



JAN 05 2012

Jerry Frost  
Vintage Production California  
9600 Ming Ave, Suite 300  
Bakersfield, CA 93311

**Re: Notice of Final Action - Title V Permit Renewal  
District Facility # S-1326  
Project # S-1054756**

Dear Mr. Frost:

The District has issued the Final Renewed Title V Permit for Vintage Production California. The preliminary decision for this project was made on October 24, 2011. A summary of the comments and the District's response to each comment is included as an attachment to the engineering evaluation.

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

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

Sincerely,



David Warner  
Director of Permit Services

Attachments

cc: Steve Davidson, Permit Services Engineer

**Seyed Sadredin**  
Executive Director/Air Pollution Control Officer

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

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

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



JAN 05 2012

Gerardo C. Rios, Chief  
Permits Office (AIR-3)  
U.S. EPA - Region IX  
75 Hawthorne St.  
San Francisco, CA 94105

**Re: Notice of Final Action - Title V Permit Renewal  
District Facility # S-1326  
Project # S-1054756**

Dear Mr. Rios:

The District has issued the Final Renewed Title V Permit for Vintage Production California. The preliminary decision for this project was made on October 24, 2011. A summary of the comments and the District's response to each comment is included as an attachment to the engineering evaluation.

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

I would like to thank you and your staff for working with us. We appreciate your concurrence with this action. Should you have any questions, please contact Mr. Leonard Scandura, Permit Services Manager, at (661) 392-5500.

Sincerely,

David Warner  
Director of Permit Services

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JAN 05 2012

Mike Tollstrup, Chief  
Project Assessment Branch  
Air Resources Board  
P O Box 2815  
Sacramento, CA 95812-2815

**Re: Notice of Final Action - Title V Permit Renewal  
District Facility # S-1326  
Project # S-1054756**

Dear Mr. Tollstrup:

The District has issued the Final Renewed Title V Permit for Vintage Production California. The preliminary decision for this project was made on October 24, 2011. A summary of the comments and the District's response to each comment is included as an attachment to the engineering evaluation.

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

I would like to thank you and your staff for working with us. Should you have any questions, please contact Mr. Leonard Scandura, Permit Services Manager, at (661) 392-5500.

Sincerely,



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Director of Permit Services

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cc: Steve Davidson, Permit Services Engineer

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Bakersfield Californian

**SAN JOAQUIN VALLEY  
AIR POLLUTION CONTROL DISTRICT  
NOTICE OF FINAL DECISION TO ISSUE  
RENEWED FEDERALLY MANDATED OPERATING PERMIT**

NOTICE IS HEREBY GIVEN that the San Joaquin Valley Air Pollution Control District has made its final decision to issue the renewed Federally Mandated Operating Permit to Vintage Production California for its Heavy Oil Central Stationary Source, California.

The District's analysis of the legal and factual basis for this proposed action, project #S-1054756, is available for public inspection at [http://www.valleyair.org/notices/public\\_notices\\_idx.htm](http://www.valleyair.org/notices/public_notices_idx.htm) and the District office at the address below. For additional information regarding this matter, please contact Mr. Leonard Scandura, Permit Services Manager, at (661) 392-5500, or contact David Warner, Director of Permit Services, in writing at SAN JOAQUIN VALLEY AIR POLLUTION CONTROL DISTRICT, 1990 E. GETTYSBURG AVE, FRESNO, CA 93726-0244.

# SAN JOAQUIN VALLEY AIR POLLUTION CONTROL DISTRICT

## FINAL DECISION Permit Renewal Vintage Production California S-1326

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**FINAL DECISION - TITLE V PERMIT RENEWAL**  
**Heavy Oil Production**

**Engineer:** Steve Davidson  
**Date:** December 23, 2011

**Facility Number:** S-1326  
**Facility Name:** Vintage Production California LLC  
**Mailing Address:** 9600 Ming Ave, Suite 300  
Bakersfield, CA 93311  
**Contact Name:** Jerry Frost  
**Phone:** (661) 869-8179

**Responsible Official:** William Hill  
**Title:** Operations Leader

**Project # :** S-1054756  
**Deemed Complete:** October 7, 2005

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**I. PROPOSAL**

Vintage Production California LLC (Vintage) was issued a Title V permit on July 31, 2001. As required by District Rule 2520, the applicant is requesting a permit renewal. The existing Title V permit shall be reviewed and modified to reflect all applicable District and Federal rules updated, removed, or added since the issuance of the initial Title V permit.

The purpose of this evaluation is to provide the legal and factual basis for all updated applicable requirements and to determine if the facility will comply with these updated requirements. It also specifically identifies all additions, deletions, and/or changes made to permit conditions or equipment descriptions.

**II. FACILITY LOCATION**

Vintage is located at Heavy Oil Central Stationary Source in Kern County.

**III. EQUIPMENT LISTING**

See Attachment C for a list of all permitted equipment at the facility.

#### **IV. GENERAL PERMIT TEMPLATE USAGE**

The applicant does not propose to use any model general permit templates.

#### **V. SCOPE OF EPA AND PUBLIC REVIEW**

The applicant is not requesting any model general permit templates. Therefore, all federally enforceable conditions in this current Title V permit will be subject to EPA and public review.

#### **VI. FEDERALLY ENFORCEABLE REQUIREMENTS**

##### **A. Rules Updated**

- District Rule 2020, Exemptions  
(amended June 21, 2001 ⇒ amended August 18, 2011)
- District Rule 2201, New and Modified Stationary Source Review Rule  
(amended June 21, 2001 ⇒ amended April 21, 2011)
- District Rule 4101, Visible Emissions  
(amended June 21, 2001 ⇒ amended February 17, 2005)
- District Rule 4305, Boilers, Steam Generators, and Process Heaters–Phase 2 (amended December 19, 1996 ⇒ amended August 21, 2003)
- District Rule 4351, Boilers, Steam Generators, and Process Heaters–Phase 3 (amended October 19, 1995 ⇒ amended August 21, 2003)
- District Rule 4401, Steam-Enhanced Crude Oil Production Wells  
(amended January 15, 1998 ⇒ amended June 16, 2011)
- District Rule 4601, Architectural Coatings  
(Adopted September 17, 1997 ⇒ amended December 17, 2009)
- District Rule 4623, Storage of Organic Liquids  
(amended December 17, 1992 ⇒ amended May 19, 2005)
- District Rule 4701, Internal Combustion Engines –Phase 1  
(amended November 12, 1998 ⇒ amended August 21, 2003)

- 40 CFR Part 60, Subpart Dc, Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units (amended January 28, 2009)
- 40 CFR Part 82, Subpart B, Stratospheric Ozone (amended November 9, 2007)
- 40 CFR Part 82, Subpart F, Stratospheric Ozone (amended June 8, 2008)

## **B. Rules Adopted**

- District Rule 4311, Flares, (adopted June 20, 2002 ⇒ amended June 18, 2009)
- District Rule 4306, Boilers, Steam Generators, and Process Heaters—Phase 3 (adopted September 18, 2003 ⇒ amended October 16, 2008)
- District Rule 4320, Advanced Emission Reductions Options for Boilers, Steam Generators, and Process Heaters Greater than 5.0 MMBtu/hr (adopted October 16, 2008)
- District Rule 4702, Internal Combustion Engines –Phase 2 (Adopted August 21, 2003 ⇒ amended August 18, 2011)
- District Rule 8011, General Requirements (adopted November 15, 2001 ⇒ amended August 19, 2004)
- District Rule 8021, Construction, Demolition, Excavation, Extraction, and Other Earthmoving Activities (adopted November 15, 2001 ⇒ amended August 19, 2004)
- District Rule 8031, Bulk Materials (adopted November 15, 2001 ⇒ amended August 19, 2004)
- District Rule 8041, Carryout and Trackout (adopted November 15, 2001 ⇒ amended August 19, 2004)
- District Rule 8051, Open Areas (adopted November 15, 2001 ⇒ amended August 19, 2004)
- District Rule 8061, Paved and Unpaved Roads (adopted November 15, 2001 ⇒ amended August 19, 2004)



- District Rule 8071, Unpaved Vehicle/Equipment Traffic Areas (adopted November 15, 2001 ⇒ amended September 16, 2004)

### **C. Rules Not Updated**

- District Rule 1081, Source Sampling (amended December 16, 1993)
- District Rule 2010, Permits Required (amended December 17, 1992)
- District Rule 2031, Transfer of Permits (amended December 17, 1992)
- District Rule 2070, Standards for Granting Applications (amended December 17, 1992)
- District Rule 2080, Conditional Approval (amended December 17, 1992)
- District Rule 2520, Federally Mandated Operating Permits (amended June 21, 2001)
- District Rule 4201, Particulate Matter Concentration (amended December 17, 1992)
- District Rule 4202, Particulate Matter–Emission Rate (amended December 17, 1992)
- District Rule 4402, Crude Oil Production Sumps (amended December 17, 1992)
- District Rule 4407, In-Situ Combustion Well Vents (Adopted May 1994)
- 40 CFR Part 61, Subpart M, National Emission Standard for Asbestos (amended September 18, 2003)

## **VII. REQUIREMENTS NOT FEDERALLY ENFORCEABLE**

For each Title V source, the District issues a single permit that contains both the federally enforceable requirements as well as District-only requirements. The District-only requirements are not a part of the Title V Operating Permits. The terms and conditions that are part of the facility's Title V permit are designated as "Federally Enforceable Through Title V Permit".

For this facility, the following are not federally enforceable and will not be discussed in further detail:

**A. Rules Added**

There have been no unenforceable rules adopted at this time.

**B. Rules Not Updated**

**District Rule 1070, Inspections (Amended December 17, 1992)**

The following Permits contain District Rule 1070 conditions. The conditions on these permits do not need to be updated based on District Rule 1070. No other discussion is required:

S-1326-9, '-26, '-27, '-28, '-35, '-36, '-201 thru '-206, '-212, '-261, '-262, '-268 through '-274, '-272, '-287, '-294, '-314, '-337, '-338, '-341, '-348, '-349, '-353 thru '-363, '-369, '-370, '-374, '-375, and '-381

**District Rule 1081, Source Sampling (amended December 17, 1992)**

The following Permits contain District Rule 1081 conditions. The conditions on these permits do not need to be updated based on District Rule 1081. No other discussion is required:

S-1326-9, '-287, '-294, '-314, and '-369.

**District Rule 1160, Emissions Statements (Adopted November 18, 1992)**

The following Permit contains District Rule 1160 conditions. The conditions on these permits do not need to be updated based on District Rule 1160. No other discussion is required:

S-1326-0

**District Rule 2040, Applications (Adopted May 21, 1992, Amended December 17, 1992)**

The following Permit contains District Rule 1160 conditions. The conditions on these permits do not need to be updated based on District Rule 1161. No other discussion is required:

S-1326-0

**District Rule 2080**, Conditional Approval (amended December 17, 1992)

The following Permits contain District Rule 2080 conditions. The conditions on these permits do not need to be updated based on District Rule 2080. No other discussion is required:

S-1326-0, '-263, '-268-6, '-269, '-315, and '-369

**District Rule 4102**, Nuisance (amended December 17, 1992)

Permits contain District Rule 4102 conditions do not need to be updated based on District Rule 4102. No other discussion is required:

This Rule applies to all permits. Standard nuisance condition will be moved to the facility wide permit.

**District Rule 4801**, Sulfur Compounds (amended December 17, 1992)

The following Permits contain District Rule 4801 conditions. The conditions on these permits do not need to be updated based on District Rule 4801. No other discussion is required:

S-1326-35, '-36, '-260, and '-371

## VIII. FEDERALLY ENFORCEABLE PERMIT REQUIREMENTS

The purpose of this evaluation is to review changes to federally enforceable requirements; therefore, this section will primarily address rules that have been amended or added since the issuance of the initial Title V permit.

### A. Equipment Description

The equipment description is considered a condition for operation. Therefore, the description is enforceable. The equipment descriptions, updated to current District practice (where required), are listed below in underline/strikeout format:

Renewal PTO S-1326-9-14:

62.5 MM BTU/HR NATURAL GAS FIRED STRUTHERS STEAM  
GENERATOR - DIS# 21928-82 (NORTH TREATING PLANT)

The renewal of this permit includes converting implemented ATC S-1326-9-18, '-19, and '-20.

Renewal PTO S-1326-26-17:

THERMALLY ENHANCED OIL RECOVERY OPERATION WITH WELL VENT VAPOR CONTROL SYSTEM SERVING 120 STEAM ENHANCED WELLS, INCLUDING SULFA-TREAT SYSTEM, GAS TRAPS, COLLECTION PIPING, VAPOR COMPRESSOR WITH ELECTRIC MOTOR, AND PIPING TO FIELD FUEL GAS SYSTEM, DOGGR DISPOSAL WELL, AND FLARE (FANO).

Renewal PTO S-1326-27-14:

THERMALLY ENHANCED OIL RECOVERY (TEOR) OPERATION WITH WELL VENT VAPOR CONTROL SYSTEM SERVING UP TO 100 STEAM ENHANCED WELLS INCLUDING: GAS LIQUID SEPERATORS, COMPRESSOR, CONDENSATE HANDLING AND 2.9 MMBTU/HR AIR ASSISTED FLARE (SECTION 2 EAST CVR)

Renewal PTO S-1326-28-14:

THERMALLY ENHANCED OIL RECOVERY OPERATION INCLUDING DEEP EMERGENCY OVERFLOW PIT WITH MESH COVER, HORIZONTAL GAS-LIQUID SEPARATOR, AIR-COOLED HEAT EXCHANGER, HORIZONTAL CONDENSATE COLLECTION VESSEL WITH LIQUID TRANSFER PUMPS, 30 HP COMPRESSOR (K-101), 2.9 MMBTU/HR MCGILL STANDBY FLARE (#1011-2) EQUIPPED WITH 2 IN DIA BURNER TIP, AIR ASSIST BLOWER, KO DRUM SHARED WITH PERMIT UNIT S-1326-27, AND WELL VENT VAPOR CONTROL SYSTEM SERVING 150 STEAM DRIVE WELLS.

Renewal PTO S-1326-35-8:

THERMALLY ENHANCED OIL RECOVERY OPERATION WITH WELL VENT VAPOR CONTROL SYSTEM SERVING 150 STEAM ENHANCED WELLS, INCLUDING 50 HP COMPRESSOR, ONE AIR-COOLED VAPOR CONDENSER, AND PIPING TO FIELD FUEL GAS SYSTEM, DOGGR DISPOSAL WELL, AND FLARE (S-1326-260) (SECTION 14 YOUNG)

The renewal of this permit includes converting implemented ATC S-1326-35-11.

Renewal PTO S-1326-36-2:

UP TO 5 1/3 UNCONTROLLED CYCLICLY STEAMED OIL WELLS  
HEAVY OIL CENTRAL STATIONARY SOURCE

Renewal PTO S-1326-46-7:

1000 BBL 42,000 GALLON FIXED-ROOF STOCK TANK WITH VAPOR CONTROL SYSTEM INCLUDING GAS/LIQUID SEPARATOR AND A MINIMUM RATED 15 HP VAPOR COMPRESSOR, SHARED WITH PERMIT UNITS S-1326-47, -48, -214, AND -215 (FANO LEASE)

Renewal PTO S-1326-47-5:

1000 BBL 42,000 GALLON FIXED-ROOF STOCK TANK SERVED BY VAPOR CONTROL SYSTEM LISTED ON S-1326-46 (FANO LEASE)

Renewal PTO S-1326-48-5:

500 BBL 240,000 GALLON FIXED-ROOF WASTE WATER TANK SERVED BY VAPOR CONTROL SYSTEM LISTED ON S-1326-46 (FANO LEASE)

Renewal PTO S-1326-101-3:

1000 BBL 42,000 GALLON FIXED-ROOF PETROLEUM STORAGE TANK #T-14 (NATIONAL TANK BATTERY).

Renewal PTO S-1326-119-3:

2000 BBL 84,000 GALLON FIXED-ROOF PETROLEUM STORAGE TANK #2GK-255 (LENHARDT USL)

Renewal PTO S-1326-120-3:

2000 BBL 84,000 GALLON FIXED-ROOF PETROLEUM STORAGE TANK #2L100 (LENHARDT USL).

Renewal PTO S-1326-121-3:

5000 BBL 240,000 GALLON FIXED-ROOF PETROLEUM STORAGE TANK #2L100 (LENHARDT USL).

Renewal PTO S-1326-126-3:

2000 BBL 84,000 GALLON FIXED-ROOF PETROLEUM STORAGE TANK #20WSTWTR (SEC. 14 USL)

Renewal PTO S-1326-127-3:

2000 BBL 84,000 GALLON FIXED-ROOF PETROLEUM STORAGE TANK #20X1504 (SEC. 14 USL).

Renewal PTO S-1326-128-3:

2000 BBL 84,000 GALLON FIXED-ROOF PETROLEUM STORAGE  
TANK #2GK37 (SEC. 14 USL).

Renewal PTO S-1326-129-2:

5000 BBL 240,000 GALLON FIXED-ROOF PETROLEUM STORAGE  
TANK #5GK43 (ROBINSON A/USL)

Renewal PTO S-1326-130-2:

5000 BBL 240,000 GALLON FIXED-ROOF PETROLEUM STORAGE  
TANK #5GK-34 (ROBINSON A/USL)

Renewal PTO S-1326-131-2:

2000 BBL 84,000 GALLON FIXED-ROOF PETROLEUM STORAGE  
TANK #2RA100 (ROBINSON A/USL)

Renewal PTO S-1326-132-2:

2000 BBL 84,000 GALLON FIXED-ROOF PETROLEUM STORAGE  
TANK #SPLCONTNK (STAR USL/STAR ROBINSON)

Renewal PTO S-1326-133-2:

1000 BBL 42,000 GALLON FIXED-ROOF PETROLEUM STORAGE TANK  
#152323 (STAR USL)

Renewal PTO S-1326-134-2:

1000 BBL 42,000 GALLON FIXED-ROOF PETROLEUM STORAGE TANK  
#15322 (STAR USL)

Renewal PTO S-1326-135-2:

1000 BBL 42,000 GALLON FIXED-ROOF PETROLEUM STORAGE  
TANK #15321 (STAR USL)

Renewal PTO S-1326-136-2:

1000 BBL 42,000 GALLON FIXED-ROOF PETROLEUM STORAGE  
TANK #WSTWTR1 (STAR USL)

Renewal PTO S-1326-137-3:

1000 BBL 42,000 GALLON FIXED-ROOF PETROLEUM STORAGE  
TANK #15324 (STAR ROBINSON).

Renewal PTO S-1326-138-3:

1000 BBL 42,000 GALLON FIXED-ROOF PETROLEUM STORAGE  
TANK #15325 (STAR ROBINSON).

Renewal PTO S-1326-139-3:

1000 BBL 42,000 GALLON FIXED-ROOF PETROLEUM STORAGE  
TANK #15326 (STAR ROBINSON).

Renewal PTO S-1326-140-3:

1000 BBL 42,000 GALLON FIXED-ROOF PETROLEUM STORAGE  
TANK #WSTWTR1 (STAR ROBINSON).

Renewal PTO S-1326-147-2:

2000 BBL 84,000 GALLON FIXED-ROOF PETROLEUM STORAGE  
TANK #2GK-18 (ROBINSON B/USL)

Renewal PTO S-1326-148-2:

2000 BBL 84,000 GALLON FIXED-ROOF PETROLEUM STORAGE  
TANK #2GK-23 (ROBINSON B/USL)

Renewal PTO S-1326-149-2:

1000 BBL 42,000 GALLON FIXED-ROOF PETROLEUM STORAGE  
TANK #1RB101 (ROBINSON B/USL)

Renewal PTO S-1326-150-2:

1000 BBL 42,000 GALLON FIXED-ROOF PETROLEUM STORAGE  
TANK #1DRNTK3 (ROBINSON B DEHY).

Renewal PTO S-1326-151-2:

5000 BBL 240,000 GALLON FIXED-ROOF PETROLEUM STORAGE  
TANK #5RB1035RG (ROBINSON B DEHY).

Renewal PTO S-1326-152-2:

1000 BBL 42,000 GALLON FIXED-ROOF PETROLEUM STORAGE TANK #10WSTWTR (ROBINSON B DEHY).

Renewal PTO S-1326-153-2:

3000 BBL 126,000 GALLON FIXED-ROOF PETROLEUM STORAGE TANK #3GK309SHP (ROBINSON B DEHY).

Renewal PTO S-1326-154-2:

3000 BBL 126,000 GALLON FIXED-ROOF PETROLEUM STORAGE TANK #3GK310SHP (ROBINSON B DEHY).

Renewal PTO S-1326-158-2:

5000 BBL 240,000 GALLON FIXED-ROOF PETROLEUM STORAGE TANK #5T100 (TEGELER/USL)

Renewal PTO S-1326-159-2:

2000 BBL 84,000 GALLON FIXED-ROOF PETROLEUM STORAGE TANK #3GK24 (TEGELER/USL)

Renewal PTO S-1326-160-2:

2000 BBL 84,000 GALLON FIXED-ROOF PETROLEUM STORAGE TANK #2GK13 (TEGELER/USL)

Renewal PTO S-1326-201-10:

3,000 BBL FIXED ROOF WASH TANK (#T-1) WITH SHARED VAPOR CONTROL SYSTEM SERVING TEOR SYSTEM TEOR SYSTEM S-1326-28 and TANKS S-1326-201, '-202, '-203, '-204, '-205, '-206, '-212, '-261, '-262, '-268, '-269, '-270, '-271, '-272, and '-274. (NORTH TREATING FACILITY).

Renewal PTO S-1326-202-:

1,000 BBL FIXED ROOF REJECT OIL TANK (#T-2) WITH CONNECTED TO THE VAPOR CONTROL SYSTEM LISTED ON PERMIT S-1326-201 (PART OF S-1326-201) (NORTH TREATING FACILITY).



Renewal PTO S-1326-203-10:

2,000 BBL FIXED ROOF STOCK TANK (#T-3) WITH VAPOR CONTROL LISTED ON PERMIT ~~(PART OF S-1326-201)~~ (NORTH TREATING FACILITY)

Renewal PTO S-1326-204-7:

2,000 BBL FIXED ROOF STOCK TANK (#T-4) WITH VAPOR CONTROL LISTED ON PERMIT ~~(PART OF S-1326-201)~~ (NORTH TREATING FACILITY)

Renewal PTO S-1326-205:

5,000 BBL FIXED ROOF WATER TANK (#T-5) WITH VAPOR CONTROL LISTED ON PERMIT ~~(PART OF S-1326-201)~~ (NORTH TREATING FACILITY)

Renewal PTO S-1326-206-7 (Oilfield Tank with vapor control listed on the PTO S-1326-201):

1,000 BBL FIXED ROOF WATER TANK (#T-6) WITH VAPOR CONTROL LISTED ON PERMIT ~~(PART OF S-1326-201)~~ (NORTH TREATING FACILITY)

Renewal PTO S-1326-212-7:

2,000 BBL FIXED ROOF SURGE TANK (#ST-1) WITH VAPOR CONTROL LISTED ON PERMIT ~~(PART OF S-1326-201)~~ (NORTH TREATING FACILITY)

Renewal PTO S-1326-214-7:

~~2000 BBL~~ 84,000 GALLON FIXED-ROOF STOCK TANK SERVED BY VAPOR CONTROL SYSTEM LISTED ON S-1326-46 (FANO LEASE)

Renewal PTO S-1326-215-7:

~~3000 BBL~~ 126,000 GALLON ~~FIXED-ROOF~~ WASH TANK SERVED BY VAPOR CONTROL SYSTEM LISTED ON S-1326-46 (FANO LEASE)

Renewal PTO S-1326-260-4:

MODIFICATION OF 3.6 MMBTU/HR KALDAIR FLARE INCLUDING TWO 8000 LB SULFATREAT CANISTERS (ONE AS BACKUP), 50 HP COMPRESSOR, AND PIPING FROM TEOR OPERATION S-1326-35

~~(YOUNG SECTION 14): ADD FLARE BYPASS CONNECTION TO  
FIELD FUEL GAS SYSTEM OR DOGGR DISPOSAL WELL(S)~~

Renewal PTO S-1326-261:

500 BBL FIXED ROOF STOCK TANK #T-20 WITH VAPOR CONTROL  
~~(PART OF LISTED ON PERMIT S-1326-201)~~ (NORTH TREATING  
FACILITY).

Renewal PTO S-1326-262:

500 BBL FIXED ROOF WATER TANK #T-19 WITH VAPOR  
CONTROL LISTED ON PERMIT ~~(PART OF S-1326-201)~~ (NORTH  
TREATING FACILITY)

Renewal PTO S-1326-263-11:

~~426,000 GALLON (3,000 BBL) FIXED ROOF WASH TANK SERVED  
BY TANK VAPOR CONTROL SYSTEM SHARED WITH SECTION 23  
TANK VAPOR RECOVERY (TVR) SYSTEM WITH CASING VENT  
RECOVERY (CVR) SYSTEM LISTED ON S-1326-287 AND STORAGE  
TANKS S-1326-263, -279, -280, -281, -283, -285, AND '315 WITH  
TWO COMPRESSORS ROUTING VAPORS EITHER TO DOGGR  
APPROVED VAPOR DISPOSAL WELL OR THROUGH HYDROGEN  
SULFIDE SCRUBBER(S) TO FIELD FUEL GAS SYSTEM (SECTION  
23 FACILITY)~~

Renewal PTO S-1326-268-3:

5,000 BBL FIXED ROOF SURGE/FWKO TANK #T-12 WITH VAPOR  
CONTROL LISTED ON PERMIT ~~(PART OF S-1326-201)~~ (NORTH  
TREATING FACILITY).

Renewal PTO S-1326-269-6:

5,000 BBL FIXED ROOF PRODUCED WATER TANK #T-13 WITH  
VAPOR CONTROL LISTED ON PERMIT ~~(PART OF S-1326-201)~~  
(NORTH TREATING FACILITY).

Renewal PTO S-1326-270-5:

1,000 BBL FIXED ROOF OIL TREATING TANK #TS-1 WITH VAPOR  
CONTROL LISTED ON PERMIT ~~(PART OF S-1326-201)~~ (NORTH  
TREATING FACILITY).

Renewal PTO S-1326-271-5:

6,000 BBL FIXED ROOF OIL TREATING TANK #TS-2 WITH VAPOR CONTROL LISTED ON PERMIT ~~(PART OF S-1326-201)~~ (NORTH TREATING FACILITY).

Renewal PTO S-1326-272-5:

1,000 BBL FIXED ROOF WATER TANK #TS-3 WITH VAPOR CONTROL LISTED ON PERMIT S-1326-201 (NORTH TREATING FACILITY)

Renewal PTO S-1326-273-3:

~~4,620 GALLON (110 BBL)~~ FIXED ROOF CRUDE OIL SKIM TANK (ROBINSON B LEASE, KERIN FRONT OIL FIELD)

Renewal PTO S-1326-274-4:

1000 BBL ~~42,000 GALLON~~ FIXED ROOF SLOP OIL TANK (# TS-8) WITH VAPOR CONTROL LISTED ON PERMIT ~~SHARED WITH S-~~ 1326-201.

Renewal PTO S-1326-279-6:

5000 BBL ~~240,000 GALLON~~ FREE WATER KNOCKOUT STORAGE TANK SERVED BY VAPOR CONTROL SYSTEM LISTED ON S-1326-263.

Renewal PTO S-1326-280-6:

1000 BBL ~~42,000 GALLON~~ FREE WATER KNOCKOUT STORAGE TANK SERVED BY VAPOR CONTROL SYSTEM LISTED ON S-1326-263.

Renewal PTO S-1326-281-5:

~~42,000 GALLON (1,000 BBL)~~ CRUDE OIL LACT TANK SERVED BY VAPOR CONTROL SYSTEM LISTED ON S-1326-263

Renewal PTO S-1326-283-4:

2000 BBL ~~84,000 GALLON~~ RAW WATER STORAGE TANK SERVED BY VAPOR CONTROL SYSTEM LISTED ON S-1326-263

Renewal PTO S-1326-285-4:

~~2000 BBL 84,000 GALLON~~ OVERFLOW TANK SERVED BY VAPOR CONTROL SYSTEM LISTED ON S-1326-263

Renewal PTO S-1326-287-7:

THERMALLY ENHANCED OIL RECOVERY OPERATION WITH 305 STEAM ENHANCED PRODUCTION WELLS CONNECTED TO WELL HEAD CASING VENT VAPOR RECOVERY SYSTEM (CVR) VENTING VAPORS TO SECTION 23 TANK VAPOR RECOVERY SYSTEM (S-1326-263)

The renewal of this permit includes converting implemented ATCs S-1326-287-8 and '-287-9.

Renewal PTO S-1326-294-7:

62.5 MMBTU/HR NATURAL GAS-FIRED STRUTHERS STEAM GENERATOR WITH A NORTH AMERICAN MAGNA-FLAME G-LE ULTRA LOW NOX BURNER AND A FLUE GAS RECIRCULATION (FGR) SYSTEM

The renewal of this permit includes converting implemented ATCs S-1326-294-5 and '-294-6.

Renewal PTO S-1326-314-5:

85.0 MMBTU/HR STRUTHERS NATURAL GAS-FIRED STEAM GENERATOR WITH A NORTH AMERICAN MODEL MAGNA-FLAME G-LE ULTRA ULTRA-LOW NOX BURNER WITH FLUE GAS RECIRCULATION (FGR) AND AN O2 CONTROLLER

The renewal of this permit includes converting implemented ATCs S-1326-314-3 and '-314-4.

Renewal PTO S-1326-315-1:

20,000 BBL FWKO VENTED TO VAPOR CONTROL SYSTEM LISTED ON S-1326-263

Renewal PTO S-1326-316-1:

~~45,486 GALLON~~ 1000 BBL FIXED ROOF PRODUCED WATER TANK #32346 (TEJON)

Renewal PTO S-1326-317-1:

~~45,486 GALLON~~ 1000 BBL FIXED ROOF PETROLEUM WASH TANK  
#32384 (TEJON)

Renewal PTO S-1326-318-1:

~~45,486 GALLON~~ 1000 BBL FIXED ROOF PETROLEUM STORAGE  
TANK #30114 (TEJON)

Renewal PTO S-1326-319-1:

~~45,486 GALLON~~ 1000 BBL FIXED ROOF PETROLEUM STORAGE  
TANK #30115 (TEJON)

Renewal PTO S-1326-320-1:

~~ONE 840,000 GALLON~~ 20,000 BBL FIXED ROOF PETROLEUM  
WASH TANK (SEC. 9 NO. 1)

Renewal PTO S-1326-321-1:

~~ONE 840,000 GALLON~~ 20,000 BBL FIXED ROOF PETROLEUM  
WASH TANK (SEC. 9 NO. 2)

Renewal PTO S-1326-322-1:

~~ONE 504,000 GALLON~~ 12,000 BBL FIXED ROOF PETROLEUM  
WASH TANK (SEC. 9 NO. 4)

Renewal PTO S-1326-323-1:

~~ONE 420,000 GALLON~~ 10,000 BBL FIXED ROOF PETROLEUM  
STORAGE TANK (SEC. 9 NO. 8)

Renewal PTO S-1326-324-1:

~~ONE 210,000 GALLON~~ 5000 BBL FIXED ROOF PETROLEUM WASH  
TANK (SEC. 9 NO. 9) WITH A VAPOR CONTROL SYSTEM  
CONSISTING OF ONE COMPRESSOR, TWO SCRUBBERS, PIPING,  
AND CONTROL HARDWARE (SHARED WITH TANKS S-1326-326-0  
AND S-1327-0 S-3529-20 AND 21)

Renewal PTO S-1326-325-1:

~~ONE 420,000 GALLON 10,000 BBL~~ FIXED ROOF PETROLEUM STORAGE TANK (SEC. 9 NO. 8)

Renewal PTO S-1326-326-1:

~~240,000 GALLON 5000 BBL~~ FIXED ROOF PETROLEUM STORAGE TANK, CONNECTED TO VAPOR CONTROL SYSTEM LISTED ON PERMIT S-1326-324 ~~S-3529-18~~ (SEC. 9 #11)

Renewal PTO S-1326-327-1:

~~240,000 GALLON 5000 BBL~~ FIXED ROOF PETROLEUM STORAGE TANK, CONNECTED TO VAPOR CONTROL SYSTEM LISTED ON PERMIT S-1326-324 ~~S-3529-18~~ (SEC. 9 #11)

Renewal PTO S-1326-328-1:

~~750 BBL ONE 31,500 GALLON~~ FIXED ROOF PETROLEUM STORAGE TANK (SO. UNIT TANK FARM NO. 8 )

Renewal PTO S-1326-330-1:

~~750 BBL 42,000 GALLON~~ FIXED ROOF PETROLEUM STORAGE TANK (NORTH UNIT NO. 5) WITH PV VALVE

Renewal PTO S-1326-331-1:

~~2000 BBL ONE 84,000 GALLON~~ FIXED ROOF PETROLEUM WASH TANK WITH PV VALVE (NORTH UNIT NO. 6)

Renewal PTO S-1326-332-1:

~~2000 BBL ONE 84,000 GALLON~~ FIXED ROOF CRUDE OIL WASH TANK (SOUTH UNIT TANK FARM NO. 1)

Renewal PTO S-1326-333-1:

~~2000 BBL ONE 84,000 GALLON~~ FIXED ROOF CRUDE OIL WASH TANK (SOUTH UNIT TANK FARM NO. 2)

Renewal PTO S-1326-334-1:

~~2000 BBL ONE 84,000 GALLON FIXED ROOF WASH TANK (NO. 1)  
WITH PR/V DEVICE (FUNCTIONALLY IDENTICAL REPLACEMENT  
UNIT FOR S-3529-30. SECURITY TANK FARM - NO. 1)~~

Renewal PTO S-1326-335-1:

~~2000 BBL ONE 84,000 GALLON FIXED ROOF WASH TANK (NO. 1)  
WITH PR/V DEVICE (FUNCTIONALLY IDENTICAL REPLACEMENT  
UNIT FOR S-3529-30. SECURITY TANK FARM - NO. 2)~~

Renewal PTO S-1326-337-6:

85.0 MMBTU/HR STRUTHERS NATURAL GAS-FRIED STEAM  
GENERATOR WITH A NORTH AMERICAN MODEL MAGNA-FLAME  
G-LE ULTRA ULTRA-LOW NOX BURNER WITH FLUE GAS  
RECIRCULATION (FGR) AND AN O2 CONTROLLER

The renewal of this permit includes converting implemented ATC  
S-1326-337-4.

Renewal PTO S-1326-338-6:

85.0 MMBTU/HR STRUTHERS NATURAL GAS-FRIED STEAM  
GENERATOR WITH A NORTH AMERICAN MODEL MAGNA-FLAME  
G-LE ULTRA ULTRA-LOW NOX BURNER WITH FLUE GAS  
RECIRCULATION (FGR) AND AN O2 CONTROLLER

The renewal of this permit includes converting implemented  
ATCs S-1326-338-4.

Renewal PTO S-1326-341-1:

THERMALLY ENHANCED OIL RECOVERY OPERATION WELL VENT  
VAPOR CONTROL SYSTEM SERVING UP TO 50 STEAM DRIVE  
WELLS AND 40 CYCLIC WELLS (MOVIUS FEE LEASE)

Renewal PTO S-1326-348-1:

10 CLOSED VENTS CYCLIC WELLS

Renewal PTO S-1326-349-1:

~~1000 BBL 42,000 GALLON FIXED ROOF PETROLEUM STOCK TANK  
WITH PRESSURE VACUUM VENT (#156744, TEJON LEASE)~~

Renewal PTO S-1326-353-1:

500 BBL 21,000 GALLON FIXED ROOF PETROLEUM STORAGE TANK WITH PRESSURE/VACUUM VENT (ANTHILL LEASE)

Renewal PTO S-1326-354-1:

500 BBL 21,000 GALLON FIXED ROOF PETROLEUM STORAGE TANK WITH PRESSURE/VACUUM VENT (ANTHILL LEASE)

Renewal PTO S-1326-355-1:

500 BBL 21,000 GALLON FIXED ROOF PETROLEUM STOCK TANK WITH PRESSURE/VACUUM VENT (GRAPEVINE LEASE)

Renewal PTO S-1326-356-1:

1000 BBL 42,000 GALLON FIXED ROOF WASH TANK WITH PRESSURE/VACUUM VENT (#56569, GRAPEVINE LEASE)

Renewal PTO S-1326-357-1:

1000 BBL 42,000 GALLON FIXED ROOF WASH TANK WITH PRESSURE/VACUUM VENT (#117049, DAVIES LEASE)

Renewal PTO S-1326-358-1:

1000 BBL 42,000 GALLON FIXED ROOF WASH TANK WITH PRESSURE/VACUUM VENT (#117050, DAVIES LEASE)

Renewal PTO S-1326-360-1:

3000 BBL 126,000 GALLON, 29 FT. DIA., FIXED ROOF WASH TANK INCLUDING: FWKO VESSEL, WEMCO OIL/WATER SEPARATOR, AND SHARED WITH VAPOR CONTROL SYSTEM SHARED WITH TANKS S-1326-361, '-362, and 370. (ANTHILL LEASE)

Renewal PTO S-1326-361-1:

3000 BBL 84,000 GALLON, 29 FT. DIA FIXED ROOF WASH TANK WITH CONNECTED TO VAPOR CONTROL LISTED ON S-1326-360 SYSTEM SHARED WITH PERMITS S-1326-361, '362, AND 370 (ANTHILL LEASE)



Renewal PTO S-1326-362-1:

2000 BBL ~~84,000 GALLON, 29 FT. DIA.,~~ FIXED ROOF STORAGE TANK WITH SHARED VAPOR CONTROL LISTED ON S-1326-360 (ANTHILL LEASE)

Renewal PTO S-1326-363-1:

750 BBL ~~31,500 GALLON~~ FIXED ROOF PETROLEUM STORAGE TANK (NO. 002317) WITH PRESSURE/VACUUM VENT (ANTHILL LEASE)

Renewal PTO S-1326-365-1:

1250 BBL ~~52,500 GALLON~~ FIXED ROOF WASH TANK (JV LEASE)

Renewal PTO S-1326-366-1:

1000 BBL ~~42,000 GALLON~~ FIXED ROOF PETROLEUM STOCK TANK WITH PRESSURE/VACUUM VENT (#10X901, JV LEASE)

Renewal PTO S-1326-367-1:

1000 BBL ~~42,000 GALLON~~ FIXED ROOF PETROLEUM STORAGE TANK WITH PRESSURE VACUUM VENT #10X1853 (OMB LEASE)

Renewal PTO S-1326-368-1:

21,000 GALLON ~~(500 BBL)~~ FIXED ROOF PETROLEUM STORAGE TANK WITH PRESSURE/VACUUM VENT (CARREC FEE LEASE)

Renewal PTO S-1326-369-1:

25 MM BTU/HR STEAM GENERATOR WITH NORTH AMERICAN LOW-NOX BURNER AND O2 MONITOR/CONTROLLER

Renewal PTO S-1326-370-1:

250 BBL ~~10,500 GALLON~~ FIXED ROOF DRAIN TANK WITH VAPOR CONTROL LISTED ON PERMIT S-1326-360

Renewal PTO S-1326-371-1:

180 HP DIESEL FIRED DETROIT DIESEL 6V53 TRANSPORTABLE  
IC ENGINE DRIVING POSITIVE DISPLACEMENT PUMP IN WELL  
PUMP SERVICE

Renewal PTO S-1326-372-1:

23 STEAM ENHANCED CRUDE OIL PRODUCTION WELLS WITH  
CLOSED WELL VENTS

Renewal PTO S-1326-373-5:

3000 BBL HEATED, FIXED ROOF WASH TANK WITH VAPOR  
CONTROL SYSTEM ALSO SERVING TANKS S-1326-374, '-375, AND  
'-381, CONSISTING OF A FWKO, A COMPRESSOR AND PIPING TO  
VAPOR INCINERATION DEVICES

Renewal PTO S-1326-374-1:

2000 BBL (~~84,000 GALLON~~) HEATED FIXED ROOF STOCK TANK  
SERVED BY VAPOR CONTROL SYSTEM LISTED VRS SHARED  
WITH S-1326-373

Renewal PTO S-1326-375-1:

2000 BBL (~~84,000 GALLON~~) HEATED FIXED ROOF STOCK TANK  
SERVED BY VRS SHARED WITH S-1326-373

Renewal PTO S-1326-376-1 (Oilfield Flare):

6.1 MMBTU/HR FLARE INCINERATING WASTE GAS FROM VAPOR  
COLLECTION SYSTEM

Renewal PTO S-1326-377-1:

750 BBL (~~31,500 GAL~~) FIXED ROOF CRUDE OIL WASH TANK - OMB  
LEASE

Renewal PTO S-1326-378-1:

1000 BBL ~~42,000 GALLON~~ FIXED ROOF PETROLEUM STORAGE  
TANK: (ID #10X898 STOCK TANK)

Renewal PTO S-1326-381-1:

2000 BBL ~~84,000 GALLON~~ CRUDE OIL PRODUCTION TANK  
SERVED BY A VAPOR RECOVERY SYSTEM SHARED WITH  
PERMIT UNIT S-1326-373

Renewal PTO S-1326-382-1:

25 FOOT TALL MACTRONIC AIR-ASSISTED PROCESS FLARE WITH 6  
INCH DIAMETER FLARE STACK AND AUTOMATIC RE-IGNITION

Renewal PTO S-1326-383-1:

1000 BARREL, FIXED ROOF, CONSTANT LEVEL CRUDE OIL  
STORAGE TANK WITH PRESSURE/VACUUM VENT

Renewal PTO S-1326-384-1:

2,000 BBL SKIM TANK (JV LEASE)

Renewal PTO S-1326-385-3:

85 MMBTU/HR NATURAL GAS-FIRED STEAM GENERATOR WITH A  
NORTH AMERICAN 4231-85 GLE BURNER (OR EQUIVALENT), AND  
FLUE GAS RECIRCULATION (FGR)

The renewal of this permit includes converting implemented ATC  
S-1326-385-2.

Renewal PTO S-1326-387-1:

100 BBL (~~4200 GALLON~~) FIXED ROOF CRUDE OIL STORAGE TANK

Renewal PTO S-1326-388-1:

1000 BBL (~~42,000 GALLON~~) FIXED ROOF CRUDE OIL STORAGE  
TANK

Renewal PTO S-1326-389-1:

2000 BBL (~~84,000 GALLON~~) FIXED ROOF CRUDE OIL STORAGE  
TANK

Renewal PTO S-1326-398-1:

2,500 BBL FIXED ROOF CRUDE OIL STOCK TANK WITH PRESSURE-VACUUM VALVE (MT. POSO OIL FIELD, GLIDE 33 LEASE)

Renewal PTO S-1326-399-1:

2,500 BBL FIXED ROOF CONSTANT-LEVEL CRUDE OIL WASH TANK WITH PRESSURE-VACUUM VALVE (MT. POSO OIL FIELD, GLIDE 33 LEASE)

Renewal PTO S-1326-400-1:

85 MMBTU/HR STRUTHERS NATURAL GAS/TEOR/TVR-FIRED STEAM GENERATOR WITH NORTH AMERICAN MODEL MAGNA-FLAMETM 4231-85 GLE BURNER OR EQUIVALENT AND A FLUE GAS RECIRCULATION (FGR) SYSTEM

The renewal of this permit includes converting implemented ATCs S-1326-400-0.

Renewal PTO S-1326-401-4:

85 MMBTU/HR NATURAL AND/OR TVR GAS-FIRED STEAM GENERATOR WITH NORTH AMERICAN MODEL MAGNA-FLAME 4231-85 GLE BURNER OR EQUIVALENT AND A FLUE GAS RECIRCULATION (FGR) SYSTEM

The renewal of this permit includes converting implemented ATCs S-1326-401-0.

**B. District Rule 1100 – Equipment Breakdown**

Although Rule 1100 is by itself not federally enforceable, it is referenced as one of the rules on which three federally enforceable conditions are based.

Renewal PTO S-1326-0-2 (facility-wide permit):

Existing conditions referencing District Rule 1100 are included on the renewal PTO. However, the reference to county rules other than Kern County (where the facility is located) were removed. These conditions on the facility wide permit will ensure facility-wide compliance with the requirements of this rule.

Renewal PTO S-1326-360-1 (oilfield tank with vapor control):

Condition allowing existing oil production sumps to be used for intermittent or emergency collection of crude oil and water pursuant to Rule 1100 and 4402 will remain on the current permit.

Renewal PTO S-1326-362-3 (oilfield tank with vapor control):

Condition allowing existing oil production sumps to be used for intermittent or emergency collection of crude oil and water pursuant to Rule 1100 and 4402 will remain on the current permit.

**C. District Rule 2020 – Exemptions**

District Rule 2020 lists equipment that is exempt from obtaining permits and specifies recordkeeping requirements to verify such exemptions.

The amendments to this rule – which are not approved for inclusion into the SIP – do not have any affect on current permit requirements.

Renewal PTO S-1326-0-2 (facility-wide permit):

Condition requiring permittee to obtain an ATC if installing new equipment that is not permit exempt will remain on the permit.

Renewal PTO S-1326-263-1 (oilfield tank):

Conditions ensuring that permit exempt equipment burns gasses that will ensure the equipment remains exempt will remain of the permit.

Renewal PTO S-1326-341-1 (TEOR System):

Condition ensuring the permit exempt 3.0 MMBtu/hr heater burns gasses that will ensure the equipment remains exempt will remain of the permit.

**D. District Rule 2201 - New and Modified Stationary Source Review Rule**

District Rule 2201 has been amended since this facility's initial Title V permit was issued. However, this Title V permit renewal does not constitute a modification. Per section 3.26, a modification is defined as an action including at least one of the following items:

- 1) Any change in hours of operation, production rate, or method of operation of an existing emissions unit, which would necessitate a change in permit conditions.
- 2) Any structural change or addition to an existing emissions unit which would necessitate a change in permit conditions. Routine replacement shall not be considered to be a structural change.
- 3) An increase in emissions from an emissions unit caused by a modification of the Stationary Source when the emissions unit is not subject to a daily emissions limitation.
- 4) Addition of any new emissions unit which is subject to District permitting requirements.
- 5) A change in a permit term or condition proposed by an applicant to obtain an exemption from an applicable requirement to which the source would otherwise be subject.

Therefore, the updated requirements of this rule are not applicable at this time. NSR conditions that have not been updated or removed from the permit will not be addressed in this evaluation.

Facility wide condition amendments:

Numerous permits at this facility have conditions referencing the District Rule 2201 as the "NSR Rule" in the rule reference section of the condition. In accordance with current district practice, this reference has been replaced facility wide with "District Rule 2201".

The following conditions have been amended at the permittee's request. They are not modifications:

Renewal PTO S-1326-26-17 (62.5 MMBtu/hr Steam Generator)

Condition 27 has been changed, per applicant request, as follows:

Emissions ~~rates from waste gas flare~~ shall not exceed any of the following: VOC: 0.063 lb/MMBtu; NOx: 0.068 lb/MMBtu; PM10: 0.008 lb/MMBtu; and CO: 0.37 lb/MMBtu. [District NSR Rule] Y

Renewal PTO S-1326-36-2-1 (uncontrolled cyclic wells):

Condition requiring permittee to acquire an ATC prior to increase the number of wells authorized by this permit will be removed from the permit.

Renewal PTO S-1326-46-7 (oil field tank):

The following condition is redundant to the equipment description;  
therefore, it has been removed.

Operation shall include vapor control system piping between tanks  
S- 1326-46, -47, -48, -214, and -215. [District NSR Rule] Y

Renewal PTO S-1326-47-5 (oil field tank):

The following condition is redundant to the equipment description;  
therefore, it has been removed.

Tank vapors shall be vented only to vapor control system listed on  
tank permit S-1326-46. [District NSR Rule] Y

Renewal PTO S-1326-48-5 (oil field tank):

The following condition is redundant to the equipment description;  
therefore, it has been removed.

Tank vapors shall be vented only to vapor control system listed on  
tank permit S-1326-46. [District NSR Rule] Y

Renewal PTO S-1326-201-10 (oil field tank with vapor control system):

The following conditions are redundant to the equipment description;  
therefore, they have been removed.

Tank vapor control system consists of three 15 hp vapor  
compressors and compressed vapor piping to TEOR well vent vapor  
control system S-1326-28. [District NSR Rule] Y

Tank vapor control system includes vapor piping shared between  
storage tanks S-1326-201, '-202, '-203, '-204, '-205, '-206, '-212, '-  
261, '-262, '-268, '-269, '-270, '-271, '-272, and '-274. [District NSR  
Rule] Y

Renewal PTO S-1326-212-7 (oil field tank with vapor control system):

The following condition is redundant to the equipment description;  
therefore, it has been removed.

Tank vapors shall be vented only to vapor control system listed on  
tank permit S-1326-46. [District NSR Rule] Y

Renewal PTO S-1326-214-7 (oil field tank with vapor control system):

The following condition is redundant to the equipment description; therefore, it has been removed.

Tank vapors shall be vented only to vapor control system listed on tank permit S-1326-46. [District NSR Rule] Y

Renewal PTO S-1326-215-7 (oil field tank with vapor control system):

The following condition is redundant to the equipment description; therefore, it has been removed.

Tank vapors shall be vented only to vapor control system listed on tank permit S-1326-46. [District NSR Rule] Y

Renewal PTO S-1326-263-11(Oilfield Tank with vapor control shared with casing vent recovery system listed on permit S-1326-287 and tanks S-1326-263, -279, -280, -281, -283, -285, and -315):

The existing condition that lists all the tanks served by the vapor control system and the vapor control system's approved control devices will be replaced. The tanks will be listed in the equipment description and the control devices will be listed in the following new condition:

Collected TVR vapors shall be disposed of in a Department of Oil, Gas and Geothermal Resources (DOGGR) approved vapor disposal well or injected into the field fuel gas system and used in permit exempt equipment. [District Rules 2020 and 2201] Y

The following conditions will be removed they do not apply to emissions from a tank with vapor control:

The vapor control system compressor shall activate when the tank internal pressure exceeds 1.5 in. w.c. and deactivate when the tank internal pressure falls to 0.5 in. w.c. [District NSR Rule] Y

The tank pressure relief valves shall not open unless the tank internal pressure exceeds 2.0 oz. or falls below 0.5 oz. vacuum. [District NSR Rule] Y



Renewal PTO S-1326-279-6 (oilfield tank with vapor control):

The following condition is redundant to the equipment description;  
therefore, it has been removed.

Tank shall vent only to vapor control system listed on permit S-  
1326-263. [District NSR Rule] Y

Renewal PTO S-1326-280-5 (oilfield tank with vapor control):

The following condition is redundant to the equipment description;  
therefore, it has been removed.

Tank shall vent only to vapor control system listed on permit S-  
1326-263. [District NSR Rule] Y

Renewal PTO S-1326-281-5 (Oilfield Tank with vapor control):

The following condition is redundant to the equipment description;  
therefore, it has been removed.

Tank shall vent only to vapor control system listed on permit S-  
1326-263. [District NSR Rule] Y

Renewal PTO S-1326-283-4 (oilfield tank with vapor control):

The following condition is redundant to the equipment description;  
therefore, it has been removed.

Tank shall vent only to vapor control system listed on permit S-  
1326-263. [District NSR Rule] Y

Renewal PTO S-1326-285-4 (oilfield tank with vapor control):

The following condition is redundant to the equipment description;  
therefore, it has been removed.

Tank shall vent only to vapor control system listed on permit S-  
1326-263. [District NSR Rule] Y

Renewal PTO S-1326-287-7 (TEOR System):

The following condition is redundant to the equipment description;  
therefore, it has been removed.

Collected CVR vapor shall be piped to tank vapor recovery system (TVR) serving S-1326-263. [District NSR Rule] Y

Renewal PTO S-1326-294-7 (62.5 MMBtu/hr Steam Generator)

The renewal of this permit includes of converting implemented ATCs S-1326-294-5 and '-294-6.

The condition requiring ATC S-1326-294-5 to be implemented concurrently to ATC S-1326-294-6 is being removed from the permit as part of the ATC conversion process.

Renewal PTO S-1326-314-5 (62.5 MMBtu/hr Steam Generator)

The renewal of this permit includes of converting implemented ATCs S-1326-314-3 and '-314-4.

The condition requiring ATC S-1326-314-3 to be implemented concurrently to ATC S-1326-314-4 is being removed from the permit as part of the ATC conversion process.

Renewal PTO S-1326-315-1 (free water knock out with vapor control):

The following condition is redundant to the equipment description; therefore, it has been removed.

FWKO vapors shall be vented only to vapor control system listed on tank permit S-1326-263. [District NSR Rule] Y

Renewal PTO S-1326-324-1 (Oilfield tank with vapor control):

The condition listing approved disposal devices will be modified by removing the reference to IC engine S-3259-59 and '-60. The engines is are no longer in service.

Renewal PTO S-1326-326-1 (Oilfield tank with vapor control):

The condition listing approved disposal devices will removed as redundant to condition listed on Permit S-1326-324 and will be removed.

Renewal PTO S-1326-327-1 (Oilfield tank with vapor):

The condition listing approved disposal devices will removed as redundant to condition listed on Permit S-1326-324 and will be removed.

Renewal PTO S-1326-337-6 (85 MMBTU/hr steam generator):

The renewal of this permit includes converting implemented ATC S-1326-337-4.

NSR condition requiring initial source testing of the steam generator will be removed. Condition has already been met.

Renewal PTO S-1326-360-1 (Oilfield tank with vapor control):

Conditions listing the tanks connected to vapor control will be removed because they are redundant to equipment description.

Renewal PTO S-1326-361-1 (Oilfield tank with vapor control):

Conditions listing the tank connected to vapor control will be removed because they are redundant to equipment description.

Renewal PTO S-1326-362-1 (Oilfield tank with vapor control):

Conditions listing tank connected to vapor control removed because they are redundant to equipment description.

Renewal PTO S-1326-370-1 (Oilfield tank with vapor control):

Conditions listing the vapor control listed on permit S-1326-360 is removed because it is redundant to the equipment description.

Renewal PTO S-1326-381-1 (Oilfield tank with vapor Control):

Condition listing the tank permits and control devices removed. Requirements listed on permit S-1326-373.

Renewal PTO S-1326-385-3 (85 MMBtu/hr steam generator):

Condition requiring initial source test removed from the permit. The condition has already been satisfied

The renewal of this permit includes converting implemented ATCs S-1326-385-2.

Renewal PTO S-1326-398-1(Uncontrolled Oilfield tank):

Conditions with "Gas-tight" terminology replaced with "leak-free" in accordance with current District practice.

Renewal PTO S-1326-399-1(Uncontrolled Oilfield tank):

Conditions with "Gas-tight" terminology replaced with "leak-free" in accordance with current District practice.

**E. District Rule 2520 - Federally Mandated Operating Permits**

Renewal PTO S-1326-0-2 (facility-wide permit):

The following table lists Rule 2520 conditions (by condition number) that appear on the facility wide permit. The table identifies the permit condition, the new Rule 2520 section reference(s), and if the Section reference has been updated.

Rule 2520 Rule Reference PTO S-1326-0-2 (facility-wide permit):		
Condition	Section #	Updated Reference?
5	9.8.1 & 9.12.1	No
8	9.4.1	Yes
9	9.4.2	Yes
10	9.5.1	Yes
11	9.5.2	Yes
12	9.7	Yes
13	9.8.1	Yes
14	9.8.3	Yes
15	9.8.4	Yes
16	9.8.5	Yes
17	9.9	Yes
18	9.13.2.1	Yes
19	9.13.2.2	Yes
20	9.13.2.3	Yes
21	9.13.2.4	Yes
26	9.13.1	Yes
35	9.16	Yes
36	5.2	No
37	9.1.1	No
38	13.2	No
39	13.2	No
42	9.4.2	Yes

Conditions rule references with updated to remove irrelevant County Rules (Madera, Fresno, Kings, San Joaquin, Stanislaus and Merced).

All Permits:

Conditions on the following permits have had the rule references updated to reflect current Rule 2520. Conditions have not been edited or reworded:

TEOR Systems:

S-1326-35-8,

Uncontrolled Cyclic Wells:

PTO S-1326-36-2

Oilfield Tanks:

PTOs S-1326-46-79, '-47-5, '-48-5, '-201-10, '-202-10, '-203-7, '-204-7, '-205-6, '-206-7, '-212-7, '-268-8, '-269-6, '-270-5, '-271-5, '-272-5, and '-274-4

Oil Field Flare:

PTO S-1326-260-4

A condition requiring the permittee to maintain daily records and make records readily available for District inspection for a period of five years as required by District Rule 2520, section 9.4.2 has been added to the following permits.

TEOR Systems:

PTO S-1326-27-14

Oilfield Tanks:

PTOs S-1326-201-10, '-202-10, '-203-7, '-204-7, '-205-6, '-206-7, '-212-7, '-214-7, '-215-7, '-261-7, '-262-5, '-268-8, '-270-5, '-271-5, '-272-5, '-273-2, '-274-4, '-279-6, '-280-5, '-281-5, '-283-4, and '-285-4

Oil Field Flares:

PTOs S-1326-260-4 and '-376-1

The following permits contain an existing condition requiring the permittee to maintain daily records and make records readily available for District inspection for a period of five years. The record keeping condition has been updated to include a Rule reference to Rule 2520 section 9.4.2.

S-1326-326-1, '-315-1, '-316-1, '-317-1, '-318-1, '-319-1, '-320-1, '-321-1, '-322-1, '-323-1, '-324-1, '-325-1, '-326-1, '-327-1, '-328-1, '-330-1, '-331-1, '-332-1, '-333-1, '-334-1, '-335-1, '-349-1, '-353-1, '-

354-1, '-355-1, '-356-1, '-357-1, '-358-1, '-360-1, '-361-1, '-362-1, '-363-1, '-365-1, '-366-1, '-367-1, '-368-1, '-370-1, '-373-5, '-374-1, '-375-1, '-377-1, '-381-1, '-383-1, '-384-1, '-385-3, '-387-1, '-388-1, '-389-1, and '-399-1

The following permits containing District Rule 2520 conditions containing the wording "gas-tight" have been replaced by current District approved "leak-free" wording.

PTOs S-1326-47-5 and '-48-5

The following permits contained Rule 2520 conditions that should have referenced District Rule 4623. The reference have been changed and/or the conditions have been replaced by currently accepted Rule 4623 conditions"

PTO S-1326-101-3, '-119-3, '-120-3 '-1326-121-3, '-126-3, '-127-3, '-128-3, '-129-2, '-130-20, '-131-2, '-132-2, '-133-2, '-133-2, '-134-2, '-135-2, '-136-2, '-137-3, '-138-3, '-139-3'-140-3, '-1326-147-2, '-148-2, '-149-2, '-150-2, '-151-2, '-152-2, '-153-2, '-154-2, '-1326-158-2, '-159-2, '-160-2, '-261-7, '-262-5, '-271-5, and '-273-2 '

The following permit condition is irrelevant and unenforceable; therefore, it will be removed from the following permits:

Condition:

As used in this permit, the term "source or type of petroleum" shall mean petroleum liquids with similar characteristics. The operator shall maintain records of API gravity of petroleum liquids store in this unit to determine which oil are from common source. [District Rule 2520, 9.4.2] Y

Permits:

PTOs S-1326-101-3, '-120-3, '-121-3, '-126-3, '-127-3, '-128-3, '-129-2, '-130-20, '-131-2, '-132-2, '-133-2, '-133-2, '-134-2, '-135-2, '-136-2, '-137-3, '-138-3, '-139-3'-140-3, '-147-2, '-148-2, '-149-2, '-150-2, '-151-2, '-152-2, '-153-2, '-154-2, '-158-2, '-159-2, and '-160-2, '-201-10, '-202-10, '-203-7, '-204-7, '-205-6, '-206-7, '-212-7, '-214-7, '-215-7, '-261-7, '-262-5, '-268-8, '-269-6, '-270-5, '-271-5, '-272-5, '-273-2, '-274-4, '-279-6, '-280-5, '-283-4, and '-285-4

Permit conditions that solely identify tanks at a tank farm/lease (see example below) are irrelevant and unenforceable; therefore, they will be removed from the following permits:

Condition:

Tanks associated with this battery setting are S-1326-XXX, '-XXX, '-XXX, and '-XXX. [District Rule 2520, 9.4.2] Y

Permits:

PTOs S-1326-101-3, '-120-3, '-121-3, '-126-3, '-127-3, '-128-3, '-129-2, '-130-20, '-131-2, '-132-2, '-133-2, '-133-2, '-134-2, '-135-2, '-136-2, '-137-3, '-138-3, '-139-3, '-140-3, '-147-2, '-148-2, '-149-2, '-150-2, '-151-2, '-152-2, '-153-2, '-154-2, '-158-2, '-159-2, and '-160-2, '-201-10, '-202-10, '-203-7, '-204-7, '-205-6, '-206-7, '-212-7, '-261-7, '-262-5, '-268-8, '-269-6, '-270-5, '-271-5, '-272-5, and '-274-

Renewal PTO S-1326-36-2 (Uncontrolled Cyclic Well permit):

Conditions acting as permit shields from County Rules 108, 108.1, 110 and District Rule 4401 will be removed from the permit.

Renewal PTO S-1326-273-2 (Uncontrolled Oilfield Tank):

The following will be replaced by current 4623 TVP < 0.5 psia exemption conditions:

The true vapor pressure (TVP) of liquids stored in the tank shall not exceed 1.5 psia at storage temperature or tank shall be subject to the requirements of Rule 4623. [District Rule 4623, 2.0 and District Rule 2520, 9.1] Y

True vapor pressure shall be measured using Reid vapor pressure ASTM Method D323 modified by maintaining the hot water bath at storage temperature. Where storage temperature is above 100 degrees F, true vapor pressure shall be determined by Reid vapor pressure at 100 degrees F and CARB approved calculations. [District Rule 2520, 9.3.1] Y

True vapor pressure of crude oil with an API (American Petroleum Institute) gravity less than 30 deg, as determined by API 2547, may be determined by Headspace Gas Chromatography using the procedures from CARB Evaluation of a Method for Determining Vapor Pressures of Petroleum Mixtures by Headspace Gas Chromatography, October 1990. [District Rule 2520, 9.3.1] Y

The operator shall keep accurate records of types, storage temperature, and TVP of liquids stored to verify continued exemption from District Rule 4623 (as amended December 17, 1992). [District Rule 2520, 9.1] Y

Renewal PTO S-1326-398-1 (Uncontrolled Oilfield Tank):

The permit contain an existing condition requiring the permittee to maintain daily records and make records readily available for District inspection for a period of five years. The record keeping condition has been updated to include a Rule reference to Rule 2520 section 9.4.2.

**F. District Rule 4101 - Visible Emissions**

This rule prohibits the emissions of visible air contaminants to the atmosphere from any source operation which emits or may emit air contaminants.

Renewal PTO S-1326-0-2:

The following condition will be included the facility wide Permit to Operate and will ensure facility-wide compliance with the requirements of this rule:

No air contaminants shall be discharged into the atmosphere for a period or periods aggregating more than 3 minutes in any one hour which is as dark or darker than Ringelmann #1 or equivalent to 20% opacity and greater, unless specifically exempted by District Rule 4101. If the equipment or operation is subject to a more stringent visible emission standard as prescribed in a permit condition, the more stringent visible emission limit shall supersede this condition

Since Rule 4101 has been adopted into the SIP and superceded County Rules 401 (for all eight counties within SJVUAPCD), the superceded county rules will be removed from the above conditions rule reference.

All Other permits:

The District's standard condition requiring visible emission of less than Ringlemann 1 or 20% opacity will be moved to permit S-1326-0

**G. District Rule 4601 - Architectural Coatings**

This rule limits the emissions of VOCs from architectural coatings. It requires limiting the application of any architectural coating to no more than what is listed in the Table of Standards (Section 5.0). The rule was amended in



December 17, 2009. Since the following changes included in the latest rule amendment did not result in adding new requirements and/or revising current requirements in the facility-wide permit S-2010-0-2, no further evaluation is needed.

#### **H. Rule 4306 - Boilers, Steam Generators, and Process Heaters—Phase 3**

This rule applies to any boiler, steam generator or process heater, with a rated heat input greater than 5 million Btu per hour that is fired with gaseous and/or liquid fuels.

Section 5.1 requires that NO<sub>x</sub> and CO emissions shall not exceed the limits specified in Table 1. For oil field steam generators (Table 1 Category C), NO<sub>x</sub> and CO emissions shall not exceed 15 ppmv and 400 ppmv, respectively. Units emissions, limited to an annual heat input of 9 billion Btu/year to 30 billion Btu/year (Table 1, Category H), shall not exceed 30 ppmv NO<sub>x</sub> per year and 400 ppmv CO per year.

Section 5.3 states that emission limits shall not apply during start-up or shutdown provided an operator complies with the requirements that the duration of each start-up or each shutdown shall not exceed two hours, the emission control system shall be in operation and emissions shall be minimized insofar as technologically feasible during start-up or shutdown, and an operator may submit an application for a permit condition to allow more than two hours for each start-up or each shutdown provided the operator meets all of the conditions specified in Sections 5.3.3.1 through 5.3.3.3.

Section 5.4 requires that operators of any unit subject to the applicable emission limits of the rule shall install and maintain an operational APCO approved Continuous Emissions Monitoring System (CEMS) for NO<sub>x</sub>, CO, and oxygen, or implement an APCO-approved Alternate Monitoring System. The operator of any Category H units shall install and maintain an operational non-resettable, totalizing mass or volumetric flow meter in each fuel line to each unit.

Section 6.1 requires that records required by Sections 6.1.1 through 6.1.4 shall be maintained for five calendar years and shall be made available to the APCO upon request.

Section 6.2 identifies the applicable test methods.

Section 6.3 requires that units subject to the requirements in Sections 5.1 or 5.2.3 shall be source tested to determine compliance with the applicable emission limits at least once every 12 months.

This rule applies to the following permits:

Renewal Permit S-1326-9-14, '-294-7, '-314-5:

Currently these permits are in compliance with this Rule. No changes were necessary to this permit to ensure compliance with this Rule.

Renewal PTO S-1326-337-6, and '-338-6:

This Rule was addressed when the permits were all updated in Project S-1092155 when the project preliminary Modification notification was mailed to EPA on September 8, 2011. No changes have been made to the permits; therefore, these permits will not be discussed at this time.

Renewal Permit S-1326-369-1 :

This permit is a dormant emissions unit. Any Rule 4306 changes associated with this permit will be made prior to the unit ending dormancy.

Renewal Permit SS-1326-385-3, '-400-1 and '-401-1:

This Rule was addressed when the permits were all updated in the previous ATC project. The ATCs have been implemented and the applicant has filed a title V Administrative Amendment as required by Rule 2520. No changes have been made to the permits; therefore, these permits will not be discussed at this time.

**I. District Rule 4320, Advanced Emission Reductions Options for Boilers, Steam Generators, and Process Heaters Greater than 5.0 MMBtu/hr**

This rule applies to any gaseous fuel or liquid fuel fired boiler, steam generator, or process heater with a total rated heat input greater than 5 million Btu per hour.

Section 5.1 requires that the operator comply with all applicable requirements of the rule and one of the following:

- 5.1.1 Operate the unit to comply with the emission limits specified in Sections 5.2 and 5.4; or
- 5.1.2 Pay an annual emissions fee to the District as specified in Section 5.3 and comply with the control requirements specified in Section 5.4; or

5.1.3 Comply with the applicable Low-use Unit requirements of Section 5.5.

Section 5.2 states that emission limits and compliance deadlines.

Section 5.3 states the fee calculation for the fee paying compliance option

Section 5.4 lists the requirements of the particulate matter control measures.

Section 5.5 lists the requirements of low-use unit requirements.

Section 5.6 states the Start-up and shut down requirements.

Section 5.7 states the Monitoring requirements.

Section 5.8 lists methods of showing compliance with the rule.

Section 6.1 requires that records required by Sections 6.1.1 through 6.1.5.

Section 6.2 identifies the applicable test methods.

Section 6.3 identifies the compliance testing requirements.

Section 6.4 requires the operator to submit a compliance Control Plan.

Renewal Permit S-1326-9-14:

Currently this permit is in compliance with this Rule (Project S-1103744). No changes were necessary to this permit to ensure compliance with this Rule.

Renewal Permit S-1326-294-7:

Currently this permit is in compliance with this Rule (Project S-11045874). No changes were necessary to this permit to ensure compliance with this Rule.

Renewal Permit S-1326-314-5:

Currently this permit is in compliance with this Rule (Project S-1084587). No changes were necessary to this permit to ensure compliance with this Rule.

Renewal PTO S-1326-337-6, and '-338-6:

This Rule was addressed when the permits were all updated in Project S-1092155 when the project preliminary Minor Modification notification was mailed to EPA on September 8, 2011. No changes have been made to the permits; therefore, these permits will not be discussed at this time.

Renewal PTO S-1326-369-6:

District Rule reference will be added to the dormant emissions unit conditions. No other changes will be made to the permit until the unit is removed from dormancy.

Renewal Permit SS-1326-385-3, '-400-1 and '-401-1:

This Rule was addressed when the permits were all updated in the previous ATC project. The ATCs have been implemented and the applicant has filed a title V Administrative Amendment as required by Rule 2520. No changes have been made to the permits; therefore, these permits will not be discussed at this time.

**J. Rule 4311, Flares**

The purpose of this Rule is to limit the emissions of VOC, NO<sub>x</sub>, and sulfur oxides SO<sub>x</sub> from the operation of flares. It applies to all operations involving the use of flares.

Section 5.2 requires a flame shall be present at all times when combustible gases are vented through the flare.

Section 5.3 requires the outlet to be equipped with an automatic ignition system, or, shall operate with a pilot flame present at all times when combustible gases are vented through the flare, except during purge periods for automatic-ignition equipped flares.

Section 5.4 requires except for flares equipped with a flow-sensing ignition system, a heat sensing device such as a thermocouple, ultraviolet beam sensor, infrared sensor, or an alternative equivalent device, capable of continuously detecting at least one pilot flame or the flare flame is present shall be installed and operated.

Section 5.5 requires flares that use flow-sensing automatic ignition systems and which do not use a continuous flame pilot shall use purge gas for purging.

Section 5.6 requires open flares (air-assisted, steam-assisted, or non-assisted) in which the flare gas pressure is less than 5 psig shall be operated in such a manner that meets the provisions of 40 CFR 60.18.

Section 5.8 prohibits flaring unless it is consistent with an approved flare minimization plan (FMP), pursuant to Section 6.5

Section 5.10 requires the operator of a flare subject to flare minimization requirements to monitor the vent gas flow to the flare with a flow measuring device or other parameters as specified in the Permit to Operate. The operator shall maintain records pursuant to Section 6.1.7.

Section 6.1 identifies the recordkeeping requirements.

Section 6.2 identifies the flare reporting requirements.

Section 6.3 specifies the test methods.

Section 6.4 specifies the source testing requirements.

Section 6.5 requires a flare minimization plan by 7/1/2010.

Please note that the flare minimization plan was received on August 19, 2010 and subsequently approved by the District in Project 1103495.

Renewal permit S-1326-376-1 and S-1326-382-1:

The following conditions ensure compliance with the Rule:

Flare shall comply with all of the applicable requirements of Rule 4311. [District Rule 4311]

The flame shall be present at all times when combustible gases are vented through the flare. [District Rule 4311, 5.2]

The flare outlet shall be equipped with an automatic ignition system, or, shall operate with a pilot flame present at all times when combustible gases are vented through the flare, except during purge periods for automatic-ignition equipped flares. [District Rule 4311, 5.3]

Except for flares equipped with a flow-sensing ignition system, a heat sensing device such as a thermocouple, ultraviolet beam sensor, infrared sensor, or an equivalent device, capable of continuously detecting at least one pilot flame or the flare flame is present shall be installed and operated. [District Rule 4311, 5.4]

Flares using flow-sensing automatic ignition systems and not using a continuous flame pilot shall use purge gas for purging. [District Rule 4311, 5.5]

Open flares (air-assisted, steam-assisted, or non-assisted) in which the flare gas pressure is less than 5 psig shall be operated in such a manner that meets the provisions of 40 CFR 60.18. [District Rule 4311, 5.6]

Flaring is prohibited unless it is consistent with an approved flare minimization plan (FMP), pursuant to Rule 4311, Section 6.5, and all commitments listed in that plan have been met. This standard shall not apply if the APCO determines that the flaring is caused by an emergency as defined by Section 3.7 and is necessary to prevent an accident, hazard or release of vent gas directly to the atmosphere [District Rule 4311, 5.8]

The operator of a flare subject to flare minimization requirements pursuant to Section 5.8 shall monitor the vent gas flow to the flare with a flow measuring device or other parameters as specified in the Permit to Operate. The operator shall maintain records pursuant to Section 6.1.7. Flares that the operator can verify, based on permit conditions, are not capable of producing reportable flare events pursuant to Section 6.2.2 shall not be required to monitor vent gas flow to the flare. [District Rule 4311, 5.10]

The following records shall be maintained, retained on-site for a minimum of five years, and made available to the APCO, ARB, and EPA upon request: 1) A copy of the compliance determination conducted pursuant to Section 6.4.1., 2) For flares used during an emergency, record of the duration of flare operation, amount of gas burned, and the nature of the emergency situation, 3) A copy of the approved flare minimization plan pursuant to Section 6.5, 4) On and after July 1, 2012, where applicable, a copy of annual reports submitted to the APCO pursuant to Section 6.2, and 5) Where applicable, monitoring data collected pursuant to Sections 5.10. [District Rule 4311, 6.1]

The operator of a flare subject to flare minimization plans pursuant to Section 5.8 of Rule 4311 shall notify the APCO of an unplanned flaring event within 24 hours after the start of the next business day or within 24 hours of their discovery, whichever occurs first. The notification shall include the flare source identification, the start

date and time, and the end date and time. [District Rule 4311, 6.2.1]

Effective on and after July 1, 2012, and annually thereafter, the operator of a flare subject to flare minimization plans pursuant to Section 5.8 shall submit an annual report to the APCO that summarizes all Reportable Flaring Events as defined in Section 3.0 that occurred during the previous 12 month period. The report shall be submitted within 30 days following the end of the twelve month period of the previous year. The report shall include, but is not limited to all of the following: 1) The results of an investigation to determine the primary cause and contributing factors of the flaring event; 2) Any prevention measures considered or implemented to prevent recurrence together with a justification for rejecting any measures that were considered but not implemented; 3) If appropriate, an explanation of why the flaring was an emergency and necessary to prevent accident, hazard or release of vent gas to the atmosphere, or where, due to a regulatory mandate to vent a flare, it cannot be recovered, treated and used as a fuel gas at the facility; and 4) The date, time, and duration of the flaring event. [District Rule 4311, 6.2.2]

Effective on and after July 1, 2012, and annually thereafter, the operator of a flare subject to flare monitoring requirements pursuant to Rule 4311, Sections 5.10, 6.6, 6.7, 6.8, 6.9, and 6.10, as appropriate, shall submit an annual report to the APCO within 30 days following the end of each 12 month period. The report shall include the following: 1) The total volumetric flow of vent gas in standard cubic feet for each day, 2) Hydrogen sulfide content, methane content, and hydrocarbon content of vent gas composition pursuant to Section 6.6, 3) If vent gas composition is monitored by a continuous analyzer or analyzers pursuant to Section 5.11, average total hydrocarbon content by volume, average methane content by volume, and depending upon the analytical method used pursuant to Section 6.3.4, total reduced sulfur content by volume or hydrogen sulfide content by volume of vent gas flared for each hour of the month, 4) If the flow monitor used pursuant to Section 5.10 measures molecular weight, the average molecular weight for each hour of each month, 5) For any pilot and purge gas used, the type of gas used, the volumetric flow for each day and for each month, and the means used to determine flow, 6) Flare monitoring system downtime periods, including dates and times, 7) For each day and for each month provide calculated sulfur dioxide emissions, and 8) A flow verification report for each flare subject to

this rule. The flow verification report shall include flow verification testing pursuant to Section 6.3.5. [District Rule 4311, 6.2.3]

Hydrogen sulfide content of vent gas shall be determined using ASTM Method D 1945-96, ASTM Method UOP 539-97, ASTM Method D 4084-94, or ASTM Method D 4810-88. [District Rule 4311, 6.3.4]

Upon request, the operator of flares that are subject to Section 5.6 shall make available to the APCO the compliance determination records that demonstrate compliance with the provisions of 40 CFR 60.18, (c)(3) through (c)(5). [District Rule 4311, 6.4.1]

#### **K. District Rule 4401, Steam-Enhanced Crude Oil Production Wells**

The purpose of this rule is to limit the VOC emissions from steam-enhanced crude oil production wells. This rule is applicable to all steam-enhanced crude oil production wells and any associated vapor collection and control systems.

Section 4.1: Exempts any steam-enhanced crude oil production well undergoing service or repair during the time the well is not producing.

Section 5.1: Requires 99% control of well vent VOC emissions.

Section 5.2: Allows a maximum number of leaks from the vapor control system.

Section 5.3: Operational requirements.

Section 5.4: Inspection and re-inspection requirements

Section 5.5: Leak repair requirements

Section 6.1: Requires recordkeeping and submissions.

Section 6.2.1: Requires annual compliance testing.

Section 6.2.4: Requires permittee to submit a written justifiable request to the District if permittee desires to stop annual compliance testing.

Section 6.3.1: Specifies the method of compliance testing of control efficiency.

Section 6.3.2: Specifies the method of compliance testing of VOC content.

Section 6.3.3: Specifies the method of compliance leak inspection.



Section 6.3.4: List the approved testes to determine VOC content of the gas by weight percentage.

Section 6.4: Requires inspection log lists content of log .

Section 6.5: Requires permittee to establish and implement employee training Plan

Section 6.6: Requires permittee to complete and maintain an Operators Management Plan.

Section 6.7: Requires permittee to complete and submit to the district an annual report

Renewal permits S-1326-26-17, '-27-14, -28-14, -35-8, '-287-7 341-1, '-372-1

The following permit conditions have been placed/replaced/updated on the above permits. The rule references have been updated to reflect the current rule:

During the time any steam-enhanced crude oil production well is undergoing service or repair while the well is not producing, it shall be exempt from the emission control requirements of District Rule 4401, 5.0 (as amended January 15, 1998). [District Rule 4401, 4.1] Y

{1297} The operator shall maintain monitoring records of the date and well identification where steam injection or well stimulation occurs. [District Rule 4401, 6.1] Y

{1298} The uncontrolled VOC emissions from any well vent shall be reduced by at least 99 percent by weight or, if several steam-enhanced crude oil production well vents are connected to a vapor collection and control system, total uncontrolled VOC emissions shall be reduced by at least 99 percent. This requirement does not apply to cyclic wells located on contiguous and adjacent oil production properties with less than 10 cyclic wells owned by or under the control of a company. [District Rule 4401, 5.1 and 5.2] Y

{1299} For cyclic wells located on properties with less than 10 cyclic wells and owned by a company, the uncontrolled VOC emissions from any well vent or system of well vents connected to a single control device shall be reduced by at least 50 percent. Properties shall include contiguous and adjacent oil production properties

owned by or under control of the company. [District Rule 4401, 5.4]  
Y

Total number of leaks from the vapor collection and control system, including condensate handling, shall not exceed the number as allowed by Rule 4401 (as amended January 15, 1998) at any one time. [District Rule 4401, 5.3] Y

{1302} Operator shall affix a readily visible tag bearing the date on which a leak is detected. The tag shall remain in place until the leaking component is repaired. [District Rule 4401, 5.3.1] Y

{1303} Operator shall repair each leak within 15 days of detection. The APCO may grant a 10 day extension if the operator demonstrates that the necessary and sufficient actions have and are being taken to correct the leak. [District Rule 4401, 5.3.1] Y

{1304} Operator shall maintain all components of a well vent vapor collection and control system in good repair. Components of the well vent vapor collection and control system shall include all piping, valves, fittings, pumps, compressors, tanks, etc. used to collect, control, store, or dispose of VOC condensate or non-condensable VOCs and which is prior to any blending of VOC condensate with crude oil or blending of non-condensable VOCs with gases to be used as a fuel. [District Rule 4401, 5.3 and 5.3.2]  
Y

Annual control efficiency compliance tests shall be performed on all vapor collection and control systems used to control emissions from steam-enhanced crude oil production wells. Testing shall be performed by source tester certified by the California Air Resource Board (CARB) certified contractors 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 the requirements of this condition if the vapor control system does not exhaust to atmosphere or if all uncondensed VOC emissions collected by a vapor collection and control system are burned in fuel burning equipment or in a smokeless open flare and the source's Operating Permit contains adequate periodic monitoring to ensure the source meets 99% control efficiency. [District Rule 4401, 5.1, 5.2 and 6.2.1] Y

The control efficiency of any VOC control device, measured and calculated as carbon, shall be determined by EPA Method 25, except when the outlet concentration must be below 50 ppm in

order to meet the standard, in which case EPA Method 25a may be used. EPA Method 18 may be used in lieu of EPA Method 25 or EPA Method 25a provided the identity and approximate concentrations of the analytes/compounds in the sample gas stream are known before analysis with the gas chromatograph and the gas chromatograph is calibrated for each of those known analyte/compound to ensure that the VOC concentrations are neither under- or over-reported. [District Rule 4401, 6.3.1] N

The permittee shall perform leak inspections at least annually, using a portable hydrocarbon detection instrument in accordance with USEPA Method 21. [District Rules 2520, 9.3.2 and 4401, 6.3.3] Y

Permittee shall maintain with the permit a current listing of all steam enhanced wells connected to the casing vent control system and shall make such listing readily available for District inspection upon request. [District Rule 4401] Y

The VOC content by weight percent (wt.%) shall be determined using American Society of Testing and Materials (ASTM) D1945 for gases and South Coast Air Quality Management District (SCAQMD) Method 304-91 or the latest revision of ASTM Method E168, E169 or E260 for liquids. [District Rule 4401, 6.3.5] Y

Renewal permit S-1326-36-2 – 5 Cyclic Wells:

The following condition appears on the permit to ensure compliance:

The well contained in this permit unit shall be located more than 1000 feet from an existing well vent vapor control system. [District Rule 4401, 4.4] Y

**L. Rule 4407, In-Situ Combustion Well Vents**

Renewal PTO S-1326-36-2:

Permit condition requiring wells to be located more than 1000 feet from an existing well vent control system will have the rule reference updated to 4.4.

Renewal PTO S-1326-341-1:

Current condition requiring that no wells shall lie within 1000 feet of an air injection well used for in-situ combustion is not required and will be removed from the permit.

**M. Rule 4623, Storage of Organic Liquids**

The purpose of this rule is to limit volatile organic compound (VOC) emissions from the storage of organic liquids. This rule applies to any tank with a capacity of 1,100 gallons or greater in which any organic liquid is placed, held, or stored.

This rule limits volatile organic compound (VOC) emissions from the storage of organic liquids. It applies to any tank with a capacity of 1,100 gallons or greater in which any organic liquid is placed, held, or stored. The rule was amended in May 19, 2005.

Section 5.1 requires that no organic liquid shall be placed, held, or stored in any tank unless the tank is equipped with a VOC control system identified in Table 1.

Section 5.2 requires that pressure-vacuum relief valve shall be set to within ten (10) percent of the maximum allowable working pressure of the tank. The valves shall be permanently labeled with the operating pressure settings.

Section 5.6 requires that fixed roof tanks shall be fully enclosed and shall be maintained in a leak-free condition. The approved vapor recovery system shall consist of a closed system that collects all VOCs from the storage tank, and a VOC control device. This section also specifies the applicable VOC control device.

Section 5.7 states that only operators who elect to participate in the voluntary tank preventive inspection and maintenance, and tank interior cleaning program shall be allowed to use the provisions specified in Tables 3 to 5 and Section 5.7.5.

Section 6.2 requires initial and periodic TVP testing of each uncontrolled fixed roof tank.

Section 6.3 requires that tank subject to the requirements of this rule shall keep an accurate record of each organic liquid stored in each tank, including its storage temperature, TVP, and API gravity, except for fixed roof tanks equipped with a vapor recovery system.

Section 6.4 addresses the test methods approved by the APCO and EPA.

Renewal PTO's S-1326-46-7, '-47-5, '-48-5, '-101-3, '-119-3, '-120-3, '-121-3, '-126-3, '-127-3, '-128-3, '-129-2, '-130-20, '-131-2, '-132-2, '-133-2, '-133-2, '-134-2, '-135-2, '-136-2, '-137-3, '-138-3, '-139-3, '-140-3, '-147-2, '-148-2, '-149-2, '-150-2, '-151-2, '-152-2, '-153-2, '-154-2, '-158-2, '-159-2, '-160-2, '-214-7, '-215-7-263-11, '-273-2, '-279-6, '-315-1, '-316-1, '-317-1, '-318-1, '-319-1, '-320-1, '-321-1, '-322-1, '-323-1, '-324-1, '-325-1, '-328, '-330, '-331-1, '-332-1, '-333-1, '-334-1, '-349-1, '-353-1, '-354-1, '-355-1, '-356-1, '-357-1, '-358-1, '-363-1, '-365-1, '-366-1, '-367-1, '-368-1, '-377-1, '-378-1, '-383-2, '-384-1, '-387-1, '-388-1, '-389-1, '-398-1, and '-399-1:

The above permits have a TVP limit of 0.5 psia. The following conditions will be added/remain on the permits and have the Rule References updated when required.

The true vapor pressure of the liquids stored in this tank shall not exceed 0.5 psia. [District Rules 4623, 4.4 and 2201] Y

The operator shall conduct true vapor pressure (TVP) testing of the organic liquid stored in this tank at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored in this tank. [District Rule 4623, 6.3] Y

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, 6.2.2] Y

The API gravity of organic liquid stored in this tank 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, 6.2.2] Y

Operator shall determine the true vapor pressure of the petroleum liquid stored in the tank located at the beginning of the process flow after the production header at least once per year. 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, shall be used to determine the TVP of crude oil with an API gravity of 26ø or less, or for any API gravity that is specified in this test method. Determinations shall be made annually during summer and whenever there is a change in the source or type of petroleum entering the tank. [District Rule 4623, 6.4.4] Y

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, 6.3.6] Y

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, 6.3.6] Y

Renewal PTO S-1326-354-1, '-368-1:

Condition limiting TVP to "1.5 psia or less" will be changed to "0.5 psia or less" to continue TVP exemption (Rule 4623, 4.4).

Renewal PTO S-1326-316-1, '-317-1, '-318-1, '-319-1, -324-1:

The following conditions enforce District Rule 4623 exemption limit of 50 barrels per day for small producers. Vintage is not a small producer; therefore, the exemption does not apply and the conditions will be removed.

Crude oil throughput shall not exceed 50 barrels per day based on a monthly average. [District Rule 4623] Y

Permittee shall maintain monthly records of average daily crude oil throughput and shall submit such information to the APCO 30 days prior to the expiration date indicated in the Permit to Operate. [District Rule 4623] Y

Renewal PTO S-1326-261-6, '-262-5 :

Current Rule 2520 monitoring, inspection and maintenance, and record keeping conditions have been removed and replaced with Rule 4623 conditions.

Renewal PTO S-1326-268-8, '-269-6, '-270-5, '-271-5, '-272-5, '-274-4, '-326-1, '-327-1, '-360-, '-361-1, '-362-1, '-370-11, '-373-5, '-374-1, '-375-1, and '-381-1:

These tanks are equipped with vapor control and District Rule 4623 applies; therefore, the following District approved, Rule 4623, standard tank and inspection and maintenance conditions will replace the current conditions:

{Modified 2498} 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 95% control device. [District Rule 4623] Y

{2499} All piping, valves, and fittings shall be constructed and maintained in a leak-free condition. [District Rule 4623] Y

{2501} 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. [District Rule 4623] Y

{2502} Any tank gauging or sampling device on a tank vented to the vapor control system shall be equipped with a leak-free cover which shall be closed at all times except during gauging or sampling. [District Rule 4623] Y

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] Y

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] Y

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] Y

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 on 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] Y

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] Y

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] Y

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] Y

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] Y

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] Y

Operator 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] N

#### **N. Rule 4701, Internal Combustion Engines –Phase 1**

This rule applies to internal combustion engines, rated greater than 50 bhp, that requires a Permit to Operate (PTO).

Section 3.24, defines transportable engines as any engine designed to be and capable of being carried or moved from one location to another, and that is operated at one location for no more than 12 consecutive months.

Section 4.2.7, Exempts transportable engines from the requirements of this rule except for the administrative requirements of Sections 6.1, 6.2.2, and 6.2.3,

Section 6.2.2, requires operator to maintain annual operating records.

Section 6.2.3, requires records to be kept for a period of 5 years.

##### Renewal PTO S-1326-371-1:

The following conditions will remain on the permit to ensure compliance with the transportable requirements of the Rule:

This transportable engine shall not be operated at one location for more than 12 consecutive months and shall meet all the

requirements of a transportable engine, per District Rule 4701 (amended August 21, 2003). [District Rule 4701, 3.24] Y

The engine shall be operated no more than 200 hours per calendar year [District Rules 4701, 4.2.1 and 4702, 4.2.2] Y

The permittee shall install and operate a nonresettable fuel meter and a nonresettable elapsed operating time meter. In lieu of installing a nonresettable fuel meter, the owner or operator may use a non-resettable elapsed operating time meter in conjunction with the engine manufacturer's maximum rated fuel consumption to determine annual fuel usage. [District Rules 4701, 4.2.1 and 4702, 5.74] Y

The operator of an internal combustion (IC) engine shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rules 4701, 6.2.3 and 4702, 6.2.3] Y

#### **F. Rule 4702– Internal Combustion Engines –Phase 2**

This rule applies to internal combustion engines, rated greater than 50 bhp, that require a Permit to Operate (PTO).

Section 4.4.2, exempts internal combustion engines that are operated no more than 200 hours per calendar year from the requirements of the rule except for the requirements of Sections 5.7 and 6.2.3,

Section 5.7.2, requires the operator to properly operate and maintain each engine as recommended by the engine manufacturer.

Section 5.7.3, requires operator to monitor the operational characteristics of each engine as recommended by the engine manufacturer or emission control system supplier.

Section 5.7.4, requires operator to install and operate a nonresettable elapsed operating time meter.

Section 6.2.3, requires operator to maintain annual operating records for a period of 5 years.

##### Renewal PTO S-1326-371-1:

The following conditions will remain on the permit to ensure compliance with the limited use requirements of the Rule:

Permittee shall maintain following annual operating records: 1) Total hours of operation, 2) type and quantity of fuel used, 3) purpose of operating engine, 4) dates and locations where this equipment is operated, and 5) other support documentation necessary to claim Transportable Engine exemption, as defined in District Rule 4701, 3.24 (amended August 21, 2003). These records shall be submitted to the District upon request and at end of each calendar year. [District Rules 4701, 6.2.2 and 4702, 6.2.3] Y

The engine shall be operated no more than 200 hours per calendar year [District Rules 4701, 4.2.1 and 4702, 4.2.2] Y

Operator shall properly operate and maintain each engine as recommended by the engine manufacturer or emission control system supplier. [District Rule 4702, 5.7.2] Y

Operator shall monitor the operational characteristics of each engine as recommended by the engine manufacturer or emission control system supplier. [District Rule 4702, 5.7.3] Y

The permittee shall install and operate a nonresettable fuel meter and a nonresettable elapsed operating time meter. In lieu of installing a nonresettable fuel meter, the owner or operator may use a non-resettable elapsed operating time meter in conjunction with the engine manufacturer's maximum rated fuel consumption to determine annual fuel usage. [District Rules 4701, 4.2.1 and 4702, 5.7.4] Y

The operator of an internal combustion (IC) engine shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rules 4701, 6.2.3 and 4702, 6.2.3] Y

### **SJVUAPCD Regulation VIII - Fugitive Dust (PM10)**

The following Regulation VIII requirements will be addressed on the facility-wide draft renewal PTO S-1326-0-2:

#### **O. District Rule 8011, General Requirements**

The provisions of this rule are applicable to specified outdoor fugitive dust sources. The definitions, exemptions, requirements, administrative requirements, recordkeeping requirements, and test methods set forth in this rule are applicable to all Rules under Regulation VIII (Fugitive PM10 Prohibitions) of the Rules and Regulations of the San Joaquin Valley Unified

Air Pollution Control District. The rule was adopted November 15, 2001;  
Amended August 19, 2004.

S-1326-0-2 – Facility-Wide Requirements

Conditions 31 through 36 on the proposed permit assure compliance with this rule.

Conditions 32, 33, and 35 are updated to reflect the current District wording as follows:

Disturbances of soil related to any construction, demolition, excavation, extraction, or other earthmoving activities shall comply with the requirements for fugitive dust control in District Rule 8021 unless specifically exempted under Section 4.0 of Rule 8021 (8/19/04) or Rule 8011 (8/19/04). [District Rule 8021 and 8011] Y

Outdoor handling, storage and transport of any bulk material which emits dust shall comply with the requirements of District Rule 8031, unless specifically exempted under Section 4.0 of Rule 8031 (8/19/04) or Rule 8011 (8/19/04). [District Rule 8031 and 8011] Y  
Any paved road or unpaved road shall comply with the requirements of District Rule 8061 unless specifically exempted under Section 4.0 of Rule 8061 (8/19/04) or Rule 8011 (8/19/04). [District Rule 8061 and Rule 8011] Y

**Conditions 33, 34, and 36 are added to the permit to reflect the current Rule requirements as follows:**

An owner/operator shall prevent or cleanup any carryout or trackout in accordance with the requirements of District Rule 8041 Section 5.0, unless specifically exempted under Section 4.0 of Rule 8041 (8/19/04) or Rule 8011 (8/19/04). [District Rule 8041 and 8011] Y

Whenever open areas are disturbed or vehicles are used in open areas, the facility shall comply with the requirements of Section 5.0 of District Rule 8051, unless specifically exempted under Section 4.0 of Rule 8051 (8/19/04) or Rule 8011 (8/19/04). [District Rule 8051 and 8011] Y

Any unpaved vehicle/equipment traffic area that anticipates more than 50 or more Average Annual Daily Trips(AADT) shall comply with the requirements of Section 5.1.1 of District Rule 8071. Any unpaved vehicle/equipment traffic area that anticipates 150 vehicle daily trips (VDT), or 150 VDT that are utilized intermittently for a period of 30 days or less during the calendar year shall comply with the requirements of Section 5.1.2 of District Rule 8071. All sources shall comply with the requirements of Section 5.0 of District Rule 8071 unless specifically exempted under Section 4.0 of Rule 8071 (9/16/04) or Rule 8011 (8/19/04). [District Rule 8071 and Rule 8011] Y

**P. District Rule 8021, Construction, Demolition, Excavation, Extraction, and Other Earthmoving Activities**

The purpose of this rule is to limit fugitive dust emissions from construction, demolition, excavation, extraction, and other earthmoving activities. This rule applies to any construction, demolition, excavation, extraction, and other earthmoving activities, including, but not limited to, land clearing, grubbing, scraping, travel on site, and travel on access roads to and from the site.

Section 5.0 requires that no person shall perform any construction, demolition, excavation, extraction, or other earthmoving activities unless the appropriate requirements in sections 5.1 and 5.2 are sufficiently implemented to limit VDE to 20% opacity.

Compliance with the provisions of this rule is ensured by condition #31 on renewal PTO S-1326-0-2.

**Q. District Rule 8031, Bulk Materials**

The purpose of this rule is to limit fugitive dust emissions from the outdoor handling, storage, and transport of bulk materials.

This rule applies to the outdoor handling, storage, and transport of any bulk material.

Section 5.0 requires that no person shall perform any outdoor handling, storage, and transport of bulk materials unless the appropriate requirements in Table 8031-1 of this rule are sufficiently implemented to limit VDE to 20% opacity or to comply with the conditions for a stabilized surface as defined in

Rule 8011.

Compliance with the provisions of this rule is ensured by condition #32 on renewal PTO S-1326-0-2.

**R. District Rule 8041,- Carryout and Trackout**

The purpose of this rule is to limit fugitive dust emissions from carryout and trackout.

This rule applies to all sites that are subject to Rules 8021 (Construction, Demolition, Excavation, Extraction, and other Earthmoving Activities), 8031 (Bulk Materials), and 8071 (Unpaved Vehicle and Equipment Traffic Areas) where carryout or trackout has occurred or may occur.

Section 5.0 requires that an owner/operator shall sufficiently prevent or cleanup carryout and trackout as specified in sections 5.1 through 5.8. The use of blower devices, or dry rotary brushes or brooms, for removal of carryout and trackout on public roads is expressly prohibited. The removal of carryout and trackout from paved public roads does not exempt an owner/operator from obtaining state or local agency permits which may be required for the cleanup of mud and dirt on paved public roads.

Compliance with the provisions of this rule is ensured by condition #33 on renewal PTO S-1326-0-2.

**S. District Rule 8051, Open Areas**

The purpose of this rule is to limit fugitive dust emissions from open areas.

This rule applies to any open area having 3.0 acres or more of disturbed surface area, that has remained undeveloped, unoccupied, unused, or vacant for more than seven days.

Section 5.0 requires that whenever open areas are disturbed or vehicles are used in open areas, the owner/operator shall implement one or a combination of control measures indicated in Table 8051-1 to comply with the conditions of a stabilized surface at all times and to limit VDE to 20% opacity. In addition to the requirements of this rule, a person shall comply with all other applicable requirements of Regulation VIII.

Compliance with the provisions of this rule is ensured by condition #34 on draft renewal PTO S-1326-0-2.

#### **T. District Rule 8061, Paved and Unpaved Roads**

The purpose of this rule is to limit fugitive dust emissions from paved and unpaved roads by implementing control measures and design criteria.

This rule applies to any new or existing public or private paved or unpaved road, road construction project, or road modification project.

Compliance with the provisions of this rule is ensured by condition #35 on draft renewal PTO S--1326-0-2.

#### **U. District Rule 8071, Unpaved Vehicle/Equipment Traffic Area**

The purpose of this rule is to limit fugitive dust emissions from unpaved vehicle and equipment traffic areas by implementing control measures and design criteria.

This rule applies to any unpaved vehicle/equipment traffic area of 1.0 acre or larger.

Compliance with the provisions of this rule is ensured by condition #36 on renewal PTO S-8071-0-2.

#### **V. 40 CFR Part 60, Subpart Dc, Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units**

Subpart Dc applies to steam generating units for which construction, modification, or reconstruction is commenced after June 9, 1989 and that has a maximum design heat input capacity of 100 million Btu per hour or less, but greater than or equal to 10 million Btu per hour. This rule was amended in January 28, 2009.

The steam generators in this project (Renewal PTO S-1326-337-6, '-338-6, '-369-1, and '-385-3) are all gas-fired units. Subpart Dc has no emission requirements for gas-fired units. However, §60.48c requires that the owner or operator of each affected facility submit notification of the date of construction or reconstruction, anticipated startup, and actual startup, as provided by §60.7. Therefore, the following condition will be placed on all steam generator permits.

Permittee shall comply with all notification and recordkeeping requirements of 40 CFR 60.7 a (1)(3) and (b). [District Rule 4001] Y

**W. 40 CFR Part 61, Subpart M, National Emission Standard for Asbestos**

These regulations apply to demolition or renovation activity, as defined in 40 CFR 61.141. 40 CFR Section 61.150 of this subpart was amended September 18, 2003. The following condition listed on S-1326-0-2 ensures compliance with the requirements of this subpart:

{1288} Any owner or operator of a demolition or renovation activity, as defined in 40 CFR 61.141, shall comply with the applicable inspection, notification, removal, and disposal procedures for asbestos containing materials as specified in 40 CFR 61.145 (Standard for Demolition and Renovation). [40 CFR 61 Subpart M] Y

**X. 40 CFR Part 64, Compliance Assurance Monitoring (CAM)**

The CAM rule requires facilities to monitor the performance of their emission control equipment.

CAM Section 64.1 Definitions

This section defines the key terms in the CAM rule.

CAM Section 64.2(a) General applicability

Except for certain exemptions enumerated in subpart (b), CAM requirements apply to a pollutant specific emissions unit<sup>1</sup> at a Major Source if the unit satisfies all of the following criteria:

- 1) the unit must have an emission limit for the pollutant; and
- 2) the unit must have add-on controls for the pollutant that enable it to achieve the emission limit; and
- 3) the unit must have a pre-control potential to emit for that pollutant greater than the Major Source threshold.

**CAM Applicability Determinations:**

40 CFR Part 64 requires Compliance Assurance Monitoring (CAM) for units that meet the following three criteria:

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<sup>1</sup> Pollutant-specific emissions unit means an emissions unit considered separately with respect to each regulated air pollutant (Section 64.1).



- 1) the unit must have an emission limit for the pollutant;
- 2) the unit must have add-on controls for the pollutant; these are devices such as flue gas recirculation (FGR), baghouses, and catalytic oxidizers; and
- 3) the unit must have a pre-control potential to emit of greater than the major source thresholds.

Fixed Roof Tanks with Vapor Recovery System (Renewal PTO S-1326-268-8, '-269-6, '-270-5, '-271-5, '-272-5, '-274-4, '-326-1, '-327-1, '-360-, '-361-1, '-362-1, '-370-11, '-373-5, '-374-1, '-375-1, and '-381-1):

§64.1 defines a control device as equipment, other than inherent process equipment, that is used to destroy or remove air pollutants prior to discharge to the atmosphere.

These permit units are not subject to CAM since the vapor recovery system does not meet CAM's definition of a control device. The vapor recovery system consists of a vapor return or condensation system that connects to a gas pipeline distribution system which does not destroy or remove air pollutants prior to discharge to the atmosphere.

Fixed Roof Tanks with PV vents (Renewal PTO's S-1326-46-7, '-47-5, '-48-5, '-101-3, '-119-3, '-120-3, '-121-3, '-126-3, '-127-3, '-128-3, '-129-2, '-130-20, '-131-2, '-132-2, '-133-2, '-133-2, '-134-2, '-135-2, '-136-2, '-137-3, '-138-3, '-139-3, '-140-3, '-147-2, '-148-2, '-149-2, '-150-2, '-151-2, '-152-2, '-153-2, '-154-2, '-158-2, '-159-2, '-160-2, '-214-7, '-215-7-263-11, '-273-2, '-279-6, '-315-1, '-316-1, '-317-1, '-318-1, '-319-1, '-320-1, '-321-1, '-322-1, '-323-1, '-324-1, '-325-1, '-328, '-330, '-331-1, '-332-1, '-333-1, '-334-1, '-349-1, '-353-1, '-354-1, '-355-1, '-356-1, '-357-1, '-358-1, '-363-1, '-365-1, '-366-1, '-367-1, '-368-1, '-377-1, '-378-1, '-383-2, '-384-1, '-387-1, '-388-1, '-389-1, '-398-1, and '-399-1):

These permit units are not subject to CAM since the units do not have add-on controls.

Steam Generators (Renewal PTO S-1326-337-6, '-338-6, '-369-1, and '-385-3):

Steam generators have low-NO<sub>x</sub> burners, which are not bolt-on control devices, and they have FGR systems, which are bolt-on control devices.

Since steam generators are not source tested with and without the FGR system operating, the effectiveness of the FGR system must be determined by other means in order to determine if the steam generators are major NO<sub>x</sub> sources without the add-on FGR systems.

EPA AP-42, Table 1.4-1 lists the following emission factors for large boilers.

	Emissions Factor (lb·NO <sub>x</sub> per MMscf)
Uncontrolled	100
Controlled – low NO <sub>x</sub> burners	50
Controlled – Low NO <sub>x</sub> burners/Flue gas recirculation	32

The effectiveness of the FGR is calculated as follows:

$$\frac{(50 - 32) \text{ lb} \cdot \text{NO}_x / \text{MMscf}}{50 \text{ lb} \cdot \text{NO}_x / \text{MMscf}} \times 100\% = 36\%$$

Therefore, after the low-NO<sub>x</sub> burner, the FGR reduces NO<sub>x</sub> by additional 36%.

The highest NO<sub>x</sub> limit on a steam generator permit (S-1326-369) at this facility is 30 ppm (0.036 lb/MMBtu). However, this steam generator is a dormant emissions unit and would be limited to a minimum of Rule 4320's emissions limit of 9 ppmv if it comes emerges from dormancy.

NO<sub>x</sub> level for all other steam generators is less than 9 ppmv (0.011 lb/MMBtu) or less; therefore, the pre-FGR emission factor is calculated as follows.

$$\frac{0.011 \frac{\text{lb} \cdot \text{NO}}{\text{MMBtu}}}{(100\% - 36\%)} = 0.017 \frac{\text{lb} \cdot \text{NO}_x}{\text{MMBtu}}$$

The size of a 9 ppm·NO<sub>x</sub> steam generator operating with no annual fuel-use limit required to surpass the major source threshold for NO<sub>x</sub> (20,000 lb·NO<sub>x</sub>/yr) is:

$$\frac{20,000 \text{ lb} \cdot \text{NO}_x}{\text{year}} \times \frac{\text{MMBtu}}{0.017 \text{ lb} \cdot \text{NO}_x} \times \frac{1 \text{ year}}{8,760 \text{ hours}} = 134.3 \frac{\text{MMBtu}}{\text{hr}}$$

Since none of the steam generators at this facility exceed 134.3 MMBtu/hr, none of the steam generators are pre-FGR major sources of NO<sub>x</sub>, and as such, none require CAM.

Flares (S-1326-376-1 and S-1326-382-1):

This permit units have emissions limits for NOX, SOX, PM10, CO, and VOC; but, they do not have add-on controls for these criteria pollutants. Therefore, this permit unit is not subject to CAM for NOX, SOX, PM10, CO, and VOC.

These permit units are not subject to CAM since the units do not have add-on controls.

#### **Y. 40 CFR Part 82, Subparts B and F, Stratospheric Ozone**

These regulations apply to the servicing of motor vehicles when this service involves the ozone-depleting refrigerant in the motor vehicle air conditioner (MVAC). Sections of this regulation were amended in 2004 and 2008. Conditions #29 and 30 of S-1326-0-2 ensure compliance with the requirements of this subpart.

### **IX. PERMIT SHIELD**

A permit shield legally protects a facility from enforcement of the shielded regulations when a source is in compliance with the terms and conditions of the Title V permit. Compliance with the terms and conditions of the Operating Permit is considered compliance with all applicable requirements upon which those conditions are based, including those that have been subsumed.

#### **A. Permit Shields from Model General Permit Templates**

The applicant has not requested the use of any model templates. Therefore, the following conditions will be removed from the facility wide permit:

Compliance with permit conditions in the Title V permit shall be deemed in compliance with the following outdated SIP requirements: Kern County Rule 401 and Kern County Rule 111. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Y

Compliance with permit conditions in the Title V permit shall be deemed in compliance with the following applicable requirements: SJVUAPCD Rules 1100, sections 6.1 and 7.0 (12/17/92); 2010, sections 3.0 and 4.0 (12/17/92); 2031 (12/17/92); 2040 (12/17/92); 2070, section 7.0 (12/17/92); 2080 (12/17/92); 4101 (2/17/05); 4601, sections 5.1, 5.4, 6.1, and 6.3 (12/17/09); 8021 (8/19/04); 8031 (8/19/04); 8041 (8/19/04); 8051 (8/19/04); 8061 (8/19/04); and 8071 (9/16/04). A permit shield is granted from these requirements.. [District Rule 2520, 13.2] Y

## **X. PERMIT CONDITIONS**

See Attachment A - Draft Renewed Title V Operating Permit.

## **XI. ATTACHMENTS**

- A. Draft Renewal Title V Operating Permit
- B. Previous Title V Operating Permit
- C. Detailed Facility List

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# ATTACHMENT A

Final Title V Operating Permit

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# Permit to Operate

**FACILITY:** S-1326

**EXPIRATION DATE:** 03/31/2016

**LEGAL OWNER OR OPERATOR:**  
**MAILING ADDRESS:**

VINTAGE PRODUCTION CALIFORNIA LLC  
9600 MING AVE, SUITE 300  
BAKERSFIELD, CA 93311

**FACILITY LOCATION:**

HEAVY OIL CENTRAL STATIONARY SOURCE  
KERN COUNTY, CA

**FACILITY DESCRIPTION:**

OIL AND NATURAL GAS PRODUCTION

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

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

**Seyed Sadredin**  
Executive Director / APCO

**David Warner**  
Director of Permit Services

# San Joaquin Valley Air Pollution Control District

**FACILITY:** S-1326-0-2

**EXPIRATION DATE:** 03/31/2016

## **FACILITY-WIDE REQUIREMENTS**

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1. The owner or operator shall notify the District of any breakdown condition as soon as reasonably possible, but no later than one hour after its detection, unless the owner or operator demonstrates to the District's satisfaction that the longer reporting period was necessary. [District Rule 1100, 6.1 & Kern County Rule 111] Federally Enforceable Through Title V Permit
2. The District shall be notified in writing within ten days following the correction of any breakdown condition. The breakdown notification shall include a description of the equipment malfunction or failure, the date and cause of the initial failure, the estimated emissions in excess of those allowed, and the methods utilized to restore normal operations. [District Rule 1100, 7.0 & Kern County Rule 111] Federally Enforceable Through Title V Permit
3. The owner or operator of any stationary source operation that emits more than 25 tons per year of nitrogen oxides or reactive organic compounds, shall provide the District annually with a written statement in such form and at such time as the District prescribes, showing actual emissions of nitrogen oxides and reactive organic compounds from that source. [District Rule 1160, 5.0]
4. Any person building, altering or replacing any operation, article, machine, equipment, or other contrivance, the use of which may cause the issuance of air contaminants or the use of which may eliminate, reduce, or control the issuance of air contaminants, shall first obtain an Authority to Construct (ATC) from the District unless exempted by District Rule 2020. [District Rules 2010, 3.0 and 4.0; and 2020] Federally Enforceable Through Title V Permit
5. The permittee must comply with all conditions of the permit including permit revisions originated by the District. All terms and conditions of a permit that are required pursuant to the Clean Air Act (CAA), including provisions to limit potential to emit, are enforceable by the EPA and Citizens under the CAA. Any permit noncompliance constitutes a violation of the CAA and the District Rules and Regulations, and is grounds for enforcement action, for permit termination, revocation, reopening and reissuance, or modification; or for denial of a permit renewal application. [District Rules 2070, 7.0; 2080; and 2520, 9.8.1 and 9.12.1] Federally Enforceable Through Title V Permit
6. A Permit to Operate or an Authority to Construct shall not be transferred unless a new application is filed with and approved by the District. [District Rule 2031] Federally Enforceable Through Title V Permit
7. Every application for a permit required under Rule 2010 (Permits Required) shall be filed in a manner and form prescribed by the District. [District Rule 2040] Federally Enforceable Through Title V Permit
8. The operator shall maintain records of required monitoring that include: 1) the date, place, and time of sampling or measurement; 2) the date(s) analyses were performed; 3) the company or entity that performed the analysis; 4) the analytical techniques or methods used; 5) the results of such analysis; and 6) the operating conditions at the time of sampling or measurement. [District Rule 2520, 9.4.1] Federally Enforceable Through Title V Permit
9. The operator shall retain records of all required monitoring data and support information for a period of at least 5 years from the date of the monitoring sample, measurement, or report. Support information includes copies of all reports required by the permit and, for continuous monitoring instrumentation, all calibration and maintenance records and all original strip-chart recordings. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

FACILITY-WIDE REQUIREMENTS CONTINUE ON NEXT PAGE

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

Facility Name: VINTAGE PRODUCTION CALIFORNIA LLC  
Location: HEAVY OIL CENTRAL STATIONARY SOURCE, KERN COUNTY, CA  
S-1326-0-2: Jan 5 2012 9:58AM - THAOS

10. The operator shall submit reports of any required monitoring at least every six months unless a different frequency is required by an applicable requirement. All instances of deviations from permit requirements must be clearly identified in such reports. [District Rule 2520, 9.5.1] Federally Enforceable Through Title V Permit
11. Deviations from permit conditions must be promptly reported, including deviations attributable to upset conditions, as defined in the permit. For the purpose of this condition, promptly means as soon as reasonably possible, but no later than 10 days after detection. The report shall include the probable cause of such deviations, and any corrective actions or preventive measures taken. All required reports must be certified by a responsible official consistent with section 10.0 of District Rule 2520. [District Rules 2520, 9.5.2 and 1100, 7.0] Federally Enforceable Through Title V Permit
12. If for any reason a permit requirement or condition is being challenged for its constitutionality or validity by a court of competent jurisdiction, the outcome of such challenge shall not affect or invalidate the remainder of the conditions or requirements in that permit. [District Rule 2520, 9.7] Federally Enforceable Through Title V Permit
13. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit. [District Rule 2520, 9.8.1] Federally Enforceable Through Title V Permit
14. The permit may be modified, revoked, reopened and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition. [District Rule 2520, 9.8.3] Federally Enforceable Through Title V Permit
15. The permit does not convey any property rights of any sort, or any exclusive privilege. [District Rule 2520, 9.8.4] Federally Enforceable Through Title V Permit
16. The Permittee shall furnish to the District, within a reasonable time, any information that the District may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the District copies of records required to be kept by the permit or, for information claimed to be confidential, the permittee may furnish such records directly to EPA along with a claim of confidentiality. [District Rule 2520, 9.8.5] Federally Enforceable Through Title V Permit
17. The permittee shall pay annual permit fees and other applicable fees as prescribed in Regulation III of the District Rules and Regulations. [District Rule 2520, 9.9] Federally Enforceable Through Title V Permit
18. Upon presentation of appropriate credentials, a permittee shall allow an authorized representative of the District to enter the permittee's premises where a permitted source is located or emissions related activity is conducted, or where records must be kept under condition of the permit. [District Rule 2520, 9.13.2.1] Federally Enforceable Through Title V Permit
19. Upon presentation of appropriate credentials, a permittee shall allow an authorized representative of the District to have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit. [District Rule 2520, 9.13.2.2] Federally Enforceable Through Title V Permit
20. Upon presentation of appropriate credentials, a permittee shall allow an authorized representative of the District to inspect at reasonable times any facilities, equipment, practices, or operations regulated or required under the permit. [District Rule 2520, 9.13.2.3] Federally Enforceable Through Title V Permit
21. Upon presentation of appropriate credentials, a permittee shall allow an authorized representative of the District to sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with the permit or applicable requirements. [District Rule 2520, 9.13.2.4] Federally Enforceable Through Title V Permit
22. No air contaminants shall be discharged into the atmosphere for a period or periods aggregating more than 3 minutes in any one hour which is as dark or darker than Ringelmann #1 or equivalent to 20% opacity and greater, unless specifically exempted by District Rule 4101. If the equipment or operation is subject to a more stringent visible emission standard as prescribed in a permit condition, the more stringent visible emission limit shall supersede this condition. [District Rule 4101] Federally Enforceable Through Title V Permit

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



23. No person shall manufacture, blend, repackage, supply, sell, solicit or apply any architectural coating with a VOC content in excess of the corresponding limit specified in the Table of Standards of District Rule 4601 (12/17/09) for use or sale within the District. [District Rule 4601, 5.1] Federally Enforceable Through Title V Permit
24. All VOC-containing materials for architectural coatings subject to Rule 4601 (12/17/09) shall be stored in closed containers when not in use. [District Rule 4601, 5.4] Federally Enforceable Through Title V Permit
25. The permittee shall comply with all the Labeling and Test Methods requirements outlined in Rule 4601 sections 6.1 and 6.3 (12/17/09). [District Rule 4601, 6.1 and 6.3] Federally Enforceable Through Title V Permit
26. With each report or document submitted under a permit requirement or a request for information by the District or EPA, the permittee shall include a certification of truth, accuracy, and completeness by a responsible official. [District Rule 2520, 9.13.1 and 10.0] Federally Enforceable Through Title V Permit
27. If the permittee performs maintenance on, or services, repairs, or disposes of appliances, the permittee shall comply with the standards for Recycling and Emissions Reduction pursuant to 40 CFR Part 82, Subpart F. [40 CFR 82 Subpart F] Federally Enforceable Through Title V Permit
28. If the permittee performs service on motor vehicles when this service involves the ozone-depleting refrigerant in the motor vehicle air conditioner (MVAC), the permittee shall comply with the standards for Servicing of Motor Vehicle Air Conditioners pursuant to all the applicable requirements as specified in 40 CFR Part 82, Subpart B. [40 CFR Part 82, Subpart B] Federally Enforceable Through Title V Permit
29. Disturbances of soil related to any construction, demolition, excavation, extraction, or water mining activities shall comply with the requirements for fugitive dust control in SJVUAPCD District Rule 8020 unless specifically exempted under section 4 of Rule 8020. [District Rule 8020] Federally Enforceable Through Title V Permit
30. Outdoor handling and storage of any bulk material which emits dust shall comply with the requirements of SJVUAPCD Rule 8030, unless specifically exempted under section 4 of Rule 8030. [District Rule 8030] Federally Enforceable Through Title V Permit
31. Any paved road over 3 miles in length, and any unpaved roads over half a mile in length, constructed after October 10, 1993 shall use the design criteria and dust control measures of, and comply with the administrative requirements of, SJVUAPCD Rule 8060 unless specifically exempted under section 4 of Rule 8060. [District Rule 8060] Federally Enforceable Through Title V Permit
32. Disturbances of soil related to any construction, demolition, excavation, extraction, or other earthmoving activities shall comply with the requirements for fugitive dust control in District Rule 8021 unless specifically exempted under Section 4.0 of Rule 8021 (8/19/04) or Rule 8011 (8/19/04). [District Rule 8021 and 8011] Federally Enforceable Through Title V Permit
33. Outdoor handling, storage and transport of any bulk material which emits dust shall comply with the requirements of District Rule 8031, unless specifically exempted under Section 4.0 of Rule 8031 (8/19/04) or Rule 8011 (8/19/04). [District Rule 8031 and 8011] Federally Enforceable Through Title V Permit
34. An owner/operator shall prevent or cleanup any carryout or trackout in accordance with the requirements of District Rule 8041 Section 5.0, unless specifically exempted under Section 4.0 of Rule 8041 (8/19/04) or Rule 8011 (8/19/04). [District Rule 8041 and 8011] Federally Enforceable Through Title V Permit
35. Whenever open areas are disturbed or vehicles are used in open areas, the facility shall comply with the requirements of Section 5.0 of District Rule 8051, unless specifically exempted under Section 4.0 of Rule 8051 (8/19/04) or Rule 8011 (8/19/04). [District Rule 8051 and 8011] Federally Enforceable Through Title V Permit
36. Any paved road or unpaved road shall comply with the requirements of District Rule 8061 unless specifically exempted under Section 4.0 of Rule 8061 (8/19/04) or Rule 8011 (8/19/04). [District Rule 8061 and Rule 8011] Federally Enforceable Through Title V Permit

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

37. Any unpaved vehicle/equipment traffic area that anticipates more than 50 or more Average Annual Daily Trips(AADT) shall comply with the requirements of Section 5.1.1 of District Rule 8071. Any unpaved vehicle/equipment traffic area that anticipates 150 vehicle daily trips (VDT), or 150 VDT that are utilized intermittently for a period of 30 days or less during the calendar year shall comply with the requirements of Section 5.1.2 of District Rule 8071. All sources shall comply with the requirements of Section 5.0 of District Rule 8071 unless specifically exempted under Section 4.0 of Rule 8071 (9/16/04) or Rule 8011 (8/19/04). [District Rule 8071 and Rule 8011] Federally Enforceable Through Title V Permit
38. Any owner or operator of a demolition or renovation activity, as defined in 40 CFR 61.141, shall comply with the applicable inspection, notification, removal, and disposal procedures for asbestos containing materials as specified in 40 CFR 61.145 (Standard for Demolition and Renovation). [40 CFR 61 Subpart M] Federally Enforceable Through Title V Permit
39. The permittee shall submit certifications of compliance with the terms and standards contained in Title V permits, including emission limits, standards and work practices, to the District and the EPA annually (or more frequently as specified in an applicable requirement or as specified by the District). The certification shall include the identification of each permit term or condition, the compliance status, whether compliance was continuous or intermittent, the methods used for determining the compliance status, and any other facts required by the District to determine the compliance status of the source. [District Rule 2520, 9.16] Federally Enforceable Through Title V Permit
40. The permittee shall submit an application for Title V permit renewal to the District at least six months, but not greater than 18 months, prior to the permit expiration date. [District Rule 2520, 5.2] Federally Enforceable Through Title V Permit
41. When a term is not defined in a Title V permit condition, the definition in the rule cited as the origin and authority for the condition in a Title V permit shall apply. [District Rule 2520, 9.1.1] Federally Enforceable Through Title V Permit
42. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
43. Should the facility, as defined in 40 CFR 68.3, become subject to Part 68, then the owner or operator shall submit a risk management plan (RMP) by the date specified in 40 CFR 68.10. The facility shall certify compliance as part of the annual certification as required by 40 CFR part 70. [40 CFR 68] Federally Enforceable Through Title V Permit
44. On August 31, 2001, the initial Title V permit was issued, the reporting periods for the Report of Required Monitoring and the Compliance Certification Report are based upon this initial permit issuance date, unless alternative dates are approved by the District Compliance Division. This reports are due within 30 days of the end of reporting period. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-1326-9-14

**EXPIRATION DATE:** 03/31/2016

**SECTION:** NE11 **TOWNSHIP:** 28S **RANGE:** 27E

**EQUIPMENT DESCRIPTION:**

62.5 MM BTU/HR NATURAL GAS FIRED STRUTHERS STEAM GENERATOR - DIS# 21928-82 (NORTH TREATING PLANT)

## PERMIT UNIT REQUIREMENTS

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1. All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District Rule 2201] Federally Enforceable Through Title V Permit
2. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
3. The unit shall only be fired on PUC-quality natural gas and scrubbed TEOR and TVR gas from S-1326-26, '-27, '-28, '-35 and '-263 with a sulfur content no greater than 1 gr S/100 scf. [District Rules 2201, 4301, 4320, 4406, and 4801] Federally Enforceable Through Title V Permit
4. Emissions rates from the steam generator shall not exceed any of the following limits: 0.003 lb-PM10/MMBtu, 75 ppmvd CO @ 3% O2 or 0.055 lb-CO/MMBtu, or 0.0055 lb-VOC/MMBtu. [District Rules 2201, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
5. Emissions shall not exceed any of the following limits when this unit is burning 50% or greater by volume PUC quality gas on a monthly average basis: 9 ppmvd NOx @ 3% O2 or 0.011 lb-NOx/MMBtu. [District Rules 2201, 4301, 4305, 4306, 4320, 4351, and 4405] Federally Enforceable Through Title V Permit
6. Emissions shall not exceed any of the following limits when the unit is burning less than 50% by volume PUC quality gas on a monthly average basis: 12 ppmvd NOx @ 3% O2 or 0.014 lb-NOx/MMBtu. [District Rules 2201, 4301, 4305, 4306, 4320, 4351, and 4405] Federally Enforceable Through Title V Permit
7. The applicable NOx emissions concentration for each month shall be determined based on the volume and type of fuel combusted in the unit (< 50% by volume PUC quality gas or > = 50% by volume PUC quality gas). Permittee shall maintain supporting records that demonstrate the type of fuel combusted. [District Rules 2201, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
8. Permittee shall test annually the sulfur content of the fuel gas combusted in steam generator using ASTM method D1072, D3031, D4084, or D3246 and make test results readily available for District inspection. [District Rules 2520, 9.3.2 and 4320] Federally Enforceable Through Title V Permit
9. All emissions measurements shall be made with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. Unless otherwise specified in the Permit to Operate, no determination of compliance shall be established within two hours after a continuous period in which fuel flow to the unit is shut off for 30 minutes or longer, or within 30 minutes after a re-ignition as defined in Section 3.0 of District Rule 4306. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

10. A source test to demonstrate compliance with NO<sub>x</sub>, and CO emission limits shall be performed within 60 days of startup of this unit. The NO<sub>x</sub> limit in effect at the time of the startup source testing will be determined based on the volume and type of fuel combusted ( $\geq 50\%$  PUC quality or  $< 50\%$  PUC quality gas) and shall be identified in the source test protocol. Whenever the fuel type is switched from the fuel type combusted during the initial startup of this unit, compliance source testing for NO<sub>x</sub> and CO shall be conducted within 90 days of the date the fuel type is switched. [District Rules 2201, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
11. Source testing is required at least once every twelve (12) months from the initial source test date of each fuel type ( $\geq 50\%$  PUC quality gas or  $< 50\%$  PUC quality gas). After initial compliance demonstration with the NO<sub>x</sub> and CO emission limits for each fuel type on two (2) consecutive source tests, the unit shall be tested not less than once every thirty-six (36) months from the last test date for that fuel type. Testing shall not be required for any fuel type not in use during the 36 month period until such time the fuel type is switched, after which testing shall be performed within 90 days of switching fuel types. [District Rules 2201, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
12. Compliance source testing after switching fuel types is not required if the unit continues to demonstrate compliance with 9 ppmvd NO<sub>x</sub> @ 3% O<sub>2</sub> or 0.011 lb-NO<sub>x</sub>/MMBtu and 75 ppmvd CO @ 3% O<sub>2</sub> or 0.055 lb-CO/MMBtu while firing on less than 50% by volume PUC quality gas. In which case, source testing shall only be required every thirty-six (36) months for the less than 50% by PUC quality gas. If the result of a source test demonstrates that the unit does not meet 9 ppmvd NO<sub>x</sub> @ 3% O<sub>2</sub> or 0.011 lb-NO<sub>x</sub>/MMBtu and 75 ppmvd CO @ 3% O<sub>2</sub> or 0.055 lb-CO/MMBtu while firing on less than 50% by volume PUC quality gas, the source test frequency shall revert to at least one test every 36 months for each fuel type. [District Rules 2201, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
13. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
14. The source test plan shall identify which basis (ppmv or lb/MMBtu) will be used to demonstrate compliance. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
15. The following test methods shall be used: NO<sub>x</sub> (ppmv) - EPA Method 7E or ARB Method 100, NO<sub>x</sub> (lb/MMBtu) - EPA Method 19, CO (ppmv) - EPA Method 10 or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, stack gas moisture content - EPA Method 4, stack gas velocities - EPA Method 2, fuel gas sulfur content - ASTM D1072, ASTM D3246, ASTM D6228 (GC-FPD) or double GC for H<sub>2</sub>S and mercaptans, and methane content - ASTM D1945. [District Rules 1081, 4305, 4306, 6.2, 4320, and 4351] Federally Enforceable Through Title V Permit
16. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
17. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
18. The permittee shall monitor and record the stack concentration of NO<sub>x</sub>, CO, and O<sub>2</sub> at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless monitoring has been performed within the last month. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

19. If either the NO<sub>x</sub> or CO concentrations corrected to 3% O<sub>2</sub>, as measured by the portable analyzer, exceed the allowable emissions concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
20. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
21. The permittee shall maintain records of: (1) the date and time of NO<sub>x</sub>, CO, and O<sub>2</sub> measurements, (2) the O<sub>2</sub> concentration in percent and the measured NO<sub>x</sub> and CO concentrations corrected to 3% O<sub>2</sub>, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
22. Permittee shall maintain records of fuel gas sulfur compound measurements. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
23. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-1326-26-17

**EXPIRATION DATE:** 03/31/2016

**SECTION:** NE23 **TOWNSHIP:** 28S **RANGE:** 27E

**EQUIPMENT DESCRIPTION:**

THERMALLY ENHANCED OIL RECOVERY OPERATION WITH WELL VENT VAPOR CONTROL SYSTEM SERVING 120 STEAM ENHANCED WELLS, INCLUDING SULFA-TREAT SYSTEM, GAS TRAPS, COLLECTION PIPING, VAPOR COMPRESSOR WITH ELECTRIC MOTOR, AND PIPING TO FIELD FUEL GAS SYSTEM, DOGGR DISPOSAL WELL, AND FLARE (FANO).

