in violation of the District Rule 4623, even if it is under the voluntary inspection and maintenance program. [District Rule 4623, 5.7 (Table 3)]
12. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date and time of leak detection, and method of detection; 3) Date and time of leak repair, and emission level of recheck after leak is repaired; 4) Method used to minimize the leak to lowest possible level within 8 hours after detection. [District Rule 4623]
13. Permittee shall maintain records of number and type of components installed and calculated fugitive emissions. Permittee shall update such records when new components are installed. [District Rule NSR]
14. This permit authorizes tank cleaning that is not the result of breakdowns or poor maintenance as a routine maintenance activity. [District Rule 2020]
15. Interior tank cleaning shall be performed in accordance with provisions specified in Table 6 of Rule 4623. [District Rules 2201 & 4623]
16. Permittee shall keep in their facility at all times a copy of the letter sent to the APCO requesting participation in the Rule 4623 Fixed Roof Tank Preventive Inspection and Maintenance Program, and Tank Interior Cleaning Program, and maintain the records of annual tank inspections, maintenance, and cleaning to document the participation in the program. [District Rule 4623, 5.7]
17. The operator of a fixed roof tank shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 1070]
18. Formerly permit S-1624-126

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1131-1130-0 **EXPIRATION DATE:** 02/28/2017

SECTION: NW09 **TOWNSHIP:** 29S **RANGE:** 28E

EQUIPMENT DESCRIPTION:
1,000 BBL FIXED ROOF CRUDE OIL STOCK TANK SERVED BY VAPOR CONTROL SYSTEM LISTED ON S-1131-1128 (KCLC LEASE)

PERMIT UNIT REQUIREMENTS

1. Tank shall only vent to vapor control system listed on S-1131-1128. [District Rules 2201]
2. All tank gauging or sampling device on a tank vented to the vapor recovery system shall be equipped with a gas tight cover which shall be closed at all times except during gauging or sampling. [District Rule 4623, 5.3.2]
3. Fugitive VOC emissions rate shall be, calculated using CAPCOA California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities Table IV-2c, Oil and Gas Production Screening Value Ranges Emission Factors (Feb 1999), from the total number of components from this tank. [District Rule 2201]
4. VOC fugitive emissions from the components in gas service on the tank shall not exceed 0.1 lb/day. [District Rule 2201]
5. A leak-free condition is defined as a condition without a gas leak. A gas leak is defined as a reading in excess of 10,000 ppmv, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21. A reading in excess of 10,000 ppmv above background is a violation of this permit and shall be reported as a deviation. [District Rule 2201]
6. 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, 5.7 (Table 3)]
7. 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 4623, 5.7 (Table 3)]
8. Upon detection of any leaking components (having a gas leak >10,000 ppmv, measured in accordance with EPA Method 21 by a portable hydrocarbon detection instrument that is calibrated with methane) operator shall: (a) Eliminate or minimize the leak within 8 hours after detection. (b) If the leak can not be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices; and eliminate the leak within 48 hours after detection. (c) In no event that the total time to minimize and eliminate the leak shall exceed 56 hours after detection. [District Rule 4623, 5.7 (Table 3)]
9. Leaking tank components affixed to the tank or within five feet of the tank that have been discovered by the operator and that have been immediately tagged and repaired within the specified deadlines, shall not constitute a violation of the District Rule 4623. However, leaking components discovered during inspections by District staff that were not previously identified and/or tagged by the operator, and/or any leaks that were not repaired within specified deadlines, shall constitute a violation of the District Rule 4623. [District Rule 4623, 5.7 (Table 3)]

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

10. If a component type for a given tank is found to leak during an annual inspection, then conduct quarterly inspections of that component type on the tank or tank system for four consecutive quarters. If a component type is found to have no leak after four consecutive quarterly inspections, then revert to annual inspections. [District Rule 4623, 5.7 (Table 3)]
11. Any component found to be leaking on two consecutive annual inspections is in violation of the District Rule 4623, even if it is under the voluntary inspection and maintenance program. [District Rule 4623, 5.7 (Table 3)]
12. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date and time of leak detection, and method of detection; 3) Date and time of leak repair, and emission level of recheck after leak is repaired; 4) Method used to minimize the leak to lowest possible level within 8 hours after detection. [District Rule 4623]
13. Permittee shall maintain records of number and type of components installed and calculated fugitive emissions. Permittee shall update such records when new components are installed. [District Rule NSR]
14. This permit authorizes tank cleaning that is not the result of breakdowns or poor maintenance as a routine maintenance activity. [District Rule 2020]
15. Interior tank cleaning shall be performed in accordance with provisions specified in Table 6 of Rule 4623. [District Rules 2201 & 4623]
16. Permittee shall keep in their facility at all times a copy of the letter sent to the APCO requesting participation in the Rule 4623 Fixed Roof Tank Preventive Inspection and Maintenance Program, and Tank Interior Cleaning Program, and maintain the records of annual tank inspections, maintenance, and cleaning to document the participation in the program. [District Rule 4623, 5.7]
17. The operator of a fixed roof tank shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 1070]
18. Formerly permit S-1624-127

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1131-1131-0 **EXPIRATION DATE:** 02/28/2017

SECTION: NW 09 **TOWNSHIP:** 29S **RANGE:** 28E

EQUIPMENT DESCRIPTION:
THERMALLY ENHANCED OIL RECOVERY OPERATION WITH 20 CYCLIC WELLS SERVED BY CASING GAS COLLECTION SYSTEM (KCLC LEASE)

PERMIT UNIT REQUIREMENTS

1. TEOR gas shall only be combusted in permit exempt 0.8 MMBtu/hr heater. [District Rule 2201]
2. Gas combusted in 0.8 MMBtu/hr heater shall contain no more that 5% by weight hydrocarbons heavier than butane and no more than 1.0 gr of total sulfur per 100 standard cubic feet of gas. [District Rule 2020]
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. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
5. Fugitive VOC emissions from TEOR operation shall not exceed 1.0 lb/day. [District Rule 2201]
6. A leak shall be defined as the dripping of VOC-containing liquid or the detection of a concentration of total organic compound, above background, as determined according to EPA Method 21 using an instrument calibrated with methane, that exceeds the values specified in Table 1, Section 3.20.2.1 and Section 3.20.2.2 of Rule 4401. [District Rule 4401, 3.20.2]
7. Gas leaks exceeding 10,000 ppmv are a violation of this permit. [District Rule 2201]
8. 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. [District Rule 4401, 4.1]
9. 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]
10. The control efficiency of any VOC control device, measured and calculated as carbon, shall be determined by EPA Method 18, 25 or 25a, as applicable. [District Rule 4401, 6.3.1]
11. 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]
12. The operator 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 and 6.6]
13. By January 30 of each year, the operator shall submit to the APCO for approval, in writing, an annual report indicating any changes to the existing approved OMP. [District Rule 4401, 6.7]

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

14. In accordance with the approved APCO- approved OMP, the operator shall meet all applicable operating, inspection and re-inspection, maintenance, component identification, recordkeeping, and notification requirements of Rule 4401 for all steam-enhanced crude oil production wells at this facility except for those wells and components specifically exempted in Section 4.0 of Rule 4401. [District Rule 4401, 5.6, 5.7, 5.8, 5.9, 6.1 and 6.6]
15. The operator shall perform leak inspections, other than audio visual, and measurements of gaseous leak concentration 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]
16. The operator shall maintain an inspection log that contains, at a minimum, all the information listed in Section 6.4 of Rule 4401. [District Rule 4401, 6.1.5 and 6.4]
17. Permittee shall determine VOC content of TEOR gas upon startup and annually thereafter. The VOC content shall be determined using the latest revision of ASTM Method Method E168, E169, or E260 as applicable. [District Rules 2201 and 4401, 6.3.2]
18. Permittee shall determine sulfur content of TEOR gas upon startup and quarterly thereafter. Gas analysis shall be performed using ASTM method D3246 or double GC for H2S and mercaptans. [District Rules 1081 and 2201]
19. Permittee shall maintain records of the date and well identification where steam injection or well stimulation occurs, current list of all thermally enhanced production wells associated with this operation and accurate fugitive component counts of components in gas service and resulting emissions calculated using the emission factors in the CAPCOA California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities, Table IV-2c, Oil and Gas Production Screening Value Ranges Emission Factors (Feb 1999) . [District Rules 2201 and 4401]
20. Permittee shall maintain records of concentration of total sulfur and VOCs in TEOR gas. [District Rules 2201 and 1070]
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 1070]
22. Formerly permit S-1624-161.

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1131-1132-0 **EXPIRATION DATE:** 02/28/2017

SECTION: NW 9 **TOWNSHIP:** 29S **RANGE:** 28E

EQUIPMENT DESCRIPTION:
1,500 BBL FIXED ROOF CRUDE OIL WASH TANK WITH P/V VALVE SERVED BY VAPOR CONTROL SYSTEM LISTED ON S-1131-1128 (KCLC LEASE)

PERMIT UNIT REQUIREMENTS

1. Tank shall only vent to vapor control system listed on S-1131-128. [District Rules 2201]
2. All tank gauging or sampling device on a tank vented to the vapor recovery system shall be equipped with a gas tight cover which shall be closed at all times except during gauging or sampling. [District Rule 4623, 5.3.2]
3. Fugitive VOC emissions rate shall be, calculated using CAPCOA California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities Table IV-2c, Oil and Gas Production Screening Value Ranges Emission Factors (Feb 1999), from the total number of components from this tank. [District Rule 2201]
4. VOC fugitive emissions from the components in gas service on the tank shall not exceed 0.5 lb/day. [District Rule 2201]
5. A leak-free condition is defined as a condition without a gas leak. A gas leak is defined as a reading in excess of 10,000 ppmv, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21. A reading in excess of 10,000 ppmv above background is a violation of this permit and shall be reported as a deviation. [District Rule 2201]
6. 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, 5.7 (Table 3)]
7. 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 4623, 5.7 (Table 3)]
8. Upon detection of any leaking components (having a gas leak >10,000 ppmv, measured in accordance with EPA Method 21 by a portable hydrocarbon detection instrument that is calibrated with methane) operator shall: (a) Eliminate or minimize the leak within 8 hours after detection. (b) If the leak can not be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices; and eliminate the leak within 48 hours after detection. (c) In no event that the total time to minimize and eliminate the leak shall exceed 56 hours after detection. [District Rule 4623, 5.7 (Table 3)]
9. Leaking tank components affixed to the tank or within five feet of the tank that have been discovered by the operator and that have been immediately tagged and repaired within the specified deadlines, shall not constitute a violation of the District Rule 4623. However, leaking components discovered during inspections by District staff that were not previously identified and/or tagged by the operator, and/or any leaks that were not repaired within specified deadlines, shall constitute a violation of the District Rule 4623. [District Rule 4623, 5.7 (Table 3)]

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

10. If a component type for a given tank is found to leak during an annual inspection, then conduct quarterly inspections of that component type on the tank or tank system for four consecutive quarters. If a component type is found to have no leak after four consecutive quarterly inspections, then revert to annual inspections. [District Rule 4623, 5.7 (Table 3)]
11. Any component found to be leaking on two consecutive annual inspections is in violation of the District Rule 4623, even if it is under the voluntary inspection and maintenance program. [District Rule 4623, 5.7 (Table 3)]
12. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date and time of leak detection, and method of detection; 3) Date and time of leak repair, and emission level of recheck after leak is repaired; 4) Method used to minimize the leak to lowest possible level within 8 hours after detection. [District Rule 4623]
13. Permittee shall maintain records of number and type of components installed and calculated fugitive emissions. Permittee shall update such records when new components are installed. [District Rule NSR]
14. This permit authorizes tank cleaning that is not the result of breakdowns or poor maintenance as a routine maintenance activity. [District Rule 2020]
15. Interior tank cleaning shall be performed in accordance with provisions specified in Table 6 of Rule 4623. [District Rules 2201 & 4623]
16. Permittee shall keep in their facility at all times a copy of the letter sent to the APCO requesting participation in the Rule 4623 Fixed Roof Tank Preventive Inspection and Maintenance Program, and Tank Interior Cleaning Program, and maintain the records of annual tank inspections, maintenance, and cleaning to document the participation in the program. [District Rule 4623, 5.7]
17. The operator of a fixed roof tank shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 1070]
18. Formerly permit S-1624-163

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1131-1133-0 **EXPIRATION DATE:** 02/28/2017

SECTION: NW09 **TOWNSHIP:** 29S **RANGE:** 28E

EQUIPMENT DESCRIPTION:
1,000 BBL FIXED ROOF CRUDE OIL STORAGE TANK SERVED BY VAPOR CONTROL SYSTEM LISTED ON S-1131-1128 (KCLC LEASE)

PERMIT UNIT REQUIREMENTS

1. Tank shall only vent to vapor control system listed on S-1131-1128. [District Rules 2201]
2. All tank gauging or sampling device on a tank vented to the vapor recovery system shall be equipped with a gas tight cover which shall be closed at all times except during gauging or sampling. [District Rule 4623, 5.3.2]
3. Fugitive VOC emissions rate shall be, calculated using CAPCOA California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities Table IV-2c, Oil and Gas Production Screening Value Ranges Emission Factors (Feb 1999), from the total number of components from this tank. [District Rule 2201]
4. VOC fugitive emissions from the components in gas service on the tank shall not exceed 0.1 lb/day. [District Rule 2201]
5. A leak-free condition is defined as a condition without a gas leak. A gas leak is defined as a reading in excess of 10,000 ppmv, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21. A reading in excess of 10,000 ppmv above background is a violation of this permit and shall be reported as a deviation. [District Rule 2201]
6. 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, 5.7 (Table 3)]
7. 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 4623, 5.7 (Table 3)]
8. Upon detection of any leaking components (having a gas leak >10,000 ppmv, measured in accordance with EPA Method 21 by a portable hydrocarbon detection instrument that is calibrated with methane) operator shall: (a) Eliminate or minimize the leak within 8 hours after detection. (b) If the leak can not be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices; and eliminate the leak within 48 hours after detection. (c) In no event that the total time to minimize and eliminate the leak shall exceed 56 hours after detection. [District Rule 4623, 5.7 (Table 3)]
9. Leaking tank components affixed to the tank or within five feet of the tank that have been discovered by the operator and that have been immediately tagged and repaired within the specified deadlines, shall not constitute a violation of the District Rule 4623. However, leaking components discovered during inspections by District staff that were not previously identified and/or tagged by the operator, and/or any leaks that were not repaired within specified deadlines, shall constitute a violation of the District Rule 4623. [District Rule 4623, 5.7 (Table 3)]

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

10. If a component type for a given tank is found to leak during an annual inspection, then conduct quarterly inspections of that component type on the tank or tank system for four consecutive quarters. If a component type is found to have no leak after four consecutive quarterly inspections, then revert to annual inspections. [District Rule 4623, 5.7 (Table 3)]
11. Any component found to be leaking on two consecutive annual inspections is in violation of the District Rule 4623, even if it is under the voluntary inspection and maintenance program. [District Rule 4623, 5.7 (Table 3)]
12. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date and time of leak detection, and method of detection; 3) Date and time of leak repair, and emission level of recheck after leak is repaired; 4) Method used to minimize the leak to lowest possible level within 8 hours after detection. [District Rule 4623]
13. Permittee shall maintain records of number and type of components installed and calculated fugitive emissions. Permittee shall update such records when new components are installed. [District Rule NSR]
14. This permit authorizes tank cleaning that is not the result of breakdowns or poor maintenance as a routine maintenance activity. [District Rule 2020]
15. Interior tank cleaning shall be performed in accordance with provisions specified in Table 6 of Rule 4623. [District Rules 2201 & 4623]
16. Permittee shall keep in their facility at all times a copy of the letter sent to the APCO requesting participation in the Rule 4623 Fixed Roof Tank Preventive Inspection and Maintenance Program, and Tank Interior Cleaning Program, and maintain the records of annual tank inspections, maintenance, and cleaning to document the participation in the program. [District Rule 4623, 5.7]
17. The operator of a fixed roof tank shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 1070]
18. Formerly permit S--1131-166

ATTACHMENT B

Authority to Construct
#S-1131-885-27, '-886-20, '-891-19, '-892-19, '-1128-1, '-1129-1, '-1130-1, '-1131-1, '-1132-1, and '-1133-1

San Joaquin Valley
AIR POLLUTION CONTROL DISTRICT

HEALTHY AIR LIVING™

AUTHORITY TO CONSTRUCT

PERMIT NO: S-1131-885-27 **ISSUANCE DATE:** 05/28/2013

LEGAL OWNER OR OPERATOR: CHEVRON USA INC
MAILING ADDRESS: PO BOX 1392
BAKERSFIELD, CA 93302

LOCATION: HEAVY OIL CENTRAL
KERN COUNTY, CA

SECTION: SW03 **TOWNSHIP:** 29S **RANGE:** 28E

EQUIPMENT DESCRIPTION:
MODIFICATION OF 5,000 BBL FIXED ROOF PETROLEUM STORAGE TANK #3K-L75 WITH VAPOR CONTROL SYSTEM: ALLOW RECEIPT OF CRUDE OIL FROM TEOR OPERATION LISTED ON PERMIT S-1131-1131

CONDITIONS

1. The facility shall submit an application to modify the Title V permit in accordance with the timeframes and procedures of District Rule 2520. [District Rule 2520] Federally Enforceable Through Title V Permit
2. Tank is authorized to receive fluids from facilities S-1131 and S-1127. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Well vent vapor control systems S-1131-903, S-1131-909, and S-1131-598 may discharge vapors into compressor suction of this operation. [District Rule 2201] Federally Enforceable Through Title V Permit
4. The overall efficiency of the tank vapor collection and control system shall be maintained at no less than 99%. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Permittee shall maintain records of number and type of components in gas service installed. Permittee shall update such records when new gas handling components are installed. Permittee shall maintain records of components exempted from counting, and the basis for exemption. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Fugitive VOC emission rates shall be calculated using the Oil and Gas Production Operations Average Emission Factors, U.S. EPA Protocol for Equipment Leak Emission Estimates, Table 2-4 (EPA-453/R-95-017) November 1995 and the total number of vapor components. [District Rule 2201] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

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

Seyed Sadredin, Executive Director / APCO

DAVID WARNER, Director of Permit Services
S-1131-885-27 : Oct 28 2013 7:54AM -- DAVIDSOS : Joint Inspection NOT Required

7. VOC emission rate from components associated with vapor recovery trunk-line up to and including vapor compressors and approved disposal devices shall not exceed 23.9 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
8. VOC emission rate from vapor service components associated with this tank, up to the tie-in with the vapor recovery unit trunk-line, shall not exceed 5.33 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
9. The fugitive VOC emission rate does not include piping and components handling produced fluids with API gravity less than 30 degrees. [District Rule 2201] Federally Enforceable Through Title V Permit
10. 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
11. The fugitive VOC emission rate does not include components in water/oil service (water content of fluids handled greater than 50%). Permittee shall maintain records of annual testing to demonstrate that such fluid streams have at least 50% water by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
12. Operator shall conduct quarterly sampling from the tank vapor control system's inlet header 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-1131-608, -613, -629, -630, -638, -641, -650, -651, and -1097. [District Rule 2201] Federally Enforceable Through Title V Permit
13. 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
14. Permittee shall maintain a written record of the VOC content of the gas sampled. [District Rule 2201] Federally Enforceable Through Title V Permit
15. Collected VOC vapors shall be incinerated in steam generators S-1131-82, '-95, '-98, '-99, '-859, '-877, '-879, '-880, '-881, '-883, '-884, and '908 or disposed of in Department of Oil, Gas, and Geothermal Resources (DOGGR) approved vapor disposal well(s). [District Rule 2201] Federally Enforceable Through Title V Permit
16. Fluids stored or handled by tank shall be routed exclusively to the vapor-controlled "Surge" tanks at Station 36 (S-1131-598, '-629, '-630, '-638, '-641, '-650, '-651, and '-1097). [District Rule 2201] Federally Enforceable Through Title V Permit
17. 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]
18. This tank shall be degassed before commencing interior cleaning by one of the following methods (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) 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) 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]
19. 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]
20. 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]

CONDITIONS CONTINUE ON NEXT PAGE

21. After a tank has been degassed pursuant to the requirements of this permit, vapor control requirements are not applicable until an organic liquid having a TVP of 0.5 psia or greater is placed, held, or stored in this tank. [District Rule 2080]
22. While performing tank cleaning activities, operators may only use the following cleaning agents: diesel, solvents with an initial boiling point of greater than 302 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]
23. Steam cleaning shall only be allowed at locations where wastewater treatment facilities are limited, or during the months of December through March. [District Rule 2080]
24. During sludge removal, the operator shall control emissions from the sludge receiving vessel by operating an APCO-approved vapor control device that reduces emissions of organic vapors by at least 95%. [District Rule 2080]
25. Permittee shall only transport removed sludge in closed, liquid leak-free containers. [District Rule 2080]
26. Permittee shall store removed sludge, until final disposal, in vapor leak-free containers, or in tanks complying with the vapor control requirements of District Rule 4623. Sludge that is to be used to manufacture roadmix, as defined in District Rule 2020, is not required to be stored in this manner. Roadmix manufacturing operations exempt pursuant to District Rule 2020 shall maintain documentation of their compliance with Rule 2020, and shall readily make said documentation available for District inspection upon request. [District Rules 2020 and 2080]
27. Tank shall be equipped with an operational and calibrated stored liquid temperature indicator. [District Rule 2201] Federally Enforceable Through Title V Permit
28. Tank roof, tank shell, tank vapor space appurtances, vapor control system piping, and vapor control system components shall be inspected and monitored using EPA Method 21 at least monthly. Items found to be not leaking may then be inspected and monitored at least once every 3 months until a leak is detected at which time the inspection and monitoring frequency shall revert to monthly until such time that two consecutive monthly inspections reveal with no leaks at which time the inspection and monitoring frequency shall revert to at least once every 3 months. [District Rule 2201] Federally Enforceable Through Title V Permit
29. A visible mist, liquid dripping at the rate of more than 3 drops per minute, and vapor leaks of 50,000 ppm or greater VOC as methane shall be repaired as expeditiously as possible but in no case beyond 24 hours of detecting the leak and shall be re-monitored using EPA Method 21 upon completion of the repair. Vapor leaks equal to or greater than 10,000 ppm and less than 50,000 ppm VOC as methane shall be repaired within 5 days of detecting the leak and re-monitored using EPA Method 21 upon completion of the repair. Vapor leaks equal to or greater than 1,000 ppm and less than 10,000 ppm VOC as methane shall be repaired within 14 days of leak detection and shall be re-monitored using EPA Method 21 upon completion of the repair. [District Rule 2201] Federally Enforceable Through Title V Permit
30. Upon detection of a leak, permittee shall tag the leak with a uniquely numbered tag, and shall record the leak location, component leaking, identification tag number, leak magnitude, date of leak detection, date of repair, method of repair, and post-repair monitoring measurement. Such records of leaks shall be maintained current and shall be made readily available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit
31. Components not accessible for EPA Method 21 inspection shall be visually and auditorily checked for leaks at least weekly and shall be monitored using EPA Method 21 at least annually. Any leak detected visually or auditorially shall be recorded and the leak shall be repaired within 14 days of leak detection and shall be re-monitored using EPA Method 21 upon completion of the repair. Any leak detected using EPA Method 21 shall be repaired according the leak magnitude as described above and shall be re-monitored using EPA Method 21 upon completion of the repair. [District Rule 2201] Federally Enforceable Through Title V Permit
32. In addition to the requirements above, pressure relief devices shall be inspected and monitored for leaks within 3 days of any known, likely, or suspected venting of such devices. [District Rule 2201] Federally Enforceable Through Title V Permit
33. True vapor pressure of any liquid introduced in this permit unit shall be less than 0.5 psia at (or before) tank liquid inlet and at tank storage temperature. [District Rule 4623] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