## PERMIT UNIT REQUIREMENTS

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1. TEOR operation shall include sulfatreat system, gas traps, collection piping, vapor compressor with electric motor, piping to field fuel gas system, piping to steam generators S-1326-9, '-294, '-314, '-337, and '-338, DOGGR disposal well and flare (Fano). [District Rule 2201] Federally Enforceable Through Title V Permit
2. Wells may be operated with closed casing vents or be vented to vapor control system. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Fluids produced from wells with closed vents shall be introduced only to production equipment served by vapor control system listed on tank S-1326-46 which is 99% efficient. [District Rule 2201] Federally Enforceable Through Title V Permit
4. The crude oil production from wells associated with this permit unit shall not lie within 1000 feet of an air injection well used for in-situ combustion. [District Rule 4407, 2.0, 3.4, and 3.5] Federally Enforceable Through Title V Permit
5. During the time any steam-enhanced crude oil production well is undergoing service or repair while the well is not producing, it shall be exempt from the emission control requirements of District Rule 4401, 5.0 (as amended January 15, 1998). [District Rule 4401, 4.1] Federally Enforceable Through Title V Permit
6. All required source testing shall conform to the compliance testing procedures described in District Rule 1081(as amended December 16, 1993). [District Rule 1081] Federally Enforceable Through Title V Permit
7. The operator shall maintain monitoring records of the date and well identification where steam injection or well stimulation occurs. [District Rule 4401, 6.1] Federally Enforceable Through Title V Permit
8. The uncontrolled VOC emissions from any well vent shall be reduced by at least 99 percent by weight or, if several steam-enhanced crude oil production well vents are connected to a vapor collection and control system, total uncontrolled VOC emissions shall be reduced by at least 99 percent. This requirement does not apply to cyclic wells located on contiguous and adjacent oil production properties with less than 10 cyclic wells owned by or under the control of a company. [District Rule 4401, 5.1 and 5.2] Federally Enforceable Through Title V Permit
9. For cyclic wells located on properties with less than 10 cyclic wells and owned by a company, the uncontrolled VOC emissions from any well vent or system of well vents connected to a single control device shall be reduced by at least 50 percent. Properties shall include contiguous and adjacent oil production properties owned by or under control of the company. [District Rule 4401, 5.4] Federally Enforceable Through Title V Permit
10. Total number of leaks from the vapor collection and control system, including condensate handling, shall not exceed the number as allowed by Rule 4401 (as amended January 15, 1998) at any one time. [District Rule 4401, 5.3] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

11. Operator shall affix a readily visible tag bearing the date on which a leak is detected. The tag shall remain in place until the leaking component is repaired. [District Rule 4401, 5.3.1] Federally Enforceable Through Title V Permit
12. Operator shall repair each leak within 15 days of detection. The APCO may grant a 10 day extension if the operator demonstrates that the necessary and sufficient actions have and are being taken to correct the leak. [District Rule 4401, 5.3.1] Federally Enforceable Through Title V Permit
13. Operator shall maintain all components of a well vent vapor collection and control system in good repair. Components of the well vent vapor collection and control system shall include all piping, valves, fittings, pumps, compressors, tanks, etc. used to collect, control, store, or dispose of VOC condensate or non-condensable VOCs and which is prior to any blending of VOC condensate with crude oil or blending of non-condensable VOCs with gases to be used as a fuel. [District Rule 4401, 5.3 and 5.3.2] Federally Enforceable Through Title V Permit
14. Annual control efficiency compliance tests shall be performed on all vapor collection and control systems used to control emissions from steam-enhanced crude oil production wells. Testing shall be performed by source tester certified by the California Air Resource Board (CARB) certified contractors 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 the requirements of this condition if the vapor control system does not exhaust to atmosphere or if all uncondensed VOC emissions collected by a vapor collection and control system are burned in fuel burning equipment or in a smokeless open flare and the source's Operating Permit contains adequate periodic monitoring to ensure the source meets 99% control efficiency. [District Rule 4401, 5.1, 5.2 and 6.2.1] Federally Enforceable Through Title V Permit
15. 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 District Rule 4401, 6.3.1] Federally Enforceable Through Title V Permit
16. The permittee shall perform leak inspections at least annually, using a portable hydrocarbon detection instrument in accordance with USEPA Method 21. [District Rules 2520, 9.3.2 and 4401, 6.3.3] Federally Enforceable Through Title V Permit
17. Compliance with permit conditions in the Title V permit shall be deemed compliance with Kern County Rule 108.1. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
18. Compliance with permit conditions in the Title V permit shall be deemed compliance with SJVUAPCD Rule 4401 (Amended January 15, 1998), excluding sections 5.1 and 5.2 for control systems which have been waived from complying with the requirement of section 6.2.1. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
19. The requirements of SJVUAPCD Rule 4407 (Adopted May 19, 1994) do not apply to this permit unit. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
20. Permittee shall maintain with the permit a current listing of all steam enhanced wells connected to the casing vent control system and shall make such listing readily available for District inspection upon request. [District Rule 4401] Federally Enforceable Through Title V Permit
21. Sulfur content of scrubbed TEOR gas and flare pilot gas shall not exceed 1 gr/100scf. [District Rule 2201] Federally Enforceable Through Title V Permit
22. The well vent vapors and tank vapors from vapor collection systems #S-1326-46 shall vent only to existing otherwise permit exempt combustion equipment, DOGGR approved injection wells, 2.9 MMBtu/hr waste gas flare, or steam generators S-1326-9, '-294, '-314, '-337, and '-338. [District Rule 2201] Federally Enforceable Through Title V Permit
23. Flare shall be used exclusively for incineration of vapors from this TEOR control system and tank vapor control systems #S-1326-46. [District NSR Rule] 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.

24. Collected liquids shall be piped only to vapor controlled tanks. [District NSR Rule] Federally Enforceable Through Title V Permit
25. VOC content of well vent vapor gas shall not exceed 10% by weight. If the VOC content of the well vent vapor gas is less than 10% by weight for 8 consecutive quarterly samplings per District approved plan, sampling frequency shall only be required annually. Representative samples shall be collected during periods of normal operation and not be within 48 hours after routine maintenance or repair. Records of test shall be maintained for a period of five years and be made readily available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit
26. The VOC content by weight percent (wt.%) shall be determined using American Society of Testing and Materials (ASTM) D1945 for gases and South Coast Air Quality Management District (SCAQMD) Method 304-91 or the latest revision of ASTM Method E168, E169 or E260 for liquids. [District Rule 4401, 6.3.5] Federally Enforceable Through Title V Permit
27. Emissions rates shall not exceed any of the following: VOC: 0.063 lb/MMBtu; NOx: 0.068 lb/MMBtu; PM10: 0.008 lb/MMBtu; and CO: 0.37 lb/MMBtu. [District NSR Rule] Federally Enforceable Through Title V Permit
28. The higher heating value of the flared gas shall be monitored at least quarterly. Measured higher heating value and quantity of gas flared shall be used to determine compliance with heat input limits. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
29. Permittee shall test annually the sulfur content of casing gas combusted in permit exempt equipment using ASTM method D1072, D3031, D4084, or D3246 and make test results readily available for District inspection. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
30. The flare shall be operated according to the manufacturer's specifications, a copy of which shall be maintained on site. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
31. If this flare requires a pilot flame, then the flare shall be operated with a flame present at all times, and kept in operation when emissions may be vented to it. The presence of a flare pilot flame shall be monitored using a thermocouple or any other equivalent device to detect the presence of a flame. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
32. Permittee shall maintain daily records of pilot gas and TEOR gas flared and shall make such records readily available for District inspection for a period of five years. [District Rule 2520, 9.4.2 and District Rule 1070] Federally Enforceable Through Title V Permit
33. This flare shall be inspected every two weeks while in operation for visible emissions. If visible emissions are observed, corrective action shall be taken. If visible emissions continue, an EPA Method 9 test shall be conducted within 72 hours. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
34. This flare shall not be used as a leak control device as described in Rule 4403, 5.3.1, nor as a control device for any permit unit subject to NSPS, without modification of permit requirements to address 40 CFR 60.18. [District Rule 2520, 9.3.3] Federally Enforceable Through Title V Permit
35. Sulfa Treat equipment shall be purged with natural gas, inert gas, or air prior to opening any vessel, filter, pipeline or connection to prevent sulfur compound emissions. [District Rule 2201] Federally Enforceable Through Title V Permit

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



# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-1326-27-14

**EXPIRATION DATE:** 03/31/2016

**SECTION:** 02 **TOWNSHIP:** 28S **RANGE:** 27E

**EQUIPMENT DESCRIPTION:**

THERMALLY ENHANCED OIL RECOVERY (TEOR) OPERATION WITH WELL VENT VAPOR CONTROL SYSTEM SERVING UP TO 100 STEAM ENHANCED WELLS INCLUDING: GAS LIQUID SEPERATORS, COMPRESSOR, CONDENSATE HANDLING AND 2.9 MMBTU/HR AIR ASSISTED FLARE (SECTION 2 EAST CVR)

## PERMIT UNIT REQUIREMENTS

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1. Wells may be operated with closed casing vents or be vented to vapor control system. [District Rule 2201] Federally Enforceable Through Title V Permit
2. TEOR operation (Section 2 East CVR) shall include gas liquid separator, compressor, condensate handling equipment, 2.9 MMBtu/hr McGill, #1011-2, flare equipped with 2 in. dia. burner tip, 1/2 hp air assist blower, and K/O drum at flare base and vapor piping from TEOR system S-1326-28 . [District NSR Rule] Federally Enforceable Through Title V Permit
3. The well vent vapors shall vent only to 2.9 MMBtu/hr waste gas flare or steam generators S-1326-9, '-294, '-314, '-337, and '-338. [District NSR Rule] Federally Enforceable Through Title V Permit
4. Fluids produced from wells with closed vents shall be introduced only to production equipment served by vapor control system listed on tank S-1326-201 which is 99% efficient. [District NSR Rule] Federally Enforceable Through Title V Permit
5. The crude oil production from wells associated with this permit unit shall not lie within 1000 feet of an air injection well used for in-situ combustion. [District Rule 4407, 2.0, 3.4, and 3.5] Federally Enforceable Through Title V Permit
6. During the time any steam-enhanced crude oil production well is undergoing service or repair while the well is not producing, it shall be exempt from the emission control requirements of District Rule 4401, 5.0 (as amended January 15, 1998). [District Rule 4401, 4.1] Federally Enforceable Through Title V Permit
7. All required source testing shall conform to the compliance testing procedures described in District Rule 1081(as amended December 16, 1993). [District Rule 1081] Federally Enforceable Through Title V Permit
8. The operator shall maintain monitoring records of the date and well identification where steam injection or well stimulation occurs. [District Rule 4401, 6.1] Federally Enforceable Through Title V Permit
9. The uncontrolled VOC emissions from any well vent shall be reduced by at least 99 percent by weight or, if several steam-enhanced crude oil production well vents are connected to a vapor collection and control system, total uncontrolled VOC emissions shall be reduced by at least 99 percent. This requirement does not apply to cyclic wells located on contiguous and adjacent oil production properties with less than 10 cyclic wells owned by or under the control of a company. [District Rule 4401, 5.1 and 5.2] Federally Enforceable Through Title V Permit
10. For cyclic wells located on properties with less than 10 cyclic wells and owned by a company, the uncontrolled VOC emissions from any well vent or system of well vents connected to a single control device shall be reduced by at least 50 percent. Properties shall include contiguous and adjacent oil production properties owned by or under control of the company. [District Rule 4401, 5.4] 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.

11. Total number of leaks from the vapor collection and control system, including condensate handling, shall not exceed the number as allowed by Rule 4401 (as amended January 15, 1998) at any one time. [District Rule 4401, 5.3] Federally Enforceable Through Title V Permit
12. Operator shall affix a readily visible tag bearing the date on which a leak is detected. The tag shall remain in place until the leaking component is repaired. [District Rule 4401, 5.3.1] Federally Enforceable Through Title V Permit
13. Operator shall repair each leak within 15 days of detection. The APCO may grant a 10 day extension if the operator demonstrates that the necessary and sufficient actions have and are being taken to correct the leak. [District Rule 4401, 5.3.1] Federally Enforceable Through Title V Permit
14. Operator shall maintain all components of a well vent vapor collection and control system in good repair. Components of the well vent vapor collection and control system shall include all piping, valves, fittings, pumps, compressors, tanks, etc. used to collect, control, store, or dispose of VOC condensate or non-condensable VOCs and which is prior to any blending of VOC condensate with crude oil or blending of non-condensable VOCs with gases to be used as a fuel. [District Rule 4401, 5.3 and 5.3.2] Federally Enforceable Through Title V Permit
15. Annual control efficiency compliance tests shall be performed on all vapor collection and control systems used to control emissions from steam-enhanced crude oil production wells. Testing shall be performed by source tester certified by the California Air Resource Board (CARB) certified contractors 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 the requirements of this condition if the vapor control system does not exhaust to atmosphere or if all uncondensed VOC emissions collected by a vapor collection and control system are burned in fuel burning equipment or in a smokeless open flare and the source's Operating Permit contains adequate periodic monitoring to ensure the source meets 99% control efficiency. [District Rule 4401, 5.1, 5.2 and 6.2.1] Federally Enforceable Through Title V Permit
16. The control efficiency, measured and calculated as carbon ,of the vapor collection and control system used to control VOC emissions from steam enhanced crude oil production well 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. [District Rule 4401, 6.3.1] Federally Enforceable Through Title V Permit
17. The source shall perform leak inspections at least annually, using a portable hydrocarbon detection instrument in accordance with USEPA Method 21. [District Rules 2520, 9.3.2 and 4401, 6.3.3] Federally Enforceable Through Title V Permit
18. Permittee shall maintain with the permit a current listing of all steam enhanced wells connected to the casing vent control system and shall make such listing readily available for District inspection upon request. [District Rule 4401, 6.6] Federally Enforceable Through Title V Permit
19. Compliance with permit conditions in the Title V permit shall be deemed compliance with Kern County Rule 108.1. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
20. Compliance with permit conditions in the Title V permit shall be deemed compliance with SJVUAPCD Rule 4401 (Amended January 15, 1998), excluding sections 5.1 and 5.2 for control systems which have been waived from complying with the requirement of section 6.2.1. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
21. The requirements of District Rule 4407 (Adopted May 19, 1994) do not apply to this permit unit because it is not an in situ combustion well vent. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
22. Flare Visible emissions shall not exceed 1/4 Ringelmann. [District NSR Rule] Federally Enforceable Through Title V Permit
23. Sulfur content of scrubbed TEOR gas and flare pilot gas shall not exceed 1 gr/100scf. [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.

24. All well vent gas shall be desulfurized prior to incineration and shall be disposed of in flare only. [District NSR Rule] Federally Enforceable Through Title V Permit
25. Emission rates for flare shall not exceed any of the following limits: 0.008 lb-PM10/MMBtu, 0.068 lb-NO<sub>x</sub>/MMBtu (as NO<sub>2</sub>), 0.063 lb-VOC/MMBtu, or 0.37 lb-CO/MMBtu. [District NSR Rule] Federally Enforceable Through Title V Permit
26. The higher heating value of the flared gas shall be monitored at least quarterly. Measured higher heating value and quantity of gas flared shall be used to determine compliance with heat input limits. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
27. VOC content of well vent vapor gas shall not exceed 10% by weight. If the VOC content of the well vent vapor gas is less than 10% by weight for 8 consecutive quarterly samplings per District approved plan, sampling frequency shall only be required annually. Representative samples shall be collected during periods of normal operation and not be within 48 hours after routine maintenance or repair. Records of test shall be maintained for a period of five years and be made readily available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit
28. The VOC content by weight percent (wt.%) shall be determined using American Society of Testing and Materials (ASTM) D1945 for gases and South Coast Air Quality Management District (SCAQMD) Method 304-91 or the latest revision of ASTM Method E168, E169 or E260 for liquids. [District Rule 4401, 6.3.5] Federally Enforceable Through Title V Permit
29. Permittee shall test annually the sulfur content of scrubbed casing gas using ASTM method D1072, D3031, D4084, or D3246 and make test results readily available for District inspection. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
30. Permittee shall maintain a current well roster and shall make such roster, component count and resulting emissions readily available for District inspection upon request. [District Rule 1070] Federally Enforceable Through Title V Permit
31. Condensed liquids from condensate handling system shall be piped in closed systems to the WASP disposal well. [District NSR Rule] Federally Enforceable Through Title V Permit
32. Emergency condensate overflow pit shall be empty except during breakdown conditions pursuant to Rule 1100. [District NSR Rule] Federally Enforceable Through Title V Permit
33. All wells served by this vapor control system shall be shut-in and shall not vent to the atmosphere in the event of failure of the non-condensable VOC disposal system. [District NSR Rule] Federally Enforceable Through Title V Permit
34. Permittee shall at least monthly, measure and record sulfur content and BTU content of TEOR gas exiting the desulfurizer using ASTM method D1072, D3031, D4084, D3246 or a gas detector tube, and shall make all records and analyses readily available for District inspection. [District NSR Rule and District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
35. Permittee shall maintain daily records of pilot gas and TEOR gas flared and shall make such records readily available for District inspection for a period of five years. [District Rule 2520, 9.4.2 and District Rule 1070] Federally Enforceable Through Title V Permit
36. The flare shall be operated according to the manufacturer's specifications, a copy of which shall be maintained on site. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
37. If this flare requires a pilot flame, then the flare shall be operated with a flame present at all times, and kept in operation when emissions may be vented to it. The presence of a flare pilot flame shall be monitored using a thermocouple or any other equivalent device to detect the presence of a flame. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
38. This flare shall be inspected every two weeks while in operation for visible emissions. If visible emissions are observed, corrective action shall be taken. If visible emissions continue, an EPA Method 9 test shall be conducted within 72 hours. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

39. This flare shall not be used as a leak control device as described in Rule 4403, 5.3.1, nor as a control device for any permit unit subject to NSPS, without modification of permit requirements to address 40 CFR 60.18. [District Rule 2520, 9.3.3] Federally Enforceable Through Title V Permit

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-1326-28-14

**EXPIRATION DATE:** 03/31/2016

**SECTION:** 2 **TOWNSHIP:** 28S **RANGE:** 27E

## **EQUIPMENT DESCRIPTION:**

THERMALLY ENHANCED OIL RECOVERY OPERATION INCLUDING DEEP EMERGENCY OVERFLOW PIT WITH MESH COVER, HORIZONTAL GAS-LIQUID SEPARATOR, AIR-COOLED HEAT EXCHANGER, HORIZONTAL CONDENSATE COLLECTION VESSEL WITH LIQUID TRANSFER PUMPS, 30 HP COMPRESSOR (K-101), 2.9 MMBTU/HR MCGILL STANDBY FLARE (#1011-2) EQUIPPED WITH 2 IN DIA BURNER TIP, AIR ASSIST BLOWER, KO DRUM SHARED WITH PERMIT UNIT S-1326-27, AND WELL VENT VAPOR CONTROL SYSTEM SERVING 150 STEAM DRIVE WELLS.

## **PERMIT UNIT REQUIREMENTS**

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1. TEOR operation shall include deep emergency overflow pit with mesh cover, horizontal gas-liquid separator, air-cooled heat exchanger, horizontal condensate collection vessel with liquid transfer pumps for the pumping of condensate to heavy oil tank battery, 30 hp compressor (K-101) with compressed vapors sent to common field fuel gas line, and production well vent casing line to TEOR system S-1326-27. [District NSR Rule] Federally Enforceable Through Title V Permit
2. Wells may be operated with closed casing vents or be vented to vapor control system. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Fluids produced from wells with closed vents shall be introduced only to production equipment served by vapor control system listed on tank S-1326-201 which is 99% efficient. [District NSR Rule] Federally Enforceable Through Title V Permit
4. The crude oil production from wells associated with this permit unit shall not lie within 1000 feet of an air injection well used for in-situ combustion. [District Rule 4407, 2.0, 3.4, and 3.5] Federally Enforceable Through Title V Permit
5. During the time any steam-enhanced crude oil production well is undergoing service or repair while the well is not producing, it shall be exempt from the emission control requirements of District Rule 4401, 5.0 (as amended January 15, 1998). [District Rule 4401, 4.1] Federally Enforceable Through Title V Permit
6. All required source testing shall conform to the compliance testing procedures described in District Rule 1081 (as amended December 16, 1993). [District Rule 1081] Federally Enforceable Through Title V Permit
7. The operator shall maintain monitoring records of the date and well identification where steam injection or well stimulation occurs. [District Rule 4401, 6.1] Federally Enforceable Through Title V Permit
8. The uncontrolled VOC emissions from any well vent shall be reduced by at least 99 percent by weight or, if several steam-enhanced crude oil production well vents are connected to a vapor collection and control system, total uncontrolled VOC emissions shall be reduced by at least 99 percent. This requirement does not apply to cyclic wells located on contiguous and adjacent oil production properties with less than 10 cyclic wells owned by or under the control of a company. [District Rule 4401, 5.1 and 5.2] Federally Enforceable Through Title V Permit
9. For cyclic wells located on properties with less than 10 cyclic wells and owned by a company, the uncontrolled VOC emissions from any well vent or system of well vents connected to a single control device shall be reduced by at least 50 percent. Properties shall include contiguous and adjacent oil production properties owned by or under control of the company. [District Rule 4401, 5.4] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

10. Total number of leaks from the vapor collection and control system, including condensate handling, shall not exceed the number as allowed by Rule 4401 (as amended January 15, 1998) at any one time. [District Rule 4401, 5.3] Federally Enforceable Through Title V Permit
11. Operator shall affix a readily visible tag bearing the date on which a leak is detected. The tag shall remain in place until the leaking component is repaired. [District Rule 4401, 5.3.1] Federally Enforceable Through Title V Permit
12. Operator shall repair each leak within 15 days of detection. The APCO may grant a 10 day extension if the operator demonstrates that the necessary and sufficient actions have and are being taken to correct the leak. [District Rule 4401, 5.3.1] Federally Enforceable Through Title V Permit
13. Operator shall maintain all components of a well vent vapor collection and control system in good repair. Components of the well vent vapor collection and control system shall include all piping, valves, fittings, pumps, compressors, tanks, etc. used to collect, control, store, or dispose of VOC condensate or non-condensable VOCs and which is prior to any blending of VOC condensate with crude oil or blending of non-condensable VOCs with gases to be used as a fuel. [District Rule 4401, 5.3 and 5.3.2] Federally Enforceable Through Title V Permit
14. Annual control efficiency compliance tests shall be performed on all vapor collection and control systems used to control emissions from steam-enhanced crude oil production wells. Testing shall be performed by source tester certified by the California Air Resource Board (CARB) certified contractors 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 the requirements of this condition if the vapor control system does not exhaust to atmosphere or if all uncondensed VOC emissions collected by a vapor collection and control system are burned in fuel burning equipment or in a smokeless open flare and the source's Operating Permit contains adequate periodic monitoring to ensure the source meets 99% control efficiency. [District Rule 4401, 5.1, 5.2 and 6.2.1] Federally Enforceable Through Title V Permit
15. 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 District Rule 4401, 6.3.1] Federally Enforceable Through Title V Permit
16. The permittee shall perform leak inspections at least annually, using a portable hydrocarbon detection instrument in accordance with USEPA Method 21. [District Rules 2520, 9.3.2 and 4401, 6.3.3] Federally Enforceable Through Title V Permit
17. Compliance with permit conditions in the Title V permit shall be deemed compliance with Kern County Rule 108.1. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
18. Compliance with permit conditions in the Title V permit shall be deemed compliance with SJVUAPCD Rule 4401 (Amended January 15, 1998), excluding sections 5.1 and 5.2 for control systems which have been waived from complying with the requirement of section 6.2.1. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
19. The requirements of District Rule 4407 (Adopted May 19, 1994) do not apply to this permit unit because it is not an in situ combustion well vent. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
20. Components shall be maintained and leaks shall be repaired as specified in Rule 4401. [District NSR Rule] Federally Enforceable Through Title V Permit
21. The VOC content by weight percent (wt.%) shall be determined using American Society of Testing and Materials (ASTM) D1945 for gases and South Coast Air Quality Management District (SCAQMD) Method 304-91 or the latest revision of ASTM Method E168, E169 or E260 for liquids. [District Rule 4401, 6.3.5] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

22. Permittee shall maintain with the permit a current listing of all steam enhanced wells connected to the casing vent control system and shall make such listing readily available for District inspection upon request. [District NSR Rule] Federally Enforceable Through Title V Permit
23. Well vent vapor control system shall include vapor piping connected to tank vapor control system listed on permit #S-1326-201. [District NSR Rule] Federally Enforceable Through Title V Permit
24. Sulfur content of scrubbed TEOR gas shall not exceed 1 gr/100scf. [District Rule 2201] Federally Enforceable Through Title V Permit
25. Sulfur scrubber shall be operated to maintain continued compliance with fuel gas sulfur content limit of 1 grain-S/100 scf of fuel gas. [District NSR Rule] Federally Enforceable Through Title V Permit
26. Only PUC quality natural gas or comparable quality lease gas with sulfur content of 1 grain-S/100 scf or less shall be utilized as make-up gas for the horizontal condensate collection vessel and utilized as pilot fuel for standby flare. [District NSR Rule] Federally Enforceable Through Title V Permit
27. Sulfur scrubber shall be monitored monthly for H<sub>2</sub>S content of gas after treatment to determine when recharging is required. [District NSR Rule] Federally Enforceable Through Title V Permit
28. Permittee shall maintain a written record of H<sub>2</sub>S content and recharging dates and such records shall be made readily available for District inspection upon request. [District NSR Rule and District Rule 1070] Federally Enforceable Through Title V Permit
29. Permittee shall test annually the sulfur content of scrubbed casing gas using ASTM method D1072, D3031, D4084, or D3246 and make test results readily available for District inspection. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
30. VOC content of well vent vapor gas shall not exceed 10% by weight. If the VOC content of the well vent vapor gas is less than 10% by weight for 8 consecutive quarterly samplings per District approved plan, sampling frequency shall only be required annually. Representative samples shall be collected during periods of normal operation and not be within 48 hours after routine maintenance or repair. Records of test shall be maintained for a period of five years and be made readily available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit
31. The emergency condensate overflow pit shall be empty except during breakdown conditions pursuant to Rule 1100. [District NSR Rule] Federally Enforceable Through Title V Permit
32. Well head casing vent gas collection system shall be shut-in and shall not vent to the atmosphere in the event of failure of the non-condensable VOC disposal system. [District NSR Rule] Federally Enforceable Through Title V Permit

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-1326-35-8

**EXPIRATION DATE:** 03/31/2016

**SECTION:** 14 **TOWNSHIP:** 28S **RANGE:** 27E

**EQUIPMENT DESCRIPTION:**

THERMALLY ENHANCED OIL RECOVERY OPERATION WITH WELL VENT VAPOR CONTROL SYSTEM SERVING 150 STEAM ENHANCED WELLS, INCLUDING 50 HP COMPRESSOR, ONE AIR-COOLED VAPOR CONDENSER, AND PIPING TO FIELD FUEL GAS SYSTEM, DOGGR DISPOSAL WELL, AND FLARE (S-1326-260) (SECTION 14 YOUNG)

## PERMIT UNIT REQUIREMENTS

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1. TEOR operation shall include 50 hp compressor, one air-cooled vapor condenser, piping to field fuel gas system, DOGGR disposal well, and flare. (SECTION 14 Young). [District Rule 2201] Federally Enforceable Through Title V Permit
2. Wells may be operated with closed casing vents or be vented to vapor control system. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Collected vapors shall discharge to H<sub>2</sub>S scrubber prior to vapor combustion in flare or in steam generators S-1326-9, '-294, '-314, '-337, and '-338. [District NSR Rule] Federally Enforceable Through Title V Permit
4. Sulfur scrubber shall be monitored monthly for H<sub>2</sub>S content of gas after treatment to determine when recharging is required. [District NSR Rule and District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
5. Sulfur content of gas combusted in flare shall not exceed 1 gr/100 scf. [District NSR Rule, District Rule 4801, and Kern County Rule 407] Federally Enforceable Through Title V Permit
6. Permittee shall test annually the sulfur content of gas combusted in flare using ASTM method D1072, D3031, D4084, or D3246 and make test results readily available for District inspection. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
7. Flare shall operate with no visible emission in excess of 5% opacity. [District NSR Rule] Federally Enforceable Through Title V Permit
8. Maximum amount of gas (pilot and waste gas) combusted by flare shall not exceed 150.0 MMBtu/day. [District Rule 2201] Federally Enforceable Through Title V Permit
9. Emissions from the flare shall not exceed any of the following limits (based on total gas combusted): NO<sub>x</sub> (as NO<sub>2</sub>): 0.068 lb/MMBtu; PM<sub>10</sub>: 0.008 lb/MMBtu; CO: 0.37 lb/MMBtu; or VOC: 0.063 lb/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
10. The higher heating value of the flared gas shall be monitored at least quarterly. Measured higher heating value and quantity of gas flared shall be used to determine compliance with heat input limit. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
11. The flare shall be operated according to the manufacturer's specifications, a copy of which shall be maintained on site. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
12. If this flare requires a pilot flame, then the flare shall be operated with a flame present at all times, and kept in operation when emissions may be vented to it. The presence of a flare pilot flame shall be monitored using a thermocouple or any other equivalent device to detect the presence of a flame. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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



13. This flare shall be inspected every two weeks while in operation for visible emissions. If visible emissions are observed, corrective action shall be taken. If visible emissions continue, an EPA Method 9 test shall be conducted within 72 hours. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
14. This flare shall not be used as a leak control device as described in Rule 4403, 5.3.1, nor as a control device for any permit unit subject to NSPS, without modification of permit requirements to address 40 CFR 60.18. [District Rule 2520, 9.3.3] Federally Enforceable Through Title V Permit
15. A gas leak is defined as the detection of a concentration of total organic compounds, above background (measured in accordance with EPA Method 21) that exceeds the following values: 1) A major gas leak is a detection of greater than 10,000 ppmv as methane; and 2) A minor gas leak is a detection of 400 to 10,000 ppmv as methane for pressure relief devices (PRDs) and 2,000 to 10,000 for components other than PRDs. [District Rule 4401] Federally Enforceable Through Title V Permit
16. A liquid leak is defined as the dripping of VOC-containing liquid. A major liquid leak is a visible mist or a continuous flow of liquid that is not seal lubricant. A minor liquid leak is a liquid leak that is not a major liquid leak and drips liquid at a rate of more than three drops per minute, except for seal lubricant. [District Rule 4401] Federally Enforceable Through Title V Permit
17. Fluids produced from wells with closed vents shall be introduced only to production equipment served by vapor control system listed on tank S-1326-201 which is 99% efficient. [District NSR Rule] Federally Enforceable Through Title V Permit
18. Well vent vapors shall vent to the field fuel gas system, DOGGR approved injection wells, flare listed on permit S-1326-260, or steam generators S-1326-9, '-294, '-314, '-337, and '-338. [District Rule 2201] Federally Enforceable Through Title V Permit
19. The crude oil production from wells associated with this permit unit shall not lie within 1000 feet of an air injection well used for in-situ combustion. [District Rule 4407, 2.0, 3.4, and 3.5] Federally Enforceable Through Title V Permit
20. All required source testing shall conform to the compliance testing procedures described in District Rule 1081 (as amended December 16, 1993). [District Rule 1081] Federally Enforceable Through Title V Permit
21. Permittee shall keep the steam-enhanced crude oil production well vents closed and the front line production equipment downstream of the wells that carry produced fluids (crude oil or mixture of crude oil and water) shall be connected to a VOC collection and control system. The well vent may be temporarily opened during periods of attended service or repair of the well provided such activity is done as expeditiously as possible with minimal spillage of material and VOC emissions to the atmosphere. [District Rule 4401] Federally Enforceable Through Title V Permit
22. During the time any steam-enhanced crude oil production well is undergoing service or repair while the well is not producing, it shall be exempt from the emission control requirements of District Rule 4401, 5.0 (as amended December 14, 2006). [District Rule 4401, 4.1] Federally Enforceable Through Title V Permit
23. The uncontrolled VOC emissions from any well vent shall be reduced by at least 99 percent by weight or, if several steam-enhanced crude oil production well vents are connected to a vapor collection and control system, total uncontrolled VOC emissions shall be reduced by at least 99 percent. This requirement does not apply to cyclic wells located on contiguous and adjacent oil production properties with less than 10 cyclic wells owned by or under the control of a company. [District Rule 4401, 5.1 and 5.2] Federally Enforceable Through Title V Permit
24. For cyclic wells located on properties with less than 10 cyclic wells and owned by a company, the uncontrolled VOC emissions from any well vent or system of well vents connected to a single control device shall be reduced by at least 50 percent. Properties shall include contiguous and adjacent oil production properties owned by or under control of the company. [District Rule 4401, 5.4] Federally Enforceable Through Title V Permit
25. Total number of leaks from the vapor collection and control system, including condensate handling, shall not exceed the number as allowed by Rule 4401 (as amended December 14, 2006) at any one time. [District Rule 4401, 5.3] Federally Enforceable Through Title V Permit
26. Operator shall affix a readily visible tag bearing the date on which a leak is detected. The tag shall remain in place until the leaking component is repaired. [District Rule 4401, 5.3.1] 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.

27. Operator shall maintain all components of a well vent vapor collection and control system in good repair. Components of the well vent vapor collection and control system shall include all piping, valves, fittings, pumps, compressors, tanks, etc. used to collect, control, store, or dispose of VOC condensate or non-condensable VOCs and which is prior to any blending of VOC condensate with crude oil or blending of non-condensable VOCs with gases to be used as a fuel. [District Rule 4401, 5.3 and 5.3.2] Federally Enforceable Through Title V Permit
28. Annual control efficiency compliance tests shall be performed on all vapor collection and control systems used to control emissions from steam-enhanced crude oil production wells. Testing shall be performed by source tester certified by the California Air Resource Board (CARB) certified contractors 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 the requirements of this condition if the vapor control system does not exhaust to atmosphere or if all uncondensed VOC emissions collected by a vapor collection and control system are burned in fuel burning equipment or in a smokeless open flare and the source's Operating Permit contains adequate periodic monitoring to ensure the source meets 99% control efficiency. [District Rule 4401, 5.1, 5.2 and 6.2.1] Federally Enforceable Through Title V Permit
29. The control efficiency of the vapor collection and control system used to control VOC emissions from steam enhanced crude oil production well shall be determined by mass balance based on most stringent of a source test, USEPA approved emission factors, or Air Pollution (AP)-42 emission factors for components; and the efficiency of destruction devices determined by USEPA Method 25, 25a, or 25b as applicable. [District Rule 4401, 6.3.1] Federally Enforceable Through Title V Permit
30. Permittee shall perform leak inspections at least annually, using a portable hydrocarbon detection instrument in accordance with USEPA Method 21. Where safety is a concern, such as measuring leaks from compressor seals or pump seals when the shaft is rotating, a person shall measure leaks by placing the instrument probe inlet at a distance of one centimeter or less from the surface of the component interface. [District Rules 2520, 9.3.2 and 4401] Federally Enforceable Through Title V Permit
31. The permittee shall not use any components that leak in excess of the applicable leak standards as specified in this permit. Components that have been found leaking in excess of the applicable leak standards of this rule may be used provided such leaking components have been identified with a tag for repair, are repaired, or are awaiting re-inspection after being repaired, within the applicable time period specified in this permit. [District Rule 4401] Federally Enforceable Through Title V Permit
32. 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
33. 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
34. During District compliance inspection, the following conditions shall be used to determination of a violation: 1) Existence of an open-ended line or a valve located at the end of the line that is not sealed with a blind flange, plug, cap, or a second closed valve that is not closed at all times, except during attended operations requiring process fluid flow through the open-ended lines. Attended operations include draining or degassing operations, connection of temporary process equipment, sampling of process streams, emergency venting, and other normal operational needs, provided such operations are done as expeditiously as possible and with minimal spillage of material and VOC emissions to the atmosphere; 2) Existence of a component with a major liquid leak; 3) Existence of a component with a gas leak greater than 50,000 ppmv; or 4) Existence of a component leak consisting of a minor liquid or gas leak, or a gas leak greater than 10,000 ppmv up to 50,000 ppmv, in excess of the allowable number of leaks specified in Table 3 of Rule 4401. [District Rule 4401] Federally Enforceable Through Title V Permit
35. Permittee shall keep all hatches closed at all times except during sampling or adding of process material through the hatch, or during attended repair, replacement, or maintenance operations, provided such activities are done as expeditiously as possible with minimal spillage of material and VOC emissions to the atmosphere. [District Rule 4401] 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.

36. Except for pipes and unsafe-to-monitor components, permittee shall visually inspect all pipes at least once every year. Any visual inspection of pipes that indicates a leak that cannot be immediately repaired to meet the leak standards of Rule 4401 shall be inspected within 24 hours after detecting the leak. If a leak is found, the leak shall be repaired as soon as practicable but not later than the time frame specified in Table 4 of Rule 4401. [District Rule 4401] Federally Enforceable Through Title V Permit
37. Permittee shall inspect all unsafe-to-monitor components during each turnaround. [District Rule 4401] Federally Enforceable Through Title V Permit
38. Permittee shall inspect audio-visually (by hearing and by sight) for leaks all accessible operating pumps, compressors, and pressure relief devices (PRDs) in service at least once each calendar week. [District Rule 4401] Federally Enforceable Through Title V Permit
39. Any audio-visual inspection of an accessible operating pump, compressor, and PRD performed by an operator that indicates a leak that cannot be immediately repaired to meet the leak standards of Rule 4401 shall be inspected not later than 24 hours after conducting the audio-visual inspection. If a leak is found, the leak shall be repaired as soon as practicable but not later than the time frame specified in Table 4 of Rule 4401. [District Rule 4401] Federally Enforceable Through Title V Permit
40. Permittee shall initially inspect a PRD that releases to the atmosphere as soon as practicable but not later than 24 hours after the discovery of the release. Permittee shall re-inspect the PRD not earlier than 24 hours after the initial inspection but not later than 15 calendar days after the initial inspection. [District Rule 4401] Federally Enforceable Through Title V Permit
41. Permittee shall inspect all new, replaced, or repaired fittings, flanges, and threaded connections within 72 hours of placing the component in service. [District Rule 4401] Federally Enforceable Through Title V Permit
42. Except for PRDs, permittee shall inspect a component that has been repaired or replaced not later than 15 calendar days after the component was repaired or replaced. [District Rule 4401] Federally Enforceable Through Title V Permit
43. Permittee shall affix a readily visible weatherproof tag to a leaking component upon detection of the leak. The following information shall be included on the tag: 1) the date and time of leak detection; 2) the date and time of leak measurement; 3) leak concentration in ppmv for a gaseous leak; 4) description of whether it is a major liquid leak or a minor liquid leak; and 5) whether the component is an essential component, an unsafe-to-monitor component, or a critical component. [District Rule 4401] Federally Enforceable Through Title V Permit
44. Permittee shall keep the tag affixed to the component until all of the following conditions have been met: 1) the leaking component has been repaired or replaced, and 2) the component has been re-inspected using the test methods described in this permit; and 3) the component is found to be in compliance with the requirements of Rule 4401. [District Rule 4401] Federally Enforceable Through Title V Permit
45. Permittee shall minimize a component leak in order to stop or reduce leakage to the atmosphere immediately to the extent possible, but not later than one (1) hour after detection of the leak. [District Rule 4401] Federally Enforceable Through Title V Permit
46. Except for leaking critical components or leaking essential components, if the operator has minimized a leak but the leak still exceeds the applicable leak limits, the operator shall comply with at least one of the following requirements as soon as practicable but not later than the time period specified in Table 4 of Rule 4401: 1) repair or replace the leaking component; 2) vent the leaking component to a VOC collection and control system; or 3) remove the leaking component from operation. [District Rule 4401] Federally Enforceable Through Title V Permit
47. The leak rate, measured after leak minimization has been performed, shall be used to determine the applicable repair period specified in Table 4 of Rule 4401 and the time of initial leak detection shall be the start of the repair period specified in Table 4 of Rule 4401. [District Rule 4401] Federally Enforceable Through Title V Permit
48. 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

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

49. Permittee shall maintain an inspection log in which, at a minimum, all of the following information shall be recorded for each inspection performed: 1) The total number of components inspected, and the total number and percentage of leaking components found by component type; 2) The location, type, and name or description of each leaking component and description of any unit where the leaking component is found; 3) The date of leak detection and the method of leak detection; 4) For gaseous leaks, the leak concentration in ppmv, and for liquid leaks record whether the leak is a major liquid leak or a minor liquid leak; 5) The date of repair, replacement, or removal from operation of leaking components; 6) The identify and location of essential components and critical components found leaking that cannot be repaired until the next process unit turnaround or not later than one year after leak detection, whichever comes earlier; 7) The methods used to minimize the leak from essential components and critical components found leaking that cannot be repaired until the next process unit turnaround or not later than one year after leak detection, whichever comes earlier; 8) The date of re-inspection and the leak concentration in ppmv after the component is repaired or is replaced; 9) The inspector's name, business mailing address, and business telephone number; and 10) The date and signature of the facility operator responsible for the inspection and repair program certifying the accuracy of the information recorded in the log. [District Rule 4401] Federally Enforceable Through Title V Permit
50. Compliance with permit conditions in the Title V permit shall be deemed compliance with Kern County Rule 108.1. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
51. Compliance with permit conditions in the Title V permit shall be deemed compliance with SJVUAPCD Rule 4401 (Amended December 14, 2006), excluding sections 5.1 and 5.2 for control systems which have been waived from complying with the requirement of section 6.2.1. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
52. The requirements of District Rule 4407 (Adopted May 19, 1994) do not apply to this permit unit because it is not an in situ combustion well vent. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
53. Wells authorized by this permit shall comply with all applicable requirements of Rule 4401. [District Rule 4401] Federally Enforceable Through Title V Permit
54. Well head casing vent collection piping network shall be limited to 150 steam enhanced wells. [District NSR Rule] Federally Enforceable Through Title V Permit
55. Leaks shall be inspected and repaired as specified in Rule 4401. [District Rule 4401] Federally Enforceable Through Title V Permit
56. VOC content of well vent vapor gas shall not exceed 10% by weight. If the VOC content of the well vent vapor gas is less than 10% by weight for 8 consecutive quarterly samplings per District approved plan, sampling frequency shall only be required annually. Representative samples shall be collected during periods of normal operation and not be within 48 hours after routine maintenance or repair. Records of test shall be maintained for a period of five years and be made readily available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit
57. VOC content shall be determined using ASTM Method D1945, D3588, or EPA method 18. [District Rule 4401, 6.2.3] Federally Enforceable Through Title V Permit
58. 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
59. The operator shall maintain monitoring records of the date and well identification where steam injection or well stimulation occurs. [District Rule 4401, 6.1] Federally Enforceable Through Title V Permit
60. The permittee shall keep accurate records of the amount of gas (pilot and waste gas) flared, H2S content and recharging dates, for a period of five years, and shall make such records available for District inspection upon request. [District NSR Rule] 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.

61. Permittee shall maintain a current well roster of all wells served by collection system, and such roster shall be made readily available for District inspection upon request. [District Rule 2520, 9.3.2 and District Rule 1070] Federally Enforceable Through Title V Permit
62. Records shall be maintained of each calibration of the portable hydrocarbon detection instrument utilized for inspecting components. The records shall include a copy of the current calibration gas certification from the vendor of the calibration gas cylinder, the date of calibration, the concentration of calibration gas, the instrument reading of calibration gas before adjustment, the instrument reading of calibration gas after adjustment, the calibration gas expiration date, and the calibration gas cylinder pressure at the time of calibration. [District Rule 4401] Federally Enforceable Through Title V Permit
63. All records required by this permit shall be maintained and retained on-site for a minimum of five (5) years and made available for District, ARB, and EPA inspection upon request. [District Rule 4401] Federally Enforceable Through Title V Permit

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-1326-36-2

**EXPIRATION DATE:** 03/31/2016

**EQUIPMENT DESCRIPTION:**

UP TO 5 UNCONTROLLED CYCLICLY STEAMED OIL WELLS HEAVY OIL CENTRAL STATIONARY SOURCE

## PERMIT UNIT REQUIREMENTS

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1. Sulfur compounds emission concentration shall not exceed 0.2 percent by volume calculated as sulfur dioxide (SO<sub>2</sub>), on a dry basis averaged over 15 consecutive minutes. [District Rule 4801] Federally Enforceable Through Title V Permit
2. An increase in the number of wells listed on this Permit to Operate shall require an Authority to Construct. [District Rule 2201] Federally Enforceable Through Title V Permit
3. The well contained in this permit unit shall be located more than 1000 feet from an existing well vent vapor control system. [District Rule 4401, 4.4] Federally Enforceable Through Title V Permit
4. Permittee shall maintain a current well roster of all open well vents and, upon request, shall make such roster available for District inspection. [District 1070]
5. 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 2520, 9.4.2] Federally Enforceable Through Title V Permit

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-1326-46-7

**EXPIRATION DATE:** 03/31/2016

**SECTION:** NE 23 **TOWNSHIP:** 28S **RANGE:** 27E

**EQUIPMENT DESCRIPTION:**

1000 BBL FIXED-ROOF STOCK TANK WITH VAPOR CONTROL SYSTEM INCLUDING GAS/LIQUID SEPARATOR SHARED WITH PERMIT UNITS S-1326-47, -48, -214, AND -215 (FANO LEASE)

## PERMIT UNIT REQUIREMENTS

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1. The true vapor pressure of the liquids stored in this tank shall not exceed 0.5 psia. [District Rules 4623, 4.4 and 2201] Federally Enforceable Through Title V Permit
2. Tank vapors shall be compressed and routed to approved control equipment listed on permit S-1326-26. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Vapor control efficiency shall be maintained at no less than 99%. [District Rule 2201] Federally Enforceable Through Title V Permit
4. The vapor control system compressor shall activate when the tank internal pressure exceeds 1.5 in. w.c. and deactivate when the tank internal pressure falls to 0.5 in. w.c. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Fuel gas system gas shall consist primarily of methane containing no more than 5% by weight hydrocarbons heavier than butane and shall have a sulfur content of no more than 0.75 gr/100 scf. [District Rule 2201] Federally Enforceable Through Title V Permit
6. The tank pressure relief valves shall not open unless the tank internal pressure exceeds 2.0 oz. or falls below 0.5 oz. vacuum. [District Rule 2201] Federally Enforceable Through Title V Permit
7. This permit authorizes tank cleaning that is not the result of breakdowns or poor maintenance as a routine maintenance activity. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Prior to opening the tank to allow tank cleaning the following procedure must be followed. Operate PV valve and vapor recovery system (if equipped) during emptying, filling, and flushing. During filling and purging, no vapor leakage is allowed. Drain all liquid from the tank to the maximum extent feasible prior to opening the tank. [District Rule 2201] Federally Enforceable Through Title V Permit
9. Prior to opening the tank to allow tank cleaning one of the following options must be followed: 1) operate the vapor recovery system for at least 2 hours after all the liquid in the tank has been drained, 2) displace vapors floating the oil pad off with water such that 90% of the tank volume is displaced, 3) vent the tank to the vapor control system until the vapor concentration is less than 10% of the lower explosive limit (LEL) or 5,000 ppmv whichever is less; or 4) vent the tank to the vapor control system for a length of time determined by the following relationship:  $t = 2.3 V / Q$ , where  $t$  = time,  $V$  = tank volume (cubic feet), and  $Q$  = flow rate to the vapor control system as determined using appropriate engineering calculations. [District Rule 2201] Federally Enforceable Through Title V Permit
10. Allowable methods of cleaning include using steam, diesel, solvents with an initial boiling point of greater than 302 F, solvents with a vapor pressure of less than 0.5 psia, or solvents with 50 grams/liter VOC content or less. Steam cleaning shall be allowed at locations where wastewater treatment facilities are limited or during December through March. [District Rule 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.

11. Permittee shall maintain records of each period of cleaning and maintenance when the tank is disconnected or isolated from the vapor control system. Records shall include the date that tank cleaning was initiated, the date tank cleaning was completed, the procedure used to vent tank vapors prior to opening, the method of tank cleaning used, and a description of internal and external tank repairs and maintenance performed. Such records shall be retained for a period of at least 5 years and shall be made available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit
12. To qualify for quantification of no fugitive emissions, operator shall conduct quarterly gas sampling after TVR compressor (prior to connection to any other vapor control system) and at either the first line tank or at any secondary tank which is heated above ambient temperature. If gas samples are less than 10% VOC by weight for 8 consecutive quarterly samplings, sampling frequency shall only be required annually and whenever there is a change in source or type of petroleum processed. Samples shall be collected during periods of normal operation, and not be within 48 hours after routine maintenance or repair. [District Rule 2201] Federally Enforceable Through Title V Permit
13. Permittee shall provide the District with written notification at least 30 days prior to installation of components handling fluid streams with a VOC content of 10% or less by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
14. Any 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. Gas-tight shall be defined as emitting no more than 10,000 ppm of methane with an instrument calibrated with methane in accordance with USEPA Method 21. Emissions in excess of this limit shall be considered a leak. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
15. All tank seams, welds, joints, piping, valves, and fittings shall be inspected and maintained in a gas-tight condition. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
16. Compressor knockout drum liquids shall be piped only to vapor-controlled tanks or WASP disposal well. [District Rule 2201] Federally Enforceable Through Title V Permit
17. The permittee shall keep accurate records of liquids stored and true vapor pressure of such liquids. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
18. The operator shall conduct true vapor pressure (TVP) testing of the organic liquid stored in this tank at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored in this tank. [District Rule 4623, 6.3] Federally Enforceable Through Title V Permit
19. The API gravity of organic liquid stored in this tank 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, 6.2.2] Federally Enforceable Through Title V Permit
20. Control efficiency shall be determined by a comparison of controlled emissions to those emissions which would occur from a fixed or cone roof tank in the same product service without a vapor recovery system. Emissions shall be determined based on tank emission factors in USEPA Publication AP-42, component counts for fugitive emissions sources, recognized emission factors for fugitive emission sources and the efficiency of any VOC destruction device. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
21. Operator shall ensure the vapor control system is functional and operating as designed at all times, except during periods of routine maintenance. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
22. Operator shall determine the true vapor pressure of the petroleum liquid stored in the tank located at the beginning of the process flow after the production header at least once per year. 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, shall be used to determine the TVP of crude oil with an API gravity of 260 or less, or for any API gravity that is specified in this test method. Determinations shall be made annually during summer and whenever there is a change in the source or type of petroleum entering the tank. [District Rule 4623, 6.4.4] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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



23. 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, 6.3.6] Federally Enforceable Through Title V Permit
24. 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, 6.3.6] Federally Enforceable Through Title V Permit
25. As used in this permit, the term "source or type of petroleum" shall mean petroleum liquids with similar characteristics. The operator shall maintain records of API gravity of petroleum liquids store in this unit to determine which oil are from common source. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-1326-47-5

**EXPIRATION DATE:** 03/31/2016

**SECTION:** NE 23 **TOWNSHIP:** 28S **RANGE:** 27E

**EQUIPMENT DESCRIPTION:**

1000 BBL FIXED-ROOF STOCK TANK SERVED BY VAPOR CONTROL SYSTEM LISTED ON S-1326-46 (FANO LEASE)

## PERMIT UNIT REQUIREMENTS

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1. The true vapor pressure of the liquids stored in this tank shall not exceed 0.5 psia. [District Rules 4623, 4.4 and 2201] Federally Enforceable Through Title V Permit
2. Vapor control efficiency shall be maintained at no less than 99%. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Fuel gas system gas shall consist primarily of methane containing no more than 5% by weight hydrocarbons heavier than butane and shall have a sulfur content of no more than 0.75 gr/100 scf. [District Rule 2201] Federally Enforceable Through Title V Permit
4. The tank pressure relief valves shall not open unless the tank internal pressure exceeds 2.0 oz. or falls below 0.5 oz. vacuum. [District Rule 2201] Federally Enforceable Through Title V Permit
5. This permit authorizes tank cleaning that is not the result of breakdowns or poor maintenance as a routine maintenance activity. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Prior to opening the tank to allow tank cleaning the following procedure must be followed. Operate PV valve and vapor recovery system (if equipped) during emptying, filling, and flushing. During filling and purging, no vapor leakage is allowed. Drain all liquid from the tank to the maximum extent feasible prior to opening the tank. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Prior to opening the tank to allow tank cleaning one of the following options must be followed: 1) operate the vapor recovery system for at least 2 hours after all the liquid in the tank has been drained, 2) displace vapors floating the oil pad off with water such that 90% of the tank volume is displaced, 3) vent the tank to the vapor control system until the vapor concentration is less than 10% of the lower explosive limit (LEL) or 5,000 ppmv whichever is less; or 4) vent the tank to the vapor control system for a length of time determined by the following relationship:  $t = 2.3 V / Q$ , where  $t$  = time,  $V$  = tank volume (cubic feet), and  $Q$  = flow rate to the vapor control system as determined using appropriate engineering calculations. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Allowable methods of cleaning include using steam, diesel, solvents with an initial boiling point of greater than 302 F, solvents with a vapor pressure of less than 0.5 psia, or solvents with 50 grams/liter VOC content or less. Steam cleaning shall be allowed at locations where wastewater treatment facilities are limited or during December through March. [District Rule 2201] Federally Enforceable Through Title V Permit
9. Permittee shall maintain records of each period of cleaning and maintenance when the tank is disconnected or isolated from the vapor control system. Records shall include the date that tank cleaning was initiated, the date tank cleaning was completed, the procedure used to vent tank vapors prior to opening, the method of tank cleaning used, and a description of internal and external tank repairs and maintenance performed. Such records shall be retained for a period of at least 5 years and shall be made available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

10. To qualify for quantification of no fugitive emissions, operator shall conduct quarterly gas sampling after TVR compressor (prior to connection to any other vapor control system) and at either the first line tank or at any secondary tank which is heated above ambient temperature. If gas samples are less than 10% VOC by weight for 8 consecutive quarterly samplings, sampling frequency shall only be required annually and whenever there is a change in source or type of petroleum processed. Samples shall be collected during periods of normal operation, and not be within 48 hours after routine maintenance or repair. [District Rule 2201] Federally Enforceable Through Title V Permit
11. Permittee shall provide the District with written notification at least 30 days prior to installation of components handling fluid streams with a VOC content of 10% or less by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
12. Any 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. Gas-tight shall be defined as emitting no more than 10,000 ppm of methane with an instrument calibrated with methane in accordance with USEPA Method 21. Emissions in excess of this limit shall be considered a leak. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
13. All tank seams, welds, joints, piping, valves, and fittings shall be inspected and maintained in a leak-free condition. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
14. The permittee shall keep accurate records of liquids stored and true vapor pressure of such liquids. [District Rule 4623.6.3] Federally Enforceable Through Title V Permit
15. The operator shall conduct true vapor pressure (TVP) testing of the organic liquid stored in this tank at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored in this tank. [District Rule 4623, 6.2.2] Federally Enforceable Through Title V Permit
16. The TVP testing shall be conducted at actual storage temperature of the organic liquid in the tank. The permittee shall also conduct an API gravity testing. [District Rule 4623, 6.2.2] Federally Enforceable Through Title V Permit
17. The API gravity of organic liquid stored in this tank 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
18. Control efficiency shall be determined by a comparison of controlled emissions to those emissions which would occur from a fixed or cone roof tank in the same product service without a vapor recovery system. Emissions shall be determined based on tank emission factors in USEPA Publication AP-42, component counts for fugitive emissions sources, recognized emission factors for fugitive emission sources and the efficiency of any VOC destruction device. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
19. Operator shall ensure the vapor control system is functional and operating as designed at all times, except during periods of routine maintenance. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
20. Operator shall determine the true vapor pressure of the petroleum liquid stored in the tank located at the beginning of the process flow after the production header at least once per year. 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, shall be used to determine the TVP of crude oil with an API gravity of 26 or less, or for any API gravity that is specified in this test method. Determinations shall be made annually during summer and whenever there is a change in the source or type of petroleum entering the tank. [District Rules 2520, 9.3.2 and 4623, 4.4] Federally Enforceable Through Title V Permit
21. Permittee shall submit the records of TVP and API gravity testing to the APCO within 45 days after the date of testing. The records shall include the tank identification number, Permit to Operate number, type of stored organic liquid, TVP and API gravity of the organic liquid, test methods used, and a copy of the test results. [District Rule 4623, 6.3.6] Federally Enforceable Through Title V Permit
22. 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, 6.3.6] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

23. As used in this permit, the term "source or type of petroleum" shall mean petroleum liquids with similar characteristics. The operator shall maintain records of API gravity of petroleum liquids store in this unit to determine which oil are from common source. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-1326-48-5

**EXPIRATION DATE:** 03/31/2016

**SECTION:** NE 23 **TOWNSHIP:** 28S **RANGE:** 27E

**EQUIPMENT DESCRIPTION:**

5000 BBL FIXED-ROOF WASTE WATER TANK SERVED BY VAPOR CONTROL SYSTEM LISTED ON S-1326-46  
(FANO LEASE)

## PERMIT UNIT REQUIREMENTS

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1. The true vapor pressure of the liquids stored in this tank shall not exceed 0.5 psia. [District Rules 4623, 2.0 and 2201] Federally Enforceable Through Title V Permit
2. Vapor control efficiency shall be maintained at no less than 99%. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Fuel gas system gas shall consist primarily of methane containing no more than 5% by weight hydrocarbons heavier than butane and shall have a sulfur content of no more than 0.75 gr/100 scf. [District Rule 2201] Federally Enforceable Through Title V Permit
4. The tank pressure relief valves shall not open unless the tank internal pressure exceeds 2.0 oz. or falls below 0.5 oz. vacuum. [District Rule 2201] Federally Enforceable Through Title V Permit
5. This permit authorizes tank cleaning that is not the result of breakdowns or poor maintenance as a routine maintenance activity. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Prior to opening the tank to allow tank cleaning the following procedure must be followed. Operate PV valve and vapor recovery system (if equipped) during emptying, filling, and flushing. During filling and purging, no vapor leakage is allowed. Drain all liquid from the tank to the maximum extent feasible prior to opening the tank. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Prior to opening the tank to allow tank cleaning one of the following options must be followed: 1) operate the vapor recovery system for at least 2 hours after all the liquid in the tank has been drained, 2) displace vapors floating the oil pad off with water such that 90% of the tank volume is displaced, 3) vent the tank to the vapor control system until the vapor concentration is less than 10% of the lower explosive limit (LEL) or 5,000 ppmv whichever is less; or 4) vent the tank to the vapor control system for a length of time determined by the following relationship:  $t = 2.3 V / Q$ , where  $t$  = time,  $V$  = tank volume (cubic feet), and  $Q$  = flow rate to the vapor control system as determined using appropriate engineering calculations. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Allowable methods of cleaning include using steam, diesel, solvents with an initial boiling point of greater than 302 F, solvents with a vapor pressure of less than 0.5 psia, or solvents with 50 grams/liter VOC content or less. Steam cleaning shall be allowed at locations where wastewater treatment facilities are limited or during December through March. [District Rule 2201] Federally Enforceable Through Title V Permit
9. Permittee shall maintain records of each period of cleaning and maintenance when the tank is disconnected or isolated from the vapor control system. Records shall include the date that tank cleaning was initiated, the date tank cleaning was completed, the procedure used to vent tank vapors prior to opening, the method of tank cleaning used, and a description of internal and external tank repairs and maintenance performed. Such records shall be retained for a period of at least 5 years and shall be made available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

10. To qualify for quantification of no fugitive emissions, operator shall conduct quarterly gas sampling after TVR compressor (prior to connection to any other vapor control system) and at either the first line tank or at any secondary tank which is heated above ambient temperature. If gas samples are less than 10% VOC by weight for 8 consecutive quarterly samplings, sampling frequency shall only be required annually and whenever there is a change in source or type of petroleum processed. Samples shall be collected during periods of normal operation, and not be within 48 hours after routine maintenance or repair. [District Rule 2201] Federally Enforceable Through Title V Permit
11. Permittee shall provide the District with written notification at least 30 days prior to installation of components handling fluid streams with a VOC content of 10% or less by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
12. Any tank gauging or sampling device on a tank vented to the vapor recovery system shall be equipped with a leak-free cover which shall be closed at all times except during gauging or sampling. Leak-free shall be defined as emitting no more than 10,000 ppm of methane measured at a distance of one centimeter from the potential source with an instrument calibrated with methane in accordance with USEPA Method 21. Emissions in excess of this limit shall be considered a leak. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
13. All tank seams, welds, joints, piping, valves, and fittings shall be inspected and maintained in a leak-free condition. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
14. The permittee shall keep accurate records of liquids stored and true vapor pressure of such liquids. [District Rule 4623, 6.3] Federally Enforceable Through Title V Permit
15. The operator shall conduct true vapor pressure (TVP) testing of the organic liquid stored in this tank at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored in this tank. [District Rule 4623, 6.2.2] Federally Enforceable Through Title V Permit
16. The TVP testing shall be conducted at actual storage temperature of the organic liquid in the tank. The permittee shall also conduct an API gravity testing. [District Rule 4623, 6.2.2] Federally Enforceable Through Title V Permit
17. The API gravity of organic liquid stored in this tank 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
18. Control efficiency shall be determined by a comparison of controlled emissions to those emissions which would occur from a fixed or cone roof tank in the same product service without a vapor recovery system. Emissions shall be determined based on tank emission factors in USEPA Publication AP-42, component counts for fugitive emissions sources, recognized emission factors for fugitive emission sources and the efficiency of any VOC destruction device. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
19. The operator shall ensure that the vapor control system is functional and is operating as designed at all times, except during periods of routine maintenance. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
20. Operator shall determine the true vapor pressure of the petroleum liquid stored in the tank located at the beginning of the process flow after the production header at least once per year. 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, shall be used to determine the TVP of crude oil with an API gravity of 260 or less, or for any API gravity that is specified in this test method. Determinations shall be made annually during summer and whenever there is a change in the source or type of petroleum entering the tank. [District Rule 4623, 6.4.4] Federally Enforceable Through Title V Permit
21. Permittee shall submit the records of TVP and API gravity testing to the APCO within 45 days after the date of testing. The records shall include the tank identification number, Permit to Operate number, type of stored organic liquid, TVP and API gravity of the organic liquid, test methods used, and a copy of the test results. [District Rule 4623, 6.3.6] Federally Enforceable Through Title V Permit
22. 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, 6.3.6] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

23. As used in this permit, the term "source or type of petroleum" shall mean petroleum liquids with similar characteristics. The operator shall maintain records of API gravity of petroleum liquids store in this unit to determine which oil are from common source. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-1326-101-3

**EXPIRATION DATE:** 03/31/2016

**SECTION:** 11 **TOWNSHIP:** 28S **RANGE:** 27E

**EQUIPMENT DESCRIPTION:**

1000 BBL FIXED-ROOF PETROLEUM STORAGE TANK #T-14 (NATIONAL TANK BATTERY).

## PERMIT UNIT REQUIREMENTS

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1. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623, 4.4] Federally Enforceable Through Title V Permit
2. Permittee shall conduct true vapor pressure (TVP) testing of the organic liquid stored in this tank at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored in this tank in order to maintain exemption from the rule. [District Rule 4623, 6.2.2] Federally Enforceable Through Title V Permit
3. 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, 6.2.2] Federally Enforceable Through Title V Permit
4. 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
5. 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
6. Operator shall determine the true vapor pressure of the petroleum liquid stored in the tank located at the beginning of the process flow after the production header at least once per year. 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, shall be used to determine the TVP of crude oil with an API gravity of 26 or less, or for any API gravity that is specified in this test method. Determinations shall be made annually during summer and whenever there is a change in the source or type of petroleum entering the tank. [District Rule 4623, 6.4.4] Federally Enforceable Through Title V Permit
7. 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, 6.3.6] Federally Enforceable Through Title V Permit
8. 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, 6.3.6] Federally Enforceable Through Title V Permit
9. 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]

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



# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-1326-119-3

**EXPIRATION DATE:** 03/31/2016

**SECTION:** 14 **TOWNSHIP:** 28S **RANGE:** 27E

**EQUIPMENT DESCRIPTION:**

2000 BBL FIXED-ROOF PETROLEUM STORAGE TANK #2GK-255 (LENHARDT USL).

## PERMIT UNIT REQUIREMENTS

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1. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623, 4.4] Federally Enforceable Through Title V Permit
2. Permittee shall conduct true vapor pressure (TVP) testing of the organic liquid stored in this tank at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored in this tank in order to maintain exemption from the rule. [District Rule 4623, 6.2.2] Federally Enforceable Through Title V Permit
3. 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, 6.2.2] Federally Enforceable Through Title V Permit
4. Operator shall determine the true vapor pressure of the petroleum liquid stored in the tank located at the beginning of the process flow after the production header at least once per year. 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, shall be used to determine the TVP of crude oil with an API gravity of 26ø or less, or for any API gravity that is specified in this test method. Determinations shall be made annually during summer and whenever there is a change in the source or type of petroleum entering the tank. [District Rule 4623, 6.4] Federally Enforceable Through Title V Permit
5. 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
6. 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, 6.3.6] Federally Enforceable Through Title V Permit
7. 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, 6.3.6] Federally Enforceable Through Title V Permit
8. All records required to be maintained by this permit shall be maintained for a period of at least five years and shall be made readily available for District inspection upon request. [District Rule 4623] Federally Enforceable Through Title V Permit

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-1326-120-3

**EXPIRATION DATE:** 03/31/2016

**SECTION:** 14 **TOWNSHIP:** 28S **RANGE:** 27E

**EQUIPMENT DESCRIPTION:**

2000 BBL FIXED-ROOF PETROLEUM STORAGE TANK #2L100 (LENHARDT USL).

## PERMIT UNIT REQUIREMENTS

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1. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623] Federally Enforceable Through Title V Permit
2. Permittee shall conduct true vapor pressure (TVP) testing of the organic liquid stored in this tank at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored in this tank in order to maintain exemption from the rule. [District Rule 4623, 6.2.2] Federally Enforceable Through Title V Permit
3. 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, 6.2.2] Federally Enforceable Through Title V Permit
4. Operator shall determine the true vapor pressure of the petroleum liquid stored in the tank located at the beginning of the process flow after the production header at least once per year. 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, shall be used to determine the TVP of crude oil with an API gravity of 26 or less, or for any API gravity that is specified in this test method. Determinations shall be made annually during summer and whenever there is a change in the source or type of petroleum entering the tank. [District Rule 4623, 6.4.4] Federally Enforceable Through Title V Permit
5. 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
6. 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, 6.3.6] Federally Enforceable Through Title V Permit
7. 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, 6.3.6] Federally Enforceable Through Title V Permit
8. All records required to be maintained by this permit shall be maintained for a period of at least five years and shall be made readily available for District inspection upon request. [District Rule 4623] Federally Enforceable Through Title V Permit

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-1326-121-3

**EXPIRATION DATE:** 03/31/2016

**SECTION:** 14 **TOWNSHIP:** 28S **RANGE:** 27E

**EQUIPMENT DESCRIPTION:**

5000 BBL FIXED-ROOF PETROLEUM STORAGE TANK #5L101 (LENHARDT USL).

## PERMIT UNIT REQUIREMENTS

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1. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623] Federally Enforceable Through Title V Permit
2. Permittee shall conduct true vapor pressure (TVP) testing of the organic liquid stored in this tank at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored in this tank in order to maintain exemption from the rule. [District Rule 4623, 6.2.2] Federally Enforceable Through Title V Permit
3. 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, 6.2.2] Federally Enforceable Through Title V Permit
4. Operator shall determine the true vapor pressure of the petroleum liquid stored in the tank located at the beginning of the process flow after the production header at least once per year. 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, shall be used to determine the TVP of crude oil with an API gravity of 26ø or less, or for any API gravity that is specified in this test method. Determinations shall be made annually during summer and whenever there is a change in the source or type of petroleum entering the tank. [District Rule 4623, 6.4.4] Federally Enforceable Through Title V Permit
5. 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
6. 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, 6.3.6] Federally Enforceable Through Title V Permit
7. 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, 6.3.6] Federally Enforceable Through Title V Permit
8. All records required to be maintained by this permit shall be maintained for a period of at least five years and shall be made readily available for District inspection upon request. [District Rule 4623] Federally Enforceable Through Title V Permit

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-1326-126-3

**EXPIRATION DATE:** 03/31/2016

**SECTION:** 14 **TOWNSHIP:** 28S **RANGE:** 27E

**EQUIPMENT DESCRIPTION:**

2000 BBL FIXED-ROOF PETROLEUM STORAGE TANK #20WSTWTR (SEC. 14 USL).

## PERMIT UNIT REQUIREMENTS

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1. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623] Federally Enforceable Through Title V Permit
2. Permittee shall conduct true vapor pressure (TVP) testing of the organic liquid stored in this tank at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored in this tank in order to maintain exemption from the rule. [District Rule 4623, 6.2.2] Federally Enforceable Through Title V Permit
3. 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, 6.2.2] Federally Enforceable Through Title V Permit
4. Operator shall determine the true vapor pressure of the petroleum liquid stored in the tank located at the beginning of the process flow after the production header at least once per year. 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, shall be used to determine the TVP of crude oil with an API gravity of 260 or less, or for any API gravity that is specified in this test method. Determinations shall be made annually during summer and whenever there is a change in the source or type of petroleum entering the tank. [District Rule 4623, 6.4.4] Federally Enforceable Through Title V Permit
5. 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
6. 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, 6.3.6] Federally Enforceable Through Title V Permit
7. 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, 6.3.6] Federally Enforceable Through Title V Permit
8. All records required to be maintained by this permit shall be maintained for a period of at least five years and shall be made readily available for District inspection upon request. [District Rule 4623] Federally Enforceable Through Title V Permit

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-1326-127-3

**EXPIRATION DATE:** 03/31/2016

**SECTION:** 14 **TOWNSHIP:** 28S **RANGE:** 27E

**EQUIPMENT DESCRIPTION:**

2000 BBL FIXED-ROOF PETROLEUM STORAGE TANK #20X1504 (SEC. 14 USL).

## PERMIT UNIT REQUIREMENTS

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1. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623] Federally Enforceable Through Title V Permit
2. Permittee shall conduct true vapor pressure (TVP) testing of the organic liquid stored in this tank at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored in this tank in order to maintain exemption from the rule. [District Rule 4623, 6.2.2] Federally Enforceable Through Title V Permit
3. 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, 6.2.2] Federally Enforceable Through Title V Permit
4. 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
5. 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
6. 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, 6.3.6] Federally Enforceable Through Title V Permit
7. 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, 6.3.6] Federally Enforceable Through Title V Permit
8. All records required to be maintained by this permit shall be maintained for a period of at least five years and shall be made readily available for District inspection upon request. [District Rule 4623] Federally Enforceable Through Title V Permit

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# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-1326-128-3

**EXPIRATION DATE:** 03/31/2016

**SECTION:** 14 **TOWNSHIP:** 28S **RANGE:** 27E

**EQUIPMENT DESCRIPTION:**

2000 BBL FIXED-ROOF PETROLEUM STORAGE TANK #2GK37 (SEC. 14 USL)

## PERMIT UNIT REQUIREMENTS

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1. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623] Federally Enforceable Through Title V Permit
2. Permittee shall conduct true vapor pressure (TVP) testing of the organic liquid stored in this tank at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored in this tank in order to maintain exemption from the rule. [District Rule 4623, 6.2.2] Federally Enforceable Through Title V Permit
3. 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, 6.2.2] Federally Enforceable Through Title V Permit
4. 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
5. 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
6. 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, 6.3.6] Federally Enforceable Through Title V Permit
7. 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, 6.3.6] Federally Enforceable Through Title V Permit
8. All records required to be maintained by this permit shall be maintained for a period of at least five years and shall be made readily available for District inspection upon request. [District Rule 4623] Federally Enforceable Through Title V Permit

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# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-1326-129-2

**EXPIRATION DATE:** 03/31/2016

**SECTION:** 22 **TOWNSHIP:** 28S **RANGE:** 27E

**EQUIPMENT DESCRIPTION:**

5000 BBL FIXED-ROOF PETROLEUM STORAGE TANK #5GK43 (ROBINSON A/USL)

## PERMIT UNIT REQUIREMENTS

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1. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623] Federally Enforceable Through Title V Permit
2. Permittee shall conduct true vapor pressure (TVP) testing of the organic liquid stored in this tank at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored in this tank in order to maintain exemption from the rule. [District Rule 4623, 6.2.2] Federally Enforceable Through Title V Permit
3. 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, 6.2.2] Federally Enforceable Through Title V Permit
4. 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
5. 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
6. 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, 6.3.6] Federally Enforceable Through Title V Permit
7. 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, 6.3.6] Federally Enforceable Through Title V Permit
8. All records required to be maintained by this permit shall be maintained for a period of at least five years and shall be made readily available for District inspection upon request. [District Rule 4623] Federally Enforceable Through Title V Permit

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# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-1326-130-2

**EXPIRATION DATE:** 03/31/2016

**SECTION:** 22 **TOWNSHIP:** 28S **RANGE:** 27E

**EQUIPMENT DESCRIPTION:**

5000 BBL FIXED-ROOF PETROLEUM STORAGE TANK #5GK-34 (ROBINSON A/USL)

## PERMIT UNIT REQUIREMENTS

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1. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623] Federally Enforceable Through Title V Permit
2. Permittee shall conduct true vapor pressure (TVP) testing of the organic liquid stored in this tank at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored in this tank in order to maintain exemption from the rule. [District Rule 4623, 6.2.2] Federally Enforceable Through Title V Permit
3. 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, 6.2.2] Federally Enforceable Through Title V Permit
4. 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
5. 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
6. 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, 6.3.6] Federally Enforceable Through Title V Permit
7. 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, 6.3.6] Federally Enforceable Through Title V Permit
8. All records required to be maintained by this permit shall be maintained for a period of at least five years and shall be made readily available for District inspection upon request. [District Rule 4623] Federally Enforceable Through Title V Permit

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# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-1326-131-2

**EXPIRATION DATE:** 03/31/2016

**SECTION:** 22 **TOWNSHIP:** 28S **RANGE:** 27E

**EQUIPMENT DESCRIPTION:**

2000 BBL FIXED-ROOF PETROLEUM STORAGE TANK #2RA100 (ROBINSON AVUSL)

## PERMIT UNIT REQUIREMENTS

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1. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623] Federally Enforceable Through Title V Permit
2. Permittee shall conduct true vapor pressure (TVP) testing of the organic liquid stored in this tank at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored in this tank in order to maintain exemption from the rule. [District Rule 4623, 6.2.2] Federally Enforceable Through Title V Permit
3. 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, 6.2.2] Federally Enforceable Through Title V Permit
4. 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
5. 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
6. 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, 6.3.6] Federally Enforceable Through Title V Permit
7. 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, 6.3.6] Federally Enforceable Through Title V Permit
8. All records required to be maintained by this permit shall be maintained for a period of at least five years and shall be made readily available for District inspection upon request. [District Rule 4623] Federally Enforceable Through Title V Permit

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-1326-132-2

**EXPIRATION DATE:** 03/31/2016

**SECTION:** 22 **TOWNSHIP:** 28S **RANGE:** 27E

**EQUIPMENT DESCRIPTION:**

2000 BBL FIXED-ROOF PETROLEUM STORAGE TANK #SPLCONTNK (STAR USL/STAR ROBINSON)

## PERMIT UNIT REQUIREMENTS

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1. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623] Federally Enforceable Through Title V Permit
2. Permittee shall conduct true vapor pressure (TVP) testing of the organic liquid stored in this tank at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored in this tank in order to maintain exemption from the rule. [District Rule 4623, 6.2.2] Federally Enforceable Through Title V Permit
3. 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, 6.2.2] Federally Enforceable Through Title V Permit
4. 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
5. 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
6. 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, 6.3.6] Federally Enforceable Through Title V Permit
7. 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, 6.3.6] Federally Enforceable Through Title V Permit
8. All records required to be maintained by this permit shall be maintained for a period of at least five years and shall be made readily available for District inspection upon request. [District Rule 4623] Federally Enforceable Through Title V Permit

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-1326-133-2

**EXPIRATION DATE:** 03/31/2016

**SECTION:** 22 **TOWNSHIP:** 28S **RANGE:** 27E

**EQUIPMENT DESCRIPTION:**

1000 BBL FIXED-ROOF PETROLEUM STORAGE TANK #152323 (STAR USL)

## PERMIT UNIT REQUIREMENTS

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1. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623] Federally Enforceable Through Title V Permit
2. Permittee shall conduct true vapor pressure (TVP) testing of the organic liquid stored in this tank at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored in this tank in order to maintain exemption from the rule. [District Rule 4623, 6.2.2] Federally Enforceable Through Title V Permit
3. 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, 6.2.2] Federally Enforceable Through Title V Permit
4. 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
5. 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
6. 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, 6.3.6] Federally Enforceable Through Title V Permit
7. 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, 6.3.6] Federally Enforceable Through Title V Permit
8. All records required to be maintained by this permit shall be maintained for a period of at least five years and shall be made readily available for District inspection upon request. [District Rule 4623] Federally Enforceable Through Title V Permit

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-1326-134-2

**EXPIRATION DATE:** 03/31/2016

**SECTION:** 22 **TOWNSHIP:** 28S **RANGE:** 27E

**EQUIPMENT DESCRIPTION:**

1000 BBL FIXED-ROOF PETROLEUM STORAGE TANK #15322 (STAR USL)

## PERMIT UNIT REQUIREMENTS

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1. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623] Federally Enforceable Through Title V Permit
2. Permittee shall conduct true vapor pressure (TVP) testing of the organic liquid stored in this tank at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored in this tank in order to maintain exemption from the rule. [District Rule 4623, 6.2.2] Federally Enforceable Through Title V Permit
3. 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, 6.2.2] Federally Enforceable Through Title V Permit
4. 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
5. 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
6. 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, 6.3.6] Federally Enforceable Through Title V Permit
7. 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, 6.3.6] Federally Enforceable Through Title V Permit
8. All records required to be maintained by this permit shall be maintained for a period of at least five years and shall be made readily available for District inspection upon request. [District Rule 4623] Federally Enforceable Through Title V Permit

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# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-1326-135-2

**EXPIRATION DATE:** 03/31/2016

**SECTION:** 22 **TOWNSHIP:** 28S **RANGE:** 27E

**EQUIPMENT DESCRIPTION:**

1000 BBL FIXED-ROOF PETROLEUM STORAGE TANK #15321 (STAR USL)

## PERMIT UNIT REQUIREMENTS

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1. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623] Federally Enforceable Through Title V Permit
2. Permittee shall conduct true vapor pressure (TVP) testing of the organic liquid stored in this tank at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored in this tank in order to maintain exemption from the rule. [District Rule 4623, 6.2.2] Federally Enforceable Through Title V Permit
3. 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, 6.2.2] Federally Enforceable Through Title V Permit
4. 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
5. 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
6. 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, 6.3.6] Federally Enforceable Through Title V Permit
7. 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, 6.3.6] Federally Enforceable Through Title V Permit
8. All records required to be maintained by this permit shall be maintained for a period of at least five years and shall be made readily available for District inspection upon request. [District Rule 4623] Federally Enforceable Through Title V Permit

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# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-1326-136-2

**EXPIRATION DATE:** 03/31/2016

**SECTION:** 22 **TOWNSHIP:** 28S **RANGE:** 27E

**EQUIPMENT DESCRIPTION:**

1000 BBL FIXED-ROOF PETROLEUM STORAGE TANK #WSTWTR1 (STAR USL)

## PERMIT UNIT REQUIREMENTS

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1. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623] Federally Enforceable Through Title V Permit
2. Permittee shall conduct true vapor pressure (TVP) testing of the organic liquid stored in this tank at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored in this tank in order to maintain exemption from the rule. [District Rule 4623, 6.2.2] Federally Enforceable Through Title V Permit
3. 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, 6.2.2] Federally Enforceable Through Title V Permit
4. 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
5. 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
6. 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, 6.3.6] Federally Enforceable Through Title V Permit
7. 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, 6.3.6] Federally Enforceable Through Title V Permit
8. All records required to be maintained by this permit shall be maintained for a period of at least five years and shall be made readily available for District inspection upon request. [District Rule 4623] Federally Enforceable Through Title V Permit

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-1326-137-3

**EXPIRATION DATE:** 03/31/2016

**SECTION:** 22 **TOWNSHIP:** 28S **RANGE:** 27E

**EQUIPMENT DESCRIPTION:**

1000 BBL FIXED-ROOF PETROLEUM STORAGE TANK #15324 (STAR ROBINSON).

## PERMIT UNIT REQUIREMENTS

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1. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623] Federally Enforceable Through Title V Permit
2. Permittee shall conduct true vapor pressure (TVP) testing of the organic liquid stored in this tank at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored in this tank in order to maintain exemption from the rule. [District Rule 4623, 6.2.2] Federally Enforceable Through Title V Permit
3. 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, 6.2.2] Federally Enforceable Through Title V Permit
4. 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
5. 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
6. 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, 6.3.6] Federally Enforceable Through Title V Permit
7. 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, 6.3.6] Federally Enforceable Through Title V Permit
8. All records required to be maintained by this permit shall be maintained for a period of at least five years and shall be made readily available for District inspection upon request. [District Rule 4623] Federally Enforceable Through Title V Permit

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-1326-138-3

**EXPIRATION DATE:** 03/31/2016

**SECTION:** 22 **TOWNSHIP:** 28S **RANGE:** 27E

**EQUIPMENT DESCRIPTION:**

1000 BBL FIXED-ROOF PETROLEUM STORAGE TANK #15325 (STAR ROBINSON).

## PERMIT UNIT REQUIREMENTS

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1. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623] Federally Enforceable Through Title V Permit
2. Permittee shall conduct true vapor pressure (TVP) testing of the organic liquid stored in this tank at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored in this tank in order to maintain exemption from the rule. [District Rule 4623, 6.2.2] Federally Enforceable Through Title V Permit
3. 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, 6.2.2] Federally Enforceable Through Title V Permit
4. 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
5. 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
6. 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, 6.3.6] Federally Enforceable Through Title V Permit
7. 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, 6.3.6] Federally Enforceable Through Title V Permit
8. All records required to be maintained by this permit shall be maintained for a period of at least five years and shall be made readily available for District inspection upon request. [District Rule 4623] Federally Enforceable Through Title V Permit

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# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-1326-139-3

**EXPIRATION DATE:** 03/31/2016

**SECTION:** 22 **TOWNSHIP:** 28S **RANGE:** 27E

**EQUIPMENT DESCRIPTION:**

1000 BBL FIXED-ROOF PETROLEUM STORAGE TANK #15326 (STAR ROBINSON).

## PERMIT UNIT REQUIREMENTS

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1. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623] Federally Enforceable Through Title V Permit
2. Permittee shall conduct true vapor pressure (TVP) testing of the organic liquid stored in this tank at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored in this tank in order to maintain exemption from the rule. [District Rule 4623, 6.2.2] Federally Enforceable Through Title V Permit
3. 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, 6.2.2] Federally Enforceable Through Title V Permit
4. 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
5. 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
6. 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, 6.3.6] Federally Enforceable Through Title V Permit
7. 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, 6.3.6] Federally Enforceable Through Title V Permit
8. All records required to be maintained by this permit shall be maintained for a period of at least five years and shall be made readily available for District inspection upon request. [District Rule 4623] Federally Enforceable Through Title V Permit

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# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-1326-140-3

**EXPIRATION DATE:** 03/31/2016

**SECTION:** 22 **TOWNSHIP:** 28S **RANGE:** 27E

**EQUIPMENT DESCRIPTION:**

1000 BBL FIXED-ROOF PETROLEUM STORAGE TANK #WSTWTR1 (STAR ROBINSON).

## PERMIT UNIT REQUIREMENTS

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1. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623] Federally Enforceable Through Title V Permit
2. Permittee shall conduct true vapor pressure (TVP) testing of the organic liquid stored in this tank at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored in this tank in order to maintain exemption from the rule. [District Rule 4623, 6.2.2] Federally Enforceable Through Title V Permit
3. 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, 6.2.2] Federally Enforceable Through Title V Permit
4. 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
5. 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
6. 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, 6.3.6] Federally Enforceable Through Title V Permit
7. 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, 6.3.6] Federally Enforceable Through Title V Permit
8. All records required to be maintained by this permit shall be maintained for a period of at least five years and shall be made readily available for District inspection upon request. [District Rule 4623] Federally Enforceable Through Title V Permit

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# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-1326-147-2

**EXPIRATION DATE:** 03/31/2016

**SECTION:** 22 **TOWNSHIP:** 28S **RANGE:** 27E

**EQUIPMENT DESCRIPTION:**

2000 BBL FIXED-ROOF PETROLEUM STORAGE TANK #2GK-18 (ROBINSON B/USL)

## PERMIT UNIT REQUIREMENTS

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1. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623] Federally Enforceable Through Title V Permit
2. Permittee shall conduct true vapor pressure (TVP) testing of the organic liquid stored in this tank at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored in this tank in order to maintain exemption from the rule. [District Rule 4623, 6.2.2] Federally Enforceable Through Title V Permit
3. 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, 6.2.2] Federally Enforceable Through Title V Permit
4. 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
5. 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
6. 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, 6.3.6] Federally Enforceable Through Title V Permit
7. 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, 6.3.6] Federally Enforceable Through Title V Permit
8. All records required to be maintained by this permit shall be maintained for a period of at least five years and shall be made readily available for District inspection upon request. [District Rule 4623] Federally Enforceable Through Title V Permit

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# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-1326-148-2

**EXPIRATION DATE:** 03/31/2016

**SECTION:** 22 **TOWNSHIP:** 28S **RANGE:** 27E

**EQUIPMENT DESCRIPTION:**

2000 BBL FIXED-ROOF PETROLEUM STORAGE TANK #2GK-23 (ROBINSON B/USL)

## PERMIT UNIT REQUIREMENTS

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1. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623] Federally Enforceable Through Title V Permit
2. Permittee shall conduct true vapor pressure (TVP) testing of the organic liquid stored in this tank at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored in this tank in order to maintain exemption from the rule. [District Rule 4623, 6.2.2] Federally Enforceable Through Title V Permit
3. 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, 6.2.2] Federally Enforceable Through Title V Permit
4. 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
5. 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
6. 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, 6.3.6] Federally Enforceable Through Title V Permit
7. 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, 6.3.6] Federally Enforceable Through Title V Permit
8. All records required to be maintained by this permit shall be maintained for a period of at least five years and shall be made readily available for District inspection upon request. [District Rule 4623] Federally Enforceable Through Title V Permit

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# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-1326-149-2

**EXPIRATION DATE:** 03/31/2016

**SECTION:** 22 **TOWNSHIP:** 28S **RANGE:** 27E

**EQUIPMENT DESCRIPTION:**

1000 BBL FIXED-ROOF PETROLEUM STORAGE TANK #1RB101 (ROBINSON B/USL)

## PERMIT UNIT REQUIREMENTS

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1. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623] Federally Enforceable Through Title V Permit
2. Permittee shall conduct true vapor pressure (TVP) testing of the organic liquid stored in this tank at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored in this tank in order to maintain exemption from the rule. [District Rule 4623, 6.2.2] Federally Enforceable Through Title V Permit
3. 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, 6.2.2] Federally Enforceable Through Title V Permit
4. 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
5. 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
6. 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, 6.3.6] Federally Enforceable Through Title V Permit
7. 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, 6.3.6] Federally Enforceable Through Title V Permit
8. All records required to be maintained by this permit shall be maintained for a period of at least five years and shall be made readily available for District inspection upon request. [District Rule 4623] Federally Enforceable Through Title V Permit

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# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-1326-150-3

**EXPIRATION DATE:** 03/31/2016

**SECTION:** 22 **TOWNSHIP:** 28S **RANGE:** 27E

**EQUIPMENT DESCRIPTION:**

1000 BBL FIXED-ROOF PETROLEUM STORAGE TANK #1DRNTK3 (ROBINSON B DEHY).

## PERMIT UNIT REQUIREMENTS

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1. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623] Federally Enforceable Through Title V Permit
2. Permittee shall conduct true vapor pressure (TVP) testing of the organic liquid stored in this tank at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored in this tank in order to maintain exemption from the rule. [District Rule 4623, 6.2.2] Federally Enforceable Through Title V Permit
3. 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, 6.2.2] Federally Enforceable Through Title V Permit
4. 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
5. 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
6. 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, 6.3.6] Federally Enforceable Through Title V Permit
7. 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, 6.3.6] Federally Enforceable Through Title V Permit
8. All records required to be maintained by this permit shall be maintained for a period of at least five years and shall be made readily available for District inspection upon request. [District Rule 4623] Federally Enforceable Through Title V Permit

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# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-1326-151-3

**EXPIRATION DATE:** 03/31/2016

**SECTION:** 22 **TOWNSHIP:** 28S **RANGE:** 27E

**EQUIPMENT DESCRIPTION:**

5000 BBL FIXED-ROOF PETROLEUM STORAGE TANK #5RB1035RG (ROBINSON B DEHY).

## PERMIT UNIT REQUIREMENTS

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1. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623] Federally Enforceable Through Title V Permit
2. Permittee shall conduct true vapor pressure (TVP) testing of the organic liquid stored in this tank at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored in this tank in order to maintain exemption from the rule. [District Rule 4623, 6.2.2] Federally Enforceable Through Title V Permit
3. 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, 6.2.2] Federally Enforceable Through Title V Permit
4. 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
5. 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
6. 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, 6.3.6] Federally Enforceable Through Title V Permit
7. 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, 6.3.6] Federally Enforceable Through Title V Permit
8. All records required to be maintained by this permit shall be maintained for a period of at least five years and shall be made readily available for District inspection upon request. [District Rule 4623] Federally Enforceable Through Title V Permit

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# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-1326-152-3

**EXPIRATION DATE:** 03/31/2016

**SECTION:** 22 **TOWNSHIP:** 28S **RANGE:** 27E

**EQUIPMENT DESCRIPTION:**

1000 BBL FIXED-ROOF PETROLEUM STORAGE TANK #10WSTWTR (ROBINSON B DEHY).

## PERMIT UNIT REQUIREMENTS

---

1. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623] Federally Enforceable Through Title V Permit
2. Permittee shall conduct true vapor pressure (TVP) testing of the organic liquid stored in this tank at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored in this tank in order to maintain exemption from the rule. [District Rule 4623, 6.2.2] Federally Enforceable Through Title V Permit
3. 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, 6.2.2] Federally Enforceable Through Title V Permit
4. 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
5. 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
6. 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, 6.3.6] Federally Enforceable Through Title V Permit
7. 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, 6.3.6] Federally Enforceable Through Title V Permit
8. All records required to be maintained by this permit shall be maintained for a period of at least five years and shall be made readily available for District inspection upon request. [District Rule 4623] Federally Enforceable Through Title V Permit

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# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-1326-153-3

**EXPIRATION DATE:** 03/31/2016

**SECTION:** 22 **TOWNSHIP:** 28S **RANGE:** 27E

**EQUIPMENT DESCRIPTION:**

3000 BBL FIXED-ROOF PETROLEUM STORAGE TANK #3GK309SHP (ROBINSON B DEHY).

## PERMIT UNIT REQUIREMENTS

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1. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623] Federally Enforceable Through Title V Permit
2. Permittee shall conduct true vapor pressure (TVP) testing of the organic liquid stored in this tank at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored in this tank in order to maintain exemption from the rule. [District Rule 4623, 6.2.2] Federally Enforceable Through Title V Permit
3. 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, 6.2.2] Federally Enforceable Through Title V Permit
4. 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
5. 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
6. 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, 6.3.6] Federally Enforceable Through Title V Permit
7. 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, 6.3.6] Federally Enforceable Through Title V Permit
8. All records required to be maintained by this permit shall be maintained for a period of at least five years and shall be made readily available for District inspection upon request. [District Rule 4623] Federally Enforceable Through Title V Permit

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-1326-154-3

**EXPIRATION DATE:** 03/31/2016

**SECTION:** 22 **TOWNSHIP:** 28S **RANGE:** 27E

**EQUIPMENT DESCRIPTION:**

3000 BBL FIXED-ROOF PETROLEUM STORAGE TANK #3GK310SHP (ROBINSON B DEHY).

## PERMIT UNIT REQUIREMENTS

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1. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623] Federally Enforceable Through Title V Permit
2. Permittee shall conduct true vapor pressure (TVP) testing of the organic liquid stored in this tank at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored in this tank in order to maintain exemption from the rule. [District Rule 4623, 6.2.2] Federally Enforceable Through Title V Permit
3. 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, 6.2.2] Federally Enforceable Through Title V Permit
4. 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
5. 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
6. 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, 6.3.6] Federally Enforceable Through Title V Permit
7. 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, 6.3.6] Federally Enforceable Through Title V Permit
8. All records required to be maintained by this permit shall be maintained for a period of at least five years and shall be made readily available for District inspection upon request. [District Rule 4623] Federally Enforceable Through Title V Permit

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-1326-158-2

**EXPIRATION DATE:** 03/31/2016

**SECTION:** 22 **TOWNSHIP:** 28S **RANGE:** 27E

**EQUIPMENT DESCRIPTION:**

5000 BBL FIXED-ROOF PETROLEUM STORAGE TANK #5T100 (TEGELER/USL)

## PERMIT UNIT REQUIREMENTS

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1. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623] Federally Enforceable Through Title V Permit
2. Permittee shall conduct true vapor pressure (TVP) testing of the organic liquid stored in this tank at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored in this tank in order to maintain exemption from the rule. [District Rule 4623, 6.2.2] Federally Enforceable Through Title V Permit
3. 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, 6.2.2] Federally Enforceable Through Title V Permit
4. 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
5. 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
6. 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, 6.3.6] Federally Enforceable Through Title V Permit
7. 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, 6.3.6] Federally Enforceable Through Title V Permit
8. All records required to be maintained by this permit shall be maintained for a period of at least five years and shall be made readily available for District inspection upon request. [District Rule 4623] Federally Enforceable Through Title V Permit

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-1326-159-2

**EXPIRATION DATE:** 03/31/2016

**SECTION:** 22 **TOWNSHIP:** 28S **RANGE:** 27E

**EQUIPMENT DESCRIPTION:**

2000 BBL FIXED-ROOF PETROLEUM STORAGE TANK #3GK24 (TEGELER/USL)

## PERMIT UNIT REQUIREMENTS

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1. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623] Federally Enforceable Through Title V Permit
2. Permittee shall conduct true vapor pressure (TVP) testing of the organic liquid stored in this tank at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored in this tank in order to maintain exemption from the rule. [District Rule 4623, 6.2.2] Federally Enforceable Through Title V Permit
3. 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, 6.2.2] Federally Enforceable Through Title V Permit
4. 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
5. 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
6. 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, 6.3.6] Federally Enforceable Through Title V Permit
7. 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, 6.3.6] Federally Enforceable Through Title V Permit
8. All records required to be maintained by this permit shall be maintained for a period of at least five years and shall be made readily available for District inspection upon request. [District Rule 4623] Federally Enforceable Through Title V Permit

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-1326-160-2

**EXPIRATION DATE:** 03/31/2016

**SECTION:** 22 **TOWNSHIP:** 28S **RANGE:** 27E

**EQUIPMENT DESCRIPTION:**

2000 BBL FIXED-ROOF PETROLEUM STORAGE TANK #2GK13 (TEGELER/USL)

## PERMIT UNIT REQUIREMENTS

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1. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623, 4.4] Federally Enforceable Through Title V Permit
2. Permittee shall conduct true vapor pressure (TVP) testing of the organic liquid stored in this tank at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored in this tank in order to maintain exemption from the rule. [District Rule 4623, 6.2.2] Federally Enforceable Through Title V Permit
3. 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, 6.2.2] Federally Enforceable Through Title V Permit
4. 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
5. 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
6. 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, 6.3.6] Federally Enforceable Through Title V Permit
7. 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, 6.3.6] Federally Enforceable Through Title V Permit
8. All records required to be maintained by this permit shall be maintained for a period of at least five years and shall be made readily available for District inspection upon request. [District Rule 4623] Federally Enforceable Through Title V Permit

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-1326-201-10

**EXPIRATION DATE:** 03/31/2016

**SECTION:** SW11 **TOWNSHIP:** 28S **RANGE:** 27E

**EQUIPMENT DESCRIPTION:**

3,000 BBL FIXED ROOF WASH TANK (#T-1) WITH SHARED VAPOR CONTROL SYSTEM SERVING TEOR SYSTEM TEOR SYSTEM S-1326-28 AND TANKS S-1326-201, '-202, '-203, '-204, '-205, '-206, '-212, '-261, '-262, '-268, '-269, '-270, '-271, '-272, AND '-274. (NORTH TREATING FACILITY).

## PERMIT UNIT REQUIREMENTS

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1. Tank vapor control system consists of three 15 hp vapor compressors and compressed vapor piping to TEOR well vent vapor control system S-1326-28. [District 2201 Rule] Federally Enforceable Through Title V Permit
2. Tank stored liquid temperature shall not exceed 220 degrees F. [District 2201 Rule] Federally Enforceable Through Title V Permit
3. Tank shall be equipped with an operational stored liquid temperature indicator. [District Rule 2201] Federally Enforceable Through Title V Permit
4. Tank shall operate at a constant level. [District Rule 2201] Federally Enforceable Through Title V Permit
5. The Reid Vapor Pressure (RVP) of the liquid stored in this tank shall not exceed 0.75 psia. [District Rule 2201] Federally Enforceable Through Title V Permit
6. The tank shall be equipped with a vapor recovery system consisting of a closed vent system that collects all VOCs from the storage tank, and a VOC control device. The vapor recovery system shall be APCO-approved and maintained in gas-tight condition. The VOC control device shall be either of the following: a vapor return or condensation system that connects to a gas pipeline distribution system, or an approved VOC destruction device that reduces the inlet VOC emissions by at least 95% by weight as determined by the test method specified in Section 6.4.7. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
7. All piping, valves, and fittings shall be constructed and maintained in a gas-tight condition. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
8. Any 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 2520, 9.3.2] Federally Enforceable Through Title V Permit
9. A gas-tight condition is defined as a condition without a gas leak. A gas leak is defined as a reading in excess of 10,000 ppmv, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21. A reading in excess of 10,000 ppmv above background is a violation of this permit and Rule 4623 and shall be reported as a deviation. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

10. All piping, fittings, and valves shall be inspected annually by the facility operator in accordance with USEPA Method 21, with the instrument calibrated with methane, to ensure compliance with the provisions of this permit. If any of the tank components are found to leak during an annual inspection, the inspection frequency for that component type shall be changed from annual to quarterly. If no tank components are subsequently found to be leaking during five consecutive inspections, the inspection frequency may be changed from quarterly to annual. Components located in inaccessible (over 15 feet above ground when access is required from the ground or over 6 feet away from a platform when access is required from the platform) locations shall be inspected at least annually and components located in unsafe areas shall be inspected and repaired at the next process unit turnaround (the scheduled shutdown of a unit for maintenance and repair work). [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
11. A facility operator, upon detection of a leaking component, shall affix to that component a weatherproof readily visible tag bearing the date on which the leak is detected. The tag shall remain in place until the leaking component is repaired, reinspected and found to be in compliance with the requirements of this rule. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
12. An operator shall reinspect a component for leaks within thirty working days after the date on which the component is repaired. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
13. Emissions from components which have been tagged by the facility operator for repair within 15 calendar days or which have been repaired and are awaiting re-inspection shall not be in violation of this permit. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
14. Any component leak shall be repaired to a leak-free condition or vented to a flare satisfying the requirements of 40 CFR 60.18 or to a vapor control device that is at least 99 percent efficient as measured by USEPA Method 25 within fifteen (15) calendar days of detection. The APCO may grant a ten (10) calendar day extension provided the operator demonstrates that necessary and sufficient actions are being taken to correct the leak within this time period. Any vapor control device, other than a flare, used to comply with this condition shall demonstrate at least 99% control efficiency as measured by USEPA Method 25 at least annually. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
15. If the leaking component is an essential part of a critical process unit which cannot be immediately shut down for repairs, the operator shall 1) Minimize the leak within 15 calendar days; and 2) If the leak which has been minimized still exceeds the concentration allowed by this permit, the essential component shall be repaired to eliminate the leak during the next process unit turnaround, but in no case later than one year from the date of the original leak detection. A critical process unit is any process unit which would result in the automatic shutdown of other process units if it were shut down. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
16. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date of leak detection, and method of detection; 3) Date and emission level of recheck after leak is repaired; 4) Identification and location of essential parts of critical process units found leaking that cannot be repaired until the next process unit turnaround; and 5) Method used to minimize the leak from essential parts of critical process units which cannot be repaired until the next process unit turnaround. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
17. True Vapor Pressure (TVP) shall be measured using Reid vapor pressure ASTM Method D323 modified by maintaining the hot water bath at storage temperature. Where storage temperature is above 100 degrees F true vapor pressure shall be determined by Reid vapor pressure at 100 degrees F and CARB approved calculations. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
18. True vapor pressure of crude oil with an API (American Petroleum Institute) gravity less than 30 deg, as determined by API 2547, may be determined by Headspace Gas Chromatography using the procedures from CARB Evaluation of a Method for Determining Vapor Pressures of Petroleum Mixtures by Headspace Gas Chromatography, October 1990. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

19. Control efficiency shall be determined by a comparison of controlled emissions to those emissions which would occur from a fixed or cone roof tank in the same product service without a vapor recovery system. Emissions shall be determined based on tank emission factors in USEPA Publication AP-42, component counts for fugitive emissions sources, recognized emission factors for fugitive emission sources and the efficiency of any VOC destruction device. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
20. The efficiency of any VOC destruction device shall be measured by USEPA Method 25, 25a, or 25b. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
21. The operator shall ensure that the vapor recovery system is functional and is operating as designed at all times. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
22. Operator shall determine the True Vapor Pressure and the Reid Vapor Pressure of the petroleum liquid received at the North Treating Facility (SW/4 Sec. 11, T28S, R27E) at least once per year in accordance with methods described in Section 6.2 of District Rule 4623 (amended 12/17/92). Determinations shall be made annually during summer and whenever there is a change in the source or type of petroleum entering the tank. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
23. The permittee shall keep accurate records of Reid Vapor Pressure, and storage temperature of liquids stored, and shall make such records available for District inspection upon request. [District Rule 1070; District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
24. 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 2520, 9.4.2] Federally Enforceable Through Title V Permit

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



# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-1326-202-6

**EXPIRATION DATE:** 03/31/2016

**SECTION:** 11 **TOWNSHIP:** 28S **RANGE:** 27E

**EQUIPMENT DESCRIPTION:**

1,000 BBL FIXED ROOF REJECT OIL TANK (#T-2)CONNECTED TO THE VAPOR CONTROL SYSTEM LISTED ON PERMIT S-1326-201 (NORTH TREATING FACILITY).

## PERMIT UNIT REQUIREMENTS

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1. The Reid vapor pressure of the liquid stored in this tank shall not exceed 0.75 psia. [District Rule 2201] Federally Enforceable Through Title V Permit
2. Tank stored liquid temperature shall not exceed 220 degrees F. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Tank shall be equipped with a stored liquid temperature indicator. [District Rule 2201] Federally Enforceable Through Title V Permit
4. The average daily throughput for this tank (on an annual basis) shall not exceed 12,000 bbl/day. [District Rule 2201] Federally Enforceable Through Title V Permit
5. VOC emission rate shall not exceed 5.3 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Any tank gauging or sampling device on a tank vented to the vapor recovery system shall be equipped with a gas-tight cover which shall be closed at all times except during gauging or sampling. Gas-tight shall be defined as emitting no more than 10,000 ppm of methane measured at a distance of one centimeter from the potential source with an instrument calibrated with methane in accordance with USEPA Method 21. Emissions in excess of this limit shall be considered a leak. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
7. Tank seams, welds, joints, piping, valves, and fittings shall be inspected and maintained in a gas-tight condition. [District Rule 2520, 9.34.2] Federally Enforceable Through Title V Permit
8. The permittee shall keep accurate records of Reid vapor pressure, storage temperature, and tank throughput and shall make such records available for District inspection upon request. [District Rules 1070 and District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
9. All piping, fittings, and valves shall be inspected annually by the facility operator in accordance with USEPA Method 21, with the instrument calibrated with methane, to ensure compliance with the provisions of this permit. If any of the tank components are found to leak during an annual inspection, the inspection frequency for that component type shall be changed from annual to quarterly. If no tank components are subsequently found to be leaking during five consecutive inspections, the inspection frequency may be changed from quarterly to annual. Components located in inaccessible (over 15 feet above ground when access is required from the ground or over 6 feet away from a platform when access is required from the platform) locations shall be inspected at least annually and components located in unsafe areas shall be inspected and repaired at the next process unit turnaround (the scheduled shutdown of a unit for maintenance and repair work). [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

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

10. A facility operator, upon detection of a leaking component, shall affix to that component a weatherproof readily visible tag bearing the date on which the leak is detected. The tag shall remain in place until the leaking component is repaired, reinspected and found to be in compliance with the requirements of this rule. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
11. An operator shall reinspect a component for leaks within thirty working days after the date on which the component is repaired. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
12. Emissions from components which have been tagged by the facility operator for repair within 15 calendar days or which have been repaired and are awaiting re-inspection shall not be in violation of this permit. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
13. Any component leak shall be repaired to a leak-free condition or vented to a flare satisfying the requirements of 40 CFR 60.18 or to a vapor control device that is at least 99 percent efficient as measured by USEPA Method 25 within fifteen (15) calendar days of detection. The APCO may grant a ten (10) calendar day extension provided the operator demonstrates that necessary and sufficient actions are being taken to correct the leak within this time period. Any vapor control device, other than a flare, used to comply with this condition shall demonstrate at least 99% control efficiency as measured by USEPA Method 25 at least annually. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
14. If the leaking component is an essential part of a critical process unit which cannot be immediately shut down for repairs, the operator shall 1) Minimize the leak within 15 calendar days; and 2) If the leak which has been minimized still exceeds the concentration allowed by this permit, the essential component shall be repaired to eliminate the leak during the next process unit turnaround, but in no case later than one year from the date of the original leak detection. A critical process unit is any process unit which would result in the automatic shutdown of other process units if it were shut down. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
15. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date of leak detection, and method of detection; 3) Date and emission level of recheck after leak is repaired; 4) Identification and location of essential parts of critical process units found leaking that cannot be repaired until the next process unit turnaround; and 5) Method used to minimize the leak from essential parts of critical process units which cannot be repaired until the next process unit turnaround. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
16. True vapor pressure shall be measured using Reid vapor pressure ASTM Method D323 modified by maintaining the hot water bath at storage temperature. Where storage temperature is above 100 degrees F true vapor pressure shall be determined by Reid vapor pressure at 100 degrees F and CARB approved calculations. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
17. True vapor pressure of crude oil with an API (American Petroleum Institute) gravity less than 30 deg, as determined by API 2547, may be determined by Headspace Gas Chromatography using the procedures from CARB Evaluation of a Method for Determining Vapor Pressures of Petroleum Mixtures by Headspace Gas Chromatography, October 1990. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
18. Control efficiency shall be determined by a comparison of controlled emissions to those emissions which would occur from a fixed or cone roof tank in the same product service without a vapor recovery system. Emissions shall be determined based on tank emission factors in USEPA Publication AP-42, component counts for fugitive emissions sources, recognized emission factors for fugitive emission sources and the efficiency of any VOC destruction device. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
19. The efficiency of any VOC destruction device shall be measured by USEPA Method 25, 25a, or 25b. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
20. The operator shall ensure that the vapor recovery system is functional and is operating as designed at all times. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

21. Operator shall determine the true vapor pressure of the petroleum liquid stored in the tank located at the beginning of the process flow after the production header at least once per year in accordance with methods described in Section 6.2 of District Rule 4623 (Amended 12/17/92). Determinations shall be made annually during summer and whenever there is a change in the source or type of petroleum entering the tank. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
22. 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 2520, 9.4.2] Federally Enforceable Through Title V Permit

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-1326-203-7

**EXPIRATION DATE:** 03/31/2016

**SECTION:** 11 **TOWNSHIP:** 28S **RANGE:** 27E

**EQUIPMENT DESCRIPTION:**

2,000 BBL FIXED ROOF STOCK TANK (#T-3) WITH VAPOR CONTROL LISTED ON PERMIT S-1326-201 (NORTH TREATING FACILITY)

## PERMIT UNIT REQUIREMENTS

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1. The Reid vapor pressure of the liquid stored in this tank shall not exceed 0.75 psia. [District Rule 2201] Federally Enforceable Through Title V Permit
2. Tank stored liquid temperature shall not exceed 220 degrees F. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Tank shall be equipped with a stored liquid temperature indicator. [District Rule 2201] Federally Enforceable Through Title V Permit
4. The average daily throughput for this tank (on an annual basis) shall not exceed 7500 bbl/day. [District Rule 2201] Federally Enforceable Through Title V Permit
5. VOC emission rate shall not exceed 3.6 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Any tank gauging or sampling device on a tank vented to the vapor recovery system shall be equipped with a gas-tight cover which shall be closed at all times except during gauging or sampling. Gas-tight shall be defined as emitting no more than 10,000 ppm of methane measured at a distance of one centimeter from the potential source with an instrument calibrated with methane in accordance with USEPA Method 21. Emissions in excess of this limit shall be considered a leak. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
7. Tank seams, welds, joints, piping, valves, and fittings shall be inspected and maintained in a gas-tight condition. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
8. The permittee shall keep accurate records of Reid vapor pressure, storage temperature, and tank throughput and shall make such records available for District inspection upon request. [District Rule 1070; District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
9. All piping, fittings, and valves shall be inspected annually by the facility operator in accordance with USEPA Method 21, with the instrument calibrated with methane, to ensure compliance with the provisions of this permit. If any of the tank components are found to leak during an annual inspection, the inspection frequency for that component type shall be changed from annual to quarterly. If no tank components are subsequently found to be leaking during five consecutive inspections, the inspection frequency may be changed from quarterly to annual. Components located in inaccessible (over 15 feet above ground when access is required from the ground or over 6 feet away from a platform when access is required from the platform) locations shall be inspected at least annually and components located in unsafe areas shall be inspected and repaired at the next process unit turnaround (the scheduled shutdown of a unit for maintenance and repair work). [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

10. A facility operator, upon detection of a leaking component, shall affix to that component a weatherproof readily visible tag bearing the date on which the leak is detected. The tag shall remain in place until the leaking component is repaired, reinspected and found to be in compliance with the requirements of this rule. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
11. An operator shall reinspect a component for leaks within thirty working days after the date on which the component is repaired. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
12. Emissions from components which have been tagged by the facility operator for repair within 15 calendar days or which have been repaired and are awaiting re-inspection shall not be in violation of this permit. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
13. Any component leak shall be repaired to a leak-free condition or vented to a flare satisfying the requirements of 40 CFR 60.18 or to a vapor control device that is at least 99 percent efficient as measured by USEPA Method 25 within fifteen (15) calendar days of detection. The APCO may grant a ten (10) calendar day extension provided the operator demonstrates that necessary and sufficient actions are being taken to correct the leak within this time period. Any vapor control device, other than a flare, used to comply with this condition shall demonstrate at least 99% control efficiency as measured by USEPA Method 25 at least annually. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
14. If the leaking component is an essential part of a critical process unit which cannot be immediately shut down for repairs, the operator shall 1) Minimize the leak within 15 calendar days; and 2) If the leak which has been minimized still exceeds the concentration allowed by this permit, the essential component shall be repaired to eliminate the leak during the next process unit turnaround, but in no case later than one year from the date of the original leak detection. A critical process unit is any process unit which would result in the automatic shutdown of other process units if it were shut down. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
15. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date of leak detection, and method of detection; 3) Date and emission level of recheck after leak is repaired; 4) Identification and location of essential parts of critical process units found leaking that cannot be repaired until the next process unit turnaround; and 5) Method used to minimize the leak from essential parts of critical process units which cannot be repaired until the next process unit turnaround. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
16. True vapor pressure shall be measured using Reid vapor pressure ASTM Method D323 modified by maintaining the hot water bath at storage temperature. Where storage temperature is above 100 degrees F true vapor pressure shall be determined by Reid vapor pressure at 100 degrees F and CARB approved calculations. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
17. True vapor pressure of crude oil with an API (American Petroleum Institute) gravity less than 30 deg, as determined by API 2547, may be determined by Headspace Gas Chromatography using the procedures from CARB Evaluation of a Method for Determining Vapor Pressures of Petroleum Mixtures by Headspace Gas Chromatography, October 1990. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
18. Control efficiency shall be determined by a comparison of controlled emissions to those emissions which would occur from a fixed or cone roof tank in the same product service without a vapor recovery system. Emissions shall be determined based on tank emission factors in USEPA Publication AP-42, component counts for fugitive emissions sources, recognized emission factors for fugitive emission sources and the efficiency of any VOC destruction device. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
19. The efficiency of any VOC destruction device shall be measured by USEPA Method 25, 25a, or 25b. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
20. The operator shall ensure that the vapor recovery system is functional and is operating as designed at all times. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

21. Operator shall determine the true vapor pressure of the petroleum liquid stored in the tank located at the beginning of the process flow after the production header at least once per year in accordance with methods described in Section 6.2 of District Rule 4623 (Amended 12/17/92). Determinations shall be made annually during summer and whenever there is a change in the source or type of petroleum entering the tank. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
22. 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 2520, 9.4.2] Federally Enforceable Through Title V Permit

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-1326-204-7

**EXPIRATION DATE:** 03/31/2016

**SECTION:** 11 **TOWNSHIP:** 28S **RANGE:** 27E

**EQUIPMENT DESCRIPTION:**

2,000 BBL FIXED ROOF STOCK TANK (#T-4) WITH VAPOR CONTROL LISTED ON PERMIT S-1326-201 (NORTH TREATING FACILITY)

## PERMIT UNIT REQUIREMENTS

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1. The Reid vapor pressure of the liquid stored in this tank shall not exceed 0.75 psia. [District Rule 2201] Federally Enforceable Through Title V Permit
2. Tank stored liquid temperature shall not exceed 220 degrees F. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Tank shall be equipped with a stored liquid temperature indicator. [District Rule 2201] Federally Enforceable Through Title V Permit
4. The average daily throughput for this tank (on an annual basis) shall not exceed 7,500 bbl/day. [District Rule 2201] Federally Enforceable Through Title V Permit
5. VOC emission rate shall not exceed 3.6 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Any tank gauging or sampling device on a tank vented to the vapor recovery system shall be equipped with a gas-tight cover which shall be closed at all times except during gauging or sampling. Gas-tight shall be defined as emitting no more than 10,000 ppm of methane measured at a distance of one centimeter from the potential source with an instrument calibrated with methane in accordance with USEPA Method 21. Emissions in excess of this limit shall be considered a leak. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
7. Tank seams, welds, joints, piping, valves, and fittings shall be inspected and maintained in a gas-tight condition. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
8. The permittee shall keep accurate records of Reid vapor pressure, storage temperature, and tank throughput and shall make such records available for District inspection upon request. [District Rule 1070; District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
9. All piping, fittings, and valves shall be inspected annually by the facility operator in accordance with USEPA Method 21, with the instrument calibrated with methane, to ensure compliance with the provisions of this permit. If any of the tank components are found to leak during an annual inspection, the inspection frequency for that component type shall be changed from annual to quarterly. If no tank components are subsequently found to be leaking during five consecutive inspections, the inspection frequency may be changed from quarterly to annual. Components located in inaccessible (over 15 feet above ground when access is required from the ground or over 6 feet away from a platform when access is required from the platform) locations shall be inspected at least annually and components located in unsafe areas shall be inspected and repaired at the next process unit turnaround (the scheduled shutdown of a unit for maintenance and repair work). [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

10. A facility operator, upon detection of a leaking component, shall affix to that component a weatherproof readily visible tag bearing the date on which the leak is detected. The tag shall remain in place until the leaking component is repaired, reinspected and found to be in compliance with the requirements of this rule. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
11. An operator shall reinspect a component for leaks within thirty working days after the date on which the component is repaired. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
12. Emissions from components which have been tagged by the facility operator for repair within 15 calendar days or which have been repaired and are awaiting re-inspection shall not be in violation of this permit. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
13. Any component leak shall be repaired to a leak-free condition or vented to a flare satisfying the requirements of 40 CFR 60.18 or to a vapor control device that is at least 99 percent efficient as measured by USEPA Method 25 within fifteen (15) calendar days of detection. The APCO may grant a ten (10) calendar day extension provided the operator demonstrates that necessary and sufficient actions are being taken to correct the leak within this time period. Any vapor control device, other than a flare, used to comply with this condition shall demonstrate at least 99% control efficiency as measured by USEPA Method 25 at least annually. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
14. If the leaking component is an essential part of a critical process unit which cannot be immediately shut down for repairs, the operator shall 1) Minimize the leak within 15 calendar days; and 2) If the leak which has been minimized still exceeds the concentration allowed by this permit, the essential component shall be repaired to eliminate the leak during the next process unit turnaround, but in no case later than one year from the date of the original leak detection. A critical process unit is any process unit which would result in the automatic shutdown of other process units if it were shut down. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
15. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date of leak detection, and method of detection; 3) Date and emission level of recheck after leak is repaired; 4) Identification and location of essential parts of critical process units found leaking that cannot be repaired until the next process unit turnaround; and 5) Method used to minimize the leak from essential parts of critical process units which cannot be repaired until the next process unit turnaround. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
16. Operator shall determine the true vapor pressure of the petroleum liquid stored in the tank located at the beginning of the process flow after the production header at least once per year in accordance with methods described in Section 6.2 of District Rule 4623 (Amended 12/17/92). Determinations shall be made annually during summer and whenever there is a change in the source or type of petroleum entering the tank. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
17. True vapor pressure shall be measured using Reid vapor pressure ASTM Method D323 modified by maintaining the hot water bath at storage temperature. Where storage temperature is above 100 degrees F true vapor pressure shall be determined by Reid vapor pressure at 100 degrees F and CARB approved calculations. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
18. True vapor pressure of crude oil with an API (American Petroleum Institute) gravity less than 30 deg, as determined by API 2547, may be determined by Headspace Gas Chromatography using the procedures from CARB Evaluation of a Method for Determining Vapor Pressures of Petroleum Mixtures by Headspace Gas Chromatography, October 1990. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
19. Control efficiency shall be determined by a comparison of controlled emissions to those emissions which would occur from a fixed or cone roof tank in the same product service without a vapor recovery system. Emissions shall be determined based on tank emission factors in USEPA Publication AP-42, component counts for fugitive emissions sources, recognized emission factors for fugitive emission sources and the efficiency of any VOC destruction device. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
20. The efficiency of any VOC destruction device shall be measured by USEPA Method 25, 25a, or 25b. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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



21. 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 2520, 9.4.2] Federally Enforceable Through Title V Permit

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-1326-205-6

**EXPIRATION DATE:** 03/31/2016

**SECTION:** 11 **TOWNSHIP:** 28S **RANGE:** 27E

**EQUIPMENT DESCRIPTION:**

5,000 BBL FIXED ROOF WATER TANK #T-5 WITH VAPOR CONTROL LISTED ON PERMIT S-1326-201 (NORTH TREATING FACILITY).

## PERMIT UNIT REQUIREMENTS

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1. The Reid vapor pressure of the liquid stored in this tank shall not exceed 0.75 psia. [District Rule 2201] Federally Enforceable Through Title V Permit
2. Tank stored liquid temperature shall not exceed 220 degrees F. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Tank shall be equipped with a stored liquid temperature indicator. [District Rule 2201] Federally Enforceable Through Title V Permit
4. Any 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. Gas-tight shall be defined as emitting no more than 10,000 ppm of methane measured at a distance of one centimeter from the potential source with an instrument calibrated with methane in accordance with USEPA Method 21. Emissions in excess of this limit shall be considered a leak. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
5. Tank seams, welds, joints, piping, valves, and fittings shall be inspected and maintained in a gas-tight condition. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
6. The permittee shall keep accurate records of Reid vapor pressure, storage temperature, and tank throughput and shall make such records available for District inspection upon request. [District Rule 1070; District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
7. All piping, fittings, and valves shall be inspected annually by the facility operator in accordance with USEPA Method 21, with the instrument calibrated with methane, to ensure compliance with the provisions of this permit. If any of the tank components are found to leak during an annual inspection, the inspection frequency for that component type shall be changed from annual to quarterly. If no tank components are subsequently found to be leaking during five consecutive inspections, the inspection frequency may be changed from quarterly to annual. Components located in inaccessible (over 15 feet above ground when access is required from the ground or over 6 feet away from a platform when access is required from the platform) locations shall be inspected at least annually and components located in unsafe areas shall be inspected and repaired at the next process unit turnaround (the scheduled shutdown of a unit for maintenance and repair work). [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
8. A facility operator, upon detection of a leaking component, shall affix to that component a weatherproof readily visible tag bearing the date on which the leak is detected. The tag shall remain in place until the leaking component is repaired, reinspected and found to be in compliance with the requirements of this rule. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
9. An operator shall reinspect a component for leaks within thirty working days after the date on which the component is repaired. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

10. Emissions from components which have been tagged by the facility operator for repair within 15 calendar days or which have been repaired and are awaiting re-inspection shall not be in violation of this permit. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
11. Any component leak shall be repaired to a leak-free condition or vented to a flare satisfying the requirements of 40 CFR 60.18 or to a vapor control device that is at least 99 percent efficient as measured by USEPA Method 25 within fifteen (15) calendar days of detection. The APCO may grant a ten (10) calendar day extension provided the operator demonstrates that necessary and sufficient actions are being taken to correct the leak within this time period. Any vapor control device, other than a flare, used to comply with this condition shall demonstrate at least 99% control efficiency as measured by USEPA Method 25 at least annually. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
12. If the leaking component is an essential part of a critical process unit which cannot be immediately shut down for repairs, the operator shall 1) Minimize the leak within 15 calendar days; and 2) If the leak which has been minimized still exceeds the concentration allowed by this permit, the essential component shall be repaired to eliminate the leak during the next process unit turnaround, but in no case later than one year from the date of the original leak detection. A critical process unit is any process unit which would result in the automatic shutdown of other process units if it were shut down. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
13. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date of leak detection, and method of detection; 3) Date and emission level of recheck after leak is repaired; 4) Identification and location of essential parts of critical process units found leaking that cannot be repaired until the next process unit turnaround; and 5) Method used to minimize the leak from essential parts of critical process units which cannot be repaired until the next process unit turnaround. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
14. True vapor pressure shall be measured using Reid vapor pressure ASTM Method D323 modified by maintaining the hot water bath at storage temperature. Where storage temperature is above 100 degrees F true vapor pressure shall be determined by Reid vapor pressure at 100 degrees F and CARB approved calculations. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
15. True vapor pressure of crude oil with an API (American Petroleum Institute) gravity less than 30 deg, as determined by API 2547, may be determined by Headspace Gas Chromatography using the procedures from CARB Evaluation of a Method for Determining Vapor Pressures of Petroleum Mixtures by Headspace Gas Chromatography, October 1990. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
16. Control efficiency shall be determined by a comparison of controlled emissions to those emissions which would occur from a fixed or cone roof tank in the same product service without a vapor recovery system. Emissions shall be determined based on tank emission factors in USEPA Publication AP-42, component counts for fugitive emissions sources, recognized emission factors for fugitive emission sources and the efficiency of any VOC destruction device. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
17. The efficiency of any VOC destruction device shall be measured by USEPA Method 25, 25a, or 25b. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
18. The operator shall ensure that the vapor recovery system is functional and is operating as designed at all times. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
19. Operator shall determine the true vapor pressure of the petroleum liquid stored in the tank located at the beginning of the process flow after the production header at least once per year in accordance with methods described in Section 6.2 of District Rule 4623 (Amended 12/17/92). Determinations shall be made annually during summer and whenever there is a change in the source or type of petroleum entering the tank. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
20. 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 2520, 9.4.2] Federally Enforceable Through Title V Permit

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-1326-206-7

**EXPIRATION DATE:** 03/31/2016

**SECTION:** 11 **TOWNSHIP:** 28S **RANGE:** 27E

**EQUIPMENT DESCRIPTION:**

1,000 BBL FIXED ROOF WATER TANK (#T-6) WITH VAPOR CONTROL LISTED ON PERMIT S-1326-201 (NORTH TREATING FACILITY)

## PERMIT UNIT REQUIREMENTS

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1. The Reid vapor pressure of the liquid stored in this tank shall not exceed 0.75 psia. [District Rule 2201] Federally Enforceable Through Title V Permit
2. Tank stored liquid temperature shall not exceed 220 degrees F. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Tank shall be equipped with a stored liquid temperature indicator. [District Rule 2201] Federally Enforceable Through Title V Permit
4. The average daily throughput for this tank (on an annual basis) shall not exceed 4000 bbl/day. [District Rule 2201] Federally Enforceable Through Title V Permit
5. VOC emission rate shall not exceed 1.9 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Any tank gauging or sampling device on a tank vented to the vapor recovery system shall be equipped with a gas-tight cover which shall be closed at all times except during gauging or sampling. Gas-tight shall be defined as emitting no more than 10,000 ppm of methane measured at a distance of one centimeter from the potential source with an instrument calibrated with methane in accordance with USEPA Method 21. Emissions in excess of this limit shall be considered a leak. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
7. Tank seams, welds, joints, piping, valves, and fittings shall be inspected and maintained in a gas-tight condition. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
8. The permittee shall keep accurate records of Reid vapor pressure, storage temperature, and tank throughput and shall make such records available for District inspection upon request. [District Rule 1070; District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
9. All piping, fittings, and valves shall be inspected annually by the facility operator in accordance with USEPA Method 21, with the instrument calibrated with methane, to ensure compliance with the provisions of this permit. If any of the tank components are found to leak during an annual inspection, the inspection frequency for that component type shall be changed from annual to quarterly. If no tank components are subsequently found to be leaking during five consecutive inspections, the inspection frequency may be changed from quarterly to annual. Components located in inaccessible (over 15 feet above ground when access is required from the ground or over 6 feet away from a platform when access is required from the platform) locations shall be inspected at least annually and components located in unsafe areas shall be inspected and repaired at the next process unit turnaround (the scheduled shutdown of a unit for maintenance and repair work). [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

10. A facility operator, upon detection of a leaking component, shall affix to that component a weatherproof readily visible tag bearing the date on which the leak is detected. The tag shall remain in place until the leaking component is repaired, reinspected and found to be in compliance with the requirements of this rule. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
11. An operator shall reinspect a component for leaks within thirty working days after the date on which the component is repaired. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
12. Emissions from components which have been tagged by the facility operator for repair within 15 calendar days or which have been repaired and are awaiting re-inspection shall not be in violation of this permit. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
13. Any component leak shall be repaired to a leak-free condition or vented to a flare satisfying the requirements of 40 CFR 60.18 or to a vapor control device that is at least 99 percent efficient as measured by USEPA Method 25 within fifteen (15) calendar days of detection. The APCO may grant a ten (10) calendar day extension provided the operator demonstrates that necessary and sufficient actions are being taken to correct the leak within this time period. Any vapor control device, other than a flare, used to comply with this condition shall demonstrate at least 99% control efficiency as measured by USEPA Method 25 at least annually. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
14. If the leaking component is an essential part of a critical process unit which cannot be immediately shut down for repairs, the operator shall 1) Minimize the leak within 15 calendar days; and 2) If the leak which has been minimized still exceeds the concentration allowed by this permit, the essential component shall be repaired to eliminate the leak during the next process unit turnaround, but in no case later than one year from the date of the original leak detection. A critical process unit is any process unit which would result in the automatic shutdown of other process units if it were shut down. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
15. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date of leak detection, and method of detection; 3) Date and emission level of recheck after leak is repaired; 4) Identification and location of essential parts of critical process units found leaking that cannot be repaired until the next process unit turnaround; and 5) Method used to minimize the leak from essential parts of critical process units which cannot be repaired until the next process unit turnaround. [District Rule 2520, 9.43.2] Federally Enforceable Through Title V Permit
16. True vapor pressure shall be measured using Reid vapor pressure ASTM Method D323 modified by maintaining the hot water bath at storage temperature. Where storage temperature is above 100 degrees F true vapor pressure shall be determined by Reid vapor pressure at 100 degrees F and CARB approved calculations. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
17. True vapor pressure of crude oil with an API (American Petroleum Institute) gravity less than 30 deg, as determined by API 2547, may be determined by Headspace Gas Chromatography using the procedures from CARB Evaluation of a Method for Determining Vapor Pressures of Petroleum Mixtures by Headspace Gas Chromatography, October 1990. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
18. Control efficiency shall be determined by a comparison of controlled emissions to those emissions which would occur from a fixed or cone roof tank in the same product service without a vapor recovery system. Emissions shall be determined based on tank emission factors in USEPA Publication AP-42, component counts for fugitive emissions sources, recognized emission factors for fugitive emission sources and the efficiency of any VOC destruction device. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
19. The efficiency of any VOC destruction device shall be measured by USEPA Method 25, 25a, or 25b. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
20. The operator shall ensure that the vapor recovery system is functional and is operating as designed at all times. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

21. Operator shall determine the true vapor pressure of the petroleum liquid stored in the tank located at the beginning of the process flow after the production header at least once per year in accordance with methods described in Section 6.2 of District Rule 4623 (Amended 12/17/92). Determinations shall be made annually during summer and whenever there is a change in the source or type of petroleum entering the tank. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
22. 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 2520, 9.4.2] Federally Enforceable Through Title V Permit

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-1326-212-7

**EXPIRATION DATE:** 03/31/2016

**SECTION:** 11 **TOWNSHIP:** 28S **RANGE:** 27E

**EQUIPMENT DESCRIPTION:**

2,000 BBL FIXED ROOF SURGE TANK #ST-1 WITH VAPOR CONTROL LISTED ON PERMIT S-1326-201 (NORTH TREATING FACILITY).

## PERMIT UNIT REQUIREMENTS

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1. The Reid vapor pressure of the liquid stored in this tank shall not exceed 0.75 psia. [District Rule 2201] Federally Enforceable Through Title V Permit
2. Tank stored liquid temperature shall not exceed 220 degrees F. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Tank shall be equipped with a stored liquid temperature indicator. [District Rule 2201] Federally Enforceable Through Title V Permit
4. Tank shall operate at a constant level. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Any 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. Gas-tight shall be defined as emitting no more than 10,000 ppm of methane measured at a distance of one centimeter from the potential source with an instrument calibrated with methane in accordance with USEPA Method 21. Emissions in excess of this limit shall be considered a leak. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
6. Tank seams, welds, joints, piping, valves, and fittings shall be inspected and maintained in a gas-tight condition. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
7. The permittee shall keep accurate records of Reid vapor pressure, and storage temperature of liquids stored and shall make such records available for District inspection upon request. [District Rule 1070; District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
8. All piping, fittings, and valves shall be inspected annually by the facility operator in accordance with USEPA Method 21, with the instrument calibrated with methane, to ensure compliance with the provisions of this permit. If any of the tank components are found to leak during an annual inspection, the inspection frequency for that component type shall be changed from annual to quarterly. If no tank components are subsequently found to be leaking during five consecutive inspections, the inspection frequency may be changed from quarterly to annual. Components located in inaccessible (over 15 feet above ground when access is required from the ground or over 6 feet away from a platform when access is required from the platform) locations shall be inspected at least annually and components located in unsafe areas shall be inspected and repaired at the next process unit turnaround (the scheduled shutdown of a unit for maintenance and repair work). [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
9. A facility operator, upon detection of a leaking component, shall affix to that component a weatherproof readily visible tag bearing the date on which the leak is detected. The tag shall remain in place until the leaking component is repaired, reinspected and found to be in compliance with the requirements of this rule. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

10. An operator shall reinspect a component for leaks within thirty working days after the date on which the component is repaired. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
11. Emissions from components which have been tagged by the facility operator for repair within 15 calendar days or which have been repaired and are awaiting re-inspection shall not be in violation of this permit. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
12. Any component leak shall be repaired to a leak-free condition or vented to a flare satisfying the requirements of 40 CFR 60.18 or to a vapor control device that is at least 99 percent efficient as measured by USEPA Method 25 within fifteen (15) calendar days of detection. The APCO may grant a ten (10) calendar day extension provided the operator demonstrates that necessary and sufficient actions are being taken to correct the leak within this time period. Any vapor control device, other than a flare, used to comply with this condition shall demonstrate at least 99% control efficiency as measured by USEPA Method 25 at least annually. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
13. If the leaking component is an essential part of a critical process unit which cannot be immediately shut down for repairs, the operator shall 1) Minimize the leak within 15 calendar days; and 2) If the leak which has been minimized still exceeds the concentration allowed by this permit, the essential component shall be repaired to eliminate the leak during the next process unit turnaround, but in no case later than one year from the date of the original leak detection. A critical process unit is any process unit which would result in the automatic shutdown of other process units if it were shut down. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
14. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date of leak detection, and method of detection; 3) Date and emission level of recheck after leak is repaired; 4) Identification and location of essential parts of critical process units found leaking that cannot be repaired until the next process unit turnaround; and 5) Method used to minimize the leak from essential parts of critical process units which cannot be repaired until the next process unit turnaround. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
15. True vapor pressure shall be measured using Reid vapor pressure ASTM Method D323 modified by maintaining the hot water bath at storage temperature. Where storage temperature is above 100 degrees F true vapor pressure shall be determined by Reid vapor pressure at 100 degrees F and CARB approved calculations. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
16. True vapor pressure of crude oil with an API (American Petroleum Institute) gravity less than 30 deg, as determined by API 2547, may be determined by Headspace Gas Chromatography using the procedures from CARB Evaluation of a Method for Determining Vapor Pressures of Petroleum Mixtures by Headspace Gas Chromatography, October 1990. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
17. Control efficiency shall be determined by a comparison of controlled emissions to those emissions which would occur from a fixed or cone roof tank in the same product service without a vapor recovery system. Emissions shall be determined based on tank emission factors in USEPA Publication AP-42, component counts for fugitive emissions sources, recognized emission factors for fugitive emission sources and the efficiency of any VOC destruction device. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
18. The efficiency of any VOC destruction device shall be measured by USEPA Method 25, 25a, or 25b. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
19. The operator shall ensure that the vapor recovery system is functional and is operating as designed at all times. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
20. Operator shall determine the true vapor pressure of the petroleum liquid stored in the tank located at the beginning of the process flow after the production header at least once per year in accordance with methods described in 40 CFR 60.113 and Section 6.2 of District Rule 4623 (Amended 12/17/92). Determinations shall be made annually during summer and whenever there is a change in the source or type of petroleum entering the tank. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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



21. 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 2520, 9.4.2] Federally Enforceable Through Title V Permit

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-1326-214-7

**EXPIRATION DATE:** 03/31/2016

**SECTION:** NE 23 **TOWNSHIP:** 28S **RANGE:** 27E

**EQUIPMENT DESCRIPTION:**

2000 BBL FIXED-ROOF STOCK TANK SERVED BY VAPOR CONTROL SYSTEM LISTED ON S-1326-46 (FANO LEASE)

## PERMIT UNIT REQUIREMENTS

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1. Tank vapors shall be vented only to vapor control system listed on tank permit S-1326-46. [District Rule 2201] Federally Enforceable Through Title V Permit
2. The true vapor pressure of the liquids stored in this tank shall not exceed 0.5 psia. [District Rules 4623, 4.4 and 2201] Federally Enforceable Through Title V Permit
3. Vapor control efficiency shall be maintained at no less than 99%. [District Rule 2201] Federally Enforceable Through Title V Permit
4. Fuel gas system gas shall consist primarily of methane containing no more than 5% by weight hydrocarbons heavier than butane and shall have a sulfur content of no more than 0.75 gr/100 scf. [District Rule 2201] Federally Enforceable Through Title V Permit
5. The tank pressure relief valves shall not open unless the tank internal pressure exceeds 2.0 oz. or falls below 0.5 oz. vacuum. [District Rule 2201] Federally Enforceable Through Title V Permit
6. This permit authorizes tank cleaning that is not the result of breakdowns or poor maintenance as a routine maintenance activity. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Prior to opening the tank to allow tank cleaning the following procedure must be followed. Operate PV valve and vapor recovery system (if equipped) during emptying, filling, and flushing. During filling and purging, no vapor leakage is allowed. Drain all liquid from the tank to the maximum extent feasible prior to opening the tank. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Prior to opening the tank to allow tank cleaning one of the following options must be followed: 1) operate the vapor recovery system for at least 2 hours after all the liquid in the tank has been drained, 2) displace vapors floating the oil pad off with water such that 90% of the tank volume is displaced, 3) vent the tank to the vapor control system until the vapor concentration is less than 10% of the lower explosive limit (LEL) or 5,000 ppmv whichever is less; or 4) vent the tank to the vapor control system for a length of time determined by the following relationship:  $t = 2.3 V / Q$ , where  $t$  = time,  $V$  = tank volume (cubic feet), and  $Q$  = flow rate to the vapor control system as determined using appropriate engineering calculations. [District Rule 2201] Federally Enforceable Through Title V Permit
9. Allowable methods of cleaning include using steam, diesel, solvents with an initial boiling point of greater than 302 F, solvents with a vapor pressure of less than 0.5 psia, or solvents with 50 grams/liter VOC content or less. Steam cleaning shall be allowed at locations where wastewater treatment facilities are limited or during December through March. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

10. Permittee shall maintain records of each period of cleaning and maintenance when the tank is disconnected or isolated from the vapor control system. Records shall include the date that tank cleaning was initiated, the date tank cleaning was completed, the procedure used to vent tank vapors prior to opening, the method of tank cleaning used, and a description of internal and external tank repairs and maintenance performed. Such records shall be retained for a period of at least 5 years and shall be made available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit
11. To qualify for quantification of no fugitive emissions, operator shall conduct quarterly gas sampling after TVR compressor (prior to connection to any other vapor control system) and at either the first line tank or at any secondary tank which is heated above ambient temperature. If gas samples are less than 10% VOC by weight for 8 consecutive quarterly samplings, sampling frequency shall only be required annually and whenever there is a change in source or type of petroleum processed. Samples shall be collected during periods of normal operation, and not be within 48 hours after routine maintenance or repair. [District Rule 2201] Federally Enforceable Through Title V Permit
12. Permittee shall provide the District with written notification at least 30 days prior to installation of components handling fluid streams with a VOC content of 10% or less by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
13. Any 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. Gas-tight shall be defined as emitting no more than 10,000 ppm of methane measured at a distance of one centimeter from the potential source with an instrument calibrated with methane in accordance with USEPA Method 21. Emissions in excess of this limit shall be considered a leak. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
14. All tank seams, welds, joints, piping, valves, and fittings shall be inspected and maintained in a gas-tight condition. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
15. The permittee shall keep accurate records of liquids stored and true vapor pressure of such liquids. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
16. Permittee shall conduct true vapor pressure (TVP) testing of the organic liquid stored in this tank at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored in this tank in order to maintain exemption from the rule. [District Rule 4623, 6.2.2] Federally Enforceable Through Title V Permit
17. The TVP testing shall be conducted at actual storage temperature of the organic liquid in the tank. The permittee shall also conduct an API gravity testing. [District Rule 4623, 6.2.2] Federally Enforceable Through Title V Permit
18. For crude oil with an API gravity of 26 degrees or less, the TVP shall be determined using the latest version of the Lawrence Berkeley National Laboratory "test Method for Vapor pressure of Reactive Organic Compounds in Heavy Crude Oil Using Gas Chromatograph", as approved by ARB and EPA. [District Rule 4623, 6.4] Federally Enforceable Through Title V Permit
19. 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
20. Permittee shall submit the records of TVP and API gravity testing to the APCO within 45 days after the date of testing. The records shall include the tank identification number, Permit to Operate number, type of stored organic liquid, TVP and API gravity of the organic liquid, test methods used, and a copy of the test results. [District Rule 4623, 6.3.6] Federally Enforceable Through Title V Permit
21. 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, 6.3.6] 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.

22. Control efficiency shall be determined by a comparison of controlled emissions to those emissions which would occur from a fixed or cone roof tank in the same product service without a vapor recovery system. Emissions shall be determined based on tank emission factors in USEPA Publication AP-42, component counts for fugitive emissions sources, recognized emission factors for fugitive emission sources and the efficiency of any VOC destruction device. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
23. The operator shall ensure that the vapor control system is functional and is operating as designed at all times, except during periods of routine maintenance. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
24. As used in this permit, the term "source or type of petroleum" shall mean petroleum liquids with similar characteristics. The operator shall maintain records of API gravity of petroleum liquids store in this unit to determine which oil are from common source. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
25. 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 2520, 9.4.2] Federally Enforceable Through Title V Permit

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-1326-215-7

**EXPIRATION DATE:** 03/31/2016

**SECTION:** NE 23 **TOWNSHIP:** 28S **RANGE:** 27E

**EQUIPMENT DESCRIPTION:**

3000 BBL FIXED-ROOF WASH TANK SERVED BY VAPOR CONTROL SYSTEM LISTED ON S-1326-46 (FANO LEASE)

## PERMIT UNIT REQUIREMENTS

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1. The true vapor pressure of the liquids stored in this tank shall not exceed 0.5 psia. [District NSR Rule and District Rule 4623, 4.4] Federally Enforceable Through Title V Permit
2. Vapor control efficiency shall be maintained at no less than 99%. [District NSR Rule] Federally Enforceable Through Title V Permit
3. Fuel gas system gas shall consist primarily of methane containing no more than 5% by weight hydrocarbons heavier than butane and shall have a sulfur content of no more than 0.75 gr/100 scf. [District NSR Rule] Federally Enforceable Through Title V Permit
4. This permit authorizes tank cleaning that is not the result of breakdowns or poor maintenance as a routine maintenance activity. [District NSR Rule] Federally Enforceable Through Title V Permit
5. Prior to opening the tank to allow tank cleaning the following procedure must be followed. Operate PV valve and vapor recovery system (if equipped) during emptying, filling, and flushing. During filling and purging, no vapor leakage is allowed. Drain all liquid from the tank to the maximum extent feasible prior to opening the tank. [District NSR Rule] Federally Enforceable Through Title V Permit
6. Prior to opening the tank to allow tank cleaning one of the following options must be followed: 1) operate the vapor recovery system for at least 2 hours after all the liquid in the tank has been drained, 2) displace vapors floating the oil pad off with water such that 90% of the tank volume is displaced, 3) vent the tank to the vapor control system until the vapor concentration is less than 10% of the lower explosive limit (LEL) or 5,000 ppmv whichever is less; or 4) vent the tank to the vapor control system for a length of time determined by the following relationship:  $t = 2.3 V / Q$ , where  $t$  = time,  $V$  = tank volume (cubic feet), and  $Q$  = flow rate to the vapor control system as determined using appropriate engineering calculations. [District NSR Rule] Federally Enforceable Through Title V Permit
7. Allowable methods of cleaning include using steam, diesel, solvents with an initial boiling point of greater than 302 F, solvents with a vapor pressure of less than 0.5 psia, or solvents with 50 grams/liter VOC content or less. Steam cleaning shall be allowed at locations where wastewater treatment facilities are limited or during December through March. [District NSR Rule] Federally Enforceable Through Title V Permit
8. Permittee shall maintain records of each period of cleaning and maintenance when the tank is disconnected or isolated from the vapor control system. Records shall include the date that tank cleaning was initiated, the date tank cleaning was completed, the procedure used to vent tank vapors prior to opening, the method of tank cleaning used, and a description of internal and external tank repairs and maintenance performed. Such records shall be retained for a period of at least 5 years and shall be made available for District inspection upon request. [District NSR Rule] Federally Enforceable Through Title V Permit

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

9. To qualify for quantification of no fugitive emissions, operator shall conduct quarterly gas sampling after TVR compressor (prior to connection to any other vapor control system) and at either the first line tank or at any secondary tank which is heated above ambient temperature. If gas samples are less than 10% VOC by weight for 8 consecutive quarterly samplings, sampling frequency shall only be required annually and whenever there is a change in source or type of petroleum processed. Samples shall be collected during periods of normal operation, and not be within 48 hours after routine maintenance or repair. [District NSR Rule] Federally Enforceable Through Title V Permit
10. Permittee shall provide the District with written notification at least 30 days prior to installation of components handling fluid streams with a VOC content of 10% or less by weight. [District NSR Rule] Federally Enforceable Through Title V Permit
11. Any 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. Gas-tight shall be defined as emitting no more than 10,000 ppm of methane measured at a distance of one centimeter from the potential source with an instrument calibrated with methane in accordance with USEPA Method 21. Emissions in excess of this limit shall be considered a leak. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
12. All tank seams, welds, joints, piping, valves, and fittings shall be inspected and maintained in a gas-tight condition. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
13. Permittee shall conduct true vapor pressure (TVP) testing of the organic liquid stored in this tank at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored in this tank in order to maintain exemption from the rule. [District Rule 4623, 6.2.2] Federally Enforceable Through Title V Permit
14. The TVP testing shall be conducted at actual storage temperature of the organic liquid in the tank. The permittee shall also conduct an API gravity testing. [District Rule 4623, 6.2.2] Federally Enforceable Through Title V Permit
15. For crude oil with an API gravity of 26 degrees or less, the TVP shall be determined using the latest version of the Lawrence Berkeley National Laboratory "test Method for Vapor pressure of Reactive Organic Compounds in Heavy Crude Oil Using Gas Chromatograph", as approved by ARB and EPA. [District Rule 4623, 6.4] Federally Enforceable Through Title V Permit
16. 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
17. Permittee shall submit the records of TVP and API gravity testing to the APCO within 45 days after the date of testing. The records shall include the tank identification number, Permit to Operate number, type of stored organic liquid, TVP and API gravity of the organic liquid, test methods used, and a copy of the test results. [District Rule 4623, 6.3.6] Federally Enforceable Through Title V Permit
18. 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, 6.3.6] Federally Enforceable Through Title V Permit
19. Control efficiency shall be determined by a comparison of controlled emissions to those emissions which would occur from a fixed or cone roof tank in the same product service without a vapor recovery system. Emissions shall be determined based on tank emission factors in USEPA Publication AP-42, component counts for fugitive emissions sources, recognized emission factors for fugitive emission sources and the efficiency of any VOC destruction device. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
20. The operator shall ensure that the vapor control system is functional and is operating as designed at all times, except during periods of routine maintenance. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
21. 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 2520, 9.4.2] Federally Enforceable Through Title V Permit

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-1326-260-4

**EXPIRATION DATE:** 03/31/2016

**SECTION:** SE14 **TOWNSHIP:** 28S **RANGE:** 27E

**EQUIPMENT DESCRIPTION:**

3.6 MMBTU/HR KALDAIR FLARE INCLUDING TWO 8000 LB SULFATREAT CANISTERS (ONE AS BACKUP), 50 HP COMPRESSOR, AND PIPING FROM TEOR OPERATION S-1326-35 (YOUNG SECTION 14)

## PERMIT UNIT REQUIREMENTS

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1. Collected vapors shall discharge to H<sub>2</sub>S scrubber prior to vapor combustion in flare. [District Rule 2201] Federally Enforceable Through Title V Permit
2. Flare shall comply with all of the applicable requirements of Rule 4311. [District Rule 4311] Federally Enforceable Through Title V Permit
3. Flare shall operate with no visible emission in excess of 5% opacity. [District Rule 2201] Federally Enforceable Through Title V Permit
4. The flame shall be present at all times when combustible gases are vented through the flare. [District Rule 4311, 5.2] Federally Enforceable Through Title V Permit
5. The flare outlet shall be equipped with an automatic ignition system, or, shall operate with a pilot flame present at all times when combustible gases are vented through the flare, except during purge periods for automatic-ignition equipped flares. [District Rule 4311, 5.3] Federally Enforceable Through Title V Permit
6. Except for flares equipped with a flow-sensing ignition system, a heat sensing device such as a thermocouple, ultraviolet beam sensor, infrared sensor, or an equivalent device, capable of continuously detecting at least one pilot flame or the flare flame is present shall be installed and operated. [District Rule 4311, 5.4] Federally Enforceable Through Title V Permit
7. Flares using flow-sensing automatic ignition systems and not using a continuous flame pilot shall use purge gas for purging. [District Rule 4311, 5.5] Federally Enforceable Through Title V Permit
8. The flare shall be operated according to the manufacturer's specifications, a copy of which shall be maintained on site. [District Rule 2520, 9.4.1] Federally Enforceable Through Title V Permit
9. Open flares (air-assisted, steam-assisted, or non-assisted) in which the flare gas pressure is less than 5 psig shall be operated in such a manner that meets the provisions of 40 CFR 60.18. [District Rule 4311, 5.6] Federally Enforceable Through Title V Permit
10. Sulfur content of gas combusted in flare shall not exceed 0.75 gr/100 scf. [District Rule 2201 and District Rule 4801] Federally Enforceable Through Title V Permit
11. Emission rates shall not exceed the following: PM<sub>10</sub>: 12.0 lb/MMscf, SO<sub>x</sub> (as SO<sub>2</sub>): 2.1 lb/MMscf, NO<sub>x</sub> (as NO<sub>2</sub>): 100.0 lb/MMscf, VOC: 7.26 lb/MMscf and CO: 21.0 lb/MMscf. [District Rule 2201] Federally Enforceable Through Title V Permit
12. Combined pilot and waste gas flow rate shall not exceed 0.15 MMscf/day. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

13. Sulfur scrubber shall be monitored monthly for H2S content of gas after treatment to determine when recharging is required. [District NSR Rule and District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
14. Hydrogen sulfide content of vent gas shall be determined using ASTM Method D 1945-96, ASTM Method UOP 539-97, ASTM Method D 4084-94, or ASTM Method D 4810-88. [District Rule 4311, 6.3.4] Federally Enforceable Through Title V Permit
15. The permittee shall keep accurate records of the amount of gas flared, H2S content and recharging dates, for a period of five years, and shall make such records available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit
16. This flare shall be inspected every two weeks while in operation for visible emissions. If visible emissions are observed, corrective action shall be taken. If visible emissions continue, an EPA Method 9 test shall be conducted within 72 hours. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
17. This flare shall not be used as a leak control device as described in Rule 4403, 5.3.1, nor as a control device for any permit unit subject to NSPS, without modification of permit requirements to address 40 CFR 60.18. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
18. The operator of a flare subject to flare minimization plans pursuant to Section 5.8 of Rule 4311 shall notify the APCO of an unplanned flaring event within 24 hours after the start of the next business day or within 24 hours of their discovery, whichever occurs first. The notification shall include the flare source identification, the start date and time, and the end date and time. [District Rule 4311, 6.2.1] Federally Enforceable Through Title V Permit
19. Effective on and after July 1, 2012, and annually thereafter, the operator of a flare subject to flare minimization plans pursuant to Section 5.8 shall submit an annual report to the APCO that summarizes all Reportable Flaring Events as defined in Section 3.0 that occurred during the previous 12 month period. The report shall be submitted within 30 days following the end of the twelve month period of the previous year. The report shall include, but is not limited to all of the following: 1) The results of an investigation to determine the primary cause and contributing factors of the flaring event; 2) Any prevention measures considered or implemented to prevent recurrence together with a justification for rejecting any measures that were considered but not implemented; 3) If appropriate, an explanation of why the flaring was an emergency and necessary to prevent accident, hazard or release of vent gas to the atmosphere, or where, due to a regulatory mandate to vent a flare, it cannot be recovered, treated and used as a fuel gas at the facility; and 4) The date, time, and duration of the flaring event. [District Rule 4311, 6.2.2] Federally Enforceable Through Title V Permit
20. Effective on and after July 1, 2012, and annually thereafter, the operator of a flare subject to flare monitoring requirements pursuant to Rule 4311, Sections 5.10, 6.6, 6.7, 6.8, 6.9, and 6.10, as appropriate, shall submit an annual report to the APCO within 30 days following the end of each 12 month period. The report shall include the following: 1) The total volumetric flow of vent gas in standard cubic feet for each day, 2) Hydrogen sulfide content, methane content, and hydrocarbon content of vent gas composition pursuant to Section 6.6, 3) If vent gas composition is monitored by a continuous analyzer or analyzers pursuant to Section 5.11, average total hydrocarbon content by volume, average methane content by volume, and depending upon the analytical method used pursuant to Section 6.3.4, total reduced sulfur content by volume or hydrogen sulfide content by volume of vent gas flared for each hour of the month, 4) If the flow monitor used pursuant to Section 5.10 measures molecular weight, the average molecular weight for each hour of each month, 5) For any pilot and purge gas used, the type of gas used, the volumetric flow for each day and for each month, and the means used to determine flow, 6) Flare monitoring system downtime periods, including dates and times, 7) For each day and for each month provide calculated sulfur dioxide emissions, and 8) A flow verification report for each flare subject to this rule. The flow verification report shall include flow verification testing pursuant to Section 6.3.5. [District Rule 4311, 6.2.3] Federally Enforceable Through Title V Permit
21. Flaring is prohibited unless it is consistent with an approved flare minimization plan (FMP), pursuant to Rule 4311, Section 6.5, and all commitments listed in that plan have been met. This standard shall not apply if the APCO determines that the flaring is caused by an emergency as defined by Section 3.7 and is necessary to prevent an accident, hazard or release of vent gas directly to the atmosphere [District Rule 4311, 5.8] 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.



22. The operator of a flare subject to flare minimization requirements pursuant to Section 5.8 shall monitor the vent gas flow to the flare with a flow measuring device or other parameters as specified in the Permit to Operate. The operator shall maintain records pursuant to Section 6.1.7. Flares that the operator can verify, based on permit conditions, are not capable of producing reportable flare events pursuant to Section 6.2.2 shall not be required to monitor vent gas flow to the flare. [District Rule 4311, 5.10] Federally Enforceable Through Title V Permit
23. Upon request, the operator of flares that are subject to Section 5.6 shall make available to the APCO the compliance determination records that demonstrate compliance with the provisions of 40 CFR 60.18, (c)(3) through (c)(5). [District Rule 4311, 6.4.1] Federally Enforceable Through Title V Permit
24. The following records shall be maintained, retained on-site for a minimum of five years, and made available to the APCO, ARB, and EPA upon request: 1) A copy of the compliance determination conducted pursuant to Section 6.4.1, 2) For flares used during an emergency, record of the duration of flare operation, amount of gas burned, and the nature of the emergency situation, 3) A copy of the approved flare minimization plan pursuant to Section 6.5, 4) On and after July 1, 2012, where applicable, a copy of annual reports submitted to the APCO pursuant to Section 6.2, and 5) Where applicable, monitoring data collected pursuant to Sections 5.10. [District Rule 4311, 6.1] Federally Enforceable Through Title V Permit

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-1326-261-6

**EXPIRATION DATE:** 03/31/2016

**SECTION:** SW11 **TOWNSHIP:** 28S **RANGE:** 27E

**EQUIPMENT DESCRIPTION:**

500 BBL FIXED ROOF STOCK TANK #T-20 WITH VAPOR CONTROL OF LISTED ON PERMIT S-1326-201 (NORTH TREATING FACILITY).

## PERMIT UNIT REQUIREMENTS

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1. The Reid vapor pressure of the liquid stored in this tank shall not exceed 0.75 psia. [District Rule 2201] Federally Enforceable Through Title V Permit
2. Tank stored liquid temperature shall not exceed 220 degrees F. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Tank shall be equipped with a stored liquid temperature indicator. [District Rule 2201] Federally Enforceable Through Title V Permit
4. The average daily throughput for this tank (on an annual basis) shall not exceed 4670 bbl/day. [District Rule 2201] Federally Enforceable Through Title V Permit
5. VOC emission rate shall not exceed 2.1 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Any tank gauging or sampling device on a tank vented to the vapor recovery system shall be equipped with a gas-tight cover which shall be closed at all times except during gauging or sampling. Gas-tight shall be defined as emitting no more than 10,000 ppm of methane measured at a distance of one centimeter from the potential source with an instrument calibrated with methane in accordance with USEPA Method 21. Emissions in excess of this limit shall be considered a leak. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
7. The permittee shall keep accurate records of Reid vapor pressure, storage temperature, and tank throughput, and shall make such records available for District inspection upon request. [District Rule 1070; District Rule 2520, 9.5.2] Federally Enforceable Through Title V Permit
8. The tank shall be equipped with a vapor recovery system consisting of a closed vent system that collects all VOCs from the storage tank, and a VOC control device. The vapor recovery system shall be APCO-approved and maintained in gas-tight condition. The VOC control device shall be either of the following: a vapor return or condensation system that connects to a gas pipeline distribution system, or an approved VOC destruction device that reduces the inlet VOC emissions by at least 95% by weight as determined by the test method specified in Section 6.4.7. [District Rule 4623] Federally Enforceable Through Title V Permit
9. All piping, valves, and fittings shall be constructed and maintained in a gas-tight condition. [District Rule 4623] Federally Enforceable Through Title V Permit
10. A gas-tight condition is defined as a condition without a gas leak. A gas leak is defined as a reading in excess of 10,000 ppmv, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21. A reading in excess of 10,000 ppmv above background is a violation of this permit and Rule 4623 and shall be reported as a deviation. [District Rule 4623] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

11. Any tank gauging or sampling device on a tank vented to the vapor recovery system shall be equipped with a leak-free cover which shall be closed at all times except during gauging or sampling. [District Rule 4623] Federally Enforceable Through Title V Permit
12. Except as otherwise provided in this permit, the operator shall ensure that the vapor recovery system is functional and is operating as designed at all times. [District Rule 4623] Federally Enforceable Through Title V Permit
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] Federally Enforceable Through Title V Permit
14. 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] Federally Enforceable Through Title V Permit
15. 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
16. 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 on 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 District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
17. 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
18. 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
19. 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
20. 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
21. 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, Table 3] Federally Enforceable Through Title V Permit
22. Operator 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] Federally Enforceable Through Title V Permit

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-1326-262-5

**EXPIRATION DATE:** 03/31/2016

**SECTION:** SW11 **TOWNSHIP:** 28S **RANGE:** 27E

**EQUIPMENT DESCRIPTION:**

500 BBL FIXED ROOF WATER TANK #T-19 WITH VAPOR CONTROL LISTED ON PERMIT S-1326-201 (NORTH TREATING FACILITY).

## PERMIT UNIT REQUIREMENTS

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1. The Reid vapor pressure of the liquid stored in this tank shall not exceed 0.75 psia. [District Rule 2201] Federally Enforceable Through Title V Permit
2. Tank stored liquid temperature shall not exceed 220 degrees F. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Tank shall be equipped with a stored liquid temperature indicator. [District Rule 2201] Federally Enforceable Through Title V Permit
4. The average daily throughput for this tank (on an annual basis) shall not exceed 40,000 bbl/day. [District Rule 2201] Federally Enforceable Through Title V Permit
5. VOC emission rate shall not exceed 16.8 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
6. The permittee shall keep accurate records of Reid vapor pressure, storage temperature, and tank throughput, and shall make such records available for District inspection upon request. [District Rule 1070; District Rule 2520, 9.5.2] Federally Enforceable Through Title V Permit
7. The tank shall be equipped with a vapor recovery system consisting of a closed vent system that collects all VOCs from the storage tank, and a VOC control device. The vapor recovery system shall be APCO-approved and maintained in gas-tight condition. The VOC control device shall be either of the following: a vapor return or condensation system that connects to a gas pipeline distribution system, or an approved VOC destruction device that reduces the inlet VOC emissions by at least 95% by weight as determined by the test method specified in Section 6.4.7. [District Rule 4623] Federally Enforceable Through Title V Permit
8. All piping, valves, and fittings shall be constructed and maintained in a gas-tight condition. [District Rule 4623] Federally Enforceable Through Title V Permit
9. A gas-tight condition is defined as a condition without a gas leak. A gas leak is defined as a reading in excess of 10,000 ppmv, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21. A reading in excess of 10,000 ppmv above background is a violation of this permit and Rule 4623 and shall be reported as a deviation. [District Rule 4623] Federally Enforceable Through Title V Permit
10. Any tank gauging or sampling device on a tank vented to the vapor recovery system shall be equipped with a leak-free cover which shall be closed at all times except during gauging or sampling. [District Rule 4623] Federally Enforceable Through Title V Permit
11. Except as otherwise provided in this permit, the operator shall ensure that the vapor recovery system is functional and is operating as designed at all times. [District Rule 4623] 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. All piping, fittings, and valves on this tank shall be inspected annually by the facility operator in accordance with EPA Method 21, with the instrument calibrated with methane, to ensure compliance with the leaking provisions of this permit. [District Rule 4623] Federally Enforceable Through Title V Permit
13. 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] Federally Enforceable Through Title V Permit
14. 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
15. 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 on 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 District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
16. 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
17. 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
18. 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
19. 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
20. Operator shall determine the true vapor pressure of the petroleum liquid stored in the tank located at the beginning of the process flow after the production header at least once per year in accordance with methods described in Section 6.2 of District Rule 4623 (Amended 12/17/92). Determinations shall be made annually during summer and whenever there is a change in the source or type of petroleum entering the tank. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
21. 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, Table 3] Federally Enforceable Through Title V Permit
22. Operator 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] Federally Enforceable Through Title V Permit

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-1326-263-11

**EXPIRATION DATE:** 03/31/2016

**SECTION:** SW23 **TOWNSHIP:** 28S **RANGE:** 27E

**EQUIPMENT DESCRIPTION:**

3,000 BBL FIXED ROOF WASH TANK SERVED BY TANK VAPOR CONTROL SYSTEM SHARED WITH CASING VENT RECOVERY (CVR) SYSTEM LISTED ON S-1326-287 AND CRUDE OIL STORAGE TANKS S-1326-263, -279, -280, -281, -283, -285, AND '-315 (SECTION 23 FACILITY)

## PERMIT UNIT REQUIREMENTS

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1. Collected TVR vapors shall be disposed of in a Department of Oil, Gas and Geothermal Resources (DOGGR) approved vapor disposal well or injected into the field fuel gas system and used in permit exempt equipment. [District Rules 2020 and 2201] Federally Enforceable Through Title V Permit
2. VOC content of tank vapor space and vapor control system piping and components shall not exceed 10% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Prior to injecting collected TVR (and S-1326-287 CVR) vapors into field fuel gas system, the collected vapors shall be treated by a hydrogen sulfide removal system which reduces the hydrogen sulfide concentration in the collected vapors by at least 95%. The sulfur content of the treated vapors may not exceed 1.0 grains S/ 100 scf gas. The treated TVR (and CVR) vapors injected into the field fuel gas line shall not be greater than five percent by weight hydrocarbons heavier than butane as determined by test method ASTM D-1945 or equivalent test method with prior District approval. [District Rules 2020 and 2201] Federally Enforceable Through Title V Permit
4. Operator shall ensure the vapor control system is functional and operating as designed at all times, except during periods of routine maintenance. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
5. 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 Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
6. The true vapor pressure of the liquids stored in this tank shall not exceed 0.5 psia. [District Rules 4623, 4.4 and 2201] Federally Enforceable Through Title V Permit
7. Connections between this TVR system and the wellhead casing vent recovery (CVR) system listed on S-1326-287 shall be made upstream of the hydrogen sulfide removal system included in this permit. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Permittee shall conduct tank cleaning and maintenance operations in accordance with District approved procedures as described in this permit. [District Rule 2080] Federally Enforceable Through Title V Permit
9. 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

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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10. Prior to opening the tank to allow tank cleaning, one of the following procedures must be followed: 1) Prior to venting the tank to the atmosphere, operate the tank vapor recovery system/vapor control device for at least 24 hours such that it collects the tank vapors; or 2) use liquid displacement, conducted using a liquid with a TVP less than 0.5 psia, or conducted by floating the oil pad off a crude oil tank by restricting the outflow of water, such that 90% of the tank volume is displaced; or 3) Vent the tank to a vapor control device/vapor recovery system until the vapor concentration is less than 10% of the lower explosive limit (LEL) or 5,000 ppmv whichever is less; or 4) vent the tank to the vapor control system for a length of time determined by the following relationship:  $t = 2.3 V/Q$ , where  $t$  = time,  $V$  = tank volume (cubic feet), and  $Q$  = flow rate to the vapor control system as determined using appropriate engineering calculations. [District Rule 2080] Federally Enforceable Through Title V Permit
11. 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
12. 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
13. 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
14. 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
15. Permittee shall maintain records of each period of cleaning and maintenance when the tank is disconnected or isolated from the vapor control system. Records shall include the date that tank cleaning was initiated, the date tank cleaning was completed, the procedure used to vent tank vapors prior to opening, the method of tank cleaning used, and a description of internal and external tank repairs and maintenance performed. Such records shall be retained for a period of at least 5 years and shall be made available for District inspection upon request. [District Rule 2080] Federally Enforceable Through Title V Permit
16. Operator shall conduct quarterly gas sampling after TVR compressor (prior to connection to any other vapor control system) and at either the first line tank or at any secondary tank which is heated above ambient temperature. If gas samples are less than 10% VOC by weight for 8 consecutive quarterly samplings, sampling frequency shall only be required annually and whenever there is a change in source or type of petroleum processed. Samples shall be collected during periods of normal operation, and not be within 48 hours after routine maintenance or repair. [District Rule 2201] Federally Enforceable Through Title V Permit
17. VOC content of gas shall be measured using ASTM D-1945, EPA Method 18 referenced as methane, or equivalent test method with prior District approval. [District Rule 2201] Federally Enforceable Through Title V Permit
18. Permittee shall conduct true vapor pressure (TVP) testing of the organic liquid stored in this tank at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored in this tank in order to maintain exemption from the rule. [District Rule 4623, 6.2.2] Federally Enforceable Through Title V Permit
19. The TVP testing shall be conducted at actual storage temperature of the organic liquid in the tank. The permittee shall also conduct an API gravity testing. [District Rule 4623, 6.2.2] Federally Enforceable Through Title V Permit
20. 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

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

21. 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
22. 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, 6.3.6] Federally Enforceable Through Title V Permit
23. 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, 6.3.6] Federally Enforceable Through Title V Permit
24. The permittee shall keep accurate records of VOC content of vapors, liquids stored and true vapor pressure of such liquids for a period of 5 years and shall make such records available for District inspection upon request. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
25. All records required to be maintained by this permit shall be maintained for a period of at least five years and shall be made readily available for District inspection upon request. [District Rule 4623] Federally Enforceable Through Title V Permit

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



# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-1326-268-6

**EXPIRATION DATE:** 03/31/2016

**SECTION:** SW11 **TOWNSHIP:** 28S **RANGE:** 27E

**EQUIPMENT DESCRIPTION:**

5,000 BBL FIXED ROOF SURGE/FWKO TANK #T-12 WITH VAPOR CONTROL LISTED ON PERMIT S-1326-201 (NORTH TREATING FACILITY).

## PERMIT UNIT REQUIREMENTS

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1. The Reid vapor pressure of liquids stored shall not exceed 1.84 psia. [District Rule 2201] Federally Enforceable Through Title V Permit
2. Tank stored liquid temperature shall not exceed 220 degrees F. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Tank shall be equipped with a stored liquid temperature indicator. [District Rule 2080] Federally Enforceable Through Title V Permit
4. VOC emissions shall not exceed 2.6 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Tank shall be operated at a constant level. [District Rule 2201] Federally Enforceable Through Title V Permit
6. The tank shall be equipped with a vapor recovery system consisting of a closed vent system that collects all VOCs from the storage tank, and a VOC control device. The vapor recovery system shall be APCO-approved and maintained in leak-free condition. The VOC control device shall be either of the following: a vapor return or condensation system that connects to a gas pipeline distribution system, or an approved VOC destruction device that reduces the inlet VOC emissions by at least 95% by weight as determined by the test method specified in Section 6.4.7. [District Rule 4623] Federally Enforceable Through Title V Permit
7. All piping, valves, and fittings shall be constructed and maintained in a leak-free condition. [District Rule 4623] Federally Enforceable Through Title V Permit
8. A leak-free condition is defined as a condition without a gas leak. A gas leak is defined as a reading in excess of 10,000 ppmv, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21. A reading in excess of 10,000 ppmv above background is a violation of this permit and Rule 4623 and shall be reported as a deviation. [District Rule 4623] Federally Enforceable Through Title V Permit
9. Any tank gauging or sampling device on a tank vented to the vapor recovery system shall be equipped with a leak-free cover which shall be closed at all times except during gauging or sampling. [District Rule 4623] Federally Enforceable Through Title V Permit
10. 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

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

11. Operator shall visually inspect tank shell, hatches, seals, seams, cable seals, valves, flanges, connectors, and any other piping components directly affixed to the tank and within five feet of the tank at least once per year for liquid leaks, and with a portable hydrocarbon detection instrument conducted in accordance with EPA Method 21 for gas leaks. Operator shall also visually or ultrasonically inspect as appropriate, the external shells and roofs of uninsulated tanks for structural integrity annually. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
12. Upon detection of a liquid leak, defined as a leak rate of greater than or equal to 30 drops per minute, operator shall repair the leak within 8 hours. For leaks with a liquid leak rate of between 3 and 30 drops per minute, the leaking component shall be repaired within 24 hours after detection. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
13. 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
14. 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
15. 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
16. 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
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 Rule 4623,] Federally Enforceable Through Title V Permit
18. The permittee shall keep accurate records of Reid vapor pressure, and storage temperature of liquids stored, and shall make such records readily available for District inspection upon request. [District Rule 1070; District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
19. All records required to be maintained by this permit shall be maintained for a period of at least five years and shall be made readily available for District inspection upon request. [District Rule 4623 and District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-1326-269-6

**EXPIRATION DATE:** 03/31/2016

**SECTION:** SW11 **TOWNSHIP:** 28S **RANGE:** 27E

**EQUIPMENT DESCRIPTION:**

5,000 BBL FIXED ROOF PRODUCED WATER TANK #T-13 WITH VAPOR CONTROL LISTED ON PERMIT S-1326-201 (NORTH TREATING FACILITY).

## PERMIT UNIT REQUIREMENTS

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1. The Reid vapor pressure of liquids stored shall not exceed 1.84 psia. [District Rule 2201] Federally Enforceable Through Title V Permit
2. Tank stored liquid temperature shall not exceed 220 degrees F. [District Rule 220] Federally Enforceable Through Title V Permit
3. Tank shall be equipped with a stored liquid temperature indicator. [District Rule 2080] Federally Enforceable Through Title V Permit
4. VOC emissions shall not exceed 2.6 lb/day. [District Rule 220] Federally Enforceable Through Title V Permit
5. Tank shall be operated at a constant level. [District Rule 220] Federally Enforceable Through Title V Permit
6. The permittee shall keep accurate records of Reid vapor pressure, and storage temperature of liquids stored, and shall make such records readily available for District inspection upon request. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
7. The tank shall be equipped with a vapor recovery system consisting of a closed vent system that collects all VOCs from the storage tank, and a VOC control device. The vapor recovery system shall be APCO-approved and maintained in leak-free condition. The VOC control device shall be either of the following: a vapor return or condensation system that connects to a gas pipeline distribution system, or an approved VOC destruction device that reduces the inlet VOC emissions by at least 95% by weight as determined by the test method specified in Section 6.4.7. [District Rule 4623] Federally Enforceable Through Title V Permit
8. All piping, valves, and fittings shall be constructed and maintained in a leak-free condition. [District Rule 4623] Federally Enforceable Through Title V Permit
9. A leak-free condition is defined as a condition without a gas leak. A gas leak is defined as a reading in excess of 10,000 ppmv, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21. A reading in excess of 10,000 ppmv above background is a violation of this permit and Rule 4623 and shall be reported as a deviation. [District Rule 4623] Federally Enforceable Through Title V Permit
10. Any tank gauging or sampling device on a tank vented to the vapor recovery system shall be equipped with a leak-free cover which shall be closed at all times except during gauging or sampling. [District Rule 4623] Federally Enforceable Through Title V Permit
11. 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

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

12. 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
13. 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
14. Components found to be leaking either liquids or gases shall be immediately affixed with a tag showing the component to be leaking. Operator shall maintain records of the liquid or gas leak detection readings, date/time the leak was discovered, and date/time the component was repaired to a leak-free condition. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
15. Leaking components that have been discovered by the operator that have been immediately tagged and repaired within the timeframes specified in District Rule 4623, Table 3 shall not constitute a violation of this rule. Leaking components as defined by District Rule 4623 discovered by District staff that were not previously identified and/or tagged by the operator, and/or any leaks that were not repaired within the timeframes specified in District Rule 4623, Table 3 shall constitute a violation of this rule. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
16. If a component type for a given tank is found to leak during an annual inspection, operator shall conduct quarterly inspections of that component type on the tank or tank system for four consecutive quarters. If no components are found to leak after four consecutive quarters, the operator may revert to annual inspections. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
17. Any component found to be leaking on two consecutive annual inspections is in violation of this rule, even if covered under the voluntary inspection and maintenance program. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
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 Rule 4623,] Federally Enforceable Through Title V Permit
19. All records required to be maintained by this permit shall be maintained for a period of at least five years and shall be made readily available for District inspection upon request. [District Rules 4623 and 2520, 9.4.2] Federally Enforceable Through Title V Permit

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-1326-270-5

**EXPIRATION DATE:** 03/31/2016

**SECTION:** SW11 **TOWNSHIP:** 28S **RANGE:** 27E

**EQUIPMENT DESCRIPTION:**

1,000 BBL FIXED ROOF OIL TREATING TANK #TS-1 WITH VAPOR CONTROL LISTED ON PERMIT S-1326-201 (NORTH TREATING FACILITY).

## PERMIT UNIT REQUIREMENTS

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1. The Reid vapor pressure of the liquid stored in this tank shall not exceed 0.75 psia. [District Rule 2201] Federally Enforceable Through Title V Permit
2. Tank stored liquid temperature shall not exceed 220 degrees F. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Tank shall be equipped with a stored liquid temperature indicator. [District Rule 2201] Federally Enforceable Through Title V Permit
4. The average daily throughput for this tank (on an annual basis) shall not exceed 2500 bbl/day. [District Rule 2201] Federally Enforceable Through Title V Permit
5. VOC emission rate shall not exceed 1.3 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
6. The tank shall be equipped with a vapor recovery system consisting of a closed vent system that collects all VOCs from the storage tank, and a VOC control device. The vapor recovery system shall be APCO-approved and maintained in leak-free condition. The VOC control device shall be either of the following: a vapor return or condensation system that connects to a gas pipeline distribution system, or an approved VOC destruction device that reduces the inlet VOC emissions by at least 95% by weight as determined by the test method specified in Section 6.4.7. [District Rule 4623] Federally Enforceable Through Title V Permit
7. All piping, valves, and fittings shall be constructed and maintained in a leak-free condition. [District Rule 4623] Federally Enforceable Through Title V Permit
8. A leak-free condition is defined as a condition without a gas leak. A gas leak is defined as a reading in excess of 10,000 ppmv, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21. A reading in excess of 10,000 ppmv above background is a violation of this permit and Rule 4623 and shall be reported as a deviation. [District Rule 4623] Federally Enforceable Through Title V Permit
9. Any tank gauging or sampling device on a tank vented to the vapor recovery system shall be equipped with a leak-free cover which shall be closed at all times except during gauging or sampling. [District Rule 4623] Federally Enforceable Through Title V Permit
10. 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

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

11. Operator shall visually inspect tank shell, hatches, seals, seams, cable seals, valves, flanges, connectors, and any other piping components directly affixed to the tank and within five feet of the tank at least once per year for liquid leaks, and with a portable hydrocarbon detection instrument conducted in accordance with EPA Method 21 for gas leaks. Operator shall also visually or ultrasonically inspect as appropriate, the external shells and roofs of uninsulated tanks for structural integrity annually. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
12. Upon detection of a liquid leak, defined as a leak rate of greater than or equal to 30 drops per minute, operator shall repair the leak within 8 hours. For leaks with a liquid leak rate of between 3 and 30 drops per minute, the leaking component shall be repaired within 24 hours after detection. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
13. 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
14. 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
15. 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
16. 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
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 Rule 4623,] Federally Enforceable Through Title V Permit
18. The permittee shall keep accurate records of Reid vapor pressure, storage temperature, and tank throughput, and shall make such records available for District inspection upon request. [District Rules 1070; District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
19. All records required to be maintained by this permit shall be maintained for a period of at least five years and shall be made readily available for District inspection upon request. [District Rules 4623 and 2520, 9.4.2] Federally Enforceable Through Title V Permit

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-1326-271-5

**EXPIRATION DATE:** 03/31/2016

**SECTION:** SW11 **TOWNSHIP:** 28S **RANGE:** 27E

**EQUIPMENT DESCRIPTION:**

500 BBL FIXED ROOF DEHYDRATION TANK #TS-2 WITH VAPOR CONTROL LISTED ON PERMIT S-1326-201 (NORTH TREATING FACILITY).

## PERMIT UNIT REQUIREMENTS

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1. The Reid vapor pressure of the liquid stored in this tank shall not exceed 0.75 psia. [District Rule 2201] Federally Enforceable Through Title V Permit
2. Tank stored liquid temperature shall not exceed 220 degrees F. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Tank shall be equipped with a stored liquid temperature indicator. [District Rule 2201] Federally Enforceable Through Title V Permit
4. The average daily throughput for this tank (on an annual basis) shall not exceed 1,000 bbl/day. [District Rule 2201] Federally Enforceable Through Title V Permit
5. The tank shall be equipped with a vapor recovery system consisting of a closed vent system that collects all VOCs from the storage tank, and a VOC control device. The vapor recovery system shall be APCO-approved and maintained in leak-free condition. The VOC control device shall be either of the following: a vapor return or condensation system that connects to a gas pipeline distribution system, or an approved VOC destruction device that reduces the inlet VOC emissions by at least 95% by weight as determined by the test method specified in Section 6.4.7. [District Rule 4623] Federally Enforceable Through Title V Permit
6. All piping, valves, and fittings shall be constructed and maintained in a leak-free condition. [District Rule 4623] Federally Enforceable Through Title V Permit
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 Rule 4623 and shall be reported as a deviation. [District Rule 4623] Federally Enforceable Through Title V Permit
8. Any tank gauging or sampling device on a tank vented to the vapor recovery system shall be equipped with a leak-free cover which shall be closed at all times except during gauging or sampling. [District Rule 4623] Federally Enforceable Through Title V Permit
9. All piping, fittings, and valves on this tank shall be inspected annually by the facility operator in accordance with EPA Method 21, with the instrument calibrated with methane, to ensure compliance with the leaking provisions of this permit. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

10. 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
11. 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
12. 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
13. 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
14. 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
15. 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
16. 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,] Federally Enforceable Through Title V Permit
17. The permittee shall keep accurate records of Reid vapor pressure, and storage temperature of liquids stored, and shall make such records available for District inspection upon request. [District Rules 1070 and District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
18. All records required to be maintained by this permit shall be maintained for a period of at least five years and shall be made readily available for District inspection upon request. [District Rules 4623 and 2520, 9.4.2] Federally Enforceable Through Title V Permit

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



# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-1326-272-5

**EXPIRATION DATE:** 03/31/2016

**SECTION:** SW11 **TOWNSHIP:** 28S **RANGE:** 27E

**EQUIPMENT DESCRIPTION:**

1,000 BBL FIXED ROOF WATER TANK #TS-3 WITH VAPOR CONTROL LISTED ON PERMIT S-1326-201 (NORTH TREATING FACILITY).

## PERMIT UNIT REQUIREMENTS

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1. The Reid vapor pressure of the liquid stored in this tank shall not exceed 0.75 psia. [District Rule 2201] Federally Enforceable Through Title V Permit
2. Tank stored liquid temperature shall not exceed 220 degrees F. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Tank shall be equipped with a stored liquid temperature indicator. [District Rule 2201] Federally Enforceable Through Title V Permit
4. The average daily throughput for this tank (on an annual basis) shall not exceed 5000 bbl/day. [District Rule 2201] Federally Enforceable Through Title V Permit
5. VOC emission rate shall not exceed 2.3 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
6. The tank shall be equipped with a vapor recovery system consisting of a closed vent system that collects all VOCs from the storage tank, and a VOC control device. The vapor recovery system shall be APCO-approved and maintained in gas-tight condition. The VOC control device shall be either of the following: a vapor return or condensation system that connects to a gas pipeline distribution system, or an approved VOC destruction device that reduces the inlet VOC emissions by at least 95% by weight as determined by the test method specified in Section 6.4.7. [District Rule 4623] Federally Enforceable Through Title V Permit
7. All piping, valves, and fittings shall be constructed and maintained in a leak-free condition. [District Rule 4623] Federally Enforceable Through Title V Permit
8. A gas-tight condition is defined as a condition without a gas leak. A gas leak is defined as a reading in excess of 10,000 ppmv, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21. A reading in excess of 10,000 ppmv above background is a violation of this permit and Rule 4623 and shall be reported as a deviation. [District Rule 4623] Federally Enforceable Through Title V Permit
9. Any 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] Federally Enforceable Through Title V Permit
10. 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

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

11. Operator shall visually inspect tank shell, hatches, seals, seams, cable seals, valves, flanges, connectors, and any other piping components directly affixed to the tank and within five feet of the tank at least once per year for liquid leaks, and with a portable hydrocarbon detection instrument conducted in accordance with EPA Method 21 for gas leaks. Operator shall also visually or ultrasonically inspect as appropriate, the external shells and roofs of uninsulated tanks for structural integrity annually. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
12. Upon detection of a liquid leak, defined as a leak rate of greater than or equal to 30 drops per minute, operator shall repair the leak within 8 hours. For leaks with a liquid leak rate of between 3 and 30 drops per minute, the leaking component shall be repaired within 24 hours after detection. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
13. 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
14. 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
15. 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
16. 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
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 Rule 4623,] Federally Enforceable Through Title V Permit
18. The permittee shall keep accurate records of Reid vapor pressure, storage temperature, and tank throughput, and shall make such records available for District inspection upon request. [District Rule 1070; District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
19. All records required to be maintained by this permit shall be maintained for a period of at least five years and shall be made readily available for District inspection upon request. [District Rules 4623 and 2520, 9.4.2] Federally Enforceable Through Title V Permit

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-1326-273-2

**EXPIRATION DATE:** 03/31/2016

**SECTION:** SW22 **TOWNSHIP:** 28S **RANGE:** 27E

**EQUIPMENT DESCRIPTION:**

110 BBL FIXED ROOF CRUDE OIL SKIM TANK (ROBINSON B LEASE, KERN FRONT OIL FIELD)

## PERMIT UNIT REQUIREMENTS

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1. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623] Federally Enforceable Through Title V Permit
2. Permittee shall conduct true vapor pressure (TVP) testing of the organic liquid stored in this tank at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored in this tank in order to maintain exemption from the rule. [District Rule 4623, 6.2.2] Federally Enforceable Through Title V Permit
3. 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, 6.2.2] Federally Enforceable Through Title V Permit
4. 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
5. 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
6. 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, 6.3.6] Federally Enforceable Through Title V Permit
7. 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, 6.3.6] Federally Enforceable Through Title V Permit
8. All records required to be maintained by this permit shall be maintained for a period of at least five years and shall be made readily available for District inspection upon request. [District Rule 4623] Federally Enforceable Through Title V Permit

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-1326-274-4

**EXPIRATION DATE:** 03/31/2016

**SECTION:** SW11 **TOWNSHIP:** 28S **RANGE:** 27E

**EQUIPMENT DESCRIPTION:**

1000 BBL FIXED ROOF SLOP OIL TANK (# TS-8) WITH VAPOR CONTROL LISTED ON PERMIT S-1326-201.

## PERMIT UNIT REQUIREMENTS

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1. The Reid vapor pressure of the liquid stored in this tank shall not exceed 0.75 psia. [District Rule 2201] Federally Enforceable Through Title V Permit
2. Tank stored liquid temperature shall not exceed 220 degrees F. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Tank shall be equipped with a stored liquid temperature indicator. [District Rule 2201] Federally Enforceable Through Title V Permit
4. The average daily throughput for this tank (on an annual basis) shall not exceed 970 bbl/day. [District Rule 2201] Federally Enforceable Through Title V Permit
5. The tank shall be equipped with a vapor recovery system consisting of a closed vent system that collects all VOCs from the storage tank, and a VOC control device. The vapor recovery system shall be APCO-approved and maintained in leak-free condition. The VOC control device shall be either of the following: a vapor return or condensation system that connects to a gas pipeline distribution system, or an approved VOC destruction device that reduces the inlet VOC emissions by at least 95% by weight as determined by the test method specified in Section 6.4.7. [District Rule 4623] Federally Enforceable Through Title V Permit
6. All piping, valves, and fittings shall be constructed and maintained in a Leak-free condition. [District Rule 4623] Federally Enforceable Through Title V Permit
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 Rule 4623 and shall be reported as a deviation. [District Rule 4623] Federally Enforceable Through Title V Permit
8. Any tank gauging or sampling device on a tank vented to the vapor recovery system shall be equipped with a leak-free cover which shall be closed at all times except during gauging or sampling. [District Rule 4623] Federally Enforceable Through Title V Permit
9. All piping, fittings, and valves on this tank shall be inspected annually by the facility operator in accordance with EPA Method 21, with the instrument calibrated with methane, to ensure compliance with the leaking provisions of this permit. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
10. 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

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

11. 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
12. 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
13. 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
14. 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
15. 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
16. 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,] Federally Enforceable Through Title V Permit
17. The permittee shall maintain accurate records of Reid vapor pressure, and storage temperature of liquids stored, and shall make such records available for District inspection upon request. [District Rules 1070, 2520, 9.5.2, and 4623] Federally Enforceable Through Title V Permit
18. All records required to be maintained by this permit shall be maintained for a period of at least five years and shall be made readily available for District inspection upon request. [District Rules 4623 and 2520, 9.4.2] Federally Enforceable Through Title V Permit

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-1326-279-6

**EXPIRATION DATE:** 03/31/2016

**SECTION:** SW23 **TOWNSHIP:** 28S **RANGE:** 27E

**EQUIPMENT DESCRIPTION:**

5000 BBL FREE WATER KNOCKOUT STORAGE TANK SERVED BY VAPOR CONTROL SYSTEM LISTED ON S-1326-263

## PERMIT UNIT REQUIREMENTS

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1. The tank shall be equipped with a fixed roof with no holes or openings. [District Rule 2201] Federally Enforceable Through Title V Permit
2. The true vapor pressure of the liquids stored in this tank shall not exceed 0.5 psia. [District Rules 4623,4.4] Federally Enforceable Through Title V Permit
3. Vapor control efficiency shall be maintained at no less than 99%. [District Rule 2201] Federally Enforceable Through Title V Permit
4. The permittee shall keep accurate records of liquids stored and true vapor pressure of such liquids. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
5. This permit authorizes tank cleaning that is not the result of breakdowns or poor maintenance as a routine maintenance activity. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Prior to opening the tank to allow tank cleaning the following procedure must be followed. Operate PV valve and vapor recovery system (if equipped) during emptying, filling, and flushing. During filling and purging, no vapor leakage is allowed. Drain all liquid from the tank to the maximum extent feasible prior to opening the tank. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Prior to opening the tank to allow tank cleaning one of the following options must be followed: 1) operate the vapor recovery system for at least 2 hours after all the liquid in the tank has been drained, 2) displace vapors floating the oil pad off with water such that 90% of the tank volume is displaced, 3) vent the tank to the vapor control system until the vapor concentration is less than 10% of the lower explosive limit (LEL) or 5,000 ppmv whichever is less; or 4) vent the tank to the vapor control system for a length of time determined by the following relationship:  $t = 2.3 V / Q$ , where  $t$  = time,  $V$  = tank volume (cubic feet), and  $Q$  = flow rate to the vapor control system as determined using appropriate engineering calculations. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Allowable methods of cleaning include using steam, diesel, solvents with an initial boiling point of greater than 302 F, solvents with a vapor pressure of less than 0.5 psia, or solvents with 50 grams/liter VOC content or less. Steam cleaning shall be allowed at locations where wastewater treatment facilities are limited or during December through March. [District Rule 2201] Federally Enforceable Through Title V Permit
9. Permittee shall maintain records of each period of cleaning and maintenance when the tank is disconnected or isolated from the vapor control system. Records shall include the date that tank cleaning was initiated, the date tank cleaning was completed, the procedure used to vent tank vapors prior to opening, the method of tank cleaning used, and a description of internal and external tank repairs and maintenance performed. Such records shall be retained for a period of at least 5 years and shall be made available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

10. To qualify for quantification of no fugitive emissions, operator shall conduct quarterly gas sampling after TVR compressor (prior to connection to any other vapor control system) and at either the first line tank or at any secondary tank which is heated above ambient temperature. If gas samples are less than 10% VOC by weight for 8 consecutive quarterly samplings, sampling frequency shall only be required annually and whenever there is a change in source or type of petroleum processed. Samples shall be collected during periods of normal operation, and not be within 48 hours after routine maintenance or repair. [District Rule 2201] Federally Enforceable Through Title V Permit
11. Permittee shall provide the District with written notification at least 30 days prior to installation of components handling fluid streams with a VOC content of 10% or less by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
12. Any 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. Gas-tight shall be defined as emitting no more than 10,000 ppm of methane measured at a distance of one centimeter from the potential source with an instrument calibrated with methane in accordance with USEPA Method 21. Emissions in excess of this limit shall be considered a leak. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
13. All tank seams, welds, joints, piping, valves, and fittings shall be inspected and maintained in a gas-tight condition. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
14. Permittee shall conduct true vapor pressure (TVP) testing of the organic liquid stored in this tank at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored in this tank in order to maintain exemption from the rule. [District Rule 4623, 6.2.2] Federally Enforceable Through Title V Permit
15. 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, 6.2.2] Federally Enforceable Through Title V Permit
16. For crude oil with an API gravity of 26 degrees or less, the TVP shall be determined using the latest version of the Lawrence Berkeley National Laboratory "test Method for Vapor pressure of Reactive Organic Compounds in Heavy Crude Oil Using Gas Chromatograph", as approved by ARB and EPA. [District Rule 4623, 6.4] Federally Enforceable Through Title V Permit
17. The API gravity of crude oil or petroleum distillate shall be determined by using ASTM Method D 287 e1 "Standard Test Method for API Gravity of Crude Petroleum and Petroleum Products (Hydrometer Method). Sampling for API gravity shall be performed in accordance with ASTM Method D 4057 "Standard Practices for Manual Sampling of Petroleum and Petroleum Products." [District Rule 4623, 6.4] Federally Enforceable Through Title V Permit
18. Permittee shall submit the records of TVP and API gravity testing to the APCO within 45 days after the date of testing. The records shall include the tank identification number, Permit to Operate number, type of stored organic liquid, TVP and API gravity of the organic liquid, test methods used, and a copy of the test results. [District Rule 4623, 6.3.6] Federally Enforceable Through Title V Permit
19. 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, 6.3.6] Federally Enforceable Through Title V Permit
20. Control efficiency shall be determined by a comparison of controlled emissions to those emissions which would occur from a fixed or cone roof tank in the same product service without a vapor recovery system. Emissions shall be determined based on tank emission factors in USEPA Publication AP-42, component counts for fugitive emissions sources, recognized emission factors for fugitive emission sources and the efficiency of any VOC destruction device. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
21. The operator shall ensure that the vapor control system is functional and is operating as designed at all times, except during periods of routine maintenance. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
22. All records required to be maintained by this permit shall be maintained for a period of at least five years and shall be made readily available for District inspection upon request. [District Rules 2520, 9.4.2 and 4623] Federally Enforceable Through Title V Permit

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-1326-280-5

**EXPIRATION DATE:** 03/31/2016

**SECTION:** SW23 **TOWNSHIP:** 28S **RANGE:** 27E

**EQUIPMENT DESCRIPTION:**

1000 BBL CRUDE OIL LACT STORAGE TANK SERVED BY VAPOR CONTROL SYSTEM LISTED ON S-1326-263

## PERMIT UNIT REQUIREMENTS

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1. The tank shall be equipped with a fixed roof with no holes or openings. [District Rule 2201] Federally Enforceable Through Title V Permit
2. The true vapor pressure of the liquids stored in this tank shall not exceed 0.5 psia. [District Rules 4623, 2.0 and 2201] Federally Enforceable Through Title V Permit
3. Vapor control efficiency shall be maintained at no less than 99%. [District Rule 2201] Federally Enforceable Through Title V Permit
4. The permittee shall keep accurate records of liquids stored and true vapor pressure of such liquids. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
5. This permit authorizes tank cleaning that is not the result of breakdowns or poor maintenance as a routine maintenance activity. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Prior to opening the tank to allow tank cleaning the following procedure must be followed. Operate PV valve and vapor recovery system (if equipped) during emptying, filling, and flushing. During filling and purging, no vapor leakage is allowed. Drain all liquid from the tank to the maximum extent feasible prior to opening the tank. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Prior to opening the tank to allow tank cleaning one of the following options must be followed: 1) operate the vapor recovery system for at least 2 hours after all the liquid in the tank has been drained, 2) displace vapors floating the oil pad off with water such that 90% of the tank volume is displaced, 3) vent the tank to the vapor control system until the vapor concentration is less than 10% of the lower explosive limit (LEL) or 5,000 ppmv whichever is less; or 4) vent the tank to the vapor control system for a length of time determined by the following relationship:  $t = 2.3 V / Q$ , where  $t$  = time,  $V$  = tank volume (cubic feet), and  $Q$  = flow rate to the vapor control system as determined using appropriate engineering calculations. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Allowable methods of cleaning include using steam, diesel, solvents with an initial boiling point of greater than 302 F, solvents with a vapor pressure of less than 0.5 psia, or solvents with 50 grams/liter VOC content or less. Steam cleaning shall be allowed at locations where wastewater treatment facilities are limited or during December through March. [District Rule 2201] Federally Enforceable Through Title V Permit
9. Permittee shall maintain records of each period of cleaning and maintenance when the tank is disconnected or isolated from the vapor control system. Records shall include the date that tank cleaning was initiated, the date tank cleaning was completed, the procedure used to vent tank vapors prior to opening, the method of tank cleaning used, and a description of internal and external tank repairs and maintenance performed. Such records shall be retained for a period of at least 5 years and shall be made available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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



10. To qualify for quantification of no fugitive emissions, operator shall conduct quarterly gas sampling after TVR compressor (prior to connection to any other vapor control system) and at either the first line tank or at any secondary tank which is heated above ambient temperature. If gas samples are less than 10% VOC by weight for 8 consecutive quarterly samplings, sampling frequency shall only be required annually and whenever there is a change in source or type of petroleum processed. Samples shall be collected during periods of normal operation, and not be within 48 hours after routine maintenance or repair. [District Rule 2201] Federally Enforceable Through Title V Permit
11. Permittee shall provide the District with written notification at least 30 days prior to installation of components handling fluid streams with a VOC content of 10% or less by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
12. Any 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. Gas-tight shall be defined as emitting no more than 10,000 ppm of methane measured at a distance of one centimeter from the potential source with an instrument calibrated with methane in accordance with USEPA Method 21. Emissions in excess of this limit shall be considered a leak. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
13. All tank seams, welds, joints, piping, valves, and fittings shall be inspected and maintained in a gas-tight condition. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
14. The operator shall conduct true vapor pressure (TVP) testing of the organic liquid stored in this tank at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored in this tank. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
15. The API gravity of organic liquid stored in this tank 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 2520, 9.3.2] Federally Enforceable Through Title V Permit
16. Control efficiency shall be determined by a comparison of controlled emissions to those emissions which would occur from a fixed or cone roof tank in the same product service without a vapor recovery system. Emissions shall be determined based on tank emission factors in USEPA Publication AP-42, component counts for fugitive emissions sources, recognized emission factors for fugitive emission sources and the efficiency of any VOC destruction device. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
17. The operator shall ensure that the vapor control system is functional and is operating as designed at all times, except during periods of routine maintenance. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
18. Operator shall determine the true vapor pressure of the petroleum liquid stored in the tank located at the beginning of the process flow after the production header at least once per year. 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, shall be used to determine the TVP of crude oil with an API gravity of 26.0 or less, or for any API gravity that is specified in this test method. Determinations shall be made annually during summer and whenever there is a change in the source or type of petroleum entering the tank. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
19. All records required to be maintained by this permit shall be maintained for a period of at least five years and shall be made readily available for District inspection upon request. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-1326-281-5

**EXPIRATION DATE:** 03/31/2016

**SECTION:** SW23 **TOWNSHIP:** 28S **RANGE:** 27E

**EQUIPMENT DESCRIPTION:**

1,000 BBL CRUDE OIL LACT TANK SERVED BY VAPOR CONTROL SYSTEM LISTED ON S-1326-263

## PERMIT UNIT REQUIREMENTS

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1. 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 Rule 2201] Federally Enforceable Through Title V Permit
2. Fugitive VOC emission rate from tank components in gas service calculated using EPA's "Protocol for Equipment Leak Emission Estimates," Table 2-4, Oil and Gas Production Operations Average Emission Factors (Nov 1995) shall not exceed 0.12 lb VOC/ day. [District Rule 2201] Federally Enforceable Through Title V Permit
3. 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
4. VOC content of gas shall not exceed 10% of the total hydrocarbon content by weight. Permittee shall maintain a written record of VOC content (sampled not less than annually) and shall make such records available for District inspection upon request for a period of five years. Permittee may test a representative gas sample for VOC content from any tank served by the TVR system listed on S-1326-263. [District Rule 2201] Federally Enforceable Through Title V Permit
5. VOC content of gas shall be measured using ASTM D-1945, EPA Method 18 referenced as methane, or equivalent test method with prior District approval. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Permittee shall keep in their facility at all times a copy of the letter sent to the APCO requesting participation in the Rule 4623 Tank Preventive Inspection and Maintenance, 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] Federally Enforceable Through Title V Permit
7. Permittee shall comply with all applicable Tank Preventive Inspection and Maintenance, and Tank Interior Cleaning Program requirements specified in Tables 3 to 6 of Rule 4623. [District Rule 4623] Federally Enforceable Through Title V Permit
8. VOC emissions from tank cleaning shall not exceed 4.4 pounds in any one day. Tank shall be cleaned no more than once per calendar year. [District Rule 2201] Federally Enforceable Through Title V Permit
9. True vapor pressure (TVP) of residual liquids in tank during interior cleaning shall not exceed 3.0 psia. [District Rule 2201] Federally Enforceable Through Title V Permit
10. TVP shall be determined using test methods described in District Rule 4623. [District Rules 1080 & 4623] Federally Enforceable Through Title V Permit
11. Permittee shall maintain records of TVP prior to tank interior cleaning and length of time to accomplish tank interior cleaning. [District Rules 2201 & 4623] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

12. Any tank gauging or sampling device on a tank shall be equipped with a gas-tight cover which shall be closed at all times except during gauging or sampling. Gas-tight shall be defined as emitting no more than 10,000 ppmv above background as methane measured with an instrument calibrated with methane in accordance with EPA Method 21. Emissions in excess of this limit shall be considered a leak. [District Rule 4623] Federally Enforceable Through Title V Permit
13. For vapor service components located farther than 5 feet from the tank, there shall be no leaks greater than 10,000 ppmv when measured with a portable hydrocarbon detection instrument calibrated with methane in accordance with EPA Method 21. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
14. Facility operator, upon detection of a leaking component greater than 10,000 ppmv when measured with a portable hydrocarbon detection instrument calibrated with methane in accordance with EPA Method 21, shall affix to that component a weatherproof readily visible tag bearing the date on which leak is detected. This tag shall remain in place until the leaking component is repaired, reinspected, and found to be in compliance with requirements of this permit. [District Rule 2201] Federally Enforceable Through Title V Permit
15. Permittee shall annually inspect hatch, tank seals and seams, cable seals, and piping components including but not limited to valves, flanges, and connectors directly affixed to the tank or within 5 feet of the tank. Inspections shall be conducted visually and using a portable hydrocarbon detection instrument conducted in accordance with EPA Method 21. Permittee shall annually inspect, either visually or ultrasonically as appropriate, the external shells and roofs of uninsulated tanks for integrity. [District Rule 4623] Federally Enforceable Through Title V Permit
16. Liquid components directly affixed to the tank or within 5 feet of the tank that have a liquid leak rate of 30 drops per minute or greater shall be repaired within 8 hours after detection. Liquid components directly affixed to the tank or within 5 feet of the tank that have a liquid leak rate of 3 drops per minutes or greater but less than 30 drops per minute shall be repaired within 24 hours after detection. [District Rule 4623] Federally Enforceable Through Title V Permit
17. Leaks from gas components directly affixed to the tank or within 5 feet of the tank that have a leak rate greater than 10,000 ppmv (measured in accordance with EPA Method 21 by a portable hydrocarbon detection instrument that is calibrated with methane) shall be eliminated or minimized within 8 hours after detection; and if the leak cannot be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices; and eliminate the leak within 48 hours after detection; and in no event that the total time to minimize and eliminate the leak shall exceed 56 hours after detection. 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] Federally Enforceable Through Title V Permit
18. For leaking components directly affixed to the tank or within 5 feet of the tank, permittee shall immediately affix a tag and maintain records of liquid leak and gas leak detection readings, date/time leak was discovered, and date/time the component was repaired to a leak free condition. [District Rule 4623] Federally Enforceable Through Title V Permit
19. Leaking components directly affixed to the tank or within 5 feet of the tank that have been discovered by the operator and have been immediately tagged and repaired within the deadlines specified shall not constitute a violation of this rule. However, leaking components discovered during inspections by District staff that were not previously identified and/or tagged by the operator, and/or any leaks that were not repaired within deadlines specified shall constitute a violation of this rule. Any component directly affixed to the tank or within 5 feet of the tank found to be leaking on two consecutive annual inspections is in violation of this rule, even if it is under the voluntary inspection and maintenance program. [District Rule 4623] Federally Enforceable Through Title V Permit
20. Operator shall maintain an inspection log containing the following: 1) Location of leaking component; 2) Type of component leaking and leak emissions level detected; 3) Date of leak detection and method of detection; 4) Date of leak repair and method of repair; 5) Date and emission level of recheck after leak is repaired. This inspection log shall be made available to District personal upon request. [District Rule 2201] Federally Enforceable Through Title V Permit
21. All records required to be maintained by this permit shall be maintained for a period of at least five years and shall be made readily available for District inspection upon request. [District Rules 4623 and 2520, 9.4.2] Federally Enforceable Through Title V Permit

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-1326-283-4

**EXPIRATION DATE:** 03/31/2016

**SECTION:** SW23 **TOWNSHIP:** 28S **RANGE:** 27E

**EQUIPMENT DESCRIPTION:**

2000 BBL RAW WATER STORAGE TANK SERVED BY VAPOR CONTROL SYSTEM LISTED ON S-1326-263

## PERMIT UNIT REQUIREMENTS

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1. The tank shall be equipped with a fixed roof with no holes or openings. [District Rule 2201] Federally Enforceable Through Title V Permit
2. The true vapor pressure of the liquids stored in this tank shall not exceed 0.5 psia. [District Rules 4623 and 2201] Federally Enforceable Through Title V Permit
3. Vapor control efficiency shall be maintained at no less than 99%. [District Rule 2201] Federally Enforceable Through Title V Permit
4. The permittee shall keep accurate records of liquids stored and true vapor pressure of such liquids. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
5. This permit authorizes tank cleaning that is not the result of breakdowns or poor maintenance as a routine maintenance activity. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Prior to opening the tank to allow tank cleaning the following procedure must be followed. Operate PV valve and vapor recovery system (if equipped) during emptying, filling, and flushing. During filling and purging, no vapor leakage is allowed. Drain all liquid from the tank to the maximum extent feasible prior to opening the tank. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Prior to opening the tank to allow tank cleaning one of the following options must be followed: 1) operate the vapor recovery system for at least 2 hours after all the liquid in the tank has been drained, 2) displace vapors floating the oil pad off with water such that 90% of the tank volume is displaced, 3) vent the tank to the vapor control system until the vapor concentration is less than 10% of the lower explosive limit (LEL) or 5,000 ppmv whichever is less; or 4) vent the tank to the vapor control system for a length of time determined by the following relationship:  $t = 2.3 V / Q$ , where  $t$  = time,  $V$  = tank volume (cubic feet), and  $Q$  = flow rate to the vapor control system as determined using appropriate engineering calculations. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Allowable methods of cleaning include using steam, diesel, solvents with an initial boiling point of greater than 302 F, solvents with a vapor pressure of less than 0.5 psia, or solvents with 50 grams/liter VOC content or less. Steam cleaning shall be allowed at locations where wastewater treatment facilities are limited or during December through March. [District Rule 2201] Federally Enforceable Through Title V Permit
9. Permittee shall maintain records of each period of cleaning and maintenance when the tank is disconnected or isolated from the vapor control system. Records shall include the date that tank cleaning was initiated, the date tank cleaning was completed, the procedure used to vent tank vapors prior to opening, the method of tank cleaning used, and a description of internal and external tank repairs and maintenance performed. Such records shall be retained for a period of at least 5 years and shall be made available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

10. To qualify for quantification of no fugitive emissions, operator shall conduct quarterly gas sampling after TVR compressor (prior to connection to any other vapor control system) and at either the first line tank or at any secondary tank which is heated above ambient temperature. If gas samples are less than 10% VOC by weight for 8 consecutive quarterly samplings, sampling frequency shall only be required annually and whenever there is a change in source or type of petroleum processed. Samples shall be collected during periods of normal operation, and not be within 48 hours after routine maintenance or repair. [District Rule 2201] Federally Enforceable Through Title V Permit
11. Permittee shall provide the District with written notification at least 30 days prior to installation of components handling fluid streams with a VOC content of 10% or less by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
12. Any 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. Gas-tight shall be defined as emitting no more than 10,000 ppm of methane measured at a distance of one centimeter from the potential source with an instrument calibrated with methane in accordance with USEPA Method 21. Emissions in excess of this limit shall be considered a leak. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
13. All tank seams, welds, joints, piping, valves, and fittings shall be inspected and maintained in a gas-tight condition. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
14. The operator shall conduct true vapor pressure (TVP) testing of the organic liquid stored in this tank at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored in this tank. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
15. The API gravity of organic liquid stored in this tank 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 2520, 9.3.2] Federally Enforceable Through Title V Permit
16. Control efficiency shall be determined by a comparison of controlled emissions to those emissions which would occur from a fixed or cone roof tank in the same product service without a vapor recovery system. Emissions shall be determined based on tank emission factors in USEPA Publication AP-42, component counts for fugitive emissions sources, recognized emission factors for fugitive emission sources and the efficiency of any VOC destruction device. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
17. The operator shall ensure that the vapor control system is functional and is operating as designed at all times, except during periods of routine maintenance. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
18. Operator shall determine the true vapor pressure of the petroleum liquid stored in the tank located at the beginning of the process flow after the production header at least once per year. 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, shall be used to determine the TVP of crude oil with an API gravity of 26 or less, or for any API gravity that is specified in this test method. Determinations shall be made annually during summer and whenever there is a change in the source or type of petroleum entering the tank. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
19. All records required to be maintained by this permit shall be maintained for a period of at least five years and shall be made readily available for District inspection upon request. [District Rules 4623 and 2520, 9.4.2] Federally Enforceable Through Title V Permit

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-1326-285-4

**EXPIRATION DATE:** 03/31/2016

**SECTION:** SW23 **TOWNSHIP:** 28S **RANGE:** 27E

**EQUIPMENT DESCRIPTION:**

2000 BBL OVERFLOW TANK SERVED BY VAPOR CONTROL SYSTEM LISTED ON S-1326-263

## PERMIT UNIT REQUIREMENTS

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1. The tank shall be equipped with a fixed roof with no holes or openings. [District Rule 2201] Federally Enforceable Through Title V Permit
2. The true vapor pressure of the liquids stored in this tank shall not exceed 0.5 psia. [District Rules 4623, 2.0 and 2201] Federally Enforceable Through Title V Permit
3. Vapor control efficiency shall be maintained at no less than 99%. [District Rule 2201] Federally Enforceable Through Title V Permit
4. The permittee shall keep accurate records of liquids stored and true vapor pressure of such liquids. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
5. This permit authorizes tank cleaning that is not the result of breakdowns or poor maintenance as a routine maintenance activity. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Prior to opening the tank to allow tank cleaning the following procedure must be followed. Operate PV valve and vapor recovery system (if equipped) during emptying, filling, and flushing. During filling and purging, no vapor leakage is allowed. Drain all liquid from the tank to the maximum extent feasible prior to opening the tank. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Prior to opening the tank to allow tank cleaning one of the following options must be followed: 1) operate the vapor recovery system for at least 2 hours after all the liquid in the tank has been drained, 2) displace vapors floating the oil pad off with water such that 90% of the tank volume is displaced, 3) vent the tank to the vapor control system until the vapor concentration is less than 10% of the lower explosive limit (LEL) or 5,000 ppmv whichever is less; or 4) vent the tank to the vapor control system for a length of time determined by the following relationship:  $t = 2.3 V / Q$ , where  $t$  = time,  $V$  = tank volume (cubic feet), and  $Q$  = flow rate to the vapor control system as determined using appropriate engineering calculations. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Allowable methods of cleaning include using steam, diesel, solvents with an initial boiling point of greater than 302 F, solvents with a vapor pressure of less than 0.5 psia, or solvents with 50 grams/liter VOC content or less. Steam cleaning shall be allowed at locations where wastewater treatment facilities are limited or during December through March. [District Rule 2201] Federally Enforceable Through Title V Permit
9. Permittee shall maintain records of each period of cleaning and maintenance when the tank is disconnected or isolated from the vapor control system. Records shall include the date that tank cleaning was initiated, the date tank cleaning was completed, the procedure used to vent tank vapors prior to opening, the method of tank cleaning used, and a description of internal and external tank repairs and maintenance performed. Such records shall be retained for a period of at least 5 years and shall be made available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

10. To qualify for quantification of no fugitive emissions, operator shall conduct quarterly gas sampling after TVR compressor (prior to connection to any other vapor control system) and at either the first line tank or at any secondary tank which is heated above ambient temperature. If gas samples are less than 10% VOC by weight for 8 consecutive quarterly samplings, sampling frequency shall only be required annually and whenever there is a change in source or type of petroleum processed. Samples shall be collected during periods of normal operation, and not be within 48 hours after routine maintenance or repair. [District Rule 2201] Federally Enforceable Through Title V Permit
11. Permittee shall provide the District with written notification at least 30 days prior to installation of components handling fluid streams with a VOC content of 10% or less by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
12. Any 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. Gas-tight shall be defined as emitting no more than 10,000 ppm of methane measured at a distance of one centimeter from the potential source with an instrument calibrated with methane in accordance with USEPA Method 21. Emissions in excess of this limit shall be considered a leak. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
13. All tank seams, welds, joints, piping, valves, and fittings shall be inspected and maintained in a gas-tight condition. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
14. The operator shall conduct true vapor pressure (TVP) testing of the organic liquid stored in this tank at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored in this tank. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
15. The API gravity of organic liquid stored in this tank 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 2520, 9.3.2] Federally Enforceable Through Title V Permit
16. Control efficiency shall be determined by a comparison of controlled emissions to those emissions which would occur from a fixed or cone roof tank in the same product service without a vapor recovery system. Emissions shall be determined based on tank emission factors in USEPA Publication AP-42, component counts for fugitive emissions sources, recognized emission factors for fugitive emission sources and the efficiency of any VOC destruction device. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
17. The operator shall ensure that the vapor control system is functional and is operating as designed at all times, except during periods of routine maintenance. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
18. Operator shall determine the true vapor pressure of the petroleum liquid stored in the tank located at the beginning of the process flow after the production header at least once per year. 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, shall be used to determine the TVP of crude oil with an API gravity of 26 or less, or for any API gravity that is specified in this test method. Determinations shall be made annually during summer and whenever there is a change in the source or type of petroleum entering the tank. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
19. All records required to be maintained by this permit shall be maintained for a period of at least five years and shall be made readily available for District inspection upon request. [District Rules 4623 and 2520, 9.4.2] Federally Enforceable Through Title V Permit

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-1326-287-7

**EXPIRATION DATE:** 03/31/2016

**SECTION:** SW23 **TOWNSHIP:** 28S **RANGE:** 27E

**EQUIPMENT DESCRIPTION:**

THERMALLY ENHANCED OIL RECOVERY OPERATION WITH 130 STEAM ENHANCED PRODUCTION WELLS CONNECTED TO WELL HEAD CASING VENT VAPOR RECOVERY SYSTEM (CVR) VENTING VAPORS TO SECTION 23 TANK VAPOR RECOVERY SYSTEM (S-1326-263)

## PERMIT UNIT REQUIREMENTS

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1. VOC content of gas collected by the CVR system shall not exceed 10% by weight. Permittee shall maintain a written record of VOC content (sampled not less than annually) and shall make such records available for District inspection upon request for a period of five years. Permittee may use test results obtained from S-1326-263 to demonstrate compliance. [District NSR Rule and District Rule 1070] Federally Enforceable Through Title V Permit
2. The crude oil production from wells associated with this permit unit shall not lie within 1000 feet of an air injection well used for in-situ combustion. [District Rule 4407, 2.0, 3.4, and 3.5] Federally Enforceable Through Title V Permit
3. Total combined fugitive emissions from all components associated with this TEOR operation shall not exceed 6.3 lb VOC/ day. [District NSR Rule] Federally Enforceable Through Title V Permit
4. Steam enhanced production wells covered by this permit shall each have a visible identification number. Field personnel shall be provided with written instructions concerning proper operation and maintenance of these wells. [District NSR Rule] Federally Enforceable Through Title V Permit
5. During the time any steam-enhanced crude oil production well is undergoing service or repair while the well is not producing, it shall be exempt from the emission control requirements of District Rule 4401, 5.0 (as amended January 15, 1998). [District Rule 4401, 4.1] Federally Enforceable Through Title V Permit
6. The uncontrolled VOC emissions from any well vent shall be reduced by at least 99 percent by weight or, if several steam-enhanced crude oil production well vents are connected to a vapor collection and control system, total uncontrolled VOC emissions shall be reduced by at least 99 percent. This requirement does not apply to cyclic wells located on contiguous and adjacent oil production properties with less than 10 cyclic wells owned by or under the control of a company. [District Rule 4401, 5.1 and 5.2] Federally Enforceable Through Title V Permit
7. For cyclic wells located on properties with less than 10 cyclic wells and owned by a company, the uncontrolled VOC emissions from any well vent or system of well vents connected to a single control device shall be reduced by at least 50 percent. Properties shall include contiguous and adjacent oil production properties owned by or under control of the company. [District Rule 4401, 5.4] Federally Enforceable Through Title V Permit
8. Permittee shall maintain a current list of all steam enhanced wells authorized by this permit and shall update the list whenever a well is added, replaced, or deleted. [District NSR Rule] Federally Enforceable Through Title V Permit
9. Total number of leaks from the vapor collection and control system, including condensate handling, shall not exceed the number as allowed by Rule 4401 (as amended January 15, 1998) at any one time. [District Rule 4401, 5.3] Federally Enforceable Through Title V Permit
10. The permittee shall perform leak inspections at least annually, using a portable hydrocarbon detection instrument in accordance with USEPA Method 21. [District Rule 2520, 9.3.2 and 4401, 6.3.3] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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



11. Operator shall affix a readily visible tag bearing the date on which a leak is detected. The tag shall remain in place until the leaking component is repaired. [District Rule 4401, 5.3.1] Federally Enforceable Through Title V Permit
12. Operator shall repair each leak within 15 days of detection. The APCO may grant a 10 day extension if the operator demonstrates that the necessary and sufficient actions have and are being taken to correct the leak. [District Rule 4401, 5.3.1] Federally Enforceable Through Title V Permit
13. Annual control efficiency compliance tests shall be performed on all vapor collection and control systems used to control emissions from steam-enhanced crude oil production wells. Testing shall be performed by source tester certified by the California Air Resource Board (CARB) certified contractors 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 the requirements of this condition if the vapor control system does not exhaust to atmosphere or if all uncondensed VOC emissions collected by a vapor collection and control system are burned in fuel burning equipment or in a smokeless open flare and the source's Operating Permit contains adequate periodic monitoring to ensure the source meets 99% control efficiency. [District Rule 4401, 5.1, 5.2 and 6.2.1] Federally Enforceable Through Title V Permit
14. The control efficiency of any VOC control device, measured and calculated as carbon, shall be determined by EPA Method 25, except when the outlet concentration must be below 50 ppm in order to meet the standard, in which case EPA Method 25a may be used. EPA Method 18 may be used in lieu of EPA Method 25 or EPA Method 25a provided the identity and approximate concentrations of the analytes/compounds in the sample gas stream are known before analysis with the gas chromatograph and the gas chromatograph is calibrated for each of those known analyte/compound to ensure that the VOC concentrations are neither under- or over-reported. [District Rule 4401, 6.3.1] Federally Enforceable Through Title V Permit
15. The VOC content by weight percent (wt.%) shall be determined using American Society of Testing and Materials (ASTM) D1945 for gases and South Coast Air Quality Management District (SCAQMD) Method 304-91 or the latest revision of ASTM Method E168, E169 or E260 for liquids. [District Rule 4401, 6.3.5] Federally Enforceable Through Title V Permit
16. Portable hydrocarbon detection instrument shall be operated and calibrated in accordance with recommendations in CAPCOA/CARB's California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities (February, 1999). [District NSR Rule] Federally Enforceable Through Title V Permit
17. Operator shall maintain all components of a well vent vapor collection and control system in good repair. Components of the well vent vapor collection and control system shall include all piping, valves, fittings, pumps, compressors, tanks, etc. used to collect, control, store, or dispose of VOC condensate or non-condensable VOCs and which is prior to any blending of VOC condensate with crude oil or blending of non-condensable VOCs with gases to be used as a fuel. [District Rule 4401, 5.3 and 5.3.2] Federally Enforceable Through Title V Permit
18. The operator shall maintain monitoring records of the date and well identification where steam injection or well stimulation occurs. [District Rule 4401, 6.1] Federally Enforceable Through Title V Permit

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-1326-294-7

**EXPIRATION DATE:** 03/31/2016

**SECTION:** SE23 **TOWNSHIP:** 28S **RANGE:** 27E

**EQUIPMENT DESCRIPTION:**

62.5 MMBTU/HR NATURAL GAS-FIRED STRUTHERS STEAM GENERATOR WITH A NORTH AMERICAN MAGNA-FLAME G-LE ULTRA LOW NOX BURNER AND A FLUE GAS RECIRCULATION (FGR) SYSTEM

## PERMIT UNIT REQUIREMENTS

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1. All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District Rule 2201] Federally Enforceable Through Title V Permit
2. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
3. The unit shall only be fired on PUC-quality natural gas and scrubbed TEOR and TVR gas from S-1326-26, '-27, '-28, '-35 and '-263 with a sulfur content no greater than 1 gr S/100 scf. [District Rules 2201, 4301, 4320, 4406, and 4801] Federally Enforceable Through Title V Permit
4. Emissions rates from the steam generator shall not exceed any of the following limits: 0.003 lb-PM10/MMBtu, 75 ppmvd CO @ 3% O2 or 0.055 lb-CO/MMBtu, or 0.0055 lb-VOC/MMBtu. [District Rules 2201, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
5. Emissions shall not exceed any of the following limits when this unit is burning 50% or greater by volume PUC quality gas on a monthly average basis: 9 ppmvd NOx @ 3% O2 or 0.011 lb-NOx/MMBtu. [District Rules 2201, 4301, 4305, 4306, 4320, 4351, and 4405] Federally Enforceable Through Title V Permit
6. Emissions shall not exceed any of the following limits when the unit is burning less than 50% by volume PUC quality gas on a monthly average basis: 12 ppmvd NOx @ 3% O2 or 0.014 lb-NOx/MMBtu. [District Rules 2201, 4301, 4305, 4306, 4320, 4351, and 4405] Federally Enforceable Through Title V Permit
7. The applicable NOx emissions concentration for each month shall be determined based on the volume and type of fuel combusted in the unit (< 50% by volume PUC quality gas or > = 50% by volume PUC quality gas). Permittee shall maintain supporting records that demonstrate the type of fuel combusted. [District Rules 2201, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
8. Permittee shall test annually the sulfur content of the fuel gas combusted in steam generator using ASTM method D1072, D3031, D4084, or D3246 and make test results readily available for District inspection. [District Rules 2520, 9.3.2 and 4320] Federally Enforceable Through Title V Permit
9. All emissions measurements shall be made with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. Unless otherwise specified in the Permit to Operate, no determination of compliance shall be established within two hours after a continuous period in which fuel flow to the unit is shut off for 30 minutes or longer, or within 30 minutes after a re-ignition as defined in Section 3.0 of District Rule 4306. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

10. A source test to demonstrate compliance with NO<sub>x</sub> and CO emission limits shall be performed within 60 days of startup of this unit. The NO<sub>x</sub> limit in effect at the time of the startup source testing will be determined based on the volume and type of fuel combusted ( $\geq 50\%$  PUC quality or  $< 50\%$  PUC quality gas) and shall be identified in the source test protocol. Whenever the fuel type is switched from the fuel type combusted during the initial startup of this unit, compliance source testing for NO<sub>x</sub> and CO shall be conducted within 90 days of the date the fuel type is switched. [District Rules 2201, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
11. Source testing is required at least once every twelve (12) months from the initial source test date of each fuel type ( $\geq 50\%$  PUC quality gas or  $< 50\%$  PUC quality gas). After initial compliance demonstration with the NO<sub>x</sub> and CO emission limits for each fuel type on two (2) consecutive source tests, the unit shall be tested not less than once every thirty-six (36) months from the last test date for that fuel type. Testing shall not be required for any fuel type not in use during the 36 month period until such time the fuel type is switched, after which testing shall be performed within 90 days of switching fuel types. [District Rules 2201, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
12. Compliance source testing after switching fuel types is not required if the unit continues to demonstrate compliance with 9 ppmvd NO<sub>x</sub> @ 3% O<sub>2</sub> or 0.011 lb-NO<sub>x</sub>/MMBtu and 75 ppmvd CO @ 3% O<sub>2</sub> or 0.055 lb-CO/MMBtu while firing on less than 50% by volume PUC quality gas. In which case, source testing shall only be required every thirty-six (36) months for the less than 50% by PUC quality gas. If the result of a source test demonstrates that the unit does not meet 9 ppmvd NO<sub>x</sub> @ 3% O<sub>2</sub> or 0.011 lb-NO<sub>x</sub>/MMBtu and 75 ppmvd CO @ 3% O<sub>2</sub> or 0.055 lb-CO/MMBtu while firing on less than 50% by volume PUC quality gas, the source test frequency shall revert to at least one test every 36 months for each fuel type. [District Rules 2201, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
13. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
14. The source test plan shall identify which basis (ppmv or lb/MMBtu) will be used to demonstrate compliance. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
15. The following test methods shall be used: NO<sub>x</sub> (ppmv) - EPA Method 7E or ARB Method 100, NO<sub>x</sub> (lb/MMBtu) - EPA Method 19, CO (ppmv) - EPA Method 10 or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, stack gas moisture content - EPA Method 4, stack gas velocities - EPA Method 2, fuel gas sulfur content - ASTM D1072, ASTM D3246, ASTM D6228 (GC-FPD) or double GC for H<sub>2</sub>S and mercaptans, and methane content - ASTM D1945. [District Rules 1081, 4305, 4306, 6.2, 4320, and 4351] Federally Enforceable Through Title V Permit
16. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
17. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
18. The permittee shall monitor and record the stack concentration of NO<sub>x</sub>, CO, and O<sub>2</sub> at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless monitoring has been performed within the last month. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

19. If either the NO<sub>x</sub> or CO concentrations corrected to 3% O<sub>2</sub>, as measured by the portable analyzer, exceed the allowable emissions concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
20. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
21. The permittee shall maintain records of: (1) the date and time of NO<sub>x</sub>, CO, and O<sub>2</sub> measurements, (2) the O<sub>2</sub> concentration in percent and the measured NO<sub>x</sub> and CO concentrations corrected to 3% O<sub>2</sub>, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
22. Permittee shall maintain records of fuel gas sulfur compound measurements. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
23. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-1326-314-5

**EXPIRATION DATE:** 03/31/2016

**SECTION:** 23 **TOWNSHIP:** 28S **RANGE:** 27E

**EQUIPMENT DESCRIPTION:**

85.0 MMBTU/HR STRUTHERS NATURAL GAS-FIRED STEAM GENERATOR WITH A NORTH AMERICAN MODEL MAGNA-FLAME G-LE ULTRA ULTRA-LOW NOX BURNER WITH FLUE GAS RECIRCULATION (FGR) AND AN O2 CONTROLLER

## PERMIT UNIT REQUIREMENTS

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1. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
2. The unit shall only be fired on PUC-quality natural gas and scrubbed TEOR and TVR gas from S-1326-26, '-27, '-28, '-35 and '-263 with a sulfur content no greater than 1 gr S/100 scf. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
3. Permittee shall test annually the sulfur content of the fuel gas combusted in steam generator using ASTM method D1072, D3031, D4084, or D3246 and make test results readily available for District inspection. [District Rules 2520, 9.3.2 and 4320] Federally Enforceable Through Title V Permit
4. Emissions rates from unit shall not exceed any of the following limits: 7 ppmv NOx @ 3% O2 or 0.008 lb-NOx/MMBtu, 0.00300 lb-PM10/MMBtu, 35 ppmv CO @ 3% O2 or 0.026 lb-CO/MMBtu, or 0.0055 lb-VOC/MMBtu. [District Rules 2201, 4301, 5.2, 4305, 5.1, and 4306, 5.1, 4320, and 40 CFR 60.43c(e)(1)] Federally Enforceable Through Title V Permit
5. Source testing to measure NOx, and CO emissions from this unit while fired on natural gas shall be conducted at least once every twelve (12) months. After demonstrating compliance on two (2) consecutive annual source tests, the unit shall be tested not less than once every thirty-six (36) months. If the result of the 36-month source test demonstrates that the unit does not meet the applicable emission limits, the source testing frequency shall revert to at least once every twelve (12) months. [District Rules 4305, 6.3.1, 4306, 6.3.1, and 4320] Federally Enforceable Through Title V Permit
6. All emissions measurements shall be made with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. Unless otherwise specified in the Permit to Operate, no determination of compliance shall be established within two hours after a continuous period in which fuel flow to the unit is shut off for 30 minutes or longer, or within 30 minutes after a re-ignition as defined in Section 3.0 of District Rule 4306. [District Rules 4305, 5.5.2, 4306, 5.5.2, and 4320] Federally Enforceable Through Title V Permit
7. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
8. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
9. The source test plan shall identify which basis (ppmv or lb/MMBtu) will be used to demonstrate compliance. [District Rules 4305, 5.5.1, 4306, 5.5.1, and 4320] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

10. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rules 4305, 5.5.5, 4306, 5.5.5, and 4320] Federally Enforceable Through Title V Permit
11. The following test methods shall be used: NO<sub>x</sub> (ppmv) - EPA Method 7E or ARB Method 100, NO<sub>x</sub> (lb/MMBtu) - EPA Method 19, CO (ppmv) - EPA Method 10 or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, stack gas moisture content - EPA Method 4, stack gas velocities - EPA Method 2, and fuel gas sulfur content - ASTM D1072, ASTM D3246, ASTM D6228 (GC-FPD) or double GC for H<sub>2</sub>S and mercaptans. [District Rule 1081, 4305, 4306, 6.2, 4320, and 4351] Federally Enforceable Through Title V Permit
12. The permittee shall monitor and record the stack concentration of NO<sub>x</sub>, CO, and O<sub>2</sub> at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless monitoring has been performed within the last month. [District Rules 4305, 5.4, 4306, 5.4, and 4320] Federally Enforceable Through Title V Permit
13. If either the NO<sub>x</sub> or CO concentrations corrected to 3% O<sub>2</sub>, as measured by the portable analyzer, exceed the allowable emissions concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rules 4305, 5.4, 4306, 5.4, and 4320] Federally Enforceable Through Title V Permit
14. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 4305, 5.4, 4306, 5.4, and 4320] Federally Enforceable Through Title V Permit
15. The permittee shall maintain records of: (1) the date and time of NO<sub>x</sub>, CO, and O<sub>2</sub> measurements, (2) the O<sub>2</sub> concentration in percent and the measured NO<sub>x</sub> and CO concentrations corrected to 3% O<sub>2</sub>, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rules 4305, 6.1, 4306, 6.1, and 4320] Federally Enforceable Through Title V Permit
16. Permittee shall maintain records of fuel gas sulfur compound measurements. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
17. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070, 4305, 6.1, 4306, 6.1, and 4320] Federally Enforceable Through Title V Permit

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-1326-315-1

**EXPIRATION DATE:** 03/31/2016

**EQUIPMENT DESCRIPTION:**

20,000 BBL FWKO VENTED TO VAPOR CONTROL SYSTEM LISTED ON S-1326-263

## PERMIT UNIT REQUIREMENTS

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1. Vapor control efficiency shall be maintained at no less than 99%. [District Rule 2201] Federally Enforceable Through Title V Permit
2. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623] Federally Enforceable Through Title V Permit
3. Permittee shall conduct true vapor pressure (TVP) testing of the organic liquid stored in this tank at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored in this tank in order to maintain exemption from the rule. [District Rule 4623] Federally Enforceable Through Title V Permit
4. 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
5. 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
6. 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
7. This permit authorizes FWKO 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
8. Permittee shall conduct FWKO cleaning and maintenance operations in accordance with District approved procedures as described in this permit. [District Rule 2080] Federally Enforceable Through Title V Permit
9. FWKO may be disconnected from vapor control system during District approved cleaning and maintenance procedures as described in this permit. [District Rule 2080] Federally Enforceable Through Title V Permit
10. Permittee shall notify the District Compliance Division at least 24 hours before FWKO cleaning and vapor control system disconnection and within 72 hours after restoring crude oil flow to the FWKO. [District Rule 2080] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

11. Prior to opening the FWKO to allow FWKO cleaning, one of the following procedures must be followed: 1) Prior to venting the FWKO to the atmosphere, operate the FWKO vapor recovery system/vapor control device for at least 24 hours such that it collects the FWKO vapors; or 2) use liquid displacement, conducted using a liquid with a TVP less than 0.5 psia, or conducted by floating the oil pad off a crude oil FWKO by restricting the outflow of water, such that 90% of the FWKO volume is displaced; or 3) Vent the FWKO to a vapor control device/vapor recovery system until the vapor concentration is less than 10% of the lower explosive limit (LEL) or 5,000 ppmv whichever is less; or 4) vent the FWKO 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
12. The FWKO 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 FWKO 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
13. 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
14. Prior to reintroducing crude oil/water to the FWKO, the FWKO shall be filled to the maximum possible level with water, the FWKO 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
15. Within 48 hours after refilling the FWKO with crude oil/water, the pressure relief valve seats and hatch seals shall be inspected for leaks using EPA method 21 and the regular FWKO maintenance and inspection program shall resume. [District Rule 2080] Federally Enforceable Through Title V Permit
16. Permittee shall maintain records of each period of cleaning and maintenance when the FWKO is disconnected or isolated from the vapor control system. Records shall include the date that FWKO cleaning was initiated, the date FWKO cleaning was completed, the procedure used to vent FWKO vapors prior to opening, the method of FWKO cleaning used, and a description of internal and external FWKO 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
17. Operator shall conduct quarterly gas sampling after TVR compressor (prior to connection to any other vapor control system) and at either the first line tank or at any secondary tank which is heated above ambient temperature. If gas samples are less than 10% VOC by weight for 8 consecutive quarterly samplings, sampling frequency shall only be required annually and whenever there is a change in source or type of petroleum processed. Samples shall be collected during periods of normal operation, and not be within 48 hours after routine maintenance or repair. [District Rule 2201] Federally Enforceable Through Title V Permit
18. VOC content of tank vapor space and vapor control system piping and components shall not exceed 10% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
19. Permittee shall submit the records of TVP and API gravity testing to the APCO within 45 days after the date of testing. The records shall include the tank identification number, Permit to Operate number, type of stored organic liquid, TVP and API gravity of the organic liquid, test methods used, and a copy of the test results. [District Rule 4623] Federally Enforceable Through Title V Permit
20. The permittee shall keep accurate records of each organic liquid stored in the tank, including its storage temperature, TVP, and API gravity. [District Rule 4623] Federally Enforceable Through Title V Permit
21. VOC content of gas shall be measured using ASTM D-1945, EPA Method 18 referenced as methane, or equivalent test method with prior District approval. [District Rule 2201] Federally Enforceable Through Title V Permit
22. The permittee shall keep accurate records of VOC content of vapors for a period of 5 years and shall make such records available for District inspection upon request. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

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



# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-1326-316-1

**EXPIRATION DATE:** 03/31/2016

**SECTION:** 35 **TOWNSHIP:** 11N **RANGE:** 19W

**EQUIPMENT DESCRIPTION:**

1000 BBL FIXED ROOF PRODUCED WATER TANK #32346 (TEJON)

## PERMIT UNIT REQUIREMENTS

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1. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623] Federally Enforceable Through Title V Permit
2. Permittee shall conduct true vapor pressure (TVP) testing of the organic liquid stored in this tank at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored in this tank in order to maintain exemption from the rule. [District Rule 4623] Federally Enforceable Through Title V Permit
3. 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
4. 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
5. 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
6. 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
7. 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
8. All records required to be maintained by this permit shall be maintained for a period of at least five years and shall be made readily available for District inspection upon request. [District Rules 2520, 9.4.2 and 4623] Federally Enforceable Through Title V Permit

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-1326-317-1

**EXPIRATION DATE:** 03/31/2016

**SECTION:** 35 **TOWNSHIP:** 11N **RANGE:** 19W

**EQUIPMENT DESCRIPTION:**

1000 BBL FIXED ROOF PETROLEUM WASH TANK #32384 (TEJON)

## PERMIT UNIT REQUIREMENTS

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1. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623] Federally Enforceable Through Title V Permit
2. Permittee shall conduct true vapor pressure (TVP) testing of the organic liquid stored in this tank at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored in this tank in order to maintain exemption from the rule. [District Rule 4623] Federally Enforceable Through Title V Permit
3. 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
4. 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
5. 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
6. 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
7. 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
8. Tank shall be equipped with pressure relief device set to within 10% of the maximum allowable working pressure of the tank. [District Rule 4623] Federally Enforceable Through Title V Permit
9. All records required to be maintained by this permit shall be maintained for a period of at least five years and shall be made readily available for District inspection upon request. [District Rules 2520, 9.4.2, and 4623] Federally Enforceable Through Title V Permit

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-1326-318-1

**EXPIRATION DATE:** 03/31/2016

**SECTION:** 35 **TOWNSHIP:** 11N **RANGE:** 19W

**EQUIPMENT DESCRIPTION:**

1000 BBL FIXED ROOF PETROLEUM STORAGE TANK #30114 (TEJON)

## PERMIT UNIT REQUIREMENTS

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1. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623] Federally Enforceable Through Title V Permit
2. Permittee shall conduct true vapor pressure (TVP) testing of the organic liquid stored in this tank at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored in this tank in order to maintain exemption from the rule. [District Rule 4623] Federally Enforceable Through Title V Permit
3. 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
4. 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
5. 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
6. 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
7. Tank shall be equipped with pressure relief device set to within 10% of the maximum allowable working pressure of the tank. [District Rule 4623] Federally Enforceable Through Title V Permit
8. 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
9. All records required to be maintained by this permit shall be maintained for a period of at least five years and shall be made readily available for District inspection upon request. [District Rules 2520, 9.4.2 and 4623] Federally Enforceable Through Title V Permit

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-1326-319-1

**EXPIRATION DATE:** 03/31/2016

**SECTION:** 35 **TOWNSHIP:** 11N **RANGE:** 19W

**EQUIPMENT DESCRIPTION:**

1000 BBL FIXED ROOF PETROLEUM STORAGE TANK #30115 (TEJON)

## PERMIT UNIT REQUIREMENTS

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1. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623] Federally Enforceable Through Title V Permit
2. Permittee shall conduct true vapor pressure (TVP) testing of the organic liquid stored in this tank at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored in this tank in order to maintain exemption from the rule. [District Rule 4623] Federally Enforceable Through Title V Permit
3. 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
4. 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
5. 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
6. 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
7. 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
8. Tank shall be equipped with pressure relief device set to within 10% of the maximum allowable working pressure of the tank. [District Rule 4623] Federally Enforceable Through Title V Permit
9. All records required to be maintained by this permit shall be maintained for a period of at least five years and shall be made readily available for District inspection upon request. [District Rules 2520, 9.4.2 and 4623] Federally Enforceable Through Title V Permit

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-1326-320-1

**EXPIRATION DATE:** 03/31/2016

**SECTION:** SE09 **TOWNSHIP:** 27S **RANGE:** 28E

**EQUIPMENT DESCRIPTION:**

20,000 BBL FIXED ROOF PETROLEUM WASH TANK (SEC. 9 NO. 1)

## PERMIT UNIT REQUIREMENTS

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1. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623] Federally Enforceable Through Title V Permit
2. Permittee shall conduct true vapor pressure (TVP) testing of the organic liquid stored in this tank at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored in this tank in order to maintain exemption from the rule. [District Rule 4623] Federally Enforceable Through Title V Permit
3. 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
4. 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
5. 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
6. 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
7. 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
8. All records required to be maintained by this permit shall be maintained for a period of at least five years and shall be made readily available for District inspection upon request. [District Rules 2520, 9.4.2 and 4623] Federally Enforceable Through Title V Permit

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-1326-321-1

**EXPIRATION DATE:** 03/31/2016

**SECTION:** SE09 **TOWNSHIP:** 27S **RANGE:** 28E

**EQUIPMENT DESCRIPTION:**

20,000 BBL FIXED ROOF PETROLEUM WASH TANK (SEC. 9 NO. 2)

## PERMIT UNIT REQUIREMENTS

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1. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623] Federally Enforceable Through Title V Permit
2. Permittee shall conduct true vapor pressure (TVP) testing of the organic liquid stored in this tank at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored in this tank in order to maintain exemption from the rule. [District Rule 4623] Federally Enforceable Through Title V Permit
3. 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
4. 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
5. 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
6. 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
7. 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
8. All records required to be maintained by this permit shall be maintained for a period of at least five years and shall be made readily available for District inspection upon request. [District Rule 4623] Federally Enforceable Through Title V Permit

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-1326-322-1

**EXPIRATION DATE:** 03/31/2016

**SECTION:** SE09 **TOWNSHIP:** 27S **RANGE:** 28E

**EQUIPMENT DESCRIPTION:**

12,000 BBL WASH TANK (SEC. 9 NO. 4)

## PERMIT UNIT REQUIREMENTS

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1. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623] Federally Enforceable Through Title V Permit
2. Permittee shall conduct true vapor pressure (TVP) testing of the organic liquid stored in this tank at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored in this tank in order to maintain exemption from the rule. [District Rule 4623] Federally Enforceable Through Title V Permit
3. 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
4. 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
5. 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
6. 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
7. 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
8. All records required to be maintained by this permit shall be maintained for a period of at least five years and shall be made readily available for District inspection upon request. [District Rules 2520, 9.4.2 and 4623] Federally Enforceable Through Title V Permit

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-1326-323-1

**EXPIRATION DATE:** 03/31/2016

**SECTION:** SE09 **TOWNSHIP:** 27S **RANGE:** 28E

**EQUIPMENT DESCRIPTION:**

ONE 420,000 GALLON FIXED ROOF PETROLEUM STORAGE TANK (SEC. 9 NO. 8)

## PERMIT UNIT REQUIREMENTS

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1. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623] Federally Enforceable Through Title V Permit
2. Permittee shall conduct true vapor pressure (TVP) testing of the organic liquid stored in this tank at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored in this tank in order to maintain exemption from the rule. [District Rule 4623] Federally Enforceable Through Title V Permit
3. 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
4. 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
5. 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
6. 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
7. 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
8. All records required to be maintained by this permit shall be maintained for a period of at least five years and shall be made readily available for District inspection upon request. [District Rule 4623] Federally Enforceable Through Title V Permit

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



# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-1326-324-1

**EXPIRATION DATE:** 03/31/2016

**SECTION:** SE09 **TOWNSHIP:** 27S **RANGE:** 28E

**EQUIPMENT DESCRIPTION:**

5000 BBL FIXED ROOF PETROLEUM WASH TANK (SEC. 9 NO. 9) WITH VAPOR CONTROL SHARED WITH TANKS S-1326-326 AND '-327

## PERMIT UNIT REQUIREMENTS

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1. Tank vapors shall be reinjected in DOGGR approved wells or incinerated in permit exempt heater treaters. [District Rule 2201] Federally Enforceable Through Title V Permit
2. The tank shall be equipped with a vapor recovery system consisting of a closed vent system that collects all VOCs from the storage tank, and a VOC control device. The vapor recovery system shall be APCO-approved and maintained in gas-tight condition. The VOC control device shall be either of the following: a vapor return or condensation system that connects to a gas pipeline distribution system, or an approved VOC destruction device that reduces the inlet VOC emissions by at least 95% by weight as determined by the test method specified in Section 6.4.7. [District Rule 4623] Federally Enforceable Through Title V Permit
3. All piping, valves, and fittings shall be constructed and maintained in a leak-free condition. [District Rule 4623] Federally Enforceable Through Title V Permit
4. A leak-free condition is defined as a condition without a gas leak. A gas leak is defined as a reading in excess of 10,000 ppmv, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21. A reading in excess of 10,000 ppmv above background is a violation of this permit and Rule 4623 and shall be reported as a deviation. [District Rule 4623] Federally Enforceable Through Title V Permit
5. Any tank gauging or sampling device on a tank vented to the vapor recovery system shall be equipped with a leak-free cover which shall be closed at all times except during gauging or sampling. [District Rule 4623, 5.6.2] Federally Enforceable Through Title V Permit
6. Fugitive VOC emission rate, 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 from the total number of vapor components associated with tank and vapor control system shall not exceed 1.9 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
7. All piping, fittings, and valves on this tank shall be inspected annually by the facility operator in accordance with EPA Method 21, with the instrument calibrated with methane, to ensure compliance with the leaking provisions of this permit. [District Rule 4623] Federally Enforceable Through Title V Permit
8. 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] Federally Enforceable Through Title V Permit
9. 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] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

10. 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 Rules 2201 and 2520, 9.4.2] Federally Enforceable Through Title V Permit

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-1326-325-1

**EXPIRATION DATE:** 03/31/2016

**SECTION:** SE09 **TOWNSHIP:** 27S **RANGE:** 28E

**EQUIPMENT DESCRIPTION:**

10,000 BBL FIXED ROOF PETROLEUM STORAGE TANK (SEC. 9 NO. 10)

## PERMIT UNIT REQUIREMENTS

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1. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623] Federally Enforceable Through Title V Permit
2. Permittee shall conduct true vapor pressure (TVP) testing of the organic liquid stored in this tank at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored in this tank in order to maintain exemption from the rule. [District Rule 4623] Federally Enforceable Through Title V Permit
3. 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
4. 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
5. 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
6. 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
7. 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
8. All records required to be maintained by this permit shall be maintained for a period of at least five years and shall be made readily available for District inspection upon request. [District Rules 4623 and 2520, 9.4.2] Federally Enforceable Through Title V Permit

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-1326-326-1

**EXPIRATION DATE:** 03/31/2016

**SECTION:** SE09 **TOWNSHIP:** 27S **RANGE:** 28E

**EQUIPMENT DESCRIPTION:**

5000 BBL FIXED ROOF PETROLEUM STORAGE TANK, CONNECTED TO VAPOR CONTROL SYSTEM LISTED ON PERMIT S-1326-324 (SEC. 9 #11)

## PERMIT UNIT REQUIREMENTS

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1. Fugitive VOC emission rate, 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 from the total number of vapor components associated with tank and vapor control system shall not exceed 1.8 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
2. The tank shall be equipped with a vapor recovery system consisting of a closed vent system that collects all VOCs from the storage tank, and a VOC control device. The vapor recovery system shall be APCO-approved and maintained in leak-free condition. The VOC control device shall be either of the following: a vapor return or condensation system that connects to a gas pipeline distribution system, or an approved VOC destruction device that reduces the inlet VOC emissions by at least 95% by weight as determined by the test method specified in Section 6.4.7. [District Rule 4623] Federally Enforceable Through Title V Permit
3. All piping, valves, and fittings shall be constructed and maintained in a leak-free condition. [District Rule 4623] Federally Enforceable Through Title V Permit
4. A leak-free condition is defined as a condition without a gas leak. A gas leak is defined as a reading in excess of 10,000 ppmv, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21. A reading in excess of 10,000 ppmv above background is a violation of this permit and Rule 4623 and shall be reported as a deviation. [District Rule 4623] Federally Enforceable Through Title V Permit
5. Any tank gauging or sampling device on a tank vented to the vapor recovery system shall be equipped with a leak-free cover which shall be closed at all times except during gauging or sampling. [District Rule 4623] Federally Enforceable Through Title V Permit
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 Rules 2201 and 4623] Federally Enforceable Through Title V Permit
7. 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
8. 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

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

9. 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
10. 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
11. 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
12. 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
13. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date and time of leak detection, and method of detection; 3) Date and time of leak repair, and emission level of recheck after leak is repaired; 4) Method used to minimize the leak to lowest possible level within 8 hours after detection. [District Rule 4623,] Federally Enforceable Through Title V Permit
14. All records required to be maintained by this permit shall be maintained for a period of at least five years and shall be made readily available for District inspection upon request. [District Rules 2520, 9.4.2 and 4623] Federally Enforceable Through Title V Permit

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-1326-327-1

**EXPIRATION DATE:** 03/31/2016

**SECTION:** SE09 **TOWNSHIP:** 27S **RANGE:** 28E

**EQUIPMENT DESCRIPTION:**

5000 BBL FIXED ROOF PETROLEUM STORAGE TANK CONNECTED TO VAPOR CONTROL SYSTEM LISTED ON S-1326-324 (SEC. 9 NO. 12)

## PERMIT UNIT REQUIREMENTS

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1. Fugitive VOC emission rate, 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 from the total number of vapor components associated with tank and vapor control system shall not exceed 0.5 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
2. The tank shall be equipped with a vapor recovery system consisting of a closed vent system that collects all VOCs from the storage tank, and a VOC control device. The vapor recovery system shall be APCO-approved and maintained in leak-free condition. The VOC control device shall be either of the following: a vapor return or condensation system that connects to a gas pipeline distribution system, or an approved VOC destruction device that reduces the inlet VOC emissions by at least 95% by weight as determined by the test method specified in Section 6.4.7. [District Rule 4623] Federally Enforceable Through Title V Permit
3. All piping, valves, and fittings shall be constructed and maintained in a leak-free condition. [District Rule 4623] Federally Enforceable Through Title V Permit
4. A leak-free condition is defined as a condition without a gas leak. A gas leak is defined as a reading in excess of 10,000 ppmv, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21. A reading in excess of 10,000 ppmv above background is a violation of this permit and Rule 4623 and shall be reported as a deviation. [District Rule 4623] Federally Enforceable Through Title V Permit
5. Any tank gauging or sampling device on a tank vented to the vapor recovery system shall be equipped with a leak-free cover which shall be closed at all times except during gauging or sampling. [District Rule 4623] Federally Enforceable Through Title V Permit
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 Rules 2201 and 4623] Federally Enforceable Through Title V Permit
7. 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
8. 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

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

9. 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
10. 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
11. 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
12. 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
13. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date and time of leak detection, and method of detection; 3) Date and time of leak repair, and emission level of recheck after leak is repaired; 4) Method used to minimize the leak to lowest possible level within 8 hours after detection. [District Rule 4623,] Federally Enforceable Through Title V Permit
14. Permittee shall maintain accurate component count for tank according to EPA Protocol for equipment Leak Emission Estimate Table 2-4 Oil and Gas Production Operations Average Emission Factors. Permittee shall update such records when new components are installed. [District Rules 2520 9.4.2 and 2201] Federally Enforceable Through Title V Permit
15. 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 Rules 2201 and 2520 9.4.2] Federally Enforceable Through Title V Permit

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-1326-328-1

**EXPIRATION DATE:** 03/31/2016

**SECTION:** 21 **TOWNSHIP:** 27S **RANGE:** 28E

**EQUIPMENT DESCRIPTION:**

750 BBL FIXED ROOF PETROLEUM STORAGE TANK (SO. UNIT TANK FARM NO. 8)

## PERMIT UNIT REQUIREMENTS

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1. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623] Federally Enforceable Through Title V Permit
2. Permittee shall conduct true vapor pressure (TVP) testing of the organic liquid stored in this tank at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored in this tank in order to maintain exemption from the rule. [District Rule 4623] Federally Enforceable Through Title V Permit
3. 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
4. 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
5. 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
6. 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
7. 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
8. All records required to be maintained by this permit shall be maintained for a period of at least five years and shall be made readily available for District inspection upon request. [District Rules 2520, 9.4.2 and 4623] Federally Enforceable Through Title V Permit

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



# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-1326-330-1

**EXPIRATION DATE:** 03/31/2016

**SECTION:** SW04 **TOWNSHIP:** 27S **RANGE:** 28E

**EQUIPMENT DESCRIPTION:**

1000 BBL FIXED ROOF PETROLEUM STORAGE TANK (NORTH UNIT NO. 5) WITH PV VALVE

## PERMIT UNIT REQUIREMENTS

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1. Crude oil throughput shall not exceed 1,200 barrels per day based on a monthly average. [District Rule 2201] Federally Enforceable Through Title V Permit
2. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623] Federally Enforceable Through Title V Permit
3. Permittee shall conduct true vapor pressure (TVP) testing of the organic liquid stored in this tank at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored in this tank in order to maintain exemption from the rule. [District Rule 4623] Federally Enforceable Through Title V Permit
4. 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
5. 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
6. 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
7. 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
8. 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
9. All records required to be maintained by this permit shall be maintained for a period of at least five years and shall be made readily available for District inspection upon request. [District Rules 2520, 9.4.2 and 4623] Federally Enforceable Through Title V Permit

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-1326-331-1

**EXPIRATION DATE:** 03/31/2016

**SECTION:** SW04 **TOWNSHIP:** 27E **RANGE:** 28S

**EQUIPMENT DESCRIPTION:**

2000 BBL FIXED ROOF PETROLEUM WASH TANK WITH PV VALVE (NORTH UNIT NO. 6)

## PERMIT UNIT REQUIREMENTS

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1. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
2. Crude oil throughput shall not exceed 2,000 barrels per day based on a monthly average. [District Rule 2201] Federally Enforceable Through Title V Permit
3. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623] Federally Enforceable Through Title V Permit
4. Permittee shall conduct true vapor pressure (TVP) testing of the organic liquid stored in this tank at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored in this tank in order to maintain exemption from the rule. [District Rule 4623] Federally Enforceable Through Title V Permit
5. 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
6. 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
7. 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
8. 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
9. 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
10. All records required to be maintained by this permit shall be maintained for a period of at least five years and shall be made readily available for District inspection upon request. [District Rules 2520, 9.4.2 and 4623] Federally Enforceable Through Title V Permit

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-1326-332-1

**EXPIRATION DATE:** 03/31/2016

**SECTION:** NE21 **TOWNSHIP:** 27S **RANGE:** 28E

**EQUIPMENT DESCRIPTION:**

2000 BBL FIXED ROOF CRUDE OIL WASH TANK (SOUTH UNIT TANK FARM NO. 1)

## PERMIT UNIT REQUIREMENTS

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1. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
2. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623] Federally Enforceable Through Title V Permit
3. Permittee shall conduct true vapor pressure (TVP) testing of the organic liquid stored in this tank at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored in this tank in order to maintain exemption from the rule. [District Rule 4623] Federally Enforceable Through Title V Permit
4. 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
5. 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
6. 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
7. 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
8. 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
9. All records required to be maintained by this permit shall be maintained for a period of at least five years and shall be made readily available for District inspection upon request. [District Rules 2520, 9.4.2 and 4623] Federally Enforceable Through Title V Permit

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-1326-333-1

**EXPIRATION DATE:** 03/31/2016

**SECTION:** NE21 **TOWNSHIP:** 27S **RANGE:** 28E

**EQUIPMENT DESCRIPTION:**

2000 BBL FIXED ROOF STOCK TANK (SOUTH UNIT TANK FARM NO. 2)

## PERMIT UNIT REQUIREMENTS

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1. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
2. Average daily tank throughput (on quarterly basis) shall not exceed 150 bbl/day of fluid. [District Rule 2201] Federally Enforceable Through Title V Permit
3. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623] Federally Enforceable Through Title V Permit
4. Permittee shall conduct true vapor pressure (TVP) testing of the organic liquid stored in this tank at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored in this tank in order to maintain exemption from the rule. [District Rule 4623] Federally Enforceable Through Title V Permit
5. 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
6. 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
7. 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
8. 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
9. 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
10. Permittee shall maintain accurate records of average daily throughput (on quarterly basis) and such records shall be made readily available for District inspection upon request for a period of two years. [District Rule 1070] Federally Enforceable Through Title V Permit
11. All records required to be maintained by this permit shall be maintained for a period of at least five years and shall be made readily available for District inspection upon request. [District Rules 2520, 9.4.2 and 4623] Federally Enforceable Through Title V Permit

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-1326-334-1

**EXPIRATION DATE:** 03/31/2016

**SECTION:** NE16 **TOWNSHIP:** 27S **RANGE:** 28E

**EQUIPMENT DESCRIPTION:**

2000 BBL FIXED ROOF WASH TANK WITH PR/V DEVICE (SECURITY TANK FARM - NO. 1)

## PERMIT UNIT REQUIREMENTS

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1. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623] Federally Enforceable Through Title V Permit
2. Permittee shall conduct true vapor pressure (TVP) testing of the organic liquid stored in this tank at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored in this tank in order to maintain exemption from the rule. [District Rule 4623] Federally Enforceable Through Title V Permit
3. 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
4. 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
5. 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
6. 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
7. 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
8. All records required to be maintained by this permit shall be maintained for a period of at least five years and shall be made readily available for District inspection upon request. [District Rule 4623] Federally Enforceable Through Title V Permit

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-1326-335-1

**EXPIRATION DATE:** 03/31/2016

**SECTION:** NE16 **TOWNSHIP:** 27S **RANGE:** 28E

**EQUIPMENT DESCRIPTION:**

2000 BBL FIXED ROOF STORAGE TANK WITH PR/V DEVICE (SECURITY TANK FARM - NO. 2)

## PERMIT UNIT REQUIREMENTS

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1. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623] Federally Enforceable Through Title V Permit
2. Permittee shall conduct true vapor pressure (TVP) testing of the organic liquid stored in this tank at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored in this tank in order to maintain exemption from the rule. [District Rule 4623] Federally Enforceable Through Title V Permit
3. 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
4. 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
5. 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
6. 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
7. 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
8. All records required to be maintained by this permit shall be maintained for a period of at least five years and shall be made readily available for District inspection upon request. [District Rules 2520, 9.4.2 and 4623] Federally Enforceable Through Title V Permit

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-1326-337-6

**EXPIRATION DATE:** 03/31/2016

**EQUIPMENT DESCRIPTION:**

85.0 MMBTU/HR STRUTHERS NATURAL GAS-FIRED STEAM GENERATOR WITH A NORTH AMERICAN MODEL MAGNA-FLAME G-LE ULTRA ULTRA-LOW NOX BURNER WITH FLUE GAS RECIRCULATION (FGR) AND AN O2 CONTROLLER

## PERMIT UNIT REQUIREMENTS

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1. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
2. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
3. The unit shall only be fired on regulated natural gas and scrubbed TEOR and TVR gas from S-1326-26, '-27, '-28, '-35 and '-263 with a sulfur content no greater than 1 gr S/100 scf . [District Rule 2201 and 4320, 5.4.1.2] Federally Enforceable Through Title V Permit
4. Permittee shall test annually the sulfur content of TEOR/TVR gas combusted in steam generator using ASTM method D1072, D3031, D4084, or D3246 and make test results readily available for District inspection. [District Rule 2520, 9.4.1 and 4320, 5.7.6.1] Federally Enforceable Through Title V Permit
5. Emissions from the steam generator shall not exceed any of the following limits: 0.003 lb-PM10/MMBtu, or 0.0055 lb-VOC/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Maximum emissions from the steam generator, including start-up and shutdown, shall not exceed any of the following limits: 16.3 lb-NOx/day, 5,957 lb-NOx/yr, 18.4 lb-CO/day, and 6,701 lb-CO/yr. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Except during start-up and shutdown periods emissions from the steam generator shall not exceed any of the following limits: 7 ppmvd NOx @ 3% O2 or 0.008 lb-NOx/MMBtu or 10 ppmvd CO @ 3% O2 or 0.009 lb-CO/MMBtu. [District Rules 2201, 4301, 5.2, 4305, 5.1, 4306, 5.1, and 4320, 5.2] Federally Enforceable Through Title V Permit
8. Duration of start-up or shutdown shall not exceed two hours each per occurrence. During start-up or shutdown, the emissions control system shall be in operation, and emissions shall be minimized insofar as technologically possible. The operator shall maintain daily records of the duration of start-up and shutdown periods. [District Rules 4305, 5.5.6, 4306, 5.3, and 4320, 5.6] Federally Enforceable Through Title V Permit
9. Start-up is defined as the period of time during which a unit is brought from a shutdown status to its operating temperature and pressure, including the time required by the unit's emission control system to reach full operation. Shutdown is defined as the period of time during which a unit is taken from an operational to a non-operational status by allowing it to cool down from its operating temperature to ambient temperature as the fuel supply to the unit is completely turned off. [District Rule 4306, 3.25, 3.22, and 4320, 5.6] Federally Enforceable Through Title V Permit
10. Source testing to measure NOx and CO emissions from this unit while fired on natural gas shall be conducted at least once every twelve (12) months. After demonstrating compliance on two (2) consecutive annual source tests, the unit shall be tested not less than once every thirty-six (36) months. If the result of the 36-month source test demonstrates that the unit does not meet the applicable emission limits, the source testing frequency shall revert to at least once every twelve (12) months. [District Rules 4305, 6.3.1, 4306, 6.3.1, and 4320, 6.3.1] 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.