34. Permittee shall conduct true vapor pressure (TVP) testing of the organic liquid stored in this tank, or a representative tank as provided in Section 6.2.1.1 of District Rule 4623, 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. [District Rule 4623] Federally Enforceable Through Title V Permit

35. 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

36. 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

37. True Vapor Pressure (TVP) of any organic liquid, except for crude oil with an API gravity of 20 degrees or less, shall be determined by measuring the Reid Vapor Pressure (RVP) using ASTM D 323, and converting the RVP to TVP at the tank's maximum organic liquid storage temperature. The conversion of RVP to TVP shall be done in accordance with the procedures in Appendix B. Appendix B is an excerpt from the oil and gas section of "California Air Resources Boards (ARB) Technical Guidance Document to the Criteria and Guidelines Regulation for AB 2588", dated August 1989. As an alternative, the TVP of crude oil with an API gravity range of greater than 26 degrees up to 30 degrees may be determined by using other equivalent test methods approved by APCO, ARB and EPA. [District Rule 4623] Federally Enforceable Through Title V Permit

38. 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

39. 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

40. 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

41. The permittee shall keep accurate records of the dates of inspection and monitoring and the components inspected and monitored. [District Rule 2201] Federally Enforceable Through Title V Permit

42. Permittee shall provide District with a copy of D.O.G.G.R. approval for each vapor disposal well prior to use for vapor injection. [District Rule 1070] Federally Enforceable Through Title V Permit

43. 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 Rules1070 and 4623] Federally Enforceable Through Title V Permit

44. Formerly S-1143-21. [District Rule 2010] Federally Enforceable Through Title V Permit

San Joaquin Valley
AIR POLLUTION CONTROL DISTRICT

HEALTHY AIR LIVING™

AUTHORITY TO CONSTRUCT

PERMIT NO: S-1131-886-20 **ISSUANCE DATE:** 05/28/2013

LEGAL OWNER OR OPERATOR: CHEVRON USA INC
MAILING ADDRESS: PO BOX 1392
BAKERSFIELD, CA 93302

LOCATION: HEAVY OIL CENTRAL
KERN COUNTY, CA

SECTION: SW03 **TOWNSHIP:** 29S **RANGE:** 28E

EQUIPMENT DESCRIPTION:
MODIFICATION OF 5,000 BBL FIXED ROOF PETROLEUM STORAGE TANK #3K-S76 WITH VAPOR CONTROL SYSTEM LISTED ON S-1131-885: ALLOW RECEIPT OF CRUDE OIL FROM TEOR OPERATION LISTED ON PERMIT S-1131-1131

CONDITIONS

1. The facility shall submit an application to modify the Title V permit in accordance with the timeframes and procedures of District Rule 2520. [District Rule 2520] Federally Enforceable Through Title V Permit
2. Tank is authorized to receive fluids from facilities S-1131 and S-1127. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Well vent vapor control systems S-1131-903 and S-1131-909 may discharge vapors into compressor suction of this operation. [District Rule 2201] Federally Enforceable Through Title V Permit
4. The overall efficiency of the tank vapor collection and control system shall be maintained at no less than 99%. [District Rule 2201] Federally Enforceable Through Title V Permit
5. VOC emission rate from vapor service components associated with this tank, up to the tie-in with the vapor recovery unit trunk-line, shall not exceed 5.33 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Permittee shall maintain an accurate fugitive component count and resultant emissions calculated using emission factors from U.S. EPA Publication 453/R-95-017, or other District-approved emission factors. [District Rule 2201] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

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

Seyed Sadredin, Executive Director / APCO

DAVID WARNER, Director of Permit Services
S-1131-886-20 : Oct 28 2013 7:54AM -- DAVIDSOS : Joint Inspection NOT Required

7. Steam generators authorized to incinerate collected VOC vapors are S-1131-877,'-880, '-881, '-882, '-883, and '-908. [District Rule 2201] Federally Enforceable Through Title V Permit

8. Fluids stored or handled by tank shall be routed exclusively to the vapor-controlled "Surge" tanks at Station 36 (S-1131-598, '-629, '-630, '-638, '-641, '-650, '-651, and '-1097). [District Rule 2201] Federally Enforceable Through Title V Permit

9. 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]

10. This tank shall be degassed before commencing interior cleaning by one of the following methods (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) 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) 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]

11. 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]

12. 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]

13. After a tank has been degassed pursuant to the requirements of this permit, vapor control requirements are not applicable until an organic liquid having a TVP of 0.5 psia or greater is placed, held, or stored in this tank. [District Rule 2080]

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]

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]

16. During sludge removal, the operator shall control emissions from the sludge receiving vessel by operating an APCO-approved vapor control device that reduces emissions of organic vapors by at least 95%. [District Rule 2080]

17. Permittee shall only transport removed sludge in closed, liquid leak-free containers. [District Rule 2080]

18. Permittee shall store removed sludge, until final disposal, in vapor leak-free containers, or in tanks complying with the vapor control requirements of District Rule 4623. Sludge that is to be used to manufacture roadmix, as defined in District Rule 2020, is not required to be stored in this manner. Roadmix manufacturing operations exempt pursuant to District Rule 2020 shall maintain documentation of their compliance with Rule 2020, and shall readily make said documentation available for District inspection upon request. [District Rules 2020 and 2080]

19. Tank shall be equipped with an operational and calibrated stored liquid temperature indicator. [District Rule 2201] Federally Enforceable Through Title V Permit

20. Tank roof, tank shell, tank vapor space appurtances, vapor control system piping, and vapor control system components shall be inspected and monitored using EPA Method 21 at least monthly. Items found to be not leaking may then be inspected and monitored at least once every 3 months until a leak is detected at which time the inspection and monitoring frequency shall revert to monthly until such time that two consecutive monthly inspections reveal with no leaks at which time the inspection and monitoring frequency shall revert to at least once every 3 months. [District Rule 2201] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

21. A visible mist, liquid dripping at the rate of more than 3 drops per minute, and vapor leaks of 50,000 ppm or greater VOC as methane shall be repaired as expeditiously as possible but in no case beyond 24 hours of detecting the leak and shall be re-monitored using EPA Method 21 upon completion of the repair. Vapor leaks equal to or greater than 10,000 ppm and less than 50,000 ppm VOC as methane shall be repaired within 5 days of detecting the leak and re-monitored using EPA Method 21 upon completion of the repair. Vapor leaks equal to or greater than 1,000 ppm and less than 10,000 ppm VOC as methane shall be repaired within 14 days of leak detection and shall be re-monitored using EPA Method 21 upon completion of the repair. [District Rule 2201] Federally Enforceable Through Title V Permit

22. Upon detection of a leak, permittee shall tag the leak with a uniquely numbered tag, and shall record the leak location, component leaking, identification tag number, leak magnitude, date of leak detection, date of repair, method of repair, and post-repair monitoring measurement. Such records of leaks shall be maintained current and shall be made readily available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit

23. Components not accessible for EPA Method 21 inspection shall be visually and auditorily checked for leaks at least weekly and shall be monitored using EPA Method 21 at least annually. Any leak detected visually or auditorially shall be recorded and the leak shall be repaired within 14 days of leak detection and shall be re-monitored using EPA Method 21 upon completion of the repair. Any leak detected using EPA Method 21 shall be repaired according the leak magnitude as described above and shall be re-monitored using EPA Method 21 upon completion of the repair. [District Rule 2201] Federally Enforceable Through Title V Permit

24. In addition to the requirements above, pressure relief devices shall be inspected and monitored for leaks within 3 days of any known, likely, or suspected venting of such devices. [District Rule 2201] Federally Enforceable Through Title V Permit

25. True vapor pressure of any liquid introduced in this permit unit shall be less than 0.5 psia at (or before) tank liquid inlet and at tank storage temperature. [District Rule 4623] Federally Enforceable Through Title V Permit

26. Permittee shall conduct true vapor pressure (TVP) testing of the organic liquid stored in this tank, or a representative tank as provided in Section 6.2.1.1 of District Rule 4623, 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. [District Rule 4623] Federally Enforceable Through Title V Permit

27. 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

28. 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

29. True Vapor Pressure (TVP) of any organic liquid, except for crude oil with an API gravity of 20 degrees or less, shall be determined by measuring the Reid Vapor Pressure (RVP) using ASTM D 323, and converting the RVP to TVP at the tank's maximum organic liquid storage temperature. The conversion of RVP to TVP shall be done in accordance with the procedures in Appendix B. Appendix B is an excerpt from the oil and gas section of "California Air Resources Boards (ARB) Technical Guidance Document to the Criteria and Guidelines Regulation for AB 2588", dated August 1989. As an alternative, the TVP of crude oil with an API gravity range of greater than 26 degrees up to 30 degrees may be determined by using other equivalent test methods approved by APCO, ARB and EPA. [District Rule 4623] Federally Enforceable Through Title V Permit

30. 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

31. 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

CONDITIONS CONTINUE ON NEXT PAGE

32. 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

33. The permittee shall keep accurate records of the dates of inspection and monitoring and the components inspected and monitored. [District Rule 2201] Federally Enforceable Through Title V Permit

34. Permittee shall provide District with a copy of D.O.G.G.R. approval for each vapor disposal well prior to use for vapor injection. [District Rule 1070] Federally Enforceable Through Title V Permit

35. All records required to be maintained by this permit shall be maintained for a period of at least 5 years and shall be made readily available for District inspection upon request. [District Rules 1070 and 4623] Federally Enforceable Through Title V Permit

36. Formerly S-1143-22. [District Rule 2010] Federally Enforceable Through Title V Permit

San Joaquin Valley
AIR POLLUTION CONTROL DISTRICT

HEALTHY AIR LIVING™

AUTHORITY TO CONSTRUCT

PERMIT NO: S-1131-891-19 **ISSUANCE DATE:** 05/28/2013

LEGAL OWNER OR OPERATOR: CHEVRON USA INC
MAILING ADDRESS: PO BOX 1392
BAKERSFIELD, CA 93302

LOCATION: HEAVY OIL CENTRAL
KERN COUNTY, CA

SECTION: SE04 **TOWNSHIP:** 29S **RANGE:** 28E

EQUIPMENT DESCRIPTION:
MODIFICATION OF 5,000 BBL FIXED ROOF PETROLEUM STORAGE TANK WITH VAPOR CONTROL SYSTEM LISTED ON S-1131-885: ALLOW RECEIPT OF CRUDE OIL FROM TEOR OPERATION LISTED ON PERMIT S-1131-1131

CONDITIONS

1. The facility shall submit an application to modify the Title V permit in accordance with the timeframes and procedures of District Rule 2520. [District Rule 2520] Federally Enforceable Through Title V Permit
2. Tank is authorized to receive fluids from facilities S-1131 and S-1127. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Well vent vapor control systems S-1131-903 and S-1131-909 may discharge vapors into compressor suction of this operation. [District Rule 2201] Federally Enforceable Through Title V Permit
4. The overall efficiency of the tank vapor collection and control system shall be maintained at no less than 99%. [District Rule 2201] Federally Enforceable Through Title V Permit
5. VOC emission rate from vapor service components associated with this tank, up to the tie-in with the vapor recovery unit trunk-line, shall not exceed 5.33 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Permittee shall maintain an accurate fugitive component count and resultant emissions calculated using emission factors from U.S. EPA Publication 453/R-95-017, or other District-approved emission factors. [District Rule 2201] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

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

Seyed Sadredin, Executive Director / APCO

COPY

DAVID WARNER, Director of Permit Services
S-1131-891-19 : Oct 28 2013 7:54AM -- DAVIDSOS : Joint Inspection NOT Required

7. Steam generators authorized to incinerate collected VOC vapors are S-1131-877,'-880, '-881, '-882, '-883, and '-908. [District Rule 2201] Federally Enforceable Through Title V Permit

8. Fluids stored or handled by tank shall be routed exclusively to the vapor-controlled "Surge" tanks at Station 36 (S-1131-598, '-629, '-630, '-638, '-641, '-650, '-651, and '-1097). [District Rule 2201] Federally Enforceable Through Title V Permit

9. 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]

10. This tank shall be degassed before commencing interior cleaning by one of the following methods (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) 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) 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]

11. 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]

12. 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]

13. After a tank has been degassed pursuant to the requirements of this permit, vapor control requirements are not applicable until an organic liquid having a TVP of 0.5 psia or greater is placed, held, or stored in this tank. [District Rule 2080]

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]

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]

16. During sludge removal, the operator shall control emissions from the sludge receiving vessel by operating an APCO-approved vapor control device that reduces emissions of organic vapors by at least 95%. [District Rule 2080]

17. Permittee shall only transport removed sludge in closed, liquid leak-free containers. [District Rule 2080]

18. Permittee shall store removed sludge, until final disposal, in vapor leak-free containers, or in tanks complying with the vapor control requirements of District Rule 4623. Sludge that is to be used to manufacture roadmix, as defined in District Rule 2020, is not required to be stored in this manner. Roadmix manufacturing operations exempt pursuant to District Rule 2020 shall maintain documentation of their compliance with Rule 2020, and shall readily make said documentation available for District inspection upon request. [District Rules 2020 and 2080]

19. Tank shall be equipped with an operational and calibrated stored liquid temperature indicator. [District Rule 2201] Federally Enforceable Through Title V Permit

20. Tank roof, tank shell, tank vapor space appurtances, vapor control system piping, and vapor control system components shall be inspected and monitored using EPA Method 21 at least monthly. Items found to be not leaking may then be inspected and monitored at least once every 3 months until a leak is detected at which time the inspection and monitoring frequency shall revert to monthly until such time that two consecutive monthly inspections reveal with no leaks at which time the inspection and monitoring frequency shall revert to at least once every 3 months. [District Rule 2201] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

21. A visible mist, liquid dripping at the rate of more than 3 drops per minute, and vapor leaks of 50,000 ppm or greater VOC as methane shall be repaired as expeditiously as possible but in no case beyond 24 hours of detecting the leak and shall be re-monitored using EPA Method 21 upon completion of the repair. Vapor leaks equal to or greater than 10,000 ppm and less than 50,000 ppm VOC as methane shall be repaired within 5 days of detecting the leak and re-monitored using EPA Method 21 upon completion of the repair. Vapor leaks equal to or greater than 1,000 ppm and less than 10,000 ppm VOC as methane shall be repaired within 14 days of leak detection and shall be re-monitored using EPA Method 21 upon completion of the repair. [District Rule 2201] Federally Enforceable Through Title V Permit

22. Upon detection of a leak, permittee shall tag the leak with a uniquely numbered tag, and shall record the leak location, component leaking, identification tag number, leak magnitude, date of leak detection, date of repair, method of repair, and post-repair monitoring measurement. Such records of leaks shall be maintained current and shall be made readily available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit

23. Components not accessible for EPA Method 21 inspection shall be visually and auditorily checked for leaks at least weekly and shall be monitored using EPA Method 21 at least annually. Any leak detected visually or auditorially shall be recorded and the leak shall be repaired within 14 days of leak detection and shall be re-monitored using EPA Method 21 upon completion of the repair. Any leak detected using EPA Method 21 shall be repaired according the leak magnitude as described above and shall be re-monitored using EPA Method 21 upon completion of the repair. [District Rule 2201] Federally Enforceable Through Title V Permit

24. In addition to the requirements above, pressure relief devices shall be inspected and monitored for leaks within 3 days of any known, likely, or suspected venting of such devices. [District Rule 2201] Federally Enforceable Through Title V Permit

25. True vapor pressure of any liquid introduced in this permit unit shall be less than 0.5 psia at (or before) tank liquid inlet and at tank storage temperature. [District Rule 4623] Federally Enforceable Through Title V Permit

26. Permittee shall conduct true vapor pressure (TVP) testing of the organic liquid stored in this tank, or a representative tank as provided in Section 6.2.1.1 of District Rule 4623, 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. [District Rule 4623] Federally Enforceable Through Title V Permit

27. 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

28. 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

29. True Vapor Pressure (TVP) of any organic liquid, except for crude oil with an API gravity of 20 degrees or less, shall be determined by measuring the Reid Vapor Pressure (RVP) using ASTM D 323, and converting the RVP to TVP at the tank's maximum organic liquid storage temperature. The conversion of RVP to TVP shall be done in accordance with the procedures in Appendix B. Appendix B is an excerpt from the oil and gas section of "California Air Resources Boards (ARB) Technical Guidance Document to the Criteria and Guidelines Regulation for AB 2588", dated August 1989. As an alternative, the TVP of crude oil with an API gravity range of greater than 26 degrees up to 30 degrees may be determined by using other equivalent test methods approved by APCO, ARB and EPA. [District Rule 4623] Federally Enforceable Through Title V Permit

30. 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

31. 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

CONDITIONS CONTINUE ON NEXT PAGE

32. 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

33. The permittee shall keep accurate records of the dates of inspection and monitoring and the components inspected and monitored. [District Rule 2201] Federally Enforceable Through Title V Permit

34. Permittee shall provide District with a copy of D.O.G.G.R. approval for each vapor disposal well prior to use for vapor injection. [District Rule 1070] Federally Enforceable Through Title V Permit

35. All records required to be maintained by this permit shall be maintained for a period of at least 5 years and shall be made readily available for District inspection upon request. [District Rules 1070 and 4623] Federally Enforceable Through Title V Permit

36. Formerly S-1143-27. [District Rule 2010] Federally Enforceable Through Title V Permit

San Joaquin Valley
AIR POLLUTION CONTROL DISTRICT

HEALTHY AIR LIVING™

AUTHORITY TO CONSTRUCT

PERMIT NO: S-1131-892-19 **ISSUANCE DATE:** 05/28/2013

LEGAL OWNER OR OPERATOR: CHEVRON USA INC
MAILING ADDRESS: PO BOX 1392
BAKERSFIELD, CA 93302

LOCATION: HEAVY OIL CENTRAL
KERN COUNTY, CA

SECTION: SE04 **TOWNSHIP:** 29S **RANGE:** 28E

EQUIPMENT DESCRIPTION:
MODIFICATION OF 5,000 BBL FIXED ROOF PETROLEUM STORAGE TANK WITH VAPOR CONTROL SYSTEM LISTED ON S-1131-885: ALLOW RECEIPT OF CRUDE OIL FROM TEOR OPERATION LISTED ON PERMIT S-1131-1131

CONDITIONS

1. The facility shall submit an application to modify the Title V permit in accordance with the timeframes and procedures of District Rule 2520. [District Rule 2520] Federally Enforceable Through Title V Permit
2. Tank is authorized to receive fluids from facilities S-1131 and S-1127. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Well vent vapor control systems S-1131-903 and S-1131-909 may discharge vapors into compressor suction of this operation. [District Rule 2201] Federally Enforceable Through Title V Permit
4. The overall efficiency of the tank vapor collection and control system shall be maintained at no less than 99%. [District Rule 2201] Federally Enforceable Through Title V Permit
5. VOC emission rate from vapor service components associated with this tank, up to the tie-in with the vapor recovery unit trunk-line, shall not exceed 5.33 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Permittee shall maintain an accurate fugitive component count and resultant emissions calculated using emission factors from U.S. EPA Publication 453/R-95-017, or other District-approved emission factors. [District Rule 2201] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

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

Seyed Sadredin, Executive Director / APCO

COPY

DAVID WARNER, Director of Permit Services
S-1131-892-19 : Oct 28 2013 7:54AM – DAVIDSOS : Joint Inspection NOT Required

7. Steam generators authorized to incinerate collected VOC vapors are S-1131-877,'-880, '-881, '-882, '-883, and '-908. [District Rule 2201] Federally Enforceable Through Title V Permit

8. Fluids stored or handled by tank shall be routed exclusively to the vapor-controlled "Surge" tanks at Station 36 (S-1131-598, '-629, '-630, '-638, '-641, '-650, '-651, and '-1097). [District Rule 2201] Federally Enforceable Through Title V Permit

9. 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]

10. This tank shall be degassed before commencing interior cleaning by one of the following methods (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) 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) 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]

11. 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]

12. 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]

13. After a tank has been degassed pursuant to the requirements of this permit, vapor control requirements are not applicable until an organic liquid having a TVP of 0.5 psia or greater is placed, held, or stored in this tank. [District Rule 2080]

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]

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]

16. During sludge removal, the operator shall control emissions from the sludge receiving vessel by operating an APCO-approved vapor control device that reduces emissions of organic vapors by at least 95%. [District Rule 2080]

17. Permittee shall only transport removed sludge in closed, liquid leak-free containers. [District Rule 2080]

18. Permittee shall store removed sludge, until final disposal, in vapor leak-free containers, or in tanks complying with the vapor control requirements of District Rule 4623. Sludge that is to be used to manufacture roadmix, as defined in District Rule 2020, is not required to be stored in this manner. Roadmix manufacturing operations exempt pursuant to District Rule 2020 shall maintain documentation of their compliance with Rule 2020, and shall readily make said documentation available for District inspection upon request. [District Rules 2020 and 2080]

19. Tank shall be equipped with an operational and calibrated stored liquid temperature indicator. [District Rule 2201] Federally Enforceable Through Title V Permit

20. Tank roof, tank shell, tank vapor space appurtances, vapor control system piping, and vapor control system components shall be inspected and monitored using EPA Method 21 at least monthly. Items found to be not leaking may then be inspected and monitored at least once every 3 months until a leak is detected at which time the inspection and monitoring frequency shall revert to monthly until such time that two consecutive monthly inspections reveal with no leaks at which time the inspection and monitoring frequency shall revert to at least once every 3 months. [District Rule 2201] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

21. A visible mist, liquid dripping at the rate of more than 3 drops per minute, and vapor leaks of 50,000 ppm or greater VOC as methane shall be repaired as expeditiously as possible but in no case beyond 24 hours of detecting the leak and shall be re-monitored using EPA Method 21 upon completion of the repair. Vapor leaks equal to or greater than 10,000 ppm and less than 50,000 ppm VOC as methane shall be repaired within 5 days of detecting the leak and re-monitored using EPA Method 21 upon completion of the repair. Vapor leaks equal to or greater than 1,000 ppm and less than 10,000 ppm VOC as methane shall be repaired within 14 days of leak detection and shall be re-monitored using EPA Method 21 upon completion of the repair. [District Rule 2201] Federally Enforceable Through Title V Permit

22. Upon detection of a leak, permittee shall tag the leak with a uniquely numbered tag, and shall record the leak location, component leaking, identification tag number, leak magnitude, date of leak detection, date of repair, method of repair, and post-repair monitoring measurement. Such records of leaks shall be maintained current and shall be made readily available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit

23. Components not accessible for EPA Method 21 inspection shall be visually and auditorily checked for leaks at least weekly and shall be monitored using EPA Method 21 at least annually. Any leak detected visually or auditorially shall be recorded and the leak shall be repaired within 14 days of leak detection and shall be re-monitored using EPA Method 21 upon completion of the repair. Any leak detected using EPA Method 21 shall be repaired according the leak magnitude as described above and shall be re-monitored using EPA Method 21 upon completion of the repair. [District Rule 2201] Federally Enforceable Through Title V Permit

24. In addition to the requirements above, pressure relief devices shall be inspected and monitored for leaks within 3 days of any known, likely, or suspected venting of such devices. [District Rule 2201] Federally Enforceable Through Title V Permit

25. True vapor pressure of any liquid introduced in this permit unit shall be less than 0.5 psia at (or before) tank liquid inlet and at tank storage temperature. [District Rule 4623] Federally Enforceable Through Title V Permit

26. Permittee shall conduct true vapor pressure (TVP) testing of the organic liquid stored in this tank, or a representative tank as provided in Section 6.2.1.1 of District Rule 4623, 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. [District Rule 4623] Federally Enforceable Through Title V Permit

27. 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

28. 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

29. True Vapor Pressure (TVP) of any organic liquid, except for crude oil with an API gravity of 20 degrees or less, shall be determined by measuring the Reid Vapor Pressure (RVP) using ASTM D 323, and converting the RVP to TVP at the tank's maximum organic liquid storage temperature. The conversion of RVP to TVP shall be done in accordance with the procedures in Appendix B. Appendix B is an excerpt from the oil and gas section of "California Air Resources Boards (ARB) Technical Guidance Document to the Criteria and Guidelines Regulation for AB 2588", dated August 1989. As an alternative, the TVP of crude oil with an API gravity range of greater than 26 degrees up to 30 degrees may be determined by using other equivalent test methods approved by APCO, ARB and EPA. [District Rule 4623] Federally Enforceable Through Title V Permit

30. 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

31. 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

CONDITIONS CONTINUE ON NEXT PAGE

32. 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

33. The permittee shall keep accurate records of the dates of inspection and monitoring and the components inspected and monitored. [District Rule 2201] Federally Enforceable Through Title V Permit

34. Permittee shall provide District with a copy of D.O.G.G.R. approval for each vapor disposal well prior to use for vapor injection. [District Rule 1070] Federally Enforceable Through Title V Permit

35. All records required to be maintained by this permit shall be maintained for a period of at least 5 years and shall be made readily available for District inspection upon request. [District Rules 1070 and 4623] Federally Enforceable Through Title V Permit

36. Formerly S-1143-28. [District Rule 2010] Federally Enforceable Through Title V Permit

San Joaquin Valley
AIR POLLUTION CONTROL DISTRICT

HEALTHY AIR LIVING™

AUTHORITY TO CONSTRUCT

PERMIT NO: S-1131-1128-1 **ISSUANCE DATE:** 05/28/2013

LEGAL OWNER OR OPERATOR: CHEVRON USA INC
MAILING ADDRESS: PO BOX 1392
BAKERSFIELD, CA 93302

LOCATION: HEAVY OIL CENTRAL
KERN COUNTY, CA

SECTION: NW09 **TOWNSHIP:** 29S **RANGE:** 28E

EQUIPMENT DESCRIPTION:
MODIFICATION OF 1,000 BBL FIXED ROOF PETROLEUM STORAGE TANK #7 WITH VAPOR CONTROL SYSTEM SHARED WITH TANKS S-1131-1129, -1130, -1132, AND -1133 (KCLC LEASE): REVISE AUTHORIZED VAPOR CONTROL SYSTEM INCINERATION DEVICES AND DESIGNATE TANK AS A COMPLIANT DORMANT EMISSIONS UNIT (DEU)

CONDITIONS

1. The facility shall submit an application to modify the Title V permit in accordance with the timeframes and procedures of District Rule 2520. [District Rule 2520] Federally Enforceable Through Title V Permit
2. While dormant, tank shall be emptied of all fluid, tank may be disconnected from vapor control system and may be open. [District Rule 2080]
3. Permittee shall submit written notification to the District upon designating the unit as dormant or active. [District Rule 2080]
4. While dormant, normal testing shall not be required. [District Rule 2080]
5. Upon recommencing operation of this unit, normal testing shall resume. [District Rule 2080]
6. Upon recommencing operation of this unit, tank shall be connected to vapor control system and is subject to normal leak free requirements. [District Rule 2080]
7. Any testing required by this permit shall be performed within 60 days of recommencing operation of this unit, regardless of whether the unit remains active or is again designated as dormant. [District Rule 2080]

CONDITIONS CONTINUE ON NEXT PAGE

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

Seyed Sadredin, Executive Director / APCO

DAVID WARNER, Director of Permit Services
S-1131-1128-1 : Oct 28 2013 7:54AM – DAVIDSOS : Joint Inspection NOT Required

8. Records of all dates and times that this unit is designated as dormant or active, and copies of all corresponding notices to the District, shall be maintained, retained for a period of at least five years, and made available for District inspection upon request. [District Rule 1070]
9. If the unit becomes non-compliant with District Rules while it is dormant, operation of the unit is not authorized until an Authority to Construct permit is issued approving all necessary retrofits and permit changes required to comply with the respective District Rules. [District Rule 2010]
10. Steam Generators authorized to incinerate collected vapors are S-1131-877, '880, '881, '882, '883, '908. [District Rule 2201]
11. The tank shall be equipped with a vapor control system consisting of a closed vent system that collects all VOCs from the storage tank, and a VOC control device. The vapor control system shall be APCO-approved and maintained in leak-free condition. Vapors shall be discharged to a system with an efficiency of at least 99% by weight. [District Rules 2201 and 4623]
12. All piping, valves, and fittings shall be constructed and maintained in a leak-free condition. [District Rules 2201 and 4623]
13. All 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]
14. 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 shall be reported as a deviation. [District Rules 2201 and 4623]
15. Except as otherwise provided in this permit, the operator shall ensure that the vapor recovery system is functional and is operating as designed at all times. [District Rule 2201]
16. 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 Rules 2201 and 4623]
17. Any component found to be leaking on two consecutive annual inspections is in violation of the District Rule 4623, even if it is under the voluntary inspection and maintenance program. [District Rules 2201 and 4623]
18. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date and time of leak detection, and method of detection; 3) Date and time of leak repair, and emission level of recheck after leak is repaired; 4) Method used to minimize the leak to lowest possible level within 8 hours after detection. [District Rules 2201 and 4623]
19. Fugitive VOC emissions rate shall be, calculated using CAPCOA California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities Table IV-2c, Oil and Gas Production Screening Value Ranges Emission Factors (Feb 1999), from the total number of components from this tank. [District Rule 2201]
20. VOC fugitive emissions from the components in gas service on the tank shall not exceed 0.1 lb/day. [District Rule 2201]
21. VOC fugitive emissions from the components in gas service on vapor control system including separator and scrubber shall not exceed 0.5 lb/day. [District Rule 2201]
22. Operator shall visually inspect tank shell, hatches, seals, seams, cable seals, valves, flanges, connectors, and any other piping components directly affixed to the tank and within five feet of the tank at least once per year for liquid leaks, and with a portable hydrocarbon detection instrument conducted in accordance with EPA Method 21 for gas leaks. Operator shall also visually or ultrasonically inspect as appropriate, the external shells and roofs of uninsulated tanks for structural integrity annually. [District Rule 4623 (Table 3)]
23. Upon detection of a liquid leak, defined as a leak rate of greater than or equal to 30 drops per minute, operator shall repair the leak within 8 hours. For leaks with a liquid leak rate of between 3 and 30 drops per minute, the leaking component shall be repaired within 24 hours after detection. [District Rule 4623 (Table 3)]

CONDITIONS CONTINUE ON NEXT PAGE

24. Upon detection of a gas leak, defined as a VOC concentration of greater than 10,000 ppmv measured in accordance with EPA Method 21, operator shall take one of the following actions: 1) eliminate the leak within 8 hours after detection; or 2) if the leak cannot be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices, and eliminate the leak within 48 hours after minimization. In no event shall the total time to minimize and eliminate a leak exceed 56 hours after detection. [District Rule 4623 (Table 3)]

25. Components found to be leaking either liquids or gases shall be immediately affixed with a tag showing the component to be leaking. Operator shall maintain records of the liquid or gas leak detection readings, date/time the leak was discovered, and date/time the component was repaired to a leak-free condition. [District Rule 4623 (Table 3)]

26. Leaking components that have been discovered by the operator that have been immediately tagged and repaired within the timeframes specified in District Rule 4623, Table 3 shall not constitute a violation of this rule. Leaking components as defined by District Rule 4623 discovered by District staff that were not previously identified and/or tagged by the operator, and/or any leaks that were not repaired within the timeframes specified in District Rule 4623, Table 3 shall constitute a violation of this rule. [District Rule 4623 (Table 3)]

27. If a component type for a given tank is found to leak during an annual inspection, operator shall conduct quarterly inspections of that component type on the tank or tank system for four consecutive quarters. If no components are found to leak after four consecutive quarters, the operator may revert to annual inspections. [District Rule 4623 (Table 3)]

28. Any component found to be leaking on two consecutive annual inspections is in violation of this rule, even if covered under the voluntary inspection and maintenance program. [District Rule 4623 (Table 3)]

29. Permittee shall maintain records of number and type of components installed and calculated fugitive emissions. Permittee shall update such records when new components are installed. [District Rule 2201]

30. Permittee shall notify the APCO in writing at least three (3) days prior to performing tank degassing and interior tank cleaning activities. Written notification shall include the following: 1) the Permit to Operate number and physical location of the tank being degassed, 2) the date and time that tank degassing and cleaning activities will begin, 3) the degassing method, as allowed in this permit, to be used, 4) the method to be used to clean the tank, including any solvents to be used, and 5) the method to be used to dispose of any removed sludge, including methods that will be used to control emissions from the receiving vessel and emissions during transport. [District Rule 4623]

31. This tank shall be degassed before commencing interior cleaning by one of the following methods (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) 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) displacing VOCs contained in the tank vapor space to an APCO-approved vapor recovery system by filling the tank with a suitable gas. Degassing shall continue until the operator has achieved a vapor displacement equivalent to at least 2.3 times the tank capacity. Suitable gases are air, nitrogen, carbon dioxide, or natural gas containing less than 10 percent VOC by weight. [District Rule 4623]

32. During tank degassing, the operator shall discharge or displace organic vapors contained in the tank vapor space to an APCO-approved vapor recovery system. [District Rule 4623]

33. To facilitate connection to an external APCO-approved recovery system, a suitable tank fitting, such as a manway, may be temporarily removed for a period of time not to exceed 1 hour. [District Rule 4623]

34. This tank shall be in compliance with the applicable requirements of District Rule 4623 at all times during draining, degassing, and refilling the tank with an organic liquid having a TVP of 0.5 psia or greater. [District Rule 4623]

35. After a tank has been degassed pursuant to the requirements of this permit, vapor control requirements are not applicable until an organic liquid having a TVP of 0.5 psia or greater is placed, held, or stored in this tank. [District Rule 4623]

36. While performing tank cleaning activities, operators may only use the following cleaning agents: diesel, solvents with an initial boiling point of greater than 302 degrees F, solvents with a vapor pressure of less than 0.5 psia, or solvents with 50 grams of VOC per liter or less. [District Rule 4623]

CONDITIONS CONTINUE ON NEXT PAGE

37. Steam cleaning shall only be allowed at locations where wastewater treatment facilities are limited, or during the months of December through March. [District Rule 4623]

38. During sludge removal, the operator shall control emissions from the sludge receiving vessel by operating an APCO-approved vapor control device that reduces emissions of organic vapors by at least 95%. [District Rule 4623]

39. Permittee shall only transport removed sludge in closed, liquid leak-free containers. [District Rule 4623]

40. Permittee shall store removed sludge, until final disposal, in vapor leak-free containers, or in tanks complying with the vapor control requirements of District Rule 4623. Sludge that is to be used to manufacture roadmix, as defined in District Rule 2020, is not required to be stored in this manner. Roadmix manufacturing operations exempt pursuant to District Rule 2020 shall maintain documentation of their compliance with Rule 2020, and shall readily make said documentation available for District inspection upon request. [District Rules 2020 and 4623]

41. The operator of a fixed roof tank shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 1070]

42. Formerly permit S-1624-53

San Joaquin Valley
AIR POLLUTION CONTROL DISTRICT

HEALTHY AIR LIVING™

AUTHORITY TO CONSTRUCT

PERMIT NO: S-1131-1129-1 **ISSUANCE DATE:** 05/28/2013

LEGAL OWNER OR OPERATOR: CHEVRON USA INC
MAILING ADDRESS: PO BOX 1392
BAKERSFIELD, CA 93302

LOCATION: HEAVY OIL CENTRAL
KERN COUNTY, CA

SECTION: NW09 **TOWNSHIP:** 29S **RANGE:** 28E

EQUIPMENT DESCRIPTION:
MODIFICATION OF 500 BBL FIXED ROOF CRUDE OIL STOCK TANK #2 SERVED BY VAPOR CONTROL SYSTEM LISTED ON S-1131-1128 (KCLC LEASE): DESIGNATE AS A COMPLIANT DORMANT EMISSIONS UNIT (DEU)

CONDITIONS

1. The facility shall submit an application to modify the Title V permit in accordance with the timeframes and procedures of District Rule 2520. [District Rule 2520] Federally Enforceable Through Title V Permit
2. While dormant, tank shall be emptied of all fluid, tank may be disconnected from vapor control system and may be open. [District Rule 2080]
3. Permittee shall submit written notification to the District upon designating the unit as dormant or active. [District Rule 2080]
4. While dormant, normal testing shall not be required. [District Rule 2080]
5. Upon recommencing operation of this unit, normal testing shall resume. [District Rule 2080]
6. Upon recommencing operation of this unit, tank shall be connected to vapor control system and is subject to normal leak free requirements. [District Rule 2080]
7. Any testing required by this permit shall be performed within 60 days of recommencing operation of this unit, regardless of whether the unit remains active or is again designated as dormant. [District Rule 2080]
8. Records of all dates and times that this unit is designated as dormant or active, and copies of all corresponding notices to the District, shall be maintained, retained for a period of at least five years, and made available for District inspection upon request. [District Rule 1070]

CONDITIONS CONTINUE ON NEXT PAGE

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

Seyed Sadredin, Executive Director / APCO

COPY

DAVID WARNER, Director of Permit Services
S-1131-1129-1 : Oct 28 2013 7:54AM – DAVIDSOS : Joint Inspection NOT Required

9. If the unit becomes non-compliant with District Rules while it is dormant, operation of the unit is not authorized until an Authority to Construct permit is issued approving all necessary retrofits and permit changes required to comply with the respective District Rules. [District Rule 2010]
10. Tank shall only vent to vapor control system listed on S-1131-1128. [District Rule 2201]
11. The tank shall be equipped with a vapor control system consisting of a closed vent system that collects all VOCs from the storage tank, and a VOC control device. The vapor control system shall be APCO-approved and maintained in leak-free condition. Vapors shall be discharged to a system with an efficiency of at least 99% by weight. [District Rules 2201 and 4623]
12. All piping, valves, and fittings shall be constructed and maintained in a leak-free condition. [District Rules 2201 and 4623]
13. All 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]
14. 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 shall be reported as a deviation. [District Rules 2201 and 4623]
15. Except as otherwise provided in this permit, the operator shall ensure that the vapor recovery system is functional and is operating as designed at all times. [District Rule 2201]
16. 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 Rules 2201 and 4623]
17. Any component found to be leaking on two consecutive annual inspections is in violation of the District Rule 4623, even if it is under the voluntary inspection and maintenance program. [District Rules 2201 and 4623]
18. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date and time of leak detection, and method of detection; 3) Date and time of leak repair, and emission level of recheck after leak is repaired; 4) Method used to minimize the leak to lowest possible level within 8 hours after detection. [District Rules 2201 and 4623]
19. Fugitive VOC emissions rate shall be, calculated using CAPCOA California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities Table IV-2c, Oil and Gas Production Screening Value Ranges Emission Factors (Feb 1999), from the total number of components from this tank. [District Rule 2201]
20. VOC fugitive emissions from the components in gas service on the tank shall not exceed 0.1 lb/day. [District Rule 2201]
21. Operator shall visually inspect tank shell, hatches, seals, seams, cable seals, valves, flanges, connectors, and any other piping components directly affixed to the tank and within five feet of the tank at least once per year for liquid leaks, and with a portable hydrocarbon detection instrument conducted in accordance with EPA Method 21 for gas leaks. Operator shall also visually or ultrasonically inspect as appropriate, the external shells and roofs of uninsulated tanks for structural integrity annually. [District Rule 4623 (Table 3)]
22. Upon detection of a liquid leak, defined as a leak rate of greater than or equal to 30 drops per minute, operator shall repair the leak within 8 hours. For leaks with a liquid leak rate of between 3 and 30 drops per minute, the leaking component shall be repaired within 24 hours after detection. [District Rule 4623 (Table 3)]
23. Upon detection of a gas leak, defined as a VOC concentration of greater than 10,000 ppmv measured in accordance with EPA Method 21, operator shall take one of the following actions: 1) eliminate the leak within 8 hours after detection; or 2) if the leak cannot be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices, and eliminate the leak within 48 hours after minimization. In no event shall the total time to minimize and eliminate a leak exceed 56 hours after detection. [District Rule 4623 (Table 3)]

CONDITIONS CONTINUE ON NEXT PAGE

24. Components found to be leaking either liquids or gases shall be immediately affixed with a tag showing the component to be leaking. Operator shall maintain records of the liquid or gas leak detection readings, date/time the leak was discovered, and date/time the component was repaired to a leak-free condition. [District Rule 4623 (Table 3)]
25. Leaking components that have been discovered by the operator that have been immediately tagged and repaired within the timeframes specified in District Rule 4623, Table 3 shall not constitute a violation of this rule. Leaking components as defined by District Rule 4623 discovered by District staff that were not previously identified and/or tagged by the operator, and/or any leaks that were not repaired within the timeframes specified in District Rule 4623, Table 3 shall constitute a violation of this rule. [District Rule 4623 (Table 3)]
26. If a component type for a given tank is found to leak during an annual inspection, operator shall conduct quarterly inspections of that component type on the tank or tank system for four consecutive quarters. If no components are found to leak after four consecutive quarters, the operator may revert to annual inspections. [District Rule 4623 (Table 3)]
27. Any component found to be leaking on two consecutive annual inspections is in violation of this rule, even if covered under the voluntary inspection and maintenance program. [District Rule 4623 (Table 3)]
28. Permittee shall maintain records of number and type of components installed and calculated fugitive emissions. Permittee shall update such records when new components are installed. [District Rule 2201]
29. Permittee shall notify the APCO in writing at least three (3) days prior to performing tank degassing and interior tank cleaning activities. Written notification shall include the following: 1) the Permit to Operate number and physical location of the tank being degassed, 2) the date and time that tank degassing and cleaning activities will begin, 3) the degassing method, as allowed in this permit, to be used, 4) the method to be used to clean the tank, including any solvents to be used, and 5) the method to be used to dispose of any removed sludge, including methods that will be used to control emissions from the receiving vessel and emissions during transport. [District Rule 4623]
30. This tank shall be degassed before commencing interior cleaning by one of the following methods (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) 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) displacing VOCs contained in the tank vapor space to an APCO-approved vapor recovery system by filling the tank with a suitable gas. Degassing shall continue until the operator has achieved a vapor displacement equivalent to at least 2.3 times the tank capacity. Suitable gases are air, nitrogen, carbon dioxide, or natural gas containing less than 10 percent VOC by weight. [District Rule 4623]
31. During tank degassing, the operator shall discharge or displace organic vapors contained in the tank vapor space to an APCO-approved vapor recovery system. [District Rule 4623]
32. To facilitate connection to an external APCO-approved recovery system, a suitable tank fitting, such as a manway, may be temporarily removed for a period of time not to exceed 1 hour. [District Rule 4623]
33. This tank shall be in compliance with the applicable requirements of District Rule 4623 at all times during draining, degassing, and refilling the tank with an organic liquid having a TVP of 0.5 psia or greater. [District Rule 4623]
34. After a tank has been degassed pursuant to the requirements of this permit, vapor control requirements are not applicable until an organic liquid having a TVP of 0.5 psia or greater is placed, held, or stored in this tank. [District Rule 4623]
35. While performing tank cleaning activities, operators may only use the following cleaning agents: diesel, solvents with an initial boiling point of greater than 302 degrees F, solvents with a vapor pressure of less than 0.5 psia, or solvents with 50 grams of VOC per liter or less. [District Rule 4623]
36. Steam cleaning shall only be allowed at locations where wastewater treatment facilities are limited, or during the months of December through March. [District Rule 4623]
37. During sludge removal, the operator shall control emissions from the sludge receiving vessel by operating an APCO-approved vapor control device that reduces emissions of organic vapors by at least 95%. [District Rule 4623]

CONDITIONS CONTINUE ON NEXT PAGE

38. Permittee shall only transport removed sludge in closed, liquid leak-free containers. [District Rule 4623]

39. Permittee shall store removed sludge, until final disposal, in vapor leak-free containers, or in tanks complying with the vapor control requirements of District Rule 4623. Sludge that is to be used to manufacture roadmix, as defined in District Rule 2020, is not required to be stored in this manner. Roadmix manufacturing operations exempt pursuant to District Rule 2020 shall maintain documentation of their compliance with Rule 2020, and shall readily make said documentation available for District inspection upon request. [District Rules 2020 and 4623]

40. The operator of a fixed roof tank shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 1070]

41. Formerly permit S-1624-126

San Joaquin Valley
AIR POLLUTION CONTROL DISTRICT

HEALTHY AIR LIVING™

AUTHORITY TO CONSTRUCT

PERMIT NO: S-1131-1130-1 **ISSUANCE DATE:** 05/28/2013

LEGAL OWNER OR OPERATOR: CHEVRON USA INC
MAILING ADDRESS: PO BOX 1392
BAKERSFIELD, CA 93302

LOCATION: HEAVY OIL CENTRAL
KERN COUNTY, CA

SECTION: NW09 **TOWNSHIP:** 29S **RANGE:** 28E

EQUIPMENT DESCRIPTION:
MODIFICATION OF 1,000 BBL FIXED ROOF CRUDE OIL STOCK TANK SERVED BY VAPOR CONTROL SYSTEM LISTED ON S-1131-1128 (KCLC LEASE): DESIGNATE AS A COMPLIANT DORMANT EMISSIONS UNIT (DEU)

CONDITIONS

1. The facility shall submit an application to modify the Title V permit in accordance with the timeframes and procedures of District Rule 2520. [District Rule 2520] Federally Enforceable Through Title V Permit
2. While dormant, tank shall be emptied of all fluid, tank may be disconnected from vapor control system and may be open. [District Rule 2080]
3. Permittee shall submit written notification to the District upon designating the unit as dormant or active. [District Rule 2080]
4. While dormant, normal testing shall not be required. [District Rule 2080]
5. Upon recommencing operation of this unit, normal testing shall resume. [District Rule 2080]
6. Upon recommencing operation of this unit, tank shall be connected to vapor control system and is subject to normal leak free requirements. [District Rule 2080]
7. Any testing required by this permit shall be performed within 60 days of recommencing operation of this unit, regardless of whether the unit remains active or is again designated as dormant. [District Rule 2080]
8. Records of all dates and times that this unit is designated as dormant or active, and copies of all corresponding notices to the District, shall be maintained, retained for a period of at least five years, and made available for District inspection upon request. [District Rule 1070]