11. All emissions measurements shall be made with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. No determination of compliance shall be established within two hours after a continuous period in which fuel flow to the unit is shut off for 30 minutes or longer, or within 30 minutes after a re-ignition as defined in Section 3.0 of District Rule 4306. [District Rules 4305, 5.5.2, 4306, 5.5.2, and 4320, 5.8.2] Federally Enforceable Through Title V Permit
12. The source test plan shall identify which basis (ppmv or lb/MMBtu) will be used to demonstrate compliance. [District Rules 4305, 5.5.1, 4306, 5.5.1 and 4320, 5.8.2] Federally Enforceable Through Title V Permit
13. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
14. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
15. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rules 4305, 5.5.5, 4306, 5.5.5, and 4320, 5.8.1] Federally Enforceable Through Title V Permit
16. The following test methods shall be used: PM10 (lb/MMBtu) - EPA 201A - 202 or Method 5, NOx (ppmv) - EPA Method 7E or ARB Method 100, NOx (lb/MMBtu) - EPA Method 19, CO (ppmv) - EPA Method 10 or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, stack gas moisture content - EPA Method 4, stack gas velocities - EPA Method 2, and fuel gas sulfur content -EPA method 11 or method 15. [District Rule 1081, 4305, 4306, 6.2, 4320, 6.2 and 4351] Federally Enforceable Through Title V Permit
17. The permittee shall monitor and record the stack concentration of NOx, CO, and O2 at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless monitoring has been performed within the last month. [District Rules 4305, 5.4, 4306, 5.4, and 4320 2.7] Federally Enforceable Through Title V Permit
18. If either the NOx or CO concentrations corrected to 3% O2, as measured by the portable analyzer, exceed the allowable emissions concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rules 4305, 5.4, 4306, 5.4, and 4320 5.7] Federally Enforceable Through Title V Permit
19. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 4305, 5.4, 4306, 5.4, and 4320 6.1] Federally Enforceable Through Title V Permit
20. Permittee shall comply with all notification and recordkeeping requirements of 40 CFR 60.7 a (1)(3) and (b). [District Rule 4001] Federally Enforceable Through Title V Permit
21. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 3% O2, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rules 4305, 6.1, 4306, 6.1, and 4320, 6.1] 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.



22. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070, 4305, 6.1, 4306, 6.1, and 4320, 6.1] Federally Enforceable Through Title V Permit

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-1326-338-6

**EXPIRATION DATE:** 03/31/2016

**SECTION:** NE23 **TOWNSHIP:** 28S **RANGE:** 27E

**EQUIPMENT DESCRIPTION:**

85.0 MMBTU/HR STRUTHERS NATURAL GAS-FIRED STEAM GENERATOR WITH A NORTH AMERICAN MODEL MAGNA-FLAME G-LE ULTRA ULTRA-LOW NOX BURNER (OR EQUIVALENT) WITH FLUE GAS RECIRCULATION (FGR) AND AN O2 CONTROLLER

## PERMIT UNIT REQUIREMENTS

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1. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
2. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
3. The unit shall only be fired on regulated natural gas and scrubbed TEOR and TVR gas from S-1326-26, '-27, '-28, '-35 and '-263 with a sulfur content no greater than 1 gr S/100 scf . [District Rule 2201 and 4320, 5.4.1.2] Federally Enforceable Through Title V Permit
4. Permittee shall test annually the sulfur content of TEOR/TVR gas combusted in steam generator using ASTM method D1072, D3031, D4084, or D3246 and make test results readily available for District inspection. [District Rule 2520, 9.4.1 and 4320, 5.7.6.1] Federally Enforceable Through Title V Permit
5. Emissions from the steam generator shall not exceed any of the following limits: 0.003 lb-PM10/MMBtu, or 0.0055 lb-VOC/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Maximum emissions from the steam generator, including start-up and shutdown, shall not exceed any of the following limits: 16.3 lb-NOx/day, 5,957 lb-NOx/yr, 18.4 lb-CO/day, and 6,701 lb-CO/yr. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Except during start-up and shutdown periods emissions from the steam generator shall not exceed any of the following limits: 7 ppmvd NOx @ 3% O2 or 0.008 lb-NOx/MMBtu or 10 ppmvd CO @ 3% O2 or 0.009 lb-CO/MMBtu. [District Rules 2201, 4301, 5.2, 4305, 5.1, 4306, 5.1, and 4320, 5.2] Federally Enforceable Through Title V Permit
8. Duration of start-up or shutdown shall not exceed two hours each per occurrence. During start-up or shutdown, the emissions control system shall be in operation, and emissions shall be minimized insofar as technologically possible. The operator shall maintain daily records of the duration of start-up and shutdown periods. [District Rules 4305, 5.5.6, 4306, 5.3, and 4320, 5.6] Federally Enforceable Through Title V Permit
9. Start-up is defined as the period of time during which a unit is brought from a shutdown status to its operating temperature and pressure, including the time required by the unit's emission control system to reach full operation. Shutdown is defined as the period of time during which a unit is taken from an operational to a non-operational status by allowing it to cool down from its operating temperature to ambient temperature as the fuel supply to the unit is completely turned off. [District Rule 4306, 3.25, 3.22, and 4320, 5.6] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

10. Source testing to measure NO<sub>x</sub> and CO emissions from this unit while fired on natural gas shall be conducted at least once every twelve (12) months. After demonstrating compliance on two (2) consecutive annual source tests, the unit shall be tested not less than once every thirty-six (36) months. If the result of the 36-month source test demonstrates that the unit does not meet the applicable emission limits, the source testing frequency shall revert to at least once every twelve (12) months. [District Rules 4305, 6.3.1, 4306, 6.3.1, and 4320, 6.3.1] Federally Enforceable Through Title V Permit
11. All emissions measurements shall be made with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. No determination of compliance shall be established within two hours after a continuous period in which fuel flow to the unit is shut off for 30 minutes or longer, or within 30 minutes after a re-ignition as defined in Section 3.0 of District Rule 4306. [District Rules 4305, 5.5.2, 4306, 5.5.2, and 4320, 5.8.2] Federally Enforceable Through Title V Permit
12. The source test plan shall identify which basis (ppmv or lb/MMBtu) will be used to demonstrate compliance. [District Rules 4305, 5.5.1, 4306, 5.5.1 and 4320, 5.8.2] Federally Enforceable Through Title V Permit
13. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
14. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
15. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rules 4305, 5.5.5, 4306, 5.5.5, and 4320, 5.8.1] Federally Enforceable Through Title V Permit
16. The following test methods shall be used: PM<sub>10</sub> (lb/MMBtu) - EPA 201A - 202 or Method 5, NO<sub>x</sub> (ppmv) - EPA Method 7E or ARB Method 100, NO<sub>x</sub> (lb/MMBtu) - EPA Method 19, CO (ppmv) - EPA Method 10 or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, stack gas moisture content - EPA Method 4, stack gas velocities - EPA Method 2, and fuel gas sulfur content -EPA method 11 or method 15. [District Rule 1081, 4305, 4306, 6.2, 4320, 6.2 and 4351] Federally Enforceable Through Title V Permit
17. The permittee shall monitor and record the stack concentration of NO<sub>x</sub>, CO, and O<sub>2</sub> at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless monitoring has been performed within the last month. [District Rules 4305, 5.4, 4306, 5.4, and 4320 2.7] Federally Enforceable Through Title V Permit
18. If either the NO<sub>x</sub> or CO concentrations corrected to 3% O<sub>2</sub>, as measured by the portable analyzer, exceed the allowable emissions concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rules 4305, 5.4, 4306, 5.4, and 4320 5.7] Federally Enforceable Through Title V Permit
19. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 4305, 5.4, 4306, 5.4, and 4320 6.1] 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.

20. Permittee shall comply with all notification and recordkeeping requirements of 40 CFR 60.7 a (1)(3) and (b). [District Rule 4001] Federally Enforceable Through Title V Permit
21. The permittee shall maintain records of: (1) the date and time of NO<sub>x</sub>, CO, and O<sub>2</sub> measurements, (2) the O<sub>2</sub> concentration in percent and the measured NO<sub>x</sub> and CO concentrations corrected to 3% O<sub>2</sub>, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rules 4305, 6.1, 4306, 6.1, and 4320, 6.1] Federally Enforceable Through Title V Permit
22. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070, 4305, 6.1, 4306, 6.1, and 4320, 6.1] Federally Enforceable Through Title V Permit

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-1326-341-1

**EXPIRATION DATE:** 03/31/2016

**SECTION:** 11 **TOWNSHIP:** 28S **RANGE:** 27E

**EQUIPMENT DESCRIPTION:**

THERMALLY ENHANCED OIL RECOVERY OPERATION WELL VENT VAPOR CONTROL SYSTEM SERVING UP TO 50 STEAM DRIVE WELLS AND 40 CYCLIC WELLS (MOVIUS FEE LEASE)

## PERMIT UNIT REQUIREMENTS

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1. Permittee shall maintain a current roster of all wells connected to this system and shall make such roster available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit
2. Non condensed well vent vapors shall only be disposed of in approved incineration/disposal devices, including one 3.0 MMBtu/hr gas-fired heater and reinjection wells. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Gas being incinerated in the 3.0 MMBtu/hr heater shall not exceed 0.75 grains of total sulfur per 100 dscf and 5% by weight hydrocarbons heavier than butane. [District Rule 2020] Federally Enforceable Through Title V Permit
4. Permittee shall keep accurate records of sulfur and VOC content of gas being incinerated and shall make records readily available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Fugitive Volatile Organic Compound (VOC) emission limit shall not exceed 114.8 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Gas being incinerated in the 3.0 MMBtu/hr heater shall be tested annually for sulfur content value by using ASTM methods D 1072, D 3031, D 4084, D 3246 or grab sample analysis by GC-FPD/TCD performed in the laboratory. [District Rule 2020] Federally Enforceable Through Title V Permit
7. During the time any steam-enhanced crude oil production well is undergoing service or repair while the well is not producing, it shall be exempt from the emission control requirements of District Rule 4401, 5.0 (as amended January 15, 1998). [District Rule 4401, 4.1] Federally Enforceable Through Title V Permit
8. All required source testing shall conform to the compliance testing procedures described in District Rule 1081 (as amended December 16, 1993). [District Rule 1081] Federally Enforceable Through Title V Permit
9. The operator shall maintain monitoring records of the date and well identification where steam injection or well stimulation occurs. [District Rule 4401, 6.1] Federally Enforceable Through Title V Permit
10. The uncontrolled VOC emissions from any well vent shall be reduced by at least 99 percent by weight or, if several steam-enhanced crude oil production well vents are connected to a vapor collection and control system, total uncontrolled VOC emissions shall be reduced by at least 99 percent. This requirement does not apply to cyclic wells located on contiguous and adjacent oil production properties with less than 10 cyclic wells owned by or under the control of a company. [District Rule 4401, 5.1 and 5.2] Federally Enforceable Through Title V Permit
11. For cyclic wells located on properties with less than 10 cyclic wells and owned by a company, the uncontrolled VOC emissions from any well vent or system of well vents connected to a single vapor collection and control device shall be reduced by at least 50 percent. Properties shall include contiguous and adjacent oil production properties owned by or under control of the company. [District Rule 4401, 5.3] Federally Enforceable Through Title V Permit

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

12. Total number of leaks from the vapor collection and control system, including condensate handling, shall not exceed 8 as allowed by Rule 4401 (as amended January 15, 1998) at any one time. [District Rule 4401, 5.2] Federally Enforceable Through Title V Permit
13. Units consisting of more than 500 wells shall not exceed one leak detected for each 20 wells tested with a minimum of 50 wells tested. [District Rule 4401, 5.2] Federally Enforceable Through Title V Permit
14. Operator shall affix a readily visible tag bearing the date on which a leak is detected. The tag shall remain in place until the leaking component is repaired. [District Rule 4401, 5.4] Federally Enforceable Through Title V Permit
15. Operator shall repair each leak within 15 calendar days of detection. The APCO may grant a 10 calendar day extension if the operator demonstrates that the necessary and sufficient actions have and are being taken to correct the leak. [District Rule 4401, 5.5] Federally Enforceable Through Title V Permit
16. Operator shall maintain all components of a well vent vapor collection and control system in good repair. Components of the well vent vapor collection and control system shall include all piping, valves, fittings, pumps, compressors, tanks, etc. used to collect, control, store, or dispose of VOC condensate or non-condensable VOCs and which is prior to any blending of VOC condensate with crude oil or blending of non-condensable VOCs with gases to be used as a fuel. [District Rule 4401, 5.3] Federally Enforceable Through Title V Permit
17. Annual control efficiency compliance tests shall be performed on all vapor collection and control systems used to control emissions from steam-enhanced crude oil production wells. Testing shall be performed by source testers certified by the California Air Resources Board (CARB) 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 the annual testing requirements of this condition if the vapor control system does not exhaust to atmosphere or 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 open flare, and the source's Operating Permit contains adequate periodic monitoring to ensure the source meets 99% control efficiency. [District Rule 4401, 5.1, 5.2 and 6.2.1] Federally Enforceable Through Title V Permit
18. The control efficiency of the vapor collection and control system used to control VOC emissions from steam enhanced crude oil production well shall be determined by mass balance based on most stringent of a source test, USEPA approved emission factors, or Air Pollution (AP)-42 emission factors for components and number of components; and the efficiency of destruction devices determined by USEPA Method 25, 25a, or 18 as applicable. [District Rule 4401, 6.3.1] Federally Enforceable Through Title V Permit
19. VOC content shall be determined using the latest revision of ASTM Method E168, E169, or E260 as applicable. Halogenated exempt compounds shall be determined by CARB Method 432. [District Rule 4401, 6.3.2] Federally Enforceable Through Title V Permit
20. The source shall perform leak inspections at least annually, using a portable hydrocarbon detection instrument in accordance with USEPA Method 21. [District Rule 4401, 6.3.3] Federally Enforceable Through Title V Permit
21. Formerly permit number S-1342-7.

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-1326-348-1

**EXPIRATION DATE:** 03/31/2016

**EQUIPMENT DESCRIPTION:**

10 CLOSED VENTS CYCLIC WELLS

## PERMIT UNIT REQUIREMENTS

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1. Crude oil produced from wells with vents shut in to comply with Rule 4401 shall be stored and handled in vapor controlled equipment. [District Rule 2201] Federally Enforceable Through Title V Permit
2. Gas and liquid leaks are as defined in Section 3.20 of Rule 4401. [District Rule 4401, 3.20] Federally Enforceable Through Title V Permit
3. The gas liquid separator listed on this permit shall be served by a vapor collection and control system that is not open to the atmosphere and that is composed of hard-piping, ductwork connections and, if necessary, flow inducing devices that transport gas or vapor from a piece or pieces of equipment to the permit exempt heater listed on this permit. [District Rule 4401, 5.1.1] Federally Enforceable Through Title V Permit
4. The permit exempt tank heater shall have a VOC destruction or removal efficiency of at least 99%, [District Rule 4401, 3.50] Federally Enforceable Through Title V Permit
5. During the time any steam-enhanced crude oil production well is undergoing service or repair while the well is not producing, it shall be exempt from the emission control requirements of District Rule 4401, 5.0 (as amended December 14, 2006). [District Rule 4401, 4.1] Federally Enforceable Through Title V Permit
6. Fugitive emissions from the TEOR system components shall not exceed 2.1 lb·VOC/day. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Permittee shall maintain accurate component counts and calculated fugitive emissions according to CAPCOA's "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), Screening Value Range emission factors <10,000 ppmv. Permittee shall update such records when new components are approved and installed. [District Rules 2201 and 4401] Federally Enforceable Through Title V Permit
8. Except for complying with the recordkeeping and submission, operator management plan, and loss of exemption portion of Rule 4401 the following components are exempt from Rule 4401: pressure relief devices, pumps, and compressors that are enclosed and whose emissions are controlled with an operating VOC collection and control system as defined in Section 3.0 of Rule 4401, components buried below ground, components used exclusively in vacuum service, one-half inch nominal or less stainless steel tube fittings which have been demonstrated to the APCO to be leak-free based on initial inspection using the test method specified in Section 6.3.3 of Rule 4401. [District Rule 4401, 4.6] Federally Enforceable Through Title V Permit
9. Steam-enhanced crude oil production wells and components that are exempt pursuant to Section 4.2, 4.3, 4.4, 4.6, or 4.7 that become subject to this rule through loss of exemption status shall not be operated until such time that they are in full compliance with the requirements of Rule 4401. [District Rule 4401, 7.2] Federally Enforceable Through Title V Permit
10. Permittee shall determine sulfur content of TEOR gas combusted by the permit exempt tank heater upon startup and annually thereafter. [District Rule 2020 and 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.

11. There shall be no open-ended line or a valve located at the end of the line that is not sealed with a blind flange, plug, cap, or a second closed valve that is not closed at all times, except during attended operations requiring process fluid flow through the open-ended lines. Attended operations include draining or degassing operations, connection of temporary process equipment, sampling of process streams, emergency venting, and other normal operational needs, provided such operations are done as expeditiously as possible and with minimal spillage of material and VOC emissions to the atmosphere. [District Rule 4401, 5.2.2.1] Federally Enforceable Through Title V Permit
12. There shall be no components with a major liquid leak as defined in Section 3.20.1 of Rule 4401. [District Rule 44.1, 5.2.2.2] Federally Enforceable Through Title V Permit
13. An operator shall be in violation of this rule if any District inspection demonstrates or if any operator inspection conducted pursuant to Section 5.4 of Rule 4401 demonstrates the existence of any combination of components with minor liquid leaks, minor gas leaks, or 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, 5.2.2.4] Federally Enforceable Through Title V Permit
14. There shall be no components with a gas leak of greater than 50,000 ppmv. [District Rule 4401, 5.2.2.3] 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, 5.3.1] 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, attended repair, replacement, or maintenance operations, providing such activities are done as expeditiously as possible with minimal spillage or material and VOC emissions into the atmosphere. [District Rule 4401, 5.3.2] Federally Enforceable Through Title V Permit
17. The operator shall comply with the requirements of Section 6.7 if there is any change in the description of major components or critical components. [District Rule 4401, 5.3.3] Federally Enforceable Through Title V Permit
18. Unless otherwise specified, an operator shall perform all component inspections and gas leak measurements pursuant to the requirements of Section 6.3.3. [District Rule 4401, 5.4] Federally Enforceable Through Title V Permit
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 at least once every year. [District Rule 4401, 5.4.2] Federally Enforceable Through Title V Permit
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 this Rule. [District Rule 4401, 5.4.2] Federally Enforceable Through Title V Permit
21. An operator shall inspect for leaks all accessible operating pumps, compressors, and PRDs in service as follows: 1) 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. 2) 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 this Rule. [District Rule 4401, 5.4.3] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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



22. The operator shall also perform the following inspections: 1) An operator shall initially inspect a PRD that releases to the atmosphere as soon as practicable but not later than 24 hours after the discovery of the release. An operator shall re-inspect the PRD not earlier than 24 hours after the initial inspection but not later than 15 calendar days after the initial inspection. 2) An operator shall inspect all new, replaced, or repaired fittings, flanges, and threaded connections within 72 hours of placing the component in service, and 3) 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, 5.4.4] Federally Enforceable Through Title V Permit
23. Components located in unsafe areas shall be inspected and repaired at the next process unit turnaround. [District Rule 4401, 5.4.7] Federally Enforceable Through Title V Permit
24. A District inspection in no way fulfills any of the mandatory inspection requirements that are placed upon operators and cannot be used or counted as an inspection required of an operator. [District Rule 4401, 5.4.8] Federally Enforceable Through Title V Permit
25. Upon detection of a leak, an operator shall affix a readily visible weatherproof tag to that leaking component that includes the following information: 1) The date and time of leak detection; 2) The date and time of the leak measurement; 3) For a gaseous leak, the leak concentration in ppmv; 4) For a liquid leak, whether it is a major or minor liquid leak; and 5) Whether the component is an essential component, and unsafe-to-monitor component, or a critical component. [District Rule 4401, 5.5.1] Federally Enforceable Through Title V Permit
26. The tag shall remain affixed to the leaky component until all the following requirements are met: 1) The component is repaired or replaced, 2) The component is re-inspected as set forth in Section 6.3, and 3) The component is found to be in compliance with this Rule. [District Rule 4401, 5.5.2] Federally Enforceable Through Title V Permit
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, 5.5.3] Federally Enforceable Through Title V Permit
28. Except for leaking critical components or leaking essential components subject to the requirements of Section 5.5.7, if an operator has minimized a leak but the leak still exceeds the applicable leak limits as defined in Section 3.0, an operator shall comply with at least one of the following three requirements as soon as practicable but not later than the time period specified in Table 3: 1) Repair or replace the leaking component, 2) Vent the leaking component to a VOC collection and control system as defined in Section 3.0, or 3) Remove the leaking component from operation. [District Rule 4401, 5.4.4] Federally Enforceable Through Title V Permit
29. The repair period (Rule 4401 Table 3) in calendar days, shall not exceed 14 days for minor gas leaks, 5 days for major gas leaks less than or equal to 50,000 ppmv, 2 days for gas leak greater than 50,000 ppmv, 3 days for minor liquid leaks, 2 days for major liquid leaks. [District Rule 4401, 5.5.4] Federally Enforceable Through Title V Permit
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, 5.5.5] Federally Enforceable Through Title V Permit
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, 5.5.6] Federally Enforceable Through Title V Permit
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, 5.5.7] 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.

33. The operator shall maintain an inspection log in which the operator records at least all of the following for each inspection performed: 1) The total number of components inspected, and the total number and percentage of leaking components found by component type, 2) The location, type and name or description of each leaking component and description of any unit where the leaking component is found, 3) The date of leak detection and the method of leak detection, 4) For gaseous leaks, the leak concentration in ppmv and, for liquids leaks, whether the leak is major or minor, 5) The date of repair, replacement or removal from operation of leaking components, 6) The identity and location of essential components and critical components as defined in Rule 4401, found leaking, that cannot be repaired until the next process unit turnaround or not later than one year after leak detection, whichever comes earlier, 7) The methods used to minimize the leak from essential components and critical components found leaking that cannot be repaired until the next process unit turnaround or not later than 1 year after detection, whichever comes earlier, 8) The date or re-inspection and the leak concentration in ppmv after the component is repaired or replaced, 9) The inspectors name, business mailing address, and business telephone number, and 10) The date and signature of the facility operator responsible for the inspection and repair program certifying the accuracy of the information recorded in the log. [District Rule 4401, 6.4.1 thru 6.4.10] Federally Enforceable Through Title V Permit
34. The operator shall establish and implement an employee training program for inspecting and repairing components and recordkeeping procedures as necessary. [District Rule 4401, 6.5] Federally Enforceable Through Title V Permit
35. The operator shall submit an Operator Management Plan for approval by the District that shall include all of the following: 1) A description of all wells and all associated VOC collection and control systems subject to this rule, and all wells and all associated VOC collection and control systems that are exempt pursuant to Section 4.0 of this rule. 2) Identification and description of any known hazard that might affect the safety of an inspector, 3) Except for pipes, the number of components that are subject to Rule 4401 by component type, 4) Except for pipes, the number and types of major components, inaccessible components, unsafe-to-monitor components, critical components, and essential components subject to Rule 4401 and the reason for such designation, 5) Except for pipes, the location of components subject to Rule 4401, 6) Except for pipes, components exempt pursuant to Rule 4401 Section 4.6 (except for components buried below ground) may be described in the Operator Management Plan by grouping them functionally by process unit or facility description. The results of any laboratory testing or other pertinent information to demonstrate compliance with the applicable exemption criteria for components for which an exemption is being claimed pursuant to Sections 4.8 shall be submitted with the Operator Management Plan. 7) A detailed schedule of inspections of components to be conducted as required by Rule 4401 and whether the operator inspections of components required by this Rule will be performed by a qualified contractor or in-house team, 8) A description of training standards for personnel that inspect and repair components, 9) A description of leak detection training for conducting the test method specified in Section 6.3.3 for new operators, and experienced operators as necessary. [District Rule 4401, 6.6.1 thru 6.6.9] Federally Enforceable Through Title V Permit
36. By January 30 of each year, an operator shall submit to the APCO for approval, in writing, an annual report indicating any changes to an existing Operator Management Plan. [District Rule 4401, 6.7] Federally Enforceable Through Title V Permit
37. The operator of any steam-enhanced crude oil production well shall maintain records of the date and well identification where steam injection or well stimulation occurs. [District Rule 4401, 6.1.1] Federally Enforceable Through Title V Permit
38. Permittee shall maintain monthly records of average daily crude oil throughput and shall submit such information to the APCO 30 days prior to the expiration date indicated in the Permit to Operate. [District Rule 4401, 6.1.2] Federally Enforceable Through Title V Permit
39. Permittee 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. [District Rule 4401, 6.1.3] Federally Enforceable Through Title V Permit
40. The operator of any steam-enhanced crude oil production well shall maintain an inspection log pursuant to Section 6.4 of Rule 4401. [District Rule 4401, 6.1.4] 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.

41. Records shall be maintained 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. [District Rule 4401, 6.1.5] Federally Enforceable Through Title V Permit
42. An operator shall maintain copies at the facility of the training records of the training program operated pursuant to Section 6.5 of Rule 4401. [District Rule 4401, 6.1.6] Federally Enforceable Through Title V Permit
43. An operator shall keep a copy of the APCO-approved Operator Management Plan at the facility. [District Rule 4401, 6.1.7] Federally Enforceable Through Title V Permit
44. An operator shall submit to the APCO a list of all gauge tanks, as defined in Section 3.0 of Rule 4401. The list shall contain the size, identification number, the location of each gauge tank and specify whether the gauge tank is upstream of all front line production equipment. [District Rule 4401, 6.1.8] Federally Enforceable Through Title V Permit
45. The results of gauge tank TVP testing conducted pursuant to Section 6.2.3 of Rule 4401 shall be submitted to the APCO within 60 days after the completion of the testing. [District Rule 4401, 6.1.10] Federally Enforceable Through Title V Permit
46. An operator that discovers that a PRD has released shall record the date that the release was discovered, and the identity and location of the PRD that released. An operator shall submit such information recorded during the calendar year to the APCO no later than 60 days after the end of the calendar year. [District Rule 4401, 6.1.10] Federally Enforceable Through Title V Permit
47. VOC content shall be analyzed by using the latest revision of ASTM Method E168, E169, or E260 as applicable. Analysis of halogenated exempt compounds shall be performed by using ARB Method 432. [District Rule 4401, 6.3.2] Federally Enforceable Through Title V Permit
48. Leak inspection, other than audio-visual, and measurements of gaseous leak concentrations shall be conducted according to EPA Method 21 using an appropriate portable hydrocarbon detection instrument calibrated with methane. The instrument shall be calibrated in accordance with the procedures specified in EPA Method 21 or the manufacturer's instruction, as appropriate, not more than 30 days prior to its use. The operator shall record the calibration date of the instrument. Where safety is a concern, such as measuring leaks from compressor seals or pump seals when the shaft is rotating, a person shall measure leaks by placing the instrument probe inlet at a distance of one (1) centimeter or less from the surface of the component interface. [District Rule 4401, 6.3.3] Federally Enforceable Through Title V Permit
49. The VOC content by weight percent (wt.%) shall be determined using American Society of Testing and Materials (ASTM) D1945 for gases and South Coast Air Quality Management District (SCAQMD) Method 304-91 or the latest revision of ASTM Method E168, E169 or E260 for liquids. [District Rule 4401, 6.3.5] Federally Enforceable Through Title V Permit
50. An accurate roster of all cyclic wells on this Permit shall be maintained and made readily available for District inspection upon request. [District Rule 1070] Federally Enforceable Through Title V Permit
51. Formerly permit number S-1342-19.

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-1326-349-1

**EXPIRATION DATE:** 03/31/2016

**SECTION:** SW32 **TOWNSHIP:** 11N **RANGE:** 19W

**EQUIPMENT DESCRIPTION:**

1000 BBL FIXED ROOF PETROLEUM STOCK TANK WITH PRESSURE VACUUM VENT (#156744, TEJON LEASE)

## PERMIT UNIT REQUIREMENTS

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1. The tank shall be equipped with a fixed roof with no holes or openings. [District Rule 2201] Federally Enforceable Through Title V Permit
2. Throughput of oil shall not exceed 150 barrels per day. [District Rule 2201] Federally Enforceable Through Title V Permit
3. The true vapor pressure (TVP) of any liquid introduced, stored or held in the tank shall not exceed 0.5 psia at storage temperature. [District Rule 4623, 4.4] Federally Enforceable Through Title V Permit
4. Permittee shall conduct true vapor pressure (TVP) testing of the organic liquid stored in this tank at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored in this tank in order to maintain exemption from the rule. [District Rule 4623] Federally Enforceable Through Title V Permit
5. 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
6. 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
7. 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
8. 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
9. 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
10. All records required to be maintained by this permit shall be maintained for a period of at least five years and shall be made readily available for District inspection upon request. [District Rules 4623, 6.3 and 2520, 9.4.2] Federally Enforceable Through Title V Permit

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-1326-353-1

**EXPIRATION DATE:** 03/31/2016

**SECTION:** SW33 **TOWNSHIP:** 11N **RANGE:** 19W

**EQUIPMENT DESCRIPTION:**

500 BBL FIXED ROOF PETROLEUM STORAGE TANK WITH PRESSURE/VACUUM VENT (ANTHILL LEASE)

## PERMIT UNIT REQUIREMENTS

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1. Throughput of oil shall not exceed 21,000 gallons per 3 day period. [District Rule 2201] Federally Enforceable Through Title V Permit
2. The true vapor pressure (TVP) of any liquid introduced, stored or held in the tank shall not exceed 0.5 psia at storage temperature. [District Rule 4623, 4.4] Federally Enforceable Through Title V Permit
3. Permittee shall conduct true vapor pressure (TVP) testing of the organic liquid stored in this tank at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored in this tank in order to maintain exemption from the rule. [District Rule 4623] Federally Enforceable Through Title V Permit
4. 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
5. 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
6. 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
7. 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
8. 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
9. Permittee shall maintain records of 3-day rolling average crude oil throughput and shall keep accurate records of each organic liquid stored in the tank, including its storage temperature, TVP, and API gravity. [District Rule 2520, 9.3.2 & District Rule 4623, 6.3.1] Federally Enforceable Through Title V Permit
10. All records required to be maintained by this permit shall be maintained for a period of at least five years and shall be made readily available for District inspection upon request. [District Rules 4623, 6.3 and 2520 9.4.2] Federally Enforceable Through Title V Permit

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-1326-354-1

**EXPIRATION DATE:** 03/31/2016

**SECTION:** 32 **TOWNSHIP:** 11N **RANGE:** 19W

**EQUIPMENT DESCRIPTION:**

500 BBL FIXED ROOF PETROLEUM STOCK TANK WITH PRESSURE/VACUUM VENT (#5X705, GRAPEVINE LEASE)

## PERMIT UNIT REQUIREMENTS

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1. The tank shall be equipped with a fixed roof with no holes or openings. [District Rule 2201] Federally Enforceable Through Title V Permit
2. Throughput of oil shall not exceed 21,000 gallons per 3 day period. [District Rule 2201] Federally Enforceable Through Title V Permit
3. The true vapor pressure (TVP) of any liquid introduced, stored or held in the tank shall not exceed 0.5 psia at storage temperature. [District Rule 4623, 4.4] Federally Enforceable Through Title V Permit
4. Permittee shall conduct true vapor pressure (TVP) testing of the organic liquid stored in this tank at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored in this tank in order to maintain exemption from the rule. [District Rule 4623] Federally Enforceable Through Title V Permit
5. 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
6. 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
7. 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
8. 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
9. Permittee shall maintain records of 3-day rolling average crude oil throughput and shall keep accurate records of each organic liquid stored in the tank, including its storage temperature, TVP, and API gravity. [District Rule 2201 and District Rule 4623, 6.3.6] Federally Enforceable Through Title V Permit
10. 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

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-1326-355-1

**EXPIRATION DATE:** 03/31/2016

**SECTION:** 32 **TOWNSHIP:** 11N **RANGE:** 19W

**EQUIPMENT DESCRIPTION:**

500 BBL FIXED ROOF PETROLEUM TANK WITH PRESSURE/VACUUM VENT (GRAPEVINE LEASE)

## PERMIT UNIT REQUIREMENTS

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1. Throughput of oil shall not exceed 21,000 gallons per 3 day period. [District Rule 2201] Federally Enforceable Through Title V Permit
2. The true vapor pressure (TVP) of any liquid introduced, stored or held in the tank shall not exceed 0.5 psia at storage temperature. [District Rule 4623, 4.4] Federally Enforceable Through Title V Permit
3. Permittee shall conduct true vapor pressure (TVP) testing of the organic liquid stored in this tank at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored in this tank in order to maintain exemption from the rule. [District Rule 4623] Federally Enforceable Through Title V Permit
4. 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
5. 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
6. 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
7. 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
8. Permittee shall maintain records of 3-day rolling average crude oil throughput and shall keep accurate records of each organic liquid stored in the tank, including its storage temperature, TVP, and API gravity. [District Rules 2201 and 4623, 6.3.6] Federally Enforceable Through Title V Permit
9. 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

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-1326-356-1

**EXPIRATION DATE:** 03/31/2016

**SECTION:** 32 **TOWNSHIP:** 11N **RANGE:** 19W

**EQUIPMENT DESCRIPTION:**

1000 BBL FIXED ROOF WASH TANK WITH PRESSURE/VACUUM VENT (#56569, GRAPEVINE LEASE)

## PERMIT UNIT REQUIREMENTS

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1. Throughput of oil shall not exceed 42,000 gallons per 3 day period. [District Rule 2201] Federally Enforceable Through Title V Permit
2. The true vapor pressure (TVP) of any liquid introduced, stored or held in the tank shall not exceed 0.5 psia at storage temperature. [District Rule 4623, 4.4] Federally Enforceable Through Title V Permit
3. Permittee shall conduct true vapor pressure (TVP) testing of the organic liquid stored in this tank at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored in this tank in order to maintain exemption from the rule. [District Rule 4623] Federally Enforceable Through Title V Permit
4. 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
5. 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
6. 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
7. 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
8. Permittee shall maintain records of 3-day rolling average crude oil throughput and shall keep accurate records of each organic liquid stored in the tank, including its storage temperature, TVP, and API gravity. [District Rule 2520, 9.3.2 & District Rule 4623, 6.3.6] Federally Enforceable Through Title V Permit
9. 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 and 2520, 9.4.2] Federally Enforceable Through Title V Permit
10. Formerly permit number S-1342-46.

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



# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-1326-357-1

**EXPIRATION DATE:** 03/31/2016

**SECTION:** 03 **TOWNSHIP:** 28S **RANGE:** 27E

**EQUIPMENT DESCRIPTION:**

1000 BBL FIXED ROOF PETROLEUM STORAGE TANK WITH PRESSURE/VACUUM VENT (#117049, DAVIES LEASE)

## PERMIT UNIT REQUIREMENTS

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1. Throughput of oil shall not exceed 42,000 gallons per 3 day period. [District Rule 2201] Federally Enforceable Through Title V Permit
2. The true vapor pressure (TVP) of any liquid introduced, stored or held in the tank shall not exceed 0.5 psia at storage temperature. [District Rule 4623, 4.4] Federally Enforceable Through Title V Permit
3. Permittee shall conduct true vapor pressure (TVP) testing of the organic liquid stored in this tank at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored in this tank in order to maintain exemption from the rule. [District Rule 4623] Federally Enforceable Through Title V Permit
4. 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
5. 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
6. 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
7. 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
8. Permittee shall maintain records of 3-day rolling average crude oil throughput and shall keep accurate records of each organic liquid stored in the tank, including its storage temperature, TVP, and API gravity. [District Rule 2520, 9.3.2 & District Rule 4623, 6.3.6] Federally Enforceable Through Title V Permit
9. All records required to be maintained by this permit shall be maintained for a period of at least five years and shall be made readily available for District inspection upon request. [District Rules 4623, 6.3 and 2520, 9.4.2] Federally Enforceable Through Title V Permit

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-1326-358-1

**EXPIRATION DATE:** 03/31/2016

**SECTION:** 03 **TOWNSHIP:** 28S **RANGE:** 27E

**EQUIPMENT DESCRIPTION:**

1000 BBL FIXED ROOF PETROLEUM STORAGE TANK WITH PRESSURE/VACUUM VENT (#117050, DAVIES LEASE)

## PERMIT UNIT REQUIREMENTS

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1. Throughput of oil shall not exceed 42,000 gallons per 3 day period. [District Rule 2201] Federally Enforceable Through Title V Permit
2. The true vapor pressure (TVP) of any liquid introduced, stored or held in the tank shall not exceed 0.5 psia at storage temperature. [District Rule 4623, 2.0] Federally Enforceable Through Title V Permit
3. Permittee shall conduct true vapor pressure (TVP) testing of the organic liquid stored in this tank at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored in this tank in order to maintain exemption from the rule. [District Rule 4623] Federally Enforceable Through Title V Permit
4. 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
5. 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
6. 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
7. 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
8. Permittee shall maintain records of 3-day rolling average crude oil throughput and shall keep accurate records of each organic liquid stored in the tank, including its storage temperature, TVP, and API gravity. [District Rule 2520, 9.3.2 & District Rule 4623, 6.3.1] Federally Enforceable Through Title V Permit
9. 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
10. Formerly permit number S-1342-55.

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-1326-360-1

**EXPIRATION DATE:** 03/31/2016

**SECTION:** SW15 **TOWNSHIP:** 29S **RANGE:** 29E

**EQUIPMENT DESCRIPTION:**

3000 BBL FIXED ROOF WASH TANK WITH VAPOR CONTROL SYSTEM SHARED WITH S-1326-361, '-362, AND '-370 (ANTHILL LEASE)

## PERMIT UNIT REQUIREMENTS

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1. Existing oil production sumps shall be used for intermittent or emergency collection of crude oil and water pursuant to Rule 1100 and 4402, or used exclusively for storage of fresh or clean produced water. [District Rules 1100 and 2201] Federally Enforceable Through Title V Permit
2. The tank shall be equipped with a vapor recovery system consisting of a closed vent system that collects all VOCs from the storage tank, and a VOC control device. The vapor recovery system shall be APCO-approved and maintained in gas-tight condition. The VOC control device shall be either of the following: boiler #S-1326-339, steam generator #S-1326-369, or flare #S-1326-382 . [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
3. 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
4. A leak-free condition is defined as a condition without a gas leak. A gas leak is defined as a reading in excess of 10,000 ppmv, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21. A reading in excess of 10,000 ppmv above background is a violation of this permit and Rule 4623 and shall be reported as a deviation. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
5. Any tank gauging or sampling device on a tank vented to the vapor recovery system shall be equipped with a leak-free cover which shall be closed at all times except during gauging or sampling. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
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 Rules 2201 and 4623] Federally Enforceable Through Title V Permit
7. 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
8. 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

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

9. 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
10. 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
11. 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
12. 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
13. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date and time of leak detection, and method of detection; 3) Date and time of leak repair, and emission level of recheck after leak is repaired; 4) Method used to minimize the leak to lowest possible level within 8 hours after detection. [District Rules 2201 and 4623,] Federally Enforceable Through Title V Permit
14. The operator shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rules 1070 and 2520, 9.4.2] Federally Enforceable Through Title V Permit

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-1326-361-3

**EXPIRATION DATE:** 03/31/2016

**SECTION:** SW15 **TOWNSHIP:** 29S **RANGE:** 29E

**EQUIPMENT DESCRIPTION:**

2000 BBL FIXED ROOF STORAGE TANK WITH VAPOR CONTROL LISTED ON PERMIT S-1326-360 (ANTHILL LEASE)

## PERMIT UNIT REQUIREMENTS

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1. Tank shall vent only to tank vapor control system shared with permit unit #S-1326-360. [District Rule 2201] Federally Enforceable Through Title V Permit
2. The tank shall be equipped with a vapor recovery system consisting of a closed vent system that collects all VOCs from the storage tank, and a VOC control device. The vapor recovery system shall be APCO-approved and maintained in gas-tight condition. The VOC control device shall be either of the following: boiler #S-1326-339, steam generator #S-1326-369, or flare #S-1326-382 . [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
3. 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
4. A leak-free condition is defined as a condition without a gas leak. A gas leak is defined as a reading in excess of 10,000 ppmv, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21. A reading in excess of 10,000 ppmv above background is a violation of this permit and Rule 4623 and shall be reported as a deviation. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
5. Any tank gauging or sampling device on a tank vented to the vapor recovery system shall be equipped with a leak-free cover which shall be closed at all times except during gauging or sampling. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
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 Rules 2201 and 4623] Federally Enforceable Through Title V Permit
7. 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
8. 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
9. 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

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

10. 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
11. 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
12. 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
13. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date and time of leak detection, and method of detection; 3) Date and time of leak repair, and emission level of recheck after leak is repaired; 4) Method used to minimize the leak to lowest possible level within 8 hours after detection. [District Rule Rules 2201 and 4623,] Federally Enforceable Through Title V Permit
14. The operator shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rules 1070 and 2520, 9.4.2] Federally Enforceable Through Title V Permit

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-1326-362-3

**EXPIRATION DATE:** 03/31/2016

**SECTION:** SW15 **TOWNSHIP:** 29S **RANGE:** 29E

**EQUIPMENT DESCRIPTION:**

2000 BBL FIXED ROOF STORAGE TANK WITH VAPOR CONTROL LISTED ON S-1326-360 (ANTHILL LEASE)

## PERMIT UNIT REQUIREMENTS

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1. Existing oil production sumps shall be used for intermittent or emergency collection of crude oil and water pursuant to Rule 1100 and 4402, or used exclusively for storage of fresh or clean produced water. [District Rules 1100 and 4623] Federally Enforceable Through Title V Permit
2. The tank shall be equipped with a vapor recovery system consisting of a closed vent system that collects all VOCs from the storage tank, and a VOC control device. The vapor recovery system shall be APCO-approved and maintained in gas-tight condition. The VOC control device shall be either of the following: boiler #S-1326-339, steam generator #S-1326-369, or flare #S-1326-382 . [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
3. 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
4. A leak-free condition is defined as a condition without a gas leak. A gas leak is defined as a reading in excess of 10,000 ppmv, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21. A reading in excess of 10,000 ppmv above background is a violation of this permit and Rule 4623 and shall be reported as a deviation. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
5. Any tank gauging or sampling device on a tank vented to the vapor recovery system shall be equipped with a leak-free cover which shall be closed at all times except during gauging or sampling. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
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 Rules 2201 and 4623] Federally Enforceable Through Title V Permit
7. 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
8. 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
9. 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

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

10. 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
11. 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
12. 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
13. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date and time of leak detection, and method of detection; 3) Date and time of leak repair, and emission level of recheck after leak is repaired; 4) Method used to minimize the leak to lowest possible level within 8 hours after detection. [District Rules 2201 and 4623,] Federally Enforceable Through Title V Permit
14. The operator shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rules 1070 and 2520, 9.4.2] Federally Enforceable Through Title V Permit

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



# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-1326-363-1

**EXPIRATION DATE:** 03/31/2016

**SECTION:** 15 **TOWNSHIP:** 29S **RANGE:** 29E

**EQUIPMENT DESCRIPTION:**

750 BBL FIXED ROOF PETROLEUM STORAGE TANK (NO. 002317) WITH PRESSURE/VACUUM VENT (ANTHILL LEASE)

## PERMIT UNIT REQUIREMENTS

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1. Throughput of oil shall not exceed 31,500 gallons per 3 day period. [District Rule 2201] Federally Enforceable Through Title V Permit
2. The true vapor pressure (TVP) of any liquid introduced, stored or held in the tank shall not exceed 0.5 psia at storage temperature. [District Rule 4623, 4.4] Federally Enforceable Through Title V Permit
3. Permittee shall conduct true vapor pressure (TVP) testing of the organic liquid stored in this tank at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored in this tank in order to maintain exemption from the rule. [District Rule 4623] Federally Enforceable Through Title V Permit
4. 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
5. 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
6. 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
7. 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
8. Permittee shall maintain records of 3-day rolling average crude oil throughput and shall keep accurate records of each organic liquid stored in the tank, including its storage temperature, TVP, and API gravity. [District Rules 2201 and 4623, 6.3.6] Federally Enforceable Through Title V Permit
9. 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
10. Formerly permit number S-1342-66.

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-1326-365-1

**EXPIRATION DATE:** 03/31/2016

**SECTION:** 32 **TOWNSHIP:** 11N **RANGE:** 19W

**EQUIPMENT DESCRIPTION:**

1250 BBL FIXED ROOF WASH TANK (JV LEASE)

## PERMIT UNIT REQUIREMENTS

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1. The true vapor pressure (TVP) of any liquid introduced, stored or held in the tank shall not exceed 0.5 psia at storage temperature. [District Rule 4623,4.4] Federally Enforceable Through Title V Permit
2. Permittee shall conduct true vapor pressure (TVP) testing of the organic liquid stored in this tank at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored in this tank in order to maintain exemption from the rule. [District Rule 4623] Federally Enforceable Through Title V Permit
3. 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
4. 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
5. 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
6. 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
7. 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
8. All records required to be maintained by this permit shall be maintained for a period of at least five years and shall be made readily available for District inspection upon request. [District Rules 2520, 9.4.2 and 4623, 6.3.6] Federally Enforceable Through Title V Permit

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-1326-366-1

**EXPIRATION DATE:** 03/31/2016

**SECTION:** 32 **TOWNSHIP:** 11N **RANGE:** 19W

**EQUIPMENT DESCRIPTION:**

1000 BBL FIXED ROOF PETROLEUM STOCK TANK WITH PRESSURE/VACUUM VENT (#10X901, JV LEASE)

## PERMIT UNIT REQUIREMENTS

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1. Throughput of oil shall not exceed 42,000 gallons per 3 day period. [District Rule 2201] Federally Enforceable Through Title V Permit
2. The true vapor pressure (TVP) of any liquid introduced, stored or held in the tank shall not exceed 0.5 psia at storage temperature. [District Rule 4623, 4.4] Federally Enforceable Through Title V Permit
3. Permittee shall conduct true vapor pressure (TVP) testing of the organic liquid stored in this tank at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored in this tank in order to maintain exemption from the rule. [District Rule 4623] Federally Enforceable Through Title V Permit
4. 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
5. 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
6. 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
7. 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
8. Permittee shall maintain records of 3-day rolling average crude oil throughput and shall keep accurate records of each organic liquid stored in the tank, including its storage temperature, TVP, and API gravity. [District Rule 2520, 9.3.2 & District Rule 4623, 6.3.6] Federally Enforceable Through Title V Permit
9. All records required to be maintained by this permit shall be maintained for a period of at least five years and shall be made readily available for District inspection upon request. [District Rules 2520, 9.4.2 and 4623, 6.3] Federally Enforceable Through Title V Permit

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-1326-367-1

**EXPIRATION DATE:** 03/31/2016

**SECTION:** 33 **TOWNSHIP:** 11N **RANGE:** 19W

**EQUIPMENT DESCRIPTION:**

1000 BBL FIXED ROOF PETROLEUM STORAGE TANK WITH PRESSURE VACUUM VENT #10X1853 (OMB LEASE)

## PERMIT UNIT REQUIREMENTS

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1. Throughput of oil shall not exceed 42,000 gallons per 3 day period. [District Rule 2201] Federally Enforceable Through Title V Permit
2. The true vapor pressure (TVP) of any liquid introduced, stored or held in the tank shall not exceed 0.5 psia at storage temperature. [District Rule 4623, 4.4] Federally Enforceable Through Title V Permit
3. Permittee shall conduct true vapor pressure (TVP) testing of the organic liquid stored in this tank at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored in this tank in order to maintain exemption from the rule. [District Rule 4623] Federally Enforceable Through Title V Permit
4. 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
5. 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
6. 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
7. 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
8. 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
9. Permittee shall maintain records of 3-day rolling average crude oil throughput and shall keep accurate records of each organic liquid stored in the tank, including its storage temperature, TVP, and API gravity. [District Rule 2520, 9.3.2 & District Rule 4623, 6.3.6] Federally Enforceable Through Title V Permit
10. All records required to be maintained by this permit shall be maintained for a period of at least five years and shall be made readily available for District inspection upon request. [District Rules 2520, 9.4.2 and 4623, 6.3] Federally Enforceable Through Title V Permit
11. Formerly permit number S-1342-74.

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-1326-368-1

**EXPIRATION DATE:** 03/31/2016

**SECTION:** 11 **TOWNSHIP:** 28S **RANGE:** 27E

**EQUIPMENT DESCRIPTION:**

500 BBL FIXED ROOF PETROLEUM STORAGE TANK WITH PRESSURE/VACUUM VENT (CARREC FEE LEASE)

## PERMIT UNIT REQUIREMENTS

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1. Throughput of oil shall not exceed 500 BBLs per 3 day period. [District Rule 2201] Federally Enforceable Through Title V Permit
2. The true vapor pressure (TVP) of any liquid introduced, stored or held in the tank shall not exceed 0.5 psia at storage temperature. [District Rule 4623, 4.4] Federally Enforceable Through Title V Permit
3. Permittee shall conduct true vapor pressure (TVP) testing of the organic liquid stored in this tank at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored in this tank in order to maintain exemption from the rule. [District Rule 4623] Federally Enforceable Through Title V Permit
4. 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
5. 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
6. 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
7. 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
8. 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
9. Permittee shall maintain records of 3-day rolling average crude oil throughput and shall keep accurate records of each organic liquid stored in the tank, including its storage temperature, TVP, and API gravity. [District Rule 2520, 9.3.2 & District Rule 4623, 6.3.6] Federally Enforceable Through Title V Permit
10. All records required to be maintained by this permit shall be maintained for a period of at least five years and shall be made readily available for District inspection upon request. [District Rules 2520, 9.4.2 and 4623, 6.3] Federally Enforceable Through Title V Permit
11. Formerly permit number S-1342-75.

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-1326-369-1

**EXPIRATION DATE:** 03/31/2016

**SECTION:** SW32 **TOWNSHIP:** 11N **RANGE:** 19W

**EQUIPMENT DESCRIPTION:**

25 MM BTU/HR STEAM GENERATOR WITH NORTH AMERICAN LOW-NOX BURNER AND O2 MONITOR/CONTROLLER

## PERMIT UNIT REQUIREMENTS

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1. This equipment shall not be operated for any reason until necessary retrofits are made to comply with the applicable requirements of District Rules 4305, 4306 and 4320. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
2. No modification to this unit shall be performed without an Authority to Construct for that modification(s), except for changes specified in condition 4 below. [District Rule 2201] Federally Enforceable Through Title V Permit
3. The fuel supply line shall be physically disconnected from this unit. [District Rule 2080] Federally Enforceable Through Title V Permit
4. Approved locations for this equipment: NE10, SE10 and SE11, T28S/R27E; SW15 and SW22, T29S/R29E; SW32 and SE32, T11N/R19W and SE4, T30S/R29E. [District Rule 4102] Federally Enforceable Through Title V Permit
5. Permittee shall notify the District Compliance Division of each location at which the operation is located in excess of 24 hours. Such notification shall be made no later than 48 hours after starting operation at the location. [District Rule 1070] Federally Enforceable Through Title V Permit
6. Generator shall be equipped with natural gas volume flowmeter and continuous operation flue gas oxygen monitor/controller. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Excess O2 shall be maintained between 0.5 and 4.0%. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Steam generator shall be fired only on natural gas and/or noncondensable vapors from shared tank vapor control system listed on permit unit S-1342-63. [District Rule 2201] Federally Enforceable Through Title V Permit
9. Total sulfur content of natural gas shall not exceed 0.2 grain/100 scf. [District Rule 2201] Federally Enforceable Through Title V Permit
10. Emission rates shall not exceed the following: PM10: 0.013 lb/MMBtu, SOx (as SO2): 0.001 lb/MMBtu, NOx (as NO2): 0.036 lb/MMBtu, VOC: 0.0026 lb/MMBtu and CO: 0.033 lb/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
11. Permittee shall demonstrate compliance with fuel gas sulfur content limit within 60 days of startup and thereafter, upon District request, by sample analysis by independent testing laboratory or by written verification from the fuel supplier. [District Rule 1081] Federally Enforceable Through Title V Permit
12. Upon District request, permittee shall determine, by sample analysis by independent testing laboratory or other District approved method, the total sulfur content of the noncondensable vapors from the tank battery vapor control system. [District Rule 1081] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

13. Compliance with NOx and CO emission limits shall be demonstrated within 60 days of startup and, thereafter, not less than once every 12 months, except as provided below. [District Rule 4305] Federally Enforceable Through Title V Permit
14. Compliance with NOx and CO emission limits shall be demonstrated not less than once every 36 months if compliance is demonstrated on two consecutive annual compliance tests. [District Rule 4305] Federally Enforceable Through Title V Permit
15. If permittee fails any compliance demonstration for NOx or CO emissions limits when testing not less than once every 36 months, compliance with NOx and CO emission limits shall be demonstrated not less than once every 12 months. [District Rule 4305] Federally Enforceable Through Title V Permit
16. Source testing shall be conducted at conditions typical of normal operation. [District Rule 1081] Federally Enforceable Through Title V Permit
17. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
18. Sampling facilities for source testing shall be provided in accordance with the provisions of Rule 1081 (Source Sampling). [District Rule 1081] Federally Enforceable Through Title V Permit
19. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
20. Permittee shall comply with all notification and recordkeeping requirements of 40 CFR 60.7 a (1)(3) and (b). [District Rule 4001] Federally Enforceable Through Title V Permit
21. Permittee shall maintain accurate records of heating value (in Btu/scf) and daily consumption of natural gas, and such records shall be made readily available for District inspection upon request for a period of two years. [District Rule 1070] Federally Enforceable Through Title V Permit
22. Formerly permit number S-1342-76.

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-1326-370-1

**EXPIRATION DATE:** 03/31/2016

**SECTION:** SW15 **TOWNSHIP:** 29S **RANGE:** 29E

**EQUIPMENT DESCRIPTION:**

10,500 GALLON FIXED ROOF DRAIN TANK WITH VAPOR CONTROL LISTED ON PERMIT S-1326-360

## PERMIT UNIT REQUIREMENTS

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1. Reid vapor pressure (RVP) of any material stored in tank shall not exceed 1.0 psia. [District Rule 2201] Federally Enforceable Through Title V Permit
2. Temperature of any material stored in tank shall not exceed 190 degrees F. [District Rule 2201] Federally Enforceable Through Title V Permit
3. The average throughput shall not exceed 8,400 gallons per day, calculated on monthly basis. [District Rule 2201] Federally Enforceable Through Title V Permit
4. 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
5. The tank shall be equipped with a vapor recovery system consisting of a closed vent system that collects all VOCs from the storage tank, and a VOC control device. The vapor recovery system shall be APCO-approved and maintained in leak-free condition. The VOC control device shall be either of the following: a vapor return or condensation system that connects to a gas pipeline distribution system, or an approved VOC destruction device that reduces the inlet VOC emissions by at least 99% by weight as determined by the test method specified in Section 6.4.7. [District Rule 4623] Federally Enforceable Through Title V Permit
6. All piping, valves, and fittings shall be constructed and maintained in a leak-free condition. [District Rule 4623] Federally Enforceable Through Title V Permit
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 Rule 4623 and shall be reported as a deviation. [District Rule 4623] Federally Enforceable Through Title V Permit
8. Any tank gauging or sampling device on a tank vented to the vapor recovery system shall be equipped with a leak-free cover which shall be closed at all times except during gauging or sampling. [District Rule 4623] Federally Enforceable Through Title V Permit
9. All piping, fittings, and valves on this tank shall be inspected annually by the facility operator in accordance with EPA Method 21, with the instrument calibrated with methane, to ensure compliance with the leaking provisions of this permit. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
10. 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

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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



11. 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
12. 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
13. 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
14. 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
15. 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
16. 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,] Federally Enforceable Through Title V Permit
17. The operator shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rules 1070 and 2520, 9.4.2] Federally Enforceable Through Title V Permit
18. Permittee shall maintain accurate monthly records of storage temperature and tank throughput and shall make such records readily available for District inspection upon request. [District Rules 2201 and 2520 9.4.1] Federally Enforceable Through Title V Permit
19. Permittee shall maintain accurate records of RVP, updated at least once every 12 months and make such records readily available for District inspection upon request. [District Rules 2201 and 2520, 9.4.1] Federally Enforceable Through Title V Permit
20. Formerly permit number S-1342-78.

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-1326-371-1

**EXPIRATION DATE:** 03/31/2016

**EQUIPMENT DESCRIPTION:**

180 HP DIESEL FIRED DETROIT DIESEL 6V53 TRANSPORTABLE IC ENGINE DRIVING POSITIVE DISPLACEMENT PUMP IN WELL PUMP SERVICE

## PERMIT UNIT REQUIREMENTS

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1. Approved locations for this equipment: any site within the permittee's Heavy Oil Central Stationary Source, except as noted below. [District Rule 2201] Federally Enforceable Through Title V Permit
2. This equipment shall not be operated within 1000 feet of any K-12 school. [CH&SC 42301.6]
3. This transportable engine shall not be operated at one location for more than 12 consecutive months and shall meet all the requirements of a transportable engine, per District Rule 4701 (amended August 21, 2003). [District Rule 4701, 3.24] Federally Enforceable Through Title V Permit
4. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [District Rule 4801 & Kern County Rule 407] Federally Enforceable Through Title V Permit
5. Particulate matter emissions shall not exceed in concentration at the point of discharge 0.1 gr/dscf. [District Rule 4201] Federally Enforceable Through Title V Permit
6. If the IC engine is fired on Air Resources Board regulated diesel fuel, with a supplier certified sulfur content less than 0.05% by weight, the operator shall maintain copies of all fuel invoices and supplier certifications. [District Rule 4801] Federally Enforceable Through Title V Permit
7. If the IC engine is not fired on ARB regulated diesel fuel, with a supplier certified sulfur content less than 0.05% by weight, then the owner or operator shall determine the sulfur content of each delivery of diesel fuel being fired in the IC engine. The sulfur content shall be determined using ASTM method D 2880. [District Rule 4801] Federally Enforceable Through Title V Permit
8. The engine shall be operated no more than 200 hours per calendar year [District Rules 4701, 4.2.1 and 4702, 4.2.2] Federally Enforceable Through Title V Permit
9. Operator shall properly operate and maintain each engine as recommended by the engine manufacturer or emission control system supplier. [District Rule 4702, 5.7.2] Federally Enforceable Through Title V Permit
10. Operator shall monitor the operational characteristics of each engine as recommended by the engine manufacturer or emission control system supplier. [District Rule 4702, 5.7.3] Federally Enforceable Through Title V Permit
11. The permittee shall install and operate a nonresettable fuel meter and a nonresettable elapsed operating time meter. In lieu of installing a nonresettable fuel meter, the owner or operator may use a non-resettable elapsed operating time meter in conjunction with the engine manufacturer's maximum rated fuel consumption to determine annual fuel usage. [District Rules 4701, 4.2.1 and 4702, 5.7.4] Federally Enforceable Through Title V Permit
12. Permittee shall maintain following annual operating records: 1) Total hours of operation, 2) type and quantity of fuel used, 3) purpose of operating engine, 4) dates and locations where this equipment is operated, and 5) other support documentation necessary to claim Transportable Engine exemption, as defined in District Rule 4701, 3.24 (amended August 21, 2003). These records shall be submitted to the District upon request and at end of each calendar year. [District Rules 4701, 6.2.2 and 4702, 6.2.3] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

13. The operator of an internal combustion (IC) engine shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rules 4701, 6.2.3 and 4702, 6.2.3] Federally Enforceable Through Title V Permit

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-1326-372-1

**EXPIRATION DATE:** 03/31/2016

**SECTION:** SW32 **TOWNSHIP:** 11N **RANGE:** 19W

**EQUIPMENT DESCRIPTION:**

23 STEAM ENHANCED CRUDE OIL PRODUCTION WELLS WITH CLOSED WELL VENTS

## PERMIT UNIT REQUIREMENTS

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1. Fugitive emission rate of volatile organic compounds shall not exceed 4.4 pounds per day. [District Rule 2201] Federally Enforceable Through Title V Permit
2. Wells shall produce only into closed production equipment and vapor controlled tanks S-1326-373, -374, and -375. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Well casing vent vapors shall not be vented to the atmosphere and well casing vents shall remain closed to the atmosphere at all times, except during periods of service or repair, as defined in Rule 4401, when wells are not producing. The uncontrolled VOC emissions from any well vent shall be reduced by at least 99 percent by weight. [District Rules 2201 and 4401, 5.1] Federally Enforceable Through Title V Permit
4. Gas and liquid leaks are as defined in Section 3.20 of Rule 4401. [District Rule 4401, 3.20] Federally Enforceable Through Title V Permit
5. The gas liquid separator listed on this permit shall be served by a vapor collection and control system that is not open to the atmosphere and that is composed of hard-piping, ductwork connections and, if necessary, flow inducing devices that transport gas or vapor from a piece or pieces of equipment to the permit exempt heater listed on this permit. [District Rule 4401, 5.1.1] Federally Enforceable Through Title V Permit
6. The permit exempt tank heater shall have a VOC destruction or removal efficiency of at least 99%, [District Rule 4401, 3.50] Federally Enforceable Through Title V Permit
7. During the time any steam-enhanced crude oil production well is undergoing service or repair while the well is not producing, it shall be exempt from the emission control requirements of District Rule 4401, 5.0 (as amended December 14, 2006). [District Rule 4401, 4.1] Federally Enforceable Through Title V Permit
8. Except for complying with the recordkeeping and submission, operator management plan, and loss of exemption portion of Rule 4401 the following components are exempt from Rule 4401: pressure relief devices, pumps, and compressors that are enclosed and whose emissions are controlled with an operating VOC collection and control system as defined in Section 3.0 of Rule 4401, components buried below ground, components used exclusively in vacuum service, one-half inch nominal or less stainless steel tube fittings which have been demonstrated to the APCO to be leak-free based on initial inspection using the test method specified in Section 6.3.3 of Rule 4401. [District Rule 4401, 4.6] Federally Enforceable Through Title V Permit
9. Steam-enhanced crude oil production wells and components that are exempt pursuant to Section 4.2, 4.3, 4.4, 4.6, or 4.7 that become subject to this rule through loss of exemption status shall not be operated until such time that they are in full compliance with the requirements of Rule 4401. [District Rule 4401, 7.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

10. There shall be no open-ended line or a valve located at the end of the line that is not sealed with a blind flange, plug, cap, or a second closed valve that is not closed at all times, except during attended operations requiring process fluid flow through the open-ended lines. Attended operations include draining or degassing operations, connection of temporary process equipment, sampling of process streams, emergency venting, and other normal operational needs, provided such operations are done as expeditiously as possible and with minimal spillage of material and VOC emissions to the atmosphere. [District Rule 44.1, 5.2.2.1] Federally Enforceable Through Title V Permit
11. There shall be no components with a major liquid leak as defined in Section 3.20.1 of Rule 4401. [District Rule 4401, 5.2.2.2] Federally Enforceable Through Title V Permit
12. An operator shall be in violation of this rule if any District inspection demonstrates or if any operator inspection conducted pursuant to Section 5.4 of Rule 4401 demonstrates the existence of any combination of components with minor liquid leaks, minor gas leaks, or 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, 5.2.2.4] Federally Enforceable Through Title V Permit
13. There shall be no components with a gas leak of greater than 50,000 ppmv. [District Rule 4401, 5.2.2.3] Federally Enforceable Through Title V Permit
14. An operator shall not use any component with a leak as defined in Section 3.0 of Rule 4401, or that is found to be in violation of the provisions of Section 5.2.2 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, 5.3.1] Federally Enforceable Through Title V Permit
15. Each hatch shall be closed at all times except during sampling or adding of process material through the hatch, attended repair, replacement, or maintenance operations, providing such activities are done as expeditiously as possible with minimal spillage or material and VOC emissions into the atmosphere. [District Rule 4401, 5.3.2] Federally Enforceable Through Title V Permit
16. The operator shall comply with the requirements of Section 6.7 if there is any change in the description of major components or critical components. [District Rule 4401, 5.3.3] Federally Enforceable Through Title V Permit
17. Unless otherwise specified, an operator shall perform all component inspections and gas leak measurements pursuant to the requirements of Section 6.3.3. [District Rule 4401, 5.4] Federally Enforceable Through Title V Permit
18. Except for pipes and unsafe-to-monitor components, an operator shall inspect all other components pursuant to the requirements of Section 6.3.3 at least once every year. [District Rule 4401, 5.4.2] Federally Enforceable Through Title V Permit
19. An operator shall visually inspect all pipes at least once every year. Any visual inspection of pipes that indicates a leak that cannot be immediately repaired to meet the leak standards of this rule shall be inspected within 24 hours after detecting the leak. If a leak is found, the leak shall be repaired as soon as practicable but not later than the time frame specified in Table 3 of this Rule. [District Rule 4401, 5.4.2] Federally Enforceable Through Title V Permit
20. An operator shall inspect for leaks all accessible operating pumps, compressors, and PRDs in service as follows: 1) 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. 2) 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 this Rule. [District Rule 4401, 5.4.3] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

21. The operator shall also perform the following inspections: 1) An operator shall initially inspect a PRD that releases to the atmosphere as soon as practicable but not later than 24 hours after the discovery of the release. An operator shall re-inspect the PRD not earlier than 24 hours after the initial inspection but not later than 15 calendar days after the initial inspection. 2) An operator shall inspect all new, replaced, or repaired fittings, flanges, and threaded connections within 72 hours of placing the component in service, and 3) 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, 5.4.4] Federally Enforceable Through Title V Permit
22. Components located in unsafe areas shall be inspected and repaired at the next process unit turnaround. [District Rule 4401, 5.4.7] Federally Enforceable Through Title V Permit
23. A District inspection in no way fulfills any of the mandatory inspection requirements that are placed upon operators and cannot be used or counted as an inspection required of an operator. [District Rule 4401, 5.4.8] Federally Enforceable Through Title V Permit
24. Upon detection of a leak, an operator shall affix a readily visible weatherproof tag to that leaking component that includes the following information: 1) The date and time of leak detection; 2) The date and time of the leak measurement; 3) For a gaseous leak, the leak concentration in ppmv; 4) For a liquid leak, whether it is a major or minor liquid leak; and 5) Whether the component is an essential component, and unsafe-to-monitor component, or a critical component. [District Rule 4401, 5.5.1] Federally Enforceable Through Title V Permit
25. The tag shall remain affixed to the leaky component until all the following requirements are met: 1) The component is repaired or replaced, 2) The component is re-inspected as set forth in Section 6.3, and 3) The component is found to be in compliance with this Rule. [District Rule 4401, 5.5.2] Federally Enforceable Through Title V Permit
26. An operator shall minimize a component leak in order to stop or reduce leakage to the atmosphere immediately to the extent possible, but not later than one (1) hour after detection of the leak. [District Rule 4401, 5.5.3] Federally Enforceable Through Title V Permit
27. Except for leaking critical components or leaking essential components subject to the requirements of Section 5.5.7, if an operator has minimized a leak but the leak still exceeds the applicable leak limits as defined in Section 3.0, an operator shall comply with at least one of the following three requirements as soon as practicable but not later than the time period specified in Table 3: 1) Repair or replace the leaking component, 2) Vent the leaking component to a VOC collection and control system as defined in Section 3.0, or 3) Remove the leaking component from operation. [District Rule 4401, 5.5.4] Federally Enforceable Through Title V Permit
28. The repair period (Rule 4401 Table 3) in calendar days, shall not exceed 14 days for minor gas leaks, 5 days for major gas leaks less than or equal to 50,000 ppmv, 2 days for gas leak greater than 50,000 ppmv, 3 days for minor liquid leaks, 2 days for major liquid leaks. [District Rule 4401, 5.5.4] Federally Enforceable Through Title V Permit
29. The leak rate measured after leak minimization has been performed shall be the leak rate used to determine the applicable repair period specified in Table 3 of Rule 4401. [District Rule 4401, 5.5.5] Federally Enforceable Through Title V Permit
30. The time of the initial leak detection shall be the start of the repair period specified in Table 3 of Rule 4401. [District Rule 4401, 5.5.6] Federally Enforceable Through Title V Permit
31. If the leaking component is an essential component or a critical component that cannot be immediately shut down for repairs, and if the leak has been minimized but the leak still exceeds the applicable leak standard of this rule, the operator shall repair or replace the essential component or critical component to eliminate the leak during the next process unit turnaround, but in no case later than one year from the date of the original leak detection, whichever comes earlier. [District Rule 4401, 5.5.7] 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.

32. The operator shall maintain an inspection log in which the operator records at least all of the following for each inspection performed: 1) The total number of components inspected, and the total number and percentage of leaking components found by component type, 2) The location, type and name or description of each leaking component and description of any unit where the leaking component is found, 3) The date of leak detection and the method of leak detection, 4) For gaseous leaks, the leak concentration in ppmv and, for liquids leaks, whether the leak is major or minor, 5) The date of repair, replacement or removal from operation of leaking components, 6) The identity and location of essential components and critical components as defined in Rule 4401, found leaking, that cannot be repaired until the next process unit turnaround or not later than one year after leak detection, whichever comes earlier, 7) The methods used to minimize the leak from essential components and critical components found leaking that cannot be repaired until the next process unit turnaround or not later than 1 year after detection, whichever comes earlier, 8) The date or re-inspection and the leak concentration in ppmv after the component is repaired or replaced, 9) The inspectors name, business mailing address, and business telephone number, and 10) The date and signature of the facility operator responsible for the inspection and repair program certifying the accuracy of the information recorded in the log. [District Rule 4401, 6.4.1 thru 6.4.10] Federally Enforceable Through Title V Permit
33. The operator shall establish and implement an employee training program for inspecting and repairing components and recordkeeping procedures as necessary. [District Rule 4401, 6.5] Federally Enforceable Through Title V Permit
34. The operator shall submit an Operator Management Plan for approval by the District that shall include all of the following: 1) A description of all wells and all associated VOC collection and control systems subject to this rule, and all wells and all associated VOC collection and control systems that are exempt pursuant to Section 4.0 of this rule. 2) Identification and description of any known hazard that might affect the safety of an inspector, 3) Except for pipes, the number of components that are subject to Rule 4401 by component type, 4) Except for pipes, the number and types of major components, inaccessible components, unsafe-to-monitor components, critical components, and essential components subject to Rule 4401 and the reason for such designation, 5) Except for pipes, the location of components subject to Rule 4401, 6) Except for pipes, components exempt pursuant to Rule 4401 Section 4.6 (except for components buried below ground) may be described in the Operator Management Plan by grouping them functionally by process unit or facility description. The results of any laboratory testing or other pertinent information to demonstrate compliance with the applicable exemption criteria for components for which an exemption is being claimed pursuant to Sections 4.8 shall be submitted with the Operator Management Plan. 7) A detailed schedule of inspections of components to be conducted as required by Rule 4401 and whether the operator inspections of components required by this Rule will be performed by a qualified contractor or in-house team, 8) A description of training standards for personnel that inspect and repair components, 9) A description of leak detection training for conducting the test method specified in Section 6.3.3 for new operators, and experienced operators as necessary. [District Rule 4401, 6.6.1 thru 6.6.9] Federally Enforceable Through Title V Permit
35. By January 30 of each year, an operator shall submit to the APCO for approval, in writing, an annual report indicating any changes to an existing Operator Management Plan. [District Rule 4401, 6.7] Federally Enforceable Through Title V Permit
36. The operator of any steam-enhanced crude oil production well shall maintain records of the date and well identification where steam injection or well stimulation occurs. [District Rule 4401, 6.1.1] Federally Enforceable Through Title V Permit
37. Permittee shall maintain monthly records of average daily crude oil throughput and shall submit such information to the APCO 30 days prior to the expiration date indicated in the Permit to Operate. [District Rule 4401, 6.1.2] Federally Enforceable Through Title V Permit
38. Permittee 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. [District Rule 4401, 6.1.2] Federally Enforceable Through Title V Permit
39. The operator of any steam-enhanced crude oil production well shall maintain an inspection log pursuant to Section 6.4 of Rule 4401. [District Rule 4401, 6.1.4] 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.

40. Records shall be maintained 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. [District Rule 4401, 6.1.5] Federally Enforceable Through Title V Permit
41. An operator shall maintain copies at the facility of the training records of the training program operated pursuant to Section 6.5 of Rule 4401. [District Rule 4401, 6.1.6] Federally Enforceable Through Title V Permit
42. An operator shall keep a copy of the APCO-approved Operator Management Plan at the facility. [District Rule 4401, 6.1.7] Federally Enforceable Through Title V Permit
43. An operator shall submit to the APCO a list of all gauge tanks, as defined in Section 3.0 of Rule 4401. The list shall contain the size, identification number, the location of each gauge tank and specify whether the gauge tank is upstream of all front line production equipment. [District Rule 4401, 6.1.8] Federally Enforceable Through Title V Permit
44. The results of gauge tank TVP testing conducted pursuant to Section 6.2.3 of Rule 4401 shall be submitted to the APCO within 60 days after the completion of the testing. [District Rule 4401, 6.1.10] Federally Enforceable Through Title V Permit
45. An operator that discovers that a PRD has released shall record the date that the release was discovered, and the identity and location of the PRD that released. An operator shall submit such information recorded during the calendar year to the APCO no later than 60 days after the end of the calendar year. [District Rule 4401, 6.1.10] Federally Enforceable Through Title V Permit
46. VOC content shall be analyzed by using the latest revision of ASTM Method E168, E169, or E260 as applicable. Analysis of halogenated exempt compounds shall be performed by using ARB Method 432. [District Rule 4401, 6.3.2] Federally Enforceable Through Title V Permit
47. Leak inspection, other than audio-visual, and measurements of gaseous leak concentrations shall be conducted according to EPA Method 21 using an appropriate portable hydrocarbon detection instrument calibrated with methane. The instrument shall be calibrated in accordance with the procedures specified in EPA Method 21 or the manufacturer's instruction, as appropriate, not more than 30 days prior to its use. The operator shall record the calibration date of the instrument. Where safety is a concern, such as measuring leaks from compressor seals or pump seals when the shaft is rotating, a person shall measure leaks by placing the instrument probe inlet at a distance of one (1) centimeter or less from the surface of the component interface. [District Rule 4401, 6.3.3] Federally Enforceable Through Title V Permit
48. The VOC content by weight percent (wt.%) shall be determined using American Society of Testing and Materials (ASTM) D1945 for gases and South Coast Air Quality Management District (SCAQMD) Method 304-91 or the latest revision of ASTM Method E168, E169 or E260 for liquids. [District Rule 4401, 6.3.4] Federally Enforceable Through Title V Permit
49. Formerly permit number S-1342-84.

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



# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-1326-373-5

**EXPIRATION DATE:** 03/31/2016

**SECTION:** SW32 **TOWNSHIP:** 11N **RANGE:** 19W

**EQUIPMENT DESCRIPTION:**

3000 BBL FIXED ROOF WASH TANK WITH VAPOR CONTROL SYSTEM SERVING TANKS S-1326-374, '-375, AND '-381

## PERMIT UNIT REQUIREMENTS

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1. VOC emissions from the tank headspace shall be collected by an operational vapor collection system shared among tanks S-1326-373, -374, -375, -381, and the free water knockout. Collected vapors shall be burned by either flare S-1326-376, steam generator S-1326-369, or Ajax Model SGXB 50000 permit exempt boiler. [District Rule 2201] Federally Enforceable Through Title V Permit
2. The tank shall be equipped with a vapor recovery system consisting of a closed vent system that collects all VOCs from the storage tank, and a VOC control device. The vapor recovery system shall be APCO-approved and maintained in leak-free condition. The VOC control device shall be either of the following: a vapor return or condensation system that connects to a gas pipeline distribution system, or an approved VOC destruction device that reduces the inlet VOC emissions by at least 99% by weight as determined by the test method specified in Rule 4623 Section 6.4.7. [District Rules 2201 and 4623, 5.6] Federally Enforceable Through Title V Permit
3. VOC emission rate from vapor service components associated with tank and vapor control system shall not exceed 0.1 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
4. Permittee shall maintain with the permit accurate fugitive component counts and resulting emissions from tank using California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities Table IV-2C: Oil and Gas Production Screening Value Ranges (<10,000 ppmv) Emission Factors. [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 4623] 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 Rule 4623 and shall be reported as a deviation. [District Rule 4623] Federally Enforceable Through Title V Permit
7. Any tank gauging or sampling device on a tank vented to the vapor recovery system shall be equipped with a leak-free cover which shall be closed at all times except during gauging or sampling. [District Rule 4623] Federally Enforceable Through Title V Permit
8. All piping, fittings, and valves on this tank shall be inspected annually by the facility operator in accordance with EPA Method 21, with the instrument calibrated with methane, to ensure compliance with the leaking provisions of this permit. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

9. 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
10. Upon detection of a liquid leak, defined as a leak rate of greater than or equal to 30 drops per minute, operator shall repair the leak within 8 hours. For leaks with a liquid leak rate of between 3 and 30 drops per minute, the leaking component shall be repaired within 24 hours after detection. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
11. 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
12. 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
13. 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
14. 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
15. 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,] 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 Rules 2210 and 4623, 5.7, Table 3] Federally Enforceable Through Title V Permit
17. Permittee shall maintain records of annual tank inspections, maintenance, and cleaning to document the participation in the Rule 4623 Fixed Roof Tank Preventative Inspection, Maintenance and Tank Interior Cleaning Program. [District Rules 2210 and 4623, 5.7] Federally Enforceable Through Title V Permit
18. The operator shall keep accurate records of types, storage temperature, and Reid vapor pressure of liquids stored. The operator shall maintain monthly records of average daily throughput. Records shall be made available to District personnel upon request. [District Rule 4623, 6.3] Federally Enforceable Through Title V Permit
19. All records required to be maintained by this permit shall be maintained for a period of at least five years and shall be made readily available for District inspection upon request. [District Rule 4623, 6.3 and 2520, 9.4.2] Federally Enforceable Through Title V Permit

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-1326-374-1

**EXPIRATION DATE:** 03/31/2016

**SECTION:** SW32 **TOWNSHIP:** 11N **RANGE:** 19W

**EQUIPMENT DESCRIPTION:**

2000 BBL (84,000 GALLON) HEATED FIXED ROOF STOCK TANK SERVED BY VRS SHARED WITH S-1326-373

## PERMIT UNIT REQUIREMENTS

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1. The average oil throughput shall not exceed 1,000 bbl/day, calculated on monthly basis. [District Rule 2201] Federally Enforceable Through Title V Permit
2. The Reid vapor pressure of any material introduced to the tank or stored in the tank shall not exceed 0.6 psia. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Tank shall be equipped with an operational stored liquid temperature indicator. The temperature of the tank contents shall not exceed 160 degrees Fahrenheit. [District Rule 2201] Federally Enforceable Through Title V Permit
4. The tank shall be equipped with a vapor recovery system consisting of a closed vent system that collects all VOCs from the storage tank, and a VOC control device. The vapor recovery system shall be APCO-approved and maintained in leak-free condition. The VOC control device shall be either of the following: a vapor return or condensation system that connects to a gas pipeline distribution system, or an approved VOC destruction device that reduces the inlet VOC emissions by at least 95% by weight as determined by the test method specified in Section 6.4.7. [District Rule 4623] Federally Enforceable Through Title V Permit
5. All piping, valves, and fittings shall be constructed and maintained in a leak-free condition. [District Rule 4623] 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 Rule 4623 and shall be reported as a deviation. [District Rule 4623] Federally Enforceable Through Title V Permit
7. Any tank gauging or sampling device on a tank vented to the vapor recovery system shall be equipped with a leak-free cover which shall be closed at all times except during gauging or sampling. [District Rule 4623] Federally Enforceable Through Title V Permit
8. All piping, fittings, and valves on this tank shall be inspected annually by the facility operator in accordance with EPA Method 21, with the instrument calibrated with methane, to ensure compliance with the leaking provisions of this permit. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
9. 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

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

10. Upon detection of a liquid leak, defined as a leak rate of greater than or equal to 30 drops per minute, operator shall repair the leak within 8 hours. For leaks with a liquid leak rate of between 3 and 30 drops per minute, the leaking component shall be repaired within 24 hours after detection. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
11. 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
12. 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
13. 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
14. 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
15. 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,] Federally Enforceable Through Title V Permit
16. The operator shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rules 1070 and 2520, 9.4.2] Federally Enforceable Through Title V Permit

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-1326-375-1

**EXPIRATION DATE:** 03/31/2016

**SECTION:** SW32 **TOWNSHIP:** 11N **RANGE:** 19W

**EQUIPMENT DESCRIPTION:**

2000 BBL FIXED ROOF STOCK TANK SERVED BY VAPOR CONTROL SYSTEM LISTED ON S-1326-373

## PERMIT UNIT REQUIREMENTS

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1. The average oil throughput shall not exceed 1,000 bbl/day, calculated on monthly basis. [District Rule 2201] Federally Enforceable Through Title V Permit
2. The Reid vapor pressure of any material introduced to the tank or stored in the tank shall not exceed 0.6 psia. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Tank shall be equipped with an operational stored liquid temperature indicator. The temperature of the tank contents shall not exceed 160 degrees Fahrenheit. [District Rule 2201] Federally Enforceable Through Title V Permit
4. The tank shall be equipped with a vapor recovery system consisting of a closed vent system that collects all VOCs from the storage tank, and a VOC control device. The vapor recovery system shall be APCO-approved and maintained in leak-free condition. The VOC control device shall be either of the following: a vapor return or condensation system that connects to a gas pipeline distribution system, or an approved VOC destruction device that reduces the inlet VOC emissions by at least 95% by weight as determined by the test method specified in Section 6.4.7. [District Rule 4623] Federally Enforceable Through Title V Permit
5. All piping, valves, and fittings shall be constructed and maintained in a leak-free condition. [District Rule 4623] 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 Rule 4623 and shall be reported as a deviation. [District Rule 4623] Federally Enforceable Through Title V Permit
7. Any tank gauging or sampling device on a tank vented to the vapor recovery system shall be equipped with a leak-free cover which shall be closed at all times except during gauging or sampling. [District Rule 4623] Federally Enforceable Through Title V Permit
8. All piping, fittings, and valves on this tank shall be inspected annually by the facility operator in accordance with EPA Method 21, with the instrument calibrated with methane, to ensure compliance with the leaking provisions of this permit. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
9. 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

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

10. Upon detection of a liquid leak, defined as a leak rate of greater than or equal to 30 drops per minute, operator shall repair the leak within 8 hours. For leaks with a liquid leak rate of between 3 and 30 drops per minute, the leaking component shall be repaired within 24 hours after detection. [District Rule 4623, Table 3] Federally Enforceable Through Title V Permit
11. 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
12. 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
13. 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
14. 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
15. 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,] Federally Enforceable Through Title V Permit
16. The operator shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rules 1070, 2520, 9.4.2, and 4623] Federally Enforceable Through Title V Permit
17. Formerly permit number S-1342-86.

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-1326-376-1

**EXPIRATION DATE:** 03/31/2016

**SECTION:** SW32 **TOWNSHIP:** 11N **RANGE:** 19W

**EQUIPMENT DESCRIPTION:**

6.1 MMBTU/HR FLARE INCINERATING WASTE GAS FROM VAPOR COLLECTION SYSTEM

## PERMIT UNIT REQUIREMENTS

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1. Flare shall operate in a smokeless manner (no greater than 5 % opacity) except for up to three minutes in any one hour. [District Rule 2201] Federally Enforceable Through Title V Permit
2. No more than 300,000 standard cubic feet (scf) of gas shall be burned by the flare per day. [District Rule 2201] Federally Enforceable Through Title V Permit
3. No more than 10 MMscf of gas shall be burned by the flare per year. [District Rule 2201] Federally Enforceable Through Title V Permit
4. Emission rates shall not exceed any of the following: NO<sub>x</sub> (as NO<sub>2</sub>) - 0.068 lb/MMBtu, VOC - 0.063 lb/MMBtu, PM<sub>10</sub> - 0.008 lb/MMBtu or CO - 0.37 lb/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Flared gas total sulfur content shall not exceed 1.0 gr/100 scf. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Flare shall comply with all of the applicable requirements of Rule 4311. [District Rule 4311] Federally Enforceable Through Title V Permit
7. The flame shall be present at all times when combustible gases are vented through the flare. [District Rule 4311, 5.2] Federally Enforceable Through Title V Permit
8. The permit holder shall determine sulfur content of the flared gas at least once per year . [District Rule 2201] Federally Enforceable Through Title V Permit
9. The flare outlet shall be equipped with an automatic ignition system, or, shall operate with a pilot flame present at all times when combustible gases are vented through the flare, except during purge periods for automatic-ignition equipped flares. [District Rule 4311, 5.3] Federally Enforceable Through Title V Permit
10. Except for flares equipped with a flow-sensing ignition system, a heat sensing device such as a thermocouple, ultraviolet beam sensor, infrared sensor, or an equivalent device, capable of continuously detecting at least one pilot flame or the flare flame is present shall be installed and operated. [District Rule 4311, 5.4] Federally Enforceable Through Title V Permit
11. Flares using flow-sensing automatic ignition systems and not using a continuous flame pilot shall use purge gas for purging. [District Rule 4311, 5.5] Federally Enforceable Through Title V Permit
12. Open flares (air-assisted, steam-assisted, or non-assisted) in which the flare gas pressure is less than 5 psig shall be operated in such a manner that meets the provisions of 40 CFR 60.18. [District Rule 4311, 5.6] Federally Enforceable Through Title V Permit
13. Flare shall only be used with the net heating value of the gas being combusted being 300 Btu/scf or greater. [40 CFR 60.18 (c)(3) and District Rule 4311, 5.6] 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.

14. The net heating value of the gas being combusted in a flare shall be determined annually, pursuant to 40 CFR 60.18(f)(3) using EPA Method 18, ASTM D1946, and ASTM D2382. [40 CFR 60.18 (f)(3) and District Rules 2201 and 4311, 5.6] Federally Enforceable Through Title V Permit
15. Hydrogen sulfide content of vent gas shall be determined using ASTM Method D 1945-96, ASTM Method UOP 539-97, ASTM Method D 4084-94, or ASTM Method D 4810-88. [District Rule 4311, 6.3.4] Federally Enforceable Through Title V Permit
16. The following records shall be maintained, retained on-site for a minimum of five years, and made available to the APCO, ARB, and EPA upon request: 1) A copy of the compliance determination conducted pursuant to Section 6.4.1, 2) For flares used during an emergency, record of the duration of flare operation, amount of gas burned, and the nature of the emergency situation, 3) A copy of the approved flare minimization plan pursuant to Section 6.5, 4) On and after July 1, 2012, where applicable, a copy of annual reports submitted to the APCO pursuant to Section 6.2, and 5) Where applicable, monitoring data collected pursuant to Sections 5.10. [District Rule 4311, 6.1] Federally Enforceable Through Title V Permit
17. The operator of a flare subject to flare minimization plans pursuant to Section 5.8 of Rule 4311 shall notify the APCO of an unplanned flaring event within 24 hours after the start of the next business day or within 24 hours of their discovery, whichever occurs first. The notification shall include the flare source identification, the start date and time, and the end date and time. [District Rule 4311, 6.2.1] Federally Enforceable Through Title V Permit
18. Effective on and after July 1, 2012, and annually thereafter, the operator of a flare subject to flare minimization plans pursuant to Section 5.8 shall submit an annual report to the APCO that summarizes all Reportable Flaring Events as defined in Section 3.0 that occurred during the previous 12 month period. The report shall be submitted within 30 days following the end of the twelve month period of the previous year. The report shall include, but is not limited to all of the following: 1) The results of an investigation to determine the primary cause and contributing factors of the flaring event; 2) Any prevention measures considered or implemented to prevent recurrence together with a justification for rejecting any measures that were considered but not implemented; 3) If appropriate, an explanation of why the flaring was an emergency and necessary to prevent accident, hazard or release of vent gas to the atmosphere, or where, due to a regulatory mandate to vent a flare, it cannot be recovered, treated and used as a fuel gas at the facility; and 4) The date, time, and duration of the flaring event. [District Rule 4311, 6.2.2] Federally Enforceable Through Title V Permit
19. Effective on and after July 1, 2012, and annually thereafter, the operator of a flare subject to flare monitoring requirements pursuant to Rule 4311, Sections 5.10, 6.6, 6.7, 6.8, 6.9, and 6.10, as appropriate, shall submit an annual report to the APCO within 30 days following the end of each 12 month period. The report shall include the following: 1) The total volumetric flow of vent gas in standard cubic feet for each day, 2) Hydrogen sulfide content, methane content, and hydrocarbon content of vent gas composition pursuant to Section 6.6, 3) If vent gas composition is monitored by a continuous analyzer or analyzers pursuant to Section 5.11, average total hydrocarbon content by volume, average methane content by volume, and depending upon the analytical method used pursuant to Section 6.3.4, total reduced sulfur content by volume or hydrogen sulfide content by volume of vent gas flared for each hour of the month, 4) If the flow monitor used pursuant to Section 5.10 measures molecular weight, the average molecular weight for each hour of each month, 5) For any pilot and purge gas used, the type of gas used, the volumetric flow for each day and for each month, and the means used to determine flow, 6) Flare monitoring system downtime periods, including dates and times, 7) For each day and for each month provide calculated sulfur dioxide emissions, and 8) A flow verification report for each flare subject to this rule. The flow verification report shall include flow verification testing pursuant to Section 6.3.5. [District Rule 4311, 6.2.3] Federally Enforceable Through Title V Permit
20. Permittee shall comply with all notification and recordkeeping requirements of 40 CFR 60.7 a (1)(3) and (b). [District Rule 4001] Federally Enforceable Through Title V Permit
21. Upon request, the operator of flares that are subject to Section 5.6 shall make available to the APCO the compliance determination records that demonstrate compliance with the provisions of 40 CFR 60.18, (c)(3) through (c)(5). [District Rule 4311, 6.4.1] Federally Enforceable Through Title V Permit
22. The permit holder shall maintain records of the daily amounts of total gas flared each day and every year, and the sulfur content of the gas. Records shall be kept a minimum of five years and shall be made available for District inspection upon request [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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



23. Flaring is prohibited unless it is consistent with an approved flare minimization plan (FMP), pursuant to Rule 4311, Section 6.5, and all commitments listed in that plan have been met. This standard shall not apply if the APCO determines that the flaring is caused by an emergency as defined by Section 3.7 and is necessary to prevent an accident, hazard or release of vent gas directly to the atmosphere [District Rule 4311, 5.8] Federally Enforceable Through Title V Permit
24. The operator of a flare subject to flare minimization requirements pursuant to Section 5.8 shall monitor the vent gas flow to the flare with a flow measuring device or other parameters as specified in the Permit to Operate. The operator shall maintain records pursuant to Section 6.1.7. Flares that the operator can verify, based on permit conditions, are not capable of producing reportable flare events pursuant to Section 6.2.2 shall not be required to monitor vent gas flow to the flare. [District Rule 4311, 5.10] Federally Enforceable Through Title V Permit

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-1326-377-1

**EXPIRATION DATE:** 03/31/2016

**SECTION:** SW33 **TOWNSHIP:** 11N **RANGE:** 19W

**EQUIPMENT DESCRIPTION:**

750 BBL FIXED ROOF CRUDE OIL WASH TANK - OMB LEASE

## PERMIT UNIT REQUIREMENTS

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1. The true vapor pressure (TVP) of any liquid introduced, stored or held in the tank shall not exceed 0.5 psia at storage temperature. [District Rule 4623, 5.1.1] Federally Enforceable Through Title V Permit
2. Permittee shall conduct true vapor pressure (TVP) testing of the organic liquid stored in this tank at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored in this tank in order to maintain exemption from the rule. [District Rule 4623] Federally Enforceable Through Title V Permit
3. 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
4. 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
5. 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
6. 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
7. 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
8. All records required to be maintained by this permit shall be maintained for a period of at least five years and shall be made readily available for District inspection upon request. [District Rules 2520, 9.4.2, and 4623, 6.3] Federally Enforceable Through Title V Permit

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-1326-378-1

**EXPIRATION DATE:** 03/31/2016

**SECTION:** SW32 **TOWNSHIP:** 11 N **RANGE:** 19 W

**EQUIPMENT DESCRIPTION:**

1000 BBL FIXED ROOF PETROLEUM STORAGE TANK (ID #10X898 STOCK TANK)

## PERMIT UNIT REQUIREMENTS

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1. The true vapor pressure (TVP) of any liquid introduced, stored or held in the tank shall not exceed 0.5 psia at storage temperature. [District Rule 4623, 4.4] Federally Enforceable Through Title V Permit
2. Permittee shall conduct true vapor pressure (TVP) testing of the organic liquid stored in this tank at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored in this tank in order to maintain exemption from the rule. [District Rule 4623] Federally Enforceable Through Title V Permit
3. 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
4. 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
5. 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
6. 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
7. 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
8. All records required to be maintained by this permit shall be maintained for a period of at least five years and shall be made readily available for District inspection upon request. [District Rules 2520, 9.4.2 and 4623, 6.3] Federally Enforceable Through Title V Permit

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-1326-381-1

**EXPIRATION DATE:** 03/31/2016

**SECTION:** SW32 **TOWNSHIP:** 11N **RANGE:** 19W

**EQUIPMENT DESCRIPTION:**

2000 BBL CRUDE OIL PRODUCTION TANK SERVED BY A VAPOR RECOVERY SYSTEM SHARED WITH PERMIT UNIT S-1326-373

## PERMIT UNIT REQUIREMENTS

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1. The average oil throughput shall not exceed 2,000 bbl/day, calculated on monthly basis. [District Rule 2201] Federally Enforceable Through Title V Permit
2. The Reid vapor pressure of any material introduced to the tank or stored in the tank shall not exceed 0.6 psia. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Tank shall be equipped with an operational stored liquid temperature indicator. The temperature of the tank contents shall not exceed 190 degrees Fahrenheit. [District Rule 2201] Federally Enforceable Through Title V Permit
4. Vapor collection system shall consist of one vapor compressor and vapor collection piping. All components of vapor collection system shall be maintained in good repair. [District Rule 2201] Federally Enforceable Through Title V Permit
5. The tank shall be equipped with a vapor recovery system consisting of a closed vent system that collects all VOCs from the storage tank, and a VOC control device. The vapor recovery system shall be APCO-approved and maintained in leak-free condition. The VOC control device shall be either of the following: a vapor return or condensation system that connects to a gas pipeline distribution system, or an approved VOC destruction device that reduces the inlet VOC emissions by at least 95% by weight as determined by the test method specified in Section 6.4.7. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
6. 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
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 Rule 4623 and shall be reported as a deviation. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
8. Any tank gauging or sampling device on a tank vented to the vapor recovery system shall be equipped with a leak-free cover which shall be closed at all times except during gauging or sampling. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
9. All piping, fittings, and valves on this tank shall be inspected annually by the facility operator in accordance with EPA Method 21, with the instrument calibrated with methane, to ensure compliance with the leaking provisions of this permit. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

10. 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
11. 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
12. 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
13. 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
14. 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
15. 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
16. 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
17. The operator shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rules 1070, 2520, 9.4.2, and 4623] Federally Enforceable Through Title V Permit

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-1326-382-1

**EXPIRATION DATE:** 03/31/2016

**SECTION:** SW15 **TOWNSHIP:** 29S **RANGE:** 29E

**EQUIPMENT DESCRIPTION:**

25 FOOT TALL MACTRONIC AIR-ASSISTED PROCESS FLARE WITH 6 INCH DIAMETER FLARE STACK AND AUTOMATIC RE-IGNITION

## PERMIT UNIT REQUIREMENTS

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1. Flare shall be equipped with total waste gas volume flow meter (measuring gas from the Heavy Oil Central and Light Oil Central Stationary Source). Gas line from Light Oil Central Stationary Source (Section 34) shall be equipped with waste gas volume flow meter. [District Rule 2201] Federally Enforceable Through Title V Permit
2. Volume of gas flared from Heavy Oil Central Stationary Source (Section 15) shall be determined as the difference between the total volume of gas flared (from Light Oil and Heavy Oil Central Stationary Source) and the volume of gas flared from the Light Oil Central Stationary Source (Section 34). [District Rule 2201] Federally Enforceable Through Title V Permit
3. Flare air-assist blower shall be maintained and operated for smokeless combustion, i.e. no visible emissions in excess of 5% opacity or 1/4 Ringelmann. [District Rule 2201] Federally Enforceable Through Title V Permit
4. This permit does not authorize the utilization of any IC engine, or other combustion device requiring a separate permit, for powering the air assist to the flare. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Flare shall operate in a smokeless manner (no greater than 5% opacity) except for three minutes in any one hour. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Operator shall immediately utilize air assisted combustion if flare exhibits visible emissions greater than 0% opacity. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Total sulfur (as H<sub>2</sub>S) concentration of gas incinerated in flare shall not exceed 19 ppmv. [District Rule 2201 and District Rule 4801] Federally Enforceable Through Title V Permit
8. Maximum amount of gas combusted from Central Kern County fields heavy oil production stationary source (Section 15) shall not exceed 150,000 scf/day. [District Rule 2201] Federally Enforceable Through Title V Permit
9. Maximum amount of gas combusted from Central Kern County fields heavy oil production stationary source (Section 15) shall not exceed 9.2 MMscf/year. [District Rule 2201] Federally Enforceable Through Title V Permit
10. Emissions from the flare shall not exceed any of the following (based on total gas combusted): NO<sub>x</sub> (as NO<sub>2</sub>): 0.068 lb/MMBtu; PM<sub>10</sub>: 0.008 lb/MMBtu; CO: 0.37 lb/MMBtu; or VOC: 0.063 lb/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
11. Flare shall comply with all of the applicable requirements of Rule 4311. [District Rule 4311] Federally Enforceable Through Title V Permit
12. The flame shall be present at all times when combustible gases are vented through the flare. [District Rule 4311, 5.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

13. The flare outlet shall be equipped with an automatic ignition system, or, shall operate with a pilot flame present at all times when combustible gases are vented through the flare, except during purge periods for automatic-ignition equipped flares. [District Rule 4311, 5.3] Federally Enforceable Through Title V Permit
14. Except for flares equipped with a flow-sensing ignition system, a heat sensing device such as a thermocouple, ultraviolet beam sensor, infrared sensor, or an equivalent device, capable of continuously detecting at least one pilot flame or the flare flame is present shall be installed and operated. [District Rule 4311, 5.4] Federally Enforceable Through Title V Permit
15. Flares using flow-sensing automatic ignition systems and not using a continuous flame pilot shall use purge gas for purging. [District Rule 4311, 5.5] Federally Enforceable Through Title V Permit
16. Open flares (air-assisted, steam-assisted, or non-assisted) in which the flare gas pressure is less than 5 psig shall be operated in such a manner that meets the provisions of 40 CFR 60.18. [District Rule 4311, 5.6] Federally Enforceable Through Title V Permit
17. Flaring is prohibited unless it is consistent with an approved flare minimization plan (FMP), pursuant to Rule 4311, Section 6.5, and all commitments listed in that plan have been met. This standard shall not apply if the APCO determines that the flaring is caused by an emergency as defined by Section 3.7 and is necessary to prevent an accident, hazard or release of vent gas directly to the atmosphere [District Rule 4311, 5.8] Federally Enforceable Through Title V Permit
18. Permittee shall measure sulfur content of gas incinerated in flare at least once every year. Such data shall be submitted to the District within 60 days of sample collection. [District Rule 2201 and District Rule 4801] Federally Enforceable Through Title V Permit
19. Permittee shall determine sulfur content of gas flared using ASTM method D3246 or double GC for H<sub>2</sub>S and mercaptans. [District Rule 2201] Federally Enforceable Through Title V Permit
20. Hydrogen sulfide content of vent gas shall be determined using ASTM Method D 1945-96, ASTM Method UOP 539-97, ASTM Method D 4084-94, or ASTM Method D 4810-88. [District Rule 4311, 6.3.4] Federally Enforceable Through Title V Permit
21. The operator of a flare subject to flare minimization requirements pursuant to Section 5.8 shall monitor the vent gas flow to the flare with a flow measuring device or other parameters as specified in the Permit to Operate. The operator shall maintain records pursuant to Section 6.1.7. Flares that the operator can verify, based on permit conditions, are not capable of producing reportable flare events pursuant to Section 6.2.2 shall not be required to monitor vent gas flow to the flare. [District Rule 4311, 5.10] Federally Enforceable Through Title V Permit
22. Permittee shall keep accurate records of daily, quarterly, and annual quantity of gas combusted, and such records shall be retained for a period of five years and made readily available for District inspection upon request. [District NSR Rule] Federally Enforceable Through Title V Permit
23. Flare shall only be used with the net heating value of the gas being combusted being 300 Btu/scf or greater. [40 CFR 60.18 (c)(3) and District Rule 4311, 5.6] Federally Enforceable Through Title V Permit
24. The net heating value of the gas being combusted in a flare shall be determined annually, pursuant to 40 CFR 60.18(f)(3) using EPA Method 18, ASTM D1946, and ASTM D2382. [40 CFR 60.18 (f)(3) and District Rule 4311, 5.6] Federally Enforceable Through Title V Permit
25. The operator of a flare subject to flare minimization plans pursuant to Section 5.8 of Rule 4311 shall notify the APCO of an unplanned flaring event within 24 hours after the start of the next business day or within 24 hours of their discovery, whichever occurs first. The notification shall include the flare source identification, the start date and time, and the end date and time. [District Rule 4311, 6.2.1] Federally Enforceable Through Title V Permit
26. Permittee shall comply with all notification and recordkeeping requirements of 40 CFR 60.7 a (1)(3) and (b). [District Rule 4001] 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.

27. Effective on and after July 1, 2012, and annually thereafter, the operator of a flare subject to flare minimization plans pursuant to Section 5.8 shall submit an annual report to the APCO that summarizes all Reportable Flaring Events as defined in Section 3.0 that occurred during the previous 12 month period. The report shall be submitted within 30 days following the end of the twelve month period of the previous year. The report shall include, but is not limited to all of the following: 1) The results of an investigation to determine the primary cause and contributing factors of the flaring event; 2) Any prevention measures considered or implemented to prevent recurrence together with a justification for rejecting any measures that were considered but not implemented; 3) If appropriate, an explanation of why the flaring was an emergency and necessary to prevent accident, hazard or release of vent gas to the atmosphere, or where, due to a regulatory mandate to vent a flare, it cannot be recovered, treated and used as a fuel gas at the facility; and 4) The date, time, and duration of the flaring event. [District Rule 4311, 6.2.2] Federally Enforceable Through Title V Permit
28. Effective on and after July 1, 2012, and annually thereafter, the operator of a flare subject to flare monitoring requirements pursuant to Rule 4311, Sections 5.10, 6.6, 6.7, 6.8, 6.9, and 6.10, as appropriate, shall submit an annual report to the APCO within 30 days following the end of each 12 month period. The report shall include the following: 1) The total volumetric flow of vent gas in standard cubic feet for each day, 2) Hydrogen sulfide content, methane content, and hydrocarbon content of vent gas composition pursuant to Section 6.6, 3) If vent gas composition is monitored by a continuous analyzer or analyzers pursuant to Section 5.11, average total hydrocarbon content by volume, average methane content by volume, and depending upon the analytical method used pursuant to Section 6.3.4, total reduced sulfur content by volume or hydrogen sulfide content by volume of vent gas flared for each hour of the month, 4) If the flow monitor used pursuant to Section 5.10 measures molecular weight, the average molecular weight for each hour of each month, 5) For any pilot and purge gas used, the type of gas used, the volumetric flow for each day and for each month, and the means used to determine flow, 6) Flare monitoring system downtime periods, including dates and times, 7) For each day and for each month provide calculated sulfur dioxide emissions, and 8) A flow verification report for each flare subject to this rule. The flow verification report shall include flow verification testing pursuant to Section 6.3.5. [District Rule 4311, 6.2.3] Federally Enforceable Through Title V Permit
29. Upon request, the operator of flares that are subject to Section 5.6 shall make available to the APCO the compliance determination records that demonstrate compliance with the provisions of 40 CFR 60.18, (c)(3) through (c)(5). [District Rule 4311, 6.4.1] Federally Enforceable Through Title V Permit
30. The following records shall be maintained, retained on-site for a minimum of five years, and made available to the APCO, ARB, and EPA upon request: 1) A copy of the compliance determination conducted pursuant to Section 6.4.1, 2) For flares used during an emergency, record of the duration of flare operation, amount of gas burned, and the nature of the emergency situation, 3) A copy of the approved flare minimization plan pursuant to Section 6.5, 4) On and after July 1, 2012, where applicable, a copy of annual reports submitted to the APCO pursuant to Section 6.2, and 5) Where applicable, monitoring data collected pursuant to Sections 5.10. [District Rule 4311, 6.1] Federally Enforceable Through Title V Permit

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



# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-1326-383-2

**EXPIRATION DATE:** 03/31/2016

**SECTION:** 32 **TOWNSHIP:** 11N **RANGE:** 19W

**EQUIPMENT DESCRIPTION:**

1000 BARREL, FIXED ROOF, CONSTANT LEVEL CRUDE OIL STORAGE TANK WITH PRESSURE/VACUUM VENT

## PERMIT UNIT REQUIREMENTS

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1. This tank shall be operated at constant level. [District Rule 2201] Federally Enforceable Through Title V Permit
2. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rules 2201 and 4623, 4.4] Federally Enforceable Through Title V Permit
3. Permittee shall conduct true vapor pressure (TVP) testing of the organic liquid stored in this tank at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored in this tank in order to maintain exemption from the rule. [District Rule 4623] Federally Enforceable Through Title V Permit
4. 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
5. 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
6. 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
7. 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
8. 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
9. All records required to be maintained by this permit shall be maintained for a period of at least five years and shall be made readily available for District inspection upon request. [District Rules 2201, 4623, 6.3.6, 2520, 9.4.2] Federally Enforceable Through Title V Permit

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-1326-384-1

**EXPIRATION DATE:** 03/31/2016

**SECTION:** SW32 **TOWNSHIP:** 11N **RANGE:** 19W

**EQUIPMENT DESCRIPTION:**

2,000 BBL SKIM TANK (JV LEASE)

## PERMIT UNIT REQUIREMENTS

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1. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623, 4.4] Federally Enforceable Through Title V Permit
2. Permittee shall conduct true vapor pressure (TVP) testing of the organic liquid stored in this tank at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored in this tank in order to maintain exemption from the rule. [District Rule 4623] Federally Enforceable Through Title V Permit
3. 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
4. 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
5. 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
6. 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
7. 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
8. All records required to be maintained by this permit shall be maintained for a period of at least five years and shall be made readily available for District inspection upon request. [District Rules 2520, 9.4.2 and 4623, 6.3.6] Federally Enforceable Through Title V Permit

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-1326-385-3

**EXPIRATION DATE:** 03/31/2016

**SECTION:** NE23 **TOWNSHIP:** 28S **RANGE:** 27E

**EQUIPMENT DESCRIPTION:**

85 MMBTU/HR NATURAL GAS-FIRED STEAM GENERATOR WITH A NORTH AMERICAN 4231-85 GLE BURNER (OR EQUIVALENT), AND FLUE GAS RECIRCULATION (FGR)

## PERMIT UNIT REQUIREMENTS

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1. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
2. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
3. The unit shall only be fired on PUC-quality natural gas. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
4. Emissions rates from the unit shall not exceed any of the following emission limits: 7 ppmv NO<sub>x</sub> @ 3% O<sub>2</sub> or 0.008 lb NO<sub>x</sub>/MMBtu, 0.00285 lb-SO<sub>x</sub>/MMBtu, 0.003 lb-PM<sub>10</sub>/MMBtu, 25 ppmv CO @ 3% O<sub>2</sub> or 0.0185 lb CO/MMBtu, or 0.0055 lb-VOC/MMBtu. [District Rules 2201, 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
5. Permittee shall test annually the sulfur content of the fuel gas combusted in steam generator using ASTM method D1072, D3031, D4084, or D3246 and make test results readily available for District inspection. [District Rule 4320]
6. Source testing to measure NO<sub>x</sub> and CO emissions from this unit while fired on natural gas shall be conducted at least once every twelve (12) months. After demonstrating compliance on two (2) consecutive annual source tests, the unit shall be tested not less than once every thirty-six (36) months. If the result of the 36-month source test demonstrates that the unit does not meet the applicable emission limits, the source testing frequency shall revert to at least once every twelve (12) months. [District Rules 4305, 6.3.1, 4306, 6.3.1, and 4320] Federally Enforceable Through Title V Permit
7. All emissions measurements shall be made with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. Unless otherwise specified in the Permit to Operate, no determination of compliance shall be established within two hours after a continuous period in which fuel flow to the unit is shut off for 30 minutes or longer, or within 30 minutes after a re-ignition as defined in Section 3.0 of District Rule 4306. [District Rules 4305, 5.5.2, 4306, 5.5.2, and 4320] Federally Enforceable Through Title V Permit
8. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
9. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
10. The source test plan shall identify which basis (ppmv or lb/MMBtu) will be used to demonstrate compliance. [District Rules 4305, 5.5.1, 4306, 5.5.1, and 4320] Federally Enforceable Through Title V Permit
11. For NO<sub>x</sub> and CO emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rules 4305, 5.5.5, 4306, 5.5.5, and 4320] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

12. NOx emissions for source test purposes shall be determined using EPA Method 7E or ARB Method 100 on a ppmv basis, or EPA Method 19 on a heat input basis. [District Rules 4305, 6.2, 4306, 6.2, and 4320] Federally Enforceable Through Title V Permit
13. PM10 emissions for source test purposes shall be determined using EPA Methods 201A and 202, or other District approved methods. [District Rule 2201] Federally Enforceable Through Title V Permit
14. CO emissions for source test purposes shall be determined using EPA Method 10 or ARB Method 100. [District Rules 4305, 6.2, 4306, 6.2, and 4320] Federally Enforceable Through Title V Permit
15. Stack gas oxygen (O2) shall be determined using EPA Method 3 or 3A or ARB Method 100. [District Rules 4305, 6.2, 4306, 6.2, and 4320] Federally Enforceable Through Title V Permit
16. The permittee shall monitor and record the stack concentration of NOx, CO, and O2 at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless monitoring has been performed within the last month. [District Rules 4305, 5.4, 4306, 5.4, and 4320] Federally Enforceable Through Title V Permit
17. If either the NOx or CO concentrations corrected to 3% O2, as measured by the portable analyzer, exceed the allowable emissions concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rules 4305, 5.4, 4306, 5.4, and 4320] Federally Enforceable Through Title V Permit
18. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 4305, 5.4, 4306, 5.4, and 4320] Federally Enforceable Through Title V Permit
19. Permittee shall comply with all notification and recordkeeping requirements of 40 CFR 60.7 a (1)(3) and (b). [District Rule 4001] Federally Enforceable Through Title V Permit
20. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 3% O2, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rules 4305, 6.1, 4306, 6.1, and 4320] Federally Enforceable Through Title V Permit
21. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070, 4305, 6.1, 4306, 6.1, and 2520, 9.4.2] Federally Enforceable Through Title V Permit

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-1326-387-1

**EXPIRATION DATE:** 03/31/2016

**SECTION:** 34 **TOWNSHIP:** 26S **RANGE:** 28E

**EQUIPMENT DESCRIPTION:**

100 BBL (4200 GALLON) FIXED ROOF CRUDE OIL STORAGE TANK

## PERMIT UNIT REQUIREMENTS

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1. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623, 4.4] Federally Enforceable Through Title V Permit
2. Permittee shall conduct true vapor pressure (TVP) testing of the organic liquid stored in this tank at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored in this tank in order to maintain exemption from the rule. [District Rule 4623] Federally Enforceable Through Title V Permit
3. 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
4. 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
5. 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
6. 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
7. 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
8. 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, 6.3.6 and 2520, 9.4.2] Federally Enforceable Through Title V Permit

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-1326-388-1

**EXPIRATION DATE:** 03/31/2016

**SECTION:** 34 **TOWNSHIP:** 26S **RANGE:** 28E

**EQUIPMENT DESCRIPTION:**

1000 BBL FIXED ROOF CRUDE OIL STORAGE TANK

## PERMIT UNIT REQUIREMENTS

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1. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623, 4.4] Federally Enforceable Through Title V Permit
2. Permittee shall conduct true vapor pressure (TVP) testing of the organic liquid stored in this tank at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored in this tank in order to maintain exemption from the rule. [District Rule 4623] Federally Enforceable Through Title V Permit
3. 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
4. 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
5. 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
6. 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
7. 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
8. 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, 6.3.6 and 2520, 9.4.2] Federally Enforceable Through Title V Permit

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-1326-389-1

**EXPIRATION DATE:** 03/31/2016

**SECTION:** 34 **TOWNSHIP:** 26S **RANGE:** 28E

**EQUIPMENT DESCRIPTION:**

2000 BBL (84,000 GALLON) FIXED ROOF CRUDE OIL STORAGE TANK

## PERMIT UNIT REQUIREMENTS

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1. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623, 4.4] Federally Enforceable Through Title V Permit
2. Permittee shall conduct true vapor pressure (TVP) testing of the organic liquid stored in this tank at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored in this tank in order to maintain exemption from the rule. [District Rule 4623] Federally Enforceable Through Title V Permit
3. 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
4. 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
5. 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
6. 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
7. 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
8. 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, 6.3.6 and 2520, 9.4.2] Federally Enforceable Through Title V Permit

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-1326-390-2

**EXPIRATION DATE:** 03/31/2016

**EQUIPMENT DESCRIPTION:**

85.0 MMBTU/HR STRUTHERS NATURAL GAS-FIRED STEAM GENERATOR WITH A NORTH AMERICAN MODEL MAGNA-FLAME G-LE ULTRA ULTRA-LOW NOX BURNER WITH FLUE GAS RECIRCULATION (FGR) AND AN O2 CONTROLLER

## PERMIT UNIT REQUIREMENTS

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1. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
2. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101] Federally Enforceable Through Title V Permit
3. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
4. The unit shall only be fired on regulated natural gas and scrubbed TEOR and TVR gas from S-1326-26, '-27, '-28, '-35 and '-263 with a sulfur content no greater than 1 gr S/100 scf . [District Rules 2201 and 4320, 5.4] Federally Enforceable Through Title V Permit
5. Permittee shall test annually the sulfur content of TEOR/TVR gas combusted in steam generator using ASTM method D1072, D3031, D4084, or D3246 and make test results readily available for District inspection. [District Rule 4320, 5.7] Federally Enforceable Through Title V Permit
6. Emissions from the steam generator shall not exceed any of the following limits: 0.003 lb-PM10/MMBtu, or 0.0055 lb-VOC/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Maximum emissions from the steam generator, including start-up and shutdown, shall not exceed any of the following limits: 16.3 lb-NOx/day, 5,957 lb-NOx/yr, 18.4 lb-CO/day, and 6,701 lb-CO/yr. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Except during start-up and shutdown periods emissions from the steam generator shall not exceed any of the following limits: 7 ppmvd NOx @ 3% O2 or 0.008 lb-NOx/MMBtu or 10 ppmvd CO @ 3% O2 or 0.009 lb-CO/MMBtu. [District Rules 2201, 4301, 5.2, 4305, 5.1, 4306, 5.1 and 4320, 5.2] Federally Enforceable Through Title V Permit
9. Duration of start-up or shutdown shall not exceed two hours each per occurrence. During start-up or shutdown, the emissions control system shall be in operation, and emissions shall be minimized insofar as technologically possible. The operator shall maintain daily records of the duration of start-up and shutdown periods. [District Rules 4305, 5.5.6, 4306, 5.3 and 4320, 5.6]
10. Start-up is defined as the period of time during which a unit is brought from a shutdown status to its operating temperature and pressure, including the time required by the unit's emission control system to reach full operation. Shutdown is defined as the period of time during which a unit is taken from an operational to a non-operational status by allowing it to cool down from its operating temperature to ambient temperature as the fuel supply to the unit is completely turned off. [District Rule 4306, 3.25 and 3.22 and 4320, 5.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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



11. Source testing to measure NO<sub>x</sub> and CO emissions from this unit while fired on natural gas shall be conducted at least once every twelve (12) months. After demonstrating compliance on two (2) consecutive annual source tests, the unit shall be tested not less than once every thirty-six (36) months. If the result of the 36-month source test demonstrates that the unit does not meet the applicable emission limits, the source testing frequency shall revert to at least once every twelve (12) months. [District Rules 4305, 6.3.1, 4306, 6.3.1 and 4320, 5.6] Federally Enforceable Through Title V Permit
12. All emissions measurements shall be made with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. No determination of compliance shall be established within two hours after a continuous period in which fuel flow to the unit is shut off for 30 minutes or longer, or within 30 minutes after a re-ignition as defined in Section 3.0 of District Rule 4306. [District Rules 4305, 5.5.2, 4306, 5.5.2 and 4320, 5.6] Federally Enforceable Through Title V Permit
13. The source test plan shall identify which basis (ppmv or lb/MMBtu) will be used to demonstrate compliance. [District Rules 4305, 5.5.1, 4306, 5.5.1 and 4320, 6.3] Federally Enforceable Through Title V Permit
14. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
15. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
16. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rules 4305, 5.5.5, 4306, 5.5.5 and 4320, 6.3] Federally Enforceable Through Title V Permit
17. The following test methods shall be used: PM<sub>10</sub> (lb/MMBtu) - EPA 201A - 202 or Method 5, NO<sub>x</sub> (ppmv) - EPA Method 7E or ARB Method 100, NO<sub>x</sub> (lb/MMBtu) - EPA Method 19, CO (ppmv) - EPA Method 10 or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, stack gas moisture content - EPA Method 4, stack gas velocities - EPA Method 2, and fuel gas sulfur content - ASTM D1072, ASTM D3246, ASTM D6228 (GC-FPD) or double GC for H<sub>2</sub>S and mercaptans. [District Rule 1081, 4305, 4306, 6.2, 4320,6.2 and 4351] Federally Enforceable Through Title V Permit
18. The permittee shall monitor and record the stack concentration of NO<sub>x</sub>, CO, and O<sub>2</sub> at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless monitoring has been performed within the last month. [District Rules 4305, 5.4, 4306, 5.4, 4320,5.7] Federally Enforceable Through Title V Permit
19. If either the NO<sub>x</sub> or CO concentrations corrected to 3% O<sub>2</sub>, as measured by the portable analyzer, exceed the allowable emissions concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rules 4305, 5.4, 4306, 5.4 and 4320, 5.7] Federally Enforceable Through Title V Permit
20. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 4305, 5.4, 4306, 5.4 and 4320, 5.7] 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.

21. The permittee shall maintain records of: (1) the date and time of NO<sub>x</sub>, CO, and O<sub>2</sub> measurements, (2) the O<sub>2</sub> concentration in percent and the measured NO<sub>x</sub> and CO concentrations corrected to 3% O<sub>2</sub>, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rules 4305, 6.1, 4306, 6.1 and 4320, 6.1] Federally Enforceable Through Title V Permit
22. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070, 4305, 6.1, 4306, 6.1 and 4320, 6.1] Federally Enforceable Through Title V Permit

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

# San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1326-391-2

EXPIRATION DATE: 03/31/2016

## EQUIPMENT DESCRIPTION:

85.0 MMBTU/HR STRUTHERS NATURAL GAS-FIRED STEAM GENERATOR WITH A NORTH AMERICAN MODEL MAGNA-FLAME G-LE ULTRA ULTRA-LOW NOX BURNER WITH FLUE GAS RECIRCULATION (FGR) AND AN O2 CONTROLLER

## PERMIT UNIT REQUIREMENTS

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1. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
2. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101] Federally Enforceable Through Title V Permit
3. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
4. The unit shall only be fired on regulated natural gas and scrubbed TEOR and TVR gas from S-1326-26, '-27, '-28, '-35 and '-263 with a sulfur content no greater than 1 gr S/100 scf . [District Rule 2201 and 4320, 5.4] Federally Enforceable Through Title V Permit
5. Permittee shall test annually the sulfur content of TEOR/TVR gas combusted in steam generator using ASTM method D1072, D3031, D4084, or D3246 and make test results readily available for District inspection. [District Rule 4320, 5.7] Federally Enforceable Through Title V Permit
6. Emissions from the steam generator shall not exceed any of the following limits: 0.003 lb-PM10/MMBtu, or 0.0055 lb-VOC/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Maximum emissions from the steam generator, including start-up and shutdown, shall not exceed any of the following limits: 16.3 lb-NOx/day, 5,957 lb-NOx/yr, 18.4 lb-CO/day, and 6,701 lb-CO/yr. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Except during start-up and shutdown periods emissions from the steam generator shall not exceed any of the following limits: 7 ppmvd NOx @ 3% O2 or 0.008 lb-NOx/MMBtu or 10 ppmvd CO @ 3% O2 or 0.009 lb-CO/MMBtu. [District Rules 2201, 4301, 5.2, 4305, 5.1, 4306, 5.1 and 4320, 5.2] Federally Enforceable Through Title V Permit
9. Duration of start-up or shutdown shall not exceed two hours each per occurrence. During start-up or shutdown, the emissions control system shall be in operation, and emissions shall be minimized insofar as technologically possible. The operator shall maintain daily records of the duration of start-up and shutdown periods. [District Rules 4305, 5.5.6, 4306, 5.3 and 4320, 5.6]
10. Start-up is defined as the period of time during which a unit is brought from a shutdown status to its operating temperature and pressure, including the time required by the unit's emission control system to reach full operation. Shutdown is defined as the period of time during which a unit is taken from an operational to a non-operational status by allowing it to cool down from its operating temperature to ambient temperature as the fuel supply to the unit is completely turned off. [District Rule 4306, 3.25, 3.22 and 4320, 5.6] 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.

11. Source testing to measure NO<sub>x</sub> and CO emissions from this unit while fired on natural gas shall be conducted at least once every twelve (12) months. After demonstrating compliance on two (2) consecutive annual source tests, the unit shall be tested not less than once every thirty-six (36) months. If the result of the 36-month source test demonstrates that the unit does not meet the applicable emission limits, the source testing frequency shall revert to at least once every twelve (12) months. [District Rules 4305, 6.3.1, 4306, 6.3.1 and 4320, 6.3] Federally Enforceable Through Title V Permit
12. All emissions measurements shall be made with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. No determination of compliance shall be established within two hours after a continuous period in which fuel flow to the unit is shut off for 30 minutes or longer, or within 30 minutes after a re-ignition as defined in Section 3.0 of District Rule 4306. [District Rules 4305, 5.5.2, 4306, 5.5.2 and 4320, 6.3] Federally Enforceable Through Title V Permit
13. The source test plan shall identify which basis (ppmv or lb/MMBtu) will be used to demonstrate compliance. [District Rules 4305, 5.5.1, 4306, 5.5.1 and 4320, 6.3] Federally Enforceable Through Title V Permit
14. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
15. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
16. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rules 4305, 5.5.5, 4306, 5.5.5 and 4320, 6.3] Federally Enforceable Through Title V Permit
17. The following test methods shall be used: PM<sub>10</sub> (lb/MMBtu) - EPA 201A - 202 or Method 5, NO<sub>x</sub> (ppmv) - EPA Method 7E or ARB Method 100, NO<sub>x</sub> (lb/MMBtu) - EPA Method 19, CO (ppmv) - EPA Method 10 or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, stack gas moisture content - EPA Method 4, stack gas velocities - EPA Method 2, and fuel gas sulfur content - ASTM D1072, ASTM D3246, ASTM D6228 (GC-FPD) or double GC for H<sub>2</sub>S and mercaptans. [District Rule 1081, 4305, 4306, 6.2, 4320, 6.2 and 4351] Federally Enforceable Through Title V Permit
18. The permittee shall monitor and record the stack concentration of NO<sub>x</sub>, CO, and O<sub>2</sub> at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless monitoring has been performed within the last month. [District Rules 4305, 5.4, 4306, 5.4 and 4320, 5.7] Federally Enforceable Through Title V Permit
19. If either the NO<sub>x</sub> or CO concentrations corrected to 3% O<sub>2</sub>, as measured by the portable analyzer, exceed the allowable emissions concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rules 4305, 5.4, 4306, 5.4 and 4320, 5.7] Federally Enforceable Through Title V Permit
20. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 4305, 5.4, 4306, 5.4 and 4320, 5.7] 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.

21. The permittee shall maintain records of: (1) the date and time of NO<sub>x</sub>, CO, and O<sub>2</sub> measurements, (2) the O<sub>2</sub> concentration in percent and the measured NO<sub>x</sub> and CO concentrations corrected to 3% O<sub>2</sub>, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rules 4305, 6.1, 4306, 6.1 and 4320, 6.1] Federally Enforceable Through Title V Permit
22. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070, 4305, 6.1, 4306, 6.1 and 4320,6.1] Federally Enforceable Through Title V Permit

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-1326-392-1

**EXPIRATION DATE:** 03/31/2016

**EQUIPMENT DESCRIPTION:**

85.0 MMBTU/HR STRUTHERS NATURAL GAS-FIRED STEAM GENERATOR WITH A NORTH AMERICAN MODEL MAGNA-FLAME G-LE ULTRA ULTRA-LOW NOX BURNER WITH FLUE GAS RECIRCULATION (FGR) AND AN O2 CONTROLLER

## PERMIT UNIT REQUIREMENTS

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1. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
2. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101] Federally Enforceable Through Title V Permit
3. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
4. The unit shall only be fired on regulated natural gas and scrubbed TEOR and TVR gas from S-1326-26, '-27, '-28, '-35 and '-263 with a sulfur content no greater than 1 gr S/100 scf. [District Rule 2201 and 4320, 5.4] Federally Enforceable Through Title V Permit
5. Permittee shall test annually the sulfur content of TEOR/TVR gas combusted in steam generator using ASTM method D1072, D3031, D4084, or D3246 and make test results readily available for District inspection. [District Rule 4320, 5.7] Federally Enforceable Through Title V Permit
6. Emissions from the steam generator shall not exceed any of the following limits: 0.003 lb-PM10/MMBtu, or 0.0055 lb-VOC/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Maximum emissions from the steam generator, including start-up and shutdown, shall not exceed any of the following limits: 16.3 lb-NOx/day, 5,957 lb-NOx/yr, 18.4 lb-CO/day, and 6,701 lb-CO/yr. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Except during start-up and shutdown periods emissions from the steam generator shall not exceed any of the following limits: 7 ppmvd NOx @ 3% O2 or 0.008 lb-NOx/MMBtu or 10 ppmvd CO @ 3% O2 or 0.009 lb-CO/MMBtu. [District Rules 2201, 4301, 5.2, 4305, 5.1, 4306, 5.1 and 4320, 5.2] Federally Enforceable Through Title V Permit
9. Duration of start-up or shutdown shall not exceed two hours each per occurrence. During start-up or shutdown, the emissions control system shall be in operation, and emissions shall be minimized insofar as technologically possible. The operator shall maintain daily records of the duration of start-up and shutdown periods. [District Rules 4305, 5.5.6, 4306, 5.3 and 4320, 5.6]
10. Start-up is defined as the period of time during which a unit is brought from a shutdown status to its operating temperature and pressure, including the time required by the unit's emission control system to reach full operation. Shutdown is defined as the period of time during which a unit is taken from an operational to a non-operational status by allowing it to cool down from its operating temperature to ambient temperature as the fuel supply to the unit is completely turned off. [District Rule 4306, 3.25 and 3.22 and 4320, 5.6] 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.

11. Source testing to measure NO<sub>x</sub> and CO emissions from this unit while fired on natural gas shall be conducted at least once every twelve (12) months. After demonstrating compliance on two (2) consecutive annual source tests, the unit shall be tested not less than once every thirty-six (36) months. If the result of the 36-month source test demonstrates that the unit does not meet the applicable emission limits, the source testing frequency shall revert to at least once every twelve (12) months. [District Rules 4305, 6.3.1, 4306, 6.3.1 and 4320, 6.3] Federally Enforceable Through Title V Permit
12. All emissions measurements shall be made with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. No determination of compliance shall be established within two hours after a continuous period in which fuel flow to the unit is shut off for 30 minutes or longer, or within 30 minutes after a re-ignition as defined in Section 3.0 of District Rule 4306. [District Rules 4305, 5.5.2, 4306, 5.5.2 and 4320, 6.3] Federally Enforceable Through Title V Permit
13. The source test plan shall identify which basis (ppmv or lb/MMBtu) will be used to demonstrate compliance. [District Rules 4305, 5.5.1, 4306, 5.5.1 and 4320, 6.3] Federally Enforceable Through Title V Permit
14. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
15. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
16. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rules 4305, 5.5.5, 4306, 5.5.5 and 4320, 6.3] Federally Enforceable Through Title V Permit
17. The following test methods shall be used: PM<sub>10</sub> (lb/MMBtu) - EPA 201A - 202 or Method 5, NO<sub>x</sub> (ppmv) - EPA Method 7E or ARB Method 100, NO<sub>x</sub> (lb/MMBtu) - EPA Method 19, CO (ppmv) - EPA Method 10 or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, stack gas moisture content - EPA Method 4, stack gas velocities - EPA Method 2, and fuel gas sulfur content - ASTM D1072, ASTM D3246, ASTM D6228 (GC-FPD) or double GC for H<sub>2</sub>S and mercaptans. [District Rule 1081, 4305, 4306, 6.2, 4320, 6.2 and 4351] Federally Enforceable Through Title V Permit
18. The permittee shall monitor and record the stack concentration of NO<sub>x</sub>, CO, and O<sub>2</sub> at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless monitoring has been performed within the last month. [District Rules 4305, 5.4, 4306, 5.4 and 4320, 5.7] Federally Enforceable Through Title V Permit
19. If either the NO<sub>x</sub> or CO concentrations corrected to 3% O<sub>2</sub>, as measured by the portable analyzer, exceed the allowable emissions concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rules 4305, 5.4, 4306, 5.4 and 4320, 5.7] Federally Enforceable Through Title V Permit
20. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 4305, 5.4, 4306, 5.4 and 4320, 5.7] 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.

21. The permittee shall maintain records of: (1) the date and time of NO<sub>x</sub>, CO, and O<sub>2</sub> measurements, (2) the O<sub>2</sub> concentration in percent and the measured NO<sub>x</sub> and CO concentrations corrected to 3% O<sub>2</sub>, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rules 4305, 6.1, 4306, 6.1 and 4320, 6.1] Federally Enforceable Through Title V Permit
22. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070, 4305, 6.1, 4306, 6.1 and 4320, 6.1] Federally Enforceable Through Title V Permit

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



# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-1326-398-1

**EXPIRATION DATE:** 03/31/2016

**SECTION:** NE33 **TOWNSHIP:** 27S **RANGE:** 28E

**EQUIPMENT DESCRIPTION:**

2,500 BBL FIXED ROOF CRUDE OIL STOCK TANK WITH PRESSURE-VACUUM VALVE (MT. POSO OIL FIELD, GLIDE 33 LEASE)

## PERMIT UNIT REQUIREMENTS

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1. This tank shall be equipped with a pressure-vacuum (PV) relief valve set to within 10% of the maximum allowable working pressure of the tank, permanently labeled with the operating pressure settings, properly maintained in good operating order in accordance with the manufacturer's instructions, and shall remain in leak-free condition except when the operating pressure exceeds the valve's set pressure. [District Rule 2201] Federally Enforceable Through Title V Permit
2. This tank shall be in a leak-free condition. 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. [District Rule 2201] Federally Enforceable Through Title V Permit
3. True vapor pressure (TVP) of liquids received and stored in tank shall be less than 0.5 psia. [District Rules 2201 and 4623, 4.4] Federally Enforceable Through Title V Permit
4. Tank throughput shall be less than 150 barrels/ day when averaged over a one month period. [District Rules 2201] Federally Enforceable Through Title V Permit
5. Permittee shall conduct True Vapor Pressure (TVP) testing of the organic liquid stored in this tank at least once every 24 months during summer (July - September), and/ or whenever there is a change in the source or type of organic liquid stored in this tank. [District Rules 2201 and 4623, 6.3] Federally Enforceable Through Title V Permit
6. Instead of testing each uncontrolled fixed roof tank, the permittee may conduct a TVP testing of the organic liquid stored in a representative tank provided the requirements of Sections 6.2.1.1.1 through 6.2.1.1.5 of Rule 4623 are met. [District Rule 4623] Federally Enforceable Through Title V Permit
7. 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, 6.2.2] Federally Enforceable Through Title V Permit
8. The API gravity of crude oil or petroleum distillate shall be determined by using ASTM Method D 287-92 (2000) 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 4057-95 "Standard Practices for Manual Sampling of Petroleum and Petroleum Products." [District Rules 2201 and 4623, 6.2.2] Federally Enforceable Through Title V Permit
9. The TVP testing shall be conducted at actual storage temperature of the organic liquid in the tank. If the tank stores crude oil or petroleum distillates, the permittee shall also conduct an API gravity testing. [District Rules 2201 and 4623, 6.2.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

10. Operator shall determine the true vapor pressure of the petroleum liquid stored in the tank located at the beginning of the process flow after the production header at least once per year. 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, shall be used to determine the TVP of crude oil with an API gravity of 26 or less, or for any API gravity that is specified in this test method. Determinations shall be made annually during summer and whenever there is a change in the source or type of petroleum entering the tank. [District Rules 2201 and 4623, 6.4.4] Federally Enforceable Through Title V Permit
11. Permittee shall submit the records of TVP and API gravity testing to the APCO within 45 days after the date of testing. The records shall include the tank identification number, Permit to Operate number, type of stored organic liquid, TVP and API gravity of the organic liquid, test methods used, and a copy of the test results. [District Rules 2201 and 4623, 6.3.6] Federally Enforceable Through Title V Permit
12. The permittee shall keep accurate records of each organic liquid stored in the tank, including its storage temperature, throughput, TVP, and API gravity. [District Rules 2201 and 4623, 6.3.6] Federally Enforceable Through Title V Permit
13. All records required to be maintained by this permit shall be maintained for a period of at least five years and shall be made readily available for District inspection upon request. [District Rules 2520, 9.4.2 and 4623] Federally Enforceable Through Title V Permit

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-1326-399-1

**EXPIRATION DATE:** 03/31/2016

**SECTION:** NE33 **TOWNSHIP:** 27S **RANGE:** 28E

**EQUIPMENT DESCRIPTION:**

2,500 BBL FIXED ROOF CONSTANT-LEVEL CRUDE OIL WASH TANK WITH PRESSURE-VACUUM VALVE (MT. POSO OIL FIELD, GLIDE 33 LEASE)

## PERMIT UNIT REQUIREMENTS

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1. This tank shall be equipped with a pressure-vacuum (PV) relief valve set to within 10% of the maximum allowable working pressure of the tank, permanently labeled with the operating pressure settings, properly maintained in good operating order in accordance with the manufacturer's instructions, and shall remain in gas-tight condition except when the operating pressure exceeds the valve's set pressure. [District Rule 2201] Federally Enforceable Through Title V Permit
2. This tank shall be in a leak-free condition. 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. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Throughput of oil shall be less than 150 barrels per day. [District Rule 2201] Federally Enforceable Through Title V Permit
4. Tank shall operate at a constant level. [District Rule 2201] Federally Enforceable Through Title V Permit
5. True vapor pressure (TVP) of liquids received and stored in tank shall be less than 0.5 psia. [District Rules 2201 and 4623, 4.4] Federally Enforceable Through Title V Permit
6. Permittee shall conduct True Vapor Pressure (TVP) testing of the organic liquid stored in this tank at least once every 24 months during summer (July - September), and/ or whenever there is a change in the source or type of organic liquid stored in this tank. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
7. Instead of testing each uncontrolled fixed roof tank, the permittee may conduct a TVP testing of the organic liquid stored in a representative tank provided the requirements of Sections 6.2.1.1.1 through 6.2.1.1.5 of Rule 4623 are met. [District Rule 4623] Federally Enforceable Through Title V Permit
8. The API gravity of crude oil or petroleum distillate shall be determined by using ASTM Method D 287-92 (2000) 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 4057-95 "Standard Practices for Manual Sampling of Petroleum and Petroleum Products." [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
9. The TVP testing shall be conducted at actual storage temperature of the organic liquid in the tank. If the tank stores crude oil or petroleum distillates, the permittee shall also conduct an API gravity testing. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

10. 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, shall be used to determine the TVP of crude oil with an API gravity of 26 degrees or less, or for any API gravity that is specified in this test method. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
11. Permittee shall submit the records of TVP and API gravity testing to the APCO within 45 days after the date of testing. The records shall include the tank identification number, Permit to Operate number, type of stored organic liquid, TVP and API gravity of the organic liquid, test methods used, and a copy of the test results. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
12. The permittee shall keep accurate records of each organic liquid stored in the tank, including its storage temperature, throughput, TVP, and API gravity. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
13. All records required to be maintained by this permit shall be maintained for a period of at least five years and shall be made readily available for District inspection upon request. [District Rule 4623] Federally Enforceable Through Title V Permit

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-1326-400-0

**EXPIRATION DATE:** 03/31/2016

**SECTION:** 23 **TOWNSHIP:** 28S **RANGE:** 27E

**EQUIPMENT DESCRIPTION:**

85 MMBTU/HR STRUTHERS NATURAL GAS/TEOR/TVR-FIRED STEAM GENERATOR WITH NORTH AMERICAN MODEL MAGNA-FLAMETM 4231-85 GLE BURNER OR EQUIVALENT AND A FLUE GAS RECIRCULATION (FGR) SYSTEM

## PERMIT UNIT REQUIREMENTS

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1. The permittee shall obtain written District approval for the use of any equivalent equipment not specifically approved by this ATC. Approval of the equivalent equipment shall be made in writing and only after the District's determination that the submitted design and performance of the proposed alternate equipment is equivalent to the authorized equipment [District Rule 2010] Federally Enforceable Through Title V Permit
2. The permittee's request for approval of equivalent equipment shall include the make, model, manufacturer's maximum rating, manufacturer's guaranteed emissions rates, equipment drawing(s) and operational characteristics/parameters [District Rule 2010] Federally Enforceable Through Title V Permit
3. This unit shall be equipped with horizontal convection section with at least 235 square feet of bare tube surface area (or thermodynamically equivalent number of square feet of finned tube) per MMBtu/hr of heat input and variable frequency drive high efficiency electrical motors driving the blower and water pump. Documentation showing this unit is so equipped shall be retained on site. [CEQA]
4. The permittee shall notify District in writing of date of initiation of construction no later than 30 days after such date and date of anticipated startup not more than 60 days nor less than 30 days prior to such date. [40 CFR 60.48c(a)] Federally Enforceable Through Title V Permit
5. Prior to operating equipment under this Authority to Construct, permittee shall surrender VOC emission reduction credits for the following quantities of emissions: 1st quarter - 1,024 lb, 2nd quarter - 1,024 lb, 3rd quarter - 1,024 lb, and fourth quarter - 1,024 lb. Offsets shall be provided at the applicable offset ratio specified in Table 4-2 of Rule 2201 (as amended 12/18/08). [District Rule 2201] Federally Enforceable Through Title V Permit
6. Prior to operating equipment under this Authority to Construct, permittee shall surrender NOx emission reduction credits for the following quantities of emissions: 1st quarter - 1,489 lb, 2nd quarter - 1,489 lb, 3rd quarter - 1,489 lb, and fourth quarter - 1,489 lb. Offsets shall be provided at the applicable offset ratio specified in Table 4-2 of Rule 2201 (as amended 12/18/08). [District Rule 2201] Federally Enforceable Through Title V Permit
7. ERC Certificate Numbers S-1707-1 and S-3381-2 (or a certificate split from these certificates) shall be used to supply the required offsets, unless a revised offsetting proposal is received and approved by the District, upon which this Authority to Construct shall be reissued, administratively specifying the new offsetting proposal. Original public noticing requirements, if any, shall be duplicated prior to reissuance of this Authority to Construct. [District Rule 2201] Federally Enforceable Through Title V Permit
8. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
9. 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]
10. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201]

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

11. Natural gas and or TEOR and TVR gas combusted in this unit shall have a sulfur content no greater than 1 gr S/100 scf. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
12. Permittee shall test annually the sulfur content of the fuel gas combusted in steam generator using ASTM method D1072, D3031, D4084, or D3246 and make test results readily available for District inspection. [District Rules 2520, 9.3.2 and 4320] Federally Enforceable Through Title V Permit
13. Emissions rates from unit shall not exceed any of the following limits: 7 ppmv NO<sub>x</sub> @ 3% O<sub>2</sub> or 0.008 lb-NO<sub>x</sub>/MMBtu, 0.003 lb-PM<sub>10</sub>/MMBtu, 25 ppmv CO @ 3% O<sub>2</sub> or 0.0185 lb-CO/MMBtu, or 0.0055 lb-VOC/MMBtu. [District Rules 2201, 4301, 5.2, 4305, 5.1, 4306, 5.1, 4320, and 40 CFR 60.43c(e)(1)] Federally Enforceable Through Title V Permit
14. Source testing to measure NO<sub>x</sub> and CO emissions from this unit shall be conducted at least once every twelve (12) months. After demonstrating compliance on two (2) consecutive annual source tests, the unit shall be tested not less than once every thirty-six (36) months. If the result of the 36-month source test demonstrates that the unit does not meet the applicable emission limits, the source testing frequency shall revert to at least once every twelve (12) months. [District Rules 4305, 6.3.1, 4306, 6.3.1, and 4320] Federally Enforceable Through Title V Permit
15. All emissions measurements shall be made with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. Unless otherwise specified in the Permit to Operate, no determination of compliance shall be established within two hours after a continuous period in which fuel flow to the unit is shut off for 30 minutes or longer, or within 30 minutes after a re-ignition as defined in Section 3.0 of District Rule 4306. [District Rules 4305, 5.5.2, 4306, 5.5.2, and 4320] Federally Enforceable Through Title V Permit
16. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
17. The source test plan shall identify which basis (ppmv or lb/MMBtu) will be used to demonstrate compliance. [District Rules 4305, 5.5.1, 4306, 5.5.1, and 4320] Federally Enforceable Through Title V Permit
18. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081]
19. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rules 4305, 5.5.5, 4306, 5.5.5, and 4320] Federally Enforceable Through Title V Permit
20. The following test methods shall be used: NO<sub>x</sub> (ppmv) - EPA Method 7E or ARB Method 100, NO<sub>x</sub> (lb/MMBtu) - EPA Method 19, CO (ppmv) - EPA Method 10 or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, stack gas moisture content - EPA Method 4, stack gas velocities - EPA Method 2, and fuel gas sulfur content - ASTM D1072, ASTM D3246, ASTM D6228 (GC-FPD) or double GC for H<sub>2</sub>S and mercaptans. [District Rule 1081, 4305, 4306, 6.2, 4320, and 4351] Federally Enforceable Through Title V Permit
21. All emissions measurements shall be made with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. No determination of compliance shall be established within two hours after a continuous period in which fuel flow to the unit is shut off for 30 minutes or longer, or within 30 minutes after a re-ignition as defined in Section 3.0 of District Rule 4306. [District Rules 4305 and 4306]
22. The permittee shall monitor and record the stack concentration of NO<sub>x</sub>, CO, and O<sub>2</sub> at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless monitoring has been performed within the last month. [District Rules 4305, 5.4, 4306, 5.4, and 4320] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

23. If either the NO<sub>x</sub> or CO concentrations corrected to 3% O<sub>2</sub>, as measured by the portable analyzer, exceed the allowable emissions concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rules 4305, 5.4, 4306, 5.4, and 4320] Federally Enforceable Through Title V Permit
24. All NO<sub>x</sub>, CO, and O<sub>2</sub> emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 4305, 5.4, 4306, 5.4, and 4320] Federally Enforceable Through Title V Permit
25. The permittee shall maintain records of: (1) the date and time of NO<sub>x</sub>, CO, and O<sub>2</sub> measurements, (2) the O<sub>2</sub> concentration in percent and the measured NO<sub>x</sub> and CO concentrations corrected to 3% O<sub>2</sub>, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rules 4305, 6.1, 4306, 6.1, and 4320] Federally Enforceable Through Title V Permit
26. PUC quality natural gas is any gaseous fuel where the sulfur content is no more than one-fourth (0.25) grain of hydrogen sulfide per one hundred (100) standard cubic feet, no more than five (5) grains of total sulfur per one hundred (100) standard cubic feet, and at least 80% methane by volume. [District Rule 4320]
27. If the steam generator is not fired on PUC-regulated natural gas and compliance is achieved through fuel sulfur content limitations, then the sulfur content of the fuel shall be determined by testing sulfur content at a location after all fuel sources are combined prior to incineration, or by performing mass balance calculations based on monitoring the sulfur content and volume of each fuel source. The sulfur content of the fuel shall be determined using the test methods referenced in this permit. [District Rule 4320]
28. Permittee shall maintain records of fuel gas sulfur compound measurements. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
29. If the unit is fired on PUC-regulated natural gas, valid purchase contracts, supplier certifications, tariff sheets, or transportation contracts may be used to satisfy the fuel sulfur content analysis, provided they establish the fuel sulfur concentration and higher heating value. [District Rule 4320]
30. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070, 4305, 6.1, 4306, 6.1, and 4320] Federally Enforceable Through Title V Permit

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-1326-401-0

**EXPIRATION DATE:** 03/31/2016

**SECTION:** 23 **TOWNSHIP:** 28S **RANGE:** 27E

**EQUIPMENT DESCRIPTION:**

85 MMBTU/HR NATURAL AND/OR TVR GAS-FIRED STEAM GENERATOR WITH NORTH AMERICAN MODEL MAGNA-FLAME 4231-85 GLE BURNER OR EQUIVALENT AND A FLUE GAS RECIRCULATION (FGR) SYSTEM

## PERMIT UNIT REQUIREMENTS

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1. The permittee shall obtain written District approval for the use of any equivalent equipment not specifically approved by this ATC. Approval of the equivalent equipment shall be made in writing and only after the District's determination that the submitted design and performance of the proposed alternate equipment is equivalent to the authorized equipment [District Rule 2010] Federally Enforceable Through Title V Permit
2. The permittee's request for approval of equivalent equipment shall include the make, model, manufacturer's maximum rating, manufacturer's guaranteed emissions rates, equipment drawing(s) and operational characteristics/parameters [District Rule 2010] Federally Enforceable Through Title V Permit
3. This unit is approved for operation at the SE/4 and NW/4 of Section 23, T28S, R27E. [District Rule 2201] Federally Enforceable Through Title V Permit
4. Permittee shall notify the District Compliance Division of each location at which the unit is located in excess of 24 hours. Such notification shall be made no later than 48 hours after starting operation at the location. [District Rule 2201]
5. This unit shall be equipped with horizontal convection section with at least 235 square feet of bare tube surface area (or thermodynamically equivalent number of square feet of finned tube) per MMBtu/hr of heat input and variable frequency drive high efficiency electrical motors driving the blower and water pump. Documentation showing this unit is so equipped shall be retained on site. [CEQA]
6. Prior to operating equipment under this Authority to Construct, permittee shall surrender emissions reduction credits for the following increases in emissions: NOx: 1,489 lb/qtr and VOC: 1,024 lb/qtr. Offsets shall be provided at the applicable offset ratio specified in Table 4-2 of Rule 2201. [District Rule 2201] Federally Enforceable Through Title V Permit
7. ERC Certificate Numbers S-3065-1, S-3381-2 (or a certificate split from these certificates) shall be used to supply the required offsets, unless a revised offsetting proposal is received and approved by the District, upon which this Authority to Construct shall be reissued, administratively specifying the new offsetting proposal. Original public noticing requirements, if any, shall be duplicated prior to reissuance of this Authority to Construct. [District Rule 2201] Federally Enforceable Through Title V Permit
8. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
9. 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
10. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] 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.



11. Natural gas and/or TEOR and TVR gas combusted in this unit shall have a sulfur content no greater than 1 gr S/100 scf. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
12. Permittee shall test annually the sulfur content of the fuel gas combusted in steam generator using ASTM method D1072, D3031, D4084, or D3246 and make test results readily available for District inspection. [District Rules 2520, 9.3.2 and 4320] Federally Enforceable Through Title V Permit
13. Emissions rates from unit shall not exceed any of the following limits: 7 ppmv NO<sub>x</sub> @ 3% O<sub>2</sub> or 0.008 lb-NO<sub>x</sub>/MMBtu, 0.003 lb-PM<sub>10</sub>/MMBtu, 25 ppmv CO @ 3% O<sub>2</sub> or 0.0185 lb-CO/MMBtu, or 0.0055 lb-VOC/MMBtu. [District Rules 2201, 4301, 4305, 4306, 4320, and 40 CFR 60.43c(e)(1)] Federally Enforceable Through Title V Permit
14. Source testing to measure NO<sub>x</sub> and CO emissions from this unit shall be conducted at least once every twelve (12) months. After demonstrating compliance on two (2) consecutive annual source tests, the unit shall be tested not less than once every thirty-six (36) months. If the result of the 36-month source test demonstrates that the unit does not meet the applicable emission limits, the source testing frequency shall revert to at least once every twelve (12) months. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
15. All emissions measurements shall be made with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. Unless otherwise specified in the Permit to Operate, no determination of compliance shall be established within two hours after a continuous period in which fuel flow to the unit is shut off for 30 minutes or longer, or within 30 minutes after a re-ignition as defined in Section 3.0 of District Rule 4320. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
16. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
17. The source test plan shall identify which basis (ppmv or lb/MMBtu) will be used to demonstrate compliance. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
18. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
19. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rules 4305, 5.5.5, 4306, 5.5.5, and 4320] Federally Enforceable Through Title V Permit
20. The following test methods shall be used: NO<sub>x</sub> (ppmv) - EPA Method 7E or ARB Method 100, NO<sub>x</sub> (lb/MMBtu) - EPA Method 19; CO (ppmv) - EPA Method 10 or ARB Method 100; Stack gas oxygen (O<sub>2</sub>) - EPA Method 3 or 3A or ARB Method 100; stack gas velocities - EPA Method 2; Stack gas moisture content - EPA Method 4; SO<sub>x</sub> - EPA Method 6C or 8 or ARB Method 100; fuel gas sulfur as H<sub>2</sub>S content - EPA Method 11 or 15; and fuel hhv (MMBtu) - ASTM D 1826 or D 1945 in conjunction with ASTM D 3588. [District Rule 1081, 4305, 4306, 4320, and 4351] Federally Enforceable Through Title V Permit
21. All emissions measurements shall be made with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. No determination of compliance shall be established within two hours after a continuous period in which fuel flow to the unit is shut off for 30 minutes or longer, or within 30 minutes after a re-ignition as defined in Section 3.0 of District Rule 4306. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
22. The permittee shall monitor and record the stack concentration of NO<sub>x</sub>, CO, and O<sub>2</sub> at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless monitoring has been performed within the last month. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

23. If either the NO<sub>x</sub> or CO concentrations corrected to 3% O<sub>2</sub>, as measured by the portable analyzer, exceed the allowable emissions concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
24. All NO<sub>x</sub>, CO, and O<sub>2</sub> emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
25. The permittee shall maintain records of: (1) the date and time of NO<sub>x</sub>, CO, and O<sub>2</sub> measurements, (2) the O<sub>2</sub> concentration in percent and the measured NO<sub>x</sub> and CO concentrations corrected to 3% O<sub>2</sub>, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rules 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
26. PUC quality natural gas is any gaseous fuel where the sulfur content is no more than one-fourth (0.25) grain of hydrogen sulfide per one hundred (100) standard cubic feet, no more than five (5) grains of total sulfur per one hundred (100) standard cubic feet, and at least 80% methane by volume. [District Rule 4320] Federally Enforceable Through Title V Permit
27. If the steam generator is not fired on PUC-regulated natural gas and compliance is achieved through fuel sulfur content limitations, then the sulfur content of the fuel shall be determined by testing sulfur content at a location after all fuel sources are combined prior to incineration, or by performing mass balance calculations based on monitoring the sulfur content and volume of each fuel source. The sulfur content of the fuel shall be determined using the test methods referenced in this permit. [District Rule 4320] Federally Enforceable Through Title V Permit
28. Permittee shall maintain records of fuel gas sulfur compound measurements. [District Rules 2201 and 4320] Federally Enforceable Through Title V Permit
29. If the unit is fired on PUC-regulated natural gas, valid purchase contracts, supplier certifications, tariff sheets, or transportation contracts may be used to satisfy the fuel sulfur content analysis, provided they establish the fuel sulfur concentration and higher heating value. [District Rule 4320] Federally Enforceable Through Title V Permit
30. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070, 4305, 4306 and 4320] Federally Enforceable Through Title V Permit
31. This ATC shall be implemented concurrently with or subsequently to ATCs S-1326-9-20, S-1326-294-6, S-1326-314-4 and S-1326-400-0. [District Rule 2201] Federally Enforceable Through Title V Permit

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

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# ATTACHMENT B

Previous Title V Operating Permit

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**San Joaquin Valley**  
AIR POLLUTION CONTROL DISTRICT



**HEALTHY AIR LIVING™**

# Permit to Operate

**FACILITY:** S-1326

**EXPIRATION DATE:** 03/31/2006

**LEGAL OWNER OR OPERATOR:**

VINTAGE PRODUCTION CALIFORNIA LLC

**MAILING ADDRESS:**

9600 MING AVE, SUITE 300  
BAKERSFIELD, CA 93311

**FACILITY LOCATION:**

HEAVY OIL CENTRAL STATIONARY SOURCE  
KERN COUNTY, CA

**FACILITY DESCRIPTION:**

OIL AND NATURAL GAS PRODUCTION

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

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

**Seyed Sadredin**  
Executive Director / APCO

**David Warner**  
Director of Permit Services

# San Joaquin Valley Air Pollution Control District

FACILITY: S-1326-0-1

EXPIRATION DATE: 03/31/2006

## FACILITY-WIDE REQUIREMENTS

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1. The owner or operator shall notify the District of any breakdown condition as soon as reasonably possible, but no later than one hour after its detection, unless the owner or operator demonstrates to the District's satisfaction that the longer reporting period was necessary. [District Rule 1100, 6.1; County Rules 110 (Fresno, Stanislaus, San Joaquin); 109 (Merced); 113 (Madera); and 111 (Kern, Tulare, Kings)] Federally Enforceable Through Title V Permit
2. The District shall be notified in writing within ten days following the correction of any breakdown condition. The breakdown notification shall include a description of the equipment malfunction or failure, the date and cause of the initial failure, the estimated emissions in excess of those allowed, and the methods utilized to restore normal operations. [District Rule 1100, 7.0; County Rules 110 (Fresno, Stanislaus, San Joaquin); 109 (Merced); 113 (Madera); and 111 (Kern, Tulare, Kings)] Federally Enforceable Through Title V Permit
3. The owner or operator of any stationary source operation that emits more than 25 tons per year of nitrogen oxides or reactive organic compounds, shall provide the District annually with a written statement in such form and at such time as the District prescribes, showing actual emissions of nitrogen oxides and reactive organic compounds from that source. [District Rule 1160, 5.0] Federally Enforceable Through Title V Permit
4. Any person building, altering or replacing any operation, article, machine, equipment, or other contrivance, the use of which may cause the issuance of air contaminants or the use of which may eliminate, reduce, or control the issuance of air contaminants, shall first obtain an Authority to Construct (ATC) from the District unless exempted by District Rule 2020. [District Rules 2010, 3.0 and 4.0; and 2020] Federally Enforceable Through Title V Permit
5. The permittee must comply with all conditions of the permit including permit revisions originated by the District. All terms and conditions of a permit that are required pursuant to the Clean Air Act (CAA), including provisions to limit potential to emit, are enforceable by the EPA and Citizens under the CAA. Any permit noncompliance constitutes a violation of the CAA and the District Rules and Regulations, and is grounds for enforcement action, for permit termination, revocation, reopening and reissuance, or modification; or for denial of a permit renewal application. [District Rules 2070, 7.0; 2080; and 2520, 9.8.1 and 9.12.1] Federally Enforceable Through Title V Permit
6. A Permit to Operate or an Authority to Construct shall not be transferred unless a new application is filed with and approved by the District. [District Rule 2031] Federally Enforceable Through Title V Permit
7. Every application for a permit required under Rule 2010 (Permits Required) shall be filed in a manner and form prescribed by the District. [District Rule 2040] Federally Enforceable Through Title V Permit
8. The operator shall maintain records of required monitoring that include: 1) the date, place, and time of sampling or measurement; 2) the date(s) analyses were performed; 3) the company or entity that performed the analysis; 4) the analytical techniques or methods used; 5) the results of such analysis; and 6) the operating conditions at the time of sampling or measurement. [District Rule 2520, 9.5.1] Federally Enforceable Through Title V Permit
9. The operator shall retain records of all required monitoring data and support information for a period of at least 5 years from the date of the monitoring sample, measurement, or report. Support information includes copies of all reports required by the permit and, for continuous monitoring instrumentation, all calibration and maintenance records and all original strip-chart recordings. [District Rule 2520, 9.5.2] Federally Enforceable Through Title V Permit

FACILITY-WIDE REQUIREMENTS CONTINUE ON NEXT PAGE

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

Facility Name: VINTAGE PRODUCTION CALIFORNIA LLC  
Location: HEAVY OIL CENTRAL STATIONARY SOURCE, KERN COUNTY, CA  
S-1326-0-1: Sep 30 2011 12:10PM - DAVIDSOB

10. The operator shall submit reports of any required monitoring at least every six months unless a different frequency is required by an applicable requirement. All instances of deviations from permit requirements must be clearly identified in such reports. [District Rule 2520, 9.6.1] Federally Enforceable Through Title V Permit
11. Deviations from permit conditions must be promptly reported, including deviations attributable to upset conditions, as defined in the permit. For the purpose of this condition, promptly means as soon as reasonably possible, but no later than 10 days after detection. The report shall include the probable cause of such deviations, and any corrective actions or preventive measures taken. All required reports must be certified by a responsible official consistent with section 10.0 of District Rule 2520. [District Rules 2520, 9.6.2 and 1100, 7.0] Federally Enforceable Through Title V Permit
12. If for any reason a permit requirement or condition is being challenged for its constitutionality or validity by a court of competent jurisdiction, the outcome of such challenge shall not affect or invalidate the remainder of the conditions or requirements in that permit. [District Rule 2520, 9.8] Federally Enforceable Through Title V Permit
13. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit. [District Rule 2520, 9.9.1] Federally Enforceable Through Title V Permit
14. The permit may be modified, revoked, reopened and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition. [District Rule 2520, 9.9.3] Federally Enforceable Through Title V Permit
15. The permit does not convey any property rights of any sort, or any exclusive privilege. [District Rule 2520, 9.9.4] Federally Enforceable Through Title V Permit
16. The Permittee shall furnish to the District, within a reasonable time, any information that the District may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the District copies of records required to be kept by the permit or, for information claimed to be confidential, the permittee may furnish such records directly to EPA along with a claim of confidentiality. [District Rule 2520, 9.9.5] Federally Enforceable Through Title V Permit
17. The permittee shall pay annual permit fees and other applicable fees as prescribed in Regulation III of the District Rules and Regulations. [District Rule 2520, 9.10] Federally Enforceable Through Title V Permit
18. Upon presentation of appropriate credentials, a permittee shall allow an authorized representative of the District to enter the permittee's premises where a permitted source is located or emissions related activity is conducted, or where records must be kept under condition of the permit. [District Rule 2520, 9.14.2.1] Federally Enforceable Through Title V Permit
19. Upon presentation of appropriate credentials, a permittee shall allow an authorized representative of the District to have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit. [District Rule 2520, 9.14.2.2] Federally Enforceable Through Title V Permit
20. Upon presentation of appropriate credentials, a permittee shall allow an authorized representative of the District to inspect at reasonable times any facilities, equipment, practices, or operations regulated or required under the permit. [District Rule 2520, 9.14.2.3] Federally Enforceable Through Title V Permit
21. Upon presentation of appropriate credentials, a permittee shall allow an authorized representative of the District to sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with the permit or applicable requirements. [District Rule 2520, 9.14.2.4] Federally Enforceable Through Title V Permit
22. No air contaminants shall be discharged into the atmosphere for a period or periods aggregating more than 3 minutes in any one hour which is as dark or darker than Ringelmann #1 or equivalent to 20% opacity and greater, unless specifically exempted by District Rule 4101, by using EPA method 9. If the equipment or operation is subject to a more stringent visible emission standard as prescribed in a permit condition, the more stringent visible emission limit shall supersede this condition. [District Rule 4101, and County Rules 401 (in all eight counties in the San Joaquin Valley)] Federally Enforceable Through Title V Permit

FACILITY-WIDE REQUIREMENTS CONTINUE ON NEXT PAGE

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

23. No person shall supply, sell, solicit or apply any architectural coating, except specialty coatings, that contains more than 250 grams of VOC per liter of coating (less water and exempt compounds, and excluding any colorant added to tint bases), or manufacture, blend, or repackage such coating with more than 250 grams of VOC per liter (less water and exempt compounds, and excluding any colorant added to tint bases) for use within the District. [District Rule 4601, 5.1] Federally Enforceable Through Title V Permit
24. No person shall apply, sell, solicit, or offer for sale any specialty architectural coating listed in the Table of Standards (District Rule 4601, Table 1 and Table 2), nor manufacture, blend, or repackage such coating for use within the District, which contains VOCs (less water and exempt compounds, excluding any colorant added to tint bases) in excess of the specified limits listed in Table 1 (grams of VOC per liter of coating as applied less water and exempt compounds, excluding any colorant added to tint bases) and in Table 2 (grams of VOC per liter of material), except as provide in Section 5.3 of Rule 4601. [District Rule 4601, 5.2] Federally Enforceable Through Title V Permit
25. All VOC-containing materials shall be stored in closed containers when not in use. In use includes, but is not limited to: being accessed, filled, emptied, maintained or repaired. [District Rule 4601, 5.4] Federally Enforceable Through Title V Permit
26. A person shall not use VOCs for the cleanup of spray equipment unless equipment for collection of the cleaning compounds and minimizing its evaporation to the atmosphere is used. [District Rule 4601, 5.5] Federally Enforceable Through Title V Permit
27. The permittee shall comply with all the Labeling and Test Methods requirements outlined in Rule 4601 sections 6.1 and 6.2. [District Rule 4601, 6.1 and 6.2] Federally Enforceable Through Title V Permit
28. With each report or document submitted under a permit requirement or a request for information by the District or EPA, the permittee shall include a certification of truth, accuracy, and completeness by a responsible official. [District Rule 2520, 9.14.1 and 10.0] Federally Enforceable Through Title V Permit
29. If the permittee performs maintenance on, or services, repairs, or disposes of appliances, the permittee shall comply with the standards for Recycling and Emissions Reduction pursuant to 40 CFR Part 82, Subpart F. [40 CFR 82 Subpart F] Federally Enforceable Through Title V Permit
30. If the permittee performs service on motor vehicles when this service involves the ozone-depleting refrigerant in the motor vehicle air conditioner (MVAC), the permittee shall comply with the standards for Servicing of Motor Vehicle Air Conditioners pursuant to all the applicable requirements as specified in 40 CFR Part 82, Subpart B. [40 CFR Part 82, Subpart B] Federally Enforceable Through Title V Permit
31. Disturbances of soil related to any construction, demolition, excavation, extraction, or water mining activities shall comply with the requirements for fugitive dust control in SJVUAPCD District Rule 8020 unless specifically exempted under section 4 of Rule 8020. [District Rule 8020] Federally Enforceable Through Title V Permit
32. Outdoor handling and storage of any bulk material which emits dust shall comply with the requirements of SJVUAPCD Rule 8030, unless specifically exempted under section 4 of Rule 8030. [District Rule 8030] Federally Enforceable Through Title V Permit
33. Any paved road over 3 miles in length, and any unpaved roads over half a mile in length, constructed after October 10, 1993 shall use the design criteria and dust control measures of, and comply with the administrative requirements of, SJVUAPCD Rule 8060 unless specifically exempted under section 4 of Rule 8060. [District Rule 8060] Federally Enforceable Through Title V Permit
34. Any owner or operator of a demolition or renovation activity, as defined in 40 CFR 61.141, shall comply with the applicable inspection, notification, removal, and disposal procedures for asbestos containing materials as specified in 40 CFR 61.145 (Standard for Demolition and Renovation). [40 CFR 61 Subpart M] Federally Enforceable Through Title V Permit

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

35. The permittee shall submit certifications of compliance with the terms and standards contained in Title V permits, including emission limits, standards and work practices, to the District and the EPA annually (or more frequently as specified in an applicable requirement or as specified by the District). The certification shall include the identification of each permit term or condition, the compliance status, whether compliance was continuous or intermittent, the methods used for determining the compliance status, and any other facts required by the District to determine the compliance status of the source. [District Rule 2520, 9.17] Federally Enforceable Through Title V Permit
36. The permittee shall submit an application for Title V permit renewal to the District at least six months, but not greater than 18 months, prior to the permit expiration date. [District Rule 2520, 5.2] Federally Enforceable Through Title V Permit
37. When a term is not defined in a Title V permit condition, the definition in the rule cited as the origin and authority for the condition in a Title V permit shall apply. [District Rule 2520, 9.1.1] Federally Enforceable Through Title V Permit
38. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following outdated SIP requirements: Rule 401 (Madera, Fresno, Kern, Kings, San Joaquin, Stanislaus, Tulare and Merced), Rule 110 (Fresno, Stanislaus, San Joaquin), Rule 109 (Merced), Rule 113 (Madera), Rule 111 (Kern, Tulare, Kings), and Rule 202 (Fresno, Kern, Tulare, Kings, Madera, Stanislaus, Merced, San Joaquin). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
39. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements: SJVUAPCD Rules 1100, sections 6.1 and 7.0 (12/17/92); 2010, sections 3.0 and 4.0 (12/17/92); 2031 (12/17/92); 2040 (12/17/92); 2070, section 7.0 (12/17/92); 2080 (12/17/92); 4101 (12/17/92); 4601, sections 5.1, 5.2, 5.4, 5.5, 6.1, and 6.2 (9/17/97); 8020 (4/25/96); 8030 (4/25/96); and 8060 (4/25/96). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
40. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
41. Should the facility, as defined in 40 CFR 68.3, become subject to Part 68, then the owner or operator shall submit a risk management plan (RMP) by the date specified in 40 CFR 68.10. The facility shall certify compliance as part of the annual certification as required by 40 CFR part 70. [40 CFR 68] Federally Enforceable Through Title V Permit
42. On August 31, 2001, the initial Title V permit was issued, the reporting periods for the Report of Required Monitoring and the Compliance Certification Report are based upon this initial permit issuance date, unless alternative dates are approved by the District Compliance Division. This reports are due within 30 days of the end of reporting period. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

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



# San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1326-9-17

EXPIRATION DATE: 03/31/2006

SECTION: SE23 TOWNSHIP: 28S RANGE: 27E

## EQUIPMENT DESCRIPTION:

62.5 MMBTU/HR NATURAL GAS-FIRED STRUTHERS STEAM GENERATOR WITH A NORTH AMERICAN MAGNA-FLAME G-LE ULTRA LOW NOX BURNER AND A FLUE GAS RECIRCULATION (FGR) SYSTEM - DIS# 21928-82 (NORTH TREATING PLANT)

## PERMIT UNIT REQUIREMENTS

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1. All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District Rule 2201] Federally Enforceable Through Title V Permit
2. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
3. The unit shall only be fired on PUC-regulated natural gas and scrubbed TEOR and TVR gas from S-1326-26, '-27, '-28, '-35 and '-263 with a sulfur content no greater than 1 gr S/100 scf. [District Rule 2201] Federally Enforceable Through Title V Permit
4. Permittee shall test annually the sulfur content of TEOR/TVR gas combusted in steam generator using ASTM method D1072, D3031, D4084, or D3246 and make test results readily available for District inspection. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
5. Emissions rates from the steam generator shall not exceed any of the following limits: 14 ppmvd NOx @ 3% O2 or 0.017 lb-NOx/MMBtu, 0.0076 lb-PM10/MMBtu, 75 ppmvd CO @ 3% O2 or 0.055 lb-CO/MMBtu, or 0.0055 lb-VOC/MMBtu. [District Rules 2201, 4305, and 4306] Federally Enforceable Through Title V Permit
6. All emissions measurements shall be made with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. No determination of compliance shall be established within two hours after a continuous period in which fuel flow to the unit is shut off for 30 minutes or longer, or within 30 minutes after a re-ignition as defined in Section 3.0 of District Rule 4306. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
7. Source testing to measure natural gas-combustion NOx and CO emissions from this unit shall be conducted at least once every twelve (12) months. After demonstrating compliance on two (2) consecutive annual source tests, the unit shall be tested not less than once every thirty-six (36) months. If the result of the 36-month source test demonstrates that the unit does not meet the applicable emission limits, the source testing frequency shall revert to at least once every twelve (12) months. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
8. The source test plan shall identify which basis (ppmv or lb/MMBtu) will be used to demonstrate compliance. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
9. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

10. The following test methods shall be used: NO<sub>x</sub> (ppmv) - EPA Method 7E or ARB Method 100, NO<sub>x</sub> (lb/MMBtu) - EPA Method 19, CO (ppmv) - EPA Method 10 or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, stack gas moisture content - EPA Method 4, stack gas velocities - EPA Method 2, and fuel gas sulfur content - ASTM D1072, ASTM D3246, ASTM D6228 (GC-FPD) or double GC for H<sub>2</sub>S and mercaptans. [District Rule 1081, 4305, 4306, 6.2, and 4351] Federally Enforceable Through Title V Permit
11. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
12. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
13. The permittee shall monitor and record the stack concentration of NO<sub>x</sub>, CO, and O<sub>2</sub> at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless monitoring has been performed within the last month. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
14. If either the NO<sub>x</sub> or CO concentrations corrected to 3% O<sub>2</sub>, as measured by the portable analyzer, exceed the allowable emissions concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
15. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
16. The permittee shall maintain records of: (1) the date and time of NO<sub>x</sub>, CO, and O<sub>2</sub> measurements, (2) the O<sub>2</sub> concentration in percent and the measured NO<sub>x</sub> and CO concentrations corrected to 3% O<sub>2</sub>, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
17. Permittee shall maintain records of fuel gas sulfur compound measurements. [District Rule 2201] Federally Enforceable Through Title V Permit
18. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070, 4305, and 4306] Federally Enforceable Through Title V Permit

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-1326-26-19

**EXPIRATION DATE:** 03/31/2006

**SECTION:** NE23 **TOWNSHIP:** 28S **RANGE:** 27E

**EQUIPMENT DESCRIPTION:**

THERMALLY ENHANCED OIL RECOVERY OPERATION WITH WELL VENT VAPOR CONTROL SYSTEM SERVING 120 STEAM ENHANCED WELLS, INCLUDING SULFA-TREAT SYSTEM, GAS TRAPS, COLLECTION PIPING, VAPOR COMPRESSOR WITH ELECTRIC MOTOR, AND PIPING TO FIELD FUEL GAS SYSTEM, DOGGR DISPOSAL WELL, AND FLARE (FANO)

## PERMIT UNIT REQUIREMENTS

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1. TEOR operation shall include sulfatreat system, gas traps, collection piping, vapor compressor with electric motor, piping to field fuel gas system, piping to steam generators S-1326-9, '-294, '-314, '-337, and '-338, DOGGR disposal well and flare (Fano). [District Rule 2201] Federally Enforceable Through Title V Permit
2. Wells may be operated with closed casing vents or be vented to vapor control system. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Fluids produced from wells with closed vents shall be introduced only to production equipment served by vapor control system listed on tank S-1326-46 which is 99% efficient. [District Rule 2201] Federally Enforceable Through Title V Permit
4. The crude oil production from wells associated with this permit unit shall not lie within 1000 feet of an air injection well used for in-situ combustion. [District Rule 4407, 2.0, 3.4, and 3.5] Federally Enforceable Through Title V Permit
5. During the time any steam-enhanced crude oil production well is undergoing service or repair while the well is not producing, it shall be exempt from the emission control requirements of District Rule 4401, 5.0 (as amended January 15, 1998). [District Rule 4401, 4.1] Federally Enforceable Through Title V Permit
6. All required source testing shall conform to the compliance testing procedures described in District Rule 1081(as amended December 16, 1993). [District Rule 1081] Federally Enforceable Through Title V Permit
7. The operator shall maintain monitoring records of the date and well identification where steam injection or well stimulation occurs. [District Rule 4401, 6.1] Federally Enforceable Through Title V Permit
8. The uncontrolled VOC emissions from any well vent shall be reduced by at least 99 percent by weight or, if several steam-enhanced crude oil production well vents are connected to a vapor collection and control system, total uncontrolled VOC emissions shall be reduced by at least 99 percent. This requirement does not apply to cyclic wells located on contiguous and adjacent oil production properties with less than 10 cyclic wells owned by or under the control of a company. [District Rule 4401, 5.1 and 5.2] Federally Enforceable Through Title V Permit
9. For cyclic wells located on properties with less than 10 cyclic wells and owned by a company, the uncontrolled VOC emissions from any well vent or system of well vents connected to a single control device shall be reduced by at least 50 percent. Properties shall include contiguous and adjacent oil production properties owned by or under control of the company. [District Rule 4401, 5.4] Federally Enforceable Through Title V Permit
10. Total number of leaks from the vapor collection and control system, including condensate handling, shall not exceed the number as allowed by Rule 4401 (as amended January 15, 1998) at any one time. [District Rule 4401, 5.3] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

11. Operator shall affix a readily visible tag bearing the date on which a leak is detected. The tag shall remain in place until the leaking component is repaired. [District Rule 4401, 5.3.1] Federally Enforceable Through Title V Permit
12. Operator shall repair each leak within 15 days of detection. The APCO may grant a 10 day extension if the operator demonstrates that the necessary and sufficient actions have and are being taken to correct the leak. [District Rule 4401, 5.3.1] Federally Enforceable Through Title V Permit
13. Operator shall maintain all components of a well vent vapor collection and control system in good repair. Components of the well vent vapor collection and control system shall include all piping, valves, fittings, pumps, compressors, tanks, etc. used to collect, control, store, or dispose of VOC condensate or non-condensable VOCs and which is prior to any blending of VOC condensate with crude oil or blending of non-condensable VOCs with gases to be used as a fuel. [District Rule 4401, 5.3 and 5.3.2] Federally Enforceable Through Title V Permit
14. Annual control efficiency compliance tests shall be performed on all vapor collection and control systems used to control emissions from steam-enhanced crude oil production wells. Testing shall be performed by source tester certified by the California Air Resource Board (CARB) certified contractors 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 the requirements of this condition if the vapor control system does not exhaust to atmosphere or if all uncondensed VOC emissions collected by a vapor collection and control system are burned in fuel burning equipment or in a smokeless open flare and the source's Operating Permit contains adequate periodic monitoring to ensure the source meets 99% control efficiency. [District Rule 4401, 5.1, 5.2 and 6.2.1] Federally Enforceable Through Title V Permit
15. The control efficiency of the vapor collection and control system used to control VOC emissions from steam enhanced crude oil production well shall be determined by mass balance based on most stringent of a source test, USEPA approved emission factors, or Air Pollution (AP)-42 emission factors for components; and the efficiency of destruction devices determined by USEPA Method 25, 25a, or 25b as applicable. [District Rule 4401, 6.3.1] Federally Enforceable Through Title V Permit
16. The permittee shall perform leak inspections at least annually, using a portable hydrocarbon detection instrument in accordance with USEPA Method 21. [District Rules 2520, 9.3.2 and 4401, 6.2.4] Federally Enforceable Through Title V Permit
17. Compliance with permit conditions in the Title V permit shall be deemed compliance with Kern County Rule 108.1. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
18. Compliance with permit conditions in the Title V permit shall be deemed compliance with SJVUAPCD Rule 4401 (Amended January 15, 1998), excluding sections 5.1 and 5.2 for control systems which have been waived from complying with the requirement of section 6.2.1. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
19. The requirements of SJVUAPCD Rule 4407 (Adopted May 19, 1994) do not apply to this permit unit. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
20. Permittee shall maintain with the permit a current listing of all steam enhanced wells connected to the casing vent control system and shall make such listing readily available for District inspection upon request. [District Rule 4401] Federally Enforceable Through Title V Permit
21. Sulfur content of scrubbed TEOR gas and flare pilot gas shall not exceed 1 gr/100scf. [District Rule 2201] Federally Enforceable Through Title V Permit
22. The well vent vapors and tank vapors from vapor collection systems #S-1326-46 shall vent only to existing otherwise permit exempt combustion equipment, DOGGR approved injection wells, 2.9 MMBtu/hr waste gas flare, or steam generators S-1326-9, '-294, '-314, '-337, and '-338. [District Rule 2201] Federally Enforceable Through Title V Permit
23. Flare shall be used exclusively for incineration of vapors from this TEOR control system and tank vapor control systems #S-1326-46. [District NSR Rule] Federally Enforceable Through Title V Permit
24. Collected liquids shall be piped only to vapor controlled tanks. [District NSR Rule] 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.

25. VOC content of well vent vapor gas shall not exceed 10% by weight. If the VOC content of the well vent vapor gas is less than 10% by weight for 8 consecutive quarterly samplings per District approved plan, sampling frequency shall only be required annually. Representative samples shall be collected during periods of normal operation and not be within 48 hours after routine maintenance or repair. Records of test shall be maintained for a period of five years and be made readily available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit
26. VOC content shall be determined using ASTM Method D1945, D3588, or EPA Method 18 as applicable. [District Rule 4401, 6.2.3] Federally Enforceable Through Title V Permit
27. Emissions from waste gas flare shall not exceed: VOC: 0.063 lb/MMBtu; NOx: 0.068 lb/MMBtu; PM10: 0.008 lb/MMBtu; and CO: 0.37 lb/MMBtu. [District NSR Rule] Federally Enforceable Through Title V Permit
28. The higher heating value of the flared gas shall be monitored at least quarterly. Measured higher heating value and quantity of gas flared shall be used to determine compliance with heat input limits. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
29. Permittee shall test annually the sulfur content of casing gas combusted in permit exempt equipment using ASTM method D1072, D3031, D4084, or D3246 and make test results readily available for District inspection. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
30. The flare shall be operated according to the manufacturer's specifications, a copy of which shall be maintained on site. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
31. If this flare requires a pilot flame, then the flare shall be operated with a flame present at all times, and kept in operation when emissions may be vented to it. The presence of a flare pilot flame shall be monitored using a thermocouple or any other equivalent device to detect the presence of a flame. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
32. This flare shall be inspected every two weeks while in operation for visible emissions. If visible emissions are observed, corrective action shall be taken. If visible emissions continue, an EPA Method 9 test shall be conducted within 72 hours. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
33. This flare shall not be used as a leak control device as described in Rule 4403, 5.3.1, nor as a control device for any permit unit subject to NSPS, without modification of permit requirements to address 40 CFR 60.18. [District Rule 2520, 9.3.3] Federally Enforceable Through Title V Permit
34. Sulfa Treat equipment shall be purged with natural gas, inert gas, or air prior to opening any vessel, filter, pipeline or connection to prevent sulfur compound emissions. [District Rule 2201] Federally Enforceable Through Title V Permit

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

# San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1326-27-17

EXPIRATION DATE: 03/31/2006

SECTION: 02 TOWNSHIP: 28S RANGE: 27E

## EQUIPMENT DESCRIPTION:

THERMALLY ENHANCED OIL RECOVERY (TEOR) OPERATION WITH WELL VENT VAPOR CONTROL SYSTEM SERVING UP TO 100 STEAM ENHANCED WELLS INCLUDING: GAS LIQUID SEPARATORS, COMPRESSOR, CONDENSATE HANDLING AND 2.9 MMBTU/HR AIR ASSISTED FLARE (SECTION 2 EAST CVR)

## PERMIT UNIT REQUIREMENTS

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1. Wells may be operated with closed casing vents or be vented to vapor control system. [District Rule 2201] Federally Enforceable Through Title V Permit
2. TEOR operation (Section 2 East CVR) shall include gas liquid separator, compressor, condensate handling equipment, 2.9 MMBtu/hr McGill, #1011-2, flare equipped with 2 in. dia. burner tip, 1/2 hp air assist blower, and K/O drum at flare base and vapor piping from TEOR system S-1326-28. [District NSR Rule] Federally Enforceable Through Title V Permit
3. The well vent vapors shall vent only to 2.9 MMBtu/hr waste gas flare or steam generators S-1326-9, '-294, '-314, '-337, and '-338. [District NSR Rule] Federally Enforceable Through Title V Permit
4. Fluids produced from wells with closed vents shall be introduced only to production equipment served by vapor control system listed on tank S-1326-201 which is 99% efficient. [District NSR Rule] Federally Enforceable Through Title V Permit
5. The crude oil production from wells associated with this permit unit shall not lie within 1000 feet of an air injection well used for in-situ combustion. [District Rule 4407, 2.0, 3.4, and 3.5] Federally Enforceable Through Title V Permit
6. During the time any steam-enhanced crude oil production well is undergoing service or repair while the well is not producing, it shall be exempt from the emission control requirements of District Rule 4401, 5.0 (as amended January 15, 1998). [District Rule 4401, 4.1] Federally Enforceable Through Title V Permit
7. All required source testing shall conform to the compliance testing procedures described in District Rule 1081 (as amended December 16, 1993). [District Rule 1081] Federally Enforceable Through Title V Permit
8. The operator shall maintain monitoring records of the date and well identification where steam injection or well stimulation occurs. [District Rule 4401, 6.1] Federally Enforceable Through Title V Permit
9. The uncontrolled VOC emissions from any well vent shall be reduced by at least 99 percent by weight or, if several steam-enhanced crude oil production well vents are connected to a vapor collection and control system, total uncontrolled VOC emissions shall be reduced by at least 99 percent. This requirement does not apply to cyclic wells located on contiguous and adjacent oil production properties with less than 10 cyclic wells owned by or under the control of a company. [District Rule 4401, 5.1 and 5.2] Federally Enforceable Through Title V Permit
10. For cyclic wells located on properties with less than 10 cyclic wells and owned by a company, the uncontrolled VOC emissions from any well vent or system of well vents connected to a single control device shall be reduced by at least 50 percent. Properties shall include contiguous and adjacent oil production properties owned by or under control of the company. [District Rule 4401, 5.4] 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.

11. Total number of leaks from the vapor collection and control system, including condensate handling, shall not exceed the number as allowed by Rule 4401 (as amended January 15, 1998) at any one time. [District Rule 4401, 5.3] Federally Enforceable Through Title V Permit
12. Operator shall affix a readily visible tag bearing the date on which a leak is detected. The tag shall remain in place until the leaking component is repaired. [District Rule 4401, 5.3.1] Federally Enforceable Through Title V Permit
13. Operator shall repair each leak within 15 days of detection. The APCO may grant a 10 day extension if the operator demonstrates that the necessary and sufficient actions have and are being taken to correct the leak. [District Rule 4401, 5.3.1] Federally Enforceable Through Title V Permit
14. Operator shall maintain all components of a well vent vapor collection and control system in good repair. Components of the well vent vapor collection and control system shall include all piping, valves, fittings, pumps, compressors, tanks, etc. used to collect, control, store, or dispose of VOC condensate or non-condensable VOCs and which is prior to any blending of VOC condensate with crude oil or blending of non-condensable VOCs with gases to be used as a fuel. [District Rule 4401, 5.3 and 5.3.2] Federally Enforceable Through Title V Permit
15. Annual control efficiency compliance tests shall be performed on all vapor collection and control systems used to control emissions from steam-enhanced crude oil production wells. Testing shall be performed by source tester certified by the California Air Resource Board (CARB) certified contractors 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 the requirements of this condition if the vapor control system does not exhaust to atmosphere or if all uncondensed VOC emissions collected by a vapor collection and control system are burned in fuel burning equipment or in a smokeless open flare and the source's Operating Permit contains adequate periodic monitoring to ensure the source meets 99% control efficiency. [District Rule 4401, 5.1, 5.2 and 6.2.1] Federally Enforceable Through Title V Permit
16. The control efficiency of the vapor collection and control system used to control VOC emissions from steam enhanced crude oil production well shall be determined by mass balance based on most stringent of a source test, USEPA approved emission factors, or Air Pollution (AP)-42 emission factors for components; and the efficiency of destruction devices determined by USEPA Method 25, 25a, or 25b as applicable. [District Rule 4401, 6.3.1] Federally Enforceable Through Title V Permit
17. The source shall perform leak inspections at least annually, using a portable hydrocarbon detection instrument in accordance with USEPA Method 21. [District Rules 2520, 9.3.2 and 4401, 6.3.3] Federally Enforceable Through Title V Permit
18. Compliance with permit conditions in the Title V permit shall be deemed compliance with Kern County Rule 108.1. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
19. Compliance with permit conditions in the Title V permit shall be deemed compliance with SJVUAPCD Rule 4401 (Amended January 15, 1998), excluding sections 5.1 and 5.2 for control systems which have been waived from complying with the requirement of section 6.2.1. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
20. The requirements of District Rule 4407 (Adopted May 19, 1994) do not apply to this permit unit because it is not an in situ combustion well vent. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
21. Flare Visible emissions shall not exceed 1/4 Ringelmann. [District NSR Rule] Federally Enforceable Through Title V Permit
22. Sulfur content of scrubbed TEOR gas and flare pilot gas shall not exceed 1 gr/100scf. [District Rule 2201] Federally Enforceable Through Title V Permit
23. All well vent gas shall be desulfurized prior to incineration and shall be disposed of in flare only. [District NSR Rule] 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.

24. Emission rates for flare shall not exceed any of the following limits: 0.008 lb-PM10/MMBtu, 0.068 lb-NO<sub>x</sub>/MMBtu (as NO<sub>2</sub>), 0.063 lb-VOC/MMBtu, or 0.37 lb-CO/MMBtu. [District NSR Rule] Federally Enforceable Through Title V Permit
25. The higher heating value of the flared gas shall be monitored at least quarterly. Measured higher heating value and quantity of gas flared shall be used to determine compliance with heat input limits. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
26. VOC content of well vent vapor gas shall not exceed 10% by weight. If the VOC content of the well vent vapor gas is less than 10% by weight for 8 consecutive quarterly samplings per District approved plan, sampling frequency shall only be required annually. Representative samples shall be collected during periods of normal operation and not be within 48 hours after routine maintenance or repair. Records of test shall be maintained for a period of five years and be made readily available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit
27. VOC content shall be determined using ASTM Method E168, E169, or E260 as applicable. Halogenated exempt compounds shall be determined by CARB Method 432. [District Rule 4401, 6.3.2] Federally Enforceable Through Title V Permit
28. Permittee shall test annually the sulfur content of scrubbed casing gas using ASTM method D1072, D3031, D4084, or D3246 and make test results readily available for District inspection. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
29. Permittee shall maintain a current well roster and shall make such roster, component count and resulting emissions readily available for District inspection upon request. [District Rule 1070] Federally Enforceable Through Title V Permit
30. Condensed liquids from condensate handling system shall be piped in closed systems to the WASP disposal well. [District NSR Rule] Federally Enforceable Through Title V Permit
31. Emergency condensate overflow pit shall be empty except during breakdown conditions pursuant to Rule 1100. [District NSR Rule] Federally Enforceable Through Title V Permit
32. All wells served by this vapor control system shall be shut-in and shall not vent to the atmosphere in the event of failure of the non-condensable VOC disposal system. [District NSR Rule] Federally Enforceable Through Title V Permit
33. Permittee shall at least monthly, measure and record sulfur content and BTU content of TEOR gas exiting the desulfurizer using ASTM method D1072, D3031, D4084, D3246 or a gas detector tube, and shall make all records and analyses readily available for District inspection. [District NSR Rule and District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
34. Permittee shall maintain daily records of pilot gas and TEOR gas flared and shall make such records readily available for District inspection for a period of five years. [District Rule 2520, 9.4.2 and District Rule 1070] Federally Enforceable Through Title V Permit
35. The flare shall be operated according to the manufacturer's specifications, a copy of which shall be maintained on site. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
36. If this flare requires a pilot flame, then the flare shall be operated with a flame present at all times, and kept in operation when emissions may be vented to it. The presence of a flare pilot flame shall be monitored using a thermocouple or any other equivalent device to detect the presence of a flame. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
37. This flare shall be inspected every two weeks while in operation for visible emissions. If visible emissions are observed, corrective action shall be taken. If visible emissions continue, an EPA Method 9 test shall be conducted within 72 hours. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
38. This flare shall not be used as a leak control device as described in Rule 4403, 5.3.1, nor as a control device for any permit unit subject to NSPS, without modification of permit requirements to address 40 CFR 60.18. [District Rule 2520, 9.3.3] Federally Enforceable Through Title V Permit

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





# San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1326-28-16

EXPIRATION DATE: 03/31/2006

SECTION: 2 TOWNSHIP: 28S RANGE: 27E

## EQUIPMENT DESCRIPTION:

THERMALLY ENHANCED OIL RECOVERY OPERATION INCLUDING DEEP EMERGENCY OVERFLOW PIT WITH MESH COVER, HORIZONTAL GAS-LIQUID SEPARATOR, AIR-COOLED HEAT EXCHANGER, HORIZONTAL CONDENSATE COLLECTION VESSEL WITH LIQUID TRANSFER PUMPS, 30 HP COMPRESSOR (K-101), 2.9 MMBTU/HR MCGILL STANDBY FLARE (#1011-2) EQUIPPED WITH 2 IN DIA BURNER TIP, AIR ASSIST BLOWER, KO DRUM SHARED WITH PERMIT UNIT S-1326-27, AND WELL VENT VAPOR CONTROL SYSTEM SERVING 150 STEAM DRIVE WELLS

## PERMIT UNIT REQUIREMENTS

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1. TEOR operation shall include deep emergency overflow pit with mesh cover, horizontal gas-liquid separator, air-cooled heat exchanger, horizontal condensate collection vessel with liquid transfer pumps for the pumping of condensate to heavy oil tank battery, 30 hp compressor (K-101) with compressed vapors sent to common field fuel gas line, and production well vent casing line to TEOR system S-1326-27. [District NSR Rule] Federally Enforceable Through Title V Permit
2. Wells may be operated with closed casing vents or be vented to vapor control system. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Fluids produced from wells with closed vents shall be introduced only to production equipment served by vapor control system listed on tank S-1326-201 which is 99% efficient. [District NSR Rule] Federally Enforceable Through Title V Permit
4. The crude oil production from wells associated with this permit unit shall not lie within 1000 feet of an air injection well used for in-situ combustion. [District Rule 4407, 2.0, 3.4, and 3.5] Federally Enforceable Through Title V Permit
5. During the time any steam-enhanced crude oil production well is undergoing service or repair while the well is not producing, it shall be exempt from the emission control requirements of District Rule 4401, 5.0 (as amended January 15, 1998). [District Rule 4401, 4.1] Federally Enforceable Through Title V Permit
6. All required source testing shall conform to the compliance testing procedures described in District Rule 1081 (as amended December 16, 1993). [District Rule 1081] Federally Enforceable Through Title V Permit
7. The operator shall maintain monitoring records of the date and well identification where steam injection or well stimulation occurs. [District Rule 4401, 6.1] Federally Enforceable Through Title V Permit
8. The uncontrolled VOC emissions from any well vent shall be reduced by at least 99 percent by weight or, if several steam-enhanced crude oil production well vents are connected to a vapor collection and control system, total uncontrolled VOC emissions shall be reduced by at least 99 percent. This requirement does not apply to cyclic wells located on contiguous and adjacent oil production properties with less than 10 cyclic wells owned by or under the control of a company. [District Rule 4401, 5.1 and 5.2] Federally Enforceable Through Title V Permit
9. For cyclic wells located on properties with less than 10 cyclic wells and owned by a company, the uncontrolled VOC emissions from any well vent or system of well vents connected to a single control device shall be reduced by at least 50 percent. Properties shall include contiguous and adjacent oil production properties owned by or under control of the company. [District Rule 4401, 5.4] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

10. Total number of leaks from the vapor collection and control system, including condensate handling, shall not exceed the number as allowed by Rule 4401 (as amended January 15, 1998) at any one time. [District Rule 4401, 5.3] Federally Enforceable Through Title V Permit
11. Operator shall affix a readily visible tag bearing the date on which a leak is detected. The tag shall remain in place until the leaking component is repaired. [District Rule 4401, 5.3.1] Federally Enforceable Through Title V Permit
12. Operator shall repair each leak within 15 days of detection. The APCO may grant a 10 day extension if the operator demonstrates that the necessary and sufficient actions have and are being taken to correct the leak. [District Rule 4401, 5.3.1] Federally Enforceable Through Title V Permit
13. Operator shall maintain all components of a well vent vapor collection and control system in good repair. Components of the well vent vapor collection and control system shall include all piping, valves, fittings, pumps, compressors, tanks, etc. used to collect, control, store, or dispose of VOC condensate or non-condensable VOCs and which is prior to any blending of VOC condensate with crude oil or blending of non-condensable VOCs with gases to be used as a fuel. [District Rule 4401, 5.3 and 5.3.2] Federally Enforceable Through Title V Permit
14. Annual control efficiency compliance tests shall be performed on all vapor collection and control systems used to control emissions from steam-enhanced crude oil production wells. Testing shall be performed by source tester certified by the California Air Resource Board (CARB) certified contractors 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 the requirements of this condition if the vapor control system does not exhaust to atmosphere or if all uncondensed VOC emissions collected by a vapor collection and control system are burned in fuel burning equipment or in a smokeless open flare and the source's Operating Permit contains adequate periodic monitoring to ensure the source meets 99% control efficiency. [District Rule 4401, 5.1, 5.2 and 6.2.1] Federally Enforceable Through Title V Permit
15. The control efficiency of the vapor collection and control system used to control VOC emissions from steam enhanced crude oil production well shall be determined by mass balance based on most stringent of a source test, USEPA approved emission factors, or Air Pollution (AP)-42 emission factors for components; and the efficiency of destruction devices determined by USEPA Method 25, 25a, or 25b as applicable. [District Rule 4401, 6.3.1] Federally Enforceable Through Title V Permit
16. The source shall perform leak inspections at least annually, using a portable hydrocarbon detection instrument in accordance with USEPA Method 21. [District Rules 2520, 9.3.2 and 4401, 6.2.4] Federally Enforceable Through Title V Permit
17. Compliance with permit conditions in the Title V permit shall be deemed compliance with Kern County Rule 108.1. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
18. Compliance with permit conditions in the Title V permit shall be deemed compliance with SJVUAPCD Rule 4401 (Amended January 15, 1998), excluding sections 5.1 and 5.2 for control systems which have been waived from complying with the requirement of section 6.2.1. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
19. The requirements of District Rule 4407 (Adopted May 19, 1994) do not apply to this permit unit because it is not an in situ combustion well vent. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
20. Components shall be maintained and leaks shall be repaired as specified in Rule 4401. [District NSR Rule] Federally Enforceable Through Title V Permit
21. Permittee shall maintain with the permit a current listing of all steam enhanced wells connected to the casing vent control system and shall make such listing readily available for District inspection upon request. [District NSR Rule] Federally Enforceable Through Title V Permit
22. Well vent vapor control system shall include vapor piping connected to tank vapor control system listed on permit #S-1326-201. [District NSR Rule] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

23. Sulfur content of scrubbed TEOR gas shall not exceed 1 gr/100scf. [District Rule 2201] Federally Enforceable Through Title V Permit
24. Sulfur scrubber shall be operated to maintain continued compliance with fuel gas sulfur content limit of 1 grain-S/100 scf of fuel gas. [District NSR Rule] Federally Enforceable Through Title V Permit
25. Only PUC quality natural gas or comparable quality lease gas with sulfur content of 1 grain-S/100 scf or less shall be utilized as make-up gas for the horizontal condensate collection vessel and utilized as pilot fuel for standby flare. [District NSR Rule] Federally Enforceable Through Title V Permit
26. Sulfur scrubber shall be monitored monthly for H<sub>2</sub>S content of gas after treatment to determine when recharging is required. [District NSR Rule] Federally Enforceable Through Title V Permit
27. Permittee shall maintain a written record of H<sub>2</sub>S content and recharging dates and such records shall be made readily available for District inspection upon request. [District NSR Rule and District Rule 1070] Federally Enforceable Through Title V Permit
28. Permittee shall test annually the sulfur content of scrubbed casing gas using ASTM method D1072, D3031, D4084, or D3246 and make test results readily available for District inspection. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
29. VOC content of well vent vapor gas shall not exceed 10% by weight. If the VOC content of the well vent vapor gas is less than 10% by weight for 8 consecutive quarterly samplings per District approved plan, sampling frequency shall only be required annually. Representative samples shall be collected during periods of normal operation and not be within 48 hours after routine maintenance or repair. Records of test shall be maintained for a period of five years and be made readily available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit
30. VOC content shall be determined using ASTM Method E168, E169, or E260 as applicable. Halogenated exempt compounds shall be determined by CARB Method 432. [District Rule 4401, 6.2.3] Federally Enforceable Through Title V Permit
31. The emergency condensate overflow pit shall be empty except during breakdown conditions pursuant to Rule 1100. [District NSR Rule] Federally Enforceable Through Title V Permit
32. Well head casing vent gas collection system shall be shut-in and shall not vent to the atmosphere in the event of failure of the non-condensable VOC disposal system. [District NSR Rule] Federally Enforceable Through Title V Permit

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

# San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1326-35-10

EXPIRATION DATE: 03/31/2006

SECTION: 14 TOWNSHIP: 28S RANGE: 27E

## EQUIPMENT DESCRIPTION:

THERMALLY ENHANCED OIL RECOVERY OPERATION WITH WELL VENT VAPOR CONTROL SYSTEM SERVING 100 STEAM ENHANCED WELLS, INCLUDING 50 HP COMPRESSOR, ONE AIR-COOLED VAPOR CONDENSER, AND PIPING TO FIELD FUEL GAS SYSTEM, DOGGR DISPOSAL WELL, AND FLARE (S-1326-260) (SECTION 14 YOUNG)

## PERMIT UNIT REQUIREMENTS

1. TEOR operation shall include 50 hp compressor, one air-cooled vapor condenser, piping to field fuel gas system, DOGGR disposal well, and flare. (SECTION 14 Young). [District Rule 2201] Federally Enforceable Through Title V Permit
2. Wells may be operated with closed casing vents or be vented to vapor control system. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Collected vapors shall discharge to H<sub>2</sub>S scrubber prior to vapor combustion in flare or in steam generators S-1326-9, '-294, '-314, '-337, and '-338. [District NSR Rule] Federally Enforceable Through Title V Permit
4. Sulfur scrubber shall be monitored monthly for H<sub>2</sub>S content of gas after treatment to determine when recharging is required. [District NSR Rule and District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
5. Sulfur content of gas combusted in flare shall not exceed 1 gr/100 scf. [District NSR Rule, District Rule 4801, and Kern County Rule 407] Federally Enforceable Through Title V Permit
6. Permittee shall test annually the sulfur content of gas combusted in flare using ASTM method D1072, D3031, D4084, or D3246 and make test results readily available for District inspection. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
7. Flare shall operate with no visible emission in excess of 5% opacity. [District NSR Rule] Federally Enforceable Through Title V Permit
8. Maximum amount of gas (pilot and waste gas) combusted by flare shall not exceed 150.0 MMBtu/day. [District Rule 2201] Federally Enforceable Through Title V Permit
9. Emissions from the flare shall not exceed any of the following limits (based on total gas combusted): NO<sub>x</sub> (as NO<sub>2</sub>): 0.068 lb/MMBtu; PM<sub>10</sub>: 0.008 lb/MMBtu; CO: 0.37 lb/MMBtu; or VOC: 0.063 lb/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
10. The higher heating value of the flared gas shall be monitored at least quarterly. Measured higher heating value and quantity of gas flared shall be used to determine compliance with heat input limit. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
11. The flare shall be operated according to the manufacturer's specifications, a copy of which shall be maintained on site. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
12. If this flare requires a pilot flame, then the flare shall be operated with a flame present at all times, and kept in operation when emissions may be vented to it. The presence of a flare pilot flame shall be monitored using a thermocouple or any other equivalent device to detect the presence of a flame. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

13. This flare shall be inspected every two weeks while in operation for visible emissions. If visible emissions are observed, corrective action shall be taken. If visible emissions continue, an EPA Method 9 test shall be conducted within 72 hours. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
14. This flare shall not be used as a leak control device as described in Rule 4403, 5.3.1, nor as a control device for any permit unit subject to NSPS, without modification of permit requirements to address 40 CFR 60.18. [District Rule 2520, 9.3.3] Federally Enforceable Through Title V Permit
15. Fluids produced from wells with closed vents shall be introduced only to production equipment served by vapor control system listed on tank S-1326-201 which is 99% efficient. [District NSR Rule] Federally Enforceable Through Title V Permit
16. Well vent vapors shall vent to the field fuel gas system, DOGGR approved injection wells, flare listed on permit S-1326-260, or steam generators S-1326-9, '-294, '-314, '-337, and '-338. [District Rule 2201] Federally Enforceable Through Title V Permit
17. The crude oil production from wells associated with this permit unit shall not lie within 1000 feet of an air injection well used for in-situ combustion. [District Rule 4407, 2.0, 3.4, and 3.5] Federally Enforceable Through Title V Permit
18. During the time any steam-enhanced crude oil production well is undergoing service or repair while the well is not producing, it shall be exempt from the emission control requirements of District Rule 4401, 5.0 (as amended January 15, 1998). [District Rule 4401, 4.1] Federally Enforceable Through Title V Permit
19. All required source testing shall conform to the compliance testing procedures described in District Rule 1081 (as amended December 16, 1993). [District Rule 1081] Federally Enforceable Through Title V Permit
20. The operator shall maintain monitoring records of the date and well identification where steam injection or well stimulation occurs. [District Rule 4401, 6.1] Federally Enforceable Through Title V Permit
21. The uncontrolled VOC emissions from any well vent shall be reduced by at least 99 percent by weight or, if several steam-enhanced crude oil production well vents are connected to a vapor collection and control system, total uncontrolled VOC emissions shall be reduced by at least 99 percent. This requirement does not apply to cyclic wells located on contiguous and adjacent oil production properties with less than 10 cyclic wells owned by or under the control of a company. [District Rule 4401, 5.1 and 5.2] Federally Enforceable Through Title V Permit
22. For cyclic wells located on properties with less than 10 cyclic wells and owned by a company, the uncontrolled VOC emissions from any well vent or system of well vents connected to a single control device shall be reduced by at least 50 percent. Properties shall include contiguous and adjacent oil production properties owned by or under control of the company. [District Rule 4401, 5.4] Federally Enforceable Through Title V Permit
23. Total number of leaks from the vapor collection and control system, including condensate handling, shall not exceed the number as allowed by Rule 4401 (as amended January 15, 1998) at any one time. [District Rule 4401, 5.3] Federally Enforceable Through Title V Permit
24. Operator shall affix a readily visible tag bearing the date on which a leak is detected. The tag shall remain in place until the leaking component is repaired. [District Rule 4401, 5.3.1] Federally Enforceable Through Title V Permit
25. Operator shall repair each leak within 15 days of detection. The APCO may grant a 10 day extension if the operator demonstrates that the necessary and sufficient actions have and are being taken to correct the leak. [District Rule 4401, 5.3.1] Federally Enforceable Through Title V Permit
26. Operator shall maintain all components of a well vent vapor collection and control system in good repair. Components of the well vent vapor collection and control system shall include all piping, valves, fittings, pumps, compressors, tanks, etc. used to collect, control, store, or dispose of VOC condensate or non-condensable VOCs and which is prior to any blending of VOC condensate with crude oil or blending of non-condensable VOCs with gases to be used as a fuel. [District Rule 4401, 5.3 and 5.3.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

27. Annual control efficiency compliance tests shall be performed on all vapor collection and control systems used to control emissions from steam-enhanced crude oil production wells. Testing shall be performed by source tester certified by the California Air Resource Board (CARB) certified contractors 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 the requirements of this condition if the vapor control system does not exhaust to atmosphere or if all uncondensed VOC emissions collected by a vapor collection and control system are burned in fuel burning equipment or in a smokeless open flare and the source's Operating Permit contains adequate periodic monitoring to ensure the source meets 99% control efficiency. [District Rule 4401, 5.1, 5.2 and 6.2.1] Federally Enforceable Through Title V Permit
28. The control efficiency of the vapor collection and control system used to control VOC emissions from steam enhanced crude oil production well shall be determined by mass balance based on most stringent of a source test, USEPA approved emission factors, or Air Pollution (AP)-42 emission factors for components; and the efficiency of destruction devices determined by USEPA Method 25, 25a, or 25b as applicable. [District Rule 4401, 6.3.1] Federally Enforceable Through Title V Permit
29. The source shall perform leak inspections at least annually, using a portable hydrocarbon detection instrument in accordance with USEPA Method 21. [District Rules 2520, 9.3.2 and 4401, 6.2.4] Federally Enforceable Through Title V Permit
30. Compliance with permit conditions in the Title V permit shall be deemed compliance with Kern County Rule 108.1. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
31. Compliance with permit conditions in the Title V permit shall be deemed compliance with SJVUAPCD Rule 4401 (Amended January 15, 1998), excluding sections 5.1 and 5.2 for control systems which have been waived from complying with the requirement of section 6.2.1. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
32. The requirements of District Rule 4407 (Adopted May 19, 1994) do not apply to this permit unit because it is not an in situ combustion well vent. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
33. Wells authorized by this permit shall comply with all applicable requirements of Rule 4401. [District Rule 4401] Federally Enforceable Through Title V Permit
34. Well head casing vent collection piping network shall be limited to 100 steam enhanced wells. [District NSR Rule] Federally Enforceable Through Title V Permit
35. Leaks shall be inspected and repaired as specified in Rule 4401. [District Rule 4401] Federally Enforceable Through Title V Permit
36. VOC content of well vent vapor gas shall not exceed 10% by weight. If the VOC content of the well vent vapor gas is less than 10% by weight for 8 consecutive quarterly samplings per District approved plan, sampling frequency shall only be required annually. Representative samples shall be collected during periods of normal operation and not be within 48 hours after routine maintenance or repair. Records of test shall be maintained for a period of five years and be made readily available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit
37. VOC content shall be determined using ASTM Method D1945, D3588, or EPA method 18. [District Rule 4401, 6.2.3] Federally Enforceable Through Title V Permit
38. The permittee shall keep accurate records of the amount of gas (pilot and waste gas) flared, H<sub>2</sub>S content and recharging dates, for a period of five years, and shall make such records available for District inspection upon request. [District NSR Rule] Federally Enforceable Through Title V Permit
39. Permittee shall maintain a current well roster of all wells served by collection system, and such roster shall be made readily available for District inspection upon request. [District Rule 2520, 9.3.2 and District Rule 1070] Federally Enforceable Through Title V Permit

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

# San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1326-36-1

EXPIRATION DATE: 03/31/2006

**EQUIPMENT DESCRIPTION:**

13 UNCONTROLLED CYCLICLY STEAMED OIL WELLS HEAVY OIL CENTRAL STATIONARY SOURCE

## PERMIT UNIT REQUIREMENTS

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1. Sulfur compounds emission concentration shall not exceed 0.2 percent by volume calculated as sulfur dioxide (SO<sub>2</sub>), on a dry basis averaged over 15 consecutive minutes. [District Rule 4801 and County Rule 407 (Kern)] Federally Enforceable Through Title V Permit
2. An increase in the number of wells listed on this Permit to Operate shall require an Authority to Construct. [District NSR Rule] Federally Enforceable Through Title V Permit
3. The well contained in this permit unit shall be located more than 1000 feet from an existing well vent vapor control system. [District Rule 4401, 4.5] Federally Enforceable Through Title V Permit
4. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following requirements: County Rules 108 (Kings), 108.1 (Fresno, Merced, San Joaquin, Tulare, Kern, and Stanislaus), and 110 (Madera). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
5. Compliance with permit conditions in the Title V permit shall be deemed compliance with SJVUAPCD Rule 4401 (Amended January 15, 1998), excluding sections 5.1 and 5.2 for control systems which have been waived from complying with the requirement of section 6.2.1. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
6. The requirements of SJVUAPCD Rule 4407 (Adopted May 19, 1994) do not apply to this permit unit. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

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

# San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1326-46-4

EXPIRATION DATE: 03/31/2006

SECTION: NE 23 TOWNSHIP: 28S RANGE: 27E

## EQUIPMENT DESCRIPTION:

42,000 GALLON FIXED-ROOF STOCK TANK WITH VAPOR CONTROL SYSTEM INCLUDING GAS/LIQUID SEPARATOR AND A MINIMUM RATED 15 HP VAPOR COMPRESSOR, SHARED WITH UNITS -47, -48, -214, AND -215 (FANO LEASE)

## PERMIT UNIT REQUIREMENTS

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1. Operation shall include vapor control system piping between tanks S- 1326-46, -47, -48, -214, and -215. [District NSR Rule] Federally Enforceable Through Title V Permit
2. The true vapor pressure of the liquids stored in this tank shall not exceed 0.5 psia. [District Rules 4623, 2.0 and NSR] Federally Enforceable Through Title V Permit
3. Tank vapors shall be compressed and routed to approved control equipment listed on permit S-1326-26. [District NSR Rule] Federally Enforceable Through Title V Permit
4. Vapor control efficiency shall be maintained at no less than 99%. [District NSR Rule] Federally Enforceable Through Title V Permit
5. The vapor control system compressor shall activate when the tank internal pressure exceeds 1.5 in. w.c. and deactivate when the tank internal pressure falls to 0.5 in. w.c. [District NSR Rule] Federally Enforceable Through Title V Permit
6. Fuel gas system gas shall consist primarily of methane containing no more than 5% by weight hydrocarbons heavier than butane and shall have a sulfur content of no more than 0.75 gr/100 scf. [District NSR Rule] Federally Enforceable Through Title V Permit
7. The tank pressure relief valves shall not open unless the tank internal pressure exceeds 2.0 oz. or falls below 0.5 oz. vacuum. [District NSR Rule] 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 NSR Rule] Federally Enforceable Through Title V Permit
9. Prior to opening the tank to allow tank cleaning the following procedure must be followed. Operate PV valve and vapor recovery system (if equipped) during emptying, filling, and flushing. During filling and purging, no vapor leakage is allowed. Drain all liquid from the tank to the maximum extent feasible prior to opening the tank. [District NSR Rule] Federally Enforceable Through Title V Permit
10. Prior to opening the tank to allow tank cleaning one of the following options must be followed: 1) operate the vapor recovery system for at least 2 hours after all the liquid in the tank has been drained, 2) displace vapors floating the oil pad off with water such that 90% of the tank volume is displaced, 3) vent the tank to the vapor control system until the vapor concentration is less than 10% of the lower explosive limit (LEL) or 5,000 ppmv whichever is less; or 4) vent the tank to the vapor control system for a length of time determined by the following relationship:  $t = 2.3 V / Q$ , where  $t$  = time,  $V$  = tank volume (cubic feet), and  $Q$  = flow rate to the vapor control system as determined using appropriate engineering calculations. [District NSR Rule] 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.



11. Allowable methods of cleaning include using steam, diesel, solvents with an initial boiling point of greater than 302 F, solvents with a vapor pressure of less than 0.5 psia, or solvents with 50 grams/liter VOC content or less. Steam cleaning shall be allowed at locations where wastewater treatment facilities are limited or during December through March. [District NSR Rule] Federally Enforceable Through Title V Permit
12. Permittee shall maintain records of each period of cleaning and maintenance when the tank is disconnected or isolated from the vapor control system. Records shall include the date that tank cleaning was initiated, the date tank cleaning was completed, the procedure used to vent tank vapors prior to opening, the method of tank cleaning used, and a description of internal and external tank repairs and maintenance performed. Such records shall be retained for a period of at least 5 years and shall be made available for District inspection upon request. [District NSR Rule] Federally Enforceable Through Title V Permit
13. To qualify for quantification of no fugitive emissions, operator shall conduct quarterly gas sampling after TVR compressor (prior to connection to any other vapor control system) and at either the first line tank or at any secondary tank which is heated above ambient temperature. If gas samples are less than 10% VOC by weight for 8 consecutive quarterly samplings, sampling frequency shall only be required annually and whenever there is a change in source or type of petroleum processed. Samples shall be collected during periods of normal operation, and not be within 48 hours after routine maintenance or repair. [District NSR Rule] Federally Enforceable Through Title V Permit
14. Permittee shall provide the District with written notification at least 30 days prior to installation of components handling fluid streams with a VOC content of 10% or less by weight. [District NSR Rule] Federally Enforceable Through Title V Permit
15. Any 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. Gas-tight shall be defined as emitting no more than 10,000 ppm of methane with an instrument calibrated with methane in accordance with USEPA Method 21. Emissions in excess of this limit shall be considered a leak. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
16. All tank seams, welds, joints, piping, valves, and fittings shall be inspected and maintained in a gas-tight condition. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
17. Compressor knockout drum liquids shall be piped only to vapor-controlled tanks or WASP disposal well. [District NSR Rule] Federally Enforceable Through Title V Permit
18. The permittee shall keep accurate records of liquids stored and true vapor pressure of such liquids. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
19. The operator shall conduct true vapor pressure (TVP) testing of the organic liquid stored in this tank at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored in this tank. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
20. The API gravity of organic liquid stored in this tank 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 2520, 9.3.2] Federally Enforceable Through Title V Permit
21. Control efficiency shall be determined by a comparison of controlled emissions to those emissions which would occur from a fixed or cone roof tank in the same product service without a vapor recovery system. Emissions shall be determined based on tank emission factors in USEPA Publication AP-42, component counts for fugitive emissions sources, recognized emission factors for fugitive emission sources and the efficiency of any VOC destruction device. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
22. Operator shall ensure the vapor control system is functional and operating as designed at all times, except during periods of routine maintenance. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

23. Operator shall determine the true vapor pressure of the petroleum liquid stored in the tank located at the beginning of the process flow after the production header at least once per year. 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, shall be used to determine the TVP of crude oil with an API gravity of 26 or less, or for any API gravity that is specified in this test method. Determinations shall be made annually during summer and whenever there is a change in the source or type of petroleum entering the tank. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
24. As used in this permit, the term "source or type of petroleum" shall mean petroleum liquids with similar characteristics. The operator shall maintain records of API gravity of petroleum liquids store in this unit to determine which oil are from common source. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

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

# San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1326-47-3

EXPIRATION DATE: 03/31/2006

SECTION: NE 23 TOWNSHIP: 28S RANGE: 27E

## EQUIPMENT DESCRIPTION:

42,000 GALLON FIXED-ROOF STOCK TANK SERVED BY VAPOR CONTROL SYSTEM LISTED ON S-1326-46 (FANO LEASE)

## PERMIT UNIT REQUIREMENTS

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1. Tank vapors shall be vented only to vapor control system listed on tank permit S-1326-46. [District NSR Rule] Federally Enforceable Through Title V Permit
2. The true vapor pressure of the liquids stored in this tank shall not exceed 0.5 psia. [District Rules 4623, 2.0 and NSR] Federally Enforceable Through Title V Permit
3. Vapor control efficiency shall be maintained at no less than 99%. [District NSR Rule] Federally Enforceable Through Title V Permit
4. Fuel gas system gas shall consist primarily of methane containing no more than 5% by weight hydrocarbons heavier than butane and shall have a sulfur content of no more than 0.75 gr/100 scf. [District NSR Rule] Federally Enforceable Through Title V Permit
5. The tank pressure relief valves shall not open unless the tank internal pressure exceeds 2.0 oz. or falls below 0.5 oz. vacuum. [District NSR Rule] Federally Enforceable Through Title V Permit
6. This permit authorizes tank cleaning that is not the result of breakdowns or poor maintenance as a routine maintenance activity. [District NSR Rule] Federally Enforceable Through Title V Permit
7. Prior to opening the tank to allow tank cleaning the following procedure must be followed. Operate PV valve and vapor recovery system (if equipped) during emptying, filling, and flushing. During filling and purging, no vapor leakage is allowed. Drain all liquid from the tank to the maximum extent feasible prior to opening the tank. [District NSR Rule] Federally Enforceable Through Title V Permit
8. Prior to opening the tank to allow tank cleaning one of the following options must be followed: 1) operate the vapor recovery system for at least 2 hours after all the liquid in the tank has been drained, 2) displace vapors floating the oil pad off with water such that 90% of the tank volume is displaced, 3) vent the tank to the vapor control system until the vapor concentration is less than 10% of the lower explosive limit (LEL) or 5,000 ppmv whichever is less; or 4) vent the tank to the vapor control system for a length of time determined by the following relationship:  $t = 2.3 V / Q$ , where  $t$  = time,  $V$  = tank volume (cubic feet), and  $Q$  = flow rate to the vapor control system as determined using appropriate engineering calculations. [District NSR Rule] Federally Enforceable Through Title V Permit
9. Allowable methods of cleaning include using steam, diesel, solvents with an initial boiling point of greater than 302 F, solvents with a vapor pressure of less than 0.5 psia, or solvents with 50 grams/liter VOC content or less. Steam cleaning shall be allowed at locations where wastewater treatment facilities are limited or during December through March. [District NSR Rule] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

10. Permittee shall maintain records of each period of cleaning and maintenance when the tank is disconnected or isolated from the vapor control system. Records shall include the date that tank cleaning was initiated, the date tank cleaning was completed, the procedure used to vent tank vapors prior to opening, the method of tank cleaning used, and a description of internal and external tank repairs and maintenance performed. Such records shall be retained for a period of at least 5 years and shall be made available for District inspection upon request. [District NSR Rule] Federally Enforceable Through Title V Permit
11. To qualify for quantification of no fugitive emissions, operator shall conduct quarterly gas sampling after TVR compressor (prior to connection to any other vapor control system) and at either the first line tank or at any secondary tank which is heated above ambient temperature. If gas samples are less than 10% VOC by weight for 8 consecutive quarterly samplings, sampling frequency shall only be required annually and whenever there is a change in source or type of petroleum processed. Samples shall be collected during periods of normal operation, and not be within 48 hours after routine maintenance or repair. [District NSR Rule] Federally Enforceable Through Title V Permit
12. Permittee shall provide the District with written notification at least 30 days prior to installation of components handling fluid streams with a VOC content of 10% or less by weight. [District NSR Rule] Federally Enforceable Through Title V Permit
13. Any 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. Gas-tight shall be defined as emitting no more than 10,000 ppm of methane with an instrument calibrated with methane in accordance with USEPA Method 21. Emissions in excess of this limit shall be considered a leak. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
14. All tank seams, welds, joints, piping, valves, and fittings shall be inspected and maintained in a gas-tight condition. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
15. The permittee shall keep accurate records of liquids stored and true vapor pressure of such liquids. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
16. The operator shall conduct true vapor pressure (TVP) testing of the organic liquid stored in this tank at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored in this tank. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
17. The API gravity of organic liquid stored in this tank 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 2520, 9.3.2] Federally Enforceable Through Title V Permit
18. Control efficiency shall be determined by a comparison of controlled emissions to those emissions which would occur from a fixed or cone roof tank in the same product service without a vapor recovery system. Emissions shall be determined based on tank emission factors in USEPA Publication AP-42, component counts for fugitive emissions sources, recognized emission factors for fugitive emission sources and the efficiency of any VOC destruction device. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
19. Operator shall ensure the vapor control system is functional and operating as designed at all times, except during periods of routine maintenance. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
20. Operator shall determine the true vapor pressure of the petroleum liquid stored in the tank located at the beginning of the process flow after the production header at least once per year. 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, shall be used to determine the TVP of crude oil with an API gravity of 26 or less, or for any API gravity that is specified in this test method. Determinations shall be made annually during summer and whenever there is a change in the source or type of petroleum entering the tank. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
21. As used in this permit, the term "source or type of petroleum" shall mean petroleum liquids with similar characteristics. The operator shall maintain records of API gravity of petroleum liquids store in this unit to determine which oil are from common source. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

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

# San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1326-48-3

EXPIRATION DATE: 03/31/2006

SECTION: NE 23 TOWNSHIP: 28S RANGE: 27E

## EQUIPMENT DESCRIPTION:

210,000 GALLON FIXED-ROOF WASTE WATER TANK SERVED BY VAPOR CONTROL SYSTEM LISTED ON S-1326-46 (FANO LEASE)

## PERMIT UNIT REQUIREMENTS

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1. Tank vapors shall be vented only to vapor control system listed on tank permit S-1326-46. [District NSR Rule] Federally Enforceable Through Title V Permit
2. The true vapor pressure of the liquids stored in this tank shall not exceed 0.5 psia. [District Rules 4623, 2.0 and NSR] Federally Enforceable Through Title V Permit
3. Vapor control efficiency shall be maintained at no less than 99%. [District NSR Rule] Federally Enforceable Through Title V Permit
4. Fuel gas system gas shall consist primarily of methane containing no more than 5% by weight hydrocarbons heavier than butane and shall have a sulfur content of no more than 0.75 gr/100 scf. [District NSR Rule] Federally Enforceable Through Title V Permit
5. The tank pressure relief valves shall not open unless the tank internal pressure exceeds 2.0 oz. or falls below 0.5 oz. vacuum. [District NSR Rule] Federally Enforceable Through Title V Permit
6. This permit authorizes tank cleaning that is not the result of breakdowns or poor maintenance as a routine maintenance activity. [District NSR Rule] Federally Enforceable Through Title V Permit
7. Prior to opening the tank to allow tank cleaning the following procedure must be followed. Operate PV valve and vapor recovery system (if equipped) during emptying, filling, and flushing. During filling and purging, no vapor leakage is allowed. Drain all liquid from the tank to the maximum extent feasible prior to opening the tank. [District NSR Rule] Federally Enforceable Through Title V Permit
8. Prior to opening the tank to allow tank cleaning one of the following options must be followed: 1) operate the vapor recovery system for at least 2 hours after all the liquid in the tank has been drained, 2) displace vapors floating the oil pad off with water such that 90% of the tank volume is displaced, 3) vent the tank to the vapor control system until the vapor concentration is less than 10% of the lower explosive limit (LEL) or 5,000 ppmv whichever is less; or 4) vent the tank to the vapor control system for a length of time determined by the following relationship:  $t = 2.3 V / Q$ , where  $t$  = time,  $V$  = tank volume (cubic feet), and  $Q$  = flow rate to the vapor control system as determined using appropriate engineering calculations. [District NSR Rule] Federally Enforceable Through Title V Permit
9. Allowable methods of cleaning include using steam, diesel, solvents with an initial boiling point of greater than 302 F, solvents with a vapor pressure of less than 0.5 psia, or solvents with 50 grams/liter VOC content or less. Steam cleaning shall be allowed at locations where wastewater treatment facilities are limited or during December through March. [District NSR Rule] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

10. Permittee shall maintain records of each period of cleaning and maintenance when the tank is disconnected or isolated from the vapor control system. Records shall include the date that tank cleaning was initiated, the date tank cleaning was completed, the procedure used to vent tank vapors prior to opening, the method of tank cleaning used, and a description of internal and external tank repairs and maintenance performed. Such records shall be retained for a period of at least 5 years and shall be made available for District inspection upon request. [District NSR Rule] Federally Enforceable Through Title V Permit
11. To qualify for quantification of no fugitive emissions, operator shall conduct quarterly gas sampling after TVR compressor (prior to connection to any other vapor control system) and at either the first line tank or at any secondary tank which is heated above ambient temperature. If gas samples are less than 10% VOC by weight for 8 consecutive quarterly samplings, sampling frequency shall only be required annually and whenever there is a change in source or type of petroleum processed. Samples shall be collected during periods of normal operation, and not be within 48 hours after routine maintenance or repair. [District NSR Rule] Federally Enforceable Through Title V Permit
12. Permittee shall provide the District with written notification at least 30 days prior to installation of components handling fluid streams with a VOC content of 10% or less by weight. [District NSR Rule] Federally Enforceable Through Title V Permit
13. Any 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. Gas-tight shall be defined as emitting no more than 10,000 ppm of methane measured at a distance of one centimeter from the potential source with an instrument calibrated with methane in accordance with USEPA Method 21. Emissions in excess of this limit shall be considered a leak. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
14. All tank seams, welds, joints, piping, valves, and fittings shall be inspected and maintained in a gas-tight condition. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
15. The permittee shall keep accurate records of liquids stored and true vapor pressure of such liquids. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
16. The operator shall conduct true vapor pressure (TVP) testing of the organic liquid stored in this tank at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored in this tank. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
17. The API gravity of organic liquid stored in this tank 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 2520, 9.3.2] Federally Enforceable Through Title V Permit
18. Control efficiency shall be determined by a comparison of controlled emissions to those emissions which would occur from a fixed or cone roof tank in the same product service without a vapor recovery system. Emissions shall be determined based on tank emission factors in USEPA Publication AP-42, component counts for fugitive emissions sources, recognized emission factors for fugitive emission sources and the efficiency of any VOC destruction device. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
19. The operator shall ensure that the vapor control system is functional and is operating as designed at all times, except during periods of routine maintenance. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
20. Operator shall determine the true vapor pressure of the petroleum liquid stored in the tank located at the beginning of the process flow after the production header at least once per year. 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, shall be used to determine the TVP of crude oil with an API gravity of 26 or less, or for any API gravity that is specified in this test method. Determinations shall be made annually during summer and whenever there is a change in the source or type of petroleum entering the tank. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
21. As used in this permit, the term "source or type of petroleum" shall mean petroleum liquids with similar characteristics. The operator shall maintain records of API gravity of petroleum liquids store in this unit to determine which oil are from common source. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-1326-101-2

**EXPIRATION DATE:** 03/31/2006

**SECTION:** 11 **TOWNSHIP:** 28S **RANGE:** 27E

**EQUIPMENT DESCRIPTION:**

42,000 GALLON FIXED-ROOF PETROLEUM STORAGE TANK #T-14 (NATIONAL TANK BATTERY).

## PERMIT UNIT REQUIREMENTS

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1. The true vapor pressure (TVP) of liquids stored in the tank shall not exceed 1.5 psia at storage temperature or tank shall be subject to the requirements of Rule 4623. [District Rule 4623, 2.0 and District Rule 2520, 9.1] Federally Enforceable Through Title V Permit
2. True vapor pressure shall be measured using Reid vapor pressure ASTM Method D323 modified by maintaining the hot water bath at storage temperature. Where storage temperature is above 100 degrees F, true vapor pressure shall be determined by Reid vapor pressure at 100 degrees F and CARB approved calculations. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
3. Operator shall determine the true vapor pressure of the petroleum liquid stored in the tank located at the beginning of process flow after the production header at least once per year in accordance with methods described in Section 6.2 of District Rule 4623 (amended 12/17/92). Determinations shall be made annually during summer and whenever there is a change in the source or type of petroleum entering the tank. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
4. True vapor pressure of crude oil with an API (American Petroleum Institute) gravity less than 30 deg, as determined by API 2547, may be determined by Headspace Gas Chromatography using the procedures from CARB Evaluation of a Method for Determining Vapor Pressures of Petroleum Mixtures by Headspace Gas Chromatography, October 1990. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
5. The operator shall keep accurate records of types, storage temperature, and TVP of liquids stored to verify continued exemption from District Rule 4623 (as amended December 17, 1992). [District Rule 2520, 9.1] Federally Enforceable Through Title V Permit
6. As used in this permit, the term "source or type of petroleum" shall mean petroleum liquids with similar characteristics. The operator shall maintain records of API gravity of petroleum liquids store in this unit to determine which oil are from common source. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
7. Tanks associated with this battery setting are S-1326-101, '-102, '-103, and '-104. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-1326-119-2

**EXPIRATION DATE:** 03/31/2006

**SECTION:** 14 **TOWNSHIP:** 28S **RANGE:** 27E

**EQUIPMENT DESCRIPTION:**

84,000 GALLON FIXED-ROOF PETROLEUM STORAGE TANK #2GK-255 (LENHARDT USL).

## PERMIT UNIT REQUIREMENTS

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1. The true vapor pressure (TVP) of liquids stored in the tank shall not exceed 1.5 psia at storage temperature or tank shall be subject to the requirements of Rule 4623. [District Rule 4623, 2.0 and District Rule 2520, 9.1] Federally Enforceable Through Title V Permit
2. Operator shall determine the true vapor pressure of the petroleum liquid stored in the tank located at the beginning of the process flow after the production header at least once per year in accordance with methods described in Section 6.2 of District Rule 4623 (amended 12/17/92). Determinations shall be made annually during summer and whenever there is a change in the source or type of petroleum entering the tank. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
3. True vapor pressure shall be measured using Reid vapor pressure ASTM Method D323 modified by maintaining the hot water bath at storage temperature. Where storage temperature is above 100 degrees F, true vapor pressure shall be determined by Reid vapor pressure at 100 degrees F and CARB approved calculations. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
4. True vapor pressure of crude oil with an API (American Petroleum Institute) gravity less than 30 deg, as determined by API 2547, may be determined by Headspace Gas Chromatography using the procedures from CARB Evaluation of a Method for Determining Vapor Pressures of Petroleum Mixtures by Headspace Gas Chromatography, October 1990. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
5. The operator shall keep accurate records of types, storage temperature, and TVP of liquids stored to verify continued exemption from District Rule 4623 (as amended December 17, 1992). [District Rule 2520, 9.1] Federally Enforceable Through Title V Permit
6. As used in this permit, the term "source or type of petroleum" shall mean petroleum liquids with similar characteristics. The operator shall maintain records of API gravity of petroleum liquids store in this unit to determine which oil are from common source. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
7. The tanks included in this setting are S-1326-119, '-120, and '-121. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

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



# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-1326-120-2

**EXPIRATION DATE:** 03/31/2006

**SECTION:** 14 **TOWNSHIP:** 28S **RANGE:** 27E

**EQUIPMENT DESCRIPTION:**

84,000 GALLON FIXED-ROOF PETROLEUM STORAGE TANK #2L100 (LENHARDT USL).

## PERMIT UNIT REQUIREMENTS

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1. The true vapor pressure (TVP) of liquids stored in the tank shall not exceed 1.5 psia at storage temperature or tank shall be subject to the requirements of Rule 4623. [District Rule 4623, 2.0 and District Rule 2520, 9.1] Federally Enforceable Through Title V Permit
2. Operator shall determine the true vapor pressure of the petroleum liquid stored in the tank located at the beginning of the process flow after the production header at least once per year in accordance with methods described in Section 6.2 of District Rule 4623 (amended 12/17/92). Determinations shall be made annually during summer and whenever there is a change in the source or type of petroleum entering the tank. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
3. True vapor pressure shall be measured using Reid vapor pressure ASTM Method D323 modified by maintaining the hot water bath at storage temperature. Where storage temperature is above 100 degrees F, true vapor pressure shall be determined by Reid vapor pressure at 100 degrees F and CARB approved calculations. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
4. True vapor pressure of crude oil with an API (American Petroleum Institute) gravity less than 30 deg, as determined by API 2547, may be determined by Headspace Gas Chromatography using the procedures from CARB Evaluation of a Method for Determining Vapor Pressures of Petroleum Mixtures by Headspace Gas Chromatography, October 1990. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
5. The operator shall keep accurate records of types, storage temperature, and TVP of liquids stored to verify continued exemption from District Rule 4623 (as amended December 17, 1992). [District Rule 2520, 9.1] Federally Enforceable Through Title V Permit
6. As used in this permit, the term "source or type of petroleum" shall mean petroleum liquids with similar characteristics. The operator shall maintain records of API gravity of petroleum liquids store in this unit to determine which oil are from common source. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
7. The tanks included in this setting are S-1326-119, '-120, and '-121. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

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

# San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1326-121-2

EXPIRATION DATE: 03/31/2006

SECTION: 14 TOWNSHIP: 28S RANGE: 27E

**EQUIPMENT DESCRIPTION:**

210,000 GALLON FIXED-ROOF PETROLEUM STORAGE TANK #5L101 (LENHARDT USL).

## PERMIT UNIT REQUIREMENTS

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1. The true vapor pressure (TVP) of liquids stored in the tank shall not exceed 1.5 psia at storage temperature or tank shall be subject to the requirements of Rule 4623. [District Rule 4623, 2.0 and District Rule 2520, 9.1] Federally Enforceable Through Title V Permit
2. Operator shall determine the true vapor pressure of the petroleum liquid stored in the tank located at the beginning of the process flow after the production header at least once per year in accordance with methods described in Section 6.2 of District Rule 4623 (amended 12/17/92). Determinations shall be made annually during summer and whenever there is a change in the source or type of petroleum entering the tank. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
3. True vapor pressure shall be measured using Reid vapor pressure ASTM Method D323 modified by maintaining the hot water bath at storage temperature. Where storage temperature is above 100 degrees F, true vapor pressure shall be determined by Reid vapor pressure at 100 degrees F and CARB approved calculations. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
4. True vapor pressure of crude oil with an API (American Petroleum Institute) gravity less than 30 deg, as determined by API 2547, may be determined by Headspace Gas Chromatography using the procedures from CARB Evaluation of a Method for Determining Vapor Pressures of Petroleum Mixtures by Headspace Gas Chromatography, October 1990. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
5. The operator shall keep accurate records of types, storage temperature, and TVP of liquids stored to verify continued exemption from District Rule 4623 (as amended December 17, 1992). [District Rule 2520, 9.1] Federally Enforceable Through Title V Permit
6. As used in this permit, the term "source or type of petroleum" shall mean petroleum liquids with similar characteristics. The operator shall maintain records of API gravity of petroleum liquids store in this unit to determine which oil are from common source. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
7. The tanks included in this setting are S-1326-119, '-120, and '-121. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-1326-126-2

**EXPIRATION DATE:** 03/31/2006

**SECTION:** 14 **TOWNSHIP:** 28S **RANGE:** 27E

**EQUIPMENT DESCRIPTION:**

84,000 GALLON FIXED-ROOF PETROLEUM STORAGE TANK #20WSTWTR (SEC. 14 USL).

## PERMIT UNIT REQUIREMENTS

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1. The true vapor pressure (TVP) of liquids stored in the tank shall not exceed 1.5 psia at storage temperature or tank shall be subject to the requirements of Rule 4623. [District Rule 4623, 2.0 and District Rule 2520, 9.1] Federally Enforceable Through Title V Permit
2. Operator shall determine the true vapor pressure of the petroleum liquid stored in the tank located at the beginning of the process flow after the production header at least once per year in accordance with methods described in Section 6.2 of District Rule 4623 (amended 12/17/92). Determinations shall be made annually during summer and whenever there is a change in the source or type of petroleum entering the tank. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit.
3. True vapor pressure shall be measured using Reid vapor pressure ASTM Method D323 modified by maintaining the hot water bath at storage temperature. Where storage temperature is above 100 degrees F, true vapor pressure shall be determined by Reid vapor pressure at 100 degrees F and CARB approved calculations. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
4. True vapor pressure of crude oil with an API (American Petroleum Institute) gravity less than 30 deg, as determined by API 2547, may be determined by Headspace Gas Chromatography using the procedures from CARB Evaluation of a Method for Determining Vapor Pressures of Petroleum Mixtures by Headspace Gas Chromatography, October 1990. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
5. The operator shall keep accurate records of types, storage temperature, and TVP of liquids stored to verify continued exemption from District Rule 4623 (as amended December 17, 1992). [District Rule 2520, 9.1] Federally Enforceable Through Title V Permit
6. As used in this permit, the term "source or type of petroleum" shall mean petroleum liquids with similar characteristics. The operator shall maintain records of API gravity of petroleum liquids store in this unit to determine which oil are from common source. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
7. The tanks included in this setting are S-1326-126, '-127, and '-128. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

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

# San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1326-127-2

EXPIRATION DATE: 03/31/2006

SECTION: 14 TOWNSHIP: 28S RANGE: 27E

**EQUIPMENT DESCRIPTION:**

84,000 GALLON FIXED-ROOF PETROLEUM STORAGE TANK #20X1504 (SEC. 14 USL).

## PERMIT UNIT REQUIREMENTS

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1. The true vapor pressure (TVP) of liquids stored in the tank shall not exceed 1.5 psia at storage temperature or tank shall be subject to the requirements of Rule 4623. [District Rule 4623, 2.0 and District Rule 2520, 9.1] Federally Enforceable Through Title V Permit
2. Operator shall determine the true vapor pressure of the petroleum liquid stored in the tank located at the beginning of the process flow after the production header at least once per year in accordance with methods described in Section 6.2 of District Rule 4623 (amended 12/17/92). Determinations shall be made annually during summer and whenever there is a change in the source or type of petroleum entering the tank. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
3. True vapor pressure shall be measured using Reid vapor pressure ASTM Method D323 modified by maintaining the hot water bath at storage temperature. Where storage temperature is above 100 degrees F, true vapor pressure shall be determined by Reid vapor pressure at 100 degrees F and CARB approved calculations. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
4. True vapor pressure of crude oil with an API (American Petroleum Institute) gravity less than 30 deg, as determined by API 2547, may be determined by Headspace Gas Chromatography using the procedures from CARB Evaluation of a Method for Determining Vapor Pressures of Petroleum Mixtures by Headspace Gas Chromatography, October 1990. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
5. The operator shall keep accurate records of types, storage temperature, and TVP of liquids stored to verify continued exemption from District Rule 4623 (as amended December 17, 1992). [District Rule 2520, 9.1] Federally Enforceable Through Title V Permit
6. As used in this permit, the term "source or type of petroleum" shall mean petroleum liquids with similar characteristics. The operator shall maintain records of API gravity of petroleum liquids store in this unit to determine which oil are from common source. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
7. The tanks included in this setting are S-1326-126, '-127, and '-128. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

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

# San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1326-128-2

EXPIRATION DATE: 03/31/2006

SECTION: 14 TOWNSHIP: 28S RANGE: 27E

**EQUIPMENT DESCRIPTION:**

84,000 GALLON FIXED-ROOF PETROLEUM STORAGE TANK #2GK37 (SEC. 14 USL).