CONDITIONS CONTINUE ON NEXT PAGE

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

Seyed Sadredin, Executive Director / APCO

COPY

DAVID WARNER, Director of Permit Services
S-1131-1130-1 : Oct 28 2013 7:54AM -- DAVIDSOS : Joint Inspection NOT Required

9. If the unit becomes non-compliant with District Rules while it is dormant, operation of the unit is not authorized until an Authority to Construct permit is issued approving all necessary retrofits and permit changes required to comply with the respective District Rules. [District Rule 2010]
10. Tank shall only vent to vapor control system listed on S-1131-1128. [District Rule 2201]
11. The tank shall be equipped with a vapor control system consisting of a closed vent system that collects all VOCs from the storage tank, and a VOC control device. The vapor control system shall be APCO-approved and maintained in leak-free condition. Vapors shall be discharged to a system with an efficiency of at least 99% by weight. [District Rules 2201 and 4623]
12. All piping, valves, and fittings shall be constructed and maintained in a leak-free condition. [District Rules 2201 and 4623]
13. All 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]
14. 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 shall be reported as a deviation. [District Rules 2201 and 4623]
15. Except as otherwise provided in this permit, the operator shall ensure that the vapor recovery system is functional and is operating as designed at all times. [District Rule 2201]
16. 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 Rules 2201 and 4623]
17. Any component found to be leaking on two consecutive annual inspections is in violation of the District Rule 4623, even if it is under the voluntary inspection and maintenance program. [District Rules 2201 and 4623]
18. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date and time of leak detection, and method of detection; 3) Date and time of leak repair, and emission level of recheck after leak is repaired; 4) Method used to minimize the leak to lowest possible level within 8 hours after detection. [District Rules 2201 and 4623]
19. Fugitive VOC emissions rate shall be, calculated using CAPCOA California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities Table IV-2c, Oil and Gas Production Screening Value Ranges Emission Factors (Feb 1999), from the total number of components from this tank. [District Rule 2201]
20. VOC fugitive emissions from the components in gas service on the tank shall not exceed 0.1 lb/day. [District Rule 2201]
21. Operator shall visually inspect tank shell, hatches, seals, seams, cable seals, valves, flanges, connectors, and any other piping components directly affixed to the tank and within five feet of the tank at least once per year for liquid leaks, and with a portable hydrocarbon detection instrument conducted in accordance with EPA Method 21 for gas leaks. Operator shall also visually or ultrasonically inspect as appropriate, the external shells and roofs of uninsulated tanks for structural integrity annually. [District Rule 4623 (Table 3)]
22. Upon detection of a liquid leak, defined as a leak rate of greater than or equal to 30 drops per minute, operator shall repair the leak within 8 hours. For leaks with a liquid leak rate of between 3 and 30 drops per minute, the leaking component shall be repaired within 24 hours after detection. [District Rule 4623 (Table 3)]
23. Upon detection of a gas leak, defined as a VOC concentration of greater than 10,000 ppmv measured in accordance with EPA Method 21, operator shall take one of the following actions: 1) eliminate the leak within 8 hours after detection; or 2) if the leak cannot be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices, and eliminate the leak within 48 hours after minimization. In no event shall the total time to minimize and eliminate a leak exceed 56 hours after detection. [District Rule 4623 (Table 3)]

CONDITIONS CONTINUE ON NEXT PAGE

24. Components found to be leaking either liquids or gases shall be immediately affixed with a tag showing the component to be leaking. Operator shall maintain records of the liquid or gas leak detection readings, date/time the leak was discovered, and date/time the component was repaired to a leak-free condition. [District Rule 4623 (Table 3)]
25. Leaking components that have been discovered by the operator that have been immediately tagged and repaired within the timeframes specified in District Rule 4623, Table 3 shall not constitute a violation of this rule. Leaking components as defined by District Rule 4623 discovered by District staff that were not previously identified and/or tagged by the operator, and/or any leaks that were not repaired within the timeframes specified in District Rule 4623, Table 3 shall constitute a violation of this rule. [District Rule 4623 (Table 3)]
26. If a component type for a given tank is found to leak during an annual inspection, operator shall conduct quarterly inspections of that component type on the tank or tank system for four consecutive quarters. If no components are found to leak after four consecutive quarters, the operator may revert to annual inspections. [District Rule 4623 (Table 3)]
27. Any component found to be leaking on two consecutive annual inspections is in violation of this rule, even if covered under the voluntary inspection and maintenance program. [District Rule 4623 (Table 3)]
28. Permittee shall maintain records of number and type of components installed and calculated fugitive emissions. Permittee shall update such records when new components are installed. [District Rule 2201]
29. Permittee shall notify the APCO in writing at least three (3) days prior to performing tank degassing and interior tank cleaning activities. Written notification shall include the following: 1) the Permit to Operate number and physical location of the tank being degassed, 2) the date and time that tank degassing and cleaning activities will begin, 3) the degassing method, as allowed in this permit, to be used, 4) the method to be used to clean the tank, including any solvents to be used, and 5) the method to be used to dispose of any removed sludge, including methods that will be used to control emissions from the receiving vessel and emissions during transport. [District Rule 4623]
30. This tank shall be degassed before commencing interior cleaning by one of the following methods (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) 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) displacing VOCs contained in the tank vapor space to an APCO-approved vapor recovery system by filling the tank with a suitable gas. Degassing shall continue until the operator has achieved a vapor displacement equivalent to at least 2.3 times the tank capacity. Suitable gases are air, nitrogen, carbon dioxide, or natural gas containing less than 10 percent VOC by weight. [District Rule 4623]
31. During tank degassing, the operator shall discharge or displace organic vapors contained in the tank vapor space to an APCO-approved vapor recovery system. [District Rule 4623]
32. To facilitate connection to an external APCO-approved recovery system, a suitable tank fitting, such as a manway, may be temporarily removed for a period of time not to exceed 1 hour. [District Rule 4623]
33. This tank shall be in compliance with the applicable requirements of District Rule 4623 at all times during draining, degassing, and refilling the tank with an organic liquid having a TVP of 0.5 psia or greater. [District Rule 4623]
34. After a tank has been degassed pursuant to the requirements of this permit, vapor control requirements are not applicable until an organic liquid having a TVP of 0.5 psia or greater is placed, held, or stored in this tank. [District Rule 4623]
35. While performing tank cleaning activities, operators may only use the following cleaning agents: diesel, solvents with an initial boiling point of greater than 302 degrees F, solvents with a vapor pressure of less than 0.5 psia, or solvents with 50 grams of VOC per liter or less. [District Rule 4623]
36. Steam cleaning shall only be allowed at locations where wastewater treatment facilities are limited, or during the months of December through March. [District Rule 4623]
37. During sludge removal, the operator shall control emissions from the sludge receiving vessel by operating an APCO-approved vapor control device that reduces emissions of organic vapors by at least 95%. [District Rule 4623]

CONDITIONS CONTINUE ON NEXT PAGE

38. Permittee shall only transport removed sludge in closed, liquid leak-free containers. [District Rule 4623]

39. Permittee shall store removed sludge, until final disposal, in vapor leak-free containers, or in tanks complying with the vapor control requirements of District Rule 4623. Sludge that is to be used to manufacture roadmix, as defined in District Rule 2020, is not required to be stored in this manner. Roadmix manufacturing operations exempt pursuant to District Rule 2020 shall maintain documentation of their compliance with Rule 2020, and shall readily make said documentation available for District inspection upon request. [District Rules 2020 and 4623]

40. The operator of a fixed roof tank shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 1070]

41. Formerly permit S-1624-127

San Joaquin Valley
AIR POLLUTION CONTROL DISTRICT

HEALTHY AIR LIVING™

AUTHORITY TO CONSTRUCT

PERMIT NO: S-1131-1131-1 **ISSUANCE DATE:** 05/28/2013

LEGAL OWNER OR OPERATOR: CHEVRON USA INC
MAILING ADDRESS: PO BOX 1392
BAKERSFIELD, CA 93302

LOCATION: HEAVY OIL CENTRAL
KERN COUNTY, CA

SECTION: NW09 **TOWNSHIP:** 29S **RANGE:** 28E

EQUIPMENT DESCRIPTION:
MODIFICATION OF THERMALLY ENHANCED OIL RECOVERY OPERATION WITH 20 CYCLIC WELLS SERVED BY CASING GAS COLLECTION SYSTEM (KCLC LEASE): CLOSE CASING VENTS FOR WELL VENT VAPOR CONTROL SYSTEM, ALLOW CRUDE OIL TO BE SENT TO TANKS LISTED ON PERMITS S-1131-885, '886, '891, AND '892, AND REVISE AUTHORIZED VAPOR CONTROL SYSTEM INCINERATION DEVICES

CONDITIONS

1. The facility shall submit an application to modify the Title V permit in accordance with the timeframes and procedures of District Rule 2520. [District Rule 2520] Federally Enforceable Through Title V Permit
2. Fluids produced from these steam-enhanced wells with closed casing vents shall be introduced only to tanks or vessels vented to a District approved vapor collection and control system that has a destruction or removal efficiency of at least 99%, or to permit exempt storage equipment as defined by District Rule 2020, Section 6.6. [District Rule 2201]
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. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
5. Fugitive VOC emissions from TEOR operation shall not exceed 1.0 lb/day. [District Rule 2201]
6. All piping, valves, and fittings shall be constructed and maintained in a leak-free condition. [District Rule 2201]

CONDITIONS CONTINUE ON NEXT PAGE

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

Seyed Sadredin, Executive Director / APCO

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DAVID WARNER, Director of Permit Services
S-1131-1131-1 : Oct 28 2013 7:54AM – DAVIDSOS Joint Inspection NOT Required

7. 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 shall be reported as a deviation. [District Rule 2201]
8. The crude oil production from wells associated with this permit unit shall not lie within 1,000 feet of an air injection well used for in-situ combustion. [District Rule 4407]
9. Permittee shall maintain records of the date and well identification where steam injection or well stimulation occurs, current list of all thermally enhanced production wells associated with this operation and accurate fugitive component counts of components in gas service and resulting emissions calculated using the emission factors in the CAPCOA California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities, Table IV-2c, Oil and Gas Production Screening Value Ranges Emission Factors (Feb 1999) . [District Rules 2201 and 4401]
10. The inspection requirements of Section 5.4.1 through Section 5.4.6 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 6.3.4 of Rule 4401. [District Rule 4401]
11. Gas and liquid leaks are as defined in Section 3.20 of Rule 4401. [District Rule 4401]
12. 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]
13. 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] Federally Enforceable Through Title V Permit
14. An operator shall be in violation of this rule if any District inspection demonstrates or if any operator inspection conducted pursuant to Section 5.4 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 5.2.2.1 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]
15. An operator shall be in violation of this rule if any District inspection demonstrates or if any operator inspection conducted pursuant to Section 5.4 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 2 of Rule 4401. [District Rule 4401]
16. 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 5.2.2 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 5.5 of Rule 4401. [District Rule 4401]
17. 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]
18. 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]
19. 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]

CONDITIONS CONTINUE ON NEXT PAGE

20. 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 3 of Rule 4401. [District Rule 4401]

21. In addition to the inspections required by Section 5.4.1 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 3 of Rule 4401. [District Rule 4401]

22. In addition to the inspections required by Sections 5.4.1, 5.4.2 and 5.4.3 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 5.4.4.1 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]

23. An operator shall inspect all unsafe-to-monitor components during each turnaround. [District Rule 4401]

24. 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]

25. 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]

26. 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 the component is found to be in compliance with the requirements of this rule. [District Rule 4401]

27. 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]

28. Except for leaking critical components or leaking essential components subject to the requirements of Section 5.5.7 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 3 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]

29. 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]

30. 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 3 of Rule 4401. [District Rule 4401]

31. The time of the initial leak detection shall be the start of the repair period specified in Table 3 of Rule 4401. [District Rule 4401]

32. 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]

CONDITIONS CONTINUE ON NEXT PAGE

33. 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]

34. 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]

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]

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]

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]

38. Operator shall keep a copy of the APCO-approved Operator Management Plan at the facility. [District Rule 4401]

39. An operator shall source test annually all vapor collection and control systems used to control emissions from steam-enhanced 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]

40. 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]

41. 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]

42. 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]

43. 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]

44. 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]

CONDITIONS CONTINUE ON NEXT PAGE

45. 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]
46. 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]
47. 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]
48. 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]
49. In accordance with the approved OMP, permittee shall meet all applicable operating, leak standards, inspection and re-inspection, leak repair, record keeping, and notification requirements of Rule 4401. [District Rule 4401]
50. 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]
51. Formerly permit S-1624-161.

San Joaquin Valley
AIR POLLUTION CONTROL DISTRICT

HEALTHY AIR LIVING™

AUTHORITY TO CONSTRUCT

PERMIT NO: S-1131-1132-1 **ISSUANCE DATE:** 05/28/2013

LEGAL OWNER OR OPERATOR: CHEVRON USA INC
MAILING ADDRESS: PO BOX 1392
BAKERSFIELD, CA 93302

LOCATION: HEAVY OIL CENTRAL
KERN COUNTY, CA

SECTION: NW09 **TOWNSHIP:** 29S **RANGE:** 28E

EQUIPMENT DESCRIPTION:
MODIFICATION OF 1,500 BBL FIXED ROOF CRUDE OIL WASH TANK WITH P/V VALVE SERVED BY VAPOR CONTROL SYSTEM LISTED ON S-1131-1128 (KCLC LEASE): DESIGNATE AS A COMPLIANT DORMANT EMISSIONS UNIT (DEU)

CONDITIONS

1. The facility shall submit an application to modify the Title V permit in accordance with the timeframes and procedures of District Rule 2520. [District Rule 2520] Federally Enforceable Through Title V Permit
2. While dormant, tank shall be emptied of all fluid, tank may be disconnected from vapor control system and may be open. [District Rule 2080]
3. Permittee shall submit written notification to the District upon designating the unit as dormant or active. [District Rule 2080]
4. While dormant, normal testing shall not be required. [District Rule 2080]
5. Upon recommencing operation of this unit, normal testing shall resume. [District Rule 2080]
6. Upon recommencing operation of this unit, tank shall be connected to vapor control system and is subject to normal leak free requirements. [District Rule 2080]
7. Any testing required by this permit shall be performed within 60 days of recommencing operation of this unit, regardless of whether the unit remains active or is again designated as dormant. [District Rule 2080]

CONDITIONS CONTINUE ON NEXT PAGE

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

Seyed Sadredin, Executive Director / APCO

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DAVID WARNER, Director of Permit Services
S-1131-1132-1 : Oct 28 2013 7:54AM -- DAVIDSOS : Joint Inspection NOT Required

8. Records of all dates and times that this unit is designated as dormant or active, and copies of all corresponding notices to the District, shall be maintained, retained for a period of at least five years, and made available for District inspection upon request. [District Rule 1070]
9. If the unit becomes non-compliant with District Rules while it is dormant, operation of the unit is not authorized until an Authority to Construct permit is issued approving all necessary retrofits and permit changes required to comply with the respective District Rules. [District Rule 2010]
10. Tank shall only vent to vapor control system listed on S-1131-128. [District Rule 2201]
11. The tank shall be equipped with a vapor control system consisting of a closed vent system that collects all VOCs from the storage tank, and a VOC control device. The vapor control system shall be APCO-approved and maintained in leak-free condition. Vapors shall be discharged to a system with an efficiency of at least 99% by weight. [District Rules 2201 and 4623]
12. All piping, valves, and fittings shall be constructed and maintained in a leak-free condition. [District Rules 2201 and 4623]
13. All 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]
14. 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 shall be reported as a deviation. [District Rules 2201 and 4623]
15. Except as otherwise provided in this permit, the operator shall ensure that the vapor recovery system is functional and is operating as designed at all times. [District Rule 2201]
16. 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 Rules 2201 and 4623]
17. Any component found to be leaking on two consecutive annual inspections is in violation of the District Rule 4623, even if it is under the voluntary inspection and maintenance program. [District Rules 2201 and 4623]
18. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date and time of leak detection, and method of detection; 3) Date and time of leak repair, and emission level of recheck after leak is repaired; 4) Method used to minimize the leak to lowest possible level within 8 hours after detection. [District Rules 2201 and 4623]
19. Fugitive VOC emissions rate shall be, calculated using CAPCOA California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities Table IV-2c, Oil and Gas Production Screening Value Ranges Emission Factors (Feb 1999), from the total number of components from this tank. [District Rule 2201]
20. VOC fugitive emissions from the components in gas service on the tank shall not exceed 0.5 lb/day. [District Rule 2201]
21. Operator shall visually inspect tank shell, hatches, seals, seams, cable seals, valves, flanges, connectors, and any other piping components directly affixed to the tank and within five feet of the tank at least once per year for liquid leaks, and with a portable hydrocarbon detection instrument conducted in accordance with EPA Method 21 for gas leaks. Operator shall also visually or ultrasonically inspect as appropriate, the external shells and roofs of uninsulated tanks for structural integrity annually. [District Rule 4623 (Table 3)]
22. Upon detection of a liquid leak, defined as a leak rate of greater than or equal to 30 drops per minute, operator shall repair the leak within 8 hours. For leaks with a liquid leak rate of between 3 and 30 drops per minute, the leaking component shall be repaired within 24 hours after detection. [District Rule 4623 (Table 3)]

CONDITIONS CONTINUE ON NEXT PAGE

23. Upon detection of a gas leak, defined as a VOC concentration of greater than 10,000 ppmv measured in accordance with EPA Method 21, operator shall take one of the following actions: 1) eliminate the leak within 8 hours after detection; or 2) if the leak cannot be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices, and eliminate the leak within 48 hours after minimization. In no event shall the total time to minimize and eliminate a leak exceed 56 hours after detection. [District Rule 4623 (Table 3)]

24. Components found to be leaking either liquids or gases shall be immediately affixed with a tag showing the component to be leaking. Operator shall maintain records of the liquid or gas leak detection readings, date/time the leak was discovered, and date/time the component was repaired to a leak-free condition. [District Rule 4623 (Table 3)]

25. Leaking components that have been discovered by the operator that have been immediately tagged and repaired within the timeframes specified in District Rule 4623, Table 3 shall not constitute a violation of this rule. Leaking components as defined by District Rule 4623 discovered by District staff that were not previously identified and/or tagged by the operator, and/or any leaks that were not repaired within the timeframes specified in District Rule 4623, Table 3 shall constitute a violation of this rule. [District Rule 4623 (Table 3)]

26. If a component type for a given tank is found to leak during an annual inspection, operator shall conduct quarterly inspections of that component type on the tank or tank system for four consecutive quarters. If no components are found to leak after four consecutive quarters, the operator may revert to annual inspections. [District Rule 4623 (Table 3)]

27. Any component found to be leaking on two consecutive annual inspections is in violation of this rule, even if covered under the voluntary inspection and maintenance program. [District Rule 4623 (Table 3)]

28. Permittee shall maintain records of number and type of components installed and calculated fugitive emissions. Permittee shall update such records when new components are installed. [District Rule 2201]

29. Permittee shall notify the APCO in writing at least three (3) days prior to performing tank degassing and interior tank cleaning activities. Written notification shall include the following: 1) the Permit to Operate number and physical location of the tank being degassed, 2) the date and time that tank degassing and cleaning activities will begin, 3) the degassing method, as allowed in this permit, to be used, 4) the method to be used to clean the tank, including any solvents to be used, and 5) the method to be used to dispose of any removed sludge, including methods that will be used to control emissions from the receiving vessel and emissions during transport. [District Rule 4623]

30. This tank shall be degassed before commencing interior cleaning by one of the following methods (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) 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) displacing VOCs contained in the tank vapor space to an APCO-approved vapor recovery system by filling the tank with a suitable gas. Degassing shall continue until the operator has achieved a vapor displacement equivalent to at least 2.3 times the tank capacity. Suitable gases are air, nitrogen, carbon dioxide, or natural gas containing less than 10 percent VOC by weight. [District Rule 4623]

31. During tank degassing, the operator shall discharge or displace organic vapors contained in the tank vapor space to an APCO-approved vapor recovery system. [District Rule 4623]

32. To facilitate connection to an external APCO-approved recovery system, a suitable tank fitting, such as a manway, may be temporarily removed for a period of time not to exceed 1 hour. [District Rule 4623]

33. This tank shall be in compliance with the applicable requirements of District Rule 4623 at all times during draining, degassing, and refilling the tank with an organic liquid having a TVP of 0.5 psia or greater. [District Rule 4623]

34. After a tank has been degassed pursuant to the requirements of this permit, vapor control requirements are not applicable until an organic liquid having a TVP of 0.5 psia or greater is placed, held, or stored in this tank. [District Rule 4623]

35. While performing tank cleaning activities, operators may only use the following cleaning agents: diesel, solvents with an initial boiling point of greater than 302 degrees F, solvents with a vapor pressure of less than 0.5 psia, or solvents with 50 grams of VOC per liter or less. [District Rule 4623]

CONDITIONS CONTINUE ON NEXT PAGE

36. Steam cleaning shall only be allowed at locations where wastewater treatment facilities are limited, or during the months of December through March. [District Rule 4623]

37. During sludge removal, the operator shall control emissions from the sludge receiving vessel by operating an APCO-approved vapor control device that reduces emissions of organic vapors by at least 95%. [District Rule 4623]

38. Permittee shall only transport removed sludge in closed, liquid leak-free containers. [District Rule 4623]

39. Permittee shall store removed sludge, until final disposal, in vapor leak-free containers, or in tanks complying with the vapor control requirements of District Rule 4623. Sludge that is to be used to manufacture roadmix, as defined in District Rule 2020, is not required to be stored in this manner. Roadmix manufacturing operations exempt pursuant to District Rule 2020 shall maintain documentation of their compliance with Rule 2020, and shall readily make said documentation available for District inspection upon request. [District Rules 2020 and 4623]

40. The operator of a fixed roof tank shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 1070]

41. Formerly permit S-1624-163

San Joaquin Valley
AIR POLLUTION CONTROL DISTRICT

HEALTHY AIR LIVING™

AUTHORITY TO CONSTRUCT

PERMIT NO: S-1131-1133-1 **ISSUANCE DATE:** 05/28/2013

LEGAL OWNER OR OPERATOR: CHEVRON USA INC
MAILING ADDRESS: PO BOX 1392
BAKERSFIELD, CA 93302

LOCATION: HEAVY OIL CENTRAL
KERN COUNTY, CA

SECTION: NW09 **TOWNSHIP:** 29S **RANGE:** 28E

EQUIPMENT DESCRIPTION:
MODIFICATION OF 1,000 BBL FIXED ROOF CRUDE OIL STORAGE TANK SERVED BY VAPOR CONTROL SYSTEM LISTED ON S-1131-1128 (KCLC LEASE): DESIGNATE AS A COMPLIANT DORMANT EMISSIONS UNIT (DEU)

CONDITIONS

1. The facility shall submit an application to modify the Title V permit in accordance with the timeframes and procedures of District Rule 2520. [District Rule 2520] Federally Enforceable Through Title V Permit
2. While dormant, tank shall be emptied of all fluid, tank may be disconnected from vapor control system and may be open. [District Rule 2080]
3. Permittee shall submit written notification to the District upon designating the unit as dormant or active. [District Rule 2080]
4. While dormant, normal testing shall not be required. [District Rule 2080]
5. Upon recommencing operation of this unit, normal testing shall resume. [District Rule 2080]
6. Upon recommencing operation of this unit, tank shall be connected to vapor control system and is subject to normal leak free requirements. [District Rule 2080]
7. Any testing required by this permit shall be performed within 60 days of recommencing operation of this unit, regardless of whether the unit remains active or is again designated as dormant. [District Rule 2080]
8. Records of all dates and times that this unit is designated as dormant or active, and copies of all corresponding notices to the District, shall be maintained, retained for a period of at least five years, and made available for District inspection upon request. [District Rule 1070]

CONDITIONS CONTINUE ON NEXT PAGE

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

Seyed Sadredin, Executive Director / APCO

COPY

DAVID WARNER, Director of Permit Services
S-1131-1133-1 : Oct 28 2013 7:54AM – DAVIDSOS : Joint Inspection NOT Required

9. If the unit becomes non-compliant with District Rules while it is dormant, operation of the unit is not authorized until an Authority to Construct permit is issued approving all necessary retrofits and permit changes required to comply with the respective District Rules. [District Rule 2010]
10. Tank shall only vent to vapor control system listed on S-1131-1128. [District Rule 2201]
11. The tank shall be equipped with a vapor control system consisting of a closed vent system that collects all VOCs from the storage tank, and a VOC control device. The vapor control system shall be APCO-approved and maintained in leak-free condition. Vapors shall be discharged to a system with an efficiency of at least 99% by weight. [District Rules 2201 and 4623]
12. All piping, valves, and fittings shall be constructed and maintained in a leak-free condition. [District Rules 2201 and 4623]
13. All 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]
14. 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 shall be reported as a deviation. [District Rules 2201 and 4623]
15. Except as otherwise provided in this permit, the operator shall ensure that the vapor recovery system is functional and is operating as designed at all times. [District Rule 2201]
16. 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 Rules 2201 and 4623]
17. Any component found to be leaking on two consecutive annual inspections is in violation of the District Rule 4623, even if it is under the voluntary inspection and maintenance program. [District Rules 2201 and 4623]
18. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date and time of leak detection, and method of detection; 3) Date and time of leak repair, and emission level of recheck after leak is repaired; 4) Method used to minimize the leak to lowest possible level within 8 hours after detection. [District Rules 2201 and 4623]
19. Fugitive VOC emissions rate shall be, calculated using CAPCOA California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities Table IV-2c, Oil and Gas Production Screening Value Ranges Emission Factors (Feb 1999), from the total number of components from this tank. [District Rule 2201]
20. VOC fugitive emissions from the components in gas service on the tank shall not exceed 0.1 lb/day. [District Rule 2201]
21. Operator shall visually inspect tank shell, hatches, seals, seams, cable seals, valves, flanges, connectors, and any other piping components directly affixed to the tank and within five feet of the tank at least once per year for liquid leaks, and with a portable hydrocarbon detection instrument conducted in accordance with EPA Method 21 for gas leaks. Operator shall also visually or ultrasonically inspect as appropriate, the external shells and roofs of uninsulated tanks for structural integrity annually. [District Rule 4623 (Table 3)]
22. Upon detection of a liquid leak, defined as a leak rate of greater than or equal to 30 drops per minute, operator shall repair the leak within 8 hours. For leaks with a liquid leak rate of between 3 and 30 drops per minute, the leaking component shall be repaired within 24 hours after detection. [District Rule 4623 (Table 3)]
23. Upon detection of a gas leak, defined as a VOC concentration of greater than 10,000 ppmv measured in accordance with EPA Method 21, operator shall take one of the following actions: 1) eliminate the leak within 8 hours after detection; or 2) if the leak cannot be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices, and eliminate the leak within 48 hours after minimization. In no event shall the total time to minimize and eliminate a leak exceed 56 hours after detection. [District Rule 4623 (Table 3)]

CONDITIONS CONTINUE ON NEXT PAGE

24. Components found to be leaking either liquids or gases shall be immediately affixed with a tag showing the component to be leaking. Operator shall maintain records of the liquid or gas leak detection readings, date/time the leak was discovered, and date/time the component was repaired to a leak-free condition. [District Rule 4623 (Table 3)]
25. Leaking components that have been discovered by the operator that have been immediately tagged and repaired within the timeframes specified in District Rule 4623, Table 3 shall not constitute a violation of this rule. Leaking components as defined by District Rule 4623 discovered by District staff that were not previously identified and/or tagged by the operator, and/or any leaks that were not repaired within the timeframes specified in District Rule 4623, Table 3 shall constitute a violation of this rule. [District Rule 4623 (Table 3)]
26. If a component type for a given tank is found to leak during an annual inspection, operator shall conduct quarterly inspections of that component type on the tank or tank system for four consecutive quarters. If no components are found to leak after four consecutive quarters, the operator may revert to annual inspections. [District Rule 4623 (Table 3)]
27. Any component found to be leaking on two consecutive annual inspections is in violation of this rule, even if covered under the voluntary inspection and maintenance program. [District Rule 4623 (Table 3)]
28. Permittee shall maintain records of number and type of components installed and calculated fugitive emissions. Permittee shall update such records when new components are installed. [District Rule 2201]
29. Permittee shall notify the APCO in writing at least three (3) days prior to performing tank degassing and interior tank cleaning activities. Written notification shall include the following: 1) the Permit to Operate number and physical location of the tank being degassed, 2) the date and time that tank degassing and cleaning activities will begin, 3) the degassing method, as allowed in this permit, to be used, 4) the method to be used to clean the tank, including any solvents to be used, and 5) the method to be used to dispose of any removed sludge, including methods that will be used to control emissions from the receiving vessel and emissions during transport. [District Rule 4623]
30. This tank shall be degassed before commencing interior cleaning by one of the following methods (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) 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) displacing VOCs contained in the tank vapor space to an APCO-approved vapor recovery system by filling the tank with a suitable gas. Degassing shall continue until the operator has achieved a vapor displacement equivalent to at least 2.3 times the tank capacity. Suitable gases are air, nitrogen, carbon dioxide, or natural gas containing less than 10 percent VOC by weight. [District Rule 4623]
31. During tank degassing, the operator shall discharge or displace organic vapors contained in the tank vapor space to an APCO-approved vapor recovery system. [District Rule 4623]
32. To facilitate connection to an external APCO-approved recovery system, a suitable tank fitting, such as a manway, may be temporarily removed for a period of time not to exceed 1 hour. [District Rule 4623]
33. This tank shall be in compliance with the applicable requirements of District Rule 4623 at all times during draining, degassing, and refilling the tank with an organic liquid having a TVP of 0.5 psia or greater. [District Rule 4623]
34. After a tank has been degassed pursuant to the requirements of this permit, vapor control requirements are not applicable until an organic liquid having a TVP of 0.5 psia or greater is placed, held, or stored in this tank. [District Rule 4623]
35. While performing tank cleaning activities, operators may only use the following cleaning agents: diesel, solvents with an initial boiling point of greater than 302 degrees F, solvents with a vapor pressure of less than 0.5 psia, or solvents with 50 grams of VOC per liter or less. [District Rule 4623]
36. Steam cleaning shall only be allowed at locations where wastewater treatment facilities are limited, or during the months of December through March. [District Rule 4623]
37. During sludge removal, the operator shall control emissions from the sludge receiving vessel by operating an APCO-approved vapor control device that reduces emissions of organic vapors by at least 95%. [District Rule 4623]

CONDITIONS CONTINUE ON NEXT PAGE

38. Permittee shall only transport removed sludge in closed, liquid leak-free containers. [District Rule 4623]

39. Permittee shall store removed sludge, until final disposal, in vapor leak-free containers, or in tanks complying with the vapor control requirements of District Rule 4623. Sludge that is to be used to manufacture roadmix, as defined in District Rule 2020, is not required to be stored in this manner. Roadmix manufacturing operations exempt pursuant to District Rule 2020 shall maintain documentation of their compliance with Rule 2020, and shall readily make said documentation available for District inspection upon request. [District Rules 2020 and 4623]

40. The operator of a fixed roof tank shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 1070]

41. Formerly permit S--1131-166

ATTACHMENT C

Emissions Increases

	SSIPE (lb/yr)				
	NOx	VOC	CO	SOx	PM10
S-1131-885-28	0	0	0	0	0
S-1131-886-21	0	0	0	0	0
S-1131-891-20	0	0	0	0	0
S-1131-892-20	0	0	0	0	0
S-1131-1128-2	0	0	0	0	0
S-1131-1129-2	0	0	0	0	0
S-1131-1130-2	0	0	0	0	0
S-1131-1131-2	0	0	0	0	0
S-1131-1132-2	0	0	0	0	0
S-1131-1133-2	0	0	0	0	0
Total	0	0	0	0	0

ATTACHMENT D

Application

San Joaquin Valley Air Pollution Control District

www.valleyair.org

RECEIVED
JUN 17 2013
SJVAPCD
Southern Region

Permit Application For:

[ ] ADMINISTRATIVE AMENDMENT [X] MINOR MODIFICATION [ ] SIGNIFICANT MODIFICATION

1. PERMIT TO BE ISSUED TO: CHEVRON U.S.A. INC.

2. MAILING ADDRESS:

STREET/P.O. BOX: PO BOX 1392

CITY: BAKERSFIELD STATE: CA 9-DIGIT ZIP CODE: 93302

3. LOCATION WHERE THE EQUIPMENT WILL BE OPERATED:

STREET: Kern River Heavy Oil Source CITY:

____ ¼ SECTION ____ TOWNSHIP ____ RANGE

INSTALLATION DATE:

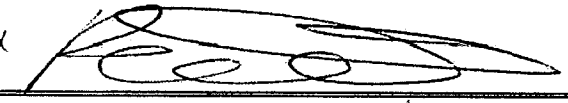
4. GENERAL NATURE OF BUSINESS:
CRUDE OIL AND GAS PRODUCTION

5. DESCRIPTION OF EQUIPMENT OR MODIFICATION FOR WHICH APPLICATION IS MADE
(include Permit #'s if known, and use additional sheets if necessary)

Implementation of ATC S-1131-885-27, -886-20, -891-19, -892-19, -1128-1, -1129-1, -1130-1, -1131-1, -1132-1 and -1133-1

6. TYPE OR PRINT NAME OF APPLICANT:
Patricia O'Neill

TITLE OF APPLICANT:
Kern River Operations Supervisor

7. SIGNATURE OF APPLICANT: X 

DATE: 06-17-13

PHONE: (661) 654-7141
FAX: ( )
EMAIL: beckdl@chevron.com

For APCD Use Only: NO $

DATE STAMP	*FILING FEE RECEIVED :* $ *CHECK#:*
	DATE PAID:
	PROJECT NO: S-1132604 *FACILITY ID:* S-1131

RECEIVED
JUN 17 2013
SJVAPCD
Southern Region

San Joaquin Valley
Unified Air Pollution Control District

TITLE V MODIFICATION - COMPLIANCE CERTIFICATION FORM

I. TYPE OF PERMIT ACTION (Check appropriate box)

[ ] SIGNIFICANT PERMIT MODIFICATION
[X] MINOR PERMIT MODIFICATION
[ ] ADMINISTRATIVE AMENDMENT

COMPANY NAME: **CHEVRON U.S.A. INC.**	FACILITY ID: **S-1131**
1. Type of Organization: [X] Corporation [ ] Sole Ownership [ ] Government [ ] Partnership [ ] Utility	
2. Owner's Name: **CHEVRON U.S.A. INC.**	
3. Agent to the Owner: **N/A**	

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

(PM) Based on information and belief formed after reasonable inquiry, the equipment identified in this application will continue to comply with the applicable federal requirement(s).

(PM) Based on information and belief formed after reasonable inquiry, the equipment identified in this application will comply with applicable federal requirement(s) that will become effective during the permit term, on a timely basis.

(PM) Corrected information will be provided to the District when I become aware that incorrect or incomplete information has been submitted.

(PM) Based on information and belief formed after reasonable inquiry, information and statements in the submitted application package, including all accompanying reports, and required certifications are true accurate and complete.

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

[signature] 06-14-13

Signature of Responsible Official — Date

Patricia O'Neill

Name of Responsible Official (please print)

Kern River Operations Supervisor

Title of Responsible Official (please print)

Chevron

Jason H. Donchin
Health, Environment and Safety Manager

San Joaquin Valley SBU
Chevron North America
Exploration and Production
P. O. Box 1392
Bakersfield, CA 93302
Tel 661 654 7038
Fax 661 654 7004

June 17, 2013

Mr. Leonard Scandura,
Manager Permit Services
San Joaquin Valley APCD
34946 Flyover Court
Bakersfield, California 93308

RE: Title V Minor Modification—Ten ATCs for Stationary Source S-1131

Dear Mr. Scandura:

Chevron's application for minor modification of Title V permits is attached for your review and approval. The subject ATCs were approved under Project S-1131580. Our Compliance Certification is also attached. Please bill us for the review fees, as allowed.

Thank you for your assistance. Please telephone Daniel Beck at (661) 654-7141 if there are questions.

Sincerely,

/FOR J.H. DONCHIN

Jason Donchin
Health, Environment and Safety Manager

Attachments

ATTACHMENT E

Proposed Title V Operating Permit
#S-1131-885-28, '-886-21, '-891-20, '-892-20, '-1128-2, '-1129-2, '-1130-2, '-1131-2, '-1132-2, and '-1133-2

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1131-885-28 **EXPIRATION DATE:** 02/28/2017

SECTION: SW03 **TOWNSHIP:** 29S **RANGE:** 28E

EQUIPMENT DESCRIPTION:
5,000 BBL FIXED ROOF PETROLEUM STORAGE TANK #3K-L75 WITH VAPOR CONTROL SYSTEM

PERMIT UNIT REQUIREMENTS

1. Tank is authorized to receive fluids from facilities S-1131 and S-1127. [District Rule 2201] Federally Enforceable Through Title V Permit
2. Well vent vapor control systems S-1131-903, S-1131-909, and S-1131-598 may discharge vapors into compressor suction of this operation. [District Rule 2201] Federally Enforceable Through Title V Permit
3. The overall efficiency of the tank vapor collection and control system shall be maintained at no less than 99%. [District Rule 2201] Federally Enforceable Through Title V Permit
4. Permittee shall maintain records of number and type of components in gas service installed. Permittee shall update such records when new gas handling components are installed. Permittee shall maintain records of components exempted from counting, and the basis for exemption. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Fugitive VOC emission rates shall be calculated using the Oil and Gas Production Operations Average Emission Factors, U.S. EPA Protocol for Equipment Leak Emission Estimates, Table 2-4 (EPA-453/R-95-017) November 1995 and the total number of vapor components. [District Rule 2201] Federally Enforceable Through Title V Permit
6. VOC emission rate from components associated with vapor recovery trunk-line up to and including vapor compressors and approved disposal devices shall not exceed 23.9 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
7. VOC emission rate from vapor service components associated with this tank, up to the tie-in with the vapor recovery unit trunk-line, shall not exceed 5.33 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
8. The fugitive VOC emission rate does not include piping and components handling produced fluids with API gravity less than 30 degrees. [District Rule 2201] Federally Enforceable Through Title V Permit
9. 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
10. The fugitive VOC emission rate does not include components in water/oil service (water content of fluids handled greater than 50%). Permittee shall maintain records of annual testing to demonstrate that such fluid streams have at least 50% water by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
11. Operator shall conduct quarterly sampling from the tank vapor control system's inlet header 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-1131-608, -613, -629, -630, -638, -641, -650, -651, and -1097. [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.

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. Permittee shall maintain a written record of the VOC content of the gas sampled. [District Rule 2201] Federally Enforceable Through Title V Permit
14. Collected VOC vapors shall be incinerated in steam generators S-1131-82, '-95, '-98, '-99, '-859, '-877, '-879, '-880, '-881, '-883, '-884, and '908 or disposed of in Department of Oil, Gas, and Geothermal Resources (DOGGR) approved vapor disposal well(s). [District Rule 2201] Federally Enforceable Through Title V Permit
15. Fluids stored or handled by tank shall be routed exclusively to the vapor-controlled "Surge" tanks at Station 36 (S-1131-598, '-629, '-630, '-638, '-641, '-650, '-651, and '-1097). [District Rule 2201] Federally Enforceable Through Title V Permit
16. 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
17. 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
18. 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
19. 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
20. 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
21. 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
22. During sludge removal, the operator shall control emissions from the sludge receiving vessel by operating an APCO-approved vapor control device that reduces emissions of organic vapors by at least 95%. [District Rule 2080] Federally Enforceable Through Title V Permit
23. Permittee shall only transport removed sludge in closed, liquid leak-free containers. [District Rule 2080] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

24. Permittee shall store removed sludge, until final disposal, in vapor leak-free containers, or in tanks complying with the vapor control requirements of District Rule 4623. Sludge that is to be used to manufacture roadmix, as defined in District Rule 2020, is not required to be stored in this manner. Roadmix manufacturing operations exempt pursuant to District Rule 2020 shall maintain documentation of their compliance with Rule 2020, and shall readily make said documentation available for District inspection upon request. [District Rule 2080] Federally Enforceable Through Title V Permit

25. Tank shall be equipped with an operational and calibrated stored liquid temperature indicator. [District Rule 2201] Federally Enforceable Through Title V Permit

26. Tank roof, tank shell, tank vapor space appurtances, vapor control system piping, and vapor control system components shall be inspected and monitored using EPA Method 21 at least monthly. Items found to be not leaking may then be inspected and monitored at least once every 3 months until a leak is detected at which time the inspection and monitoring frequency shall revert to monthly until such time that two consecutive monthly inspections reveal with no leaks at which time the inspection and monitoring frequency shall revert to at least once every 3 months. [District Rule 2201] Federally Enforceable Through Title V Permit

27. A visible mist, liquid dripping at the rate of more than 3 drops per minute, and vapor leaks of 50,000 ppm or greater VOC as methane shall be repaired as expeditiously as possible but in no case beyond 24 hours of detecting the leak and shall be re-monitored using EPA Method 21 upon completion of the repair. Vapor leaks equal to or greater than 10,000 ppm and less than 50,000 ppm VOC as methane shall be repaired within 5 days of detecting the leak and re-monitored using EPA Method 21 upon completion of the repair. Vapor leaks equal to or greater than 1,000 ppm and less than 10,000 ppm VOC as methane shall be repaired within 14 days of leak detection and shall be re-monitored using EPA Method 21 upon completion of the repair. [District Rule 2201] Federally Enforceable Through Title V Permit

28. Upon detection of a leak, permittee shall tag the leak with a uniquely numbered tag, and shall record the leak location, component leaking, identification tag number, leak magnitude, date of leak detection, date of repair, method of repair, and post-repair monitoring measurement. Such records of leaks shall be maintained current and shall be made readily available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit

29. Components not accessible for EPA Method 21 inspection shall be visually and auditorily checked for leaks at least weekly and shall be monitored using EPA Method 21 at least annually. Any leak detected visually or auditorially shall be recorded and the leak shall be repaired within 14 days of leak detection and shall be re-monitored using EPA Method 21 upon completion of the repair. Any leak detected using EPA Method 21 shall be repaired according the leak magnitude as described above and shall be re-monitored using EPA Method 21 upon completion of the repair. [District Rule 2201] Federally Enforceable Through Title V Permit

30. In addition to the requirements above, pressure relief devices shall be inspected and monitored for leaks within 3 days of any known, likely, or suspected venting of such devices. [District Rule 2201] Federally Enforceable Through Title V Permit

31. True vapor pressure of any liquid introduced in this permit unit shall be less than 0.5 psia at (or before) tank liquid inlet and at tank storage temperature. [District Rule 4623] Federally Enforceable Through Title V Permit

32. Permittee shall conduct true vapor pressure (TVP) testing of the organic liquid stored in this tank, or a representative tank as provided in Section 6.2.1.1 of District Rule 4623, 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. [District Rule 4623] Federally Enforceable Through Title V Permit

33. 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

34. 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

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

35. True Vapor Pressure (TVP) of any organic liquid, except for crude oil with an API gravity of 20 degrees or less, shall be determined by measuring the Reid Vapor Pressure (RVP) using ASTM D 323, and converting the RVP to TVP at the tank's maximum organic liquid storage temperature. The conversion of RVP to TVP shall be done in accordance with the procedures in Appendix B. Appendix B is an excerpt from the oil and gas section of "California Air Resources Boards (ARB) Technical Guidance Document to the Criteria and Guidelines Regulation for AB 2588", dated August 1989. As an alternative, the TVP of crude oil with an API gravity range of greater than 26 degrees up to 30 degrees may be determined by using other equivalent test methods approved by APCO, ARB and EPA. [District Rule 4623] Federally Enforceable Through Title V Permit
36. 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
37. 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
38. 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
39. The permittee shall keep accurate records of the dates of inspection and monitoring and the components inspected and monitored. [District Rule 2201] Federally Enforceable Through Title V Permit
40. Permittee shall provide District with a copy of D.O.G.G.R. approval for each vapor disposal well prior to use for vapor injection. [District Rule 1070]
41. 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 Rules1070 and 4623] Federally Enforceable Through Title V Permit
42. Formerly S-1143-21. [District Rule 2010] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1131-886-21 **EXPIRATION DATE:** 02/28/2017

SECTION: SW03 **TOWNSHIP:** 29S **RANGE:** 28E

EQUIPMENT DESCRIPTION:
5,000 BBL FIXED ROOF PETROLEUM STORAGE TANK #3K-S76 WITH VAPOR CONTROL SYSTEM LISTED ON S-1131-885

PERMIT UNIT REQUIREMENTS

1. Tank is authorized to receive fluids from facilities S-1131 and S-1127. [District Rule 2201] Federally Enforceable Through Title V Permit
2. Well vent vapor control systems S-1131-903 and S-1131-909 may discharge vapors into compressor suction of this operation. [District Rule 2201] Federally Enforceable Through Title V Permit
3. The overall efficiency of the tank vapor collection and control system shall be maintained at no less than 99%. [District Rule 2201] Federally Enforceable Through Title V Permit
4. VOC emission rate from vapor service components associated with this tank, up to the tie-in with the vapor recovery unit trunk-line, shall not exceed 5.33 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Permittee shall maintain an accurate fugitive component count and resultant emissions calculated using emission factors from U.S. EPA Publication 453/R-95-017, or other District-approved emission factors. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Steam generators authorized to incinerate collected VOC vapors are S-1131-877,'-880, '-881, '-882, '-883, and '-908. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Fluids stored or handled by tank shall be routed exclusively to the vapor-controlled "Surge" tanks at Station 36 (S-1131-598, '-629, '-630, '-638, '-641, '-650, '-651, and '-1097). [District Rule 2201] Federally Enforceable Through Title V Permit
8. 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