## PERMIT UNIT REQUIREMENTS

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1. The true vapor pressure (TVP) of liquids stored in the tank shall not exceed 1.5 psia at storage temperature or tank shall be subject to the requirements of Rule 4623. [District Rule 4623, 2.0 and District Rule 2520, 9.1] Federally Enforceable Through Title V Permit
2. Operator shall determine the true vapor pressure of the petroleum liquid stored in the tank located at the beginning of the process flow after the production header at least once per year in accordance with methods described in Section 6.2 of District Rule 4623 (amended 12/17/92). Determinations shall be made annually during summer and whenever there is a change in the source or type of petroleum entering the tank. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
3. True vapor pressure shall be measured using Reid vapor pressure ASTM Method D323 modified by maintaining the hot water bath at storage temperature. Where storage temperature is above 100 degrees F, true vapor pressure shall be determined by Reid vapor pressure at 100 degrees F and CARB approved calculations. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
4. True vapor pressure of crude oil with an API (American Petroleum Institute) gravity less than 30 deg, as determined by API 2547, may be determined by Headspace Gas Chromatography using the procedures from CARB Evaluation of a Method for Determining Vapor Pressures of Petroleum Mixtures by Headspace Gas Chromatography, October 1990. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
5. The operator shall keep accurate records of types, storage temperature, and TVP of liquids stored to verify continued exemption from District Rule 4623 (as amended December 17, 1992). [District Rule 2520, 9.1] Federally Enforceable Through Title V Permit
6. As used in this permit, the term "source or type of petroleum" shall mean petroleum liquids with similar characteristics. The operator shall maintain records of API gravity of petroleum liquids store in this unit to determine which oil are from common source. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
7. The tanks included in this setting are S-1326-126, '-127, and '-128. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-1326-129-1

**EXPIRATION DATE:** 03/31/2006

**SECTION:** 22 **TOWNSHIP:** 28S **RANGE:** 27E

**EQUIPMENT DESCRIPTION:**

210,000 GALLON FIXED-ROOF PETROLEUM STORAGE TANK #5GK43 (ROBINSON A/USL)

## PERMIT UNIT REQUIREMENTS

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1. The true vapor pressure (TVP) of liquids stored in the tank shall not exceed 1.5 psia at storage temperature or tank shall be subject to the requirements of Rule 4623. [District Rule 4623, 2.0 and District Rule 2520, 9.1] Federally Enforceable Through Title V Permit
2. Operator shall determine the true vapor pressure of the petroleum liquid stored in the tank located at the beginning of the process flow after the production header at least once per year in accordance with methods described in Section 6.2 of District Rule 4623 (amended 12/17/92). Determinations shall be made annually during summer and whenever there is a change in the source or type of petroleum entering the tank. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
3. True vapor pressure shall be measured using Reid vapor pressure ASTM Method D323 modified by maintaining the hot water bath at storage temperature. Where storage temperature is above 100 degrees F, true vapor pressure shall be determined by Reid vapor pressure at 100 degrees F and CARB approved calculations. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
4. True vapor pressure of crude oil with an API (American Petroleum Institute) gravity less than 30 deg, as determined by API 2547, may be determined by Headspace Gas Chromatography using the procedures from CARB Evaluation of a Method for Determining Vapor Pressures of Petroleum Mixtures by Headspace Gas Chromatography, October 1990. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
5. The operator shall keep accurate records of types, storage temperature, and TVP of liquids stored to verify continued exemption from District Rule 4623 (as amended December 17, 1992). [District Rule 2520, 9.1] Federally Enforceable Through Title V Permit
6. As used in this permit, the term "source or type of petroleum" shall mean petroleum liquids with similar characteristics. The operator shall maintain records of API gravity of petroleum liquids store in this unit to determine which oil are from common source. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
7. The tanks included in this setting are S-1326-129, '-130, and '-131. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-1326-130-1

**EXPIRATION DATE:** 03/31/2006

**SECTION:** 22 **TOWNSHIP:** 28S **RANGE:** 27E

**EQUIPMENT DESCRIPTION:**

210,000 GALLON FIXED-ROOF PETROLEUM STORAGE TANK #5GK-34 (ROBINSON A/USL)

## PERMIT UNIT REQUIREMENTS

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1. The true vapor pressure (TVP) of liquids stored in the tank shall not exceed 1.5 psia at storage temperature or tank shall be subject to the requirements of Rule 4623. [District Rule 4623, 2.0 and District Rule 2520, 9.1] Federally Enforceable Through Title V Permit
2. Operator shall determine the true vapor pressure of the petroleum liquid stored in the tank located at the beginning of the process flow after the production header at least once per year in accordance with methods described in Section 6.2 of District Rule 4623 (amended 12/17/92). Determinations shall be made annually during summer and whenever there is a change in the source or type of petroleum entering the tank. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
3. True vapor pressure shall be measured using Reid vapor pressure ASTM Method D323 modified by maintaining the hot water bath at storage temperature. Where storage temperature is above 100 degrees F, true vapor pressure shall be determined by Reid vapor pressure at 100 degrees F and CARB approved calculations. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
4. True vapor pressure of crude oil with an API (American Petroleum Institute) gravity less than 30 deg, as determined by API 2547, may be determined by Headspace Gas Chromatography using the procedures from CARB Evaluation of a Method for Determining Vapor Pressures of Petroleum Mixtures by Headspace Gas Chromatography, October 1990. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
5. The operator shall keep accurate records of types, storage temperature, and TVP of liquids stored to verify continued exemption from District Rule 4623 (as amended December 17, 1992). [District Rule 2520, 9.1] Federally Enforceable Through Title V Permit
6. As used in this permit, the term "source or type of petroleum" shall mean petroleum liquids with similar characteristics. The operator shall maintain records of API gravity of petroleum liquids store in this unit to determine which oil are from common source. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
7. The tanks included in this setting are S-1326-129, '-130, and '-131. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-1326-131-1

**EXPIRATION DATE:** 03/31/2006

**SECTION:** 22 **TOWNSHIP:** 28S **RANGE:** 27E

**EQUIPMENT DESCRIPTION:**

84,000 GALLON FIXED-ROOF PETROLEUM STORAGE TANK #2RA100 (ROBINSON A/USL)

## PERMIT UNIT REQUIREMENTS

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1. The true vapor pressure (TVP) of liquids stored in the tank shall not exceed 1.5 psia at storage temperature or tank shall be subject to the requirements of Rule 4623. [District Rule 4623, 2.0 and District Rule 2520, 9.1] Federally Enforceable Through Title V Permit
2. Operator shall determine the true vapor pressure of the petroleum liquid stored in the tank located at the beginning of the process flow after the production header at least once per year in accordance with methods described in Section 6.2 of District Rule 4623 (amended 12/17/92). Determinations shall be made annually during summer and whenever there is a change in the source or type of petroleum entering the tank. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
3. True vapor pressure shall be measured using Reid vapor pressure ASTM Method D323 modified by maintaining the hot water bath at storage temperature. Where storage temperature is above 100 degrees F, true vapor pressure shall be determined by Reid vapor pressure at 100 degrees F and CARB approved calculations. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
4. True vapor pressure of crude oil with an API (American Petroleum Institute) gravity less than 30 deg, as determined by API 2547, may be determined by Headspace Gas Chromatography using the procedures from CARB Evaluation of a Method for Determining Vapor Pressures of Petroleum Mixtures by Headspace Gas Chromatography, October 1990. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
5. The operator shall keep accurate records of types, storage temperature, and TVP of liquids stored to verify continued exemption from District Rule 4623 (as amended December 17, 1992). [District Rule 2520, 9.1] Federally Enforceable Through Title V Permit
6. As used in this permit, the term "source or type of petroleum" shall mean petroleum liquids with similar characteristics. The operator shall maintain records of API gravity of petroleum liquids store in this unit to determine which oil are from common source. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
7. The tanks included in this setting are S-1326-129, '-130, and '-131. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

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



# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-1326-132-1

**EXPIRATION DATE:** 03/31/2006

**SECTION:** 22 **TOWNSHIP:** 28S **RANGE:** 27E

**EQUIPMENT DESCRIPTION:**

84,000 GALLON FIXED-ROOF PETROLEUM STORAGE TANK #SPLCONTTNK (STAR USL/STAR ROBINSON)

## PERMIT UNIT REQUIREMENTS

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1. The true vapor pressure (TVP) of liquids stored in the tank shall not exceed 1.5 psia at storage temperature or tank shall be subject to the requirements of Rule 4623. [District Rule 4623, 2.0 and District Rule 2520, 9.1] Federally Enforceable Through Title V Permit
2. Operator shall determine the true vapor pressure of the petroleum liquid stored in the tank at least once per year in accordance with methods described in Section 6.2 of District Rule 4623 (amended 12/17/92). Determinations shall be made annually during summer and whenever there is a change in the source or type of petroleum entering the tank. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
3. True vapor pressure shall be measured using Reid vapor pressure ASTM Method D323 modified by maintaining the hot water bath at storage temperature. Where storage temperature is above 100 degrees F, true vapor pressure shall be determined by Reid vapor pressure at 100 degrees F and CARB approved calculations. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
4. True vapor pressure of crude oil with an API (American Petroleum Institute) gravity less than 30 deg, as determined by API 2547, may be determined by Headspace Gas Chromatography using the procedures from CARB Evaluation of a Method for Determining Vapor Pressures of Petroleum Mixtures by Headspace Gas Chromatography, October 1990. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
5. The operator shall keep accurate records of types, storage temperature, and TVP of liquids stored to verify continued exemption from District Rule 4623 (as amended December 17, 1992). [District Rule 2520, 9.1] Federally Enforceable Through Title V Permit
6. As used in this permit, the term "source or type of petroleum" shall mean petroleum liquids with similar characteristics. The operator shall maintain records of API gravity of petroleum liquids store in this unit to determine which oil are from common source. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

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

# San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1326-133-1

EXPIRATION DATE: 03/31/2006

SECTION: 22 TOWNSHIP: 28S RANGE: 27E

**EQUIPMENT DESCRIPTION:**

42,000 GALLON FIXED-ROOF PETROLEUM STORAGE TANK #152323 (STAR USL)

## PERMIT UNIT REQUIREMENTS

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1. The true vapor pressure (TVP) of liquids stored in the tank shall not exceed 1.5 psia at storage temperature or tank shall be subject to the requirements of Rule 4623. [District Rule 4623, 2.0 and District Rule 2520, 9.1] Federally Enforceable Through Title V Permit
2. Operator shall determine the true vapor pressure of the petroleum liquid stored in the tank located at the beginning of the process flow after the production header at least once per year in accordance with methods described in Section 6.2 of District Rule 4623 (amended 12/17/92). Determinations shall be made annually during summer and whenever there is a change in the source or type of petroleum entering the tank. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
3. True vapor pressure shall be measured using Reid vapor pressure ASTM Method D323 modified by maintaining the hot water bath at storage temperature. Where storage temperature is above 100 degrees F, true vapor pressure shall be determined by Reid vapor pressure at 100 degrees F and CARB approved calculations. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
4. True vapor pressure of crude oil with an API (American Petroleum Institute) gravity less than 30 deg, as determined by API 2547, may be determined by Headspace Gas Chromatography using the procedures from CARB Evaluation of a Method for Determining Vapor Pressures of Petroleum Mixtures by Headspace Gas Chromatography, October 1990. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
5. The operator shall keep accurate records of types, storage temperature, and TVP of liquids stored to verify continued exemption from District Rule 4623 (as amended December 17, 1992). [District Rule 2520, 9.1] Federally Enforceable Through Title V Permit
6. As used in this permit, the term "source or type of petroleum" shall mean petroleum liquids with similar characteristics. The operator shall maintain records of API gravity of petroleum liquids store in this unit to determine which oil are from common source. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
7. The tanks included in this setting are S-1326-133, '-134, '-135, and '-136. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-1326-134-1

**EXPIRATION DATE:** 03/31/2006

**SECTION:** 22 **TOWNSHIP:** 28S **RANGE:** 27E

**EQUIPMENT DESCRIPTION:**

42,000 GALLON FIXED-ROOF PETROLEUM STORAGE TANK #15322 (STAR USL)

## PERMIT UNIT REQUIREMENTS

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1. The true vapor pressure (TVP) of liquids stored in the tank shall not exceed 1.5 psia at storage temperature or tank shall be subject to the requirements of Rule 4623. [District Rule 4623, 2.0 and District Rule 2520, 9.1] Federally Enforceable Through Title V Permit
2. Operator shall determine the true vapor pressure of the petroleum liquid stored in the tank located at the beginning of the process flow after the production header at least once per year in accordance with methods described in Section 6.2 of District Rule 4623 (amended 12/17/92). Determinations shall be made annually during summer and whenever there is a change in the source or type of petroleum entering the tank. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
3. True vapor pressure shall be measured using Reid vapor pressure ASTM Method D323 modified by maintaining the hot water bath at storage temperature. Where storage temperature is above 100 degrees F, true vapor pressure shall be determined by Reid vapor pressure at 100 degrees F and CARB approved calculations. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
4. True vapor pressure of crude oil with an API (American Petroleum Institute) gravity less than 30 deg, as determined by API 2547, may be determined by Headspace Gas Chromatography using the procedures from CARB Evaluation of a Method for Determining Vapor Pressures of Petroleum Mixtures by Headspace Gas Chromatography, October 1990. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
5. The operator shall keep accurate records of types, storage temperature, and TVP of liquids stored to verify continued exemption from District Rule 4623 (as amended December 17, 1992). [District Rule 2520, 9.1] Federally Enforceable Through Title V Permit
6. As used in this permit, the term "source or type of petroleum" shall mean petroleum liquids with similar characteristics. The operator shall maintain records of API gravity of petroleum liquids store in this unit to determine which oil are from common source. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
7. The tanks included in this setting are S-1326-133, '-134, '-135, and '-136. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-1326-135-1

**EXPIRATION DATE:** 03/31/2006

**SECTION:** 22 **TOWNSHIP:** 28S **RANGE:** 27E

**EQUIPMENT DESCRIPTION:**

42,000 GALLON FIXED-ROOF PETROLEUM STORAGE TANK #15321 (STAR USL)

## PERMIT UNIT REQUIREMENTS

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1. The true vapor pressure (TVP) of liquids stored in the tank shall not exceed 1.5 psia at storage temperature or tank shall be subject to the requirements of Rule 4623. [District Rule 4623, 2.0 and District Rule 2520, 9.1] Federally Enforceable Through Title V Permit
2. Operator shall determine the true vapor pressure of the petroleum liquid stored in the tank located at the beginning of the process flow after the production header at least once per year in accordance with methods described in Section 6.2 of District Rule 4623 (amended 12/17/92). Determinations shall be made annually during summer and whenever there is a change in the source or type of petroleum entering the tank. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
3. True vapor pressure shall be measured using Reid vapor pressure ASTM Method D323 modified by maintaining the hot water bath at storage temperature. Where storage temperature is above 100 degrees F, true vapor pressure shall be determined by Reid vapor pressure at 100 degrees F and CARB approved calculations. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
4. True vapor pressure of crude oil with an API (American Petroleum Institute) gravity less than 30 deg, as determined by API 2547, may be determined by Headspace Gas Chromatography using the procedures from CARB Evaluation of a Method for Determining Vapor Pressures of Petroleum Mixtures by Headspace Gas Chromatography, October 1990. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
5. The operator shall keep accurate records of types, storage temperature, and TVP of liquids stored to verify continued exemption from District Rule 4623 (as amended December 17, 1992). [District Rule 2520, 9.1] Federally Enforceable Through Title V Permit
6. As used in this permit, the term "source or type of petroleum" shall mean petroleum liquids with similar characteristics. The operator shall maintain records of API gravity of petroleum liquids store in this unit to determine which oil are from common source. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
7. The tanks included in this setting are S-1326-133, '-134, '-135, and '-136. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-1326-136-1

**EXPIRATION DATE:** 03/31/2006

**SECTION:** 22 **TOWNSHIP:** 28S **RANGE:** 27E

**EQUIPMENT DESCRIPTION:**

42,000 GALLON FIXED-ROOF PETROLEUM STORAGE TANK #WSTWTR1 (STAR USL)

## PERMIT UNIT REQUIREMENTS

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1. The true vapor pressure (TVP) of liquids stored in the tank shall not exceed 1.5 psia at storage temperature or tank shall be subject to the requirements of Rule 4623. [District Rule 4623, 2.0 and District Rule 2520, 9.1] Federally Enforceable Through Title V Permit
2. Operator shall determine the true vapor pressure of the petroleum liquid stored in the tank located at the beginning of the process flow after the production header at least once per year in accordance with methods described in Section 6.2 of District Rule 4623 (amended 12/17/92). Determinations shall be made annually during summer and whenever there is a change in the source or type of petroleum entering the tank. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
3. True vapor pressure shall be measured using Reid vapor pressure ASTM Method D323 modified by maintaining the hot water bath at storage temperature. Where storage temperature is above 100 degrees F, true vapor pressure shall be determined by Reid vapor pressure at 100 degrees F and CARB approved calculations. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
4. True vapor pressure of crude oil with an API (American Petroleum Institute) gravity less than 30 deg, as determined by API 2547, may be determined by Headspace Gas Chromatography using the procedures from CARB Evaluation of a Method for Determining Vapor Pressures of Petroleum Mixtures by Headspace Gas Chromatography, October 1990. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
5. The operator shall keep accurate records of types, storage temperature, and TVP of liquids stored to verify continued exemption from District Rule 4623 (as amended December 17, 1992). [District Rule 2520, 9.1] Federally Enforceable Through Title V Permit
6. As used in this permit, the term "source or type of petroleum" shall mean petroleum liquids with similar characteristics. The operator shall maintain records of API gravity of petroleum liquids store in this unit to determine which oil are from common source. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
7. The tanks included in this setting are S-1326-133, '-134, '-135, and '-136. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-1326-137-2

**EXPIRATION DATE:** 03/31/2006

**SECTION:** 22 **TOWNSHIP:** 28S **RANGE:** 27E

**EQUIPMENT DESCRIPTION:**

42,000 GALLON FIXED-ROOF PETROLEUM STORAGE TANK #15324 (STAR ROBINSON).

## PERMIT UNIT REQUIREMENTS

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1. The true vapor pressure (TVP) of liquids stored in the tank shall not exceed 1.5 psia at storage temperature or tank shall be subject to the requirements of Rule 4623. [District Rule 4623, 2.0 and District Rule 2520, 9.1] Federally Enforceable Through Title V Permit
2. Operator shall determine the true vapor pressure of the petroleum liquid stored in the tank located at the beginning of process flow after the production header at least once per year in accordance with methods described in Section 6.2 of District Rule 4623 (amended 12/17/92). Determinations shall be made annually during summer and whenever there is a change in the source or type of petroleum entering the tank. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
3. True vapor pressure shall be measured using Reid vapor pressure ASTM Method D323 modified by maintaining the hot water bath at storage temperature. Where storage temperature is above 100 degrees F, true vapor pressure shall be determined by Reid vapor pressure at 100 degrees F and CARB approved calculations. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
4. True vapor pressure of crude oil with an API (American Petroleum Institute) gravity less than 30 deg, as determined by API 2547, may be determined by Headspace Gas Chromatography using the procedures from CARB Evaluation of a Method for Determining Vapor Pressures of Petroleum Mixtures by Headspace Gas Chromatography, October 1990. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
5. The operator shall keep accurate records of types, storage temperature, and TVP of liquids stored to verify continued exemption from District Rule 4623 (as amended December 17, 1992). [District Rule 2520, 9.1] Federally Enforceable Through Title V Permit
6. As used in this permit, the term "source or type of petroleum" shall mean petroleum liquids with similar characteristics. The operator shall maintain records of API gravity of petroleum liquids store in this unit to determine which oil are from common source. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
7. Tanks associated with this battery setting are S-1326-137, '-138, '-139, and '-140. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

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

# San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1326-138-2

EXPIRATION DATE: 03/31/2006

SECTION: 22 TOWNSHIP: 28S RANGE: 27E

**EQUIPMENT DESCRIPTION:**

42,000 GALLON FIXED-ROOF PETROLEUM STORAGE TANK #15325 (STAR ROBINSON).

## PERMIT UNIT REQUIREMENTS

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1. The true vapor pressure (TVP) of liquids stored in the tank shall not exceed 1.5 psia at storage temperature or tank shall be subject to the requirements of Rule 4623. [District Rule 4623, 2.0 and District Rule 2520, 9.1] Federally Enforceable Through Title V Permit
2. Operator shall determine the true vapor pressure of the petroleum liquid stored in the tank located at the beginning of process flow after the production header at least once per year in accordance with methods described in Section 6.2 of District Rule 4623 (amended 12/17/92). Determinations shall be made annually during summer and whenever there is a change in the source or type of petroleum entering the tank. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
3. True vapor pressure shall be measured using Reid vapor pressure ASTM Method D323 modified by maintaining the hot water bath at storage temperature. Where storage temperature is above 100 degrees F, true vapor pressure shall be determined by Reid vapor pressure at 100 degrees F and CARB approved calculations. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
4. True vapor pressure of crude oil with an API (American Petroleum Institute) gravity less than 30 deg, as determined by API 2547, may be determined by Headspace Gas Chromatography using the procedures from CARB Evaluation of a Method for Determining Vapor Pressures of Petroleum Mixtures by Headspace Gas Chromatography, October 1990. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
5. The operator shall keep accurate records of types, storage temperature, and TVP of liquids stored to verify continued exemption from District Rule 4623 (as amended December 17, 1992). [District Rule 2520, 9.1] Federally Enforceable Through Title V Permit
6. As used in this permit, the term "source or type of petroleum" shall mean petroleum liquids with similar characteristics. The operator shall maintain records of API gravity of petroleum liquids store in this unit to determine which oil are from common source. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
7. Tanks associated with this battery setting are S-1326-137, '-138, '-139, and '-140. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

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

# San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1326-139-2

EXPIRATION DATE: 03/31/2006

SECTION: 22 TOWNSHIP: 28S RANGE: 27E

**EQUIPMENT DESCRIPTION:**

42,000 GALLON FIXED-ROOF PETROLEUM STORAGE TANK #15326 (STAR ROBINSON).

## PERMIT UNIT REQUIREMENTS

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1. The true vapor pressure (TVP) of liquids stored in the tank shall not exceed 1.5 psia at storage temperature or tank shall be subject to the requirements of Rule 4623. [District Rule 4623, 2.0 and District Rule 2520, 9.1] Federally Enforceable Through Title V Permit
2. Operator shall determine the true vapor pressure of the petroleum liquid stored in the tank located at the beginning of process flow after the production header at least once per year in accordance with methods described in Section 6.2 of District Rule 4623 (amended 12/17/92). Determinations shall be made annually during summer and whenever there is a change in the source or type of petroleum entering the tank. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
3. True vapor pressure shall be measured using Reid vapor pressure ASTM Method D323 modified by maintaining the hot water bath at storage temperature. Where storage temperature is above 100 degrees F, true vapor pressure shall be determined by Reid vapor pressure at 100 degrees F and CARB approved calculations. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
4. True vapor pressure of crude oil with an API (American Petroleum Institute) gravity less than 30 deg, as determined by API 2547, may be determined by Headspace Gas Chromatography using the procedures from CARB Evaluation of a Method for Determining Vapor Pressures of Petroleum Mixtures by Headspace Gas Chromatography, October 1990. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
5. The operator shall keep accurate records of types, storage temperature, and TVP of liquids stored to verify continued exemption from District Rule 4623 (as amended December 17, 1992). [District Rule 2520, 9.1] Federally Enforceable Through Title V Permit
6. As used in this permit, the term "source or type of petroleum" shall mean petroleum liquids with similar characteristics. The operator shall maintain records of API gravity of petroleum liquids store in this unit to determine which oil are from common source. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
7. Tanks associated with this battery setting are S-1326-137, '-138, '-139, and '-140. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

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



# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-1326-140-2

**EXPIRATION DATE:** 03/31/2006

**SECTION:** 22 **TOWNSHIP:** 28S **RANGE:** 27E

**EQUIPMENT DESCRIPTION:**

42,000 GALLON FIXED-ROOF PETROLEUM STORAGE TANK #WSTWTR1 (STAR ROBINSON).

## PERMIT UNIT REQUIREMENTS

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1. The true vapor pressure (TVP) of liquids stored in the tank shall not exceed 1.5 psia at storage temperature or tank shall be subject to the requirements of Rule 4623. [District Rule 4623, 2.0 and District Rule 2520, 9.1] Federally Enforceable Through Title V Permit
2. Operator shall determine the true vapor pressure of the petroleum liquid stored in the tank located at the beginning of process flow after the production header at least once per year in accordance with methods described in Section 6.2 of District Rule 4623 (amended 12/17/92). Determinations shall be made annually during summer and whenever there is a change in the source or type of petroleum entering the tank. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
3. True vapor pressure shall be measured using Reid vapor pressure ASTM Method D323 modified by maintaining the hot water bath at storage temperature. Where storage temperature is above 100 degrees F, true vapor pressure shall be determined by Reid vapor pressure at 100 degrees F and CARB approved calculations. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
4. True vapor pressure of crude oil with an API (American Petroleum Institute) gravity less than 30 deg, as determined by API 2547, may be determined by Headspace Gas Chromatography using the procedures from CARB Evaluation of a Method for Determining Vapor Pressures of Petroleum Mixtures by Headspace Gas Chromatography, October 1990. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
5. The operator shall keep accurate records of types, storage temperature, and TVP of liquids stored to verify continued exemption from District Rule 4623 (as amended December 17, 1992). [District Rule 2520, 9.1] Federally Enforceable Through Title V Permit
6. As used in this permit, the term "source or type of petroleum" shall mean petroleum liquids with similar characteristics. The operator shall maintain records of API gravity of petroleum liquids store in this unit to determine which oil are from common source. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
7. Tanks associated with this battery setting are S-1326-137, '-138, '-139, and '-140. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-1326-147-1

**EXPIRATION DATE:** 03/31/2006

**SECTION:** 22 **TOWNSHIP:** 28S **RANGE:** 27E

**EQUIPMENT DESCRIPTION:**

84,000 GALLON FIXED-ROOF PETROLEUM STORAGE TANK #2GK-18 (ROBINSON B/USL)

## PERMIT UNIT REQUIREMENTS

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1. The true vapor pressure (TVP) of liquids stored in the tank shall not exceed 1.5 psia at storage temperature or tank shall be subject to the requirements of Rule 4623. [District Rule 4623, 2.0 and District Rule 2520, 9.1] Federally Enforceable Through Title V Permit
2. Operator shall determine the true vapor pressure of the petroleum liquid stored in the tank located at the beginning of the process flow after the production header at least once per year in accordance with methods described in Section 6.2 of District Rule 4623 (amended 12/17/92). Determinations shall be made annually during summer and whenever there is a change in the source or type of petroleum entering the tank. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
3. True vapor pressure shall be measured using Reid vapor pressure ASTM Method D323 modified by maintaining the hot water bath at storage temperature. Where storage temperature is above 100 degrees F, true vapor pressure shall be determined by Reid vapor pressure at 100 degrees F and CARB approved calculations. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
4. True vapor pressure of crude oil with an API (American Petroleum Institute) gravity less than 30 deg, as determined by API 2547, may be determined by Headspace Gas Chromatography using the procedures from CARB Evaluation of a Method for Determining Vapor Pressures of Petroleum Mixtures by Headspace Gas Chromatography, October 1990. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
5. The operator shall keep accurate records of types, storage temperature, and TVP of liquids stored to verify continued exemption from District Rule 4623 (as amended December 17, 1992). [District Rule 2520, 9.1] Federally Enforceable Through Title V Permit
6. As used in this permit, the term "source or type of petroleum" shall mean petroleum liquids with similar characteristics. The operator shall maintain records of API gravity of petroleum liquids store in this unit to determine which oil are from common source. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
7. The tanks included in this setting are S-1326-147, '-148, and '-149. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-1326-148-1

**EXPIRATION DATE:** 03/31/2006

**SECTION:** 22 **TOWNSHIP:** 28S **RANGE:** 27E

**EQUIPMENT DESCRIPTION:**

84,000 GALLON FIXED-ROOF PETROLEUM STORAGE TANK #2GK-23 (ROBINSON B/USL)

## PERMIT UNIT REQUIREMENTS

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1. The true vapor pressure (TVP) of liquids stored in the tank shall not exceed 1.5 psia at storage temperature or tank shall be subject to the requirements of Rule 4623. [District Rule 4623, 2.0 and District Rule 2520, 9.1] Federally Enforceable Through Title V Permit
2. Operator shall determine the true vapor pressure of the petroleum liquid stored in the tank located at the beginning of the process flow after the production header at least once per year in accordance with methods described in Section 6.2 of District Rule 4623 (amended 12/17/92). Determinations shall be made annually during summer and whenever there is a change in the source or type of petroleum entering the tank. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
3. True vapor pressure shall be measured using Reid vapor pressure ASTM Method D323 modified by maintaining the hot water bath at storage temperature. Where storage temperature is above 100 degrees F, true vapor pressure shall be determined by Reid vapor pressure at 100 degrees F and CARB approved calculations. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
4. True vapor pressure of crude oil with an API (American Petroleum Institute) gravity less than 30 deg, as determined by API 2547, may be determined by Headspace Gas Chromatography using the procedures from CARB Evaluation of a Method for Determining Vapor Pressures of Petroleum Mixtures by Headspace Gas Chromatography, October 1990. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
5. The operator shall keep accurate records of types, storage temperature, and TVP of liquids stored to verify continued exemption from District Rule 4623 (as amended December 17, 1992). [District Rule 2520, 9.1] Federally Enforceable Through Title V Permit
6. As used in this permit, the term "source or type of petroleum" shall mean petroleum liquids with similar characteristics. The operator shall maintain records of API gravity of petroleum liquids store in this unit to determine which oil are from common source. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
7. The tanks included in this setting are S-1326-147, '-148, and '-149. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

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

# San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1326-149-1

EXPIRATION DATE: 03/31/2006

SECTION: 22 TOWNSHIP: 28S RANGE: 27E

**EQUIPMENT DESCRIPTION:**

42,000 GALLON FIXED-ROOF PETROLEUM STORAGE TANK #1RB101 (ROBINSON B/USL)

## PERMIT UNIT REQUIREMENTS

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1. The true vapor pressure (TVP) of liquids stored in the tank shall not exceed 1.5 psia at storage temperature or tank shall be subject to the requirements of Rule 4623. [District Rule 4623, 2.0 and District Rule 2520, 9.1] Federally Enforceable Through Title V Permit
2. Operator shall determine the true vapor pressure of the petroleum liquid stored in the tank located at the beginning of the process flow after the production header at least once per year in accordance with methods described in Section 6.2 of District Rule 4623 (amended 12/17/92). Determinations shall be made annually during summer and whenever there is a change in the source or type of petroleum entering the tank. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
3. True vapor pressure shall be measured using Reid vapor pressure ASTM Method D323 modified by maintaining the hot water bath at storage temperature. Where storage temperature is above 100 degrees F, true vapor pressure shall be determined by Reid vapor pressure at 100 degrees F and CARB approved calculations. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
4. True vapor pressure of crude oil with an API (American Petroleum Institute) gravity less than 30 deg, as determined by API 2547, may be determined by Headspace Gas Chromatography using the procedures from CARB Evaluation of a Method for Determining Vapor Pressures of Petroleum Mixtures by Headspace Gas Chromatography, October 1990. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
5. The operator shall keep accurate records of types, storage temperature, and TVP of liquids stored to verify continued exemption from District Rule 4623 (as amended December 17, 1992). [District Rule 2520, 9.1] Federally Enforceable Through Title V Permit .
6. As used in this permit, the term "source or type of petroleum" shall mean petroleum liquids with similar characteristics. The operator shall maintain records of API gravity of petroleum liquids store in this unit to determine which oil are from common source. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
7. The tanks included in this setting are S-1326-147, '-148, and '-149. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-1326-150-2

**EXPIRATION DATE:** 03/31/2006

**SECTION:** 22 **TOWNSHIP:** 28S **RANGE:** 27E

**EQUIPMENT DESCRIPTION:**

42,000 GALLON FIXED-ROOF PETROLEUM STORAGE TANK #1DRNTK3 (ROBINSON B DEHY).

## PERMIT UNIT REQUIREMENTS

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1. The true vapor pressure (TVP) of liquids stored in the tank shall not exceed 1.5 psia at storage temperature or tank shall be subject to the requirements of Rule 4623. [District Rule 4623, 2.0 and District Rule 2520, 9.1] Federally Enforceable Through Title V Permit
2. Operator shall determine the true vapor pressure of the petroleum liquid stored in the tank located at the beginning of the process flow after the production header at least once per year in accordance with methods described in Section 6.2 of District Rule 4623 (amended 12/17/92). Determinations shall be made annually during summer and whenever there is a change in the source or type of petroleum entering the tank. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
3. True vapor pressure shall be measured using Reid vapor pressure ASTM Method D323 modified by maintaining the hot water bath at storage temperature. Where storage temperature is above 100 degrees F, true vapor pressure shall be determined by Reid vapor pressure at 100 degrees F and CARB approved calculations. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
4. True vapor pressure of crude oil with an API (American Petroleum Institute) gravity less than 30 deg, as determined by API 2547, may be determined by Headspace Gas Chromatography using the procedures from CARB Evaluation of a Method for Determining Vapor Pressures of Petroleum Mixtures by Headspace Gas Chromatography, October 1990. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
5. The operator shall keep accurate records of types, storage temperature, and TVP of liquids stored to verify continued exemption from District Rule 4623 (as amended December 17, 1992). [District Rule 2520, 9.1] Federally Enforceable Through Title V Permit
6. As used in this permit, the term "source or type of petroleum" shall mean petroleum liquids with similar characteristics. The operator shall maintain records of API gravity of petroleum liquids store in this unit to determine which oil are from common source. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
7. The tanks included in this setting are S-1326-150, '-151, '-152, '-153, and '-154. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

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

# San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1326-151-2

EXPIRATION DATE: 03/31/2006

SECTION: 22 TOWNSHIP: 28S RANGE: 27E

**EQUIPMENT DESCRIPTION:**

210,000 GALLON FIXED-ROOF PETROLEUM STORAGE TANK #5RB1035RG (ROBINSON B DEHY).

## PERMIT UNIT REQUIREMENTS

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1. The true vapor pressure (TVP) of liquids stored in the tank shall not exceed 1.5 psia at storage temperature or tank shall be subject to the requirements of Rule 4623. [District Rule 4623, 2.0 and District Rule 2520, 9.1] Federally Enforceable Through Title V Permit
2. Operator shall determine the true vapor pressure of the petroleum liquid stored in the tank located at the beginning of the process flow after the production header at least once per year in accordance with methods described in Section 6.2 of District Rule 4623 (amended 12/17/92). Determinations shall be made annually during summer and whenever there is a change in the source or type of petroleum entering the tank. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
3. True vapor pressure shall be measured using Reid vapor pressure ASTM Method D323 modified by maintaining the hot water bath at storage temperature. Where storage temperature is above 100 degrees F, true vapor pressure shall be determined by Reid vapor pressure at 100 degrees F and CARB approved calculations. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
4. True vapor pressure of crude oil with an API (American Petroleum Institute) gravity less than 30 deg, as determined by API 2547, may be determined by Headspace Gas Chromatography using the procedures from CARB Evaluation of a Method for Determining Vapor Pressures of Petroleum Mixtures by Headspace Gas Chromatography, October 1990. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
5. The operator shall keep accurate records of types, storage temperature, and TVP of liquids stored to verify continued exemption from District Rule 4623 (as amended December 17, 1992). [District Rule 2520, 9.1] Federally Enforceable Through Title V Permit
6. As used in this permit, the term "source or type of petroleum" shall mean petroleum liquids with similar characteristics. The operator shall maintain records of API gravity of petroleum liquids store in this unit to determine which oil are from common source. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
7. The tanks included in this setting are S-1326-150, '-151, '-152, '-153, and '-154. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

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# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-1326-152-2

**EXPIRATION DATE:** 03/31/2006

**SECTION:** 22 **TOWNSHIP:** 28S **RANGE:** 27E

**EQUIPMENT DESCRIPTION:**

42,000 GALLON FIXED-ROOF PETROLEUM STORAGE TANK #10WSTWTR (ROBINSON B DEHY).

## PERMIT UNIT REQUIREMENTS

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1. The true vapor pressure (TVP) of liquids stored in the tank shall not exceed 1.5 psia at storage temperature or tank shall be subject to the requirements of Rule 4623. [District Rule 4623, 2.0 and District Rule 2520, 9.1] Federally Enforceable Through Title V Permit
2. Operator shall determine the true vapor pressure of the petroleum liquid stored in the tank located at the beginning of the process flow after the production header at least once per year in accordance with methods described in Section 6.2 of District Rule 4623 (amended 12/17/92). Determinations shall be made annually during summer and whenever there is a change in the source or type of petroleum entering the tank. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
3. True vapor pressure shall be measured using Reid vapor pressure ASTM Method D323 modified by maintaining the hot water bath at storage temperature. Where storage temperature is above 100 degrees F, true vapor pressure shall be determined by Reid vapor pressure at 100 degrees F and CARB approved calculations. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
4. True vapor pressure of crude oil with an API (American Petroleum Institute) gravity less than 30 deg, as determined by API 2547, may be determined by Headspace Gas Chromatography using the procedures from CARB Evaluation of a Method for Determining Vapor Pressures of Petroleum Mixtures by Headspace Gas Chromatography, October 1990. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
5. The operator shall keep accurate records of types, storage temperature, and TVP of liquids stored to verify continued exemption from District Rule 4623 (as amended December 17, 1992). [District Rule 2520, 9.1] Federally Enforceable Through Title V Permit
6. As used in this permit, the term "source or type of petroleum" shall mean petroleum liquids with similar characteristics. The operator shall maintain records of API gravity of petroleum liquids store in this unit to determine which oil are from common source. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
7. The tanks included in this setting are S-1326-150, '-151, '-152, '-153, and '-154. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

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# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-1326-153-2

**EXPIRATION DATE:** 03/31/2006

**SECTION:** 22 **TOWNSHIP:** 28S **RANGE:** 27E

**EQUIPMENT DESCRIPTION:**

126,000 GALLON FIXED-ROOF PETROLEUM STORAGE TANK #3GK309SHP (ROBINSON B DEHY).

## PERMIT UNIT REQUIREMENTS

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1. The true vapor pressure (TVP) of liquids stored in the tank shall not exceed 1.5 psia at storage temperature or tank shall be subject to the requirements of Rule 4623. [District Rule 4623, 2.0 and District Rule 2520, 9.1] Federally Enforceable Through Title V Permit
2. Operator shall determine the true vapor pressure of the petroleum liquid stored in the tank located at the beginning of the process flow after the production header at least once per year in accordance with methods described in Section 6.2 of District Rule 4623 (amended 12/17/92). Determinations shall be made annually during summer and whenever there is a change in the source or type of petroleum entering the tank. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
3. True vapor pressure shall be measured using Reid vapor pressure ASTM Method D323 modified by maintaining the hot water bath at storage temperature. Where storage temperature is above 100 degrees F, true vapor pressure shall be determined by Reid vapor pressure at 100 degrees F and CARB approved calculations. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
4. True vapor pressure of crude oil with an API (American Petroleum Institute) gravity less than 30 deg, as determined by API 2547, may be determined by Headspace Gas Chromatography using the procedures from CARB Evaluation of a Method for Determining Vapor Pressures of Petroleum Mixtures by Headspace Gas Chromatography, October 1990. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
5. The operator shall keep accurate records of types, storage temperature, and TVP of liquids stored to verify continued exemption from District Rule 4623 (as amended December 17, 1992). [District Rule 2520, 9.1] Federally Enforceable Through Title V Permit
6. As used in this permit, the term "source or type of petroleum" shall mean petroleum liquids with similar characteristics. The operator shall maintain records of API gravity of petroleum liquids store in this unit to determine which oil are from common source. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
7. The tanks included in this setting are S-1326-150, '-151, '-152, '-153, and '-154. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

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



# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-1326-154-2

**EXPIRATION DATE:** 03/31/2006

**SECTION:** 22 **TOWNSHIP:** 28S **RANGE:** 27E

**EQUIPMENT DESCRIPTION:**

126,000 GALLON FIXED-ROOF PETROLEUM STORAGE TANK #3GK310SHP (ROBINSON B DEHY).

## PERMIT UNIT REQUIREMENTS

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1. The true vapor pressure (TVP) of liquids stored in the tank shall not exceed 1.5 psia at storage temperature or tank shall be subject to the requirements of Rule 4623. [District Rule 4623, 2.0 and District Rule 2520, 9.1] Federally Enforceable Through Title V Permit
2. Operator shall determine the true vapor pressure of the petroleum liquid stored in the tank located at the beginning of the process flow after the production header at least once per year in accordance with methods described in Section 6.2 of District Rule 4623 (amended 12/17/92). Determinations shall be made annually during summer and whenever there is a change in the source or type of petroleum entering the tank. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
3. True vapor pressure shall be measured using Reid vapor pressure ASTM Method D323 modified by maintaining the hot water bath at storage temperature. Where storage temperature is above 100 degrees F, true vapor pressure shall be determined by Reid vapor pressure at 100 degrees F and CARB approved calculations. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
4. True vapor pressure of crude oil with an API (American Petroleum Institute) gravity less than 30 deg, as determined by API 2547, may be determined by Headspace Gas Chromatography using the procedures from CARB Evaluation of a Method for Determining Vapor Pressures of Petroleum Mixtures by Headspace Gas Chromatography, October 1990. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
5. The operator shall keep accurate records of types, storage temperature, and TVP of liquids stored to verify continued exemption from District Rule 4623 (as amended December 17, 1992). [District Rule 2520, 9.1] Federally Enforceable Through Title V Permit
6. As used in this permit, the term "source or type of petroleum" shall mean petroleum liquids with similar characteristics. The operator shall maintain records of API gravity of petroleum liquids store in this unit to determine which oil are from common source. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
7. The tanks included in this setting are S-1326-150, '-151, '-152, '-153, and '-154. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

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

# San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1326-158-1

EXPIRATION DATE: 03/31/2006

SECTION: 22 TOWNSHIP: 28S RANGE: 27E

**EQUIPMENT DESCRIPTION:**

210,000 GALLON FIXED-ROOF PETROLEUM STORAGE TANK #5T100 (TEGELER/USL)

## PERMIT UNIT REQUIREMENTS

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1. The true vapor pressure (TVP) of liquids stored in the tank shall not exceed 1.5 psia at storage temperature or tank shall be subject to the requirements of Rule 4623. [District Rule 4623, 2.0 and District Rule 2520, 9.1] Federally Enforceable Through Title V Permit
2. Operator shall determine the true vapor pressure of the petroleum liquid stored in the tank located at the beginning of the process flow after the production header at least once per year in accordance with methods described in Section 6.2 of District Rule 4623 (amended 12/17/92). Determinations shall be made annually during summer and whenever there is a change in the source or type of petroleum entering the tank. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
3. True vapor pressure shall be measured using Reid vapor pressure ASTM Method D323 modified by maintaining the hot water bath at storage temperature. Where storage temperature is above 100 degrees F, true vapor pressure shall be determined by Reid vapor pressure at 100 degrees F and CARB approved calculations. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
4. True vapor pressure of crude oil with an API (American Petroleum Institute) gravity less than 30 deg, as determined by API 2547, may be determined by Headspace Gas Chromatography using the procedures from CARB Evaluation of a Method for Determining Vapor Pressures of Petroleum Mixtures by Headspace Gas Chromatography, October 1990. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
5. The operator shall keep accurate records of types, storage temperature, and TVP of liquids stored to verify continued exemption from District Rule 4623 (as amended December 17, 1992). [District Rule 2520, 9.1] Federally Enforceable Through Title V Permit
6. As used in this permit, the term "source or type of petroleum" shall mean petroleum liquids with similar characteristics. The operator shall maintain records of API gravity of petroleum liquids store in this unit to determine which oil are from common source. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
7. The tanks included in this setting are S-1326-158, '-159, and '-160. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-1326-159-1

**EXPIRATION DATE:** 03/31/2006

**SECTION:** 22 **TOWNSHIP:** 28S **RANGE:** 27E

**EQUIPMENT DESCRIPTION:**

84,000 GALLON FIXED-ROOF PETROLEUM STORAGE TANK #3GK24 (TEGELER/USL)

## PERMIT UNIT REQUIREMENTS

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1. The true vapor pressure (TVP) of liquids stored in the tank shall not exceed 1.5 psia at storage temperature or tank shall be subject to the requirements of Rule 4623. [District Rule 4623, 2.0 and District Rule 2520, 9.1] Federally Enforceable Through Title V Permit
2. Operator shall determine the true vapor pressure of the petroleum liquid stored in the tank located at the beginning of the process flow after the production header at least once per year in accordance with methods described in Section 6.2 of District Rule 4623 (amended 12/17/92). Determinations shall be made annually during summer and whenever there is a change in the source or type of petroleum entering the tank. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
3. True vapor pressure shall be measured using Reid vapor pressure ASTM Method D323 modified by maintaining the hot water bath at storage temperature. Where storage temperature is above 100 degrees F, true vapor pressure shall be determined by Reid vapor pressure at 100 degrees F and CARB approved calculations. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
4. True vapor pressure of crude oil with an API (American Petroleum Institute) gravity less than 30 deg, as determined by API 2547, may be determined by Headspace Gas Chromatography using the procedures from CARB Evaluation of a Method for Determining Vapor Pressures of Petroleum Mixtures by Headspace Gas Chromatography, October 1990. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
5. The operator shall keep accurate records of types, storage temperature, and TVP of liquids stored to verify continued exemption from District Rule 4623 (as amended December 17, 1992). [District Rule 2520, 9.1] Federally Enforceable Through Title V Permit
6. As used in this permit, the term "source or type of petroleum" shall mean petroleum liquids with similar characteristics. The operator shall maintain records of API gravity of petroleum liquids store in this unit to determine which oil are from common source. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
7. The tanks included in this setting are S-1326-158, '-159, and '-160. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

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

# San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1326-160-1

EXPIRATION DATE: 03/31/2006

SECTION: 22 TOWNSHIP: 28S RANGE: 27E

**EQUIPMENT DESCRIPTION:**

84,000 GALLON FIXED-ROOF PETROLEUM STORAGE TANK #2GK13 (TEGELER/USL)

## PERMIT UNIT REQUIREMENTS

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1. The true vapor pressure (TVP) of liquids stored in the tank shall not exceed 1.5 psia at storage temperature or tank shall be subject to the requirements of Rule 4623. [District Rule 4623, 2.0 and District Rule 2520, 9.1] Federally Enforceable Through Title V Permit
2. Operator shall determine the true vapor pressure of the petroleum liquid stored in the tank located at the beginning of the process flow after the production header at least once per year in accordance with methods described in Section 6.2 of District Rule 4623 (amended 12/17/92). Determinations shall be made annually during summer and whenever there is a change in the source or type of petroleum entering the tank. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
3. True vapor pressure shall be measured using Reid vapor pressure ASTM Method D323 modified by maintaining the hot water bath at storage temperature. Where storage temperature is above 100 degrees F, true vapor pressure shall be determined by Reid vapor pressure at 100 degrees F and CARB approved calculations. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
4. True vapor pressure of crude oil with an API (American Petroleum Institute) gravity less than 30 deg, as determined by API 2547, may be determined by Headspace Gas Chromatography using the procedures from CARB Evaluation of a Method for Determining Vapor Pressures of Petroleum Mixtures by Headspace Gas Chromatography, October 1990. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
5. The operator shall keep accurate records of types, storage temperature, and TVP of liquids stored to verify continued exemption from District Rule 4623 (as amended December 17, 1992). [District Rule 2520, 9.1] Federally Enforceable Through Title V Permit
6. As used in this permit, the term "source or type of petroleum" shall mean petroleum liquids with similar characteristics. The operator shall maintain records of API gravity of petroleum liquids store in this unit to determine which oil are from common source. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
7. The tanks included in this setting are S-1326-158, '-159, and '-160. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

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

# San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1326-201-8

EXPIRATION DATE: 03/31/2006

SECTION: SW11 TOWNSHIP: 28S RANGE: 27E

**EQUIPMENT DESCRIPTION:**

3,000 BBL FIXED ROOF WASH TANK #T-1 WITH VAPOR CONTROL SYSTEM (NORTH TREATING FACILITY).

## PERMIT UNIT REQUIREMENTS

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1. Tank vapor control system consists of three 15 hp vapor compressors and compressed vapor piping to TEOR well vent vapor control system S-1326-28. [District NSR Rule] Federally Enforceable Through Title V Permit
2. Tank stored liquid temperature shall not exceed 220 degrees F. [District NSR Rule] Federally Enforceable Through Title V Permit
3. Tank shall be equipped with an operational stored liquid temperature indicator. [District NSR Rule] Federally Enforceable Through Title V Permit
4. Tank shall operate at a constant level. [District NSR Rule] Federally Enforceable Through Title V Permit
5. The Reid Vapor Pressure (RVP) of the liquid stored in this tank shall not exceed 0.75 psia. [District NSR Rule] Federally Enforceable Through Title V Permit
6. Any tank gauging or sampling device on a tank vented to the vapor recovery system shall be equipped with a gas-tight cover which shall be closed at all times except during gauging or sampling. Gas-tight shall be defined as emitting no more than 10,000 ppm of methane measured at a distance of one centimeter from the potential source with an instrument calibrated with methane in accordance with USEPA Method 21. Emissions in excess of this limit shall be considered a leak. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
7. Tank seams, welds, joints, piping, valves, and fittings shall be inspected and maintained in a gas-tight condition. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
8. 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 Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
9. The permittee shall keep accurate records of Reid vapor pressure, and storage temperature of liquids stored and shall make such records available for District inspection upon request. [District Rule 1070; District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
10. All piping, fittings, and valves shall be inspected annually by the facility operator in accordance with USEPA Method 21, with the instrument calibrated with methane, to ensure compliance with the provisions of this permit. If any of the tank components are found to leak during an annual inspection, the inspection frequency for that component type shall be changed from annual to quarterly. If no tank components are subsequently found to be leaking during five consecutive inspections, the inspection frequency may be changed from quarterly to annual. Components located in inaccessible (over 15 feet above ground when access is required from the ground or over 6 feet away from a platform when access is required from the platform) locations shall be inspected at least annually and components located in unsafe areas shall be inspected and repaired at the next process unit turnaround (the scheduled shutdown of a unit for maintenance and repair work). [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

11. A facility operator, upon detection of a leaking component, shall affix to that component a weatherproof readily visible tag bearing the date on which the leak is detected. The tag shall remain in place until the leaking component is repaired, reinspected and found to be in compliance with the requirements of this rule. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
12. An operator shall reinspect a component for leaks within thirty working days after the date on which the component is repaired. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
13. Emissions from components which have been tagged by the facility operator for repair within 15 calendar days or which have been repaired and are awaiting re-inspection shall not be in violation of this permit. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
14. Any component leak shall be repaired to a leak-free condition or vented to a flare satisfying the requirements of 40 CFR 60.18 or to a vapor control device that is at least 99 percent efficient as measured by USEPA Method 25 within fifteen (15) calendar days of detection. The APCO may grant a ten (10) calendar day extension provided the operator demonstrates that necessary and sufficient actions are being taken to correct the leak within this time period. Any vapor control device, other than a flare, used to comply with this condition shall demonstrate at least 99% control efficiency as measured by USEPA Method 25 at least annually. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
15. If the leaking component is an essential part of a critical process unit which cannot be immediately shut down for repairs, the operator shall 1) Minimize the leak within 15 calendar days; and 2) If the leak which has been minimized still exceeds the concentration allowed by this permit, the essential component shall be repaired to eliminate the leak during the next process unit turnaround, but in no case later than one year from the date of the original leak detection. A critical process unit is any process unit which would result in the automatic shutdown of other process units if it were shut down. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
16. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date of leak detection, and method of detection; 3) Date and emission level of recheck after leak is repaired; 4) Identification and location of essential parts of critical process units found leaking that cannot be repaired until the next process unit turnaround; and 5) Method used to minimize the leak from essential parts of critical process units which cannot be repaired until the next process unit turnaround. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
17. True Vapor Pressure (TVP) shall be measured using Reid vapor pressure ASTM Method D323 modified by maintaining the hot water bath at storage temperature. Where storage temperature is above 100 degrees F true vapor pressure shall be determined by Reid vapor pressure at 100 degrees F and CARB approved calculations. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
18. True vapor pressure of crude oil with an API (American Petroleum Institute) gravity less than 30 deg, as determined by API 2547, may be determined by Headspace Gas Chromatography using the procedures from CARB Evaluation of a Method for Determining Vapor Pressures of Petroleum Mixtures by Headspace Gas Chromatography, October 1990. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
19. Control efficiency shall be determined by a comparison of controlled emissions to those emissions which would occur from a fixed or cone roof tank in the same product service without a vapor recovery system. Emissions shall be determined based on tank emission factors in USEPA Publication AP-42, component counts for fugitive emissions sources, recognized emission factors for fugitive emission sources and the efficiency of any VOC destruction device. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
20. The efficiency of any VOC destruction device shall be measured by USEPA Method 25, 25a, or 25b. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
21. The operator shall ensure that the vapor recovery system is functional and is operating as designed at all times. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

22. Operator shall determine the True Vapor Pressure and the Reid Vapor Pressure of the petroleum liquid received at the North Treating Facility (SW/4 Sec. 11, T28S, R27E) at least once per year in accordance with methods described in Section 6.2 of District Rule 4623 (amended 12/17/92). Determinations shall be made annually during summer and whenever there is a change in the source or type of petroleum entering the tank. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
23. The permittee shall keep accurate records of Reid Vapor Pressure, and storage temperature of liquids stored, and shall make such records available for District inspection upon request. [District Rule 1070; District Rule 2520, 9.5.2] Federally Enforceable Through Title V Permit
24. As used in this permit, the term "source or type of petroleum" shall mean petroleum liquids with similar characteristics. The operator shall maintain records of API gravity of petroleum liquids store in this unit to determine which oil are from common source. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
25. Tank vapor control system includes vapor piping shared between storage tanks S-1326-201, '-202, '-203, '-204, '-205, '-206, '-212, '-261, '-262, '-268, '-269, '-270, '-271, '-272, and '-274. [District NSR Rule] Federally Enforceable Through Title V Permit

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

# San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1326-202-4

EXPIRATION DATE: 03/31/2006

SECTION: 11 TOWNSHIP: 28S RANGE: 27E

## EQUIPMENT DESCRIPTION:

1,000 BBL FIXED ROOF REJECT OIL TANK #T-2 WITH VAPOR CONTROL (PART OF S-1326-201) (NORTH TREATING FACILITY).

## PERMIT UNIT REQUIREMENTS

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1. The Reid vapor pressure of the liquid stored in this tank shall not exceed 0.75 psia. [District NSR Rule] Federally Enforceable Through Title V Permit
2. Tank stored liquid temperature shall not exceed 220 degrees F. [District NSR Rule] Federally Enforceable Through Title V Permit
3. Tank shall be equipped with a stored liquid temperature indicator. [District NSR Rule] Federally Enforceable Through Title V Permit
4. The average daily throughput for this tank (on an annual basis) shall not exceed 12,000 bbl/day. [District NSR Rule] Federally Enforceable Through Title V Permit
5. VOC emission rate shall not exceed 5.3 lb/day. [District NSR Rule] Federally Enforceable Through Title V Permit
6. Any tank gauging or sampling device on a tank vented to the vapor recovery system shall be equipped with a gas-tight cover which shall be closed at all times except during gauging or sampling. Gas-tight shall be defined as emitting no more than 10,000 ppm of methane measured at a distance of one centimeter from the potential source with an instrument calibrated with methane in accordance with USEPA Method 21. Emissions in excess of this limit shall be considered a leak. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
7. Tank seams, welds, joints, piping, valves, and fittings shall be inspected and maintained in a gas-tight condition. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
8. The permittee shall keep accurate records of Reid vapor pressure, storage temperature, and tank throughput and shall make such records available for District inspection upon request. [District Rules 1070 and District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
9. All piping, fittings, and valves shall be inspected annually by the facility operator in accordance with USEPA Method 21, with the instrument calibrated with methane, to ensure compliance with the provisions of this permit. If any of the tank components are found to leak during an annual inspection, the inspection frequency for that component type shall be changed from annual to quarterly. If no tank components are subsequently found to be leaking during five consecutive inspections, the inspection frequency may be changed from quarterly to annual. Components located in inaccessible (over 15 feet above ground when access is required from the ground or over 6 feet away from a platform when access is required from the platform) locations shall be inspected at least annually and components located in unsafe areas shall be inspected and repaired at the next process unit turnaround (the scheduled shutdown of a unit for maintenance and repair work). [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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



10. A facility operator, upon detection of a leaking component, shall affix to that component a weatherproof readily visible tag bearing the date on which the leak is detected. The tag shall remain in place until the leaking component is repaired, reinspected and found to be in compliance with the requirements of this rule. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
11. An operator shall reinspect a component for leaks within thirty working days after the date on which the component is repaired. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
12. Emissions from components which have been tagged by the facility operator for repair within 15 calendar days or which have been repaired and are awaiting re-inspection shall not be in violation of this permit. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
13. Any component leak shall be repaired to a leak-free condition or vented to a flare satisfying the requirements of 40 CFR 60.18 or to a vapor control device that is at least 99 percent efficient as measured by USEPA Method 25 within fifteen (15) calendar days of detection. The APCO may grant a ten (10) calendar day extension provided the operator demonstrates that necessary and sufficient actions are being taken to correct the leak within this time period. Any vapor control device, other than a flare, used to comply with this condition shall demonstrate at least 99% control efficiency as measured by USEPA Method 25 at least annually. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
14. If the leaking component is an essential part of a critical process unit which cannot be immediately shut down for repairs, the operator shall 1) Minimize the leak within 15 calendar days; and 2) If the leak which has been minimized still exceeds the concentration allowed by this permit, the essential component shall be repaired to eliminate the leak during the next process unit turnaround, but in no case later than one year from the date of the original leak detection. A critical process unit is any process unit which would result in the automatic shutdown of other process units if it were shut down. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
15. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date of leak detection, and method of detection; 3) Date and emission level of recheck after leak is repaired; 4) Identification and location of essential parts of critical process units found leaking that cannot be repaired until the next process unit turnaround; and 5) Method used to minimize the leak from essential parts of critical process units which cannot be repaired until the next process unit turnaround. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
16. True vapor pressure shall be measured using Reid vapor pressure ASTM Method D323 modified by maintaining the hot water bath at storage temperature. Where storage temperature is above 100 degrees F true vapor pressure shall be determined by Reid vapor pressure at 100 degrees F and CARB approved calculations. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
17. True vapor pressure of crude oil with an API (American Petroleum Institute) gravity less than 30 deg, as determined by API 2547, may be determined by Headspace Gas Chromatography using the procedures from CARB Evaluation of a Method for Determining Vapor Pressures of Petroleum Mixtures by Headspace Gas Chromatography, October 1990. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
18. Control efficiency shall be determined by a comparison of controlled emissions to those emissions which would occur from a fixed or cone roof tank in the same product service without a vapor recovery system. Emissions shall be determined based on tank emission factors in USEPA Publication AP-42, component counts for fugitive emissions sources, recognized emission factors for fugitive emission sources and the efficiency of any VOC destruction device. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
19. The efficiency of any VOC destruction device shall be measured by USEPA Method 25, 25a, or 25b. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
20. The operator shall ensure that the vapor recovery system is functional and is operating as designed at all times. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

21. Operator shall determine the true vapor pressure of the petroleum liquid stored in the tank located at the beginning of the process flow after the production header at least once per year in accordance with methods described in Section 6.2 of District Rule 4623 (Amended 12/17/92). Determinations shall be made annually during summer and whenever there is a change in the source or type of petroleum entering the tank. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
22. As used in this permit, the term "source or type of petroleum" shall mean petroleum liquids with similar characteristics. The operator shall maintain records of API gravity of petroleum liquids store in this unit to determine which oil are from common source. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
23. The tanks included in this setting are S-1326-201, '-202, '-203, '-204, '-205, '-206, '-212, '-261, '-262, '-268, '-269, '-270, '-271, '-272, and '-274. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-1326-203-5

**EXPIRATION DATE:** 03/31/2006

**SECTION:** 11 **TOWNSHIP:** 28S **RANGE:** 27E

**EQUIPMENT DESCRIPTION:**

2,000 BBL FIXED ROOF STOCK TANK #T-3 WITH VAPOR CONTROL (PART OF S-1326-201) (NORTH TREATING FACILITY).

## PERMIT UNIT REQUIREMENTS

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1. The Reid vapor pressure of the liquid stored in this tank shall not exceed 0.75 psia. [District NSR Rule] Federally Enforceable Through Title V Permit
2. Tank stored liquid temperature shall not exceed 220 degrees F. [District NSR Rule] Federally Enforceable Through Title V Permit
3. Tank shall be equipped with a stored liquid temperature indicator. [District NSR Rule] Federally Enforceable Through Title V Permit
4. The average daily throughput for this tank (on an annual basis) shall not exceed 7500 bbl/day. [District NSR Rule] Federally Enforceable Through Title V Permit
5. VOC emission rate shall not exceed 3.6 lb/day. [District NSR Rule] Federally Enforceable Through Title V Permit
6. Any tank gauging or sampling device on a tank vented to the vapor recovery system shall be equipped with a gas-tight cover which shall be closed at all times except during gauging or sampling. Gas-tight shall be defined as emitting no more than 10,000 ppm of methane measured at a distance of one centimeter from the potential source with an instrument calibrated with methane in accordance with USEPA Method 21. Emissions in excess of this limit shall be considered a leak. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
7. Tank seams, welds, joints, piping, valves, and fittings shall be inspected and maintained in a gas-tight condition. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
8. The permittee shall keep accurate records of Reid vapor pressure, storage temperature, and tank throughput and shall make such records available for District inspection upon request. [District Rule 1070; District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
9. All piping, fittings, and valves shall be inspected annually by the facility operator in accordance with USEPA Method 21, with the instrument calibrated with methane, to ensure compliance with the provisions of this permit. If any of the tank components are found to leak during an annual inspection, the inspection frequency for that component type shall be changed from annual to quarterly. If no tank components are subsequently found to be leaking during five consecutive inspections, the inspection frequency may be changed from quarterly to annual. Components located in inaccessible (over 15 feet above ground when access is required from the ground or over 6 feet away from a platform when access is required from the platform) locations shall be inspected at least annually and components located in unsafe areas shall be inspected and repaired at the next process unit turnaround (the scheduled shutdown of a unit for maintenance and repair work). [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

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

10. A facility operator, upon detection of a leaking component, shall affix to that component a weatherproof readily visible tag bearing the date on which the leak is detected. The tag shall remain in place until the leaking component is repaired, reinspected and found to be in compliance with the requirements of this rule. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
11. An operator shall reinspect a component for leaks within thirty working days after the date on which the component is repaired. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
12. Emissions from components which have been tagged by the facility operator for repair within 15 calendar days or which have been repaired and are awaiting re-inspection shall not be in violation of this permit. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
13. Any component leak shall be repaired to a leak-free condition or vented to a flare satisfying the requirements of 40 CFR 60.18 or to a vapor control device that is at least 99 percent efficient as measured by USEPA Method 25 within fifteen (15) calendar days of detection. The APCO may grant a ten (10) calendar day extension provided the operator demonstrates that necessary and sufficient actions are being taken to correct the leak within this time period. Any vapor control device, other than a flare, used to comply with this condition shall demonstrate at least 99% control efficiency as measured by USEPA Method 25 at least annually. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
14. If the leaking component is an essential part of a critical process unit which cannot be immediately shut down for repairs, the operator shall 1) Minimize the leak within 15 calendar days; and 2) If the leak which has been minimized still exceeds the concentration allowed by this permit, the essential component shall be repaired to eliminate the leak during the next process unit turnaround, but in no case later than one year from the date of the original leak detection. A critical process unit is any process unit which would result in the automatic shutdown of other process units if it were shut down. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
15. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date of leak detection, and method of detection; 3) Date and emission level of recheck after leak is repaired; 4) Identification and location of essential parts of critical process units found leaking that cannot be repaired until the next process unit turnaround; and 5) Method used to minimize the leak from essential parts of critical process units which cannot be repaired until the next process unit turnaround. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
16. True vapor pressure shall be measured using Reid vapor pressure ASTM Method D323 modified by maintaining the hot water bath at storage temperature. Where storage temperature is above 100 degrees F true vapor pressure shall be determined by Reid vapor pressure at 100 degrees F and CARB approved calculations. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
17. True vapor pressure of crude oil with an API (American Petroleum Institute) gravity less than 30 deg, as determined by API 2547, may be determined by Headspace Gas Chromatography using the procedures from CARB Evaluation of a Method for Determining Vapor Pressures of Petroleum Mixtures by Headspace Gas Chromatography, October 1990. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
18. Control efficiency shall be determined by a comparison of controlled emissions to those emissions which would occur from a fixed or cone roof tank in the same product service without a vapor recovery system. Emissions shall be determined based on tank emission factors in USEPA Publication AP-42, component counts for fugitive emissions sources, recognized emission factors for fugitive emission sources and the efficiency of any VOC destruction device. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
19. The efficiency of any VOC destruction device shall be measured by USEPA Method 25, 25a, or 25b. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
20. The operator shall ensure that the vapor recovery system is functional and is operating as designed at all times. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

21. Operator shall determine the true vapor pressure of the petroleum liquid stored in the tank located at the beginning of the process flow after the production header at least once per year in accordance with methods described in Section 6.2 of District Rule 4623 (Amended 12/17/92). Determinations shall be made annually during summer and whenever there is a change in the source or type of petroleum entering the tank. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
22. As used in this permit, the term "source or type of petroleum" shall mean petroleum liquids with similar characteristics. The operator shall maintain records of API gravity of petroleum liquids store in this unit to determine which oil are from common source. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
23. The tanks included in this setting are S-1326-201, '-202, '-203, '-204, '-205, '-206, '-212, '-261, '-262, '-268, '-269, '-270, '-271, '-272, and '-274. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

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

# San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1326-204-5

EXPIRATION DATE: 03/31/2006

SECTION: 11 TOWNSHIP: 28S RANGE: 27E

**EQUIPMENT DESCRIPTION:**

2,000 BBL FIXED ROOF STOCK TANK #T-4 WITH VAPOR CONTROL (PART OF S-1326-201) (NORTH TREATING FACILITY).

## PERMIT UNIT REQUIREMENTS

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1. The Reid vapor pressure of the liquid stored in this tank shall not exceed 0.75 psia. [District NSR Rule] Federally Enforceable Through Title V Permit
2. Tank stored liquid temperature shall not exceed 220 degrees F. [District NSR Rule] Federally Enforceable Through Title V Permit
3. Tank shall be equipped with a stored liquid temperature indicator. [District NSR Rule] Federally Enforceable Through Title V Permit
4. The average daily throughput for this tank (on an annual basis) shall not exceed 7,500 bbl/day. [District NSR Rule] Federally Enforceable Through Title V Permit
5. VOC emission rate shall not exceed 3.6 lb/day. [District NSR Rule] Federally Enforceable Through Title V Permit
6. Any tank gauging or sampling device on a tank vented to the vapor recovery system shall be equipped with a gas-tight cover which shall be closed at all times except during gauging or sampling. Gas-tight shall be defined as emitting no more than 10,000 ppm of methane measured at a distance of one centimeter from the potential source with an instrument calibrated with methane in accordance with USEPA Method 21. Emissions in excess of this limit shall be considered a leak. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
7. Tank seams, welds, joints, piping, valves, and fittings shall be inspected and maintained in a gas-tight condition. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
8. The permittee shall keep accurate records of Reid vapor pressure, storage temperature, and tank throughput and shall make such records available for District inspection upon request. [District Rule 1070; District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
9. All piping, fittings, and valves shall be inspected annually by the facility operator in accordance with USEPA Method 21, with the instrument calibrated with methane, to ensure compliance with the provisions of this permit. If any of the tank components are found to leak during an annual inspection, the inspection frequency for that component type shall be changed from annual to quarterly. If no tank components are subsequently found to be leaking during five consecutive inspections, the inspection frequency may be changed from quarterly to annual. Components located in inaccessible (over 15 feet above ground when access is required from the ground or over 6 feet away from a platform when access is required from the platform) locations shall be inspected at least annually and components located in unsafe areas shall be inspected and repaired at the next process unit turnaround (the scheduled shutdown of a unit for maintenance and repair work). [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

10. A facility operator, upon detection of a leaking component, shall affix to that component a weatherproof readily visible tag bearing the date on which the leak is detected. The tag shall remain in place until the leaking component is repaired, reinspected and found to be in compliance with the requirements of this rule. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
11. An operator shall reinspect a component for leaks within thirty working days after the date on which the component is repaired. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
12. Emissions from components which have been tagged by the facility operator for repair within 15 calendar days or which have been repaired and are awaiting re-inspection shall not be in violation of this permit. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
13. Any component leak shall be repaired to a leak-free condition or vented to a flare satisfying the requirements of 40 CFR 60.18 or to a vapor control device that is at least 99 percent efficient as measured by USEPA Method 25 within fifteen (15) calendar days of detection. The APCO may grant a ten (10) calendar day extension provided the operator demonstrates that necessary and sufficient actions are being taken to correct the leak within this time period. Any vapor control device, other than a flare, used to comply with this condition shall demonstrate at least 99% control efficiency as measured by USEPA Method 25 at least annually. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
14. If the leaking component is an essential part of a critical process unit which cannot be immediately shut down for repairs, the operator shall 1) Minimize the leak within 15 calendar days; and 2) If the leak which has been minimized still exceeds the concentration allowed by this permit, the essential component shall be repaired to eliminate the leak during the next process unit turnaround, but in no case later than one year from the date of the original leak detection. A critical process unit is any process unit which would result in the automatic shutdown of other process units if it were shut down. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
15. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date of leak detection, and method of detection; 3) Date and emission level of recheck after leak is repaired; 4) Identification and location of essential parts of critical process units found leaking that cannot be repaired until the next process unit turnaround; and 5) Method used to minimize the leak from essential parts of critical process units which cannot be repaired until the next process unit turnaround. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
16. True vapor pressure shall be measured using Reid vapor pressure ASTM Method D323 modified by maintaining the hot water bath at storage temperature. Where storage temperature is above 100 degrees F true vapor pressure shall be determined by Reid vapor pressure at 100 degrees F and CARB approved calculations. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
17. True vapor pressure of crude oil with an API (American Petroleum Institute) gravity less than 30 deg, as determined by API 2547, may be determined by Headspace Gas Chromatography using the procedures from CARB Evaluation of a Method for Determining Vapor Pressures of Petroleum Mixtures by Headspace Gas Chromatography, October 1990. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
18. Control efficiency shall be determined by a comparison of controlled emissions to those emissions which would occur from a fixed or cone roof tank in the same product service without a vapor recovery system. Emissions shall be determined based on tank emission factors in USEPA Publication AP-42, component counts for fugitive emissions sources, recognized emission factors for fugitive emission sources and the efficiency of any VOC destruction device. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
19. The efficiency of any VOC destruction device shall be measured by USEPA Method 25, 25a, or 25b. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
20. The operator shall ensure that the vapor recovery system is functional and is operating as designed at all times. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

21. Operator shall determine the true vapor pressure of the petroleum liquid stored in the tank located at the beginning of the process flow after the production header at least once per year in accordance with methods described in Section 6.2 of District Rule 4623 (Amended 12/17/92). Determinations shall be made annually during summer and whenever there is a change in the source or type of petroleum entering the tank. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
22. As used in this permit, the term "source or type of petroleum" shall mean petroleum liquids with similar characteristics. The operator shall maintain records of API gravity of petroleum liquids store in this unit to determine which oil are from common source. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
23. The tanks included in this setting are S-1326-201, '-202, '-203, '-204, '-205, '-206, '-212, '-261, '-262, '-268, '-269, '-270, '-271, '-272, and '-274. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

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



# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-1326-205-4

**EXPIRATION DATE:** 03/31/2006

**SECTION:** 11 **TOWNSHIP:** 28S **RANGE:** 27E

**EQUIPMENT DESCRIPTION:**

5,000 BBL FIXED ROOF WATER TANK #T-5 WITH VAPOR CONTROL (PART OF S-1326-201) (NORTH TREATING FACILITY).

## PERMIT UNIT REQUIREMENTS

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1. The Reid vapor pressure of the liquid stored in this tank shall not exceed 0.75 psia. [District NSR Rule] Federally Enforceable Through Title V Permit
2. Tank stored liquid temperature shall not exceed 220 degrees F. [District NSR Rule] Federally Enforceable Through Title V Permit
3. Tank shall be equipped with a stored liquid temperature indicator. [District NSR Rule] Federally Enforceable Through Title V Permit
4. Tank shall operate at a constant level. [District NSR Rule] Federally Enforceable Through Title V Permit
5. Any 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. Gas-tight shall be defined as emitting no more than 10,000 ppm of methane measured at a distance of one centimeter from the potential source with an instrument calibrated with methane in accordance with USEPA Method 21. Emissions in excess of this limit shall be considered a leak. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
6. Tank seams, welds, joints, piping, valves, and fittings shall be inspected and maintained in a gas-tight condition. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
7. The permittee shall keep accurate records of Reid vapor pressure, and storage temperature of liquids stored shall make such records available for District inspection upon request. [District Rule 1070; District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
8. All piping, fittings, and valves shall be inspected annually by the facility operator in accordance with USEPA Method 21, with the instrument calibrated with methane, to ensure compliance with the provisions of this permit. If any of the tank components are found to leak during an annual inspection, the inspection frequency for that component type shall be changed from annual to quarterly. If no tank components are subsequently found to be leaking during five consecutive inspections, the inspection frequency may be changed from quarterly to annual. Components located in inaccessible (over 15 feet above ground when access is required from the ground or over 6 feet away from a platform when access is required from the platform) locations shall be inspected at least annually and components located in unsafe areas shall be inspected and repaired at the next process unit turnaround (the scheduled shutdown of a unit for maintenance and repair work). [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
9. A facility operator, upon detection of a leaking component, shall affix to that component a weatherproof readily visible tag bearing the date on which the leak is detected. The tag shall remain in place until the leaking component is repaired, reinspected and found to be in compliance with the requirements of this rule. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

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

10. An operator shall reinspect a component for leaks within thirty working days after the date on which the component is repaired. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
11. Emissions from components which have been tagged by the facility operator for repair within 15 calendar days or which have been repaired and are awaiting re-inspection shall not be in violation of this permit. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
12. Any component leak shall be repaired to a leak-free condition or vented to a flare satisfying the requirements of 40 CFR 60.18 or to a vapor control device that is at least 99 percent efficient as measured by USEPA Method 25 within fifteen (15) calendar days of detection. The APCO may grant a ten (10) calendar day extension provided the operator demonstrates that necessary and sufficient actions are being taken to correct the leak within this time period. Any vapor control device, other than a flare, used to comply with this condition shall demonstrate at least 99% control efficiency as measured by USEPA Method 25 at least annually. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
13. If the leaking component is an essential part of a critical process unit which cannot be immediately shut down for repairs, the operator shall 1) Minimize the leak within 15 calendar days; and 2) If the leak which has been minimized still exceeds the concentration allowed by this permit, the essential component shall be repaired to eliminate the leak during the next process unit turnaround, but in no case later than one year from the date of the original leak detection. A critical process unit is any process unit which would result in the automatic shutdown of other process units if it were shut down. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
14. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date of leak detection, and method of detection; 3) Date and emission level of recheck after leak is repaired; 4) Identification and location of essential parts of critical process units found leaking that cannot be repaired until the next process unit turnaround; and 5) Method used to minimize the leak from essential parts of critical process units which cannot be repaired until the next process unit turnaround. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
15. True vapor pressure shall be measured using Reid vapor pressure ASTM Method D323 modified by maintaining the hot water bath at storage temperature. Where storage temperature is above 100 degrees F true vapor pressure shall be determined by Reid vapor pressure at 100 degrees F and CARB approved calculations. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
16. True vapor pressure of crude oil with an API (American Petroleum Institute) gravity less than 30 deg, as determined by API 2547, may be determined by Headspace Gas Chromatography using the procedures from CARB Evaluation of a Method for Determining Vapor Pressures of Petroleum Mixtures by Headspace Gas Chromatography, October 1990. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
17. Control efficiency shall be determined by a comparison of controlled emissions to those emissions which would occur from a fixed or cone roof tank in the same product service without a vapor recovery system. Emissions shall be determined based on tank emission factors in USEPA Publication AP-42, component counts for fugitive emissions sources, recognized emission factors for fugitive emission sources and the efficiency of any VOC destruction device. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
18. The efficiency of any VOC destruction device shall be measured by USEPA Method 25, 25a, or 25b. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
19. The operator shall ensure that the vapor recovery system is functional and is operating as designed at all times. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
20. Operator shall determine the true vapor pressure of the petroleum liquid stored in the tank located at the beginning of the process flow after the production header at least once per year in accordance with methods described in Section 6.2 of District Rule 4623 (Amended 12/17/92). Determinations shall be made annually during summer and whenever there is a change in the source or type of petroleum entering the tank. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

21. As used in this permit, the term "source or type of petroleum" shall mean petroleum liquids with similar characteristics. The operator shall maintain records of API gravity of petroleum liquids store in this unit to determine which oil are from common source. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
22. The tanks included in this setting are S-1326-201, '-202, '-203, '-204, '-205, '-206, '-212, '-261, '-262, '-268, '-269, '-270, '-271, '-272, and '-274. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-1326-206-5

**EXPIRATION DATE:** 03/31/2006

**SECTION:** 11 **TOWNSHIP:** 28S **RANGE:** 27E

**EQUIPMENT DESCRIPTION:**

1,000 BBL FIXED ROOF SKIM OIL TANK #T-6 WITH VAPOR CONTROL (PART OF S-1326-201) (NORTH TREATING FACILITY).

## PERMIT UNIT REQUIREMENTS

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1. The Reid vapor pressure of the liquid stored in this tank shall not exceed 0.75 psia. [District NSR Rule] Federally Enforceable Through Title V Permit
2. Tank stored liquid temperature shall not exceed 220 degrees F. [District NSR Rule] Federally Enforceable Through Title V Permit
3. Tank shall be equipped with a stored liquid temperature indicator. [District NSR Rule] Federally Enforceable Through Title V Permit
4. The average daily throughput for this tank (on an annual basis) shall not exceed 4000 bbl/day. [District NSR Rule] Federally Enforceable Through Title V Permit
5. VOC emission rate shall not exceed 1.9 lb/day. [District NSR Rule] Federally Enforceable Through Title V Permit
6. Any tank gauging or sampling device on a tank vented to the vapor recovery system shall be equipped with a gas-tight cover which shall be closed at all times except during gauging or sampling. Gas-tight shall be defined as emitting no more than 10,000 ppm of methane measured at a distance of one centimeter from the potential source with an instrument calibrated with methane in accordance with USEPA Method 21. Emissions in excess of this limit shall be considered a leak. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
7. Tank seams, welds, joints, piping, valves, and fittings shall be inspected and maintained in a gas-tight condition. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
8. The permittee shall keep accurate records of Reid vapor pressure, storage temperature, and tank throughput and shall make such records available for District inspection upon request. [District Rule 1070; District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
9. All piping, fittings, and valves shall be inspected annually by the facility operator in accordance with USEPA Method 21, with the instrument calibrated with methane, to ensure compliance with the provisions of this permit. If any of the tank components are found to leak during an annual inspection, the inspection frequency for that component type shall be changed from annual to quarterly. If no tank components are subsequently found to be leaking during five consecutive inspections, the inspection frequency may be changed from quarterly to annual. Components located in inaccessible (over 15 feet above ground when access is required from the ground or over 6 feet away from a platform when access is required from the platform) locations shall be inspected at least annually and components located in unsafe areas shall be inspected and repaired at the next process unit turnaround (the scheduled shutdown of a unit for maintenance and repair work). [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

10. A facility operator, upon detection of a leaking component, shall affix to that component a weatherproof readily visible tag bearing the date on which the leak is detected. The tag shall remain in place until the leaking component is repaired, reinspected and found to be in compliance with the requirements of this rule. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
11. An operator shall reinspect a component for leaks within thirty working days after the date on which the component is repaired. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
12. Emissions from components which have been tagged by the facility operator for repair within 15 calendar days or which have been repaired and are awaiting re-inspection shall not be in violation of this permit. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
13. Any component leak shall be repaired to a leak-free condition or vented to a flare satisfying the requirements of 40 CFR 60.18 or to a vapor control device that is at least 99 percent efficient as measured by USEPA Method 25 within fifteen (15) calendar days of detection. The APCO may grant a ten (10) calendar day extension provided the operator demonstrates that necessary and sufficient actions are being taken to correct the leak within this time period. Any vapor control device, other than a flare, used to comply with this condition shall demonstrate at least 99% control efficiency as measured by USEPA Method 25 at least annually. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
14. If the leaking component is an essential part of a critical process unit which cannot be immediately shut down for repairs, the operator shall 1) Minimize the leak within 15 calendar days; and 2) If the leak which has been minimized still exceeds the concentration allowed by this permit, the essential component shall be repaired to eliminate the leak during the next process unit turnaround, but in no case later than one year from the date of the original leak detection. A critical process unit is any process unit which would result in the automatic shutdown of other process units if it were shut down. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
15. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date of leak detection, and method of detection; 3) Date and emission level of recheck after leak is repaired; 4) Identification and location of essential parts of critical process units found leaking that cannot be repaired until the next process unit turnaround; and 5) Method used to minimize the leak from essential parts of critical process units which cannot be repaired until the next process unit turnaround. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
16. True vapor pressure shall be measured using Reid vapor pressure ASTM Method D323 modified by maintaining the hot water bath at storage temperature. Where storage temperature is above 100 degrees F true vapor pressure shall be determined by Reid vapor pressure at 100 degrees F and CARB approved calculations. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
17. True vapor pressure of crude oil with an API (American Petroleum Institute) gravity less than 30 deg, as determined by API 2547, may be determined by Headspace Gas Chromatography using the procedures from CARB Evaluation of a Method for Determining Vapor Pressures of Petroleum Mixtures by Headspace Gas Chromatography, October 1990. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
18. Control efficiency shall be determined by a comparison of controlled emissions to those emissions which would occur from a fixed or cone roof tank in the same product service without a vapor recovery system. Emissions shall be determined based on tank emission factors in USEPA Publication AP-42, component counts for fugitive emissions sources, recognized emission factors for fugitive emission sources and the efficiency of any VOC destruction device. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
19. The efficiency of any VOC destruction device shall be measured by USEPA Method 25, 25a, or 25b. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
20. The operator shall ensure that the vapor recovery system is functional and is operating as designed at all times. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

21. Operator shall determine the true vapor pressure of the petroleum liquid stored in the tank located at the beginning of the process flow after the production header at least once per year in accordance with methods described in Section 6.2 of District Rule 4623 (Amended 12/17/92). Determinations shall be made annually during summer and whenever there is a change in the source or type of petroleum entering the tank. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
22. As used in this permit, the term "source or type of petroleum" shall mean petroleum liquids with similar characteristics. The operator shall maintain records of API gravity of petroleum liquids store in this unit to determine which oil are from common source. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
23. The tanks included in this setting are S-1326-201, '-202, '-203, '-204, '-205, '-206, '-212, '-261, '-262, '-268, '-269, '-270, '-271, '-272, and '-274. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

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

# San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1326-212-5

EXPIRATION DATE: 03/31/2006

SECTION: 11 TOWNSHIP: 28S RANGE: 27E

**EQUIPMENT DESCRIPTION:**

2,000-BBL FIXED ROOF SURGE TANK #ST-1 WITH VAPOR CONTROL (PART OF S-1326-201) (NORTH TREATING FACILITY).

## PERMIT UNIT REQUIREMENTS

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1. The Reid vapor pressure of the liquid stored in this tank shall not exceed 0.75 psia. [District NSR Rule] Federally Enforceable Through Title V Permit
2. Tank stored liquid temperature shall not exceed 220 degrees F. [District NSR Rule] Federally Enforceable Through Title V Permit
3. Tank shall be equipped with a stored liquid temperature indicator. [District NSR Rule] Federally Enforceable Through Title V Permit
4. Tank shall operate at a constant level. [District NSR Rule] Federally Enforceable Through Title V Permit
5. Any 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. Gas-tight shall be defined as emitting no more than 10,000 ppm of methane measured at a distance of one centimeter from the potential source with an instrument calibrated with methane in accordance with USEPA Method 21. Emissions in excess of this limit shall be considered a leak. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
6. Tank seams, welds, joints, piping, valves, and fittings shall be inspected and maintained in a gas-tight condition. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
7. The permittee shall keep accurate records of Reid vapor pressure, and storage temperature of liquids stored and shall make such records available for District inspection upon request. [District Rule 1070; District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
8. All piping, fittings, and valves shall be inspected annually by the facility operator in accordance with USEPA Method 21, with the instrument calibrated with methane, to ensure compliance with the provisions of this permit. If any of the tank components are found to leak during an annual inspection, the inspection frequency for that component type shall be changed from annual to quarterly. If no tank components are subsequently found to be leaking during five consecutive inspections, the inspection frequency may be changed from quarterly to annual. Components located in inaccessible (over 15 feet above ground when access is required from the ground or over 6 feet away from a platform when access is required from the platform) locations shall be inspected at least annually and components located in unsafe areas shall be inspected and repaired at the next process unit turnaround (the scheduled shutdown of a unit for maintenance and repair work). [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
9. A facility operator, upon detection of a leaking component, shall affix to that component a weatherproof readily visible tag bearing the date on which the leak is detected. The tag shall remain in place until the leaking component is repaired, reinspected and found to be in compliance with the requirements of this rule. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

10. An operator shall reinspect a component for leaks within thirty working days after the date on which the component is repaired. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
11. Emissions from components which have been tagged by the facility operator for repair within 15 calendar days or which have been repaired and are awaiting re-inspection shall not be in violation of this permit. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
12. Any component leak shall be repaired to a leak-free condition or vented to a flare satisfying the requirements of 40 CFR 60.18 or to a vapor control device that is at least 99 percent efficient as measured by USEPA Method 25 within fifteen (15) calendar days of detection. The APCO may grant a ten (10) calendar day extension provided the operator demonstrates that necessary and sufficient actions are being taken to correct the leak within this time period. Any vapor control device, other than a flare, used to comply with this condition shall demonstrate at least 99% control efficiency as measured by USEPA Method 25 at least annually. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
13. If the leaking component is an essential part of a critical process unit which cannot be immediately shut down for repairs, the operator shall 1) Minimize the leak within 15 calendar days; and 2) If the leak which has been minimized still exceeds the concentration allowed by this permit, the essential component shall be repaired to eliminate the leak during the next process unit turnaround, but in no case later than one year from the date of the original leak detection. A critical process unit is any process unit which would result in the automatic shutdown of other process units if it were shut down. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
14. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date of leak detection, and method of detection; 3) Date and emission level of recheck after leak is repaired; 4) Identification and location of essential parts of critical process units found leaking that cannot be repaired until the next process unit turnaround; and 5) Method used to minimize the leak from essential parts of critical process units which cannot be repaired until the next process unit turnaround. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
15. True vapor pressure shall be measured using Reid vapor pressure ASTM Method D323 modified by maintaining the hot water bath at storage temperature. Where storage temperature is above 100 degrees F true vapor pressure shall be determined by Reid vapor pressure at 100 degrees F and CARB approved calculations. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
16. True vapor pressure of crude oil with an API (American Petroleum Institute) gravity less than 30 deg, as determined by API 2547, may be determined by Headspace Gas Chromatography using the procedures from CARB Evaluation of a Method for Determining Vapor Pressures of Petroleum Mixtures by Headspace Gas Chromatography, October 1990. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
17. Control efficiency shall be determined by a comparison of controlled emissions to those emissions which would occur from a fixed or cone roof tank in the same product service without a vapor recovery system. Emissions shall be determined based on tank emission factors in USEPA Publication AP-42, component counts for fugitive emissions sources, recognized emission factors for fugitive emission sources and the efficiency of any VOC destruction device. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
18. The efficiency of any VOC destruction device shall be measured by USEPA Method 25, 25a, or 25b. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
19. The operator shall ensure that the vapor recovery system is functional and is operating as designed at all times. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
20. Operator shall determine the true vapor pressure of the petroleum liquid stored in the tank located at the beginning of the process flow after the production header at least once per year in accordance with methods described in 40 CFR 60.113 and Section 6.2 of District Rule 4623 (Amended 12/17/92). Determinations shall be made annually during summer and whenever there is a change in the source or type of petroleum entering the tank. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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



21. As used in this permit, the term "source or type of petroleum" shall mean petroleum liquids with similar characteristics. The operator shall maintain records of API gravity of petroleum liquids store in this unit to determine which oil are from common source. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
22. The tanks included in this setting are S-1326-201, '-202, '-203, '-204, '-205, '-206, '-212, '-261, '-262, '-268, '-269, '-270, '-271, '-272, and '-274. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

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

# San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1326-214-5

EXPIRATION DATE: 03/31/2006

SECTION: NE 23 TOWNSHIP: 28S RANGE: 27E

## EQUIPMENT DESCRIPTION:

84,000 GALLON FIXED-ROOF STOCK TANK SERVED BY VAPOR CONTROL SYSTEM LISTED ON S-1326-46 (FANO LEASE)

## PERMIT UNIT REQUIREMENTS

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1. Tank vapors shall be vented only to vapor control system listed on tank permit S-1326-46. [District NSR Rule] Federally Enforceable Through Title V Permit
2. The true vapor pressure of the liquids stored in this tank shall not exceed 0.5 psia. [District Rules 4623, 2.0 and NSR] Federally Enforceable Through Title V Permit
3. Vapor control efficiency shall be maintained at no less than 99%. [District NSR Rule] Federally Enforceable Through Title V Permit
4. Fuel gas system gas shall consist primarily of methane containing no more than 5% by weight hydrocarbons heavier than butane and shall have a sulfur content of no more than 0.75 gr/100 scf. [District NSR Rule] Federally Enforceable Through Title V Permit
5. The tank pressure relief valves shall not open unless the tank internal pressure exceeds 2.0 oz. or falls below 0.5 oz. vacuum. [District NSR Rule] Federally Enforceable Through Title V Permit
6. This permit authorizes tank cleaning that is not the result of breakdowns or poor maintenance as a routine maintenance activity. [District NSR Rule] Federally Enforceable Through Title V Permit
7. Prior to opening the tank to allow tank cleaning the following procedure must be followed. Operate PV valve and vapor recovery system (if equipped) during emptying, filling, and flushing. During filling and purging, no vapor leakage is allowed. Drain all liquid from the tank to the maximum extent feasible prior to opening the tank. [District NSR Rule] Federally Enforceable Through Title V Permit
8. Prior to opening the tank to allow tank cleaning one of the following options must be followed: 1) operate the vapor recovery system for at least 2 hours after all the liquid in the tank has been drained, 2) displace vapors floating the oil pad off with water such that 90% of the tank volume is displaced, 3) vent the tank to the vapor control system until the vapor concentration is less than 10% of the lower explosive limit (LEL) or 5,000 ppmv whichever is less; or 4) vent the tank to the vapor control system for a length of time determined by the following relationship:  $t = 2.3 V / Q$ , where  $t$  = time,  $V$  = tank volume (cubic feet), and  $Q$  = flow rate to the vapor control system as determined using appropriate engineering calculations. [District NSR Rule] Federally Enforceable Through Title V Permit
9. Allowable methods of cleaning include using steam, diesel, solvents with an initial boiling point of greater than 302 F, solvents with a vapor pressure of less than 0.5 psia, or solvents with 50 grams/liter VOC content or less. Steam cleaning shall be allowed at locations where wastewater treatment facilities are limited or during December through March. [District NSR Rule] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

10. Permittee shall maintain records of each period of cleaning and maintenance when the tank is disconnected or isolated from the vapor control system. Records shall include the date that tank cleaning was initiated, the date tank cleaning was completed, the procedure used to vent tank vapors prior to opening, the method of tank cleaning used, and a description of internal and external tank repairs and maintenance performed. Such records shall be retained for a period of at least 5 years and shall be made available for District inspection upon request. [District NSR Rule] Federally Enforceable Through Title V Permit
11. To qualify for quantification of no fugitive emissions, operator shall conduct quarterly gas sampling after TVR compressor (prior to connection to any other vapor control system) and at either the first line tank or at any secondary tank which is heated above ambient temperature. If gas samples are less than 10% VOC by weight for 8 consecutive quarterly samplings, sampling frequency shall only be required annually and whenever there is a change in source or type of petroleum processed. Samples shall be collected during periods of normal operation, and not be within 48 hours after routine maintenance or repair. [District NSR Rule] Federally Enforceable Through Title V Permit
12. Permittee shall provide the District with written notification at least 30 days prior to installation of components handling fluid streams with a VOC content of 10% or less by weight. [District NSR Rule] Federally Enforceable Through Title V Permit
13. Any 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. Gas-tight shall be defined as emitting no more than 10,000 ppm of methane measured at a distance of one centimeter from the potential source with an instrument calibrated with methane in accordance with USEPA Method 21. Emissions in excess of this limit shall be considered a leak. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
14. All tank seams, welds, joints, piping, valves, and fittings shall be inspected and maintained in a gas-tight condition. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
15. The permittee shall keep accurate records of liquids stored and true vapor pressure of such liquids. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
16. The operator shall conduct true vapor pressure (TVP) testing of the organic liquid stored in this tank at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored in this tank. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
17. The API gravity of organic liquid stored in this tank 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 2520, 9.3.2] Federally Enforceable Through Title V Permit
18. Control efficiency shall be determined by a comparison of controlled emissions to those emissions which would occur from a fixed or cone roof tank in the same product service without a vapor recovery system. Emissions shall be determined based on tank emission factors in USEPA Publication AP-42, component counts for fugitive emissions sources, recognized emission factors for fugitive emission sources and the efficiency of any VOC destruction device. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
19. The operator shall ensure that the vapor control system is functional and is operating as designed at all times, except during periods of routine maintenance. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
20. Operator shall determine the true vapor pressure of the petroleum liquid stored in the tank located at the beginning of the process flow after the production header at least once per year. 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, shall be used to determine the TVP of crude oil with an API gravity of 26 or less, or for any API gravity that is specified in this test method. Determinations shall be made annually during summer and whenever there is a change in the source or type of petroleum entering the tank. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
21. As used in this permit, the term "source or type of petroleum" shall mean petroleum liquids with similar characteristics. The operator shall maintain records of API gravity of petroleum liquids store in this unit to determine which oil are from common source. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

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

# San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1326-215-5

EXPIRATION DATE: 03/31/2006

SECTION: NE 23 TOWNSHIP: 28S RANGE: 27E

## EQUIPMENT DESCRIPTION:

126,000 GALLON FIXED-ROOF WASH TANK SERVED BY VAPOR CONTROL SYSTEM LISTED ON S-1326-46 (FANO LEASE)

## PERMIT UNIT REQUIREMENTS

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1. Tank vapors shall be vented only to vapor control system listed on tank permit S-1326-46. [District NSR Rule] Federally Enforceable Through Title V Permit
2. The true vapor pressure of the liquids stored in this tank shall not exceed 0.5 psia. [District NSR Rule and District Rule 4623, 2.0] Federally Enforceable Through Title V Permit
3. Vapor control efficiency shall be maintained at no less than 99%. [District NSR Rule] Federally Enforceable Through Title V Permit
4. Fuel gas system gas shall consist primarily of methane containing no more than 5% by weight hydrocarbons heavier than butane and shall have a sulfur content of no more than 0.75 gr/100 scf. [District NSR Rule] Federally Enforceable Through Title V Permit
5. The tank pressure relief valves shall not open unless the tank internal pressure exceeds 2.0 oz. or falls below 0.5 oz. vacuum. [District NSR Rule] Federally Enforceable Through Title V Permit
6. This permit authorizes tank cleaning that is not the result of breakdowns or poor maintenance as a routine maintenance activity. [District NSR Rule] Federally Enforceable Through Title V Permit
7. Prior to opening the tank to allow tank cleaning the following procedure must be followed. Operate PV valve and vapor recovery system (if equipped) during emptying, filling, and flushing. During filling and purging, no vapor leakage is allowed. Drain all liquid from the tank to the maximum extent feasible prior to opening the tank. [District NSR Rule] Federally Enforceable Through Title V Permit
8. Prior to opening the tank to allow tank cleaning one of the following options must be followed: 1) operate the vapor recovery system for at least 2 hours after all the liquid in the tank has been drained, 2) displace vapors floating the oil pad off with water such that 90% of the tank volume is displaced, 3) vent the tank to the vapor control system until the vapor concentration is less than 10% of the lower explosive limit (LEL) or 5,000 ppmv whichever is less; or 4) vent the tank to the vapor control system for a length of time determined by the following relationship:  $t = 2.3 V / Q$ , where  $t$  = time,  $V$  = tank volume (cubic feet), and  $Q$  = flow rate to the vapor control system as determined using appropriate engineering calculations. [District NSR Rule] Federally Enforceable Through Title V Permit
9. Allowable methods of cleaning include using steam, diesel, solvents with an initial boiling point of greater than 302 F, solvents with a vapor pressure of less than 0.5 psia, or solvents with 50 grams/liter VOC content or less. Steam cleaning shall be allowed at locations where wastewater treatment facilities are limited or during December through March. [District NSR Rule] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

10. Permittee shall maintain records of each period of cleaning and maintenance when the tank is disconnected or isolated from the vapor control system. Records shall include the date that tank cleaning was initiated, the date tank cleaning was completed, the procedure used to vent tank vapors prior to opening, the method of tank cleaning used, and a description of internal and external tank repairs and maintenance performed. Such records shall be retained for a period of at least 5 years and shall be made available for District inspection upon request. [District NSR Rule] Federally Enforceable Through Title V Permit
11. To qualify for quantification of no fugitive emissions, operator shall conduct quarterly gas sampling after TVR compressor (prior to connection to any other vapor control system) and at either the first line tank or at any secondary tank which is heated above ambient temperature. If gas samples are less than 10% VOC by weight for 8 consecutive quarterly samplings, sampling frequency shall only be required annually and whenever there is a change in source or type of petroleum processed. Samples shall be collected during periods of normal operation, and not be within 48 hours after routine maintenance or repair. [District NSR Rule] Federally Enforceable Through Title V Permit
12. Permittee shall provide the District with written notification at least 30 days prior to installation of components handling fluid streams with a VOC content of 10% or less by weight. [District NSR Rule] Federally Enforceable Through Title V Permit
13. Any 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. Gas-tight shall be defined as emitting no more than 10,000 ppm of methane measured at a distance of one centimeter from the potential source with an instrument calibrated with methane in accordance with USEPA Method 21. Emissions in excess of this limit shall be considered a leak. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
14. All tank seams, welds, joints, piping, valves, and fittings shall be inspected and maintained in a gas-tight condition. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
15. The permittee shall keep accurate records of liquids stored and true vapor pressure of such liquids. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
16. The operator shall conduct true vapor pressure (TVP) testing of the organic liquid stored in this tank at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored in this tank. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
17. The API gravity of organic liquid stored in this tank 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 2520, 9.3.2] Federally Enforceable Through Title V Permit
18. Control efficiency shall be determined by a comparison of controlled emissions to those emissions which would occur from a fixed or cone roof tank in the same product service without a vapor recovery system. Emissions shall be determined based on tank emission factors in USEPA Publication AP-42, component counts for fugitive emissions sources, recognized emission factors for fugitive emission sources and the efficiency of any VOC destruction device. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
19. The operator shall ensure that the vapor control system is functional and is operating as designed at all times, except during periods of routine maintenance. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
20. Operator shall determine the true vapor pressure of the petroleum liquid stored in the tank located at the beginning of the process flow after the production header at least once per year. 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, shall be used to determine the TVP of crude oil with an API gravity of 26ø or less, or for any API gravity that is specified in this test method. Determinations shall be made annually during summer and whenever there is a change in the source or type of petroleum entering the tank. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
21. As used in this permit, the term "source or type of petroleum" shall mean petroleum liquids with similar characteristics. The operator shall maintain records of API gravity of petroleum liquids store in this unit to determine which oil are from common source. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-1326-260-3

**EXPIRATION DATE:** 03/31/2006

**SECTION:** SE14 **TOWNSHIP:** 28S **RANGE:** 27E

## **EQUIPMENT DESCRIPTION:**

MODIFICATION OF 3.6 MMBTU/HR KALDAIR FLARE INCLUDING TWO 8000 LB SULFATREAT CANISTERS (ONE AS BACKUP), 50 HP COMPRESSOR, AND PIPING FROM TEOR S-1326-35 (YOUNG SECTION 14): ADD FLARE BYPASS CONNECTION TO FIELD FUEL GAS SYSTEM OR DOGGR DISPOSAL WELL(S)

## **PERMIT UNIT REQUIREMENTS**

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1. Collected vapors shall discharge to H<sub>2</sub>S scrubber prior to vapor combustion in flare. [District NSR Rule] Federally Enforceable Through Title V Permit
2. Flare shall operate with no visible emission in excess of 5% opacity. [District NSR Rule] Federally Enforceable Through Title V Permit
3. Sulfur content of gas combusted in flare shall not exceed 0.75 gr/100 scf. [District NSR Rule, District Rule 4801, and Kern County Rule 407] Federally Enforceable Through Title V Permit
4. Emission rates shall not exceed the following: PM<sub>10</sub>: 12.0 lb/MMscf, SO<sub>x</sub> (as SO<sub>2</sub>): 2.1 lb/MMscf, NO<sub>x</sub> (as NO<sub>2</sub>): 100.0 lb/MMscf, VOC: 7.26 lb/MMscf and CO: 21.0 lb/MMscf. [District NSR Rule] Federally Enforceable Through Title V Permit
5. Combined pilot and waste gas flow rate shall not exceed 0.15 MMscf/day. [District NSR Rule] Federally Enforceable Through Title V Permit
6. Sulfur scrubber shall be monitored monthly for H<sub>2</sub>S content of gas after treatment to determine when recharging is required. [District NSR Rule and District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
7. The permittee shall keep accurate records of the amount of gas flared, H<sub>2</sub>S content and recharging dates, for a period of five years, and shall make such records available for District inspection upon request. [District NSR Rule] Federally Enforceable Through Title V Permit
8. The flare shall be operated according to the manufacturer's specifications, a copy of which shall be maintained on site. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
9. If this flare requires a pilot flame, then the flare shall be operated with a flame present at all times, and kept in operation when emissions may be vented to it. The presence of a flare pilot flame shall be monitored using a thermocouple or any other equivalent device to detect the presence of a flame. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
10. This flare shall be inspected every two weeks while in operation for visible emissions. If visible emissions are observed, corrective action shall be taken. If visible emissions continue, an EPA Method 9 test shall be conducted within 72 hours. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
11. This flare shall not be used as a leak control device as described in Rule 4403, 5.3.1, nor as a control device for any permit unit subject to NSPS, without modification of permit requirements to address 40 CFR 60.18. [District Rule 2520, 9.4.3] Federally Enforceable Through Title V Permit

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-1326-261-4

**EXPIRATION DATE:** 03/31/2006

**SECTION:** SW11 **TOWNSHIP:** 28S **RANGE:** 27E

**EQUIPMENT DESCRIPTION:**

500 BBL FIXED ROOF STOCK TANK #T-20 WITH VAPOR CONTROL (PART OF S-1326-201) (NORTH TREATING FACILITY).

## PERMIT UNIT REQUIREMENTS

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1. The Reid vapor pressure of the liquid stored in this tank shall not exceed 0.75 psia. [District NSR Rule] Federally Enforceable Through Title V Permit
2. Tank stored liquid temperature shall not exceed 220 degrees F. [District NSR Rule] Federally Enforceable Through Title V Permit
3. Tank shall be equipped with a stored liquid temperature indicator. [District NSR Rule] Federally Enforceable Through Title V Permit
4. The average daily throughput for this tank (on an annual basis) shall not exceed 4670 bbl/day. [District NSR Rule] Federally Enforceable Through Title V Permit
5. VOC emission rate shall not exceed 2.1 lb/day. [District NSR Rule] Federally Enforceable Through Title V Permit
6. Any tank gauging or sampling device on a tank vented to the vapor recovery system shall be equipped with a gas-tight cover which shall be closed at all times except during gauging or sampling. Gas-tight shall be defined as emitting no more than 10,000 ppm of methane measured at a distance of one centimeter from the potential source with an instrument calibrated with methane in accordance with USEPA Method 21. Emissions in excess of this limit shall be considered a leak. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
7. Tank seams, welds, joints, piping, valves, and fittings shall be inspected and maintained in a gas-tight condition. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
8. The permittee shall keep accurate records of Reid vapor pressure, storage temperature, and tank throughput, and shall make such records available for District inspection upon request. [District Rule 1070; District Rule 2520, 9.5.2] Federally Enforceable Through Title V Permit
9. 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 Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
10. All piping, fittings, and valves shall be inspected annually by the facility operator in accordance with USEPA Method 21, with the instrument calibrated with methane, to ensure compliance with the provisions of this permit. If any of the tank components are found to leak during an annual inspection, the inspection frequency for that component type shall be changed from annual to quarterly. If no tank components are subsequently found to be leaking during five consecutive inspections, the inspection frequency may be changed from quarterly to annual. Components located in inaccessible (over 15 feet above ground when access is required from the ground or over 6 feet away from a platform when access is required from the platform) locations shall be inspected at least annually and components located in unsafe areas shall be inspected and repaired at the next process unit turnaround (the scheduled shutdown of a unit for maintenance and repair work). [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

11. A facility operator, upon detection of a leaking component, shall affix to that component a weatherproof readily visible tag bearing the date on which the leak is detected. The tag shall remain in place until the leaking component is repaired, reinspected and found to be in compliance with the requirements of this rule. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
12. An operator shall reinspect a component for leaks within thirty working days after the date on which the component is repaired. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
13. Emissions from components which have been tagged by the facility operator for repair within 15 calendar days or which have been repaired and are awaiting re-inspection shall not be in violation of this permit. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
14. Any component leak shall be repaired to a leak-free condition or vented to a flare satisfying the requirements of 40 CFR 60.18 or to a vapor control device that is at least 99 percent efficient as measured by USEPA Method 25 within fifteen (15) calendar days of detection. The APCO may grant a ten (10) calendar day extension provided the operator demonstrates that necessary and sufficient actions are being taken to correct the leak within this time period. Any vapor control device, other than a flare, used to comply with this condition shall demonstrate at least 99% control efficiency as measured by USEPA Method 25 at least annually. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
15. If the leaking component is an essential part of a critical process unit which cannot be immediately shut down for repairs, the operator shall 1) Minimize the leak within 15 calendar days; and 2) If the leak which has been minimized still exceeds the concentration allowed by this permit, the essential component shall be repaired to eliminate the leak during the next process unit turnaround, but in no case later than one year from the date of the original leak detection. A critical process unit is any process unit which would result in the automatic shutdown of other process units if it were shut down. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
16. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date of leak detection, and method of detection; 3) Date and emission level of recheck after leak is repaired; 4) Identification and location of essential parts of critical process units found leaking that cannot be repaired until the next process unit turnaround; and 5) Method used to minimize the leak from essential parts of critical process units which cannot be repaired until the next process unit turnaround. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
17. True vapor pressure shall be measured using Reid vapor pressure ASTM Method D323 modified by maintaining the hot water bath at storage temperature. Where storage temperature is above 100 degrees F true vapor pressure shall be determined by Reid vapor pressure at 100 degrees F and CARB approved calculations. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
18. True vapor pressure of crude oil with an API (American Petroleum Institute) gravity less than 30 deg, as determined by API 2547, may be determined by Headspace Gas Chromatography using the procedures from CARB Evaluation of a Method for Determining Vapor Pressures of Petroleum Mixtures by Headspace Gas Chromatography, October 1990. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
19. Control efficiency shall be determined by a comparison of controlled emissions to those emissions which would occur from a fixed or cone roof tank in the same product service without a vapor recovery system. Emissions shall be determined based on tank emission factors in USEPA Publication AP-42, component counts for fugitive emissions sources, recognized emission factors for fugitive emission sources and the efficiency of any VOC destruction device. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
20. The efficiency of any VOC destruction device shall be measured by USEPA Method 25, 25a, or 25b. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
21. The operator shall ensure that the vapor recovery system is functional and is operating as designed at all times. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

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



22. Operator shall determine the true vapor pressure of the petroleum liquid stored in the tank located at the beginning of the process flow after the production header at least once per year in accordance with methods described in Section 6.2 of District Rule 4623 (Amended 12/17/92). Determinations shall be made annually during summer and whenever there is a change in the source or type of petroleum entering the tank. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
23. As used in this permit, the term "source or type of petroleum" shall mean petroleum liquids with similar characteristics. The operator shall maintain records of API gravity of petroleum liquids store in this unit to determine which oil are from common source. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
24. The tanks included in this setting are S-1326-201, '-202, '-203, '-204, '-205, '-206, '-212, '-261, '-262, '-268, '-269, '-270, '-271, '-272, and '-274. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

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

# San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1326-262-3

EXPIRATION DATE: 03/31/2006

SECTION: SW11 TOWNSHIP: 28S RANGE: 27E

## EQUIPMENT DESCRIPTION:

500 BBL FIXED ROOF WATER TANK #T-19 WITH VAPOR CONTROL (PART OF S-1326-201) (NORTH TREATING FACILITY).

## PERMIT UNIT REQUIREMENTS

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1. The Reid vapor pressure of the liquid stored in this tank shall not exceed 0.75 psia. [District NSR Rule] Federally Enforceable Through Title V Permit
2. Tank stored liquid temperature shall not exceed 220 degrees F. [District NSR Rule] Federally Enforceable Through Title V Permit
3. Tank shall be equipped with a stored liquid temperature indicator. [District NSR Rule] Federally Enforceable Through Title V Permit
4. The average daily throughput for this tank (on an annual basis) shall not exceed 40000 bbl/day. [District NSR Rule] Federally Enforceable Through Title V Permit
5. VOC emission rate shall not exceed 16.8 lb/day. [District NSR Rule] Federally Enforceable Through Title V Permit
6. Any tank gauging or sampling device on a tank vented to the vapor recovery system shall be equipped with a gas-tight cover which shall be closed at all times except during gauging or sampling. Gas-tight shall be defined as emitting no more than 10,000 ppm of methane measured at a distance of one centimeter from the potential source with an instrument calibrated with methane in accordance with USEPA Method 21. Emissions in excess of this limit shall be considered a leak. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
7. Tank seams, welds, joints, piping, valves, and fittings shall be inspected and maintained in a gas-tight condition. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
8. The permittee shall keep accurate records of Reid vapor pressure, storage temperature, and tank throughput, and shall make such records available for District inspection upon request. [District Rule 1070; District Rule 2520, 9.5.2] Federally Enforceable Through Title V Permit
9. 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 Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
10. All piping, fittings, and valves shall be inspected annually by the facility operator in accordance with USEPA Method 21, with the instrument calibrated with methane, to ensure compliance with the provisions of this permit. If any of the tank components are found to leak during an annual inspection, the inspection frequency for that component type shall be changed from annual to quarterly. If no tank components are subsequently found to be leaking during five consecutive inspections, the inspection frequency may be changed from quarterly to annual. Components located in inaccessible (over 15 feet above ground when access is required from the ground or over 6 feet away from a platform when access is required from the platform) locations shall be inspected at least annually and components located in unsafe areas shall be inspected and repaired at the next process unit turnaround (the scheduled shutdown of a unit for maintenance and repair work). [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

11. A facility operator, upon detection of a leaking component, shall affix to that component a weatherproof readily visible tag bearing the date on which the leak is detected. The tag shall remain in place until the leaking component is repaired, reinspected and found to be in compliance with the requirements of this rule. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
12. An operator shall reinspect a component for leaks within thirty working days after the date on which the component is repaired. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
13. Emissions from components which have been tagged by the facility operator for repair within 15 calendar days or which have been repaired and are awaiting re-inspection shall not be in violation of this permit. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
14. Any component leak shall be repaired to a leak-free condition or vented to a flare satisfying the requirements of 40 CFR 60.18 or to a vapor control device that is at least 99 percent efficient as measured by USEPA Method 25 within fifteen (15) calendar days of detection. The APCO may grant a ten (10) calendar day extension provided the operator demonstrates that necessary and sufficient actions are being taken to correct the leak within this time period. Any vapor control device, other than a flare, used to comply with this condition shall demonstrate at least 99% control efficiency as measured by USEPA Method 25 at least annually. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
15. If the leaking component is an essential part of a critical process unit which cannot be immediately shut down for repairs, the operator shall 1) Minimize the leak within 15 calendar days; and 2) If the leak which has been minimized still exceeds the concentration allowed by this permit, the essential component shall be repaired to eliminate the leak during the next process unit turnaround, but in no case later than one year from the date of the original leak detection. A critical process unit is any process unit which would result in the automatic shutdown of other process units if it were shut down. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
16. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date of leak detection, and method of detection; 3) Date and emission level of recheck after leak is repaired; 4) Identification and location of essential parts of critical process units found leaking that cannot be repaired until the next process unit turnaround; and 5) Method used to minimize the leak from essential parts of critical process units which cannot be repaired until the next process unit turnaround. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
17. True vapor pressure shall be measured using Reid vapor pressure ASTM Method D323 modified by maintaining the hot water bath at storage temperature. Where storage temperature is above 100 degrees F true vapor pressure shall be determined by Reid vapor pressure at 100 degrees F and CARB approved calculations. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
18. True vapor pressure of crude oil with an API (American Petroleum Institute) gravity less than 30 deg, as determined by API 2547, may be determined by Headspace Gas Chromatography using the procedures from CARB Evaluation of a Method for Determining Vapor Pressures of Petroleum Mixtures by Headspace Gas Chromatography, October 1990. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
19. Control efficiency shall be determined by a comparison of controlled emissions to those emissions which would occur from a fixed or cone roof tank in the same product service without a vapor recovery system. Emissions shall be determined based on tank emission factors in USEPA Publication AP-42, component counts for fugitive emissions sources, recognized emission factors for fugitive emission sources and the efficiency of any VOC destruction device. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
20. The efficiency of any VOC destruction device shall be measured by USEPA Method 25, 25a, or 25b. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
21. The operator shall ensure that the vapor recovery system is functional and is operating as designed at all times. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

22. Operator shall determine the true vapor pressure of the petroleum liquid stored in the tank located at the beginning of the process flow after the production header at least once per year in accordance with methods described in Section 6.2 of District Rule 4623 (Amended 12/17/92). Determinations shall be made annually during summer and whenever there is a change in the source or type of petroleum entering the tank. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
23. As used in this permit, the term "source or type of petroleum" shall mean petroleum liquids with similar characteristics. The operator shall maintain records of API gravity of petroleum liquids store in this unit to determine which oil are from common source. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
24. The tanks included in this setting are S-1326-201, '-202, '-203, '-204, '-205, '-206, '-212, '-261, '-262, '-268, '-269, '-270, '-271, '-272, and '-274. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-1326-263-15

**EXPIRATION DATE:** 03/31/2006

**SECTION:** SW23 **TOWNSHIP:** 28S **RANGE:** 27E

**EQUIPMENT DESCRIPTION:**

126,000 GALLON (3,000 BBL) FIXED ROOF WASH TANK SERVED BY SECTION 23 TANK VAPOR RECOVERY (TVR) SYSTEM INCLUDING TWO COMPRESSORS ROUTING VAPORS EITHER TO DOGGR APPROVED VAPOR DISPOSAL WELL OR TO FIELD FUEL GAS SYSTEM VIA HYDROGEN SULFIDE SCRUBBER(S) (SECTION 23 FACILITY)

## PERMIT UNIT REQUIREMENTS

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1. Tank vapor recovery (TVR) system includes vapor piping shared between wellhead casing vent recovery (CVR) system on S-1326-287 and storage tanks S-1326-263, -279, -280, -281, -283, -285, and '-315, two compressors routing vapor either to DOGGR approved vapor disposal well or to sulfur scrubber(s), field fuel gas system (Section 23 facility), or steam generators S-1326-9, '-294, '-314, '-337, and '-338. [District NSR Rule] Federally Enforceable Through Title V Permit
2. Operator shall ensure the vapor control system is functional and operating as designed at all times, except during periods of routine maintenance. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
3. 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 Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
4. The true vapor pressure of the liquids stored in this tank shall not exceed 0.5 psia. [District Rules 4623, 2.0 and NSR] Federally Enforceable Through Title V Permit
5. Connections between this TVR system and the wellhead casing vent recovery (CVR) system listed on S-1326-287 shall be made upstream of the hydrogen sulfide removal system included in this permit. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Prior to injecting collected TVR (and S-1326-287 CVR) vapors into field fuel gas system, the collected vapors shall be treated by a hydrogen sulfide removal system which reduces the hydrogen sulfide concentration in the collected vapors by at least 95%. The sulfur content of the treated vapors may not exceed 1.0 grains S/ 100 scf gas. The treated TVR (and CVR) vapors injected into the field fuel gas line shall not be greater than five percent by weight hydrocarbons heavier than butane as determined by test method ASTM D-1945 or equivalent test method with prior District approval. [District Rules 2020 and 2201] Federally Enforceable Through Title V Permit
7. The vapor control system compressor shall activate when the tank internal pressure exceeds 1.5 in. w.c. and deactivate when the tank internal pressure falls to 0.5 in. w.c. [District NSR Rule] Federally Enforceable Through Title V Permit
8. The tank pressure relief valves shall not open unless the tank internal pressure exceeds 2.0 oz. or falls below 0.5 oz. vacuum. [District NSR Rule] Federally Enforceable Through Title V Permit
9. Permittee shall conduct tank cleaning and maintenance operations in accordance with District approved procedures as described in this permit. [District Rule 2080] Federally Enforceable Through Title V Permit
10. 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

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

11. Prior to opening the tank to allow tank cleaning, one of the following procedures must be followed: 1) Prior to venting the tank to the atmosphere, operate the tank vapor recovery system/vapor control device for at least 24 hours such that it collects the tank vapors; or 2) use liquid displacement, conducted using a liquid with a TVP less than 0.5 psia, or conducted by floating the oil pad off a crude oil tank by restricting the outflow of water, such that 90% of the tank volume is displaced; or 3) Vent the tank to a vapor control device/vapor recovery system until the vapor concentration is less than 10% of the lower explosive limit (LEL) or 5,000 ppmv whichever is less; or 4) vent the tank to the vapor control system for a length of time determined by the following relationship:  $t = 2.3 V/Q$ , where  $t$  = time,  $V$  = tank volume (cubic feet), and  $Q$  = flow rate to the vapor control system as determined using appropriate engineering calculations. [District Rule 2080] Federally Enforceable Through Title V Permit
12. 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
13. 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
14. 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
15. 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
16. Permittee shall maintain records of each period of cleaning and maintenance when the tank is disconnected or isolated from the vapor control system. Records shall include the date that tank cleaning was initiated, the date tank cleaning was completed, the procedure used to vent tank vapors prior to opening, the method of tank cleaning used, and a description of internal and external tank repairs and maintenance performed. Such records shall be retained for a period of at least 5 years and shall be made available for District inspection upon request. [District Rule 2080] Federally Enforceable Through Title V Permit
17. Operator shall conduct quarterly gas sampling after TVR compressor (prior to connection to any other vapor control system) and at either the first line tank or at any secondary tank which is heated above ambient temperature. If gas samples are less than 10% VOC by weight for 8 consecutive quarterly samplings, sampling frequency shall only be required annually and whenever there is a change in source or type of petroleum processed. Samples shall be collected during periods of normal operation, and not be within 48 hours after routine maintenance or repair. [District NSR Rule] Federally Enforceable Through Title V Permit
18. VOC content of tank vapor space and vapor control system piping and components shall not exceed 10% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
19. VOC content of gas shall be measured using ASTM D-1945, EPA Method 18 referenced as methane, or equivalent test method with prior District approval. [District Rule 2201] Federally Enforceable Through Title V Permit
20. Collected TVR vapors shall be disposed of in a Department of Oil, Gas and Geothermal Resources (DOGGR) approved vapor disposal well or injected into the field fuel gas system and used in permit exempt equipment. [District Rules 2020 and 2201] Federally Enforceable Through Title V Permit
21. The permittee shall keep accurate records of VOC content of vapors, liquids stored and true vapor pressure of such liquids for a period of 5 years and shall make such records available for District inspection upon request. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
22. Permittee shall conduct true vapor pressure (TVP) testing of the organic liquid stored in this tank at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored in this tank in order to maintain exemption from the rule. [District Rule 4623] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

23. The API gravity of crude oil or petroleum distillate shall be determined by using ASTM Method D 287 e1 "Standard Test Method for API Gravity of Crude Petroleum and Petroleum Products (Hydrometer Method). Sampling for API gravity shall be performed in accordance with ASTM Method D 4057 "Standard Practices for Manual Sampling of Petroleum and Petroleum Products." [District Rule 4623] Federally Enforceable Through Title V Permit
24. For crude oil with an API gravity of 26 degrees or less, the TVP shall be determined using the latest version of the Lawrence Berkeley National Laboratory "test Method for Vapor pressure of Reactive Organic Compounds in Heavy Crude Oil Using Gas Chromatograph", as approved by ARB and EPA. [District Rule 4623] Federally Enforceable Through Title V Permit
25. The TVP testing shall be conducted at actual storage temperature of the organic liquid in the tank. The permittee shall also conduct an API gravity testing. [District Rule 4623] Federally Enforceable Through Title V Permit
26. Permittee shall submit the records of TVP and API gravity testing to the APCO within 45 days after the date of testing. The records shall include the tank identification number, Permit to Operate number, type of stored organic liquid, TVP and API gravity of the organic liquid, test methods used, and a copy of the test results. [District Rule 4623] Federally Enforceable Through Title V Permit
27. The permittee shall 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
28. All records required to be maintained by this permit shall be maintained for a period of at least five years and shall be made readily available for District inspection upon request. [District Rule 4623] Federally Enforceable Through Title V Permit

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-1326-268-4

**EXPIRATION DATE:** 03/31/2006

**SECTION:** SW11 **TOWNSHIP:** 28S **RANGE:** 27E

**EQUIPMENT DESCRIPTION:**

5,000 BBL FIXED ROOF SURGE/FWKO TANK #T-12 WITH VAPOR CONTROL (PART OF S-1326-201) (NORTH TREATING FACILITY).