9. This tank shall be degassed before commencing interior cleaning by one of the following methods (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) 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) 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. After a tank has been degassed pursuant to the requirements of this permit, vapor control requirements are not applicable until an organic liquid having a TVP of 0.5 psia or greater is placed, held, or stored in this tank. [District Rule 2080] Federally Enforceable Through Title V Permit
13. 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
14. 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
15. During sludge removal, the operator shall control emissions from the sludge receiving vessel by operating an APCO-approved vapor control device that reduces emissions of organic vapors by at least 95%. [District Rule 2080] Federally Enforceable Through Title V Permit
16. Permittee shall only transport removed sludge in closed, liquid leak-free containers. [District Rule 2080] Federally Enforceable Through Title V Permit
17. Permittee shall store removed sludge, until final disposal, in vapor leak-free containers, or in tanks complying with the vapor control requirements of District Rule 4623. Sludge that is to be used to manufacture roadmix, as defined in District Rule 2020, is not required to be stored in this manner. Roadmix manufacturing operations exempt pursuant to District Rule 2020 shall maintain documentation of their compliance with Rule 2020, and shall readily make said documentation available for District inspection upon request. [District Rules 2020 and 2080] Federally Enforceable Through Title V Permit
18. Tank shall be equipped with an operational and calibrated stored liquid temperature indicator. [District Rule 2201] Federally Enforceable Through Title V Permit
19. Tank roof, tank shell, tank vapor space appurtances, vapor control system piping, and vapor control system components shall be inspected and monitored using EPA Method 21 at least monthly. Items found to be not leaking may then be inspected and monitored at least once every 3 months until a leak is detected at which time the inspection and monitoring frequency shall revert to monthly until such time that two consecutive monthly inspections reveal with no leaks at which time the inspection and monitoring frequency shall revert to at least once every 3 months. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

20. A visible mist, liquid dripping at the rate of more than 3 drops per minute, and vapor leaks of 50,000 ppm or greater VOC as methane shall be repaired as expeditiously as possible but in no case beyond 24 hours of detecting the leak and shall be re-monitored using EPA Method 21 upon completion of the repair. Vapor leaks equal to or greater than 10,000 ppm and less than 50,000 ppm VOC as methane shall be repaired within 5 days of detecting the leak and re-monitored using EPA Method 21 upon completion of the repair. Vapor leaks equal to or greater than 1,000 ppm and less than 10,000 ppm VOC as methane shall be repaired within 14 days of leak detection and shall be re-monitored using EPA Method 21 upon completion of the repair. [District Rule 2201] Federally Enforceable Through Title V Permit
21. Upon detection of a leak, permittee shall tag the leak with a uniquely numbered tag, and shall record the leak location, component leaking, identification tag number, leak magnitude, date of leak detection, date of repair, method of repair, and post-repair monitoring measurement. Such records of leaks shall be maintained current and shall be made readily available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit
22. Components not accessible for EPA Method 21 inspection shall be visually and auditorily checked for leaks at least weekly and shall be monitored using EPA Method 21 at least annually. Any leak detected visually or auditorially shall be recorded and the leak shall be repaired within 14 days of leak detection and shall be re-monitored using EPA Method 21 upon completion of the repair. Any leak detected using EPA Method 21 shall be repaired according the leak magnitude as described above and shall be re-monitored using EPA Method 21 upon completion of the repair. [District Rule 2201] Federally Enforceable Through Title V Permit
23. In addition to the requirements above, pressure relief devices shall be inspected and monitored for leaks within 3 days of any known, likely, or suspected venting of such devices. [District Rule 2201] Federally Enforceable Through Title V Permit
24. True vapor pressure of any liquid introduced in this permit unit shall be less than 0.5 psia at (or before) tank liquid inlet and at tank storage temperature. [District Rule 4623] Federally Enforceable Through Title V Permit
25. Permittee shall conduct true vapor pressure (TVP) testing of the organic liquid stored in this tank, or a representative tank as provided in Section 6.2.1.1 of District Rule 4623, 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. [District Rule 4623] Federally Enforceable Through Title V Permit
26. 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
27. 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
28. True Vapor Pressure (TVP) of any organic liquid, except for crude oil with an API gravity of 20 degrees or less, shall be determined by measuring the Reid Vapor Pressure (RVP) using ASTM D 323, and converting the RVP to TVP at the tank's maximum organic liquid storage temperature. The conversion of RVP to TVP shall be done in accordance with the procedures in Appendix B. Appendix B is an excerpt from the oil and gas section of "California Air Resources Boards (ARB) Technical Guidance Document to the Criteria and Guidelines Regulation for AB 2588", dated August 1989. As an alternative, the TVP of crude oil with an API gravity range of greater than 26 degrees up to 30 degrees may be determined by using other equivalent test methods approved by APCO, ARB and EPA. [District Rule 4623] Federally Enforceable Through Title V Permit
29. 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
30. 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

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

31. 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
32. The permittee shall keep accurate records of the dates of inspection and monitoring and the components inspected and monitored. [District Rule 2201] Federally Enforceable Through Title V Permit
33. Permittee shall provide District with a copy of D.O.G.G.R. approval for each vapor disposal well prior to use for vapor injection. [District Rule 1070]
34. All records required to be maintained by this permit shall be maintained for a period of at least 5 years and shall be made readily available for District inspection upon request. [District Rules 1070 and 4623] Federally Enforceable Through Title V Permit
35. Formerly S-1143-22. [District Rule 2010] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1131-891-20 **EXPIRATION DATE:** 02/28/2017

SECTION: SE04 **TOWNSHIP:** 29S **RANGE:** 28E

EQUIPMENT DESCRIPTION:
5,000 BBL FIXED ROOF PETROLEUM STORAGE TANK WITH VAPOR CONTROL SYSTEM LISTED ON S-1131-885

PERMIT UNIT REQUIREMENTS

1. Tank is authorized to receive fluids from facilities S-1131 and S-1127. [District Rule 2201] Federally Enforceable Through Title V Permit
2. Well vent vapor control systems S-1131-903 and S-1131-909 may discharge vapors into compressor suction of this operation. [District Rule 2201] Federally Enforceable Through Title V Permit
3. The overall efficiency of the tank vapor collection and control system shall be maintained at no less than 99%. [District Rule 2201] Federally Enforceable Through Title V Permit
4. VOC emission rate from vapor service components associated with this tank, up to the tie-in with the vapor recovery unit trunk-line, shall not exceed 5.33 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Permittee shall maintain an accurate fugitive component count and resultant emissions calculated using emission factors from U.S. EPA Publication 453/R-95-017, or other District-approved emission factors. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Steam generators authorized to incinerate collected VOC vapors are S-1131-877,'-880, '-881, '-882, '-883, and '-908. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Fluids stored or handled by tank shall be routed exclusively to the vapor-controlled "Surge" tanks at Station 36 (S-1131-598, '-629, '-630, '-638, '-641, '-650, '-651, and '-1097). [District Rule 2201] Federally Enforceable Through Title V Permit
8. 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

9. This tank shall be degassed before commencing interior cleaning by one of the following methods (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) 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) 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. After a tank has been degassed pursuant to the requirements of this permit, vapor control requirements are not applicable until an organic liquid having a TVP of 0.5 psia or greater is placed, held, or stored in this tank. [District Rule 2080] Federally Enforceable Through Title V Permit
13. 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
14. 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
15. During sludge removal, the operator shall control emissions from the sludge receiving vessel by operating an APCO-approved vapor control device that reduces emissions of organic vapors by at least 95%. [District Rule 2080] Federally Enforceable Through Title V Permit
16. Permittee shall only transport removed sludge in closed, liquid leak-free containers. [District Rule 2080] Federally Enforceable Through Title V Permit
17. Permittee shall store removed sludge, until final disposal, in vapor leak-free containers, or in tanks complying with the vapor control requirements of District Rule 4623. Sludge that is to be used to manufacture roadmix, as defined in District Rule 2020, is not required to be stored in this manner. Roadmix manufacturing operations exempt pursuant to District Rule 2020 shall maintain documentation of their compliance with Rule 2020, and shall readily make said documentation available for District inspection upon request. [District Rules 2020 and 2080] Federally Enforceable Through Title V Permit
18. Tank shall be equipped with an operational and calibrated stored liquid temperature indicator. [District Rule 2201] Federally Enforceable Through Title V Permit
19. Tank roof, tank shell, tank vapor space appurtances, vapor control system piping, and vapor control system components shall be inspected and monitored using EPA Method 21 at least monthly. Items found to be not leaking may then be inspected and monitored at least once every 3 months until a leak is detected at which time the inspection and monitoring frequency shall revert to monthly until such time that two consecutive monthly inspections reveal with no leaks at which time the inspection and monitoring frequency shall revert to at least once every 3 months. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

20. A visible mist, liquid dripping at the rate of more than 3 drops per minute, and vapor leaks of 50,000 ppm or greater VOC as methane shall be repaired as expeditiously as possible but in no case beyond 24 hours of detecting the leak and shall be re-monitored using EPA Method 21 upon completion of the repair. Vapor leaks equal to or greater than 10,000 ppm and less than 50,000 ppm VOC as methane shall be repaired within 5 days of detecting the leak and re-monitored using EPA Method 21 upon completion of the repair. Vapor leaks equal to or greater than 1,000 ppm and less than 10,000 ppm VOC as methane shall be repaired within 14 days of leak detection and shall be re-monitored using EPA Method 21 upon completion of the repair. [District Rule 2201] Federally Enforceable Through Title V Permit
21. Upon detection of a leak, permittee shall tag the leak with a uniquely numbered tag, and shall record the leak location, component leaking, identification tag number, leak magnitude, date of leak detection, date of repair, method of repair, and post-repair monitoring measurement. Such records of leaks shall be maintained current and shall be made readily available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit
22. Components not accessible for EPA Method 21 inspection shall be visually and auditorily checked for leaks at least weekly and shall be monitored using EPA Method 21 at least annually. Any leak detected visually or auditorially shall be recorded and the leak shall be repaired within 14 days of leak detection and shall be re-monitored using EPA Method 21 upon completion of the repair. Any leak detected using EPA Method 21 shall be repaired according the leak magnitude as described above and shall be re-monitored using EPA Method 21 upon completion of the repair. [District Rule 2201] Federally Enforceable Through Title V Permit
23. In addition to the requirements above, pressure relief devices shall be inspected and monitored for leaks within 3 days of any known, likely, or suspected venting of such devices. [District Rule 2201] Federally Enforceable Through Title V Permit
24. True vapor pressure of any liquid introduced in this permit unit shall be less than 0.5 psia at (or before) tank liquid inlet and at tank storage temperature. [District Rule 4623] Federally Enforceable Through Title V Permit
25. Permittee shall conduct true vapor pressure (TVP) testing of the organic liquid stored in this tank, or a representative tank as provided in Section 6.2.1.1 of District Rule 4623, 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. [District Rule 4623] Federally Enforceable Through Title V Permit
26. 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
27. 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
28. True Vapor Pressure (TVP) of any organic liquid, except for crude oil with an API gravity of 20 degrees or less, shall be determined by measuring the Reid Vapor Pressure (RVP) using ASTM D 323, and converting the RVP to TVP at the tank's maximum organic liquid storage temperature. The conversion of RVP to TVP shall be done in accordance with the procedures in Appendix B. Appendix B is an excerpt from the oil and gas section of "California Air Resources Boards (ARB) Technical Guidance Document to the Criteria and Guidelines Regulation for AB 2588", dated August 1989. As an alternative, the TVP of crude oil with an API gravity range of greater than 26 degrees up to 30 degrees may be determined by using other equivalent test methods approved by APCO, ARB and EPA. [District Rule 4623] Federally Enforceable Through Title V Permit
29. 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
30. 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

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

31. 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
32. The permittee shall keep accurate records of the dates of inspection and monitoring and the components inspected and monitored. [District Rule 2201] Federally Enforceable Through Title V Permit
33. Permittee shall provide District with a copy of D.O.G.G.R. approval for each vapor disposal well prior to use for vapor injection. [District Rule 1070]
34. All records required to be maintained by this permit shall be maintained for a period of at least 5 years and shall be made readily available for District inspection upon request. [District Rules 1070 and 4623] Federally Enforceable Through Title V Permit
35. Formerly S-1143-27. [District Rule 2010] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1131-892-20 **EXPIRATION DATE:** 02/28/2017

SECTION: SE04 **TOWNSHIP:** 29S **RANGE:** 28E

EQUIPMENT DESCRIPTION:
5,000 BBL FIXED ROOF PETROLEUM STORAGE TANK WITH VAPOR CONTROL SYSTEM LISTED ON S-1131-885

PERMIT UNIT REQUIREMENTS

1. Tank is authorized to receive fluids from facilities S-1131 and S-1127. [District Rule 2201] Federally Enforceable Through Title V Permit
2. Well vent vapor control systems S-1131-903 and S-1131-909 may discharge vapors into compressor suction of this operation. [District Rule 2201] Federally Enforceable Through Title V Permit
3. The overall efficiency of the tank vapor collection and control system shall be maintained at no less than 99%. [District Rule 2201] Federally Enforceable Through Title V Permit
4. VOC emission rate from vapor service components associated with this tank, up to the tie-in with the vapor recovery unit trunk-line, shall not exceed 5.33 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Permittee shall maintain an accurate fugitive component count and resultant emissions calculated using emission factors from U.S. EPA Publication 453/R-95-017, or other District-approved emission factors. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Steam generators authorized to incinerate collected VOC vapors are S-1131-877,'-880, '-881, '-882, '-883, and '-908. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Fluids stored or handled by tank shall be routed exclusively to the vapor-controlled "Surge" tanks at Station 36 (S-1131-598, '-629, '-630, '-638, '-641, '-650, '-651, and '-1097). [District Rule 2201] Federally Enforceable Through Title V Permit
8. 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

9. This tank shall be degassed before commencing interior cleaning by one of the following methods (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) 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) 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. After a tank has been degassed pursuant to the requirements of this permit, vapor control requirements are not applicable until an organic liquid having a TVP of 0.5 psia or greater is placed, held, or stored in this tank. [District Rule 2080] Federally Enforceable Through Title V Permit
13. 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
14. 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
15. During sludge removal, the operator shall control emissions from the sludge receiving vessel by operating an APCO-approved vapor control device that reduces emissions of organic vapors by at least 95%. [District Rule 2080] Federally Enforceable Through Title V Permit
16. Permittee shall only transport removed sludge in closed, liquid leak-free containers. [District Rule 2080] Federally Enforceable Through Title V Permit
17. Permittee shall store removed sludge, until final disposal, in vapor leak-free containers, or in tanks complying with the vapor control requirements of District Rule 4623. Sludge that is to be used to manufacture roadmix, as defined in District Rule 2020, is not required to be stored in this manner. Roadmix manufacturing operations exempt pursuant to District Rule 2020 shall maintain documentation of their compliance with Rule 2020, and shall readily make said documentation available for District inspection upon request. [District Rules 2020 and 2080] Federally Enforceable Through Title V Permit
18. Tank shall be equipped with an operational and calibrated stored liquid temperature indicator. [District Rule 2201] Federally Enforceable Through Title V Permit
19. Tank roof, tank shell, tank vapor space appurtances, vapor control system piping, and vapor control system components shall be inspected and monitored using EPA Method 21 at least monthly. Items found to be not leaking may then be inspected and monitored at least once every 3 months until a leak is detected at which time the inspection and monitoring frequency shall revert to monthly until such time that two consecutive monthly inspections reveal with no leaks at which time the inspection and monitoring frequency shall revert to at least once every 3 months. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

20. A visible mist, liquid dripping at the rate of more than 3 drops per minute, and vapor leaks of 50,000 ppm or greater VOC as methane shall be repaired as expeditiously as possible but in no case beyond 24 hours of detecting the leak and shall be re-monitored using EPA Method 21 upon completion of the repair. Vapor leaks equal to or greater than 10,000 ppm and less than 50,000 ppm VOC as methane shall be repaired within 5 days of detecting the leak and re-monitored using EPA Method 21 upon completion of the repair. Vapor leaks equal to or greater than 1,000 ppm and less than 10,000 ppm VOC as methane shall be repaired within 14 days of leak detection and shall be re-monitored using EPA Method 21 upon completion of the repair. [District Rule 2201] Federally Enforceable Through Title V Permit
21. Upon detection of a leak, permittee shall tag the leak with a uniquely numbered tag, and shall record the leak location, component leaking, identification tag number, leak magnitude, date of leak detection, date of repair, method of repair, and post-repair monitoring measurement. Such records of leaks shall be maintained current and shall be made readily available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit
22. Components not accessible for EPA Method 21 inspection shall be visually and auditorily checked for leaks at least weekly and shall be monitored using EPA Method 21 at least annually. Any leak detected visually or auditorially shall be recorded and the leak shall be repaired within 14 days of leak detection and shall be re-monitored using EPA Method 21 upon completion of the repair. Any leak detected using EPA Method 21 shall be repaired according the leak magnitude as described above and shall be re-monitored using EPA Method 21 upon completion of the repair. [District Rule 2201] Federally Enforceable Through Title V Permit
23. In addition to the requirements above, pressure relief devices shall be inspected and monitored for leaks within 3 days of any known, likely, or suspected venting of such devices. [District Rule 2201] Federally Enforceable Through Title V Permit
24. True vapor pressure of any liquid introduced in this permit unit shall be less than 0.5 psia at (or before) tank liquid inlet and at tank storage temperature. [District Rule 4623] Federally Enforceable Through Title V Permit
25. Permittee shall conduct true vapor pressure (TVP) testing of the organic liquid stored in this tank, or a representative tank as provided in Section 6.2.1.1 of District Rule 4623, 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. [District Rule 4623] Federally Enforceable Through Title V Permit
26. 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
27. 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
28. True Vapor Pressure (TVP) of any organic liquid, except for crude oil with an API gravity of 20 degrees or less, shall be determined by measuring the Reid Vapor Pressure (RVP) using ASTM D 323, and converting the RVP to TVP at the tank's maximum organic liquid storage temperature. The conversion of RVP to TVP shall be done in accordance with the procedures in Appendix B. Appendix B is an excerpt from the oil and gas section of "California Air Resources Boards (ARB) Technical Guidance Document to the Criteria and Guidelines Regulation for AB 2588", dated August 1989. As an alternative, the TVP of crude oil with an API gravity range of greater than 26 degrees up to 30 degrees may be determined by using other equivalent test methods approved by APCO, ARB and EPA. [District Rule 4623] Federally Enforceable Through Title V Permit
29. 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
30. 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

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

31. 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
32. The permittee shall keep accurate records of the dates of inspection and monitoring and the components inspected and monitored. [District Rule 2201] Federally Enforceable Through Title V Permit
33. Permittee shall provide District with a copy of D.O.G.G.R. approval for each vapor disposal well prior to use for vapor injection. [District Rule 1070]
34. All records required to be maintained by this permit shall be maintained for a period of at least 5 years and shall be made readily available for District inspection upon request. [District Rules 1070 and 4623] Federally Enforceable Through Title V Permit
35. Formerly S-1143-28. [District Rule 2010] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1131-1128-2 **EXPIRATION DATE:** 02/28/2017

SECTION: NW09 **TOWNSHIP:** 29S **RANGE:** 28E

EQUIPMENT DESCRIPTION:
1,000 BBL FIXED ROOF PETROLEUM STORAGE TANK #7 WITH VAPOR CONTROL SYSTEM SHARED WITH TANKS S-1131-1129, -1130, -1132, AND -1133 (KCLC LEASE)

PERMIT UNIT REQUIREMENTS

1. While dormant, tank shall be emptied of all fluid, tank may be disconnected from vapor control system and may be open. [District Rule 2080] Federally Enforceable Through Title V Permit
2. Permittee shall submit written notification to the District upon designating the unit as dormant or active. [District Rule 2080] Federally Enforceable Through Title V Permit
3. While dormant, normal testing shall not be required. [District Rule 2080] Federally Enforceable Through Title V Permit
4. Upon recommencing operation of this unit, normal testing shall resume. [District Rule 2080] Federally Enforceable Through Title V Permit
5. Upon recommencing operation of this unit, tank shall be connected to vapor control system and is subject to normal leak free requirements. [District Rule 2080] Federally Enforceable Through Title V Permit
6. Any testing required by this permit shall be performed within 60 days of recommencing operation of this unit, regardless of whether the unit remains active or is again designated as dormant. [District Rule 2080] Federally Enforceable Through Title V Permit
7. Records of all dates and times that this unit is designated as dormant or active, and copies of all corresponding notices to the District, shall be maintained, retained for a period of at least five years, and made available for District inspection upon request. [District Rule 1070]
8. If the unit becomes non-compliant with District Rules while it is dormant, operation of the unit is not authorized until an Authority to Construct permit is issued approving all necessary retrofits and permit changes required to comply with the respective District Rules. [District Rule 2010] Federally Enforceable Through Title V Permit
9. Steam Generators authorized to incinerate collected vapors are S-1131-877, '880, '881, '882, '883, '908. [District Rule 2201] Federally Enforceable Through Title V Permit
10. The tank shall be equipped with a vapor control system consisting of a closed vent system that collects all VOCs from the storage tank, and a VOC control device. The vapor control system shall be APCO-approved and maintained in leak-free condition. Vapors shall be discharged to a system with an efficiency of at least 99% by weight. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
11. All piping, valves, and fittings shall be constructed and maintained in a leak-free condition. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
12. All 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

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

13. 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 shall be reported as a deviation. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
14. Except as otherwise provided in this permit, the operator shall ensure that the vapor recovery system is functional and is operating as designed at all times. [District Rule 2201] Federally Enforceable Through Title V Permit
15. 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 Rules 2201 and 4623] Federally Enforceable Through Title V Permit
16. Any component found to be leaking on two consecutive annual inspections is in violation of the District Rule 4623, even if it is under the voluntary inspection and maintenance program. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
17. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date and time of leak detection, and method of detection; 3) Date and time of leak repair, and emission level of recheck after leak is repaired; 4) Method used to minimize the leak to lowest possible level within 8 hours after detection. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
18. Fugitive VOC emissions rate shall be, calculated using CAPCOA California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities Table IV-2c, Oil and Gas Production Screening Value Ranges Emission Factors (Feb 1999), from the total number of components from this tank. [District Rule 2201] Federally Enforceable Through Title V Permit
19. VOC fugitive emissions from the components in gas service on the tank shall not exceed 0.1 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
20. VOC fugitive emissions from the components in gas service on vapor control system including separator and scrubber shall not exceed 0.5 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
21. Operator shall visually inspect tank shell, hatches, seals, seams, cable seals, valves, flanges, connectors, and any other piping components directly affixed to the tank and within five feet of the tank at least once per year for liquid leaks, and with a portable hydrocarbon detection instrument conducted in accordance with EPA Method 21 for gas leaks. Operator shall also visually or ultrasonically inspect as appropriate, the external shells and roofs of uninsulated tanks for structural integrity annually. [District Rule 4623 (Table 3)] Federally Enforceable Through Title V Permit
22. Upon detection of a liquid leak, defined as a leak rate of greater than or equal to 30 drops per minute, operator shall repair the leak within 8 hours. For leaks with a liquid leak rate of between 3 and 30 drops per minute, the leaking component shall be repaired within 24 hours after detection. [District Rule 4623 (Table 3)] Federally Enforceable Through Title V Permit
23. Upon detection of a gas leak, defined as a VOC concentration of greater than 10,000 ppmv measured in accordance with EPA Method 21, operator shall take one of the following actions: 1) eliminate the leak within 8 hours after detection; or 2) if the leak cannot be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices, and eliminate the leak within 48 hours after minimization. In no event shall the total time to minimize and eliminate a leak exceed 56 hours after detection. [District Rule 4623 (Table 3)] Federally Enforceable Through Title V Permit
24. Components found to be leaking either liquids or gases shall be immediately affixed with a tag showing the component to be leaking. Operator shall maintain records of the liquid or gas leak detection readings, date/time the leak was discovered, and date/time the component was repaired to a leak-free condition. [District Rule 4623 (Table 3)] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