## PERMIT UNIT REQUIREMENTS

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1. The Reid vapor pressure of liquids stored shall not exceed 1.84 psia. [District NSR Rule] Federally Enforceable Through Title V Permit
2. Tank stored liquid temperature shall not exceed 220 degrees F. [District NSR Rule] Federally Enforceable Through Title V Permit
3. Tank shall be equipped with a stored liquid temperature indicator. [District Rule 2080] Federally Enforceable Through Title V Permit
4. VOC emissions shall not exceed 2.6 lb/day. [District NSR Rule] Federally Enforceable Through Title V Permit
5. Tank shall be operated at a constant level. [District NSR Rule] Federally Enforceable Through Title V Permit
6. Any tank gauging or sampling device on a tank vented to the vapor recovery system shall be equipped with a gas-tight cover which shall be closed at all times except during gauging or sampling. Gas-tight shall be defined as emitting no more than 10,000 ppm of methane measured at a distance of one centimeter from the potential source with an instrument calibrated with methane in accordance with USEPA Method 21. Emissions in excess of this limit shall be considered a leak. [District Rule 4623 and District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
7. Tank seams, welds, joints, piping, valves, and fittings shall be inspected and maintained in a gas-tight condition. [District Rule 4623 and District NSR Rule] Federally Enforceable Through Title V Permit
8. The permittee shall keep accurate records of Reid vapor pressure, and storage temperature of liquids stored, and shall make such records readily available for District inspection upon request. [District Rule 1070; District Rule 2520, 9.5.2] Federally Enforceable Through Title V Permit
9. 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 Rule 4623 and District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
10. All piping, fittings, and valves shall be inspected annually by the facility operator in accordance with USEPA Method 21, with the instrument calibrated with methane, to ensure compliance with the provisions of this permit. If any of the tank components are found to leak during an annual inspection, the inspection frequency for that component type shall be changed from annual to quarterly. If no tank components are subsequently found to be leaking during five consecutive inspections, the inspection frequency may be changed from quarterly to annual. Components located in inaccessible (over 15 feet above ground when access is required from the ground or over 6 feet away from a platform when access is required from the platform) locations shall be inspected at least annually and components located in unsafe areas shall be inspected and repaired at the next process unit turnaround (the scheduled shutdown of a unit for maintenance and repair work). [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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



11. A facility operator, upon detection of a leaking component, shall affix to that component a weatherproof readily visible tag bearing the date on which the leak is detected. The tag shall remain in place until the leaking component is repaired, reinspected and found to be in compliance with the requirements of this rule. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
12. An operator shall reinspect a component for leaks within thirty working days after the date on which the component is repaired. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
13. Emissions from components which have been tagged by the facility operator for repair within 15 calendar days or which have been repaired and are awaiting re-inspection shall not be in violation of this permit. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
14. Any component leak shall be repaired to a leak-free condition or vented to a flare satisfying the requirements of 40 CFR 60.18 or to a vapor control device that is at least 99 percent efficient as measured by USEPA Method 25 within fifteen (15) calendar days of detection. The APCO may grant a ten (10) calendar day extension provided the operator demonstrates that necessary and sufficient actions are being taken to correct the leak within this time period. Any vapor control device, other than a flare, used to comply with this condition shall demonstrate at least 99% control efficiency as measured by USEPA Method 25 at least annually. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
15. If the leaking component is an essential part of a critical process unit which cannot be immediately shut down for repairs, the operator shall 1) Minimize the leak within 15 calendar days; and 2) If the leak which has been minimized still exceeds the concentration allowed by this permit, the essential component shall be repaired to eliminate the leak during the next process unit turnaround, but in no case later than one year from the date of the original leak detection. A critical process unit is any process unit which would result in the automatic shutdown of other process units if it were shut down. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
16. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date of leak detection, and method of detection; 3) Date and emission level of recheck after leak is repaired; 4) Identification and location of essential parts of critical process units found leaking that cannot be repaired until the next process unit turnaround; and 5) Method used to minimize the leak from essential parts of critical process units which cannot be repaired until the next process unit turnaround. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
17. True vapor pressure shall be measured using Reid vapor pressure ASTM Method D323 modified by maintaining the hot water bath at storage temperature. Where storage temperature is above 100 degrees F true vapor pressure shall be determined by Reid vapor pressure at 100 degrees F and CARB approved calculations. [District Rule 4623, 6.2.2] Federally Enforceable Through Title V Permit
18. True vapor pressure of crude oil with an API (American Petroleum Institute) gravity less than 30 deg, as determined by API 2547, may be determined by Headspace Gas Chromatography using the procedures from CARB Evaluation of a Method for Determining Vapor Pressures of Petroleum Mixtures by Headspace Gas Chromatography, October 1990. [District Rule 4623, 6.2.3] Federally Enforceable Through Title V Permit
19. Control efficiency shall be determined by a comparison of controlled emissions to those emissions which would occur from a fixed or cone roof tank in the same product service without a vapor recovery system. Emissions shall be determined based on tank emission factors in USEPA Publication AP-42, component counts for fugitive emissions sources, recognized emission factors for fugitive emission sources and the efficiency of any VOC destruction device. [District Rule 4623, 6.2.4] Federally Enforceable Through Title V Permit
20. The efficiency of any VOC destruction device shall be measured by USEPA Method 25, 25a, or 25b. [District Rule 4623, 6.2.5] Federally Enforceable Through Title V Permit
21. The operator shall ensure that the vapor recovery system is functional and is operating as designed at all times. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

22. Operator shall determine the true vapor pressure of the petroleum liquid stored in the tank located at the beginning of the process flow after the production header at least once per year in accordance with methods described in Section 6.2 of District Rule 4623 (Amended 12/17/92). Determinations shall be made annually during summer and whenever there is a change in the source or type of petroleum entering the tank. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
23. As used in this permit, the term "source or type of petroleum" shall mean petroleum liquids with similar characteristics. The operator shall maintain records of API gravity of petroleum liquids store in this unit to determine which oil are from common source. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
24. The tanks included in this setting are S-1326-201, '-202, '-203, '-204, '-205, '-206, '-212, '-261, '-262, '-268, '-269, '-270, '-271, '-272, and '-274. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-1326-269-4

**EXPIRATION DATE:** 03/31/2006

**SECTION:** SW11 **TOWNSHIP:** 28S **RANGE:** 27E

**EQUIPMENT DESCRIPTION:**

5,000 BBL FIXED ROOF PRODUCED WATER TANK #T-13 WITH VAPOR CONTROL (PART OF S-1326-201) (NORTH TREATING FACILITY).

## PERMIT UNIT REQUIREMENTS

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1. The Reid vapor pressure of liquids stored shall not exceed 1.84 psia. [District NSR Rule] Federally Enforceable Through Title V Permit
2. Tank stored liquid temperature shall not exceed 220 degrees F. [District NSR Rule] Federally Enforceable Through Title V Permit
3. Tank shall be equipped with a stored liquid temperature indicator. [District Rule 2080] Federally Enforceable Through Title V Permit
4. VOC emissions shall not exceed 2.6 lb/day. [District NSR Rule] Federally Enforceable Through Title V Permit
5. Tank shall be operated at a constant level. [District NSR Rule] Federally Enforceable Through Title V Permit
6. Any tank gauging or sampling device on a tank vented to the vapor recovery system shall be equipped with a gas-tight cover which shall be closed at all times except during gauging or sampling. Gas-tight shall be defined as emitting no more than 10,000 ppm of methane measured at a distance of one centimeter from the potential source with an instrument calibrated with methane in accordance with USEPA Method 21. Emissions in excess of this limit shall be considered a leak. [District Rule 4623 and District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
7. Tank seams, welds, joints, piping, valves, and fittings shall be inspected and maintained in a gas-tight condition. [District Rule 4623] Federally Enforceable Through Title V Permit
8. The permittee shall keep accurate records of Reid vapor pressure, and storage temperature of liquids stored, and shall make such records readily available for District inspection upon request. [District Rules 1070; District Rule 2520, 9.5.2] Federally Enforceable Through Title V Permit
9. 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 Rule 4623 and District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
10. All piping, fittings, and valves shall be inspected annually by the facility operator in accordance with USEPA Method 21, with the instrument calibrated with methane, to ensure compliance with the provisions of this permit. If any of the tank components are found to leak during an annual inspection, the inspection frequency for that component type shall be changed from annual to quarterly. If no tank components are subsequently found to be leaking during five consecutive inspections, the inspection frequency may be changed from quarterly to annual. Components located in inaccessible (over 15 feet above ground when access is required from the ground or over 6 feet away from a platform when access is required from the platform) locations shall be inspected at least annually and components located in unsafe areas shall be inspected and repaired at the next process unit turnaround (the scheduled shutdown of a unit for maintenance and repair work). [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

11. A facility operator, upon detection of a leaking component, shall affix to that component a weatherproof readily visible tag bearing the date on which the leak is detected. The tag shall remain in place until the leaking component is repaired, reinspected and found to be in compliance with the requirements of this rule. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
12. An operator shall reinspect a component for leaks within thirty working days after the date on which the component is repaired. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
13. Emissions from components which have been tagged by the facility operator for repair within 15 calendar days or which have been repaired and are awaiting re-inspection shall not be in violation of this permit. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
14. Any component leak shall be repaired to a leak-free condition or vented to a flare satisfying the requirements of 40 CFR 60.18 or to a vapor control device that is at least 99 percent efficient as measured by USEPA Method 25 within fifteen (15) calendar days of detection. The APCO may grant a ten (10) calendar day extension provided the operator demonstrates that necessary and sufficient actions are being taken to correct the leak within this time period. Any vapor control device, other than a flare, used to comply with this condition shall demonstrate at least 99% control efficiency as measured by USEPA Method 25 at least annually. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
15. If the leaking component is an essential part of a critical process unit which cannot be immediately shut down for repairs, the operator shall 1) Minimize the leak within 15 calendar days; and 2) If the leak which has been minimized still exceeds the concentration allowed by this permit, the essential component shall be repaired to eliminate the leak during the next process unit turnaround, but in no case later than one year from the date of the original leak detection. A critical process unit is any process unit which would result in the automatic shutdown of other process units if it were shut down. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
16. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date of leak detection, and method of detection; 3) Date and emission level of recheck after leak is repaired; 4) Identification and location of essential parts of critical process units found leaking that cannot be repaired until the next process unit turnaround; and 5) Method used to minimize the leak from essential parts of critical process units which cannot be repaired until the next process unit turnaround. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
17. True vapor pressure shall be measured using Reid vapor pressure ASTM Method D323 modified by maintaining the hot water bath at storage temperature. Where storage temperature is above 100 degrees F true vapor pressure shall be determined by Reid vapor pressure at 100 degrees F and CARB approved calculations. [District Rule 4623, 6.2.2] Federally Enforceable Through Title V Permit
18. True vapor pressure of crude oil with an API (American Petroleum Institute) gravity less than 30 deg, as determined by API 2547, may be determined by Headspace Gas Chromatography using the procedures from CARB Evaluation of a Method for Determining Vapor Pressures of Petroleum Mixtures by Headspace Gas Chromatography, October 1990. [District Rule 4623, 6.2.3] Federally Enforceable Through Title V Permit
19. Control efficiency shall be determined by a comparison of controlled emissions to those emissions which would occur from a fixed or cone roof tank in the same product service without a vapor recovery system. Emissions shall be determined based on tank emission factors in USEPA Publication AP-42, component counts for fugitive emissions sources; recognized emission factors for fugitive emission sources and the efficiency of any VOC destruction device. [District Rule 4623, 6.2.4] Federally Enforceable Through Title V Permit
20. The efficiency of any VOC destruction device shall be measured by USEPA Method 25, 25a, or 25b. [District Rule 4623, 6.2.5] Federally Enforceable Through Title V Permit
21. The operator shall ensure that the vapor recovery system is functional and is operating as designed at all times. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

22. Operator shall determine the true vapor pressure of the petroleum liquid stored in the tank located at the beginning of the process flow after the production header at least once per year in accordance with methods described in Section 6.2 of District Rule 4623 (Amended 12/17/92). Determinations shall be made annually during summer and whenever there is a change in the source or type of petroleum entering the tank. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
23. As used in this permit, the term "source or type of petroleum" shall mean petroleum liquids with similar characteristics. The operator shall maintain records of API gravity of petroleum liquids store in this unit to determine which oil are from common source. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
24. The tanks included in this setting are S-1326-201, '-202, '-203, '-204, '-205, '-206, '-212, '-261, '-262, '-268, '-269, '-270, '-271, '-272, and '-274. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

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

# San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1326-270-3

EXPIRATION DATE: 03/31/2006

SECTION: SW11 TOWNSHIP: 28S RANGE: 27E

## EQUIPMENT DESCRIPTION:

1,000 BBL FIXED ROOF OIL TREATING TANK #TS-1 WITH VAPOR CONTROL (PART OF S-1326-201) (NORTH TREATING FACILITY).

## PERMIT UNIT REQUIREMENTS

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1. The Reid vapor pressure of the liquid stored in this tank shall not exceed 0.75 psia. [District NSR Rule] Federally Enforceable Through Title V Permit.
2. Tank stored liquid temperature shall not exceed 220 degrees F. [District NSR Rule] Federally Enforceable Through Title V Permit
3. Tank shall be equipped with a stored liquid temperature indicator. [District NSR Rule] Federally Enforceable Through Title V Permit
4. The average daily throughput for this tank (on an annual basis) shall not exceed 2500 bbl/day. [District NSR Rule] Federally Enforceable Through Title V Permit
5. VOC emission rate shall not exceed 1.3 lb/day. [District NSR Rule] Federally Enforceable Through Title V Permit
6. Any tank gauging or sampling device on a tank vented to the vapor recovery system shall be equipped with a gas-tight cover which shall be closed at all times except during gauging or sampling. Gas-tight shall be defined as emitting no more than 10,000 ppm of methane measured at a distance of one centimeter from the potential source with an instrument calibrated with methane in accordance with USEPA Method 21. Emissions in excess of this limit shall be considered a leak. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
7. Tank seams, welds, joints, piping, valves, and fittings shall be inspected and maintained in a gas-tight condition. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
8. The permittee shall keep accurate records of Reid vapor pressure, storage temperature, and tank throughput, and shall make such records available for District inspection upon request. [District Rules 1070; District Rule 2520, 9.5.2] Federally Enforceable Through Title V Permit
9. 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 Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
10. All piping, fittings, and valves shall be inspected annually by the facility operator in accordance with USEPA Method 21, with the instrument calibrated with methane, to ensure compliance with the provisions of this permit. If any of the tank components are found to leak during an annual inspection, the inspection frequency for that component type shall be changed from annual to quarterly. If no tank components are subsequently found to be leaking during five consecutive inspections, the inspection frequency may be changed from quarterly to annual. Components located in inaccessible (over 15 feet above ground when access is required from the ground or over 6 feet away from a platform when access is required from the platform) locations shall be inspected at least annually and components located in unsafe areas shall be inspected and repaired at the next process unit turnaround (the scheduled shutdown of a unit for maintenance and repair work). [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

11. A facility operator, upon detection of a leaking component, shall affix to that component a weatherproof readily visible tag bearing the date on which the leak is detected. The tag shall remain in place until the leaking component is repaired, reinspected and found to be in compliance with the requirements of this rule. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
12. An operator shall reinspect a component for leaks within thirty working days after the date on which the component is repaired. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
13. Emissions from components which have been tagged by the facility operator for repair within 15 calendar days or which have been repaired and are awaiting re-inspection shall not be in violation of this permit. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
14. Any component leak shall be repaired to a leak-free condition or vented to a flare satisfying the requirements of 40 CFR 60.18 or to a vapor control device that is at least 99 percent efficient as measured by USEPA Method 25 within fifteen (15) calendar days of detection. The APCO may grant a ten (10) calendar day extension provided the operator demonstrates that necessary and sufficient actions are being taken to correct the leak within this time period. Any vapor control device, other than a flare, used to comply with this condition shall demonstrate at least 99% control efficiency as measured by USEPA Method 25 at least annually. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
15. If the leaking component is an essential part of a critical process unit which cannot be immediately shut down for repairs, the operator shall 1) Minimize the leak within 15 calendar days; and 2) If the leak which has been minimized still exceeds the concentration allowed by this permit, the essential component shall be repaired to eliminate the leak during the next process unit turnaround, but in no case later than one year from the date of the original leak detection. A critical process unit is any process unit which would result in the automatic shutdown of other process units if it were shut down. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
16. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date of leak detection, and method of detection; 3) Date and emission level of recheck after leak is repaired; 4) Identification and location of essential parts of critical process units found leaking that cannot be repaired until the next process unit turnaround; and 5) Method used to minimize the leak from essential parts of critical process units which cannot be repaired until the next process unit turnaround. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
17. True vapor pressure shall be measured using Reid vapor pressure ASTM Method D323 modified by maintaining the hot water bath at storage temperature. Where storage temperature is above 100 degrees F true vapor pressure shall be determined by Reid vapor pressure at 100 degrees F and CARB approved calculations. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
18. True vapor pressure of crude oil with an API (American Petroleum Institute) gravity less than 30 deg, as determined by API 2547, may be determined by Headspace Gas Chromatography using the procedures from CARB Evaluation of a Method for Determining Vapor Pressures of Petroleum Mixtures by Headspace Gas Chromatography, October 1990. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
19. Control efficiency shall be determined by a comparison of controlled emissions to those emissions which would occur from a fixed or cone roof tank in the same product service without a vapor recovery system. Emissions shall be determined based on tank emission factors in USEPA Publication AP-42, component counts for fugitive emissions sources, recognized emission factors for fugitive emission sources and the efficiency of any VOC destruction device. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
20. The efficiency of any VOC destruction device shall be measured by USEPA Method 25, 25a, or 25b. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
21. The operator shall ensure that the vapor recovery system is functional and is operating as designed at all times. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

22. Operator shall determine the true vapor pressure of the petroleum liquid stored in the tank located at the beginning of the process flow after the production header at least once per year in accordance with methods described in Section 6.2 of District Rule 4623 (Amended 12/17/92). Determinations shall be made annually during summer and whenever there is a change in the source or type of petroleum entering the tank. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
23. As used in this permit, the term "source or type of petroleum" shall mean petroleum liquids with similar characteristics. The operator shall maintain records of API gravity of petroleum liquids store in this unit to determine which oil are from common source. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
24. The tanks included in this setting are S-1326-201, '-202, '-203, '-204, '-205, '-206, '-212, '-261, '-262, '-268, '-269, '-270, '-271, '-272, and '-274. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

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



# San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1326-271-3

EXPIRATION DATE: 03/31/2006

SECTION: SW11 TOWNSHIP: 28S RANGE: 27E

## EQUIPMENT DESCRIPTION:

500 BBL FIXED ROOF DEHYDRATION TANK #TS-2 WITH VAPOR CONTROL (PART OF S-1326-201) (NORTH TREATING FACILITY).

## PERMIT UNIT REQUIREMENTS

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1. The Reid vapor pressure of the liquid stored in this tank shall not exceed 0.75 psia. [District NSR Rule] Federally Enforceable Through Title V Permit
2. Tank stored liquid temperature shall not exceed 220 degrees F. [District NSR Rule] Federally Enforceable Through Title V Permit
3. Tank shall be equipped with a stored liquid temperature indicator. [District NSR Rule] Federally Enforceable Through Title V Permit
4. The average daily throughput for this tank (on an annual basis) shall not exceed 1,000 bbl/day. [District NSR Rule] Federally Enforceable Through Title V Permit
5. Any 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. Gas-tight shall be defined as emitting no more than 10,000 ppm of methane measured at a distance of one centimeter from the potential source with an instrument calibrated with methane in accordance with USEPA Method 21. Emissions in excess of this limit shall be considered a leak. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
6. Tank seams, welds, joints, piping, valves, and fittings shall be inspected and maintained in a gas-tight condition. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
7. The permittee shall keep accurate records of Reid vapor pressure, and storage temperature of liquids stored, and shall make such records available for District inspection upon request. [District Rules 1070 and District Rule 2520, 9.5.2] Federally Enforceable Through Title V Permit
8. 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 Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
9. All piping, fittings, and valves shall be inspected annually by the facility operator in accordance with USEPA Method 21, with the instrument calibrated with methane, to ensure compliance with the provisions of this permit. If any of the tank components are found to leak during an annual inspection, the inspection frequency for that component type shall be changed from annual to quarterly. If no tank components are subsequently found to be leaking during five consecutive inspections, the inspection frequency may be changed from quarterly to annual. Components located in inaccessible (over 15 feet above ground when access is required from the ground or over 6 feet away from a platform when access is required from the platform) locations shall be inspected at least annually and components located in unsafe areas shall be inspected and repaired at the next process unit turnaround (the scheduled shutdown of a unit for maintenance and repair work). [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

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

10. A facility operator, upon detection of a leaking component, shall affix to that component a weatherproof readily visible tag bearing the date on which the leak is detected. The tag shall remain in place until the leaking component is repaired, reinspected and found to be in compliance with the requirements of this rule. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
11. An operator shall reinspect a component for leaks within thirty working days after the date on which the component is repaired. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
12. Emissions from components which have been tagged by the facility operator for repair within 15 calendar days or which have been repaired and are awaiting re-inspection shall not be in violation of this permit. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
13. Any component leak shall be repaired to a leak-free condition or vented to a flare satisfying the requirements of 40 CFR 60.18 or to a vapor control device that is at least 99 percent efficient as measured by USEPA Method 25 within fifteen (15) calendar days of detection. The APCO may grant a ten (10) calendar day extension provided the operator demonstrates that necessary and sufficient actions are being taken to correct the leak within this time period. Any vapor control device, other than a flare, used to comply with this condition shall demonstrate at least 99% control efficiency as measured by USEPA Method 25 at least annually. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
14. If the leaking component is an essential part of a critical process unit which cannot be immediately shut down for repairs, the operator shall 1) Minimize the leak within 15 calendar days; and 2) If the leak which has been minimized still exceeds the concentration allowed by this permit, the essential component shall be repaired to eliminate the leak during the next process unit turnaround, but in no case later than one year from the date of the original leak detection. A critical process unit is any process unit which would result in the automatic shutdown of other process units if it were shut down. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
15. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date of leak detection, and method of detection; 3) Date and emission level of recheck after leak is repaired; 4) Identification and location of essential parts of critical process units found leaking that cannot be repaired until the next process unit turnaround; and 5) Method used to minimize the leak from essential parts of critical process units which cannot be repaired until the next process unit turnaround. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
16. True vapor pressure shall be measured using Reid vapor pressure ASTM Method D323 modified by maintaining the hot water bath at storage temperature. Where storage temperature is above 100 degrees F true vapor pressure shall be determined by Reid vapor pressure at 100 degrees F and CARB approved calculations. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
17. True vapor pressure of crude oil with an API (American Petroleum Institute) gravity less than 30 deg, as determined by API 2547, may be determined by Headspace Gas Chromatography using the procedures from CARB Evaluation of a Method for Determining Vapor Pressures of Petroleum Mixtures by Headspace Gas Chromatography, October 1990. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
18. Control efficiency shall be determined by a comparison of controlled emissions to those emissions which would occur from a fixed or cone roof tank in the same product service without a vapor recovery system. Emissions shall be determined based on tank emission factors in USEPA Publication AP-42, component counts for fugitive emissions sources, recognized emission factors for fugitive emission sources and the efficiency of any VOC destruction device. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
19. The efficiency of any VOC destruction device shall be measured by USEPA Method 25, 25a, or 25b. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
20. The operator shall ensure that the vapor recovery system is functional and is operating as designed at all times. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

21. Operator shall determine the true vapor pressure of the petroleum liquid stored in the tank located at the beginning of the process flow after the production header at least once per year in accordance with methods described in Section 6.2 of District Rule 4623 (Amended 12/17/92). Determinations shall be made annually during summer and whenever there is a change in the source or type of petroleum entering the tank. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
22. As used in this permit, the term "source or type of petroleum" shall mean petroleum liquids with similar characteristics. The operator shall maintain records of API gravity of petroleum liquids store in this unit to determine which oil are from common source. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
23. The tanks included in this setting are S-1326-201, '-202, '-203, '-204, '-205, '-206, '-212, '-261, '-262, '-268, '-269, '-270, '-271, '-272, and '-274. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-1326-272-3

**EXPIRATION DATE:** 03/31/2006

**SECTION:** SW11 **TOWNSHIP:** 28S **RANGE:** 27E

**EQUIPMENT DESCRIPTION:**

1,000 BBL FIXED ROOF WATER TANK #TS-3 WITH VAPOR CONTROL (PART OF S-1326-201) (NORTH TREATING FACILITY).

## PERMIT UNIT REQUIREMENTS

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1. The Reid vapor pressure of the liquid stored in this tank shall not exceed 0.75 psia. [District NSR Rule] Federally Enforceable Through Title V Permit
2. Tank stored liquid temperature shall not exceed 220 degrees F. [District NSR Rule] Federally Enforceable Through Title V Permit
3. Tank shall be equipped with a stored liquid temperature indicator. [District NSR Rule] Federally Enforceable Through Title V Permit
4. The average daily throughput for this tank (on an annual basis) shall not exceed 5000 bbl/day. [District NSR Rule] Federally Enforceable Through Title V Permit
5. VOC emission rate shall not exceed 2.3 lb/day. [District NSR Rule] Federally Enforceable Through Title V Permit
6. Any tank gauging or sampling device on a tank vented to the vapor recovery system shall be equipped with a gas-tight cover which shall be closed at all times except during gauging or sampling. Gas-tight shall be defined as emitting no more than 10,000 ppm of methane measured at a distance of one centimeter from the potential source with an instrument calibrated with methane in accordance with USEPA Method 21. Emissions in excess of this limit shall be considered a leak. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
7. Tank seams, welds, joints, piping, valves, and fittings shall be inspected and maintained in a gas-tight condition. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
8. The permittee shall keep accurate records of Reid vapor pressure, storage temperature, and tank throughput, and shall make such records available for District inspection upon request. [District Rule 1070; District Rule 2520, 9.5.2] Federally Enforceable Through Title V Permit
9. 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 Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
10. All piping, fittings, and valves shall be inspected annually by the facility operator in accordance with USEPA Method 21, with the instrument calibrated with methane, to ensure compliance with the provisions of this permit. If any of the tank components are found to leak during an annual inspection, the inspection frequency for that component type shall be changed from annual to quarterly. If no tank components are subsequently found to be leaking during five consecutive inspections, the inspection frequency may be changed from quarterly to annual. Components located in inaccessible (over 15 feet above ground when access is required from the ground or over 6 feet away from a platform when access is required from the platform) locations shall be inspected at least annually and components located in unsafe areas shall be inspected and repaired at the next process unit turnaround (the scheduled shutdown of a unit for maintenance and repair work). [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

11. A facility operator, upon detection of a leaking component, shall affix to that component a weatherproof readily visible tag bearing the date on which the leak is detected. The tag shall remain in place until the leaking component is repaired, reinspected and found to be in compliance with the requirements of this rule. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
12. An operator shall reinspect a component for leaks within thirty working days after the date on which the component is repaired. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
13. Emissions from components which have been tagged by the facility operator for repair within 15 calendar days or which have been repaired and are awaiting re-inspection shall not be in violation of this permit. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
14. Any component leak shall be repaired to a leak-free condition or vented to a flare satisfying the requirements of 40 CFR 60.18 or to a vapor control device that is at least 99 percent efficient as measured by USEPA Method 25 within fifteen (15) calendar days of detection. The APCO may grant a ten (10) calendar day extension provided the operator demonstrates that necessary and sufficient actions are being taken to correct the leak within this time period. Any vapor control device, other than a flare, used to comply with this condition shall demonstrate at least 99% control efficiency as measured by USEPA Method 25 at least annually. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
15. If the leaking component is an essential part of a critical process unit which cannot be immediately shut down for repairs, the operator shall 1) Minimize the leak within 15 calendar days; and 2) If the leak which has been minimized still exceeds the concentration allowed by this permit, the essential component shall be repaired to eliminate the leak during the next process unit turnaround, but in no case later than one year from the date of the original leak detection. A critical process unit is any process unit which would result in the automatic shutdown of other process units if it were shut down. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
16. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date of leak detection, and method of detection; 3) Date and emission level of recheck after leak is repaired; 4) Identification and location of essential parts of critical process units found leaking that cannot be repaired until the next process unit turnaround; and 5) Method used to minimize the leak from essential parts of critical process units which cannot be repaired until the next process unit turnaround. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
17. True vapor pressure shall be measured using Reid vapor pressure ASTM Method D323 modified by maintaining the hot water bath at storage temperature. Where storage temperature is above 100 degrees F true vapor pressure shall be determined by Reid vapor pressure at 100 degrees F and CARB approved calculations. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
18. True vapor pressure of crude oil with an API (American Petroleum Institute) gravity less than 30 deg, as determined by API 2547, may be determined by Headspace Gas Chromatography using the procedures from CARB Evaluation of a Method for Determining Vapor Pressures of Petroleum Mixtures by Headspace Gas Chromatography, October 1990. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
19. Control efficiency shall be determined by a comparison of controlled emissions to those emissions which would occur from a fixed or cone roof tank in the same product service without a vapor recovery system. Emissions shall be determined based on tank emission factors in USEPA Publication AP-42, component counts for fugitive emissions sources, recognized emission factors for fugitive emission sources and the efficiency of any VOC destruction device. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
20. The efficiency of any VOC destruction device shall be measured by USEPA Method 25, 25a, or 25b. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
21. The operator shall ensure that the vapor recovery system is functional and is operating as designed at all times. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

22. Operator shall determine the true vapor pressure of the petroleum liquid stored in the tank located at the beginning of the process flow after the production header at least once per year in accordance with methods described in Section 6.2 of District Rule 4623 (Amended 12/17/92). Determinations shall be made annually during summer and whenever there is a change in the source or type of petroleum entering the tank. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
23. As used in this permit, the term "source or type of petroleum" shall mean petroleum liquids with similar characteristics. The operator shall maintain records of API gravity of petroleum liquids store in this unit to determine which oil are from common source. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
24. The tanks included in this setting are S-1326-201, '-202, '-203, '-204, '-205, '-206, '-212, '-261, '-262, '-268, '-269, '-270, '-271, '-272, and '-274. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-1326-273-1

**EXPIRATION DATE:** 03/31/2006

**SECTION:** SW22 **TOWNSHIP:** 28S **RANGE:** 27E

**EQUIPMENT DESCRIPTION:**

4,620 GALLON (110 BBL) FIXED ROOF CRUDE OIL SKIM TANK (ROBINSON B LEASE, KERN FRONT OIL FIELD)

## PERMIT UNIT REQUIREMENTS

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1. The true vapor pressure (TVP) of liquids stored in the tank shall not exceed 1.5 psia at storage temperature or tank shall be subject to the requirements of Rule 4623. [District Rule 4623, 2.0 and District Rule 2520, 9.1] Federally Enforceable Through Title V Permit
2. Operator shall determine the true vapor pressure of the petroleum liquid stored in the tank at least once per year in accordance with methods described in Section 6.2 of District Rule 4623 (amended 12/17/92). Determinations shall be made annually during summer and whenever there is a change in the source or type of petroleum entering the tank. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
3. True vapor pressure shall be measured using Reid vapor pressure ASTM Method D323 modified by maintaining the hot water bath at storage temperature. Where storage temperature is above 100 degrees F, true vapor pressure shall be determined by Reid vapor pressure at 100 degrees F and CARB approved calculations. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
4. True vapor pressure of crude oil with an API (American Petroleum Institute) gravity less than 30 deg, as determined by API 2547, may be determined by Headspace Gas Chromatography using the procedures from CARB Evaluation of a Method for Determining Vapor Pressures of Petroleum Mixtures by Headspace Gas Chromatography, October 1990. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
5. The operator shall keep accurate records of types, storage temperature, and TVP of liquids stored to verify continued exemption from District Rule 4623 (as amended December 17, 1992). [District Rule 2520, 9.1] Federally Enforceable Through Title V Permit
6. As used in this permit, the term "source or type of petroleum" shall mean petroleum liquids with similar characteristics. The operator shall maintain records of API gravity of petroleum liquids store in this unit to determine which oil are from common source. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-1326-274-2

**EXPIRATION DATE:** 03/31/2006

**SECTION:** SW11 **TOWNSHIP:** 28S **RANGE:** 27E

**EQUIPMENT DESCRIPTION:**

42,000 GALLON FIXED ROOF SLOP OIL TANK # TS-8 WITH VAPOR CONTROL SHARED WITH S-1326-201.

## PERMIT UNIT REQUIREMENTS

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1. Tank vapors shall be vented only to vapor control system listed on tank permit S-1326-201. [District NSR Rule] Federally Enforceable Through Title V Permit
2. The Reid vapor pressure of the liquid stored in this tank shall not exceed 0.75 psia. [District NSR Rule] Federally Enforceable Through Title V Permit
3. Tank stored liquid temperature shall not exceed 220 degrees F. [District NSR Rule] Federally Enforceable Through Title V Permit
4. Tank shall be equipped with a stored liquid temperature indicator. [District NSR Rule] Federally Enforceable Through Title V Permit
5. The average daily throughput for this tank (on an annual basis) shall not exceed 970 bbl/day. [District NSR Rule] Federally Enforceable Through Title V Permit
6. Any tank gauging or sampling device on a tank vented to the vapor recovery system shall be equipped with a gas-tight cover which shall be closed at all times except during gauging or sampling. Gas-tight shall be defined as emitting no more than 10,000 ppm of methane measured at a distance of one centimeter from the potential source with an instrument calibrated with methane in accordance with USEPA Method 21. Emissions in excess of this limit shall be considered a leak. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
7. Tank seams, welds, joints, piping, valves, and fittings shall be inspected and maintained in a gas-tight condition. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
8. The permittee shall maintain accurate records of Reid vapor pressure, and storage temperature of liquids stored, and shall make such records available for District inspection upon request. [District Rules 1070; District Rule 2520, 9.5.2] Federally Enforceable Through Title V Permit
9. 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 Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
10. All piping, fittings, and valves shall be inspected annually by the facility operator in accordance with USEPA Method 21, with the instrument calibrated with methane, to ensure compliance with the provisions of this permit. If any of the tank components are found to leak during an annual inspection, the inspection frequency for that component type shall be changed from annual to quarterly. If no tank components are subsequently found to be leaking during five consecutive inspections, the inspection frequency may be changed from quarterly to annual. Components located in inaccessible (over 15 feet above ground when access is required from the ground or over 6 feet away from a platform when access is required from the platform) locations shall be inspected at least annually and components located in unsafe areas shall be inspected and repaired at the next process unit turnaround (the scheduled shutdown of a unit for maintenance and repair work). [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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



11. A facility operator, upon detection of a leaking component, shall affix to that component a weatherproof readily visible tag bearing the date on which the leak is detected. The tag shall remain in place until the leaking component is repaired, reinspected and found to be in compliance with the requirements of this rule. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
12. An operator shall reinspect a component for leaks within thirty working days after the date on which the component is repaired. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
13. Emissions from components which have been tagged by the facility operator for repair within 15 calendar days or which have been repaired and are awaiting re-inspection shall not be in violation of this permit. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
14. Any component leak shall be repaired to a leak-free condition or vented to a flare satisfying the requirements of 40 CFR 60.18 or to a vapor control device that is at least 99 percent efficient as measured by USEPA Method 25 within fifteen (15) calendar days of detection. The APCO may grant a ten (10) calendar day extension provided the operator demonstrates that necessary and sufficient actions are being taken to correct the leak within this time period. Any vapor control device, other than a flare, used to comply with this condition shall demonstrate at least 99% control efficiency as measured by USEPA Method 25 at least annually. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
15. If the leaking component is an essential part of a critical process unit which cannot be immediately shut down for repairs, the operator shall 1) Minimize the leak within 15 calendar days; and 2) If the leak which has been minimized still exceeds the concentration allowed by this permit, the essential component shall be repaired to eliminate the leak during the next process unit turnaround, but in no case later than one year from the date of the original leak detection. A critical process unit is any process unit which would result in the automatic shutdown of other process units if it were shut down. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
16. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date of leak detection, and method of detection; 3) Date and emission level of recheck after leak is repaired; 4) Identification and location of essential parts of critical process units found leaking that cannot be repaired until the next process unit turnaround; and 5) Method used to minimize the leak from essential parts of critical process units which cannot be repaired until the next process unit turnaround. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
17. True vapor pressure shall be measured using Reid vapor pressure ASTM Method D323 modified by maintaining the hot water bath at storage temperature. Where storage temperature is above 100 degrees F true vapor pressure shall be determined by Reid vapor pressure at 100 degrees F and CARB approved calculations. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
18. True vapor pressure of crude oil with an API (American Petroleum Institute) gravity less than 30 deg, as determined by API 2547, may be determined by Headspace Gas Chromatography using the procedures from CARB Evaluation of a Method for Determining Vapor Pressures of Petroleum Mixtures by Headspace Gas Chromatography, October 1990. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
19. Control efficiency shall be determined by a comparison of controlled emissions to those emissions which would occur from a fixed or cone roof tank in the same product service without a vapor recovery system. Emissions shall be determined based on tank emission factors in USEPA Publication AP-42, component counts for fugitive emissions sources, recognized emission factors for fugitive emission sources and the efficiency of any VOC destruction device. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
20. The efficiency of any VOC destruction device shall be measured by USEPA Method 25, 25a, or 25b. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
21. The operator shall ensure that the vapor recovery system is functional and is operating as designed at all times. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

22. Operator shall determine the true vapor pressure of the petroleum liquid stored in the tank located at the beginning of the process flow after the production header at least once per year in accordance with methods described in Section 6.2 of District Rule 4623 (Amended 12/17/92). Determinations shall be made annually during summer and whenever there is a change in the source or type of petroleum entering the tank. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
23. As used in this permit, the term "source or type of petroleum" shall mean petroleum liquids with similar characteristics. The operator shall maintain records of API gravity of petroleum liquids store in this unit to determine which oil are from common source. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
24. The tanks included in this setting are S-1326-201, '-202, '-203, '-204, '-205, '-206, '-212, '-261, '-262, '-268, '-269, '-270, '-271, '-272, and '-274. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

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

# San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1326-279-4

EXPIRATION DATE: 03/31/2006

SECTION: SW23 TOWNSHIP: 28S RANGE: 27E

**EQUIPMENT DESCRIPTION:**

210,000 GALLON FREE WATER KNOCKOUT STORAGE TANK SERVED BY VAPOR CONTROL SYSTEM LISTED ON S-1326-263

## PERMIT UNIT REQUIREMENTS

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1. Tank shall vent only to vapor control system listed on permit S-1326-263. [District NSR Rule] Federally Enforceable Through Title V Permit
2. The tank shall be equipped with a fixed roof with no holes or openings. [District NSR Rule] Federally Enforceable Through Title V Permit
3. The true vapor pressure of the liquids stored in this tank shall not exceed 0.5 psia. [District Rules 4623, 2.0 and NSR] Federally Enforceable Through Title V Permit
4. Vapor control efficiency shall be maintained at no less than 99%. [District NSR Rule] Federally Enforceable Through Title V Permit
5. The permittee shall keep accurate records of liquids stored and true vapor pressure of such liquids. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
6. This permit authorizes tank cleaning that is not the result of breakdowns or poor maintenance as a routine maintenance activity. [District NSR Rule] Federally Enforceable Through Title V Permit
7. Prior to opening the tank to allow tank cleaning the following procedure must be followed. Operate PV valve and vapor recovery system (if equipped) during emptying, filling, and flushing. During filling and purging, no vapor leakage is allowed. Drain all liquid from the tank to the maximum extent feasible prior to opening the tank. [District NSR Rule] Federally Enforceable Through Title V Permit
8. Prior to opening the tank to allow tank cleaning one of the following options must be followed: 1) operate the vapor recovery system for at least 2 hours after all the liquid in the tank has been drained, 2) displace vapors floating the oil pad off with water such that 90% of the tank volume is displaced, 3) vent the tank to the vapor control system until the vapor concentration is less than 10% of the lower explosive limit (LEL) or 5,000 ppmv whichever is less; or 4) vent the tank to the vapor control system for a length of time determined by the following relationship:  $t = 2.3 V / Q$ , where  $t$  = time,  $V$  = tank volume (cubic feet), and  $Q$  = flow rate to the vapor control system as determined using appropriate engineering calculations. [District NSR Rule] Federally Enforceable Through Title V Permit
9. Allowable methods of cleaning include using steam, diesel, solvents with an initial boiling point of greater than 302 F, solvents with a vapor pressure of less than 0.5 psia, or solvents with 50 grams/liter VOC content or less. Steam cleaning shall be allowed at locations where wastewater treatment facilities are limited or during December through March. [District NSR Rule] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

10. Permittee shall maintain records of each period of cleaning and maintenance when the tank is disconnected or isolated from the vapor control system. Records shall include the date that tank cleaning was initiated, the date tank cleaning was completed, the procedure used to vent tank vapors prior to opening, the method of tank cleaning used, and a description of internal and external tank repairs and maintenance performed. Such records shall be retained for a period of at least 5 years and shall be made available for District inspection upon request. [District NSR Rule] Federally Enforceable Through Title V Permit
11. To qualify for quantification of no fugitive emissions, operator shall conduct quarterly gas sampling after TVR compressor (prior to connection to any other vapor control system) and at either the first line tank or at any secondary tank which is heated above ambient temperature. If gas samples are less than 10% VOC by weight for 8 consecutive quarterly samplings, sampling frequency shall only be required annually and whenever there is a change in source or type of petroleum processed. Samples shall be collected during periods of normal operation, and not be within 48 hours after routine maintenance or repair. [District NSR Rule] Federally Enforceable Through Title V Permit
12. Permittee shall provide the District with written notification at least 30 days prior to installation of components handling fluid streams with a VOC content of 10% or less by weight. [District NSR Rule] Federally Enforceable Through Title V Permit
13. Any 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. Gas-tight shall be defined as emitting no more than 10,000 ppm of methane measured at a distance of one centimeter from the potential source with an instrument calibrated with methane in accordance with USEPA Method 21. Emissions in excess of this limit shall be considered a leak. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
14. All tank seams, welds, joints, piping, valves, and fittings shall be inspected and maintained in a gas-tight condition. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
15. The operator shall conduct true vapor pressure (TVP) testing of the organic liquid stored in this tank at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored in this tank. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
16. The API gravity of organic liquid stored in this tank 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 2520, 9.3.2] Federally Enforceable Through Title V Permit
17. Control efficiency shall be determined by a comparison of controlled emissions to those emissions which would occur from a fixed or cone roof tank in the same product service without a vapor recovery system. Emissions shall be determined based on tank emission factors in USEPA Publication AP-42, component counts for fugitive emissions sources, recognized emission factors for fugitive emission sources and the efficiency of any VOC destruction device. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
18. The operator shall ensure that the vapor control system is functional and is operating as designed at all times, except during periods of routine maintenance. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
19. Operator shall determine the true vapor pressure of the petroleum liquid stored in the tank located at the beginning of the process flow after the production header at least once per year. 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, shall be used to determine the TVP of crude oil with an API gravity of 26 or less, or for any API gravity that is specified in this test method. Determinations shall be made annually during summer and whenever there is a change in the source or type of petroleum entering the tank. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
20. As used in this permit, the term "source or type of petroleum" shall mean petroleum liquids with similar characteristics. The operator shall maintain records of API gravity of petroleum liquids store in this unit to determine which oil are from common source. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
21. Formerly S-1131-911-0. [District Rule 4102]

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

# San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1326-280-3

EXPIRATION DATE: 03/31/2006

SECTION: SW23 TOWNSHIP: 28S RANGE: 27E

**EQUIPMENT DESCRIPTION:**

42,000 GALLON CRUDE OIL LACT STORAGE TANK SERVED BY VAPOR CONTROL SYSTEM LISTED ON S-1326-263

## PERMIT UNIT REQUIREMENTS

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1. Tank shall vent only to vapor control system listed on permit S-1326-263. [District NSR Rule] Federally Enforceable Through Title V Permit
2. The tank shall be equipped with a fixed roof with no holes or openings. [District NSR Rule] Federally Enforceable Through Title V Permit
3. The true vapor pressure of the liquids stored in this tank shall not exceed 0.5 psia. [District Rules 4623, 2.0 and NSR] Federally Enforceable Through Title V Permit
4. Vapor control efficiency shall be maintained at no less than 99%. [District NSR Rule] Federally Enforceable Through Title V Permit
5. The permittee shall keep accurate records of liquids stored and true vapor pressure of such liquids. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
6. This permit authorizes tank cleaning that is not the result of breakdowns or poor maintenance as a routine maintenance activity. [District NSR Rule] Federally Enforceable Through Title V Permit
7. Prior to opening the tank to allow tank cleaning the following procedure must be followed. Operate PV valve and vapor recovery system (if equipped) during emptying, filling, and flushing. During filling and purging, no vapor leakage is allowed. Drain all liquid from the tank to the maximum extent feasible prior to opening the tank. [District NSR Rule] Federally Enforceable Through Title V Permit
8. Prior to opening the tank to allow tank cleaning one of the following options must be followed: 1) operate the vapor recovery system for at least 2 hours after all the liquid in the tank has been drained, 2) displace vapors floating the oil pad off with water such that 90% of the tank volume is displaced, 3) vent the tank to the vapor control system until the vapor concentration is less than 10% of the lower explosive limit (LEL) or 5,000 ppmv whichever is less; or 4) vent the tank to the vapor control system for a length of time determined by the following relationship:  $t = 2.3 V / Q$ , where  $t$  = time,  $V$  = tank volume (cubic feet), and  $Q$  = flow rate to the vapor control system as determined using appropriate engineering calculations. [District NSR Rule] Federally Enforceable Through Title V Permit
9. Allowable methods of cleaning include using steam, diesel, solvents with an initial boiling point of greater than 302 F, solvents with a vapor pressure of less than 0.5 psia, or solvents with 50 grams/liter VOC content or less. Steam cleaning shall be allowed at locations where wastewater treatment facilities are limited or during December through March. [District NSR Rule] Federally Enforceable Through Title V Permit

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

10. Permittee shall maintain records of each period of cleaning and maintenance when the tank is disconnected or isolated from the vapor control system. Records shall include the date that tank cleaning was initiated, the date tank cleaning was completed, the procedure used to vent tank vapors prior to opening, the method of tank cleaning used, and a description of internal and external tank repairs and maintenance performed. Such records shall be retained for a period of at least 5 years and shall be made available for District inspection upon request. [District NSR Rule] Federally Enforceable Through Title V Permit
11. To qualify for quantification of no fugitive emissions, operator shall conduct quarterly gas sampling after TVR compressor (prior to connection to any other vapor control system) and at either the first line tank or at any secondary tank which is heated above ambient temperature. If gas samples are less than 10% VOC by weight for 8 consecutive quarterly samplings, sampling frequency shall only be required annually and whenever there is a change in source or type of petroleum processed. Samples shall be collected during periods of normal operation, and not be within 48 hours after routine maintenance or repair. [District NSR Rule] Federally Enforceable Through Title V Permit
12. Permittee shall provide the District with written notification at least 30 days prior to installation of components handling fluid streams with a VOC content of 10% or less by weight. [District NSR Rule] Federally Enforceable Through Title V Permit
13. Any 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. Gas-tight shall be defined as emitting no more than 10,000 ppm of methane measured at a distance of one centimeter from the potential source with an instrument calibrated with methane in accordance with USEPA Method 21. Emissions in excess of this limit shall be considered a leak. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
14. All tank seams, welds, joints, piping, valves, and fittings shall be inspected and maintained in a gas-tight condition. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
15. The operator shall conduct true vapor pressure (TVP) testing of the organic liquid stored in this tank at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored in this tank. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
16. The API gravity of organic liquid stored in this tank 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 2520, 9.3.2] Federally Enforceable Through Title V Permit
17. Control efficiency shall be determined by a comparison of controlled emissions to those emissions which would occur from a fixed or cone roof tank in the same product service without a vapor recovery system. Emissions shall be determined based on tank emission factors in USEPA Publication AP-42, component counts for fugitive emissions sources, recognized emission factors for fugitive emission sources and the efficiency of any VOC destruction device. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
18. The operator shall ensure that the vapor control system is functional and is operating as designed at all times, except during periods of routine maintenance. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
19. Operator shall determine the true vapor pressure of the petroleum liquid stored in the tank located at the beginning of the process flow after the production header at least once per year. 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, shall be used to determine the TVP of crude oil with an API gravity of 260 or less, or for any API gravity that is specified in this test method. Determinations shall be made annually during summer and whenever there is a change in the source or type of petroleum entering the tank. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
20. As used in this permit, the term "source or type of petroleum" shall mean petroleum liquids with similar characteristics. The operator shall maintain records of API gravity of petroleum liquids store in this unit to determine which oil are from common source. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-1326-281-4

**EXPIRATION DATE:** 03/31/2006

**SECTION:** SW23 **TOWNSHIP:** 28S **RANGE:** 27E

**EQUIPMENT DESCRIPTION:**

42,000 GALLON (1,000 BBL) CRUDE OIL LACT TANK SERVED BY VAPOR CONTROL SYSTEM LISTED ON S-1326-263

## PERMIT UNIT REQUIREMENTS

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1. Tank shall vent only to Section 23 tank vapor recovery (TVR) system listed on permit S-1326-263. [District NSR Rule] Federally Enforceable Through Title V Permit
2. 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 Rule 2201] Federally Enforceable Through Title V Permit
3. Fugitive VOC emission rate from tank components in gas service calculated using EPA's "Protocol for Equipment Leak Emission Estimates," Table 2-4, Oil and Gas Production Operations Average Emission Factors (Nov 1995) shall not exceed 0.12 lb VOC/day. [District Rule 2201] Federally Enforceable Through Title V Permit
4. 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
5. VOC content of gas shall not exceed 10% of the total hydrocarbon content by weight. Permittee shall maintain a written record of VOC content (sampled not less than annually) and shall make such records available for District inspection upon request for a period of five years. Permittee may test a representative gas sample for VOC content from any tank served by the TVR system listed on S-1326-263. [District Rule 2201] Federally Enforceable Through Title V Permit
6. VOC content of gas shall be measured using ASTM D-1945, EPA Method 18 referenced as methane, or equivalent test method with prior District approval. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Permittee shall keep in their facility at all times a copy of the letter sent to the APCO requesting participation in the Rule 4623 Tank Preventive Inspection and Maintenance, 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] Federally Enforceable Through Title V Permit
8. Permittee shall comply with all applicable Tank Preventive Inspection and Maintenance, and Tank Interior Cleaning Program requirements specified in Tables 3 to 6 of Rule 4623. [District Rule 4623] Federally Enforceable Through Title V Permit
9. VOC emissions from tank cleaning shall not exceed 4.4 pounds in any one day. Tank shall be cleaned no more than once per calendar year. [District Rule 2201] Federally Enforceable Through Title V Permit
10. True vapor pressure (TVP) of residual liquids in tank during interior cleaning shall not exceed 3.0 psia. [District Rule 2201] Federally Enforceable Through Title V Permit
11. TVP shall be determined using test methods described in District Rule 4623. [District Rules 1080 & 4623] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

12. Permittee shall maintain records of TVP prior to tank interior cleaning and length of time to accomplish tank interior cleaning. [District Rules 2201 & 4623] Federally Enforceable Through Title V Permit
13. Any tank gauging or sampling device on a tank shall be equipped with a gas-tight cover which shall be closed at all times except during gauging or sampling. Gas-tight shall be defined as emitting no more than 10,000 ppmv above background as methane measured with an instrument calibrated with methane in accordance with EPA Method 21. Emissions in excess of this limit shall be considered a leak. [District Rule 4623] Federally Enforceable Through Title V Permit
14. For vapor service components located farther than 5 feet from the tank, there shall be no leaks greater than 10,000 ppmv when measured with a portable hydrocarbon detection instrument calibrated with methane in accordance with EPA Method 21. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
15. Facility operator, upon detection of a leaking component greater than 10,000 ppmv when measured with a portable hydrocarbon detection instrument calibrated with methane in accordance with the EPA Method 21, shall affix to that component a weatherproof readily visible tag bearing the date on which leak is detected. This tag shall remain in place until the leaking component is repaired, reinspected, and found to be in compliance with requirements of this permit. [District Rule 2201] Federally Enforceable Through Title V Permit
16. Permittee shall annually inspect hatch, tank seals and seams, cable seals, and piping components including but not limited to valves, flanges, and connectors directly affixed to the tank or within 5 feet of the tank. Inspections shall be conducted visually and using a portable hydrocarbon detection instrument conducted in accordance with EPA Method 21. Permittee shall annually inspect, either visually or ultrasonically as appropriate, the external shells and roofs of uninsulated tanks for integrity. [District Rule 4623] Federally Enforceable Through Title V Permit
17. Liquid components directly affixed to the tank or within 5 feet of the tank that have a liquid leak rate of 30 drops per minute or greater shall be repaired within 8 hours after detection. Liquid components directly affixed to the tank or within 5 feet of the tank that have a liquid leak rate of 3 drops per minutes or greater but less than 30 drops per minute shall be repaired within 24 hours after detection. [District Rule 4623] Federally Enforceable Through Title V Permit
18. Leaks from gas components directly affixed to the tank or within 5 feet of the tank that have a leak rate greater than 10,000 ppmv (measured in accordance with EPA Method 21 by a portable hydrocarbon detection instrument that is calibrated with methane) shall be eliminated or minimized within 8 hours after detection; and if the leak cannot be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices; and eliminate the leak within 48 hours after detection; and in no event that the total time to minimize and eliminate the leak shall exceed 56 hours after detection. 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] Federally Enforceable Through Title V Permit
19. For leaking components directly affixed to the tank or within 5 feet of the tank, permittee shall immediately affix a tag and maintain records of liquid leak and gas leak detection readings, date/time leak was discovered, and date/time the component was repaired to a leak free condition. [District Rule 4623] Federally Enforceable Through Title V Permit
20. Leaking components directly affixed to the tank or within 5 feet of the tank that have been discovered by the operator and have been immediately tagged and repaired within the deadlines specified shall not constitute a violation of this rule. However, leaking components discovered during inspections by District staff that were not previously identified and/or tagged by the operator, and/or any leaks that were not repaired within deadlines specified shall constitute a violation of this rule. Any component directly affixed to the tank or within 5 feet of the tank found to be leaking on two consecutive annual inspections is in violation of this rule, even if it is under the voluntary inspection and maintenance program. [District Rule 4623] Federally Enforceable Through Title V Permit
21. Operator shall maintain an inspection log containing the following: 1) Location of leaking component; 2) Type of component leaking and leak emissions level detected; 3) Date of leak detection and method of detection; 4) Date of leak repair and method of repair; 5) Date and emission level of recheck after leak is repaired. This inspection log shall be made available to District personal upon request. [District Rule 2201] Federally Enforceable Through Title V Permit

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



# San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1326-283-2

EXPIRATION DATE: 03/31/2006

SECTION: SW23 TOWNSHIP: 28S RANGE: 27E

## EQUIPMENT DESCRIPTION:

84,000 GALLON RAW WATER STORAGE TANK SERVED BY VAPOR CONTROL SYSTEM LISTED ON S-1326-263

## PERMIT UNIT REQUIREMENTS

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1. Tank shall vent only to vapor control system listed on permit S-1326-263. [District NSR Rule] Federally Enforceable Through Title V Permit
2. The tank shall be equipped with a fixed roof with no holes or openings. [District NSR Rule] Federally Enforceable Through Title V Permit
3. The true vapor pressure of the liquids stored in this tank shall not exceed 0.5 psia. [District Rules 4623, 2.0 and NSR] Federally Enforceable Through Title V Permit
4. Vapor control efficiency shall be maintained at no less than 99%. [District NSR Rule] Federally Enforceable Through Title V Permit
5. The permittee shall keep accurate records of liquids stored and true vapor pressure of such liquids. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
6. This permit authorizes tank cleaning that is not the result of breakdowns or poor maintenance as a routine maintenance activity. [District NSR Rule] Federally Enforceable Through Title V Permit
7. Prior to opening the tank to allow tank cleaning the following procedure must be followed. Operate PV valve and vapor recovery system (if equipped) during emptying, filling, and flushing. During filling and purging, no vapor leakage is allowed. Drain all liquid from the tank to the maximum extent feasible prior to opening the tank. [District NSR Rule] Federally Enforceable Through Title V Permit
8. Prior to opening the tank to allow tank cleaning one of the following options must be followed: 1) operate the vapor recovery system for at least 2 hours after all the liquid in the tank has been drained, 2) displace vapors floating the oil pad off with water such that 90% of the tank volume is displaced, 3) vent the tank to the vapor control system until the vapor concentration is less than 10% of the lower explosive limit (LEL) or 5,000 ppmv whichever is less; or 4) vent the tank to the vapor control system for a length of time determined by the following relationship:  $t = 2.3 V / Q$ , where  $t$  = time,  $V$  = tank volume (cubic feet), and  $Q$  = flow rate to the vapor control system as determined using appropriate engineering calculations. [District NSR Rule] Federally Enforceable Through Title V Permit
9. Allowable methods of cleaning include using steam, diesel, solvents with an initial boiling point of greater than 302 F, solvents with a vapor pressure of less than 0.5 psia, or solvents with 50 grams/liter VOC content or less. Steam cleaning shall be allowed at locations where wastewater treatment facilities are limited or during December through March. [District NSR Rule] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

10. Permittee shall maintain records of each period of cleaning and maintenance when the tank is disconnected or isolated from the vapor control system. Records shall include the date that tank cleaning was initiated, the date tank cleaning was completed, the procedure used to vent tank vapors prior to opening, the method of tank cleaning used, and a description of internal and external tank repairs and maintenance performed. Such records shall be retained for a period of at least 5 years and shall be made available for District inspection upon request. [District NSR Rule] Federally Enforceable Through Title V Permit
11. To qualify for quantification of no fugitive emissions, operator shall conduct quarterly gas sampling after TVR compressor (prior to connection to any other vapor control system) and at either the first line tank or at any secondary tank which is heated above ambient temperature. If gas samples are less than 10% VOC by weight for 8 consecutive quarterly samplings, sampling frequency shall only be required annually and whenever there is a change in source or type of petroleum processed. Samples shall be collected during periods of normal operation, and not be within 48 hours after routine maintenance or repair. [District NSR Rule] Federally Enforceable Through Title V Permit
12. Permittee shall provide the District with written notification at least 30 days prior to installation of components handling fluid streams with a VOC content of 10% or less by weight. [District NSR Rule] Federally Enforceable Through Title V Permit
13. Any 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. Gas-tight shall be defined as emitting no more than 10,000 ppm of methane measured at a distance of one centimeter from the potential source with an instrument calibrated with methane in accordance with USEPA Method 21. Emissions in excess of this limit shall be considered a leak. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
14. All tank seams, welds, joints, piping, valves, and fittings shall be inspected and maintained in a gas-tight condition. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
15. The operator shall conduct true vapor pressure (TVP) testing of the organic liquid stored in this tank at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored in this tank. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
16. The API gravity of organic liquid stored in this tank 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 2520, 9.3.2] Federally Enforceable Through Title V Permit
17. Control efficiency shall be determined by a comparison of controlled emissions to those emissions which would occur from a fixed or cone roof tank in the same product service without a vapor recovery system. Emissions shall be determined based on tank emission factors in USEPA Publication AP-42, component counts for fugitive emissions sources, recognized emission factors for fugitive emission sources and the efficiency of any VOC destruction device. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
18. The operator shall ensure that the vapor control system is functional and is operating as designed at all times, except during periods of routine maintenance. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
19. Operator shall determine the true vapor pressure of the petroleum liquid stored in the tank located at the beginning of the process flow after the production header at least once per year. 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, shall be used to determine the TVP of crude oil with an API gravity of 26 or less, or for any API gravity that is specified in this test method. Determinations shall be made annually during summer and whenever there is a change in the source or type of petroleum entering the tank. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
20. As used in this permit, the term "source or type of petroleum" shall mean petroleum liquids with similar characteristics. The operator shall maintain records of API gravity of petroleum liquids store in this unit to determine which oil are from common source. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

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

# San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1326-285-2

EXPIRATION DATE: 03/31/2006

SECTION: SW23 TOWNSHIP: 28S RANGE: 27E

## EQUIPMENT DESCRIPTION:

84,000 GALLON OVERFLOW TANK SERVED BY VAPOR CONTROL SYSTEM LISTED ON S-1326-263

## PERMIT UNIT REQUIREMENTS

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1. Tank shall vent only to vapor control system listed on permit S-1326-263. [District NSR Rule] Federally Enforceable Through Title V Permit
2. The tank shall be equipped with a fixed roof with no holes or openings. [District NSR Rule] Federally Enforceable Through Title V Permit
3. The true vapor pressure of the liquids stored in this tank shall not exceed 0.5 psia. [District Rules 4623, 2.0 and NSR] Federally Enforceable Through Title V Permit
4. Vapor control efficiency shall be maintained at no less than 99%. [District NSR Rule] Federally Enforceable Through Title V Permit
5. The permittee shall keep accurate records of liquids stored and true vapor pressure of such liquids. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
6. This permit authorizes tank cleaning that is not the result of breakdowns or poor maintenance as a routine maintenance activity. [District NSR Rule] Federally Enforceable Through Title V Permit
7. Prior to opening the tank to allow tank cleaning the following procedure must be followed. Operate PV valve and vapor recovery system (if equipped) during emptying, filling, and flushing. During filling and purging, no vapor leakage is allowed. Drain all liquid from the tank to the maximum extent feasible prior to opening the tank. [District NSR Rule] Federally Enforceable Through Title V Permit
8. Prior to opening the tank to allow tank cleaning one of the following options must be followed: 1) operate the vapor recovery system for at least 2 hours after all the liquid in the tank has been drained, 2) displace vapors floating the oil pad off with water such that 90% of the tank volume is displaced, 3) vent the tank to the vapor control system until the vapor concentration is less than 10% of the lower explosive limit (LEL) or 5,000 ppmv whichever is less; or 4) vent the tank to the vapor control system for a length of time determined by the following relationship:  $t = 2.3 V / Q$ , where  $t$  = time,  $V$  = tank volume (cubic feet), and  $Q$  = flow rate to the vapor control system as determined using appropriate engineering calculations. [District NSR Rule] Federally Enforceable Through Title V Permit
9. Allowable methods of cleaning include using steam, diesel, solvents with an initial boiling point of greater than 302 F, solvents with a vapor pressure of less than 0.5 psia, or solvents with 50 grams/liter VOC content or less. Steam cleaning shall be allowed at locations where wastewater treatment facilities are limited or during December through March. [District NSR Rule] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

10. Permittee shall maintain records of each period of cleaning and maintenance when the tank is disconnected or isolated from the vapor control system. Records shall include the date that tank cleaning was initiated, the date tank cleaning was completed, the procedure used to vent tank vapors prior to opening, the method of tank cleaning used, and a description of internal and external tank repairs and maintenance performed. Such records shall be retained for a period of at least 5 years and shall be made available for District inspection upon request. [District NSR Rule] Federally Enforceable Through Title V Permit
11. To qualify for quantification of no fugitive emissions, operator shall conduct quarterly gas sampling after TVR compressor (prior to connection to any other vapor control system) and at either the first line tank or at any secondary tank which is heated above ambient temperature. If gas samples are less than 10% VOC by weight for 8 consecutive quarterly samplings, sampling frequency shall only be required annually and whenever there is a change in source or type of petroleum processed. Samples shall be collected during periods of normal operation, and not be within 48 hours after routine maintenance or repair. [District NSR Rule] Federally Enforceable Through Title V Permit
12. Permittee shall provide the District with written notification at least 30 days prior to installation of components handling fluid streams with a VOC content of 10% or less by weight. [District NSR Rule] Federally Enforceable Through Title V Permit
13. Any 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. Gas-tight shall be defined as emitting no more than 10,000 ppm of methane measured at a distance of one centimeter from the potential source with an instrument calibrated with methane in accordance with USEPA Method 21. Emissions in excess of this limit shall be considered a leak. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
14. All tank seams, welds, joints, piping, valves, and fittings shall be inspected and maintained in a gas-tight condition. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
15. The operator shall conduct true vapor pressure (TVP) testing of the organic liquid stored in this tank at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored in this tank. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
16. The API gravity of organic liquid stored in this tank 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 2520, 9.3.2] Federally Enforceable Through Title V Permit
17. Control efficiency shall be determined by a comparison of controlled emissions to those emissions which would occur from a fixed or cone roof tank in the same product service without a vapor recovery system. Emissions shall be determined based on tank emission factors in USEPA Publication AP-42, component counts for fugitive emissions sources, recognized emission factors for fugitive emission sources and the efficiency of any VOC destruction device. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
18. The operator shall ensure that the vapor control system is functional and is operating as designed at all times, except during periods of routine maintenance. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
19. Operator shall determine the true vapor pressure of the petroleum liquid stored in the tank located at the beginning of the process flow after the production header at least once per year. 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, shall be used to determine the TVP of crude oil with an API gravity of 260 or less, or for any API gravity that is specified in this test method. Determinations shall be made annually during summer and whenever there is a change in the source or type of petroleum entering the tank. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
20. As used in this permit, the term "source or type of petroleum" shall mean petroleum liquids with similar characteristics. The operator shall maintain records of API gravity of petroleum liquids store in this unit to determine which oil are from common source. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-1326-287-6

**EXPIRATION DATE:** 03/31/2006

**SECTION:** SW23 **TOWNSHIP:** 28S **RANGE:** 27E

**EQUIPMENT DESCRIPTION:**

THERMALLY ENHANCED OIL RECOVERY OPERATION WITH 130 STEAM ENHANCED PRODUCTION WELLS CONNECTED TO WELL HEAD CASING VENT VAPOR RECOVERY SYSTEM (CVR) VENTING VAPORS TO SECTION 23 TANK VAPOR RECOVERY SYSTEM (S-1326-263)

## PERMIT UNIT REQUIREMENTS

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1. Well casing vents shall remain closed, connected to well produced fluids lines, or connected to a wellhead casing vent recovery (CVR) system at all times except during periods of actual service or repair when wells are not producing. [District NSR Rule and District Rule 4401] Federally Enforceable Through Title V Permit
2. Collected CVR vapor shall be piped to tank vapor recovery system (TVR) serving S-1326-263. [District NSR Rule] Federally Enforceable Through Title V Permit
3. VOC content of gas collected by the CVR system shall not exceed 10% of the total hydrocarbon content by weight. Permittee shall maintain a written record of VOC content (sampled not less than annually) and shall make such records available for District inspection upon request for a period of five years. Permittee may use test results obtained from S-1326-263 to demonstrate compliance. [District NSR Rule and District Rule 1070] Federally Enforceable Through Title V Permit
4. Fluids produced from these steam enhanced wells shall be introduced only to tanks listed on permit S-1326-263 that are vented to an approved vapor collection and control system achieving 99% control. [District NSR Rule] Federally Enforceable Through Title V Permit
5. Permittee shall maintain a current list of all steam enhanced wells authorized by this permit and shall update the list whenever a well is added, replaced, or deleted. [District NSR Rule] Federally Enforceable Through Title V Permit
6. Steam enhanced production wells covered by this permit shall each have a visible identification number. Field personnel shall be provided with written instructions concerning proper operation and maintenance of these wells. [District NSR Rule] 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, 2.0, 3.4, and 3.5] Federally Enforceable Through Title V Permit
8. Permittee shall maintain accurate component count for TEOR operation according to CAPCOA's "California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities," Table IV-2c (Feb 1999), Screening Value Range emission factors. Permittee shall update such records when new components are installed. [District NSR Rule] Federally Enforceable Through Title V Permit
9. Fugitive emissions from all components in gas service including polished rods associated with this TEOR operation shall not exceed 6.3 lb VOC/ day. [District NSR Rule] Federally Enforceable Through Title V Permit
10. During the time any steam-enhanced crude oil production well is undergoing service or repair while the well is not producing, it shall be exempt from the emission control requirements of District Rule 4401, 5.0 (as amended January 15, 1998). [District Rule 4401, 4.1] Federally Enforceable Through Title V Permit

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

11. All required source testing shall conform to the compliance testing procedures described in District Rule 1081 (as amended December 16, 1993). [District Rule 1081 and County Rules 108 (Kings), 108.1 (Fresno, Merced, San Joaquin, Tulare, Kern, and Stanislaus), and 110 (Madera)] Federally Enforceable Through Title V Permit
12. The operator shall maintain monitoring records of the date and well identification where steam injection or well stimulation occurs. [District Rule 4401, 6.1] Federally Enforceable Through Title V Permit
13. The operator shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520, 9.5.2] Federally Enforceable Through Title V Permit
14. The source shall perform leak inspections at least annually, using a portable hydrocarbon detection instrument in accordance with USEPA Method 21. [District Rules 2520, 9.4.2 and 4401, 6.3.3] Federally Enforceable Through Title V Permit
15. Portable hydrocarbon detection instrument shall be operated and calibrated in accordance with recommendations in CAPCOA/CARB's California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities (February, 1999). [District NSR Rule] Federally Enforceable Through Title V Permit
16. Except for polish rod stuffing boxes, there shall be no more than one valve and one connector or flange leaking in excess of 10,000 ppm when measured with a portable hydrocarbon detection instrument calibrated with methane in accordance with EPA Method 21 from components in gas service associated with steam enhanced oil production wells in this TEOR operation. [District NSR Rule] Federally Enforceable Through Title V Permit
17. All polish rod stuffing boxes shall be inspected and screened for leaks using EPA method 21 at least quarterly. If less than two percent of the polish rod stuffing boxes are found to leak during each of five consecutive quarterly inspections, the inspection frequency may be changed from quarterly to annually. If any annual inspection shows that more than 2 percent of the polish rod stuffing boxes are leaking, then quarterly inspections shall be resumed. Any polish rod leaking greater than 10,000 ppmv, when measured with a portable hydrocarbon detection instrument calibrated with methane in accordance with EPA method 21 or leaking at a rate of greater than 3 drops of liquid per minute shall be repaired consistent with Rule 4403 section 5.3. [District NSR Rule] Federally Enforceable Through Title V Permit
18. Operator shall affix a readily visible tag bearing the date on which a leak is detected. The tag shall remain in place until the leaking component is repaired. [District Rule 4401, 5.3.1] Federally Enforceable Through Title V Permit
19. Well casings, casing vents, any casing vent piping and fluid piping associated with these wells shall be screened and inspected for leaks at least quarterly with a minimum of 25% of the wells tested per quarter. Any leak greater than 5000 ppm, when measured with a portable hydrocarbon detection instrument calibrated with methane in accordance with EPA Method 21 or leaking at a rate of greater than 3 drops of liquid per minute, shall be repaired in a manner consistent with the procedures specified in Section 5.3.1 of Rule 4401. [District NSR Rule] Federally Enforceable Through Title V Permit
20. Permittee shall maintain, for a period of at least five years, accurate records of well casing vent piping, leak screening values in excess of 10,000 ppm, leak screening values less than 10,000 ppm, and shall, as approved by the District, calculate fugitive emissions using February 1999 CAPCOA California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities Table IV-2c. Permittee shall make records of component counts, screening values, and calculations readily available for District inspection upon request. [District NSR Rule] Federally Enforceable Through Title V Permit
21. Components to be screened shall be identified and categorized according to the following equipment types: connectors, flanges, open-ended lines, pump seals, valves with visible actuators, polished rods stuffing boxes and other (pressure relief devices, compressor seals, meters, etc.). [District NSR Rule] Federally Enforceable Through Title V Permit
22. Flanges shall be monitored with a portable hydrocarbon detection instrument along the entire circumference of the flange-gasket interface. Threaded connections, tubing fittings, and other types of non-permanent joints shall be monitored along the entire circumference of joint interface. [District NSR Rule] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

23. Valves shall be monitored with a portable hydrocarbon detection instrument where the stem comes through the packing gland, and at any attached or connected body flange(s), bonnet flange(s), or plug(s). [District NSR Rule] Federally Enforceable Through Title V Permit
24. All other components such as diaphragms, dump arms, instruments, meters shall be monitored at all points of possible emissions. [District NSR Rule] Federally Enforceable Through Title V Permit
25. The uncontrolled VOC emissions from any well vent shall be reduced by at least 99 percent by weight or, if several steam-enhanced crude oil production well vents are connected to a vapor collection and control system, total uncontrolled VOC emissions shall be reduced by at least 99 percent. This requirement does not apply to cyclic wells located on contiguous and adjacent oil production properties with less than 10 cyclic wells owned by or under the control of a company. [District Rule 4401, 5.1 and 5.2] Federally Enforceable Through Title V Permit
26. Operator shall maintain all components of a well vent vapor collection and control system in good repair. Components of the well vent vapor collection and control system shall include all piping, valves, fittings, pumps, compressors, tanks, etc. used to collect, control, store, or dispose of VOC condensate or non-condensable VOCs and which is prior to any blending of VOC condensate with crude oil or blending of non-condensable VOCs with gases to be used as a fuel. [District Rule 4401, 5.3 and 5.3.2] Federally Enforceable Through Title V Permit
27. Annual control efficiency compliance tests shall be performed on all vapor collection and control systems used to control emissions from steam-enhanced crude oil production wells. Testing shall be performed by source testers certified by the California Air Resources Board (CARB) 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 the annual testing requirements of this condition if the vapor control system does not exhaust to atmosphere or 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 open flare, and the source's Operating Permit contains adequate periodic monitoring to ensure the source meets 99% control efficiency. [District Rule 4401, 5.1, 5.2 and 6.2.1] Federally Enforceable Through Title V Permit
28. The control efficiency of the vapor collection and control system used to control VOC emissions from steam enhanced crude oil production well shall be determined by mass balance based on most stringent of a source test, USEPA approved emission factors, or Air Pollution (AP)-42 emission factors for components and number of components; and the efficiency of destruction devices determined by USEPA Method 25, 25a, or 25b as applicable. [District Rule 4401, 6.3.1] Federally Enforceable Through Title V Permit
29. VOC content shall be determined using ASTM Method E168, E169, or E260 as applicable, or equivalent test method with prior District approval. Halogenated exempt compounds shall be determined by CARB Method 432. [District Rule 4401, 6.3.2] Federally Enforceable Through Title V Permit
30. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following requirements: County Rules 108 (Kings), 108.1 (Fresno, Merced, San Joaquin, Tulare, Kern, and Stanislaus), and 110 (Madera). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
31. Compliance with permit conditions in the Title V permit shall be deemed compliance with SJVUAPCD Rule 4401 (Amended January 15, 1998), excluding sections 5.1 and 5.2 for control systems which have been waived from complying with the requirement of section 6.2.1. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
32. The requirements of SJVUAPCD Rule 4407 (Adopted May 19, 1994) do not apply to this permit unit. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-1326-294-3

**EXPIRATION DATE:** 03/31/2006

**SECTION:** SE23 **TOWNSHIP:** 28S **RANGE:** 27E

**EQUIPMENT DESCRIPTION:**

62.5 MMBTU/HR NATURAL GAS-FIRED STRUTHERS STEAM GENERATOR WITH A NORTH AMERICAN MAGNA-FLAME G-LE ULTRA LOW NOX BURNER AND A FLUE GAS RECIRCULATION (FGR) SYSTEM

## PERMIT UNIT REQUIREMENTS

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1. All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District Rule 2201] Federally Enforceable Through Title V Permit
2. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
3. The unit shall only be fired on PUC-regulated natural gas and scrubbed TEOR and TVR gas from S-1326-26, '-27, '-28, '-35 and '-263 with a sulfur content no greater than 1 gr S/100 scf. [District Rule 2201] Federally Enforceable Through Title V Permit
4. Permittee shall test annually the sulfur content of TEOR/TVR gas combusted in steam generator using ASTM method D1072, D3031, D4084, or D3246 and make test results readily available for District inspection. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
5. Emissions rates from the steam generator shall not exceed any of the following limits: 14 ppmvd NO<sub>x</sub> @ 3% O<sub>2</sub> or 0.017 lb-NO<sub>x</sub>/MMBtu, 0.0076 lb-PM<sub>10</sub>/MMBtu, 75 ppmvd CO @ 3% O<sub>2</sub> or 0.055 lb-CO/MMBtu, or 0.0055 lb-VOC/MMBtu. [District Rules 2201, 4305, and 4306] Federally Enforceable Through Title V Permit
6. All emissions measurements shall be made with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. No determination of compliance shall be established within two hours after a continuous period in which fuel flow to the unit is shut off for 30 minutes or longer, or within 30 minutes after a re-ignition as defined in Section 3.0 of District Rule 4306. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
7. Source testing to measure natural gas-combustion NO<sub>x</sub> and CO emissions from this unit shall be conducted at least once every twelve (12) months. After demonstrating compliance on two (2) consecutive annual source tests, the unit shall be tested not less than once every thirty-six (36) months. If the result of the 36-month source test demonstrates that the unit does not meet the applicable emission limits, the source testing frequency shall revert to at least once every twelve (12) months. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
8. The source test plan shall identify which basis (ppmv or lb/MMBtu) will be used to demonstrate compliance. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
9. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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10. The following test methods shall be used: NO<sub>x</sub> (ppmv) - EPA Method 7E or ARB Method 100, NO<sub>x</sub> (lb/MMBtu) - EPA Method 19, CO (ppmv) - EPA Method 10 or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, stack gas moisture content - EPA Method 4, stack gas velocities - EPA Method 2, and fuel gas sulfur content - ASTM D1072, ASTM D3246, ASTM D6228 (GC-FPD) or double GC for H<sub>2</sub>S and mercaptans. [District Rule 1081, 4305, 4306, 6.2, and 4351] Federally Enforceable Through Title V Permit
11. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
12. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
13. The permittee shall monitor and record the stack concentration of NO<sub>x</sub>, CO, and O<sub>2</sub> at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless monitoring has been performed within the last month. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
14. If either the NO<sub>x</sub> or CO concentrations corrected to 3% O<sub>2</sub>, as measured by the portable analyzer, exceed the allowable emissions concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
15. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
16. The permittee shall maintain records of: (1) the date and time of NO<sub>x</sub>, CO, and O<sub>2</sub> measurements, (2) the O<sub>2</sub> concentration in percent and the measured NO<sub>x</sub> and CO concentrations corrected to 3% O<sub>2</sub>, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
17. Permittee shall maintain records of fuel gas sulfur compound measurements. [District Rule 2201] Federally Enforceable Through Title V Permit
18. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070, 4305, and 4306] Federally Enforceable Through Title V Permit

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

# San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1326-314-2

EXPIRATION DATE: 03/31/2006

SECTION: 23 TOWNSHIP: 28S RANGE: 27E

## EQUIPMENT DESCRIPTION:

85.0 MMBTU/HR STRUTHERS NATURAL GAS-FIRED STEAM GENERATOR WITH A NORTH AMERICAN MODEL MAGNA-FLAME G-LE ULTRA ULTRA-LOW NOX BURNER WITH FLUE GAS RECIRCULATION (FGR) AND AN O2 CONTROLLER

## PERMIT UNIT REQUIREMENTS

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1. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
2. The unit shall only be fired on PUC-regulated natural gas and scrubbed TEOR and TVR gas from S-1326-26, '-27, '-28, '-35 and '-263 with a sulfur content no greater than 1 gr S/100 scf. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Permittee shall test annually the sulfur content of TEOR/TVR gas combusted in steam generator using ASTM method D1072, D3031, D4084, or D3246 and make test results readily available for District inspection. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
4. Emissions rates from unit shall not exceed any of the following limits: 9 ppmv NOx @ 3% O2 or 0.0108 lb-NOx/MMBtu, 0.0076 lb-PM10/MMBtu, 35 ppmv CO @ 3% O2 or 0.026 lb-CO/MMBtu, or 0.0055 lb-VOC/MMBtu. [District Rules 2201, 4301, 5.2, 4305, 5.1, and 4306, 5.1 and 40 CFR 60.43c(e)(1)] Federally Enforceable Through Title V Permit
5. Source testing to measure NOx and CO emissions from this unit while fired on natural gas shall be conducted at least once every twelve (12) months. After demonstrating compliance on two (2) consecutive annual source tests, the unit shall be tested not less than once every thirty-six (36) months. If the result of the 36-month source test demonstrates that the unit does not meet the applicable emission limits, the source testing frequency shall revert to at least once every twelve (12) months. [District Rules 4305, 6.3.1 and 4306, 6.3.1] Federally Enforceable Through Title V Permit
6. All emissions measurements shall be made with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. No determination of compliance shall be established within two hours after a continuous period in which fuel flow to the unit is shut off for 30 minutes or longer, or within 30 minutes after a re-ignition as defined in Section 3.0 of District Rule 4306. [District Rules 4305, 5.5.2 and 4306, 5.5.2] Federally Enforceable Through Title V Permit
7. The source test plan shall identify which basis (ppmv or lb/MMBtu) will be used to demonstrate compliance. [District Rules 4305, 5.5.1 and 4306, 5.5.1] Federally Enforceable Through Title V Permit
8. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
9. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

10. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rules 4305, 5.5.5 and 4306, 5.5.5] Federally Enforceable Through Title V Permit
11. The following test methods shall be used: NOx (ppmv) - EPA Method 7E or ARB Method 100, NOx (lb/MMBtu) - EPA Method 19, CO (ppmv) - EPA Method 10 or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, stack gas moisture content - EPA Method 4, stack gas velocities - EPA Method 2, and fuel gas sulfur content - ASTM D1072, ASTM D3246, ASTM D6228 (GC-FPD) or double GC for H2S and mercaptans. [District Rule 1081, 4305, 4306, 6.2, and 4351] Federally Enforceable Through Title V Permit
12. The permittee shall monitor and record the stack concentration of NOx, CO, and O2 at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless monitoring has been performed within the last month. [District Rules 4305, 5.4 and 4306, 5.4] Federally Enforceable Through Title V Permit
13. If either the NOx or CO concentrations corrected to 3% O2, as measured by the portable analyzer, exceed the allowable emissions concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rules 4305, 5.4 and 4306, 5.4] Federally Enforceable Through Title V Permit
14. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 4305, 5.4 and 4306, 5.4] Federally Enforceable Through Title V Permit
15. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 3% O2, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rules 4305, 6.1 and 4306, 6.1] Federally Enforceable Through Title V Permit
16. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070, 4305, 6.1, and 4306, 6.1] Federally Enforceable Through Title V Permit

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

# San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1326-315-0

EXPIRATION DATE: 03/31/2006

**EQUIPMENT DESCRIPTION:**

20,000 BBL FWKO VENTED TO VAPOR CONTROL SYSTEM LISTED ON S-1326-263

## PERMIT UNIT REQUIREMENTS

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1. FWKO vapors shall be vented only to vapor control system listed on tank permit S-1326-263. [District NSR Rule] Federally Enforceable Through Title V Permit
2. Vapor control efficiency shall be maintained at no less than 99%. [District NSR Rule] Federally Enforceable Through Title V Permit
3. The true vapor pressure of the liquids handled by FWKO shall not exceed 0.5 psia. [District Rules 4623] Federally Enforceable Through Title V Permit
4. This permit authorizes FWKO 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
5. Permittee shall conduct FWKO cleaning and maintenance operations in accordance with District approved procedures as described in this permit. [District Rule 2080] Federally Enforceable Through Title V Permit
6. FWKO may be disconnected from vapor control system during District approved cleaning and maintenance procedures as described in this permit. [District Rule 2080]
7. Permittee shall notify the District Compliance Division at least 24 hours before FWKO cleaning and vapor control system disconnection and within 72 hours after restoring crude oil flow to the FWKO. [District Rule 2080] Federally Enforceable Through Title V Permit
8. Prior to opening the FWKO to allow FWKO cleaning, one of the following procedures must be followed: 1) Prior to venting the FWKO to the atmosphere, operate the FWKO vapor recovery system/vapor control device for at least 24 hours such that it collects the FWKO vapors; or 2) use liquid displacement, conducted using a liquid with a TVP less than 0.5 psia, or conducted by floating the oil pad off a crude oil FWKO by restricting the outflow of water, such that 90% of the FWKO volume is displaced; or 3) Vent the FWKO to a vapor control device/vapor recovery system until the vapor concentration is less than 10% of the lower explosive limit (LEL) or 5,000 ppmv whichever is less; or 4) vent the FWKO 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
9. The FWKO 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 FWKO 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
10. 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
11. Prior to reintroducing crude oil/water to the FWKO, the FWKO shall be filled to the maximum possible level with water, the FWKO 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

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

12. Within 48 hours after refilling the FWKO with crude oil/water, the pressure relief valve seats and hatch seals shall be inspected for leaks using EPA method 21 and the regular FWKO maintenance and inspection program shall resume. [District Rule 2080] Federally Enforceable Through Title V Permit
13. Permittee shall maintain records of each period of cleaning and maintenance when the FWKO is disconnected or isolated from the vapor control system. Records shall include the date that FWKO cleaning was initiated, the date FWKO cleaning was completed, the procedure used to vent FWKO vapors prior to opening, the method of FWKO cleaning used, and a description of internal and external FWKO 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
14. Operator shall conduct quarterly gas sampling after TVR compressor (prior to connection to any other vapor control system) and at either the first line tank or at any secondary tank which is heated above ambient temperature. If gas samples are less than 10% VOC by weight for 8 consecutive quarterly samplings, sampling frequency shall only be required annually and whenever there is a change in source or type of petroleum processed. Samples shall be collected during periods of normal operation, and not be within 48 hours after routine maintenance or repair. [District Rule 2201] Federally Enforceable Through Title V Permit
15. VOC content of tank vapor space and vapor control system piping and components shall not exceed 10% by weight. [District Rule 2201]
16. VOC content of gas shall be measured using ASTM D-1945, EPA Method 18 referenced as methane, or equivalent test method with prior District approval. [District Rule 2201] Federally Enforceable Through Title V Permit
17. The permittee shall keep accurate records of VOC content of vapors for a period of 5 years and shall make such records available for District inspection upon request. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-1326-316-0

**EXPIRATION DATE:** 03/31/2006

**SECTION:** 35 **TOWNSHIP:** 11N **RANGE:** 19W

**EQUIPMENT DESCRIPTION:**

45,486 GALLON FIXED ROOF PRODUCED WATER TANK #32346 (TEJON)

## PERMIT UNIT REQUIREMENTS

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1. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
2. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623]
3. Permittee shall conduct true vapor pressure (TVP) testing of the organic liquid stored in this tank at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored in this tank in order to maintain exemption from the rule. [District Rule 4623]
4. 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]
5. 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. 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]
7. Instead of testing each uncontrolled fixed roof tank, the permittee may conduct a TVP test of the organic liquid stored in a representative tank provided the requirements of Sections 6.2.1.1.1 through 6.2.1.1.5 of Rule 4623 are met. [District Rule 4623]
8. 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]
9. 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]
10. Tank shall be equipped with pressure relief device set to within 10% of the maximum allowable working pressure of the tank. [District Rule 4623]
11. Crude oil throughput shall not exceed 50 barrels per day based on a monthly average. [District Rule 4623]
12. Permittee shall maintain monthly records of average daily crude oil throughput and shall submit such information to the APCO 30 days prior to the expiration date indicated in the Permit to Operate. [District Rule 4623]
13. 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]

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

# San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1326-317-0

EXPIRATION DATE: 03/31/2006

SECTION: 35 TOWNSHIP: 11N RANGE: 19W

**EQUIPMENT DESCRIPTION:**

45,486 GALLON FIXED ROOF PETROLEUM WASH TANK #32384 (TEJON)

## PERMIT UNIT REQUIREMENTS

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1. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
2. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623]
3. Permittee shall conduct true vapor pressure (TVP) testing of the organic liquid stored in this tank at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored in this tank in order to maintain exemption from the rule. [District Rule 4623]
4. 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]
5. 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. 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]
7. Instead of testing each uncontrolled fixed roof tank, the permittee may conduct a TVP test of the organic liquid stored in a representative tank provided the requirements of Sections 6.2.1.1.1 through 6.2.1.1.5 of Rule 4623 are met. [District Rule 4623]
8. 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]
9. 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]
10. Tank shall be equipped with pressure relief device set to within 10% of the maximum allowable working pressure of the tank. [District Rule 4623]
11. Crude oil throughput shall not exceed 50 barrels per day based on a monthly average. [District Rule 4623]
12. Permittee shall maintain monthly records of average daily crude oil throughput and shall submit such information to the APCO 30 days prior to the expiration date indicated in the Permit to Operate. [District Rule 4623]
13. 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]

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# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-1326-318-0

**EXPIRATION DATE:** 03/31/2006

**SECTION:** 35 **TOWNSHIP:** 11N **RANGE:** 19W

**EQUIPMENT DESCRIPTION:**

45,486 GALLON FIXED ROOF PETROLEUM STORAGE TANK #30114 (TEJON)

## PERMIT UNIT REQUIREMENTS

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1. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
2. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623]
3. Permittee shall conduct true vapor pressure (TVP) testing of the organic liquid stored in this tank at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored in this tank in order to maintain exemption from the rule. [District Rule 4623]
4. 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]
5. 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. 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]
7. Instead of testing each uncontrolled fixed roof tank, the permittee may conduct a TVP test of the organic liquid stored in a representative tank provided the requirements of Sections 6.2.1.1.1 through 6.2.1.1.5 of Rule 4623 are met. [District Rule 4623]
8. 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]
9. 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]
10. Tank shall be equipped with pressure relief device set to within 10% of the maximum allowable working pressure of the tank. [District Rule 4623]
11. Crude oil throughput shall not exceed 50 barrels per day based on a monthly average. [District Rule 4623]
12. Permittee shall maintain monthly records of average daily crude oil throughput and shall submit such information to the APCO 30 days prior to the expiration date indicated in the Permit to Operate. [District Rule 4623]
13. 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]

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



# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-1326-319-0

**EXPIRATION DATE:** 03/31/2006

**SECTION:** 35 **TOWNSHIP:** 11N **RANGE:** 19W

**EQUIPMENT DESCRIPTION:**

45,486 GALLON FIXED ROOF PETROLEUM STORAGE TANK #30115 (TEJON)

## PERMIT UNIT REQUIREMENTS

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1. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
2. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623]
3. Permittee shall conduct true vapor pressure (TVP) testing of the organic liquid stored in this tank at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored in this tank in order to maintain exemption from the rule. [District Rule 4623]
4. 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]
5. 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. 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]
7. Instead of testing each uncontrolled fixed roof tank, the permittee may conduct a TVP test of the organic liquid stored in a representative tank provided the requirements of Sections 6.2.1.1.1 through 6.2.1.1.5 of Rule 4623 are met. [District Rule 4623]
8. 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]
9. 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]
10. Tank shall be equipped with pressure relief device set to within 10% of the maximum allowable working pressure of the tank. [District Rule 4623]
11. Crude oil throughput shall not exceed 50 barrels per day based on a monthly average. [District Rule 4623]
12. Permittee shall maintain monthly records of average daily crude oil throughput and shall submit such information to the APCO 30 days prior to the expiration date indicated in the Permit to Operate. [District Rule 4623]
13. 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]

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# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-1326-320-0

**EXPIRATION DATE:** 03/31/2006

**SECTION:** SE09 **TOWNSHIP:** 27S **RANGE:** 28E

**EQUIPMENT DESCRIPTION:**

ONE 840,000 GALLON FIXED ROOF PETROLEUM WASH TANK (SEC. 9 NO. 1)

## PERMIT UNIT REQUIREMENTS

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1. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623]
2. Permittee shall conduct true vapor pressure (TVP) testing of the organic liquid stored in this tank at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored in this tank in order to maintain exemption from the rule. [District Rule 4623]
3. 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]
4. 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]
5. 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. 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]
7. 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]
8. 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]
9. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
10. Formerly permit number S-1109-522.
11. Formerly permit number S-3529-14.

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-1326-321-0

**EXPIRATION DATE:** 03/31/2006

**SECTION:** SE09 **TOWNSHIP:** 27S **RANGE:** 28E

**EQUIPMENT DESCRIPTION:**

ONE 840,000 GALLON FIXED ROOF PETROLEUM WASH TANK (SEC. 9 NO. 2)

## PERMIT UNIT REQUIREMENTS

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1. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623]
2. Permittee shall conduct true vapor pressure (TVP) testing of the organic liquid stored in this tank at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored in this tank in order to maintain exemption from the rule. [District Rule 4623]
3. 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]
4. 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]
5. 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. 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]
7. 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]
8. 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]
9. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
10. Formerly permit number S-1109-523.
11. Formerly permit number S-3529-15.

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

# San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1326-322-0

EXPIRATION DATE: 03/31/2006

SECTION: SE09 TOWNSHIP: 27S RANGE: 28E

**EQUIPMENT DESCRIPTION:**

ONE 504,000 GALLON FIXED ROOF PETROLEUM WASH TANK (SEC. 9 NO. 4)

## PERMIT UNIT REQUIREMENTS

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1. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623]
2. Permittee shall conduct true vapor pressure (TVP) testing of the organic liquid stored in this tank at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored in this tank in order to maintain exemption from the rule. [District Rule 4623]
3. 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]
4. 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]
5. 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. 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]
7. 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]
8. 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]
9. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
10. Formerly permit number S-1109-525.
11. Formerly permit number S-3529-16.

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-1326-323-0

**EXPIRATION DATE:** 03/31/2006

**SECTION:** SE09 **TOWNSHIP:** 27S **RANGE:** 28E

**EQUIPMENT DESCRIPTION:**

ONE 420,000 GALLON FIXED ROOF PETROLEUM STORAGE TANK (SEC. 9 NO. 8)

## PERMIT UNIT REQUIREMENTS

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1. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623]
2. Permittee shall conduct true vapor pressure (TVP) testing of the organic liquid stored in this tank at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored in this tank in order to maintain exemption from the rule. [District Rule 4623]
3. 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]
4. 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]
5. 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. 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]
7. 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]
8. 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]
9. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
10. Formerly permit number S-1109-529.
11. Formerly permit number S-3529-17.

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

# San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1326-324-0

EXPIRATION DATE: 03/31/2006

SECTION: SE09 TOWNSHIP: 27S RANGE: 28E

## EQUIPMENT DESCRIPTION:

ONE 210,000 GALLON FIXED ROOF PETROLEUM WASH TANK (SEC. 9 NO. 9) WITH A VAPOR CONTROL SYSTEM CONSISTING OF ONE COMPRESSOR, TWO SCRUBBERS, PIPING, AND CONTROL HARDWARE (SHARED WITH S-3529-20 AND -21)

## PERMIT UNIT REQUIREMENTS

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1. Tank vapors shall be reinjected in DOGGR approved wells or incinerated in permit exempt heater treaters and/or IC engines S-3259-59 and S-3259-60. [District Rule 2201]
2. The tank shall be equipped with a vapor recovery system consisting of a closed vent system that collects all VOCs from the storage tank, and a VOC control device. The vapor recovery system shall be APCO-approved and maintained in gas-tight condition. The VOC control device shall be either of the following: a vapor return or condensation system that connects to a gas pipeline distribution system, or an approved VOC destruction device that reduces the inlet VOC emissions by at least 95% by weight as determined by the test method specified in Section 6.4.7. [District Rule 4623]
3. All piping, valves, and fittings shall be constructed and maintained in a gas-tight condition. [District Rule 4623]
4. A gas-tight condition is defined as a condition without a gas leak. A gas leak is defined as a reading in excess of 10,000 ppmv, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21. A reading in excess of 10,000 ppmv above background is a violation of this permit and Rule 4623 and shall be reported as a deviation. [District Rule 4623]
5. Any 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]
6. Permittee shall record and maintain monthly records of average daily crude oil throughput and shall make such records readily available for District inspection upon request for a period of five years. [District Rule 4623]
7. Permittee shall maintain accurate component count for tank according to EPA Protocol for equipment Leak Emission Estimate Table 2-4 Oil and Gas Production Operations Average Emission Factors. Permittee shall update such records when new components are installed. [District Rule 2201]
8. Fugitive VOC emission rate, 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 from the total number of vapor components associated with tank and vapor control system shall not exceed 1.9 lb/day. [District Rule 2201]
9. 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 2201]
10. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
11. Formerly permit number S-3529-18.

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-1326-325-0

**EXPIRATION DATE:** 03/31/2006

**SECTION:** SE09 **TOWNSHIP:** 27S **RANGE:** 28E

**EQUIPMENT DESCRIPTION:**

ONE 420,000 GALLON FIXED ROOF PETROLEUM STORAGE TANK (SEC. 9 NO. 10)

## PERMIT UNIT REQUIREMENTS

---

1. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623]
2. Permittee shall conduct true vapor pressure (TVP) testing of the organic liquid stored in this tank at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored in this tank in order to maintain exemption from the rule. [District Rule 4623]
3. 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]
4. 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]
5. 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. 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]
7. 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]
8. 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]
9. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
10. Formerly permit number S-1109-531-0.
11. Formerly permit number S-3529-19.

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

# San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1326-326-0

EXPIRATION DATE: 03/31/2006

SECTION: SE09 TOWNSHIP: 27S RANGE: 28E

## EQUIPMENT DESCRIPTION:

210,000 GALLON FIXED ROOF PETROLEUM STORAGE TANK, SEC. 9 #11 CONNECTED TO VAPOR CONTROL SYSTEM LISTED ON S-3529-18

## PERMIT UNIT REQUIREMENTS

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1. Tank vapors shall be reinjected in DOGGR approved wells or incinerated in permit exempt heater treaters and/or IC engines S-3259-59 and S-3259-60. [District Rule 2201]
2. The tank shall be equipped with a vapor recovery system consisting of a closed vent system that collects all VOCs from the storage tank, and a VOC control device. The vapor recovery system shall be APCO-approved and maintained in gas-tight condition. The VOC control device shall be either of the following: a vapor return or condensation system that connects to a gas pipeline distribution system, or an approved VOC destruction device that reduces the inlet VOC emissions by at least 95% by weight as determined by the test method specified in Section 6.4.7. [District Rule 4623]
3. All piping, valves, and fittings shall be constructed and maintained in a gas-tight condition. [District Rule 4623]
4. A gas-tight condition is defined as a condition without a gas leak. A gas leak is defined as a reading in excess of 10,000 ppmv, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21. A reading in excess of 10,000 ppmv above background is a violation of this permit and Rule 4623 and shall be reported as a deviation. [District Rule 4623]
5. Any 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]
6. Permittee shall record and maintain monthly records of average daily crude oil throughput and shall make such records readily available for District inspection upon request for a period of five years. [District Rule 4623]
7. Permittee shall maintain accurate component count for tank according to EPA Protocol for equipment Leak Emission Estimate Table 2-4 Oil and Gas Production Operations Average Emission Factors. Permittee shall update such records when new components are installed. [District Rule 2201]
8. Fugitive VOC emission rate, 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 from the total number of vapor components associated with tank and vapor control system shall not exceed 1.8 lb/day. [District Rule 2201]
9. 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 2201]
10. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
11. Formerly permit number S-1109-532.
12. Formerly permit number S-3529-20.

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



# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-1326-327-0

**EXPIRATION DATE:** 03/31/2006

**SECTION:** SE09 **TOWNSHIP:** 27S **RANGE:** 28E

**EQUIPMENT DESCRIPTION:**

ONE 210,000 GALLON FIXED ROOF PETROLEUM STORAGE TANK (SEC. 9 NO. 12) CONNECTED TO VAPOR CONTROL SYSTEM LISTED ON S-3529-18

## PERMIT UNIT REQUIREMENTS

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1. The tank shall be equipped with a vapor recovery system consisting of a closed vent system that collects all VOCs from the storage tank, and a VOC control device. The vapor recovery system shall be APCO-approved and maintained in gas-tight condition. The VOC control device shall be either of the following: a vapor return or condensation system that connects to a gas pipeline distribution system, or an approved VOC destruction device that reduces the inlet VOC emissions by at least 95% by weight as determined by the test method specified in Section 6.4.7. [District Rule 4623]
2. Any 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]
3. All piping, valves, and fittings shall be constructed and maintained in a gas-tight condition. [District Rule 4623]
4. A gas-tight condition is defined as a condition without a gas leak. A gas leak is defined as a reading in excess of 10,000 ppmv, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21. A reading in excess of 10,000 ppmv above background is a violation of this permit and Rule 4623 and shall be reported as a deviation. [District Rule 4623]
5. Tank vapors shall be reinjected in DOGGR approved wells or incinerated in permit exempt heater treaters and/or IC engines S-3259-59 and S-3259-60. [District Rule 2201]
6. Fugitive VOC emission rate, 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 from the total number of vapor components associated with tank and vapor control system shall not exceed 0.5 lb/day. [District Rule 2201]
7. Permittee shall record and maintain monthly records of average daily crude oil throughput and shall make such records readily available for District inspection upon request for a period of five years. [District Rule 4623]
8. Permittee shall maintain accurate component count for tank according to EPA Protocol for equipment Leak Emission Estimate Table 2-4 Oil and Gas Production Operations Average Emission Factors. Permittee shall update such records when new components are installed. [District Rule 2201]
9. 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 2201]
10. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
11. Formerly permit number S-3529-21.

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

# San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1326-328-0

EXPIRATION DATE: 03/31/2006

SECTION: 21 TOWNSHIP: 27S RANGE: 28E

**EQUIPMENT DESCRIPTION:**

ONE 31,500 GALLON FIXED ROOF PETROLEUM STORAGE TANK (SO. UNIT TANK FARM NO. 8 )

## PERMIT UNIT REQUIREMENTS

---

1. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623]
2. Permittee shall conduct true vapor pressure (TVP) testing of the organic liquid stored in this tank at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored in this tank in order to maintain exemption from the rule. [District Rule 4623]
3. 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]
4. 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]
5. 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. 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]
7. 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]
8. 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]
9. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
10. Formerly permit number S-1109-590.
11. Formerly permit number S-3529-38.

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

# San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1326-330-0

EXPIRATION DATE: 03/31/2006

SECTION: SW04 TOWNSHIP: 27S RANGE: 28E

**EQUIPMENT DESCRIPTION:**

42,000 GALLON FIXED ROOF PETROLEUM STORAGE TANK (NORTH UNIT NO. 5) WITH PV VALVE

## PERMIT UNIT REQUIREMENTS

---

1. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
2. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101]
3. Crude oil throughput shall not exceed 1,200 barrels per day based on a monthly average. [District Rule 2201]
4. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623]
5. Permittee shall conduct true vapor pressure (TVP) testing of the organic liquid stored in this tank at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored in this tank in order to maintain exemption from the rule. [District Rule 4623]
6. 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]
7. 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]
8. 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]
9. 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]
10. 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]
11. All records required to be maintained by this permit shall be maintained for a period of at least five years and shall be made readily available for District inspection upon request. [District Rule 4623]
12. Formerly permit number S-3529-50.

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-1326-331-0

**EXPIRATION DATE:** 03/31/2006

**SECTION:** SW04 **TOWNSHIP:** 27E **RANGE:** 28S

**EQUIPMENT DESCRIPTION:**

ONE 84,000 GALLON FIXED ROOF PETROLEUM WASH TANK (NORTH UNIT NO. 6) WITH PV VALVE

## PERMIT UNIT REQUIREMENTS

---

1. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
2. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101]
3. Crude oil throughput shall not exceed 2,000 barrels per day based on a monthly average. [District Rule 2201]
4. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623]
5. Permittee shall conduct true vapor pressure (TVP) testing of the organic liquid stored in this tank at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored in this tank in order to maintain exemption from the rule. [District Rule 4623]
6. 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]
7. 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]
8. 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]
9. 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]
10. 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]
11. All records required to be maintained by this permit shall be maintained for a period of at least five years and shall be made readily available for District inspection upon request. [District Rule 4623]
12. Formerly permit number S-3529-51.

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-1326-332-0

**EXPIRATION DATE:** 03/31/2006

**SECTION:** NE21 **TOWNSHIP:** 27S **RANGE:** 28E

**EQUIPMENT DESCRIPTION:**

ONE 84,000 GALLON FIXED ROOF CRUDE OIL WASH TANK (SOUTH UNIT TANK FARM NO. 1)

## PERMIT UNIT REQUIREMENTS

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1. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623]
2. Permittee shall conduct true vapor pressure (TVP) testing of the organic liquid stored in this tank at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored in this tank in order to maintain exemption from the rule. [District Rule 4623]
3. 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]
4. 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]
5. 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. 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]
7. 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]
8. 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]
9. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
10. Formerly permit number S-3529-54.

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

# San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1326-333-0

EXPIRATION DATE: 03/31/2006

SECTION: NE21 TOWNSHIP: 27S RANGE: 28E

**EQUIPMENT DESCRIPTION:**

ONE 84,000 GALLON FIXED ROOF STOCK TANK (SOUTH UNIT TANK FARM NO. 2)

## PERMIT UNIT REQUIREMENTS

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1. Average daily tank throughput (on quarterly basis) shall not exceed 150 bbl/day of fluid. [District Rule 2201]
2. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623]
3. Permittee shall conduct true vapor pressure (TVP) testing of the organic liquid stored in this tank at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored in this tank in order to maintain exemption from the rule. [District Rule 4623]
4. 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]
5. 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. 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]
7. 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]
8. 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]
9. Permittee shall maintain accurate records of average daily throughput (on quarterly basis) and such records shall be made readily available for District inspection upon request for a period of two years. [District Rule 1070]
10. 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]
11. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
12. Formerly permit number S-3529-55.

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-1326-334-0

**EXPIRATION DATE:** 03/31/2006

**SECTION:** NE16 **TOWNSHIP:** 27S **RANGE:** 28E

**EQUIPMENT DESCRIPTION:**

ONE 84,000 GALLON FIXED ROOF WASH TANK (NO. 1) WITH PRV DEVICE (FUNCTIONALLY IDENTICAL REPLACEMENT UNIT FOR S-3529-30. SECURITY TANK FARM)

## PERMIT UNIT REQUIREMENTS

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1. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623]
2. Permittee shall conduct true vapor pressure (TVP) testing of the organic liquid stored in this tank at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored in this tank in order to maintain exemption from the rule. [District Rule 4623]
3. 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]
4. 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]
5. 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. 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]
7. 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]
8. 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]
9. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
10. Formerly permit number S-3529-56.

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-1326-335-0

**EXPIRATION DATE:** 03/31/2006

**SECTION:** NE16 **TOWNSHIP:** 27S **RANGE:** 28E

**EQUIPMENT DESCRIPTION:**

ONE 84,000 GALLON FIXED ROOF STORAGE TANK (NO. 2) WITH PR/V DEVICE (FUNCTIONALLY IDENTICAL REPLACEMENT UNIT FOR S-3529-31-0 SECURITY TANK FARM)

## PERMIT UNIT REQUIREMENTS

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1. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623]
2. Permittee shall conduct true vapor pressure (TVP) testing of the organic liquid stored in this tank at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored in this tank in order to maintain exemption from the rule. [District Rule 4623]
3. 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]
4. 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]
5. 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. 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]
7. 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]
8. 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]
9. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
10. Formerly permit number S-3529-57.

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



# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-1326-337-3

**EXPIRATION DATE:** 03/31/2006

**EQUIPMENT DESCRIPTION:**

85.0 MMBTU/HR STRUTHERS NATURAL GAS-FIRED STEAM GENERATOR WITH A NORTH AMERICAN MODEL MAGNA-FLAME G-LE ULTRA ULTRA-LOW NOX BURNER WITH FLUE GAS RECIRCULATION (FGR) AND AN O2 CONTROLLER

## PERMIT UNIT REQUIREMENTS

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1. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
2. The unit shall only be fired on PUC-regulated natural gas and scrubbed TEOR and TVR gas from S-1326-26, '-27, '-28, '-35 and '-263 with a sulfur content no greater than 1 gr S/100 scf. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Permittee shall test annually the sulfur content of TEOR/TVR gas combusted in steam generator using ASTM method D1072, D3031, D4084, or D3246 and make test results readily available for District inspection. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
4. Emissions rates from the unit shall not exceed any of the following emission limits: 9 ppmv NOx @ 3% O2 or 0.0109 lb-NOx/MMBtu, 0.005 lb-PM10/MMBtu, 25 ppmv CO @ 3% O2 or 0.0184 lb-CO/MMBtu, or 0.0055 lb-VOC/MMBtu. [District NSR Rule and District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
5. Source testing to measure NOx and CO emissions from this unit while fired on natural gas shall be conducted at least once every twelve (12) months. After demonstrating compliance on two (2) consecutive annual source tests, the unit shall be tested not less than once every thirty-six (36) months. If the result of the 36-month source test demonstrates that the unit does not meet the applicable emission limits, the source testing frequency shall revert to at least once every twelve (12) months. [District Rules 4305, 6.3.1 and 4306, 6.3.1] Federally Enforceable Through Title V Permit
6. All emissions measurements shall be made with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. No determination of compliance shall be established within two hours after a continuous period in which fuel flow to the unit is shut off for 30 minutes or longer, or within 30 minutes after a re-ignition as defined in Section 3.0 of District Rule 4306. [District Rules 4305, 5.5.2 and 4306, 5.5.2] Federally Enforceable Through Title V Permit
7. The source test plan shall identify which basis (ppmv or lb/MMBtu) will be used to demonstrate compliance. [District Rules 4305, 5.5.1 and 4306, 5.5.1] Federally Enforceable Through Title V Permit
8. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
9. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
10. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rules 4305, 5.5.5 and 4306, 5.5.5] 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.

11. The following test methods shall be used: NO<sub>x</sub> (ppmv) - EPA Method 7E or ARB Method 100, NO<sub>x</sub> (lb/MMBtu) - EPA Method 19, CO (ppmv) - EPA Method 10 or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, stack gas moisture content - EPA Method 4, stack gas velocities - EPA Method 2, and fuel gas sulfur content - ASTM D1072, ASTM D3246, ASTM D6228 (GC-FPD) or double GC for H<sub>2</sub>S and mercaptans. [District Rule 1081, 4305, 4306, 6.2, and 4351] Federally Enforceable Through Title V Permit
12. The permittee shall monitor and record the stack concentration of NO<sub>x</sub>, CO, and O<sub>2</sub> at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless monitoring has been performed within the last month. [District Rules 4305, 5.4 and 4306, 5.4] Federally Enforceable Through Title V Permit
13. If either the NO<sub>x</sub> or CO concentrations corrected to 3% O<sub>2</sub>, as measured by the portable analyzer, exceed the allowable emissions concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rules 4305, 5.4 and 4306, 5.4] Federally Enforceable Through Title V Permit
14. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 4305, 5.4 and 4306, 5.4] Federally Enforceable Through Title V Permit
15. The permittee shall maintain records of: (1) the date and time of NO<sub>x</sub>, CO, and O<sub>2</sub> measurements, (2) the O<sub>2</sub> concentration in percent and the measured NO<sub>x</sub> and CO concentrations corrected to 3% O<sub>2</sub>, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rules 4305, 6.1 and 4306, 6.1] Federally Enforceable Through Title V Permit
16. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070, 4305, 6.1, and 4306, 6.1] Federally Enforceable Through Title V Permit

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

# San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1326-338-3

EXPIRATION DATE: 03/31/2006

SECTION: NE23 TOWNSHIP: 28S RANGE: 27E

## EQUIPMENT DESCRIPTION:

85.0 MMBTU/HR STRUTHERS NATURAL GAS-FIRED STEAM GENERATOR WITH A NORTH AMERICAN MODEL MAGNA-FLAME G-LE ULTRA ULTRA-LOW NOX BURNER (OR EQUIVALENT) WITH FLUE GAS RECIRCULATION (FGR) AND AN O2 CONTROLLER

## PERMIT UNIT REQUIREMENTS

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1. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
2. The unit shall only be fired on PUC-regulated natural gas and scrubbed TEOR and TVR gas from S-1326-26, '-27, '-28, '-35 and '-263 with a sulfur content no greater than 1 gr S/100 scf. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Permittee shall test annually the sulfur content of TEOR/TVR gas combusted in steam generator using ASTM method D1072, D3031, D4084, or D3246 and make test results readily available for District inspection. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
4. Emissions rates from the unit shall not exceed any of the following emission limits: 9 ppmv NOx @ 3% O2 or 0.0109 lb-NOx/MMBtu, 0.005 lb-PM10/MMBtu, 25 ppmv CO @ 3% O2, or 0.0055 lb-VOC/MMBtu. [District NSR Rule and District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
5. Source testing to measure NOx and CO emissions from this unit while fired on natural gas shall be conducted at least once every twelve (12) months. After demonstrating compliance on two (2) consecutive annual source tests, the unit shall be tested not less than once every thirty-six (36) months. If the result of the 36-month source test demonstrates that the unit does not meet the applicable emission limits, the source testing frequency shall revert to at least once every twelve (12) months. [District Rules 4305, 6.3.1 and 4306, 6.3.1] Federally Enforceable Through Title V Permit
6. All emissions measurements shall be made with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. No determination of compliance shall be established within two hours after a continuous period in which fuel flow to the unit is shut off for 30 minutes or longer, or within 30 minutes after a re-ignition as defined in Section 3.0 of District Rule 4306. [District Rules 4305, 5.5.2 and 4306, 5.5.2] Federally Enforceable Through Title V Permit
7. The source test plan shall identify which basis (ppmv or lb/MMBtu) will be used to demonstrate compliance. [District Rules 4305, 5.5.1 and 4306, 5.5.1] Federally Enforceable Through Title V Permit
8. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
9. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

10. The following test methods shall be used: NOx (ppmv) - EPA Method 7E or ARB Method 100, NOx (lb/MMBtu) - EPA Method 19, CO (ppmv) - EPA Method 10 or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, stack gas moisture content - EPA Method 4, stack gas velocities - EPA Method 2, and fuel gas sulfur content - ASTM D1072, ASTM D3246, ASTM D6228 (GC-FPD) or double GC for H2S and mercaptans. [District Rule 1081, 4305, 4306, 6.2, and 4351] Federally Enforceable Through Title V Permit
11. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
12. The permittee shall monitor and record the stack concentration of NOx, CO, and O2 at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless monitoring has been performed within the last month. [District Rules 4305, 5.4 and 4306, 5.4] Federally Enforceable Through Title V Permit
13. If either the NOx or CO concentrations corrected to 3% O2, as measured by the portable analyzer, exceed the allowable emissions concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rules 4305, 5.4 and 4306, 5.4] Federally Enforceable Through Title V Permit
14. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 4305, 5.4 and 4306, 5.4] Federally Enforceable Through Title V Permit
15. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 3% O2, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rules 4305, 6.1 and 4306, 6.1] Federally Enforceable Through Title V Permit
16. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070, 4305, 6.1, and 4306, 6.1] Federally Enforceable Through Title V Permit

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

# San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1326-341-0

EXPIRATION DATE: 03/31/2006

SECTION: 11 TOWNSHIP: 28S RANGE: 27E

## EQUIPMENT DESCRIPTION:

THERMALLY ENHANCED OIL RECOVERY OPERATION WELL VENT VAPOR CONTROL SYSTEM SERVING UP TO 50 STEAM DRIVE WELLS AND 40 CYCLIC WELLS (MOVIUS FEE LEASE)

## PERMIT UNIT REQUIREMENTS

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1. Permittee shall maintain a current roster of all wells connected to this system and shall make such roster available for District inspection upon request. [District NSR Rule]
2. Non condensed well vent vapors shall only be disposed of in approved incineration/disposal devices, including one 3.0 MMBtu/hr gas-fired heater and reinjection wells. [District NSR Rule]
3. Gas being incinerated in the 3.0 MMBtu/hr heater shall not exceed 0.75 grains of total sulfur per 100 dscf and 5% by weight hydrocarbons heavier than butane. [District Rule 2020]
4. Permittee shall keep accurate records of sulfur and VOC content of gas being incinerated and shall make records readily available for District inspection upon request. [District NSR Rule]
5. Fugitive Volatile Organic Compound (VOC) emission limit shall not exceed 114.8 lb/day. [District NSR Rule]
6. Gas being incinerated in the 3.0 MMBtu/hr heater shall be tested annually for sulfur content value by using ASTM methods D 1072, D 3031, D 4084, D 3246 or grab sample analysis by GC-FPD/TCD performed in the laboratory. [District Rule 2020]
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, 2.0, 3.4, and 3.5] Federally Enforceable Through Title V Permit
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, 5.0 (as amended January 15, 1998). [District Rule 4401, 4.1]
9. All required source testing shall conform to the compliance testing procedures described in District Rule 1081 (as amended December 16, 1993). [District Rule 1081]
10. The operator shall maintain monitoring records of the date and well identification where steam injection or well stimulation occurs. [District Rule 4401, 6.1.1]
11. The uncontrolled VOC emissions from any well vent shall be reduced by at least 99 percent by weight or, if several steam-enhanced crude oil production well vents are connected to a vapor collection and control system, total uncontrolled VOC emissions shall be reduced by at least 99 percent. This requirement does not apply to cyclic wells located on contiguous and adjacent oil production properties with less than 10 cyclic wells owned by or under the control of a company. [District Rule 4401, 5.1 and 5.2]
12. For cyclic wells located on properties with less than 10 cyclic wells and owned by a company, the uncontrolled VOC emissions from any well vent or system of well vents connected to a single vapor collection and control device shall be reduced by at least 50 percent. Properties shall include contiguous and adjacent oil production properties owned by or under control of the company. [District Rule 4401, 5.4]

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

13. Total number of leaks from the vapor collection and control system, including condensate handling, shall not exceed 8 as allowed by Rule 4401 (as amended January 15, 1998) at any one time. [District Rule 4401, 5.3]
14. Units consisting of more than 500 wells shall not exceed one leak detected for each 20 wells tested with a minimum of 50 wells tested. [District Rule 4401, 5.3]
15. Operator shall affix a readily visible tag bearing the date on which a leak is detected. The tag shall remain in place until the leaking component is repaired. [District Rule 4401, 5.3.1]
16. Operator shall repair each leak within 15 calendar days of detection. The APCO may grant a 10 calendar day extension if the operator demonstrates that the necessary and sufficient actions have and are being taken to correct the leak. [District Rule 4401, 5.3.1]
17. Operator shall maintain all components of a well vent vapor collection and control system in good repair. Components of the well vent vapor collection and control system shall include all piping, valves, fittings, pumps, compressors, tanks, etc. used to collect, control, store, or dispose of VOC condensate or non-condensable VOCs and which is prior to any blending of VOC condensate with crude oil or blending of non-condensable VOCs with gases to be used as a fuel. [District Rule 4401, 5.3 and 5.3.2]
18. Annual control efficiency compliance tests shall be performed on all vapor collection and control systems used to control emissions from steam-enhanced crude oil production wells. Testing shall be performed by source testers certified by the California Air Resources Board (CARB) 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 the annual testing requirements of this condition if the vapor control system does not exhaust to atmosphere or 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 open flare, and the source's Operating Permit contains adequate periodic monitoring to ensure the source meets 99% control efficiency. [District Rule 4401, 5.1, 5.2 and 6.2.1]
19. The control efficiency of the vapor collection and control system used to control VOC emissions from steam enhanced crude oil production well shall be determined by mass balance based on most stringent of a source test, USEPA approved emission factors, or Air Pollution (AP)-42 emission factors for components and number of components; and the efficiency of destruction devices determined by USEPA Method 25, 25a, or 25b as applicable. [District Rule 4401, 6.3.1]
20. VOC content shall be determined using the latest revision of ASTM Method E168, E169, or E260 as applicable. Halogenated exempt compounds shall be determined by CARB Method 432. [District Rule 4401, 6.3.2]
21. The source shall perform leak inspections at least annually, using a portable hydrocarbon detection instrument in accordance with USEPA Method 21. [District Rule 4401, 6.3.3]
22. Formerly permit number S-1342-7.

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-1326-348-0

**EXPIRATION DATE:** 03/31/2006

**EQUIPMENT DESCRIPTION:**  
10 CLOSED VENTS CYCLIC WELLS

## PERMIT UNIT REQUIREMENTS

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1. Crude oil produced from wells with vents shut in to comply with Rule 4401 shall be stored and handled in vapor controlled equipment. [District NSR Rule]
2. Gas leak shall be defined as emitting more than 10,000 ppm of methane measured at a distance of one centimeter from the potential source with an instrument calibrated with methane in accordance with EPA Method 21. [District Rule 4401, 3.4]
3. The uncontrolled VOC emissions from any well vent shall be reduced by at least 99 percent by weight. [District Rule 4401, 5.1]
4. Total number of leaks from the vapor collection and control system, including condensate handling, shall not exceed the number as allowed by Rule 4401 (as amended December 17, 1992) at any one time. [District Rule 4401, 5.3]
5. Operator shall affix a readily visible tag bearing the date on which a leak is detected. The tag shall remain in place until the leaking component is repaired. [District Rule 4401, 5.3.1]
6. Operator shall repair each leak within 15 days of detection. The APCO may grant a 10 day extension if the operator demonstrates that the necessary and sufficient actions have and are being taken to correct the leak. [District Rule 4401, 5.3.1]
7. The operator shall maintain monitoring records of the date and well identification where steam injection or well stimulation occurs. [District Rule 4401, 6.1]
8. An accurate roster of all cyclic wells on this Permit shall be maintained and made readily available for District inspection upon request. [District Rule 1070]
9. Formerly permit number S-1342-19.

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

# San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1326-349-0

EXPIRATION DATE: 03/31/2006

SECTION: SW32 TOWNSHIP: 11N RANGE: 19W

## EQUIPMENT DESCRIPTION:

42,000 GALLON FIXED ROOF PETROLEUM STOCK TANK WITH PRESSURE VACUUM VENT (#156744, TEJON LEASE)

## PERMIT UNIT REQUIREMENTS

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1. The tank shall be equipped with a fixed roof with no holes or openings. [District NSR Rule]
2. Throughput of oil shall not exceed 150 barrels per day. [District NSR Rule and District Rule 4623, 5.1.2]
3. The true vapor pressure (TVP) of any liquid introduced, stored or held in the tank shall not exceed 0.5 psia at storage temperature. [District Rule 4623, 2.0]
4. True vapor pressure and API gravity of liquids introduced, stored or held in the tank shall be measured at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored. In lieu of testing each uncontrolled fixed roof tank, operator may conduct a TVP testing of a representative tank provided that a representative testing plan (meeting the requirements of sections 6.2.1.1.1 through 6.2.1.1.5 of District Rule 4623) received and approved by APCO. [District Rule 4623, 6.2.2]
5. 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 Rules 4623, 6.2.1.2]
6. 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, 6.2.2]
7. 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, 6.4.4]
8. Operator shall submit the records of TVP testing to the District within 45 days after the date of testing. The record shall include the tank identification number, Permit to Operate number, type of stored organic liquid, TVP and API gravity of the stored organic liquid, test methods used, and a copy of the test results. [District Rule 4623, 6.3.6]
9. 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]
10. This tank shall be equipped with a pressure-vacuum (PV) relief valve set to within 10% of the maximum allowable working pressure of the tank, permanently labeled with the operating pressure settings, properly maintained in good operating order in accordance with the manufacturer's instructions, and shall remain in gas-tight condition except when the operating pressure exceeds the valve's set pressure. [District Rule 4623, 5.2]
11. This tank shall be in a gas-tight condition. A gas-tight condition is defined as a condition without a gas leak. A gas leak is defined as a reading in excess of 10,000 ppmv, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21. A reading in excess of 10,000 ppmv above background is a violation of this permit and Rule 4623. [District Rule 4623, 5.2, 3.9]

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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



12. Permittee shall maintain accurate records of each organic liquid stored in the tank, including its storage temperature, TVP, API gravity, and daily throughput. [District Rule 4623, 6.3.1]
13. Formerly permit number S-1342-27.

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-1326-353-0

**EXPIRATION DATE:** 03/31/2006

**SECTION:** SW33 **TOWNSHIP:** 11N **RANGE:** 19W

**EQUIPMENT DESCRIPTION:**

21,000 GALLON FIXED ROOF PETROLEUM STORAGE TANK WITH PRESSURE/VACUUM VENT (ANTHILL LEASE)

## PERMIT UNIT REQUIREMENTS

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1. Throughput of oil shall not exceed 21,000 gallons per 3 day period. [District NSR Rule]
2. The true vapor pressure (TVP) of any liquid introduced, stored or held in the tank shall not exceed 1.5 psia at storage temperature. [District Rule 4623, 5.1.2]
3. This tank shall be equipped with a pressure-vacuum (PV) relief valve set to within 10% of the maximum allowable working pressure of the tank, permanently labeled with the operating pressure settings, properly maintained in good operating order in accordance with the manufacturer's instructions, and shall remain in gas-tight condition except when the operating pressure exceeds the valve's set pressure. [District Rule 4623, 5.2]
4. This tank shall be in a gas-tight condition. A gas-tight condition is defined as a condition without a gas leak. A gas leak is defined as a reading in excess of 10,000 ppmv, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21. A reading in excess of 10,000 ppmv above background is a violation of this permit and Rule 4623. [District Rule 4623, 5.2, 3.9]
5. True vapor pressure of liquids introduced, stored or held in the tank shall be measured at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored using the latest version of the Lawrence Berkeley National Laboratory Test Method for Vapor Pressure of Reactive Organic Compounds in Heavy Crude Oil Using Gas Chromatograph, as approved by ARB and EPA. In lieu of testing each tank, operator may conduct a TVP testing of a representative tank provided that a representative testing plan (meeting the requirements of sections 6.2.1.1.1 through 6.2.1.1.5 of District Rule 4623) received and approved by APCO. [District Rule 4623, 6.2.2, 6.4.4]
6. Operator shall submit the records of TVP testing to the District within 45 days after the date of testing. The record shall include the tank identification number, Permit to Operate number, type of stored organic liquid, TVP and API gravity of the stored organic liquid, test methods used, and a copy of the test results. [District Rule 4623, 6.3.6]
7. Permittee shall maintain records of 3-day rolling average crude oil throughput and shall keep accurate records of each organic liquid stored in the tank, including its storage temperature, TVP, and API gravity. [District Rule 2520, 9.3.2 & District Rule 4623, 6.3.1]
8. 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]
9. Formerly permit number S-1342-33.