25. Leaking components that have been discovered by the operator that have been immediately tagged and repaired within the timeframes specified in District Rule 4623, Table 3 shall not constitute a violation of this rule. Leaking components as defined by District Rule 4623 discovered by District staff that were not previously identified and/or tagged by the operator, and/or any leaks that were not repaired within the timeframes specified in District Rule 4623, Table 3 shall constitute a violation of this rule. [District Rule 4623 (Table 3)] Federally Enforceable Through Title V Permit

26. If a component type for a given tank is found to leak during an annual inspection, operator shall conduct quarterly inspections of that component type on the tank or tank system for four consecutive quarters. If no components are found to leak after four consecutive quarters, the operator may revert to annual inspections. [District Rule 4623 (Table 3)] Federally Enforceable Through Title V Permit

27. Any component found to be leaking on two consecutive annual inspections is in violation of this rule, even if covered under the voluntary inspection and maintenance program. [District Rule 4623 (Table 3)] Federally Enforceable Through Title V Permit

28. Permittee shall maintain records of number and type of components installed and calculated fugitive emissions. Permittee shall update such records when new components are installed. [District Rule 2201] Federally Enforceable Through Title V Permit

29. Permittee shall notify the APCO in writing at least three (3) days prior to performing tank degassing and interior tank cleaning activities. Written notification shall include the following: 1) the Permit to Operate number and physical location of the tank being degassed, 2) the date and time that tank degassing and cleaning activities will begin, 3) the degassing method, as allowed in this permit, to be used, 4) the method to be used to clean the tank, including any solvents to be used, and 5) the method to be used to dispose of any removed sludge, including methods that will be used to control emissions from the receiving vessel and emissions during transport. [District Rule 4623] Federally Enforceable Through Title V Permit

30. This tank shall be degassed before commencing interior cleaning by one of the following methods (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) 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) displacing VOCs contained in the tank vapor space to an APCO-approved vapor recovery system by filling the tank with a suitable gas. Degassing shall continue until the operator has achieved a vapor displacement equivalent to at least 2.3 times the tank capacity. Suitable gases are air, nitrogen, carbon dioxide, or natural gas containing less than 10 percent VOC by weight. [District Rule 4623] Federally Enforceable Through Title V Permit

31. During tank degassing, the operator shall discharge or displace organic vapors contained in the tank vapor space to an APCO-approved vapor recovery system. [District Rule 4623] Federally Enforceable Through Title V Permit

32. To facilitate connection to an external APCO-approved recovery system, a suitable tank fitting, such as a manway, may be temporarily removed for a period of time not to exceed 1 hour. [District Rule 4623] Federally Enforceable Through Title V Permit

33. This tank shall be in compliance with the applicable requirements of District Rule 4623 at all times during draining, degassing, and refilling the tank with an organic liquid having a TVP of 0.5 psia or greater. [District Rule 4623] Federally Enforceable Through Title V Permit

34. After a tank has been degassed pursuant to the requirements of this permit, vapor control requirements are not applicable until an organic liquid having a TVP of 0.5 psia or greater is placed, held, or stored in this tank. [District Rule 4623] Federally Enforceable Through Title V Permit

35. While performing tank cleaning activities, operators may only use the following cleaning agents: diesel, solvents with an initial boiling point of greater than 302 degrees F, solvents with a vapor pressure of less than 0.5 psia, or solvents with 50 grams of VOC per liter or less. [District Rule 4623] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

36. Steam cleaning shall only be allowed at locations where wastewater treatment facilities are limited, or during the months of December through March. [District Rule 4623] Federally Enforceable Through Title V Permit

37. During sludge removal, the operator shall control emissions from the sludge receiving vessel by operating an APCO-approved vapor control device that reduces emissions of organic vapors by at least 95%. [District Rule 4623] Federally Enforceable Through Title V Permit

38. Permittee shall only transport removed sludge in closed, liquid leak-free containers. [District Rule 4623] Federally Enforceable Through Title V Permit

39. Permittee shall store removed sludge, until final disposal, in vapor leak-free containers, or in tanks complying with the vapor control requirements of District Rule 4623. Sludge that is to be used to manufacture roadmix, as defined in District Rule 2020, is not required to be stored in this manner. Roadmix manufacturing operations exempt pursuant to District Rule 2020 shall maintain documentation of their compliance with Rule 2020, and shall readily make said documentation available for District inspection upon request. [District Rules 2020 and 4623] Federally Enforceable Through Title V Permit

40. The operator of a fixed roof tank shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 1070]

41. Formerly permit S-1624-53

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1131-1129-2 **EXPIRATION DATE:** 02/28/2017

SECTION: NW09 **TOWNSHIP:** 29S **RANGE:** 28E

EQUIPMENT DESCRIPTION:
500 BBL FIXED ROOF CRUDE OIL STOCK TANK #2 SERVED BY VAPOR CONTROL SYSTEM LISTED ON S-1131-1128 (KCLC LEASE)

PERMIT UNIT REQUIREMENTS

1. While dormant, tank shall be emptied of all fluid, tank may be disconnected from vapor control system and may be open. [District Rule 2080] Federally Enforceable Through Title V Permit
2. Permittee shall submit written notification to the District upon designating the unit as dormant or active. [District Rule 2080] Federally Enforceable Through Title V Permit
3. While dormant, normal testing shall not be required. [District Rule 2080] Federally Enforceable Through Title V Permit
4. Upon recommencing operation of this unit, normal testing shall resume. [District Rule 2080] Federally Enforceable Through Title V Permit
5. Upon recommencing operation of this unit, tank shall be connected to vapor control system and is subject to normal leak free requirements. [District Rule 2080] Federally Enforceable Through Title V Permit
6. Any testing required by this permit shall be performed within 60 days of recommencing operation of this unit, regardless of whether the unit remains active or is again designated as dormant. [District Rule 2080] Federally Enforceable Through Title V Permit
7. Records of all dates and times that this unit is designated as dormant or active, and copies of all corresponding notices to the District, shall be maintained, retained for a period of at least five years, and made available for District inspection upon request. [District Rule 1070]
8. If the unit becomes non-compliant with District Rules while it is dormant, operation of the unit is not authorized until an Authority to Construct permit is issued approving all necessary retrofits and permit changes required to comply with the respective District Rules. [District Rule 2010] Federally Enforceable Through Title V Permit
9. Tank shall only vent to vapor control system listed on S-1131-1128. [District Rule 2201] Federally Enforceable Through Title V Permit
10. The tank shall be equipped with a vapor control system consisting of a closed vent system that collects all VOCs from the storage tank, and a VOC control device. The vapor control system shall be APCO-approved and maintained in leak-free condition. Vapors shall be discharged to a system with an efficiency of at least 99% by weight. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
11. All piping, valves, and fittings shall be constructed and maintained in a leak-free condition. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
12. All 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

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

13. 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 shall be reported as a deviation. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
14. Except as otherwise provided in this permit, the operator shall ensure that the vapor recovery system is functional and is operating as designed at all times. [District Rule 2201] Federally Enforceable Through Title V Permit
15. 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 Rules 2201 and 4623] Federally Enforceable Through Title V Permit
16. Any component found to be leaking on two consecutive annual inspections is in violation of the District Rule 4623, even if it is under the voluntary inspection and maintenance program. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
17. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date and time of leak detection, and method of detection; 3) Date and time of leak repair, and emission level of recheck after leak is repaired; 4) Method used to minimize the leak to lowest possible level within 8 hours after detection. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
18. Fugitive VOC emissions rate shall be, calculated using CAPCOA California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities Table IV-2c, Oil and Gas Production Screening Value Ranges Emission Factors (Feb 1999), from the total number of components from this tank. [District Rule 2201] Federally Enforceable Through Title V Permit
19. VOC fugitive emissions from the components in gas service on the tank shall not exceed 0.1 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
20. Operator shall visually inspect tank shell, hatches, seals, seams, cable seals, valves, flanges, connectors, and any other piping components directly affixed to the tank and within five feet of the tank at least once per year for liquid leaks, and with a portable hydrocarbon detection instrument conducted in accordance with EPA Method 21 for gas leaks. Operator shall also visually or ultrasonically inspect as appropriate, the external shells and roofs of uninsulated tanks for structural integrity annually. [District Rule 4623 (Table 3)] Federally Enforceable Through Title V Permit
21. Upon detection of a liquid leak, defined as a leak rate of greater than or equal to 30 drops per minute, operator shall repair the leak within 8 hours. For leaks with a liquid leak rate of between 3 and 30 drops per minute, the leaking component shall be repaired within 24 hours after detection. [District Rule 4623 (Table 3)] Federally Enforceable Through Title V Permit
22. Upon detection of a gas leak, defined as a VOC concentration of greater than 10,000 ppmv measured in accordance with EPA Method 21, operator shall take one of the following actions: 1) eliminate the leak within 8 hours after detection; or 2) if the leak cannot be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices, and eliminate the leak within 48 hours after minimization. In no event shall the total time to minimize and eliminate a leak exceed 56 hours after detection. [District Rule 4623 (Table 3)] Federally Enforceable Through Title V Permit
23. Components found to be leaking either liquids or gases shall be immediately affixed with a tag showing the component to be leaking. Operator shall maintain records of the liquid or gas leak detection readings, date/time the leak was discovered, and date/time the component was repaired to a leak-free condition. [District Rule 4623 (Table 3)] Federally Enforceable Through Title V Permit
24. Leaking components that have been discovered by the operator that have been immediately tagged and repaired within the timeframes specified in District Rule 4623, Table 3 shall not constitute a violation of this rule. Leaking components as defined by District Rule 4623 discovered by District staff that were not previously identified and/or tagged by the operator, and/or any leaks that were not repaired within the timeframes specified in District Rule 4623, Table 3 shall constitute a violation of this rule. [District Rule 4623 (Table 3)] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

25. If a component type for a given tank is found to leak during an annual inspection, operator shall conduct quarterly inspections of that component type on the tank or tank system for four consecutive quarters. If no components are found to leak after four consecutive quarters, the operator may revert to annual inspections. [District Rule 4623 (Table 3)] Federally Enforceable Through Title V Permit

26. Permittee shall maintain records of number and type of components installed and calculated fugitive emissions. Permittee shall update such records when new components are installed. [District Rule 2201] Federally Enforceable Through Title V Permit

27. Permittee shall notify the APCO in writing at least three (3) days prior to performing tank degassing and interior tank cleaning activities. Written notification shall include the following: 1) the Permit to Operate number and physical location of the tank being degassed, 2) the date and time that tank degassing and cleaning activities will begin, 3) the degassing method, as allowed in this permit, to be used, 4) the method to be used to clean the tank, including any solvents to be used, and 5) the method to be used to dispose of any removed sludge, including methods that will be used to control emissions from the receiving vessel and emissions during transport. [District Rule 4623] Federally Enforceable Through Title V Permit

28. This tank shall be degassed before commencing interior cleaning by one of the following methods (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) 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) displacing VOCs contained in the tank vapor space to an APCO-approved vapor recovery system by filling the tank with a suitable gas. Degassing shall continue until the operator has achieved a vapor displacement equivalent to at least 2.3 times the tank capacity. Suitable gases are air, nitrogen, carbon dioxide, or natural gas containing less than 10 percent VOC by weight. [District Rule 4623] Federally Enforceable Through Title V Permit

29. During tank degassing, the operator shall discharge or displace organic vapors contained in the tank vapor space to an APCO-approved vapor recovery system. [District Rule 4623] Federally Enforceable Through Title V Permit

30. To facilitate connection to an external APCO-approved recovery system, a suitable tank fitting, such as a manway, may be temporarily removed for a period of time not to exceed 1 hour. [District Rule 4623] Federally Enforceable Through Title V Permit

31. This tank shall be in compliance with the applicable requirements of District Rule 4623 at all times during draining, degassing, and refilling the tank with an organic liquid having a TVP of 0.5 psia or greater. [District Rule 4623] Federally Enforceable Through Title V Permit

32. After a tank has been degassed pursuant to the requirements of this permit, vapor control requirements are not applicable until an organic liquid having a TVP of 0.5 psia or greater is placed, held, or stored in this tank. [District Rule 4623] Federally Enforceable Through Title V Permit

33. While performing tank cleaning activities, operators may only use the following cleaning agents: diesel, solvents with an initial boiling point of greater than 302 degrees F, solvents with a vapor pressure of less than 0.5 psia, or solvents with 50 grams of VOC per liter or less. [District Rule 4623] Federally Enforceable Through Title V Permit

34. Steam cleaning shall only be allowed at locations where wastewater treatment facilities are limited, or during the months of December through March. [District Rule 4623] Federally Enforceable Through Title V Permit

35. During sludge removal, the operator shall control emissions from the sludge receiving vessel by operating an APCO-approved vapor control device that reduces emissions of organic vapors by at least 95%. [District Rule 4623] Federally Enforceable Through Title V Permit

36. Permittee shall only transport removed sludge in closed, liquid leak-free containers. [District Rule 4623] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

37. Permittee shall store removed sludge, until final disposal, in vapor leak-free containers, or in tanks complying with the vapor control requirements of District Rule 4623. Sludge that is to be used to manufacture roadmix, as defined in District Rule 2020, is not required to be stored in this manner. Roadmix manufacturing operations exempt pursuant to District Rule 2020 shall maintain documentation of their compliance with Rule 2020, and shall readily make said documentation available for District inspection upon request. [District Rules 2020 and 4623] Federally Enforceable Through Title V Permit
38. The operator of a fixed roof tank shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 1070]
39. Formerly permit S-1624-126

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1131-1130-2 **EXPIRATION DATE:** 02/28/2017

SECTION: NW09 **TOWNSHIP:** 29S **RANGE:** 28E

EQUIPMENT DESCRIPTION:
1,000 BBL FIXED ROOF CRUDE OIL STOCK TANK SERVED BY VAPOR CONTROL SYSTEM LISTED ON S-1131-1128 (KCLC LEASE)

PERMIT UNIT REQUIREMENTS

1. While dormant, tank shall be emptied of all fluid, tank may be disconnected from vapor control system and may be open. [District Rule 2080] Federally Enforceable Through Title V Permit
2. Permittee shall submit written notification to the District upon designating the unit as dormant or active. [District Rule 2080] Federally Enforceable Through Title V Permit
3. While dormant, normal testing shall not be required. [District Rule 2080] Federally Enforceable Through Title V Permit
4. Upon recommencing operation of this unit, normal testing shall resume. [District Rule 2080] Federally Enforceable Through Title V Permit
5. Upon recommencing operation of this unit, tank shall be connected to vapor control system and is subject to normal leak free requirements. [District Rule 2080] Federally Enforceable Through Title V Permit
6. Any testing required by this permit shall be performed within 60 days of recommencing operation of this unit, regardless of whether the unit remains active or is again designated as dormant. [District Rule 2080] Federally Enforceable Through Title V Permit
7. Records of all dates and times that this unit is designated as dormant or active, and copies of all corresponding notices to the District, shall be maintained, retained for a period of at least five years, and made available for District inspection upon request. [District Rule 1070]
8. If the unit becomes non-compliant with District Rules while it is dormant, operation of the unit is not authorized until an Authority to Construct permit is issued approving all necessary retrofits and permit changes required to comply with the respective District Rules. [District Rule 2010] Federally Enforceable Through Title V Permit
9. Tank shall only vent to vapor control system listed on S-1131-1128. [District Rule 2201] Federally Enforceable Through Title V Permit
10. The tank shall be equipped with a vapor control system consisting of a closed vent system that collects all VOCs from the storage tank, and a VOC control device. The vapor control system shall be APCO-approved and maintained in leak-free condition. Vapors shall be discharged to a system with an efficiency of at least 99% by weight. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
11. All piping, valves, and fittings shall be constructed and maintained in a leak-free condition. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
12. All 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

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

13. 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 shall be reported as a deviation. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
14. Except as otherwise provided in this permit, the operator shall ensure that the vapor recovery system is functional and is operating as designed at all times. [District Rule 2201] Federally Enforceable Through Title V Permit
15. 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 Rules 2201 and 4623] Federally Enforceable Through Title V Permit
16. Any component found to be leaking on two consecutive annual inspections is in violation of the District Rule 4623, even if it is under the voluntary inspection and maintenance program. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
17. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date and time of leak detection, and method of detection; 3) Date and time of leak repair, and emission level of recheck after leak is repaired; 4) Method used to minimize the leak to lowest possible level within 8 hours after detection. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
18. Fugitive VOC emissions rate shall be, calculated using CAPCOA California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities Table IV-2c, Oil and Gas Production Screening Value Ranges Emission Factors (Feb 1999), from the total number of components from this tank. [District Rule 2201] Federally Enforceable Through Title V Permit
19. VOC fugitive emissions from the components in gas service on the tank shall not exceed 0.1 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
20. Operator shall visually inspect tank shell, hatches, seals, seams, cable seals, valves, flanges, connectors, and any other piping components directly affixed to the tank and within five feet of the tank at least once per year for liquid leaks, and with a portable hydrocarbon detection instrument conducted in accordance with EPA Method 21 for gas leaks. Operator shall also visually or ultrasonically inspect as appropriate, the external shells and roofs of uninsulated tanks for structural integrity annually. [District Rule 4623 (Table 3)] Federally Enforceable Through Title V Permit
21. Upon detection of a liquid leak, defined as a leak rate of greater than or equal to 30 drops per minute, operator shall repair the leak within 8 hours. For leaks with a liquid leak rate of between 3 and 30 drops per minute, the leaking component shall be repaired within 24 hours after detection. [District Rule 4623 (Table 3)] Federally Enforceable Through Title V Permit
22. Upon detection of a gas leak, defined as a VOC concentration of greater than 10,000 ppmv measured in accordance with EPA Method 21, operator shall take one of the following actions: 1) eliminate the leak within 8 hours after detection; or 2) if the leak cannot be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices, and eliminate the leak within 48 hours after minimization. In no event shall the total time to minimize and eliminate a leak exceed 56 hours after detection. [District Rule 4623 (Table 3)] Federally Enforceable Through Title V Permit
23. Components found to be leaking either liquids or gases shall be immediately affixed with a tag showing the component to be leaking. Operator shall maintain records of the liquid or gas leak detection readings, date/time the leak was discovered, and date/time the component was repaired to a leak-free condition. [District Rule 4623 (Table 3)] Federally Enforceable Through Title V Permit
24. Leaking components that have been discovered by the operator that have been immediately tagged and repaired within the timeframes specified in District Rule 4623, Table 3 shall not constitute a violation of this rule. Leaking components as defined by District Rule 4623 discovered by District staff that were not previously identified and/or tagged by the operator, and/or any leaks that were not repaired within the timeframes specified in District Rule 4623, Table 3 shall constitute a violation of this rule. [District Rule 4623 (Table 3)] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

25. If a component type for a given tank is found to leak during an annual inspection, operator shall conduct quarterly inspections of that component type on the tank or tank system for four consecutive quarters. If no components are found to leak after four consecutive quarters, the operator may revert to annual inspections. [District Rule 4623 (Table 3)] Federally Enforceable Through Title V Permit

26. Any component found to be leaking on two consecutive annual inspections is in violation of this rule, even if covered under the voluntary inspection and maintenance program. [District Rule 4623 (Table 3)] Federally Enforceable Through Title V Permit

27. Permittee shall maintain records of number and type of components installed and calculated fugitive emissions. Permittee shall update such records when new components are installed. [District Rule 2201] Federally Enforceable Through Title V Permit

28. Permittee shall notify the APCO in writing at least three (3) days prior to performing tank degassing and interior tank cleaning activities. Written notification shall include the following: 1) the Permit to Operate number and physical location of the tank being degassed, 2) the date and time that tank degassing and cleaning activities will begin, 3) the degassing method, as allowed in this permit, to be used, 4) the method to be used to clean the tank, including any solvents to be used, and 5) the method to be used to dispose of any removed sludge, including methods that will be used to control emissions from the receiving vessel and emissions during transport. [District Rule 4623] Federally Enforceable Through Title V Permit

29. This tank shall be degassed before commencing interior cleaning by one of the following methods (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) 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) displacing VOCs contained in the tank vapor space to an APCO-approved vapor recovery system by filling the tank with a suitable gas. Degassing shall continue until the operator has achieved a vapor displacement equivalent to at least 2.3 times the tank capacity. Suitable gases are air, nitrogen, carbon dioxide, or natural gas containing less than 10 percent VOC by weight. [District Rule 4623] Federally Enforceable Through Title V Permit

30. During tank degassing, the operator shall discharge or displace organic vapors contained in the tank vapor space to an APCO-approved vapor recovery system. [District Rule 4623] Federally Enforceable Through Title V Permit

31. To facilitate connection to an external APCO-approved recovery system, a suitable tank fitting, such as a manway, may be temporarily removed for a period of time not to exceed 1 hour. [District Rule 4623] Federally Enforceable Through Title V Permit

32. This tank shall be in compliance with the applicable requirements of District Rule 4623 at all times during draining, degassing, and refilling the tank with an organic liquid having a TVP of 0.5 psia or greater. [District Rule 4623] Federally Enforceable Through Title V Permit

33. After a tank has been degassed pursuant to the requirements of this permit, vapor control requirements are not applicable until an organic liquid having a TVP of 0.5 psia or greater is placed, held, or stored in this tank. [District Rule 4623] Federally Enforceable Through Title V Permit

34. While performing tank cleaning activities, operators may only use the following cleaning agents: diesel, solvents with an initial boiling point of greater than 302 degrees F, solvents with a vapor pressure of less than 0.5 psia, or solvents with 50 grams of VOC per liter or less. [District Rule 4623] Federally Enforceable Through Title V Permit

35. Steam cleaning shall only be allowed at locations where wastewater treatment facilities are limited, or during the months of December through March. [District Rule 4623] Federally Enforceable Through Title V Permit

36. During sludge removal, the operator shall control emissions from the sludge receiving vessel by operating an APCO-approved vapor control device that reduces emissions of organic vapors by at least 95%. [District Rule 4623] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

37. Permittee shall only transport removed sludge in closed, liquid leak-free containers. [District Rule 4623] Federally Enforceable Through Title V Permit

38. Permittee shall store removed sludge, until final disposal, in vapor leak-free containers, or in tanks complying with the vapor control requirements of District Rule 4623. Sludge that is to be used to manufacture roadmix, as defined in District Rule 2020, is not required to be stored in this manner. Roadmix manufacturing operations exempt pursuant to District Rule 2020 shall maintain documentation of their compliance with Rule 2020, and shall readily make said documentation available for District inspection upon request. [District Rules 2020 and 4623] Federally Enforceable Through Title V Permit

39. The operator of a fixed roof tank shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 1070]

40. Formerly permit S-1624-127

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1131-1131-2 **EXPIRATION DATE:** 02/28/2017

SECTION: NW 09 **TOWNSHIP:** 29S **RANGE:** 28E

EQUIPMENT DESCRIPTION:
THERMALLY ENHANCED OIL RECOVERY OPERATION WITH 20 CYCLIC WELLS WITH CLOSED CASING VENTS (KCLC LEASE)

PERMIT UNIT REQUIREMENTS

1. Fluids produced from these steam-enhanced wells with closed casing vents shall be introduced only to tanks or vessels vented to a District approved vapor collection and control system that has a destruction or removal efficiency of at least 99%, or to permit exempt storage equipment as defined by District Rule 2020, Section 6.6. [District Rule 2201] Federally Enforceable Through Title V Permit
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
3. {98} No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
4. Fugitive VOC emissions from TEOR operation shall not exceed 1.0 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
5. All piping, valves, and fittings shall be constructed and maintained in a leak-free condition. [District Rule 2201] Federally Enforceable Through Title V Permit
6. A leak-free condition is defined as a condition without a gas leak. A gas leak is defined as a reading in excess of 10,000 ppmv, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21. A reading in excess of 10,000 ppmv above background is a violation of this permit and shall be reported as a deviation. [District Rule 2201] Federally Enforceable Through Title V Permit
7. 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] Federally Enforceable Through Title V Permit
8. Permittee shall maintain records of the date and well identification where steam injection or well stimulation occurs, current list of all thermally enhanced production wells associated with this operation and accurate fugitive component counts of components in gas service and resulting emissions calculated using the emission factors in the CAPCOA California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities, Table IV-2c, Oil and Gas Production Screening Value Ranges Emission Factors (Feb 1999) . [District Rules 2201 and 4401] Federally Enforceable Through Title V Permit
9. The inspection requirements of Section 5.4.1 through Section 5.4.6 of Rule 4401 shall not apply to, as determined by the test methods in Section 6.3.4 of Rule 4401. [District Rule 4401] Federally Enforceable Through Title V Permit
10. Gas and liquid leaks are as defined in Section 3.20 of Rule 4401. [District Rule 4401] Federally Enforceable Through Title V Permit
11. 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] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

12. 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] 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 5.4 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 5.2.2.1 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] Federally Enforceable Through Title V Permit
14. An operator shall be in violation of this rule if any District inspection demonstrates or if any operator inspection conducted pursuant to Section 5.4 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 2 of Rule 4401. [District Rule 4401] Federally Enforceable Through Title V Permit
15. 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 5.2.2 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 5.5 of Rule 4401. [District Rule 4401] Federally Enforceable Through Title V Permit
16. 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] Federally Enforceable Through Title V Permit
17. 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] Federally Enforceable Through Title V Permit
18. 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 3 of Rule 4401. [District Rule 4401] Federally Enforceable Through Title V Permit
19. In addition to the inspections required by Section 5.4.1 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 3 of Rule 4401. [District Rule 4401] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

20. In addition to the inspections required by Sections 5.4.1, 5.4.2 and 5.4.3 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 5.4.4.1 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] Federally Enforceable Through Title V Permit
21. An operator shall inspect all unsafe-to-monitor components during each turnaround. [District Rule 4401] Federally Enforceable Through Title V Permit
22. 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] Federally Enforceable Through Title V Permit
23. 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] Federally Enforceable Through Title V Permit
24. 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 the component is found to be in compliance with the requirements of this rule. [District Rule 4401] Federally Enforceable Through Title V Permit
25. 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] Federally Enforceable Through Title V Permit
26. Except for leaking critical components or leaking essential components subject to the requirements of Section 5.5.7 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 3 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] Federally Enforceable Through Title V Permit
27. 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] Federally Enforceable Through Title V Permit
28. 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 3 of Rule 4401. [District Rule 4401] Federally Enforceable Through Title V Permit
29. The time of the initial leak detection shall be the start of the repair period specified in Table 3 of Rule 4401. [District Rule 4401] Federally Enforceable Through Title V Permit
30. 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] Federally Enforceable Through Title V Permit
31. 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] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

32. 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] Federally Enforceable Through Title V Permit

33. 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] Federally Enforceable Through Title V Permit

34. 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] Federally Enforceable Through Title V Permit

35. 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] Federally Enforceable Through Title V Permit

36. Operator shall keep a copy of the APCO-approved Operator Management Plan at the facility. [District Rule 4401] Federally Enforceable Through Title V Permit

37. An operator shall source test annually all vapor collection and control systems used to control emissions from steam-enhanced 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] Federally Enforceable Through Title V Permit

38. 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] Federally Enforceable Through Title V Permit

39. 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] Federally Enforceable Through Title V Permit

40. 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] Federally Enforceable Through Title V Permit

41. 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] Federally Enforceable Through Title V Permit

42. 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] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

43. 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] Federally Enforceable Through Title V Permit
44. 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] Federally Enforceable Through Title V Permit
45. 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] Federally Enforceable Through Title V Permit
46. 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] Federally Enforceable Through Title V Permit
47. In accordance with the approved OMP, permittee shall meet all applicable operating, leak standards, inspection and re-inspection, leak repair, record keeping, and notification requirements of Rule 4401. [District Rule 4401] Federally Enforceable Through Title V Permit
48. 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]
49. Formerly permit S-1624-161.

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1131-1132-2 **EXPIRATION DATE:** 02/28/2017

SECTION: NW 9 **TOWNSHIP:** 29S **RANGE:** 28E

EQUIPMENT DESCRIPTION:
1,500 BBL FIXED ROOF CRUDE OIL WASH TANK WITH P/V VALVE SERVED BY VAPOR CONTROL SYSTEM LISTED ON S-1131-1128 (KCLC LEASE)

PERMIT UNIT REQUIREMENTS

1. While dormant, tank shall be emptied of all fluid, tank may be disconnected from vapor control system and may be open. [District Rule 2080] Federally Enforceable Through Title V Permit
2. Permittee shall submit written notification to the District upon designating the unit as dormant or active. [District Rule 2080] Federally Enforceable Through Title V Permit
3. While dormant, normal testing shall not be required. [District Rule 2080] Federally Enforceable Through Title V Permit
4. Upon recommencing operation of this unit, normal testing shall resume. [District Rule 2080] Federally Enforceable Through Title V Permit
5. Upon recommencing operation of this unit, tank shall be connected to vapor control system and is subject to normal leak free requirements. [District Rule 2080] Federally Enforceable Through Title V Permit
6. Any testing required by this permit shall be performed within 60 days of recommencing operation of this unit, regardless of whether the unit remains active or is again designated as dormant. [District Rule 2080] Federally Enforceable Through Title V Permit
7. Records of all dates and times that this unit is designated as dormant or active, and copies of all corresponding notices to the District, shall be maintained, retained for a period of at least five years, and made available for District inspection upon request. [District Rule 1070]
8. If the unit becomes non-compliant with District Rules while it is dormant, operation of the unit is not authorized until an Authority to Construct permit is issued approving all necessary retrofits and permit changes required to comply with the respective District Rules. [District Rule 2010] Federally Enforceable Through Title V Permit
9. Tank shall only vent to vapor control system listed on S-1131-128. [District Rule 2201] Federally Enforceable Through Title V Permit
10. The tank shall be equipped with a vapor control system consisting of a closed vent system that collects all VOCs from the storage tank, and a VOC control device. The vapor control system shall be APCO-approved and maintained in leak-free condition. Vapors shall be discharged to a system with an efficiency of at least 99% by weight. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
11. All piping, valves, and fittings shall be constructed and maintained in a leak-free condition. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
12. All 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

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

13. 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 shall be reported as a deviation. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
14. Except as otherwise provided in this permit, the operator shall ensure that the vapor recovery system is functional and is operating as designed at all times. [District Rule 2201] Federally Enforceable Through Title V Permit
15. 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 Rules 2201 and 4623] Federally Enforceable Through Title V Permit
16. Any component found to be leaking on two consecutive annual inspections is in violation of the District Rule 4623, even if it is under the voluntary inspection and maintenance program. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
17. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date and time of leak detection, and method of detection; 3) Date and time of leak repair, and emission level of recheck after leak is repaired; 4) Method used to minimize the leak to lowest possible level within 8 hours after detection. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
18. Fugitive VOC emissions rate shall be, calculated using CAPCOA California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities Table IV-2c, Oil and Gas Production Screening Value Ranges Emission Factors (Feb 1999), from the total number of components from this tank. [District Rule 2201] Federally Enforceable Through Title V Permit
19. VOC fugitive emissions from the components in gas service on the tank shall not exceed 0.5 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
20. Operator shall visually inspect tank shell, hatches, seals, seams, cable seals, valves, flanges, connectors, and any other piping components directly affixed to the tank and within five feet of the tank at least once per year for liquid leaks, and with a portable hydrocarbon detection instrument conducted in accordance with EPA Method 21 for gas leaks. Operator shall also visually or ultrasonically inspect as appropriate, the external shells and roofs of uninsulated tanks for structural integrity annually. [District Rule 4623 (Table 3)] Federally Enforceable Through Title V Permit
21. Upon detection of a liquid leak, defined as a leak rate of greater than or equal to 30 drops per minute, operator shall repair the leak within 8 hours. For leaks with a liquid leak rate of between 3 and 30 drops per minute, the leaking component shall be repaired within 24 hours after detection. [District Rule 4623 (Table 3)] Federally Enforceable Through Title V Permit
22. Upon detection of a gas leak, defined as a VOC concentration of greater than 10,000 ppmv measured in accordance with EPA Method 21, operator shall take one of the following actions: 1) eliminate the leak within 8 hours after detection; or 2) if the leak cannot be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices, and eliminate the leak within 48 hours after minimization. In no event shall the total time to minimize and eliminate a leak exceed 56 hours after detection. [District Rule 4623 (Table 3)] Federally Enforceable Through Title V Permit
23. Components found to be leaking either liquids or gases shall be immediately affixed with a tag showing the component to be leaking. Operator shall maintain records of the liquid or gas leak detection readings, date/time the leak was discovered, and date/time the component was repaired to a leak-free condition. [District Rule 4623 (Table 3)] Federally Enforceable Through Title V Permit
24. Leaking components that have been discovered by the operator that have been immediately tagged and repaired within the timeframes specified in District Rule 4623, Table 3 shall not constitute a violation of this rule. Leaking components as defined by District Rule 4623 discovered by District staff that were not previously identified and/or tagged by the operator, and/or any leaks that were not repaired within the timeframes specified in District Rule 4623, Table 3 shall constitute a violation of this rule. [District Rule 4623 (Table 3)] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

25. If a component type for a given tank is found to leak during an annual inspection, operator shall conduct quarterly inspections of that component type on the tank or tank system for four consecutive quarters. If no components are found to leak after four consecutive quarters, the operator may revert to annual inspections. [District Rule 4623 (Table 3)] Federally Enforceable Through Title V Permit
26. Any component found to be leaking on two consecutive annual inspections is in violation of this rule, even if covered under the voluntary inspection and maintenance program. [District Rule 4623 (Table 3)] Federally Enforceable Through Title V Permit
27. Permittee shall maintain records of number and type of components installed and calculated fugitive emissions. Permittee shall update such records when new components are installed. [District Rule 2201] Federally Enforceable Through Title V Permit
28. Permittee shall notify the APCO in writing at least three (3) days prior to performing tank degassing and interior tank cleaning activities. Written notification shall include the following: 1) the Permit to Operate number and physical location of the tank being degassed, 2) the date and time that tank degassing and cleaning activities will begin, 3) the degassing method, as allowed in this permit, to be used, 4) the method to be used to clean the tank, including any solvents to be used, and 5) the method to be used to dispose of any removed sludge, including methods that will be used to control emissions from the receiving vessel and emissions during transport. [District Rule 4623] Federally Enforceable Through Title V Permit
29. This tank shall be degassed before commencing interior cleaning by one of the following methods (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) 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) displacing VOCs contained in the tank vapor space to an APCO-approved vapor recovery system by filling the tank with a suitable gas. Degassing shall continue until the operator has achieved a vapor displacement equivalent to at least 2.3 times the tank capacity. Suitable gases are air, nitrogen, carbon dioxide, or natural gas containing less than 10 percent VOC by weight. [District Rule 4623] Federally Enforceable Through Title V Permit
30. During tank degassing, the operator shall discharge or displace organic vapors contained in the tank vapor space to an APCO-approved vapor recovery system. [District Rule 4623] Federally Enforceable Through Title V Permit
31. To facilitate connection to an external APCO-approved recovery system, a suitable tank fitting, such as a manway, may be temporarily removed for a period of time not to exceed 1 hour. [District Rule 4623] Federally Enforceable Through Title V Permit
32. This tank shall be in compliance with the applicable requirements of District Rule 4623 at all times during draining, degassing, and refilling the tank with an organic liquid having a TVP of 0.5 psia or greater. [District Rule 4623] Federally Enforceable Through Title V Permit
33. After a tank has been degassed pursuant to the requirements of this permit, vapor control requirements are not applicable until an organic liquid having a TVP of 0.5 psia or greater is placed, held, or stored in this tank. [District Rule 4623] Federally Enforceable Through Title V Permit
34. While performing tank cleaning activities, operators may only use the following cleaning agents: diesel, solvents with an initial boiling point of greater than 302 degrees F, solvents with a vapor pressure of less than 0.5 psia, or solvents with 50 grams of VOC per liter or less. [District Rule 4623] Federally Enforceable Through Title V Permit
35. Steam cleaning shall only be allowed at locations where wastewater treatment facilities are limited, or during the months of December through March. [District Rule 4623] Federally Enforceable Through Title V Permit
36. During sludge removal, the operator shall control emissions from the sludge receiving vessel by operating an APCO-approved vapor control device that reduces emissions of organic vapors by at least 95%. [District Rule 4623] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

37. Permittee shall only transport removed sludge in closed, liquid leak-free containers. [District Rule 4623] Federally Enforceable Through Title V Permit

38. Permittee shall store removed sludge, until final disposal, in vapor leak-free containers, or in tanks complying with the vapor control requirements of District Rule 4623. Sludge that is to be used to manufacture roadmix, as defined in District Rule 2020, is not required to be stored in this manner. Roadmix manufacturing operations exempt pursuant to District Rule 2020 shall maintain documentation of their compliance with Rule 2020, and shall readily make said documentation available for District inspection upon request. [District Rules 2020 and 4623] Federally Enforceable Through Title V Permit

39. The operator of a fixed roof tank shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 1070]

40. Formerly permit S-1624-163

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1131-1133-2 **EXPIRATION DATE:** 02/28/2017

SECTION: NW09 **TOWNSHIP:** 29S **RANGE:** 28E

EQUIPMENT DESCRIPTION:
1,000 BBL FIXED ROOF CRUDE OIL STORAGE TANK SERVED BY VAPOR CONTROL SYSTEM LISTED ON S-1131-1128 (KCLC LEASE)

PERMIT UNIT REQUIREMENTS

1. While dormant, tank shall be emptied of all fluid, tank may be disconnected from vapor control system and may be open. [District Rule 2080] Federally Enforceable Through Title V Permit
2. Permittee shall submit written notification to the District upon designating the unit as dormant or active. [District Rule 2080] Federally Enforceable Through Title V Permit
3. While dormant, normal testing shall not be required. [District Rule 2080] Federally Enforceable Through Title V Permit
4. Upon recommencing operation of this unit, normal testing shall resume. [District Rule 2080] Federally Enforceable Through Title V Permit
5. Upon recommencing operation of this unit, tank shall be connected to vapor control system and is subject to normal leak free requirements. [District Rule 2080] Federally Enforceable Through Title V Permit
6. Any testing required by this permit shall be performed within 60 days of recommencing operation of this unit, regardless of whether the unit remains active or is again designated as dormant. [District Rule 2080] Federally Enforceable Through Title V Permit
7. Records of all dates and times that this unit is designated as dormant or active, and copies of all corresponding notices to the District, shall be maintained, retained for a period of at least five years, and made available for District inspection upon request. [District Rule 1070]
8. If the unit becomes non-compliant with District Rules while it is dormant, operation of the unit is not authorized until an Authority to Construct permit is issued approving all necessary retrofits and permit changes required to comply with the respective District Rules. [District Rule 2010] Federally Enforceable Through Title V Permit
9. Tank shall only vent to vapor control system listed on S-1131-1128. [District Rule 2201] Federally Enforceable Through Title V Permit
10. The tank shall be equipped with a vapor control system consisting of a closed vent system that collects all VOCs from the storage tank, and a VOC control device. The vapor control system shall be APCO-approved and maintained in leak-free condition. Vapors shall be discharged to a system with an efficiency of at least 99% by weight. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
11. All piping, valves, and fittings shall be constructed and maintained in a leak-free condition. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
12. All 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

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

13. 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 shall be reported as a deviation. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
14. Except as otherwise provided in this permit, the operator shall ensure that the vapor recovery system is functional and is operating as designed at all times. [District Rule 2201] Federally Enforceable Through Title V Permit
15. 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 Rules 2201 and 4623] Federally Enforceable Through Title V Permit
16. Any component found to be leaking on two consecutive annual inspections is in violation of the District Rule 4623, even if it is under the voluntary inspection and maintenance program. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
17. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date and time of leak detection, and method of detection; 3) Date and time of leak repair, and emission level of recheck after leak is repaired; 4) Method used to minimize the leak to lowest possible level within 8 hours after detection. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
18. Fugitive VOC emissions rate shall be, calculated using CAPCOA California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities Table IV-2c, Oil and Gas Production Screening Value Ranges Emission Factors (Feb 1999), from the total number of components from this tank. [District Rule 2201] Federally Enforceable Through Title V Permit
19. VOC fugitive emissions from the components in gas service on the tank shall not exceed 0.1 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
20. Operator shall visually inspect tank shell, hatches, seals, seams, cable seals, valves, flanges, connectors, and any other piping components directly affixed to the tank and within five feet of the tank at least once per year for liquid leaks, and with a portable hydrocarbon detection instrument conducted in accordance with EPA Method 21 for gas leaks. Operator shall also visually or ultrasonically inspect as appropriate, the external shells and roofs of uninsulated tanks for structural integrity annually. [District Rule 4623 (Table 3)] Federally Enforceable Through Title V Permit
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22. Upon detection of a gas leak, defined as a VOC concentration of greater than 10,000 ppmv measured in accordance with EPA Method 21, operator shall take one of the following actions: 1) eliminate the leak within 8 hours after detection; or 2) if the leak cannot be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices, and eliminate the leak within 48 hours after minimization. In no event shall the total time to minimize and eliminate a leak exceed 56 hours after detection. [District Rule 4623 (Table 3)] Federally Enforceable Through Title V Permit
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24. Leaking components that have been discovered by the operator that have been immediately tagged and repaired within the timeframes specified in District Rule 4623, Table 3 shall not constitute a violation of this rule. Leaking components as defined by District Rule 4623 discovered by District staff that were not previously identified and/or tagged by the operator, and/or any leaks that were not repaired within the timeframes specified in District Rule 4623, Table 3 shall constitute a violation of this rule. [District Rule 4623 (Table 3)] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

25. If a component type for a given tank is found to leak during an annual inspection, operator shall conduct quarterly inspections of that component type on the tank or tank system for four consecutive quarters. If no components are found to leak after four consecutive quarters, the operator may revert to annual inspections. [District Rule 4623 (Table 3)] Federally Enforceable Through Title V Permit

26. Any component found to be leaking on two consecutive annual inspections is in violation of this rule, even if covered under the voluntary inspection and maintenance program. [District Rule 4623 (Table 3)] Federally Enforceable Through Title V Permit

27. Permittee shall maintain records of number and type of components installed and calculated fugitive emissions. Permittee shall update such records when new components are installed. [District Rule 2201] Federally Enforceable Through Title V Permit

28. Permittee shall notify the APCO in writing at least three (3) days prior to performing tank degassing and interior tank cleaning activities. Written notification shall include the following: 1) the Permit to Operate number and physical location of the tank being degassed, 2) the date and time that tank degassing and cleaning activities will begin, 3) the degassing method, as allowed in this permit, to be used, 4) the method to be used to clean the tank, including any solvents to be used, and 5) the method to be used to dispose of any removed sludge, including methods that will be used to control emissions from the receiving vessel and emissions during transport. [District Rule 4623] Federally Enforceable Through Title V Permit

29. This tank shall be degassed before commencing interior cleaning by one of the following methods (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) 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) displacing VOCs contained in the tank vapor space to an APCO-approved vapor recovery system by filling the tank with a suitable gas. Degassing shall continue until the operator has achieved a vapor displacement equivalent to at least 2.3 times the tank capacity. Suitable gases are air, nitrogen, carbon dioxide, or natural gas containing less than 10 percent VOC by weight. [District Rule 4623] Federally Enforceable Through Title V Permit

30. During tank degassing, the operator shall discharge or displace organic vapors contained in the tank vapor space to an APCO-approved vapor recovery system. [District Rule 4623] Federally Enforceable Through Title V Permit

31. To facilitate connection to an external APCO-approved recovery system, a suitable tank fitting, such as a manway, may be temporarily removed for a period of time not to exceed 1 hour. [District Rule 4623] Federally Enforceable Through Title V Permit

32. This tank shall be in compliance with the applicable requirements of District Rule 4623 at all times during draining, degassing, and refilling the tank with an organic liquid having a TVP of 0.5 psia or greater. [District Rule 4623] Federally Enforceable Through Title V Permit

33. After a tank has been degassed pursuant to the requirements of this permit, vapor control requirements are not applicable until an organic liquid having a TVP of 0.5 psia or greater is placed, held, or stored in this tank. [District Rule 4623] Federally Enforceable Through Title V Permit

34. While performing tank cleaning activities, operators may only use the following cleaning agents: diesel, solvents with an initial boiling point of greater than 302 degrees F, solvents with a vapor pressure of less than 0.5 psia, or solvents with 50 grams of VOC per liter or less. [District Rule 4623] Federally Enforceable Through Title V Permit

35. Steam cleaning shall only be allowed at locations where wastewater treatment facilities are limited, or during the months of December through March. [District Rule 4623] Federally Enforceable Through Title V Permit

36. During sludge removal, the operator shall control emissions from the sludge receiving vessel by operating an APCO-approved vapor control device that reduces emissions of organic vapors by at least 95%. [District Rule 4623] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

37. Permittee shall only transport removed sludge in closed, liquid leak-free containers. [District Rule 4623] Federally Enforceable Through Title V Permit

38. Permittee shall store removed sludge, until final disposal, in vapor leak-free containers, or in tanks complying with the vapor control requirements of District Rule 4623. Sludge that is to be used to manufacture roadmix, as defined in District Rule 2020, is not required to be stored in this manner. Roadmix manufacturing operations exempt pursuant to District Rule 2020 shall maintain documentation of their compliance with Rule 2020, and shall readily make said documentation available for District inspection upon request. [District Rules 2020 and 4623] Federally Enforceable Through Title V Permit

39. The operator of a fixed roof tank shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 1070]

40. Formerly permit S--1131-166