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

# San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1326-354-0

EXPIRATION DATE: 03/31/2006

SECTION: 32 TOWNSHIP: 11N RANGE: 19W

**EQUIPMENT DESCRIPTION:**

21,000 GALLON FIXED ROOF PETROLEUM STOCK TANK WITH PRESSURE/VACUUM VENT (#5X705, GRAPEVINE LEASE)

## PERMIT UNIT REQUIREMENTS

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1. The tank shall be equipped with a fixed roof with no holes or openings. [District NSR Rule]
2. Throughput of oil shall not exceed 21,000 gallons per 3 day period. [District NSR Rule]
3. The true vapor pressure (TVP) of any liquid introduced, stored or held in the tank shall not exceed 1.5 psia at storage temperature. [District Rule 4623, 5.1.2]
4. This tank shall be equipped with a pressure-vacuum (PV) relief valve set to within 10% of the maximum allowable working pressure of the tank, permanently labeled with the operating pressure settings, properly maintained in good operating order in accordance with the manufacturer's instructions, and shall remain in gas-tight condition except when the operating pressure exceeds the valve's set pressure. [District Rule 4623, 5.2]
5. This tank shall be in a gas-tight condition. A gas-tight condition is defined as a condition without a gas leak. A gas leak is defined as a reading in excess of 10,000 ppmv, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21. A reading in excess of 10,000 ppmv above background is a violation of this permit and Rule 4623. [District Rule 4623, 5.2, 3.9]
6. True vapor pressure of liquids introduced, stored or held in the tank shall be measured at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored using the latest version of the Lawrence Berkeley National Laboratory Test Method for Vapor Pressure of Reactive Organic Compounds in Heavy Crude Oil Using Gas Chromatograph, as approved by ARB and EPA. In lieu of testing each tank, operator may conduct a TVP testing of a representative tank provided that a representative testing plan (meeting the requirements of sections 6.2.1.1.1 through 6.2.1.1.5 of District Rule 4623) received and approved by APCO. [District Rule 4623, 6.2.2, 6.4.4]
7. Operator shall submit the records of TVP testing to the District within 45 days after the date of testing. The record shall include the tank identification number, Permit to Operate number, type of stored organic liquid, TVP and API gravity of the stored organic liquid, test methods used, and a copy of the test results. [District Rule 4623, 6.3.6]
8. Permittee shall maintain records of 3-day rolling average crude oil throughput and shall keep accurate records of each organic liquid stored in the tank, including its storage temperature, TVP, and API gravity. [District NSR Rule and District Rule 4623, 6.3.1]
9. 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]
10. Formerly permit number S-1342-43.

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

# San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1326-355-0

EXPIRATION DATE: 03/31/2006

SECTION: 32 TOWNSHIP: 11N RANGE: 19W

**EQUIPMENT DESCRIPTION:**

21,000 GALLON FIXED ROOF PETROLEUM STOCK TANK WITH PRESSURE/VACUUM VENT (GRAPEVINE LEASE)

## PERMIT UNIT REQUIREMENTS

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1. Throughput of oil shall not exceed 21,000 gallons per 3 day period. [District NSR Rule]
2. The true vapor pressure (TVP) of any liquid introduced, stored or held in the tank shall not exceed 1.5 psia at storage temperature. [District Rule 4623, 5.1.2]
3. This tank shall be equipped with a pressure-vacuum (PV) relief valve set to within 10% of the maximum allowable working pressure of the tank, permanently labeled with the operating pressure settings, properly maintained in good operating order in accordance with the manufacturer's instructions, and shall remain in gas-tight condition except when the operating pressure exceeds the valve's set pressure. [District Rule 4623, 5.2]
4. This tank shall be in a gas-tight condition. A gas-tight condition is defined as a condition without a gas leak. A gas leak is defined as a reading in excess of 10,000 ppmv, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method-21. A reading in excess of 10,000 ppmv above background is a violation of this permit and Rule 4623. [District Rule 4623, 5.2, 3.9]
5. True vapor pressure of liquids introduced, stored or held in the tank shall be measured at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored using the latest version of the Lawrence Berkeley National Laboratory Test Method for Vapor Pressure of Reactive Organic Compounds in Heavy Crude Oil Using Gas Chromatograph, as approved by ARB and EPA. In lieu of testing each tank, operator may conduct a TVP testing of a representative tank provided that a representative testing plan (meeting the requirements of sections 6.2.1.1.1 through 6.2.1.1.5 of District Rule 4623) received and approved by APCO. [District Rule 4623, 6.2.2, 6.4.4]
6. Operator shall submit the records of TVP testing to the District within 45 days after the date of testing. The record shall include the tank identification number, Permit to Operate number, type of stored organic liquid, TVP and API gravity of the stored organic liquid, test methods used, and a copy of the test results. [District Rule 4623, 6.3.6]
7. Permittee shall maintain records of 3-day rolling average crude oil throughput and shall keep accurate records of each organic liquid stored in the tank, including its storage temperature, TVP, and API gravity. [District NSR Rule and District Rule 4623, 6.3.1]
8. 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]
9. Formerly permit number S-1342-45.

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-1326-356-0

**EXPIRATION DATE:** 03/31/2006

**SECTION:** 32 **TOWNSHIP:** 11N **RANGE:** 19W

**EQUIPMENT DESCRIPTION:**

42,000 GALLON FIXED ROOF WASH TANK WITH PRESSURE/VACUUM VENT (#56569, GRAPEVINE LEASE)

## PERMIT UNIT REQUIREMENTS

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1. Throughput of oil shall not exceed 42,000 gallons per 3 day period. [District NSR Rule]
2. The true vapor pressure (TVP) of any liquid introduced, stored or held in the tank shall not exceed 0.5 psia at storage temperature. [District Rule 4623, 2.0]
3. True vapor pressure and API gravity of liquids introduced, stored or held in the tank shall be measured at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored. In lieu of testing each uncontrolled fixed roof tank, operator may conduct a TVP testing of a representative tank provided that a representative testing plan (meeting the requirements of sections 6.2.1.1.1 through 6.2.1.1.5 of District Rule 4623) received and approved by APCO. [District Rule 4623, 6.2.2]
4. 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 Rules 4623, 6.2.1.2]
5. 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, 6.2.2]
6. 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, 6.4.4]
7. Operator shall submit the records of TVP testing to the District within 45 days after the date of testing. The record shall include the tank identification number, Permit to Operate number, type of stored organic liquid, TVP and API gravity of the stored organic liquid, test methods used, and a copy of the test results. [District Rule 4623, 6.3.6]
8. Permittee shall maintain records of 3-day rolling average crude oil throughput and shall keep accurate records of each organic liquid stored in the tank, including its storage temperature, TVP, and API gravity. [District Rule 2520, 9.3.2 & District Rule 4623, 6.3.1]
9. 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]
10. Formerly permit number S-1342-46.

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-1326-357-0

**EXPIRATION DATE:** 03/31/2006

**SECTION:** 03 **TOWNSHIP:** 28S **RANGE:** 27E

**EQUIPMENT DESCRIPTION:**

42,000 GALLON FIXED ROOF PETROLEUM STORAGE TANK WITH PRESSURE/VACUUM VENT (#117049, DAVIES LEASE)

## PERMIT UNIT REQUIREMENTS

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1. Throughput of oil shall not exceed 42,000 gallons per 3 day period. [District NSR Rule]
2. The true vapor pressure (TVP) of any liquid introduced, stored or held in the tank shall not exceed 0.5 psia at storage temperature. [District Rule 4623, 2.0]
3. True vapor pressure and API gravity of liquids introduced, stored or held in the tank shall be measured at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored. In lieu of testing each uncontrolled fixed roof tank, operator may conduct a TVP testing of a representative tank provided that a representative testing plan (meeting the requirements of sections 6.2.1.1.1 through 6.2.1.1.5 of District Rule 4623) received and approved by APCO. [District Rule 4623, 6.2.2]
4. 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 Rules 4623, 6.2.1.2]
5. 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, 6.2.2]
6. 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, 6.4.4]
7. Operator shall submit the records of TVP testing to the District within 45 days after the date of testing. The record shall include the tank identification number, Permit to Operate number, type of stored organic liquid, TVP and API gravity of the stored organic liquid, test methods used, and a copy of the test results. [District Rule 4623, 6.3.6]
8. Permittee shall maintain records of 3-day rolling average crude oil throughput and shall keep accurate records of each organic liquid stored in the tank, including its storage temperature, TVP, and API gravity. [District Rule 2520, 9.3.2 & District Rule 4623; 6.3.1]
9. 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]
10. Formerly permit number S-1342-54.

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-1326-358-0

**EXPIRATION DATE:** 03/31/2006

**SECTION:** 03 **TOWNSHIP:** 28S **RANGE:** 27E

**EQUIPMENT DESCRIPTION:**

42,000 GALLON FIXED ROOF PETROLEUM STORAGE TANK WITH PRESSURE/VACUUM VENT (#117050, DAVIES LEASE)

## PERMIT UNIT REQUIREMENTS

---

1. Throughput of oil shall not exceed 42,000 gallons per 3 day period. [District NSR Rule]
2. The true vapor pressure (TVP) of any liquid introduced, stored or held in the tank shall not exceed 0.5 psia at storage temperature. [District Rule 4623, 2.0]
3. True vapor pressure and API gravity of liquids introduced, stored or held in the tank shall be measured at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored. In lieu of testing each uncontrolled fixed roof tank, operator may conduct a TVP testing of a representative tank provided that a representative testing plan (meeting the requirements of sections 6.2.1.1.1 through 6.2.1.1.5 of District Rule 4623) received and approved by APCO. [District Rule 4623, 6.2.2]
4. 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 Rules 4623, 6.2.1.2]
5. 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, 6.2.2]
6. 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, 6.4.4]
7. Operator shall submit the records of TVP testing to the District within 45 days after the date of testing. The record shall include the tank identification number, Permit to Operate number, type of stored organic liquid, TVP and API gravity of the stored organic liquid, test methods used, and a copy of the test results. [District Rule 4623, 6.3.6]
8. Permittee shall maintain records of 3-day rolling average crude oil throughput and shall keep accurate records of each organic liquid stored in the tank, including its storage temperature, TVP, and API gravity. [District Rule 2520, 9.3.2 & District Rule 4623, 6.3.1]
9. 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]
10. Formerly permit number S-1342-55.

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-1326-360-0

**EXPIRATION DATE:** 03/31/2006

**SECTION:** SW15 **TOWNSHIP:** 29S **RANGE:** 29E

**EQUIPMENT DESCRIPTION:**

126,000 GALLON, 29 FT. DIA., FIXED ROOF WASH TANK INCLUDING: FWKO VESSEL, WEMCO OIL/WATER SEPARATOR, AND SHARED VAPOR CONTROL SYSTEM (ANTHILL LEASE)

## PERMIT UNIT REQUIREMENTS

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1. Tank shall only vent to vapor control system. [District NSR Rule]
2. Existing oil production sumps shall be used for intermittent or emergency collection of crude oil and water pursuant to Rule 1100 and 4402, or used exclusively for storage of fresh or clean produced water. [District NSR Rule & District Rule 1100]
3. Storage tank shall be equipped with shared tank vapor control system and associated piping to permit unit #S-1326-360, '-361, '-362, and '-370. [District NSR Rule]
4. Collected noncondensable vapors from the shared tank vapor control system shall be incinerated in: boiler #S-1326-339, steam generator #S-1326-369, or flare #S-1326-382. [District NSR Rule]
5. Vapor control system shall prevent at least 99% of tank VOC vapors from being emitted to the atmosphere and shall be maintained in a gas-tight condition. [District NSR Rule]
6. "Gas-tight" shall be defined as emitting no more than 10,000 ppm of methane measured at a distance of one centimeter from potential source with an instrument calibrated with methane in accordance with EPA Method 21. Emissions in excess of this is considered a leak. [District NSR Rule]
7. Any tank gauging or sampling device shall be equipped with a gas-tight cover which shall be closed at all times except during gauging or sampling. [District NSR Rule]
8. Tank roof and all tank seams, welds, joints, piping, valves and fittings shall be constructed and maintained in a gas-tight condition. [District NSR Rule]
9. The operator 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]
10. Formerly permit number S-1342-63.

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



# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-1326-361-0

**EXPIRATION DATE:** 03/31/2006

**SECTION:** SW15 **TOWNSHIP:** 29S **RANGE:** 29E

**EQUIPMENT DESCRIPTION:**

84,000 GALLON, 29 FT. DIA., FIXED ROOF STORAGE TANK WITH SHARED VAPOR CONTROL (ANTHILL LEASE)

## PERMIT UNIT REQUIREMENTS

---

1. Tank shall vent only to tank vapor control system shared with permit unit #S-1326-360. [District NSR Rule]
2. Existing oil production sumps shall be used for intermittent or emergency collection of crude oil and water pursuant to Rule 1100 and 4402, or used exclusively for storage of fresh or clean produced water. [District NSR Rule & District Rule 1100]
3. Vapor control system shall prevent at least 99% of tank VOC vapors from being emitted to the atmosphere and shall be maintained in a gas-tight condition. [District NSR Rule]
4. "Gas-tight" shall be defined as emitting no more than 10,000 ppm of methane measured at a distance of one centimeter from potential source with an instrument calibrated with methane in accordance with EPA Method 21. Emissions in excess of this is considered a leak. [District NSR Rule]
5. Any tank gauging or sampling device shall be equipped with a gas-tight cover which shall be closed at all times except during gauging or sampling. [District NSR Rule]
6. Tank roof and all tank seams, welds, joints, piping, valves and fittings shall be constructed and maintained in a gas-tight condition. [District NSR Rule]
7. The operator 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]
8. Formerly permit number S-1342-64.

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-1326-362-0

**EXPIRATION DATE:** 03/31/2006

**SECTION:** SW15 **TOWNSHIP:** 29S **RANGE:** 29E

**EQUIPMENT DESCRIPTION:**

84,000 GALLON, 29 FT. DIA., FIXED ROOF STORAGE TANK WITH SHARED VAPOR CONTROL (ANTHILL LEASE)

## PERMIT UNIT REQUIREMENTS

---

1. Tank shall vent only to tank vapor control system shared with permit unit #S-1326-360. [District NSR Rule]
2. Existing oil production sumps shall be used for intermittent or emergency collection of crude oil and water pursuant to Rule 1100 and 4402, or used exclusively for storage of fresh or clean produced water. [District NSR Rule & District Rule 1100]
3. Vapor control system shall prevent at least 99% of tank VOC vapors from being emitted to the atmosphere and shall be maintained in a gas-tight condition. [District NSR Rule]
4. "Gas-tight" shall be defined as emitting no more than 10,000 ppm of methane measured at a distance of one centimeter from potential source with an instrument calibrated with methane in accordance with EPA Method 21. Emissions in excess of this is considered a leak. [District NSR Rule]
5. Any tank gauging or sampling device shall be equipped with a gas-tight cover which shall be closed at all times except during gauging or sampling. [District NSR Rule]
6. Tank roof and all tank seams, welds, joints, piping, valves and fittings shall be constructed and maintained in a gas-tight condition. [District NSR Rule]
7. The operator 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]
8. Formerly permit number S-1342-65.

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-1326-363-0

**EXPIRATION DATE:** 03/31/2006

**SECTION:** 15 **TOWNSHIP:** 29S **RANGE:** 29E

**EQUIPMENT DESCRIPTION:**

31,500 GALLON FIXED ROOF PETROLEUM STORAGE TANK NO. 002317 WITH PRESSURE/VACUUM VENT  
(ANTHILL LEASE)

## PERMIT UNIT REQUIREMENTS

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1. Throughput of oil shall not exceed 31,500 gallons per 3 day period. [District NSR Rule]
2. The true vapor pressure (TVP) of any liquid introduced, stored or held in the tank shall not exceed 1.5 psia at storage temperature. [District Rule 4623, 5.1.2]
3. This tank shall be equipped with a pressure-vacuum (PV) relief valve set to within 10% of the maximum allowable working pressure of the tank, permanently labeled with the operating pressure settings, properly maintained in good operating order in accordance with the manufacturer's instructions, and shall remain in gas-tight condition except when the operating pressure exceeds the valve's set pressure. [District Rule 4623, 5.2]
4. This tank shall be in a gas-tight condition. A gas-tight condition is defined as a condition without a gas leak. A gas leak is defined as a reading in excess of 10,000 ppmv, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21. A reading in excess of 10,000 ppmv above background is a violation of this permit and Rule 4623. [District Rule 4623, 5.2, 3.9]
5. True vapor pressure of liquids introduced, stored or held in the tank shall be measured at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored using the latest version of the Lawrence Berkeley National Laboratory Test Method for Vapor Pressure of Reactive Organic Compounds in Heavy Crude Oil Using Gas Chromatograph, as approved by ARB and EPA. In lieu of testing each tank, operator may conduct a TVP testing of a representative tank provided that a representative testing plan (meeting the requirements of sections 6.2.1.1.1 through 6.2.1.1.5 of District Rule 4623) received and approved by APCO. [District Rule 4623, 6.2.2, 6.4.4]
6. Operator shall submit the records of TVP testing to the District within 45 days after the date of testing. The record shall include the tank identification number, Permit to Operate number, type of stored organic liquid, TVP and API gravity of the stored organic liquid, test methods used, and a copy of the test results. [District Rule 4623, 6.3.6]
7. Permittee shall maintain records of 3-day rolling average crude oil throughput and shall keep accurate records of each organic liquid stored in the tank, including its storage temperature, TVP, and API gravity. [District NSR Rule and District Rule 4623, 6.3.1]
8. 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]
9. Formerly permit number S-1342-66.

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

# San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1326-365-0

EXPIRATION DATE: 03/31/2006

SECTION: 32 TOWNSHIP: 11N RANGE: 19W

**EQUIPMENT DESCRIPTION:**

52,500 GALLON FIXED ROOF WASH TANK (JV LEASE)

## PERMIT UNIT REQUIREMENTS

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1. The true vapor pressure (TVP) of any liquid introduced, stored or held in the tank shall not exceed 0.5 psia at storage temperature. [District Rule 4623, 2.0]
2. True vapor pressure and API gravity of liquids introduced, stored or held in the tank shall be measured at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored. In lieu of testing each uncontrolled fixed roof tank, operator may conduct a TVP testing of a representative tank provided that a representative testing plan (meeting the requirements of sections 6.2.1.1.1 through 6.2.1.1.5 of District Rule 4623) received and approved by APCO. [District Rule 4623, 6.2.2]
3. 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 Rules 4623, 6.2.1.2]
4. 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, 6.2.2]
5. 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, 6.4.4]
6. Operator shall submit the records of TVP testing to the District within 45 days after the date of testing. The record shall include the tank identification number, Permit to Operate number, type of stored organic liquid, TVP and API gravity of the stored organic liquid, test methods used, and a copy of the test results. [District Rule 4623, 6.3.6]
7. Permittee shall keep accurate records of each organic liquid stored in the tank, including its storage temperature, TVP, and API gravity. [District Rule 4623, 6.3.1]
8. 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]
9. Formerly permit number S-1342-70.

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-1326-366-0

**EXPIRATION DATE:** 03/31/2006

**SECTION:** 32 **TOWNSHIP:** 11N **RANGE:** 19W

**EQUIPMENT DESCRIPTION:**

42,000 GALLON FIXED ROOF PETROLEUM STOCK TANK WITH PRESSURE/VACUUM VENT (#10X901, JV LEASE)

## PERMIT UNIT REQUIREMENTS

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1. Throughput of oil shall not exceed 42,000 gallons per 3 day period. [District NSR Rule]
2. The true vapor pressure (TVP) of any liquid introduced, stored or held in the tank shall not exceed 0.5 psia at storage temperature. [District Rule 4623, 2.0]
3. True vapor pressure and API gravity of liquids introduced, stored or held in the tank shall be measured at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored. In lieu of testing each uncontrolled fixed roof tank, operator may conduct a TVP testing of a representative tank provided that a representative testing plan (meeting the requirements of sections 6.2.1.1.1 through 6.2.1.1.5 of District Rule 4623) received and approved by APCO. [District Rule 4623, 6.2.2]
4. 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 Rules 4623, 6.2.1.2]
5. 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, 6.2.2]
6. 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, 6.4.4]
7. Operator shall submit the records of TVP testing to the District within 45 days after the date of testing. The record shall include the tank identification number, Permit to Operate number, type of stored organic liquid, TVP and API gravity of the stored organic liquid, test methods used, and a copy of the test results. [District Rule 4623, 6.3.6]
8. Permittee shall maintain records of 3-day rolling average crude oil throughput and shall keep accurate records of each organic liquid stored in the tank, including its storage temperature, TVP, and API gravity. [District Rule 2520, 9.3.2 & District Rule 4623, 6.3.1]
9. 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]
10. Formerly permit number S-1342-71.

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-1326-367-0

**EXPIRATION DATE:** 03/31/2006

**SECTION:** 33 **TOWNSHIP:** 11N **RANGE:** 19W

**EQUIPMENT DESCRIPTION:**

42,000 GALLON FIXED ROOF PETROLEUM STORAGE TANK WITH PRESSURE VACUUM VENT #10X1853.(OMB LEASE)

## PERMIT UNIT REQUIREMENTS

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1. Throughput of oil shall not exceed 42,000 gallons per 3 day period. [District NSR Rule]
2. The true vapor pressure (TVP) of any liquid introduced, stored or held in the tank shall not exceed 0.5 psia at storage temperature. [District Rule 4623, 2.0]
3. True vapor pressure and API gravity of liquids introduced, stored or held in the tank shall be measured at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored. In lieu of testing each uncontrolled fixed roof tank, operator may conduct a TVP testing of a representative tank provided that a representative testing plan (meeting the requirements of sections 6.2.1.1.1 through 6.2.1.1.5 of District Rule 4623) received and approved by APCO. [District Rule 4623, 6.2.2]
4. 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 Rules 4623, 6.2.1.2]
5. 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, 6.2.2]
6. 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, 6.4.4]
7. Operator shall submit the records of TVP testing to the District within 45 days after the date of testing. The record shall include the tank identification number, Permit to Operate number, type of stored organic liquid, TVP and API gravity of the stored organic liquid, test methods used, and a copy of the test results. [District Rule 4623, 6.3.6]
8. Permittee shall maintain records of 3-day rolling average crude oil throughput and shall keep accurate records of each organic liquid stored in the tank, including its storage temperature, TVP, and API gravity. [District Rule 2520, 9.3.2 & District Rule 4623, 6.3.1]
9. 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]
10. Formerly permit number S-1342-74.

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

# San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1326-368-0

EXPIRATION DATE: 03/31/2006

SECTION: 11 TOWNSHIP: 28S RANGE: 27E

**EQUIPMENT DESCRIPTION:**

21,000 GALLON (500 BBL) FIXED ROOF PETROLEUM STORAGE TANK WITH PRESSURE/VACUUM VENT (CARREC FEE LEASE)

## PERMIT UNIT REQUIREMENTS

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1. Throughput of oil shall not exceed 21,000 gallons per 3 day period. [District NSR Rule]
2. The true vapor pressure (TVP) of any liquid introduced, stored or held in the tank shall not exceed 1.5 psia at storage temperature. [District Rule 4623, 5.1.2]
3. This tank shall be equipped with a pressure-vacuum (PV) relief valve set to within 10% of the maximum allowable working pressure of the tank, permanently labeled with the operating pressure settings, properly maintained in good operating order in accordance with the manufacturer's instructions, and shall remain in gas-tight condition except when the operating pressure exceeds the valve's set pressure. [District Rule 4623, 5.2]
4. This tank shall be in a gas-tight condition. A gas-tight condition is defined as a condition without a gas leak. A gas leak is defined as a reading in excess of 10,000 ppmv, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21. A reading in excess of 10,000 ppmv above background is a violation of this permit and Rule 4623. [District Rule 4623, 5.2, 3.9]
5. True vapor pressure of liquids introduced, stored or held in the tank shall be measured at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored using the latest version of the Lawrence Berkeley National Laboratory Test Method for Vapor Pressure of Reactive Organic Compounds in Heavy Crude Oil Using Gas Chromatograph, as approved by ARB and EPA. In lieu of testing each tank, operator may conduct a TVP testing of a representative tank provided that a representative testing plan (meeting the requirements of sections 6.2.1.1.1 through 6.2.1.1.5 of District Rule 4623) received and approved by APCO. [District Rule 4623, 6.2.2, 6.4.4]
6. Operator shall submit the records of TVP testing to the District within 45 days after the date of testing. The record shall include the tank identification number, Permit to Operate number, type of stored organic liquid, TVP and API gravity of the stored organic liquid, test methods used, and a copy of the test results. [District Rule 4623, 6.3.6]
7. Permittee shall maintain records of 3-day rolling average crude oil throughput and shall keep accurate records of each organic liquid stored in the tank, including its storage temperature, TVP, and API gravity. [District NSR Rule and District Rule 4623, 6.3.1]
8. 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]
9. Formerly permit number S-1342-75.

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

# San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1326-369-0

EXPIRATION DATE: 03/31/2006

SECTION: SW32 TOWNSHIP: 11N RANGE: 19W

## EQUIPMENT DESCRIPTION:

25 MM BTU/HR STEAM GENERATOR WITH NORTH AMERICAN LOW-NOX BURNER AND O2 MONITOR/CONTROLLER

## PERMIT UNIT REQUIREMENTS

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1. This equipment shall not be operated for any reason until necessary retrofits are made to comply with the applicable requirements of District Rules 4305 and 4306. [District Rules 4305 and 4306]
2. No modification to this unit shall be performed without an Authority to Construct for that modification(s), except for changes specified in condition 4 below. [District NSR Rule]
3. The fuel supply line shall be physically disconnected from this unit. [District Rule 2080]
4. Approved locations for this equipment: NE10, SE10 and SE11, T28S/R27E; SW15 and SW22, T29S/R29E; SW32 and SE32, T11N/R19W and SE4, T30S/R29E. [District Rule 4102]
5. Permittee shall notify the District Compliance Division of each location at which the operation is located in excess of 24 hours. Such notification shall be made no later than 48 hours after starting operation at the location. [District Rule 1070]
6. Generator shall be equipped with natural gas volume flowmeter and continuous operation flue gas oxygen monitor/controller. [District Rule 2201]
7. Excess O2 shall be maintained between 0.5 and 4.0%. [District Rule 2201]
8. Steam generator shall be fired only on natural gas and/or noncondensable vapors from shared tank vapor control system listed on permit unit S-1342-63. [District Rule 2201]
9. Total sulfur content of natural gas shall not exceed 0.2 grain/100 scf. [District Rule 2201]
10. Emission rates shall not exceed the following: PM10: 0.013 lb/MMBtu, SOx (as SO2): 0.001 lb/MMBtu, NOx (as NO2): 0.036 lb/MMBtu, VOC: 0.0026 lb/MMBtu and CO: 0.033 lb/MMBtu. [District Rule 2201]
11. Permittee shall demonstrate compliance with fuel gas sulfur content limit within 60 days of startup and thereafter, upon District request, by sample analysis by independent testing laboratory or by written verification from the fuel supplier. [District Rule 1081]
12. Upon District request, permittee shall determine, by sample analysis by independent testing laboratory or other District approved method, the total sulfur content of the noncondensable vapors from the tank battery vapor control system. [District Rule 1081]
13. Compliance with NOx and CO emission limits shall be demonstrated within 60 days of startup and, thereafter, not less than once every 12 months, except as provided below. [District Rule 4305]
14. Compliance with NOx and CO emission limits shall be demonstrated not less than once every 36 months if compliance is demonstrated on two consecutive annual compliance tests. [District Rule 4305]

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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



15. If permittee fails any compliance demonstration for NOx or CO emissions limits when testing not less than once every 36 months, compliance with NOx and CO emission limits shall be demonstrated not less than once every 12 months. [District Rule 4305]
16. Source testing shall be conducted at conditions typical of normal operation. [District Rule 1081]
17. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081]
18. Sampling facilities for source testing shall be provided in accordance with the provisions of Rule 1081 (Source Sampling). [District Rule 1081]
19. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081]
20. Permittee shall maintain accurate records of heating value (in Btu/scf) and daily consumption of natural gas, and such records shall be made readily available for District inspection upon request for a period of two years. [District Rule 1070]
21. Formerly permit number S-1342-76.

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

**San Joaquin Valley  
Air Pollution Control District**

**PERMIT UNIT:** S-1326-370-0

**EXPIRATION DATE:** 03/31/2006

**SECTION:** SW15 **TOWNSHIP:** 29S **RANGE:** 29E

**EQUIPMENT DESCRIPTION:**

10,500 GALLON FIXED ROOF DRAIN TANK WITH VAPOR CONTROL

**PERMIT UNIT REQUIREMENTS**

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1. Reid vapor pressure (RVP) of any material stored in tank shall not exceed 1.0 psia. [District NSR Rule]
2. Temperature of any material stored in tank shall not exceed 190 degrees F. [District NSR Rule]
3. The average throughput shall not exceed 8,400 gallons per day, calculated on monthly basis. [District NSR Rule]
4. Tank shall vent only to tank vapor control system shared with permit unit #S-1326-360. [District NSR Rule]
5. Vapor control system shall prevent at least 99% of tank VOC vapors from being emitted to the atmosphere and shall be maintained in a gas-tight condition. [District NSR Rule]
6. "Gas-tight" shall be defined as emitting no more than 10,000 ppm of methane measured at a distance of one centimeter from potential source with an instrument calibrated with methane in accordance with EPA Method 21. Emissions in excess of this is considered a leak. [District NSR Rule]
7. Any tank gauging or sampling device shall be equipped with a gas-tight cover which shall be closed at all times except during gauging or sampling. [District NSR Rule]
8. Tank roof and all tank seams, welds, joints, piping, valves and fittings shall be constructed and maintained in a gas-tight condition. [District NSR Rule]
9. The operator 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]
10. Permittee shall maintain accurate monthly records of storage temperature and tank throughput and shall make such records readily available for District inspection upon request. [District NSR Rule]
11. Permittee shall maintain accurate records of RVP, updated at least once every 12 months and make such records readily available for District inspection upon request. [District NSR Rule]
12. Formerly permit number S-1342-78.

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

# San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1326-371-0.

EXPIRATION DATE: 03/31/2006

**EQUIPMENT DESCRIPTION:**

180 HP DIESEL FIRED DETROIT DIESEL 6V53 TRANSPORTABLE IC ENGINE DRIVING POSITIVE DISPLACEMENT PUMP IN WELL PUMP SERVICE

## PERMIT UNIT REQUIREMENTS

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1. Approved locations for this equipment: any site within the permittee's Heavy Oil Central Stationary Source, except as noted below. [District NSR Rule]
2. This equipment shall not be operated within 1000 feet of any K-12 school. [CH&SC 42301.6]
3. This transportable engine shall not be operated at one location for no more than 12 consecutive months and shall meet all the requirements of a transportable engine, per District Rule 4701 (amended August 21, 2003). [District Rule 4701, 3.24]
4. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [District Rule 4801 & Kern County Rule 407]
5. Particulate matter emissions shall not exceed in concentration at the point of discharge 0.1 gr/dscf. [District Rule 4201]
6. If the IC engine is fired on Air Resources Board regulated diesel fuel, with a supplier certified sulfur content less than 0.05% by weight, the operator shall maintain copies of all fuel invoices and supplier certifications. [District Rule 4801]
7. If the IC engine is not fired on ARB regulated diesel fuel, with a supplier certified sulfur content less than 0.05% by weight, then the owner or operator shall determine the sulfur content of each delivery of diesel fuel being fired in the IC engine. The sulfur content shall be determined using ASTM method D 2880. [District Rule 4801]
8. Permittee shall maintain following annual operating records: 1) Total hours of operation, 2) type and quantity of fuel used, 3) purpose of operating engine, 4) dates and locations where this equipment is operated, and 5) other support documentation necessary to claim Transportable Engine exemption, as defined in District Rule 4701, 3.24 (amended August 21, 2003). These records shall be submitted to the District upon request and at end of each calendar year. [District Rule 4701, 6.2.2]
9. The engine shall be operated no more than 200 hours per calendar year [District Rule 4702]
10. The permittee shall install and operate a nonresettable fuel meter and a nonresettable elapsed operating time meter. In lieu of installing a nonresettable fuel meter, the owner or operator may use a non-resettable elapsed operating time meter in conjunction with the engine manufacturer's maximum rated fuel consumption to determine annual fuel usage. [District Rules 4701 and 4702, 5.6.6]
11. The operator of an internal combustion (IC) engine shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 4701, 6.2.3]
12. Formerly permit number S-1342-83.

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

# San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1326-372-0

EXPIRATION DATE: 03/31/2006

SECTION: SW32 TOWNSHIP: 11N RANGE: 19W

**EQUIPMENT DESCRIPTION:**

23 STEAM ENHANCED CRUDE OIL PRODUCTION WELLS WITH CLOSED WELL VENTS

## PERMIT UNIT REQUIREMENTS

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1. Fugitive emission rate of volatile organic compounds shall not exceed 4.4 pounds per day. [District NSR Rule]
2. Wells shall produce only into closed production equipment and vapor controlled tanks S-1326-373, -374, and -375. [District NSR Rule]
3. Well casing vent vapors shall not be vented to the atmosphere and well casing vents shall remain closed to the atmosphere at all times, except during periods of service or repair, as defined in Rule 4401, when wells are not producing. The uncontrolled VOC emissions from any well vent shall be reduced by at least 99 percent by weight. [District NSR Rule and District Rule 4401, 5.1]
4. Gas leak shall be defined as emitting more than 10,000 ppm of methane measured at a distance of one centimeter from the potential source with an instrument calibrated with methane in accordance with EPA Method 21. [District Rule 4401, 3.4]
5. Total number of leaks from the vapor collection and control system, including condensate handling, shall not exceed the number as allowed by Rule 4401 (as amended December 17, 1992) at any one time. [District Rule 4401, 5.3]
6. Operator shall affix a readily visible tag bearing the date on which a leak is detected. The tag shall remain in place until the leaking component is repaired. [District Rule 4401, 5.3.1]
7. Operator shall repair each leak within 15 days of detection. The APCO may grant a 10 day extension if the operator demonstrates that the necessary and sufficient actions have and are being taken to correct the leak. [District Rule 4401, 5.3.1]
8. The operator shall maintain monitoring records of the date and well identification where steam injection or well stimulation occurs. [District Rule 4401, 6.1]
9. An accurate roster of all cyclic wells on this Permit shall be maintained and made readily available for District inspection upon request. [District Rule 4401]
10. Formerly permit number S-1342-84.

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

# San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1326-373-4

EXPIRATION DATE: 03/31/2006

SECTION: SW32 TOWNSHIP: 11N RANGE: 19W

## EQUIPMENT DESCRIPTION:

3000 BBL HEATED, FIXED ROOF WASH TANK WITH VAPOR CONTROL SYSTEM ALSO SERVING TANKS S-1326-374, -375, AND -381, CONSISTING OF A FWKO, A COMPRESSOR AND PIPING TO VAPOR INCINERATION DEVICES

## PERMIT UNIT REQUIREMENTS

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1. VOC emissions from the tank headspace shall be collected by an operational vapor collection system shared among tanks S-1326-373, -374, -375, -381, and the free water knockout. Collected vapors shall be burned by either flare S-1326-376, steam generator S-1326-369, or Ajax Model SGXB 50000 permit exempt boiler. [District NSR Rule] Federally Enforceable Through Title V Permit
2. Vapor collection system shall consist of one vapor compressor and vapor collection piping. All components of vapor collection system shall be maintained in good repair. [District NSR Rule] Federally Enforceable Through Title V Permit
3. The tank shall be equipped with a vapor recovery system consisting of a closed vent system that collects all VOCs from the storage tank, and a VOC control device. The vapor recovery system shall be APCO-approved and maintained in gas-tight condition. The VOC control device shall be either of the following: a vapor return or condensation system that connects to a gas pipeline distribution system, or an approved VOC destruction device that reduces the inlet VOC emissions by at least 99% by weight as determined by the test method specified in Rule 4623 Section 6.4.7. [District Rule 2201] Federally Enforceable Through Title V Permit
4. VOC emission rate from vapor service components associated with tank and vapor control system shall not exceed 0.1 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Permittee shall maintain with the permit accurate fugitive component counts and resulting emissions from tank using California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities Table IV-2C: Oil and Gas Production Screening Value Ranges (<10,000 ppmv) Emission Factors. [District Rule 2201] Federally Enforceable Through Title V Permit
6. There shall be no leaks exceeding 10,000 ppmv from fugitive emissions components associated with tank. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Gas-leak concentration shall be determined by EPA Method 21. [District Rule 2201] Federally Enforceable Through Title V Permit
8. 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 2201] Federally Enforceable Through Title V Permit
9. All piping, valves, and fittings shall be constructed and maintained in a leak-free condition. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

10. A leak-free condition is defined as a condition without a gas leak or liquid 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 liquid leak is defined as the dripping of organic liquid at a rate of more than 3 drops per minute. [District Rule 4623; 3.1.1, 3.1.7, and 3.1.8] Federally Enforceable Through Title V Permit
11. Any tank gauging or sampling device on a tank vented to the vapor recovery system shall be equipped with a leak-free cover which shall be closed at all times except during gauging or sampling. [District Rule 2201] Federally Enforceable Through Title V Permit
12. 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 shell and roof of the uninsulated tank for structural integrity annually. [District Rule 2210] Federally Enforceable Through Title V Permit
13. 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 2210] Federally Enforceable Through Title V Permit
14. 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 on 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 2201] Federally Enforceable Through Title V Permit
15. 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 2201] Federally Enforceable Through Title V Permit
16. 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 2201] Federally Enforceable Through Title V Permit
17. If a component type for the tank is found to leak during an annual inspection, operator shall conduct quarterly inspections of that component type on the tank for four consecutive quarters. If no components are found to leak after four consecutive quarters, the operator may revert to annual inspections. [District Rule 2201] Federally Enforceable Through Title V Permit
18. Any component found to be leaking on two consecutive quarterly inspections is in violation of the District Rule 4623, even if it is under the voluntary inspection and maintenance program. [District Rule 2201] Federally Enforceable Through Title V Permit
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 2201] Federally Enforceable Through Title V Permit
20. This permit authorizes tank cleaning that is not the result of breakdowns or poor maintenance as a routine maintenance activity. [District Rules 2020 and 2080] Federally Enforceable Through Title V Permit
21. Permittee shall maintain records of annual tank inspections, maintenance, and cleaning to document the participation in the Rule 4623 Fixed Roof Tank Preventative Inspection, Maintenance and Tank Interior Cleaning Program. [District Rules 2020 and 2080] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

22. Permittee shall comply with all applicable Tank Interior Cleaning Program requirements specified in Table 3 of Rule 4623. [District Rules 2020 and 2080] Federally Enforceable Through Title V Permit
23. The operator shall keep accurate records of types, storage temperature, and Reid vapor pressure of liquids stored. The operator shall maintain monthly records of average daily throughput. Records shall be made available to District personnel upon request. [District NSR Rule] Federally Enforceable Through Title V Permit
24. All records required to be maintained by this permit shall be maintained for a period of at least five years and shall be made readily available for District inspection upon request. [District Rule 4623] Federally Enforceable Through Title V Permit
25. Formerly permit number S-1342-85.

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-1326-374-0

**EXPIRATION DATE:** 03/31/2006

**SECTION:** SW32 **TOWNSHIP:** 11N **RANGE:** 19W

**EQUIPMENT DESCRIPTION:**

2000 BBL (84,000 GALLON) HEATED FIXED ROOF STOCK TANK SERVED BY VRS SHARED WITH S-1326-373

## PERMIT UNIT REQUIREMENTS

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1. The average oil throughput shall not exceed 1,000 bbl/day, calculated on monthly basis. [District NSR Rule]
2. The Reid vapor pressure of any material introduced to the tank or stored in the tank shall not exceed 0.6 psia. [District NSR Rule]
3. Tank shall be equipped with an operational stored liquid temperature indicator. The temperature of the tank contents shall not exceed 160 degrees Fahrenheit. [District NSR Rule]
4. Vapor control system shall prevent at least 99% of tank VOC vapors from being emitted to the atmosphere and shall be maintained in a gas-tight condition. [District NSR Rule]
5. "Gas-tight" shall be defined as emitting no more than 10,000 ppm of methane measured at a distance of one centimeter from potential source with an instrument calibrated with methane in accordance with EPA Method 21. Emissions in excess of this is considered a leak. [District NSR Rule]
6. Any tank gauging or sampling device shall be equipped with a gas-tight cover which shall be closed at all times except during gauging or sampling. [District NSR Rule]
7. Tank seams, welds, joints, piping, valves and fittings shall be constructed and maintained in a gas-tight condition. [District NSR Rule]
8. Tank roof and appurtenances shall be maintained gas-tight. [District NSR Rule]
9. The operator shall keep accurate records of types, storage temperature, and Reid vapor pressure of liquids stored. The operator shall maintain monthly records of average daily throughput. Records shall be made available to District personnel upon request. [District NSR Rule]
10. The operator 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]
11. Formerly permit number S-1342-86.

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



# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-1326-375-0

**EXPIRATION DATE:** 03/31/2006

**SECTION:** SW32 **TOWNSHIP:** 11N **RANGE:** 19W

**EQUIPMENT DESCRIPTION:**

2000 BBL (84,000 GALLON) HEATED FIXED ROOF STOCK TANK SERVED BY VRS SHARED WITH S-1326-373

## PERMIT UNIT REQUIREMENTS

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1. The average oil throughput shall not exceed 1,000 bbl/day, calculated on monthly basis. [District NSR Rule]
2. The Reid vapor pressure of any material introduced to the tank or stored in the tank shall not exceed 0.6 psia. [District NSR Rule]
3. Tank shall be equipped with an operational stored liquid temperature indicator. The temperature of the tank contents shall not exceed 160 degrees Fahrenheit. [District NSR Rule]
4. Vapor control system shall prevent at least 99% of tank VOC vapors from being emitted to the atmosphere and shall be maintained in a gas-tight condition. [District NSR Rule]
5. "Gas-tight" shall be defined as emitting no more than 10,000 ppm of methane measured at a distance of one centimeter from potential source with an instrument calibrated with methane in accordance with EPA Method 21. Emissions in excess of this is considered a leak. [District NSR Rule]
6. Any tank gauging or sampling device shall be equipped with a gas-tight cover which shall be closed at all times except during gauging or sampling. [District NSR Rule]
7. Tank seams, welds, joints, piping, valves and fittings shall be constructed and maintained in a gas-tight condition. [District NSR Rule]
8. Tank roof and appurtenances shall be maintained gas-tight. [District NSR Rule]
9. The operator shall keep accurate records of types, storage temperature, and Reid vapor pressure of liquids stored. The operator shall maintain monthly records of average daily throughput. Records shall be made available to District personnel upon request. [District NSR Rule]
10. The operator 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]
11. Formerly permit number S-1342-87.

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-1326-376-0

**EXPIRATION DATE:** 03/31/2006

**SECTION:** SW32 **TOWNSHIP:** 11N **RANGE:** 19W

**EQUIPMENT DESCRIPTION:**

6.1 MMBTU/HR FLARE INCINERATING WASTE GAS FROM VAPOR COLLECTION SYSTEM

## PERMIT UNIT REQUIREMENTS

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1. Flare shall operate in a smokeless manner (no greater than 5 % opacity) except for up to three minutes in any one hour. [District NSR Rule]
2. No more than 300,000 standard cubic feet (scf) of gas shall be burned by the flare per day. [District NSR Rule]
3. No more than 10 MMscf of gas shall be burned by the flare per year. [District NSR Rule]
4. Emission rates shall not exceed any of the following: NOx (as NO2) - 0.068 lb/MMBtu; VOC - 0.063 lb/MMBtu, PM10 - 0.008 lb/MMBtu or CO - 0.37 lb/MMBtu. [District NSR Rule]
5. Flared gas total sulfur content shall not exceed 1.0 gr/100 scf. [District NSR Rule]
6. The permit holder shall determine sulfur content of the flared gas at least once per year using AST Method D 3246 or double GC for H2S and mercaptans. [District NSR Rule]
7. The permit holder shall maintain records of the daily amounts of total gas flared each day and every year, and the sulfur content of the gas. Records shall be kept a minimum of five years and shall be made available for District inspection upon request [District NSR Rule]
8. Flare shall be operated with a flame present at all times when combustible gases vented through the flare. [District Rule 4311, 5.2]
9. Flare shall only be used with the net heating value of the gas being combusted being 300 Btu/scf or greater. [40 CFR 60.18 (c)(3) and District Rule 4311, 5.6]
10. The net heating value of the gas being combusted in a flare shall be determined annually, pursuant to 40 CFR 60.18(f)(3) using EPA Method 18, ASTM D1946, and ASTM D2382. [40 CFR 60.18 (f)(3) and District Rule 4311, 5.6]
11. Formerly permit number S-1342-88.

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-1326-377-0

**EXPIRATION DATE:** 03/31/2006

**SECTION:** SW33 **TOWNSHIP:** 11N **RANGE:** 19W

**EQUIPMENT DESCRIPTION:**

750 BBL (31,500 GAL) FIXED ROOF CRUDE OIL WASH TANK - OMB LEASE

## PERMIT UNIT REQUIREMENTS

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1. The true vapor pressure (TVP) of any liquid introduced, stored or held in the tank shall not exceed 1.5 psia at storage temperature. [District Rule 4623, 5.1.1]
2. This tank shall be equipped with a pressure-vacuum (PV) relief valve set to within 10% of the maximum allowable working pressure of the tank, permanently labeled with the operating pressure settings, properly maintained in good operating order in accordance with the manufacturer's instructions, and shall remain in gas-tight condition except when the operating pressure exceeds the valve's set pressure. [District Rule 4623, 5.2]
3. This tank shall be in a gas-tight condition. A gas-tight condition is defined as a condition without a gas leak. A gas leak is defined as a reading in excess of 10,000 ppmv, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21. A reading in excess of 10,000 ppmv above background is a violation of this permit and Rule 4623. [District Rule 4623, 5.2, 3.9]
4. True vapor pressure of liquids introduced, stored or held in the tank shall be measured at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored using the latest version of the Lawrence Berkeley National Laboratory Test Method for Vapor Pressure of Reactive Organic Compounds in Heavy Crude Oil Using Gas Chromatograph, as approved by ARB and EPA. In lieu of testing each tank, operator may conduct a TVP testing of a representative tank provided that a representative testing plan (meeting the requirements of sections 6.2.1.1.1 through 6.2.1.1.5 of District Rule 4623) received and approved by APCO. [District Rule 4623, 6.2.2, 6.4.4]
5. Operator shall submit the records of TVP testing to the District within 45 days after the date of testing. The record shall include the tank identification number, Permit to Operate number, type of stored organic liquid, TVP and API gravity of the stored organic liquid, test methods used, and a copy of the test results. [District Rule 4623, 6.3.6]
6. Permittee shall maintain accurate records of each organic liquid stored in the tank, including its storage temperature, TVP, and API gravity. [District Rule 4623, 6.3.1]
7. 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]
8. Formerly permit number S-1342-89.

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-1326-378-0

**EXPIRATION DATE:** 03/31/2006

**SECTION:** SW32 **TOWNSHIP:** 11 N **RANGE:** 19 W

**EQUIPMENT DESCRIPTION:**

42,000 GALLON FIXED ROOF PETROLEUM STORAGE TANK: ID #10X898 STOCK TANK

## PERMIT UNIT REQUIREMENTS

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1. The true vapor pressure (TVP) of any liquid introduced, stored or held in the tank shall not exceed 0.5 psia at storage temperature. [District Rule 4623, 2.0]
2. True vapor pressure and API gravity of liquids introduced, stored or held in the tank shall be measured at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored. In lieu of testing each uncontrolled fixed roof tank, operator may conduct a TVP testing of a representative tank provided that a representative testing plan (meeting the requirements of sections 6.2.1.1.1 through 6.2.1.1.5 of District Rule 4623) received and approved by APCO. [District Rule 4623, 6.2.2]
3. 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 Rules 4623, 6.2.1.2]
4. 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, 6.2.2]
5. 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, 6.4.4]
6. Operator shall submit the records of TVP testing to the District within 45 days after the date of testing. The record shall include the tank identification number, Permit to Operate number, type of stored organic liquid, TVP and API gravity of the stored organic liquid, test methods used, and a copy of the test results. [District Rule 4623, 6.3.6]
7. Permittee shall keep accurate records of each organic liquid stored in the tank, including its storage temperature, TVP, and API gravity. [District Rule 4623, 6.3.1]
8. 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]
9. Formerly permit number S-1342-96.

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-1326-381-0

**EXPIRATION DATE:** 03/31/2006

**SECTION:** SW32 **TOWNSHIP:** 11N **RANGE:** 19W

**EQUIPMENT DESCRIPTION:**

84,000 GALLON CRUDE OIL PRODUCTION TANK SERVED BY A VAPOR RECOVERY SYSTEM SHARED WITH PERMIT UNIT S-1326-373

## PERMIT UNIT REQUIREMENTS

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1. The average oil throughput shall not exceed 2,000 bbl/day, calculated on monthly basis. [District NSR Rule]
2. The Reid vapor pressure of any material introduced to the tank or stored in the tank shall not exceed 0.6 psia. [District NSR Rule]
3. Tank shall be equipped with an operational stored liquid temperature indicator. The temperature of the tank contents shall not exceed 190 degrees Fahrenheit. [District NSR Rule]
4. VOC emissions from the tank headspace shall be collected by an operational vapor collection system shared among tanks S-1326-373, -374, -375, -381, and the free water knockout. Collected vapors shall be burned by either flare S-1326-376, steam generator S-1326-369, or Ajax Model SGXB 50000 permit exempt boiler. [District NSR Rule]
5. Vapor collection system shall consist of one vapor compressor and vapor collection piping. All components of vapor collection system shall be maintained in good repair. [District NSR Rule]
6. Vapor control system shall prevent at least 99% of tank VOC vapors from being emitted to the atmosphere and shall be maintained in a gas-tight condition. [District NSR Rule]
7. "Gas-tight" shall be defined as emitting no more than 10,000 ppm of methane measured at a distance of one centimeter from potential source with an instrument calibrated with methane in accordance with EPA Method 21. Emissions in excess of this is considered a leak. [District NSR Rule]
8. Any tank gauging or sampling device shall be equipped with a gas-tight cover which shall be closed at all times except during gauging or sampling. [District NSR Rule]
9. Tank seams, welds, joints, piping, valves and fittings shall be constructed and maintained in a gas-tight condition. [District NSR Rule]
10. Tank roof and appurtenances shall be maintained gas-tight. [District NSR Rule]
11. The operator shall keep accurate records of types, storage temperature, and Reid vapor pressure of liquids stored. The operator shall maintain monthly records of average daily throughput. Records shall be made available to District personnel upon request. [District NSR Rule]
12. The operator 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]
13. Formerly permit number S-1342-100.

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-1326-382-0

**EXPIRATION DATE:** 03/31/2006

**SECTION:** SW15 **TOWNSHIP:** 29S **RANGE:** 29E

**EQUIPMENT DESCRIPTION:**

25 FOOT TALL MACTRONIC AIR-ASSISTED PROCESS FLARE WITH 6 INCH DIAMETER FLARE STACK AND AUTOMATIC RE-IGNITION

## PERMIT UNIT REQUIREMENTS

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1. Flare shall be equipped with total waste gas volume flow meter (measuring gas from the Heavy Oil Central and Light Oil Central Stationary Source). Gas line from Light Oil Central Stationary Source (Section 34) shall be equipped with waste gas volume flow meter. [District NSR Rule]
2. Volume of gas flared from Heavy Oil Central Stationary Source (Section 15) shall be determined as the difference between the total volume of gas flared (from Light Oil and Heavy Oil Central Stationary Source) and the volume of gas flared from the Light Oil Central Stationary Source (Section 34). [District NSR Rule]
3. Flare air-assist blower shall be maintained and operated for smokeless combustion, i.e. no visible emissions in excess of 5% opacity or 1/4 Ringelmann. [District NSR Rule]
4. This permit does not authorize the utilization of any IC engine, or other combustion device requiring a separate permit, for powering the air assist to the flare. [District NSR Rule]
5. Flare shall operate in a smokeless manner (no greater than 5% opacity) except for three minutes in any one hour. [District NSR Rule]
6. Operator shall immediately utilize air assisted combustion if flare exhibits visible emissions greater than 0% opacity. [District NSR Rule]
7. Total sulfur (as H<sub>2</sub>S) concentration of gas incinerated in flare shall not exceed 19 ppmv. [District NSR Rule and District Rule 4801]
8. Maximum amount of gas combusted from Central Kern County fields heavy oil production stationary source (Section 15) shall not exceed 150,000 scf/day. [District NSR Rule]
9. Maximum amount of gas combusted from Central Kern County fields heavy oil production stationary source (Section 15) shall not exceed 9.2 MMscf/year. [District NSR Rule]
10. Emissions from the flare shall not exceed any of the following (based on total gas combusted): NO<sub>x</sub> (as NO<sub>2</sub>): 0.068 lb/MMBtu; PM<sub>10</sub>: 0.008 lb/MMBtu; CO: 0.37 lb/MMBtu; or VOC: 0.063 lb/MMBtu. [District NSR Rule]
11. Permittee shall measure sulfur content of gas incinerated in flare at least once every year. Such data shall be submitted to the District within 60 days of sample collection. [District NSR Rule and District Rule 4801]
12. Permittee shall determine sulfur content of gas flared using ASTM method D3246 or double GC for H<sub>2</sub>S and mercaptans. [District NSR Rule]
13. Permittee shall keep accurate records of daily, quarterly, and annual quantity of gas combusted, and such records shall be retained for a period of five years and made readily available for District inspection upon request. [District NSR Rule]

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

14. Flare shall only be used with the net heating value of the gas being combusted being 300 Btu/scf or greater. [40 CFR 60.18 (c)(3) and District Rule 4311, 5.6]
15. The net heating value of the gas being combusted in a flare shall be determined annually, pursuant to 40 CFR 60.18(f)(3) using EPA Method 18, ASTM D1946, and ASTM D2382. [40 CFR 60.18 (f)(3) and District Rule 4311, 5.6]
16. Flare shall be operated with a flame present at all times when combustible gases vented through the flare. [District Rule 4311, 5.2]
17. Formerly permit number S-1342-111.

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-1326-383-0

**EXPIRATION DATE:** 03/31/2006

**SECTION:** 32 **TOWNSHIP:** 11N **RANGE:** 19W

**EQUIPMENT DESCRIPTION:**

1000 BARREL, FIXED ROOF, CONSTANT LEVEL CRUDE OIL STORAGE TANK WITH PRESSURE/VACUUM VENT

## PERMIT UNIT REQUIREMENTS

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1. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
2. This tank shall be operated at constant level. [District Rule 2201]
3. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rules 2201 and 4623]
4. Permittee shall conduct true vapor pressure (TVP) testing of the organic liquid stored in this tank at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored in this tank in order to maintain exemption from the rule. [District Rule 4623]
5. 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. 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]
7. 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]
8. 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]
9. The permittee shall keep accurate records of each organic liquid stored in the tank, including its storage temperature, TVP, and API gravity. [District Rules 2201 and 4623]
10. All records required to be maintained by this permit shall be maintained for a period of at least five years and shall be made readily available for District inspection upon request. [District Rules 2201 and 4623]
11. Formerly permit number S-1342-112.

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



# San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1326-384-0

EXPIRATION DATE: 03/31/2006

SECTION: SW32 TOWNSHIP: 11N RANGE: 19W

**EQUIPMENT DESCRIPTION:**

2,000 BBL SKIM TANK (JV LEASE)

## PERMIT UNIT REQUIREMENTS

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1. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623]
2. Permittee shall conduct true vapor pressure (TVP) testing of the organic liquid stored in this tank at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored in this tank in order to maintain exemption from the rule. [District Rule 4623]
3. 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]
4. 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]
5. 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. 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]
7. 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]
8. 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]
9. Formerly permit number S-1342-113.

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

# San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1326-385-1

EXPIRATION DATE: 03/31/2006

**EQUIPMENT DESCRIPTION:**

85 MMBTU/HR NATURAL GAS-FIRED STEAM GENERATOR WITH A NORTH AMERICAN 4231-85 GLE BURNER (OR EQUIVALENT), AND FLUE GAS RECIRCULATION (FGR)

## PERMIT UNIT REQUIREMENTS

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1. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
2. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101] Federally Enforceable Through Title V Permit
3. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
4. The unit shall only be fired on PUC-quality natural gas. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Emissions rates from the unit shall not exceed any of the following emission limits: 9 ppmv NOx @ 3% O2 or 0.0108 lb NOx/MMBtu, 0.00285 lb-SOx/MMBtu, 0.003 lb-PM10/MMBtu, 25 ppmv CO @ 3% O2 or 0.0185 lb CO/MMBtu, or 0.0055 lb-VOC/MMBtu. [District NSR Rule and District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
6. Source testing to measure NOx and CO emissions from this unit while fired on natural gas shall be conducted at least once every twelve (12) months. After demonstrating compliance on two (2) consecutive annual source tests, the unit shall be tested not less than once every thirty-six (36) months. If the result of the 36-month source test demonstrates that the unit does not meet the applicable emission limits, the source testing frequency shall revert to at least once every twelve (12) months. [District Rules 4305, 6.3.1 and 4306, 6.3.1] Federally Enforceable Through Title V Permit
7. All emissions measurements shall be made with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. No determination of compliance shall be established within two hours after a continuous period in which fuel flow to the unit is shut off for 30 minutes or longer, or within 30 minutes after a re-ignition as defined in Section 3.0 of District Rule 4306. [District Rules 4305, 5.5.2 and 4306, 5.5.2] Federally Enforceable Through Title V Permit
8. The source test plan shall identify which basis (ppmv or lb/MMBtu) will be used to demonstrate compliance. [District Rules 4305, 5.5.1 and 4306, 5.5.1] Federally Enforceable Through Title V Permit
9. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
10. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
11. For NOx and CO emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rules 4305, 5.5.5 and 4306, 5.5.5] 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. NO<sub>x</sub> emissions for source test purposes shall be determined using EPA Method 7E or ARB Method 100 on a ppmv basis, or EPA Method 19 on a heat input basis. [District Rules 4305, 6.2 and 4306, 6.2] Federally Enforceable Through Title V Permit
13. PM<sub>10</sub> emissions for source test purposes shall be determined using EPA Methods 201A and 202, or other District approved methods. [District Rule 2201]
14. CO emissions for source test purposes shall be determined using EPA Method 10 or ARB Method 100. [District Rules 4305, 6.2 and 4306, 6.2] Federally Enforceable Through Title V Permit
15. Stack gas oxygen (O<sub>2</sub>) shall be determined using EPA Method 3 or 3A or ARB Method 100. [District Rules 4305, 6.2 and 4306, 6.2] Federally Enforceable Through Title V Permit
16. The permittee shall monitor and record the stack concentration of NO<sub>x</sub>, CO, and O<sub>2</sub> at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless monitoring has been performed within the last month. [District Rules 4305, 5.4 and 4306, 5.4] Federally Enforceable Through Title V Permit
17. If either the NO<sub>x</sub> or CO concentrations corrected to 3% O<sub>2</sub>, as measured by the portable analyzer, exceed the allowable emissions concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rules 4305, 5.4 and 4306, 5.4] Federally Enforceable Through Title V Permit
18. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 4305, 5.4 and 4306, 5.4] Federally Enforceable Through Title V Permit
19. The permittee shall maintain records of: (1) the date and time of NO<sub>x</sub>, CO, and O<sub>2</sub> measurements, (2) the O<sub>2</sub> concentration in percent and the measured NO<sub>x</sub> and CO concentrations corrected to 3% O<sub>2</sub>, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rules 4305, 6.1 and 4306, 6.1] Federally Enforceable Through Title V Permit
20. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070, 4305, 6.1, and 4306, 6.1] Federally Enforceable Through Title V Permit

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

# San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1326-387-0

EXPIRATION DATE: 03/31/2006

SECTION: 34 TOWNSHIP: 26S RANGE: 28E

**EQUIPMENT DESCRIPTION:**

100 BBL (4200 GALLON) FIXED ROOF CRUDE OIL STORAGE TANK

## PERMIT UNIT REQUIREMENTS

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1. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623]
2. Permittee shall conduct true vapor pressure (TVP) testing of the organic liquid stored in this tank at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored in this tank in order to maintain exemption from the rule. [District Rule 4623]
3. 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]
4. 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]
5. 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. 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]
7. 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]
8. 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]

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

# San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1326-388-0

EXPIRATION DATE: 03/31/2006

SECTION: 34 TOWNSHIP: 26S RANGE: 28E

**EQUIPMENT DESCRIPTION:**

1000 BBL (42,000 GALLON) FIXED ROOF CRUDE OIL STORAGE TANK

## PERMIT UNIT REQUIREMENTS

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1. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623]
2. Permittee shall conduct true vapor pressure (TVP) testing of the organic liquid stored in this tank at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored in this tank in order to maintain exemption from the rule. [District Rule 4623]
3. 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]
4. 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]
5. 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. 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]
7. 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]
8. 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]

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

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-1326-389-0

**EXPIRATION DATE:** 03/31/2006

**SECTION:** 34 **TOWNSHIP:** 26S **RANGE:** 28E

**EQUIPMENT DESCRIPTION:**

2000 BBL (84,000 GALLON) FIXED ROOF CRUDE OIL STORAGE TANK

## PERMIT UNIT REQUIREMENTS

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1. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 0.5 psia under all storage conditions. [District Rule 4623]
2. Permittee shall conduct true vapor pressure (TVP) testing of the organic liquid stored in this tank at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored in this tank in order to maintain exemption from the rule. [District Rule 4623]
3. 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]
4. 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]
5. 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. 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]
7. 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]
8. 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]

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

# San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1326-398-0

EXPIRATION DATE: 03/31/2006

SECTION: NE33 TOWNSHIP: 27S RANGE: 28E

## EQUIPMENT DESCRIPTION:

2,500 BBL FIXED ROOF CRUDE OIL STOCK TANK WITH PRESSURE-VACUUM VALVE (MT. POSO OIL FIELD, GLIDE 33 LEASE)

## PERMIT UNIT REQUIREMENTS

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1. This tank shall be equipped with a pressure-vacuum (PV) relief valve set to within 10% of the maximum allowable working pressure of the tank, permanently labeled with the operating pressure settings, properly maintained in good operating order in accordance with the manufacturer's instructions, and shall remain in gas-tight condition except when the operating pressure exceeds the valve's set pressure. [District Rule 2201]
2. This tank shall be in a leak-free condition. 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. [District Rule 2201]
3. True vapor pressure (TVP) of liquids received and stored in tank shall be less than 0.5 psia. [District Rule 2201]
4. Tank throughput shall be less than 150 barrels/ day when averaged over a one month period. [District Rules 2201 and 4623]
5. Permittee shall conduct True Vapor Pressure (TVP) testing of the organic liquid stored in this tank at least once every 24 months during summer (July - September), and/ or whenever there is a change in the source or type of organic liquid stored in this tank. [District Rules 2201 and 4623]
6. Instead of testing each uncontrolled fixed roof tank, the permittee may conduct a TVP testing of the organic liquid stored in a representative tank provided the requirements of Sections 6.2.1.1.1 through 6.2.1.1.5 of Rule 4623 are met. [District Rule 4623]
7. The API gravity of crude oil or petroleum distillate shall be determined by using ASTM Method D 287-92 (2000) 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 4057-95 "Standard Practices for Manual Sampling of Petroleum and Petroleum Products." [District Rules 2201 and 4623]
8. The TVP testing shall be conducted at actual storage temperature of the organic liquid in the tank. If the tank stores crude oil or petroleum distillates, the permittee shall also conduct an API gravity testing. [District Rules 2201 and 4623]
9. 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, shall be used to determine the TVP of crude oil with an API gravity of 26 degrees or less, or for any API gravity that is specified in this test method. [District Rules 2201 and 4623]
10. 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 Rules 2201 and 4623]

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

11. The permittee shall keep accurate records of each organic liquid stored in the tank, including its storage temperature, throughput, TVP, and API gravity. [District Rules 2201 and 4623]
12. 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]
13. Formerly S-4080-1-1. [District Rule]

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



# San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1326-399-0

EXPIRATION DATE: 03/31/2006

SECTION: NE33 TOWNSHIP: 27S RANGE: 28E

**EQUIPMENT DESCRIPTION:**

2,500 BBL FIXED ROOF CONSTANT-LEVEL CRUDE OIL WASH TANK WITH PRESSURE-VACUUM VALVE (MT. POSO OIL FIELD, GLIDE 33 LEASE)

## PERMIT UNIT REQUIREMENTS

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1. This tank shall be equipped with a pressure-vacuum (PV) relief valve set to within 10% of the maximum allowable working pressure of the tank, permanently labeled with the operating pressure settings, properly maintained in good operating order in accordance with the manufacturer's instructions, and shall remain in gas-tight condition except when the operating pressure exceeds the valve's set pressure. [District Rule 2201]
2. This tank shall be in a leak-free condition. 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. [District Rule 2201]
3. Throughput of oil shall be less than 150 barrels per day. [District Rule 2201]
4. Tank shall operate at a constant level. [District Rule 2201]
5. True vapor pressure (TVP) of liquids received and stored in tank shall be less than 0.5 psia. [District Rule 2201]
6. Permittee shall conduct True Vapor Pressure (TVP) testing of the organic liquid stored in this tank at least once every 24 months during summer (July - September), and/ or whenever there is a change in the source or type of organic liquid stored in this tank. [District Rules 2201 and 4623]
7. Instead of testing each uncontrolled fixed roof tank, the permittee may conduct a TVP testing of the organic liquid stored in a representative tank provided the requirements of Sections 6.2.1.1.1 through 6.2.1.1.5 of Rule 4623 are met. [District Rule 4623]
8. The API gravity of crude oil or petroleum distillate shall be determined by using ASTM Method D 287-92 (2000) 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 4057-95 "Standard Practices for Manual Sampling of Petroleum and Petroleum Products." [District Rules 2201 and 4623]
9. The TVP testing shall be conducted at actual storage temperature of the organic liquid in the tank. If the tank stores crude oil or petroleum distillates, the permittee shall also conduct an API gravity testing. [District Rules 2201 and 4623]
10. 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, shall be used to determine the TVP of crude oil with an API gravity of 26 degrees or less, or for any API gravity that is specified in this test method. [District Rules 2201 and 4623]
11. Permittee shall submit the records of TVP and API gravity testing to the APCO within 45 days after the date of testing. The records shall include the tank identification number, Permit to Operate number, type of stored organic liquid, TVP and API gravity of the organic liquid, test methods used, and a copy of the test results. [District Rules 2201 and 4623]

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

12. The permittee shall keep accurate records of each organic liquid stored in the tank, including its storage temperature, throughput, TVP, and API gravity. [District Rules 2201 and 4623]
13. 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]
14. Formerly S-4080-2-1. [District Rule]

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



## PERMIT-EXEMPT EQUIPMENT REGISTRATION (PEER)

**PEER NO:** S-1326-1-0

**EXPIRATION DATE:** 03/27/2013

**LEGAL OWNER OR OPERATOR:** VINTAGE PRODUCTION CALIFORNIA LLC  
**MAILING ADDRESS:** 9600 MING AVE, SUITE 300  
BAKERSFIELD, CA 93311

**FACILITY LOCATION:** HEAVY OIL CENTRAL STATIONARY SOURCE  
KERN COUNTY, CA

**SECTION:** 26 **TOWNSHIP:** 28S **RANGE:** 27E

**LOCATION DESCRIPTION:** VPC 1

**EQUIPMENT DESCRIPTION:**  
4.2 MMBTU/HR NATURAL GAS-FIRED BOILER (DORMANT - NOT OPERATIONAL)

### CONDITIONS

1. The fuel supply line shall be physically disconnected from the unit. [District Rules 4307]
2. The unit shall not be operated for any reason until the necessary retrofit/replacement is made to comply with District Rule 4307. [District Rule 4307]
3. Prior to operating a 4307-compliant replacement or retrofitted unit, the owner/operator shall submit a Permit-Exempt Equipment Registration (PEER) application to the District. [District Rules 4307 and 2250]

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

**Sayed Sadredin**  
Executive Director / APCO

**David Warner**  
Director of Permit Services

S-1326-1-0 : 05/2011 -- DAVIDSOS : Joint Inspection NOT Required



## PERMIT-EXEMPT EQUIPMENT REGISTRATION (PEER)

PEER NO: S-1326-2-0

EXPIRATION DATE: 03/27/2013

LEGAL OWNER OR OPERATOR: VINTAGE PRODUCTION CALIFORNIA LLC  
MAILING ADDRESS: 9600 MING AVE, SUITE 300  
BAKERSFIELD, CA 93311

FACILITY LOCATION: HEAVY OIL CENTRAL STATIONARY SOURCE  
KERN COUNTY, CA

SECTION: 9 TOWNSHIP: 27S RANGE: 28E

LOCATION DESCRIPTION: VPC 2

EQUIPMENT DESCRIPTION:  
4.2 MMBTU/HR NATURAL GAS-FIRED BOILER (DORMANT - NOT OPERATIONAL)

### CONDITIONS

1. The fuel supply line shall be physically disconnected from the unit. [District Rules 4307]
2. The unit shall not be operated for any reason until the necessary retrofit/replacement is made to comply with District Rule 4307. [District Rule 4307]
3. Prior to operating a 4307-compliant replacement or retrofitted unit, the owner/operator shall submit a Permit-Exempt Equipment Registration (PEER) application to the District. [District Rules 4307 and 2250]

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

**Seyed Sadredin**

Executive Director / APCO

S-1326-2-0: 3/30/2011 - DAVIDSOS : Joint Inspection NOT Required

**David Warner**

Director of Permit Services

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# ATTACHMENT C

Detailed Facility List

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**Detailed Facility Report**  
For Facility=1326  
Sorted by Facility Name and Permit Number

PERMIT NUMBER	FEE DESCRIPTION	FEE RULE	QTY	FEE AMOUNT	FEE TOTAL	PERMIT STATUS	EQUIPMENT DESCRIPTION
S-1326-58-1	42,000 GALLON TANK	3020-05S C	1	63.00	63.00	D	42,000 GALLON FIXED-ROOF PETROLEUM STORAGE TANK #10134SHP (CANCELLED 5/8/97 FOR ERC PROJECT 970470)
S-1326-59-1	42,000 GALLON TANK	3020-05S C	1	63.00	63.00	D	2,000 GALLON FIXED-ROOF PETROLEUM STORAGE TANK #10135SHP (CANCELLED 5/8/97 FOR ERC PROJECT 970470)
S-1326-60-0	42,000 GALLON TANK	3020-05 C	1	135.00	135.00	D	42,000 GALLON FIXED-ROOF PETROLEUM STORAGE TANK #106621
S-1326-61-0	21,000 GALLON TANK	3020-05 C	1	135.00	135.00	D	21,000 GALLON FIXED-ROOF PETROLEUM STORAGE TANK WM500FL
S-1326-62-0	21,000 GALLON TANK	3020-05 C	1	135.00	135.00	D	21,000 GALLON FIXED-ROOF PRODUCED WATER TANK
S-1326-63-1	4,200 GALLON TANK	3020-05 A	1	75.00	75.00	D	4,200 GALLON FIXED-ROOF PETROLEUM STORAGE TANK #WM100TST (SILL)
S-1326-64-0	42,000 GALLON TANK	3020-05 C	1	135.00	135.00	D	42,000 GALLON FIXED-ROOF PETROLEUM STORAGE TANK #10S607
S-1326-65-0	42,000 GALLON TANK	3020-05 C	1	135.00	135.00	D	42,000 GALLON FIXED-ROOF PETROLEUM STORAGE TANK #ZMRTEST
S-1326-66-0	4,200 GALLON TANK	3020-05S A	1	32.00	32.00	D	4,200 GALLONS FIXED-ROOF PETROLEUM STORAGE TANK #ZMRSMPTK *** TANK NO LONGER EXISTS AT THE STATIONARY SOURCE; PERMIT CANCELED PER COMPLIANCE DIVISION REQUEST, 6-17-97, JEG ***
S-1326-67-0	42,000 GALLON TANK	3020-05 C	1	135.00	135.00	D	42,000 GALLON FIXED-ROOF PETROLEUM STORAGE TANK #6846SHP
S-1326-68-0	42,000 GALLON TANK	3020-05 C	1	135.00	135.00	D	42,000 GALLON FIXED-ROOF PETROLEUM STORAGE TANK #6845SHP
S-1326-69-0	42,000 GALLON TANK	3020-05 C	1	135.00	135.00	D	42,000 GALLON FIXED-ROOF PETROLEUM STORAGE TANK #55598WSH
S-1326-70-0	4,200 GALLON TANK	3020-05S A	1	32.00	32.00	D	4,200 GALLON FIXED-ROOF PETROLEUM STORAGE TANK #OLCFUEL -- CANCELLED 5/8/97
S-1326-71-0	31,500 GALLON TANK	3020-05S C	1	63.00	63.00	D	31,500 GALLONS FIXED-ROOF PETROLEUM STORAGE TANK #OLCESTWSH (CANCELLED 5/8/97 FOR ERC PROJECT 970470)
S-1326-72-0	84,000 GALLON TANK	3020-05S D	1	75.00	75.00	D	84,000 GALLON FIXED-ROOF PETROLEUM STORAGE TANK #OLCESTSH (CANCELLED 5/8/97 FOR ERC PROJECT 970470)
S-1326-73-0	84,000 GALLON TANK	3020-05S D	1	75.00	75.00	D	84,000 GALLONS FIXED-ROOF PETROLEUM STORAGE TANK #OCLWSH (CANCELLED 5/8/97 FOR ERC PROJECT 970470)
S-1326-74-0	84,000 GALLON TANK	3020-05S D	1	75.00	75.00	D	84,000 GALLON FIXED-ROOF PETROLEUM STORAGE TANK #OLCSHP (CANCELLED 5/8/97 FOR ERC PROJECT 970470)
S-1326-75-0	31,500 GALLON TANK	3020-05S C	1	63.00	63.00	D	31,500 GALLON FIXED-ROOF PETROLEUM STORAGE TANK #STLWSH (CANCELLED 5/8/97 FOR ERC PROJECT 970470)
S-1326-76-0	84,000 GALLON TANK	3020-05S D	1	75.00	75.00	D	84,000 GALLON FIXED-ROOF PETROLEUM STORAGE TANK #5133SHP (CANCELLED 5/8/97 FOR ERC PROJECT 970470)
S-1326-77-0	4,200 GALLON TANK	3020-05S A	1	32.00	32.00	D	4,200 GALLON FIXED-ROOF PETROLEUM STORAGE TANK #100FUEL (CANCELLED 5/8/97 FOR ERC PROJECT 970470)

**Detailed Facility Report**

For Facility=1326

Sorted by Facility Name and Permit Number

PERMIT NUMBER	FEE DESCRIPTION	FEE RULE	QTY	FEE AMOUNT	FEE TOTAL	PERMIT STATUS	EQUIPMENT DESCRIPTION
S-1326-78-0	84,000 GALLON TANK	3020-05S D	1	75.00	75.00	D	84,000 GALLON FIXED-ROOF PETROLEUM STORAGE TANK #5131WSH (CANCELLED 5/8/97 FOR ERC PROJECT 970470)
S-1326-79-0	84,000 GALLON TANK	3020-05S D	1	75.00	75.00	D	84,000 GALLON FIXED-ROOF PETROLEUM STORAGE TANK #5130STK (CANCELLED 5/8/97 FOR ERC PROJECT 970470)
S-1326-80-0	126,000 GALLON TANK	3020-05S E	1	99.00	99.00	D	126,000 GALLON FIXED-ROOF PETROLEUM STORAGE TANK #STLOLCSH (CANCELLED 5/8/97 FOR ERC PROJECT 970470)
S-1326-81-0	126,000 GALLON TANK	3020-05S E	1	99.00	99.00	D	126,000 GALLON FIXED-ROOF PETROLEUM STORAGE TANK 3STLWSH (CANCELLED 5/8/97 FOR ERC PROJECT 970470)
S-1326-82-0	4,200 GALLON TANK	3020-05S A	1	32.00	32.00	D	4,200 GALLONS FIXED-ROOF PETROLEUM STORAGE TANK #100TST (CANCELLED 5/8/97 FOR ERC PROJECT 970470)
S-1326-83-0	42,000 GALLON TANK	3020-05S C	1	63.00	63.00	D	42,000 GALLON FIXED-ROOF PETROLEUM STORAGE TANK #11007 (CANCELLED 5/8/97 FOR ERC PROJECT 970470)
S-1326-84-0	42,000 GALLON TANK	3020-05S C	1	63.00	63.00	D	42,000 GALLON FIXED-ROOF PETROLEUM STORAGE TANK #11008 (CANCELLED 5/8/97 FOR ERC PROJECT 970470)
S-1326-85-0	10,500 GALLON TANK	3020-05S B	1	44.00	44.00	D	10,500 GALLON FIXED-ROOF PETROLEUM STORAGE TANK #250WTR (CANCELLED 5/8/97 FOR ERC PROJECT 970470)
S-1326-86-0	42,000 GALLON TANK	3020-05S C	1	63.00	63.00	D	42,000 GALLON FIXED-ROOF PETROLEUM STORAGE TANK #10X835ST (CANCELLED 5/8/97 FOR ERC PROJECT 970470)
S-1326-87-0	42,000 GALLON TANK	3020-05S C	1	63.00	63.00	D	42,000 GALLON FIXED-ROOF PETROLEUM STORAGE TANK #8991ST (CANCELLED 5/8/97 FOR ERC PROJECT 970470)
S-1326-88-0	42,000 GALLON TANK	3020-05S C	1	63.00	63.00	D	42,000 GALLON FIXED-ROOF PETROLEUM STORAGE TANK #11011WTR (CANCELLED 5/8/97 FOR ERC PROJECT 970470)
S-1326-89-0	42,000 GALLON TANK	3020-05S C	1	63.00	63.00	D	42,000 GALLON FIXED-ROOF PETROLEUM STORAGE TANK #10WSHTK (CANCELLED 5/8/97 FOR ERC PROJECT 970470)
S-1326-90-0	42,000 GALLON TANK	3020-05S C	1	63.00	63.00	D	42,000 GALLON FIXED-ROOF PETROLEUM STORAGE TANK #01WSHTK (CANCELLED 5/8/97 FOR ERC PROJECT 970470)
S-1326-91-0	4,200 GALLON TANK	3020-05 A	1	75.00	75.00	D	4,200 GALLON FIXED-ROOF PETROLEUM TANK #100WTRTK (KCL/PERSEUS) ****CANCELLED BY PERMITTEE 07/19/99, SVT***
S-1326-92-1	42,000 GALLON TANK	3020-05 C	1	135.00	135.00	D	42,000 GALLON FIXED-ROOF PETROLEUM STORAGE TANK #5180 (PERSEUS)
S-1326-93-1	42,000 GALLON TANK	3020-05 C	1	135.00	135.00	D	42,000 GALLON FIXED-ROOF PETROLEUM STORAGE TANK #5188 (PERSEUS)
S-1326-94-1	42,000 GALLON TANK	3020-05 C	1	135.00	135.00	D	42,000 GALLON FIXED-ROOF PETROLEUM STORAGE TANK #5079 (KCL)
S-1326-95-1	42,000 GALLON TANK	3020-05 C	1	135.00	135.00	D	42,000 GALLON FIXED-ROOF PETROLEUM STORAGE TANK #11764 (KCL)

**Detailed Facility Report**

For Facility=1326

Sorted by Facility Name and Permit Number

PERMIT NUMBER	FEE DESCRIPTION	FEE RULE	QTY	FEE AMOUNT	FEE TOTAL	PERMIT STATUS	EQUIPMENT DESCRIPTION
S-1326-96-0	10,500 GALLON TANK	3020-05S B	1	44.00	44.00	D	10,500 GALLON FIXED-ROOF PETROLEUM STORAGE TANK #250STKTK (CANCELLED 5/8/97 FOR ERC PROJECT 970470)
S-1326-97-0	4,200 GALLON TANK	3020-05S A	1	32.00	32.00	D	4,200 GALLON FIXED-ROOF PETROLEUM STORAGE TANK #100TST2 (CANCELLED 5/8/97 FOR ERC PROJECT 970470)
S-1326-98-0	4,200 GALLON TANK	3020-05S A	1	32.00	32.00	D	4,200 GALLON FIXED-ROOF PETROLEUM STORAGE TANK #100TST1 (CANCELLED 5/8/97 FOR ERC PROJECT 970470)
S-1326-99-0	4,200 GALLON TANK	3020-05S A	1	32.00	32.00	D	4,200 GALLON FIXED-ROOF PETROLEUM STORAGE TANK #100TST1 WITH VAPOR CONTROL SHARED WITH S-1326-192-2 THRU S-1326-200-2 *** CANCELLED PRIOR TO IMPLEMENTATION OF ATC'S S-1326-268-0 AND 269-0, GAH, 5/8/97 ***
S-1326-100-0	4,200 GALLON TANK	3020-05S A	1	32.00	32.00	D	4,200 GALLON FIXED-ROOF PETROLEUM STORAGE TANK #100TST2 WITH VAPOR CONTROL SHARED WITH S-1326-198-2 THRU S-1326-200-2 *** CANCELLED PRIOR TO IMPLEMENTATION OF ATC'S S-1326-268-0 AND 269-0, GAH, 5/8/97 ***
S-1326-101-2	42,000 GALLON TANK	3020-05 C	1	135.00	135.00	A	42,000 GALLON FIXED-ROOF PETROLEUM STORAGE TANK #T-14 (NATIONAL TANK BATTERY).
S-1326-102-2	42,000 GALLON TANK	3020-05 C	1	135.00	135.00	D	42,000 GALLON FIXED-ROOF PETROLEUM STORAGE TANK #11009 (NATIONAL TANK BATTERY).
S-1326-103-2	84,000 GALLON TANK	3020-05 D	1	185.00	185.00	D	84,000 GALLON FIXED-ROOF PETROLEUM STORAGE TANK #20S323 (NATIONAL TANK BATTERY).
S-1326-104-2	84,000 GALLON TANK	3020-05 D	1	185.00	185.00	D	84,000 GALLON FIXED-ROOF PETROLEUM STORAGE TANK #12736 (NATIONAL TANK BATTERY).
S-1326-105-1	4,200 GALLON TANK	3020-05S A	1	32.00	32.00	D	4,200 GALLON FIXED-ROOF PETROLEUM STORAGE TANK #100TSTTK (CANCELLED 5/8/97 FOR ERC PROJECT 970470)
S-1326-106-1	4,200 GALLON TANK	3020-05S A	1	32.00	32.00	D	4,200 GALLON FIXED-ROOF PETROLEUM STORAGE TANK #100WSHTK (CANCELLED 5/8/97 FOR ERC PROJECT 970470)
S-1326-107-0	42,000 GALLON TANK	3020-05S C	1	63.00	63.00	D	42,000 GALLON FIXED-ROOF PETROLEUM STORAGE TANK #2186STKTK (CANCELLED 5/8/97 FOR ERC PROJECT 970470)
S-1326-108-0	10,500 GALLON TANK	3020-05S B	1	44.00	44.00	D	10,500 GALLON FIXED-ROOF PETROLEUM STORAGE TANK #250STTK (CANCELLED 5/8/97 FOR ERC PROJECT 970470)
S-1326-109-0	8,400 GALLON TANK	3020-05S B	1	44.00	44.00	D	8,400 GALLON FIXED-ROOF PETROLEUM STORAGE TANK #200TSTTK (CANCELLED 5/8/97 FOR ERC PROJECT 970470)
S-1326-110-0	21,000 GALLON TANK	3020-05S C	1	63.00	63.00	D	21,000 GALLON FIXED-ROOF PETROLEUM STORAGE TANK #500TSTTK (NORTH NEWHOUSE LEASE) *** TANK NO LONGER EXISTS AT THE STATIONARY SOURCE; PERMIT CANCELED PER COMPLIANCE DIVISION REQUEST, JEG, 6/24/97 ***
S-1326-111-1	42,000 GALLON TANK	3020-05 C	1	135.00	135.00	D	42,000 GALLON FIXED-ROOF PETROLEUM STORAGE TANK #1471 (SEC. 10 USL).



**Detailed Facility Report**  
For Facility=1326  
Sorted by Facility Name and Permit Number

PERMIT NUMBER	FEE DESCRIPTION	FEE RULE	QTY	FEE AMOUNT	FEE TOTAL	PERMIT STATUS	EQUIPMENT DESCRIPTION
S-1326-112-1	42,000 GALLON TANK	3020-05 C	1	135.00	135.00	D	42,000 GALLON FIXED-ROOF PETROLEUM STORAGE TANK #10 (SEC. 10 USL)
S-1326-113-1	42,000 GALLON TANK	3020-05 C	1	135.00	135.00	D	42,000 GALLON FIXED-ROOF PETROLEUM STORAGE TANK #1472SHP (SEC. 10 USL)
S-1326-114-0	42,000 GALLON TANK	3020-05S C	1	63.00	63.00	D	42,000 GALLON FIXED-ROOF PETROLEUM STORAGE TANK #10WTRTK (CANCELLED 5/8/97 FOR ERC PROJECT 970470)
S-1326-115-0	42,000 GALLON TANK	3020-05S C	1	63.00	63.00	D	42,000 GALLON FIXED-ROOF PETROLEUM STORAGE TANK #10STKTK (CANCELLED 5/8/97 FOR ERC PROJECT 970470)
S-1326-116-0	4200 GALLON TANK	3020-05S A	1	32.00	32.00	D	4200 GALLON FIXED-ROOF PETROLEUM STORAGE TANK #100TST2 (CANCELLED 5/8/97 FOR ERC PROJECT 970470)
S-1326-117-0	4200 GALLON TANK	3020-05S A	1	32.00	32.00	D	4200 GALLON FIXED-ROOF PETROLEUM STORAGE TANK #100TST1 (CANCELLED 5/8/97 FOR ERC PROJECT 970470)
S-1326-118-0	4,200 GALLON TANK	3020-05 A	1	75.00	75.00	D	4,200 GALLON FIXED-ROOF PETROLEUM STORAGE TANK #100 (LENHARDT USL)
S-1326-119-2	84,000 GALLON TANK	3020-05 D	1	185.00	185.00	A	84,000 GALLON FIXED-ROOF PETROLEUM STORAGE TANK #2GK-255 (LENHARDT USL).
S-1326-120-2	84,000 GALLON TANK	3020-05 D	1	185.00	185.00	A	84,000 GALLON FIXED-ROOF PETROLEUM STORAGE TANK #2L100 (LENHARDT USL).
S-1326-121-2	210,000 GALLON TANK	3020-05 E	1	246.00	246.00	A	210,000 GALLON FIXED-ROOF PETROLEUM STORAGE TANK #5L101 (LENHARDT USL).
S-1326-122-0	4,200 GALLON TANK	3020-05 A	1	75.00	75.00	D	4,200 GALLON FIXED-ROOF PETROLEUM STORAGE TANK - WEST (LENHARDT USL)
S-1326-123-0	4,200 GALLON TANK	3020-05 A	1	75.00	75.00	D	4,200 GALLON FIXED-ROOF PETROLEUM STORAGE TANK - EAST (LENHARDT)
S-1326-124-0	4,200 GALLON TANK	3020-05 A	1	75.00	75.00	D	4,200 GALLON FIXED-ROOF PETROLEUM STORAGE TANK #100TSTK2 (SEC. 14 USL)
S-1326-125-0	4,200 GALLON TANK	3020-05 A	1	75.00	75.00	D	4,200 GALLON FIXED-ROOF PETROLEUM STORAGE TANK #100TSTK1 (SEC. 14 USL)
S-1326-126-2	84,000 GALLON TANK	3020-05 D	1	185.00	185.00	A	84,000 GALLON FIXED-ROOF PETROLEUM STORAGE TANK #20WSTWTR (SEC. 14 USL).
S-1326-127-2	84,000 GALLON TANK	3020-05 D	1	185.00	185.00	A	84,000 GALLON FIXED-ROOF PETROLEUM STORAGE TANK #20X1504 (SEC. 14 USL).
S-1326-128-2	84,000 GALLON TANK	3020-05 D	1	185.00	185.00	A	84,000 GALLON FIXED-ROOF PETROLEUM STORAGE TANK #2GK37 (SEC. 14 USL).
S-1326-129-1	210,000 GALLON TANK	3020-05 E	1	246.00	246.00	A	210,000 GALLON FIXED-ROOF PETROLEUM STORAGE TANK #5GK43 (ROBINSON A/USL)

**Detailed Facility Report**  
For Facility=1326  
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PERMIT NUMBER	FEE DESCRIPTION	FEE RULE	QTY	FEE AMOUNT	FEE TOTAL	PERMIT STATUS	EQUIPMENT DESCRIPTION
S-1326-130-1	210,000 GALLON TANK	3020-05 E	1	246.00	246.00	A	210,000 GALLON FIXED-ROOF PETROLEUM STORAGE TANK #5GK-34 (ROBINSON A/USL)
S-1326-131-1	84,000 GALLON TANK	3020-05 D	1	185.00	185.00	A	84,000 GALLON FIXED-ROOF PETROLEUM STORAGE TANK #2RA100 (ROBINSON A/USL)
S-1326-132-1	84,000 GALLON TANK	3020-05 D	1	185.00	185.00	A	84,000 GALLON FIXED-ROOF PETROLEUM STORAGE TANK #SPLCONTTNK (STAR USL/STAR ROBINSON)
S-1326-133-1	42,000 GALLON TANK	3020-05 C	1	135.00	135.00	A	42,000 GALLON FIXED-ROOF PETROLEUM STORAGE TANK #152323 (STAR USL)
S-1326-134-1	42,000 GALLON TANK	3020-05 C	1	135.00	135.00	A	42,000 GALLON FIXED-ROOF PETROLEUM STORAGE TANK #15322 (STAR USL)
S-1326-135-1	42,000 GALLON TANK	3020-05 C	1	135.00	135.00	A	42,000 GALLON FIXED-ROOF PETROLEUM STORAGE TANK #15321 (STAR USL)
S-1326-136-1	42,000 GALLON TANK	3020-05 C	1	135.00	135.00	A	42,000 GALLON FIXED-ROOF PETROLEUM STORAGE TANK #WSTWTR1 (STAR USL)
S-1326-137-2	42,000 GALLON TANK	3020-05 C	1	135.00	135.00	A	42,000 GALLON FIXED-ROOF PETROLEUM STORAGE TANK #15324 (STAR ROBINSON).
S-1326-138-2	42,000 GALLON TANK	3020-05 C	1	135.00	135.00	A	42,000 GALLON FIXED-ROOF PETROLEUM STORAGE TANK #15325 (STAR ROBINSON).
S-1326-139-2	42,000 GALLON TANK	3020-05 C	1	135.00	135.00	A	42,000 GALLON FIXED-ROOF PETROLEUM STORAGE TANK #15326 (STAR ROBINSON).
S-1326-140-2	42,000 GALLON TANK	3020-05 C	1	135.00	135.00	A	42,000 GALLON FIXED-ROOF PETROLEUM STORAGE TANK #WSTWTR1 (STAR ROBINSON).
S-1326-141-0	42,000 GALLON TANK	3020-05 C	1	135.00	135.00	D	42,000 GALLON FIXED-ROOF PETROLEUM STORAGE TANK #1SKMTK6 (KERN TANK FARM)
S-1326-142-0	126,000 GALLON TANK	3020-05 E	1	246.00	246.00	D	126,000 GALLON FIXED-ROOF PETROLEUM STORAGE TANK #3SRGTK3 (KERN TANK FARM)
S-1326-143-2	84,000 GALLON TANK	3020-05 D	1	185.00	185.00	D	84,000 GALLON FIXED-ROOF PETROLEUM STORAGE TANK #2LCTK2 (KERN TANK FARM).
S-1326-144-2	84,000 GALLON TANK	3020-05 D	1	185.00	185.00	D	84,000 GALLON FIXED-ROOF PETROLEUM STORAGE TANK #2LCTK1 (KERN TANK FARM)
S-1326-145-2	84,000 GALLON TANK	3020-05 D	1	185.00	185.00	D	84,000 GALLON FIXED-ROOF PETROLEUM STORAGE TANK #WSHTK2 (KERN TANK FARM).
S-1326-146-2	84,000 GALLON TANK	3020-05 D	1	185.00	185.00	D	84,000 GALLON FIXED-ROOF PETROLEUM STORAGE TANK #WSHTK1 (KERN TANK FARM).
S-1326-147-1	84,000 GALLON TANK	3020-05 D	1	185.00	185.00	A	84,000 GALLON FIXED-ROOF PETROLEUM STORAGE TANK #2GK-18 (ROBINSON B/USL)

**Detailed Facility Report**  
For Facility=1326  
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PERMIT NUMBER	FEE DESCRIPTION	FEE RULE	QTY	FEE AMOUNT	FEE TOTAL	PERMIT STATUS	EQUIPMENT DESCRIPTION
S-1326-148-1	84,000 GALLON TANK	3020-05 D	1	185.00	185.00	A	84,000 GALLON FIXED-ROOF PETROLEUM STORAGE TANK #2GK-23 (ROBINSON B/USL)
S-1326-149-1	42,000 GALLON TANK	3020-05 C	1	135.00	135.00	A	42,000 GALLON FIXED-ROOF PETROLEUM STORAGE TANK #1RB101 (ROBINSON B/USL)
S-1326-150-2	42,000 GALLON TANK	3020-05 C	1	135.00	135.00	A	42,000 GALLON FIXED-ROOF PETROLEUM STORAGE TANK #1DRNTK3 (ROBINSON B DEHY).
S-1326-151-2	210,000 GALLON TANK	3020-05 E	1	246.00	246.00	A	210,000 GALLON FIXED-ROOF PETROLEUM STORAGE TANK #5RB1035RG (ROBINSON B DEHY).
S-1326-152-2	42,000 GALLON TANK	3020-05 C	1	135.00	135.00	A	42,000 GALLON FIXED-ROOF PETROLEUM STORAGE TANK #10WSTWTR (ROBINSON B DEHY).
S-1326-153-2	126,000 GALLON TANK	3020-05 E	1	246.00	246.00	A	126,000 GALLON FIXED-ROOF PETROLEUM STORAGE TANK #3GK309SHP (ROBINSON B DEHY).
S-1326-154-2	126,000 GALLON TANK	3020-05 E	1	246.00	246.00	A	126,000 GALLON FIXED-ROOF PETROLEUM STORAGE TANK #3GK310SHP (ROBINSON B DEHY).
S-1326-155-0	21,000 GALLON TANK	3020-05 C	1	135.00	135.00	D	21,000 GALLON FIXED-ROOF PETROLEUM STORAGE TANK #55599 (WARD)
S-1326-156-0	21,000 GALLON TANK	3020-05 C	1	135.00	135.00	D	21,000 GALLON FIXED-ROOF PETROLEUM STORAGE TANK #55598 (WARD)
S-1326-157-0	31,500 GALLON TANK	3020-05 C	1	135.00	135.00	D	31,500 GALLON FIXED-ROOF PETROLEUM STORAGE TANK #55597 (WARD)
S-1326-158-1	210,000 GALLON TANK	3020-05 E	1	246.00	246.00	A	210,000 GALLON FIXED-ROOF PETROLEUM STORAGE TANK #5T100 (TEGELER/USL)
S-1326-159-1	84,000 GALLON TANK	3020-05 D	1	185.00	185.00	A	84,000 GALLON FIXED-ROOF PETROLEUM STORAGE TANK #3GK24 (TEGELER/USL)
S-1326-160-1	84,000 GALLON TANK	3020-05 D	1	185.00	185.00	A	84,000 GALLON FIXED-ROOF PETROLEUM STORAGE TANK #2GK13 (TEGELER/USL)
S-1326-161-0	21,000 GALLON TANK	3020-05 C	1	135.00	135.00	D	21,000 GALLON FIXED-ROOF PETROLEUM STORAGE TANK #15163 (CAL TECH/SOUTHERN TREATING FACILITY)
S-1326-162-0	21,000 GALLON TANK	3020-05 C	1	135.00	135.00	D	21,000 GALLON FIXED-ROOF PETROLEUM STORAGE TANK #50240 (CAL TECH/SOUTHERN TREATING FACILITY)
S-1326-163-1	63,000 GALLON TANK	3020-05 D	1	185.00	185.00	D	63,000 GALLON FIXED-ROOF PETROLEUM STORAGE TANK #GMCD150ST (MCDUGAL/GRADY)
S-1326-164-1	210,000 GALLON TANK	3020-05 E	1	246.00	246.00	D	210,000 GALLON FIXED-ROOF PETROLEUM STORAGE TANK #GDY50WSH (GRADY)
S-1326-165-1	210,000 GALLON TANK	3020-05 E	1	246.00	246.00	D	210,000 GALLON FIXED-ROOF PETROLEUM STORAGE TANK #MCD50WSH (MCDUGAL)

**Detailed Facility Report**  
For Facility=1326  
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PERMIT NUMBER	FEE DESCRIPTION	FEE RULE	QTY	FEE AMOUNT	FEE TOTAL	PERMIT STATUS	EQUIPMENT DESCRIPTION
S-1326-166-0	21,000 GALLON TANK	3020-05 C	1	135.00	135.00	D	21,000 GALLON FIXED-ROOF PETROLEUM STORAGE TANK #LNT500STTK (LIGHTNER)
S-1326-167-1	84,000 GALLON TANK	3020-05 D	1	185.00	185.00	D	84,000 GALLON FIXED-ROOF PETROLEUM STORAGE TANK #20321 (MCDONALD)
S-1326-168-1	21,000 GALLON TANK	3020-05 C	1	135.00	135.00	D	21,000 GALLON FIXED-ROOF PETROLEUM STORAGE TANK #555982 (MCDONALD)
S-1326-169-1	105,000 GALLON TANK	3020-05 E	1	246.00	246.00	D	105,000 GALLON FIXED-ROOF PETROLEUM STORAGE TANK #25WSTW (COLE FEE)
S-1326-170-1	84,000 GALLON TANK	3020-05 D	1	185.00	185.00	D	84,000 GALLON FIXED-ROOF PETROLEUM STORAGE TANK #20WSH (COLE FEE)
S-1326-171-1	63,000 GALLON TANK	3020-05 D	1	185.00	185.00	D	63,000 GALLON FIXED-ROOF PETROLEUM STORAGE TANK #15410 (COLE FEE)
S-1326-172-1	63,000 GALLON TANK	3020-05 D	1	185.00	185.00	D	63,000 GALLON FIXED-ROOF PETROLEUM STORAGE TANK #15409 (COLE FEE)
S-1326-173-1	63,000 GALLON TANK	3020-05 D	1	185.00	185.00	D	63,000 GALLON FIXED-ROOF PETROLEUM STORAGE TANK #15408 (COLE FEE)
S-1326-174-0	63,000 GALLON TANK	3020-05 D	1	185.00	185.00	D	63,000 GALLON FIXED-ROOF PETROLEUM STORAGE TANK #TAO0B771 ***SURRENDERED AS PART OF PROJECT 950019 MPE***
S-1326-175-0	63,000 GALLON TANK	3020-05 D	1	185.00	185.00	D	63,000 GALLON FIXED-ROOF PETROLEUM STORAGE TANK #TAO0B772 ***SURRENDERED AS PART OF PROJECT 950019 MPE***
S-1326-176-0	63,000 GALLON TANK	3020-05 D	1	185.00	185.00	D	21,000 GALLON FIXED-ROOF PETROLEUM STORAGE TANK #TAO0B773 ***SURRENDERED AS PART OF PROJECT 950019 MPE***
S-1326-177-0	21,000 GALLON TANK	3020-05 C	1	135.00	135.00	D	21,000 GALLON FIXED-ROOF PETROLEUM STORAGE TANK #TAO0B774 ***SURRENDERED AS PART OF PROJECT 950019 MPE***
S-1326-178-0	21,000 GALLON TANK	3020-05 C	1	135.00	135.00	D	21,000 GALLON FIXED-ROOF PETROLEUM STORAGE TANK #TAO0B775 ***SURRENDERED AS PART OF PROJECT 950019 MPE***
S-1326-179-0	21,000 GALLON TANK	3020-05 C	1	135.00	135.00	D	21,000 GALLON FIXED-ROOF PETROLEUM STORAGE TANK #TAO0B776 ***SURRENDERED AS PART OF PROJECT 950019 MPE***
S-1326-180-0	10,500 GALLON TANK	3020-05 B	1	93.00	93.00	D	10,500 GALLON FIXED-ROOF PETROLEUM STORAGE TANK #TAO0B777 ***SURRENDERED AS PART OF PROJECT 950019***
S-1326-181-0	7,560 GALLON TANK	3020-05 B	1	93.00	93.00	D	7,560 GALLON FIXED-ROOF PETROLEUM STORAGE TANK #TAO0B778 ***SURRENDERED AS PART OF PROJECT 950019 MPE**
S-1326-182-2	63,000 GALLON TANK	3020-05 D	1	185.00	185.00	D	63,000 GALLON FIXED-ROOF PETROLEUM STORAGE TANK #TAO0B754 (SILL)

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PERMIT NUMBER	FEE DESCRIPTION	FEE RULE	QTY	FEE AMOUNT	FEE TOTAL	PERMIT STATUS	EQUIPMENT DESCRIPTION
S-1326-183-2	63,000 GALLON TANK	3020-05 D	1	185.00	185.00	D	63,000 GALLON FIXED-ROOF PETROLEUM STORAGE TANK #TAO0B757 (SILL).
S-1326-184-0	84,000 GALLON TANK	3020-05S D	1	75.00	75.00	D	84,000 GALLON FIXED-ROOF PETROLEUM STORAGE TANK TAO0B752 *** TANK NO LONGER EXISTS AT THE STATIONARY SOURCE - PERMIT CANCELED PER COMPLIANCE DIVISION REQUEST, JEG, 6/17/97 ***
S-1326-185-0	84,000 GALLON TANK	3020-05S D	1	75.00	75.00	D	84,000 GALLON FIXED-ROOF PETROLEUM STORAGE TANK #TAO0B753 *** TANK NO LONGER EXISTS AT THE STATIONARY SOURCE - PERMIT CANCELED PER COMPLIANCE DIVISION REQUEST, JEG, 6/17/97 ***
S-1326-186-2	84,000 GALLON TANK	3020-05 D	1	185.00	185.00	D	84,000 GALLON FIXED-ROOF PETROLEUM STORAGE TANK #TAO0B756 (SILL).
S-1326-187-2	63,000 GALLON TANK	3020-05 D	1	185.00	185.00	D	63,000 GALLON FIXED-ROOF PETROLEUM STORAGE TANK #TAO0B755 (SILL)
S-1326-188-2	42,000 GALLON TANK	3020-05 C	1	135.00	135.00	D	42,000 GALLON FIXED-ROOF PETROLEUM STORAGE TANK #TAO0B751 (SILL)
S-1326-189-0	21,000 GALLON TANK	3020-05 C	1	135.00	135.00	D	21,000 GALLON FIXED-ROOF PETROLEUM STORAGE TANK #TAO0B764 (WETMORE TANK BATTERY)
S-1326-190-0	7,560 GALLON TANK	3020-05 B	1	93.00	93.00	D	7,560 GALLON FIXED-ROOF PETROLEUM STORAGE TANK #TAO0B765 (WETMORE TANK BATTERY)
S-1326-191-1	7,980 GALLON TANK	3020-05 B	1	93.00	93.00	D	7,980 GALLON FIXED-ROOF PETROLEUM STORAGE TANK #TAO0B766 (WETMORE TANK BATTERY)
S-1326-192-2	21,000 GALLON TANK	3020-05 C	1	135.00	135.00	D	21,000 GALLON FIXED-ROOF PETROLEUM STORAGE TANK #TAO0B767 (WETMORE TANK BATTERY).
S-1326-193-2	63,000 GALLON TANK	3020-05 D	1	185.00	185.00	D	63,000 GALLON FIXED-ROOF PETROLEUM STORAGE TANK #TAO0B768 (WETMORE TANK BATTERY).
S-1326-194-2	63,000 GALLON TANK	3020-05 D	1	185.00	185.00	D	63,000 GALLON FIXED-ROOF PETROLEUM STORAGE TANK #TAO0B769 (WETMORE TANK BATTERY).
S-1326-195-0	63,000 GALLON TANK	3020-05S D	1	75.00	75.00	D	1,500 BBL HEAVY CRUDE OIL WASH TANK (CANCELLED 5/8/97 FOR ERC PROJECT 970470)
S-1326-196-0	42,000 GALLON TANK	3020-05S C	1	63.00	63.00	D	1,000 BBL HEAVY CRUDE OIL WASH TANK (CANCELLED 5/8/97 FOR ERC PROJECT 970470)
S-1326-197-0	42,000 GALLON TANK	3020-05S C	1	63.00	63.00	D	1,000 BBL HEAVY CRUDE OIL WASH TANK *** TANK NO LONGER EXISTS AT THE STATIONARY SOURCE - PERMIT CANCELED PER COMPLIANCE DIVISION REQUEST, JEG, 6/17/97 ***
S-1326-198-2	84,000 GALLON TANK	3020-05S D	1	75.00	75.00	D	84,000 GALLON FIXED-ROOF WASH TANK D-801 WITH MAKE UP GAS SUPPLY LINE, SUCTION SCRUBBER, VAPOR COMPRESSOR & VAPOR CONTROL SYSTEM PIPING TO TEOR OPERATION S-1326-27. * CANCELLED PRIOR TO IMPLEMENTATION OF ATC'S S-1326-268-0 & S-269-0, GAH, 5/8/97 *

**Detailed Facility Report**

For Facility=1326

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PERMIT NUMBER	FEE DESCRIPTION	FEE RULE	QTY	FEE AMOUNT	FEE TOTAL	PERMIT STATUS	EQUIPMENT DESCRIPTION
S-1326-199-0	42,000 GALLON TANK	3020-05S C	1	63.00	63.00	D	42,000 GALLON CRUDE TANK D-802 WITH MAKE UP GAS SUPPLY LINE, SUCTION SCRUBBER, VAPOR COMPRESSOR AND VAPOR CONTROL SYSTEM PIPING TO TEOR OPERATION S-1326-27. ** CANCELLED PRIOR TO IMPLEMENTATION OF ATC'S S-1326-268-0 & S-269-0, GAH, 5/8/97 **
S-1326-200-0	42,000 GALLON TANK	3020-05S C	1	63.00	63.00	D	42,000 GALLON WASTE WATER TANK D-803 WITH MAKE UP GAS SUPPLY LINE, SUCTION SCRUBBER, VAPOR COMPRESSOR & VAPOR CONTROL SYSTEM PIPING TO TEOR OPERATION S-1326-27. ** CANCELLED PRIOR TO IMPLEMENTATION OF ATC'S S-1326-268-0 & S-269-0, GAH, 5/8/97 **
S-1326-201-8	126,000 GALLON TANK	3020-05 E	1	246.00	246.00	A	3,000 BBL FIXED ROOF WASH TANK #T-1 WITH VAPOR CONTROL SYSTEM (NORTH TREATING FACILITY).
S-1326-202-4	42,000 GALLON TANK	3020-05 C	1	135.00	135.00	A	1,000 BBL FIXED ROOF REJECT OIL TANK #T-2 WITH VAPOR CONTROL (PART OF S-1326-201) (NORTH TREATING FACILITY).
S-1326-203-5	84,000-GALLON TANK	3020-05 D	1	185.00	185.00	A	2,000 BBL FIXED ROOF STOCK TANK #T-3 WITH VAPOR CONTROL (PART OF S-1326-201) (NORTH TREATING FACILITY).
S-1326-204-5	84,000 GALLON TANK	3020-05 D	1	185.00	185.00	A	2,000 BBL FIXED ROOF STOCK TANK #T-4 WITH VAPOR CONTROL (PART OF S-1326-201) (NORTH TREATING FACILITY).
S-1326-205-4	210,000 GALLON TANK	3020-05 E	1	246.00	246.00	A	5,000 BBL FIXED ROOF WATER TANK #T-5 WITH VAPOR CONTROL (PART OF S-1326-201) (NORTH TREATING FACILITY).
S-1326-206-5	42,000 GALLON TANK	3020-05 C	1	135.00	135.00	A	1,000 BBL FIXED ROOF SKIM OIL TANK #T-6 WITH VAPOR CONTROL (PART OF S-1326-201) (NORTH TREATING FACILITY).
S-1326-207-0	42,000 GALLON TANK	3020-05 C	1	135.00	135.00	D	42,000 GALLON WATER CLEAN-UP TANK #T-7 CONNECTED TO VAPOR CONTROL SYSTEM WITH TWO 15 HP COMPRESSORS AND PIPING TO TEOR OPERATION S-1326-28 ***SURRENDERED AS PART OF PROJECT 950019, TANK NO STORES CLEAN PRODUCED WATER MPE***
S-1326-208-0	537,600 GALLON SUMP	3020-05 F	1	301.00	301.00	D	12,800 BBL EMERGENCY CONTAINMENT SUMP, 95 FT. BY 85 FT. BY 5 FT. DEEP (NORTH TREATING PLANT)
S-1326-209-0	40 HP	3020-01 B	1	117.00	117.00	D	WEMCO DEPURATOR MODEL 76 DISSOLVED AIR FLOATATION OIL/WATER SEPARATOR UNIT #1 WITH EMERGENCY P/V VENT PTO CANCELLED BY APPLICANT 3/31/94 AS PERMIT EXEMPT UNDER 2020 5.7.1
S-1326-210-1	4,200 GALLON TANK	3020-05S A	1	32.00	32.00	D	4,200 GALLON DRAIN TANK #T-9 CONNECTED TO VAPOR CONTROL SYSTEM UNDER PERMIT S-1326-201 (SECTION 11 NORTH TREATING FACILITY) ** PERMIT SURRENDERED BY OPERATOR PER RULE 2020, SECTION 5.7.2; DISCONNECTED FROM VAPOR RECOVERY ** JEG, 5/12/98
S-1326-211-1	4,200 GALLON TANK	3020-05S A	1	32.00	32.00	D	4,200 GALLON DRAIN TANK #T-10 CONNECTED TO VAPOR CONTROL SYSTEM UNDER PERMIT S-1326-201 (SECTION 11 NORTH TREATING FACILITY) ** PERMIT SURRENDERED BY OPERATOR PER RULE 2020, SECTION 5.7.2; DISCONNECTED FROM VAPOR RECOVERY ** JEG, 5/12/98

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S-1326-212-5	84,000 GALLON TANK	3020-05 D	1	185.00	185.00	A	2,000 BBL FIXED ROOF SURGE TANK #ST-1 WITH VAPOR CONTROL (PART OF S-1326-201) (NORTH TREATING FACILITY).
S-1326-213-2	10,500 GALLON TANK	3020-05 B	1	93.00	93.00	D	250 BBL FIXED-ROOF WASTE WATER TANK WITH VAPOR RECOVERY. (FANO LEASE) **** CANCELED PER APPLICANT REQUEST, 11/3/98, JEG ***
S-1326-214-5	84,000 GALLON STOCK TANK	3020-05 D	1	185.00	185.00	A	84,000 GALLON FIXED-ROOF STOCK TANK SERVED BY VAPOR CONTROL SYSTEM LISTED ON S-1326-46 (FANO LEASE)
S-1326-215-5	126,000 GALLON WASH TANK	3020-05 E	1	246.00	246.00	A	126,000 GALLON FIXED-ROOF WASH TANK SERVED BY VAPOR CONTROL SYSTEM LISTED ON S-1326-46 (FANO LEASE)
S-1326-216-2	84,000 GALLON TANK	3020-05 D	1	185.00	185.00	D	84,000 GALLON STOCK TANK #15355 WITH 12-3/4 IN. DIA. BY 4 FT. HIGH GAS/LIQUID SEPARATOR, 15 HP VAPOR COMPRESSOR AND VAPOR PIPING TO INCINERATION DEVICES (STRASSBURGER/SOUTHERN TREATING FACILITY)
S-1326-217-0	31,500 GALLON TANK	3020-05 C	1	135.00	135.00	D	31,500 GALLON WASH TANK #53598 SERVED BY VAPOR CONTROL SYSTEM LISTED ON PERMIT S-1326-216 (STRASSBURGER/SOUTHERN TREATING FACILITY)
S-1326-218-1	84,000 GALLON TANK	3020-05 D	1	185.00	185.00	D	2,000 BBL FIXED ROOF WASTEWATER TANK #1 WITH VAPOR CONTROL (PART OF S-1326-216) - STRASSBURGER/SOUTHERN TREATING FACILITY
S-1326-219-0	84,000 GALLON TANK	3020-05 D	1	185.00	185.00	D	84,000 GALLON WASTE WATER TANK #2 SERVED BY VAPOR CONTROL SYSTEM LISTED ON PTO S-1326-216. (STRASSBURGER/SOUTHERN TREATING FACILITY)
S-1326-220-0	84,000 GALLON TANK	3020-05 D	1	185.00	185.00	D	84,000 GALLON STOCK TANK #1 SERVED BY VAPOR CONTROL SYSTEM LISTED ON PTO S-1326-216. (STRASSBURGER/SOUTHERN TREATING FACILITY)
S-1326-221-0	84,000 GALLON TANK	3020-05 D	1	185.00	185.00	D	84,000 GALLON STOCK TANK #2 SERVED BY VAPOR CONTROL SYSTEM LISTED ON PTO S-1326-216. (STRASSBURGER/SOUTHERN TREATING FACILITY)
S-1326-222-0	84,000 GALLON TANK	3020-05 D	1	185.00	185.00	D	84,000 GALLON STOCK TANK #3 SERVED BY VAPOR CONTROL SYSTEM LISTED ON PTO S-1326-216. (STRASSBURGER/SOUTHERN TREATING FACILITY)
S-1326-223-0	40 HP	3020-01 B	1	117.00	117.00	D	WEMCO DEPURATOR MODEL 76 DISSOLVED AIR FLOTATION OIL/WATER SEPARATOR UNIT #2 WITH EMERGENCY P/V VENT PTO SURRENDERED BY APPLICANT 3/31/94 AS PERMIT EXEMPT UNDER 2020 5.7.1.
S-1326-224-0	2 NOZZLES	3020-11 A	2	34.00	68.00	D	2,000 GALLON UNDERGROUND GASOLINE STORAGE AND DISPENSING OPERATION WITH PHASE I AND RED JACKET PHASE II (G-70-52) VAPOR CONTROL SYSTEMS, AND TWO OPW E-47 NOZZLES (CANCELLED PER OXY LETTER RECEIVED 12-1-93)

### Detailed Facility Report

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PERMIT NUMBER	FEE DESCRIPTION	FEE RULE	QTY	FEE AMOUNT	FEE TOTAL	PERMIT STATUS	EQUIPMENT DESCRIPTION
S-1326-225-0	1 NOZZLE	3020-11 A	1	34.00	34.00	D	9,970 GALLON UNDERGROUND GASOLINE STORAGE AND DISPENSING OPERATION WITH PHASE I AND PHASE II GASOLINE VAPOR CONTROL AND ONE NOZZLE (CANCELLED PER OXY LETTER RECEIVED 12-1-93)
S-1326-227-0	6,250,000 BTU/HR	3020-02 G	1	815.00	815.00	D	6,250,000 BTU/HR STEAM GENERATOR PTO SURRENDERED BY APPLICANT 3/31/94. "WE HAVE DETERMINED THAT THIS UNIT IS NOT OXY'S."
S-1326-234-0	10,000 GALLON TANK	3020-05 B	1	93.00	93.00	D	10,500 GALLON FIXED-ROOF PETROLEUM STORAGE TANK #15321SHP (STAR ROBINSON)
S-1326-235-1	4,200 GALLONS	3020-05 A	1	75.00	75.00	D	4,200 GALLON FIXED-ROOF (ACTUALLY AN OPEN-TOP SKIM TANK ACCORDING TO INSPECTION REPORTS) PETROLEUM STORAGE TANK #100SKMTK (ROBINSON B DEHY)
S-1326-236-0	4,200 GALLON TANK	3020-05 A	1	75.00	75.00	D	4,200 GALLON FIXED-ROOF PETROLEUM STORAGE TANK #1WTRTK5 (WARD)
S-1326-237-0	4,200 GALLON TANK	3020-05 A	1	75.00	75.00	D	4,200 GALLON FIXED-ROOF PETROLEUM STORAGE TANK #TST1WARD (WARD)
S-1326-238-0	4,200 GALLON TANK	3020-05S A	1	32.00	32.00	D	4,200 GALLON FIXED-ROOF PETROLEUM STORAGE TANK #100FLTK (SOUTHERN TREATING FACILITY) (CANCELED BY PERMITTEE, EXEMPT UNDER 2020 5.7.2 - TEG, 3/31/98)
S-1326-239-0	8,400 GALLON TANK	3020-05 B	1	93.00	93.00	D	8400 GALLON FIXED-ROOF PETROLEUM STORAGE TANK #200TSTK (SOUTHERN TREATING FACILITY)
S-1326-240-0	4,200 GALLON TANK	3020-05S A	1	32.00	32.00	D	4,200 GALLON FIXED-ROOF PETROLEUM STORAGE TANK #40A-55WTSTTK (CAL TECH/SOUTHERN TREATING FACILITY) (CANCELED BY PERMITTEE, EXEMPT PER 2020 5.7.2 - TEG, 3/31/98)
S-1326-241-1	10,500 GALLON TANK	3020-05 B	1	93.00	93.00	D	10,500 GALLON FIXED-ROOF PETROLEUM STORAGE TANK #250WTR (GRADY/MCDOUGAL)
S-1326-242-0	4,200 GALLON TANK	3020-05 A	1	75.00	75.00	D	4,200 GALLON FIXED-ROOF PETROLEUM STORAGE TANK #GDY100TST (GRADY)
S-1326-243-0	4,200 GALLON TANK	3020-05 A	1	75.00	75.00	D	4,200 GALLON FIXED-ROOF PETROLEUM STORAGE TANK #LHT100TST (MCDOUGAL)
S-1326-244-1	10,500 GALLON TANK	3020-05 B	1	93.00	93.00	D	10,500 GALLON FIXED-ROOF PETROLEUM STORAGE TANK #LHT250WT (LIGHTNER)
S-1326-245-1	10,500 GALLON TANK	3020-05 B	1	93.00	93.00	D	10,500 GALLON FIXED-ROOF PETROLEUM STORAGE TANK #250DRN (COLE FEE)
S-1326-256-1	30.0 MMBTU/HR STEAM GENERATOR	3020-02 H	1	1,030.00	1,030.00	D	30.0 MMBTU/HR GAS-FIRED, TRAILER MOUNTED STRUTHERS STEAM GENERATOR WITH NORTH AMERICAN BURNER MODEL #6131-FA-CR.30 AND TRAILER #81-37443 APPROVED TO OPERATE AT VARIOUS SPECIFIED LOCATIONS



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PERMIT NUMBER	FEE DESCRIPTION	FEE RULE	QTY	FEE AMOUNT	FEE TOTAL	PERMIT STATUS	EQUIPMENT DESCRIPTION
S-1326-257-2	27 MMBTU/HR STEAM GENERATOR	3020-02 H	1	1,030.00	1,030.00	D	27.0 MMBTU/HR GAS-FIRED STRUTHERS STEAM GENERATOR WITH NORTH AMERICAN BURNER MODEL #6121-27.0-H6E62. (KERN TANK FARM)
S-1326-260-3	3.6 MMBtu/hr flare	3020-02 F	1	607.00	607.00	A	MODIFICATION OF 3.6 MMBTU/HR KALDAIR FLARE INCLUDING TWO 8000 LB SULFATREAT CANISTERS (ONE AS BACKUP), 50 HP COMPRESSOR, AND PIPING FROM TEOR S-1326-35 (YOUNG SECTION 14); ADD FLARE BYPASS CONNECTION TO FIELD FUEL GAS SYSTEM OR DOGGR DISPOSAL WELL(S)
S-1326-261-4	21,000 GALLON	3020-05 C	1	135.00	135.00	A	500 BBL FIXED ROOF STOCK TANK #T-20 WITH VAPOR CONTROL (PART OF S-1326-201) (NORTH TREATING FACILITY).
S-1326-262-3	21,000 GALLON	3020-05 C	1	135.00	135.00	A	500 BBL FIXED ROOF WATER TANK #T-19 WITH VAPOR CONTROL (PART OF S-1326-201) (NORTH TREATING FACILITY).
S-1326-263-15	126,000 gallon storage	3020-05 E	1	246.00	246.00	A	126,000 GALLON (3,000 BBL) FIXED ROOF WASH TANK SERVED BY SECTION 23 TANK VAPOR RECOVERY (TVR) SYSTEM INCLUDING TWO COMPRESSORS ROUTING VAPORS EITHER TO DOGGR APPROVED VAPOR DISPOSAL WELL OR TO FIELD FUEL GAS SYSTEM VIA HYDROGEN SULFIDE SCRUBBER(S) (SECTION 23 FACILITY)
S-1326-264-0	2.5 MMBTU/HR	3020-02 F	1	607.00	607.00	D	2.5 MMBTU/HR GAS FIRED NATURAL DRAFT HEATER TREATER #2 (NORTH TREATING PLANT)
S-1326-265-3	4.2 MMBTU/HR	3020-02 F	1	607.00	607.00	D	4.2 MMBTU/HR GAS FIRED FORCED DRAFT HEATER TREATER #3 WITH ONE NORTH AMERICAN BURNER MODEL #6131-CR - NORTH TREATING PLANT
S-1326-266-3	4.2 MMBTU/HR	3020-02 F	1	607.00	607.00	D	4.2 MMBTU/HR GAS FIRED FORCED DRAFT DIXON BOILER WITH NORTH AMERICAN BURNER MODEL #6131A-CR (NORTH TREATING PLANT)
S-1326-267-1	5.2 MMBTU/HR	3020-02 G	1	815.00	815.00	D	5.2 MMBTU/HR GAS FIRED FORCED DRAFT DIXON BOILER WITH NORTH AMERICAN BURNER MODEL #6121-5.2-HCR-B41 (SOUTHERN TREATING FACILITY)
S-1326-268-4	210,000 GALLON TANK	3020-05 E	1	246.00	246.00	A	5,000 BBL FIXED ROOF SURGE/FWKO TANK #T-12 WITH VAPOR CONTROL (PART OF S-1326-201) (NORTH TREATING FACILITY).
S-1326-269-4	210,000 GALLON TANK	3020-05 E	1	246.00	246.00	A	5,000 BBL FIXED ROOF PRODUCED WATER TANK #T-13 WITH VAPOR CONTROL (PART OF S-1326-201) (NORTH TREATING FACILITY).
S-1326-270-3	42,000 GALLON TANK	3020-05 C	1	135.00	135.00	A	1,000 BBL FIXED ROOF OIL TREATING TANK #TS-1 WITH VAPOR CONTROL (PART OF S-1326-201) (NORTH TREATING FACILITY).
S-1326-271-3	21,000 GALLON TANK	3020-05 C	1	135.00	135.00	A	500 BBL FIXED ROOF DEHYDRATION TANK #TS-2 WITH VAPOR CONTROL (PART OF S-1326-201) (NORTH TREATING FACILITY).
S-1326-272-3	42,000 GALLON TANK	3020-05 C	1	135.00	135.00	A	1,000 BBL FIXED ROOF WATER TANK #TS-3 WITH VAPOR CONTROL (PART OF S-1326-201) (NORTH TREATING FACILITY).
S-1326-273-1	4,620 GALLON STORAGE TANK	3020-05 A	1	75.00	75.00	A	4,620 GALLON (110 BBL) FIXED ROOF CRUDE OIL SKIM TANK (ROBINSON B LEASE, KERN FRONT OIL FIELD)

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PERMIT NUMBER	FEE DESCRIPTION	FEE RULE	QTY	FEE AMOUNT	FEE TOTAL	PERMIT STATUS	EQUIPMENT DESCRIPTION
S-1326-274-2	42,000 GAL STORAGE TANK	3020-05 C	1	135.00	135.00	A	42,000 GALLON FIXED ROOF SLOP OIL TANK # TS-8 WITH VAPOR CONTROL SHARED WITH S-1326-201.
S-1326-275-0	1,638,000 GALLONS	3020-05 G	1	382.00	382.00	D	1,638,000 GALLON FIXED ROOF PETROLEUM WASH TANK (PERMIT CANCELLED, EQUIPMENT NO LONGER IN USE, RUE 3-16-99)
S-1326-276-1	84,000 GALLONS	3020-05 D	1	185.00	185.00	D	84,000 GALLON FIXED ROOF PETROLEUM STORAGE TANK
S-1326-277-1	84,000 GALLONS	3020-05 D	1	185.00	185.00	D	84,000 GALLON FIXED ROOF PETROLEUM STORAGE TANK
S-1326-278-0	NOZZLE	3020-11 A	1	34.00	34.00	D	ONE 2,000 GALLON ABOVEGROUND STORAGE TANK SERVED BY PHASE I VAPOR RECOVERY SYSTEM (G-70-142) AND ONE GASOLINE DISPENSING NOZZLE
S-1326-279-4	210,000 GALLON FWKO TANK	3020-05 E	1	246.00	246.00	A	210,000 GALLON FREE WATER KNOCKOUT STORAGE TANK SERVED BY VAPOR CONTROL SYSTEM LISTED ON S-1326-263
S-1326-280-3	42,000 GALLON LACT TANK	3020-05 C	1	135.00	135.00	A	42,000 GALLON CRUDE OIL LACT STORAGE TANK SERVED BY VAPOR CONTROL SYSTEM LISTED ON S-1326-263
S-1326-281-4	42,000 GALLONS	3020-05 C	1	135.00	135.00	A	42,000 GALLON (1,000 BBL) CRUDE OIL LACT TANK SERVED BY VAPOR CONTROL SYSTEM LISTED ON S-1326-263
S-1326-283-2	84,000 GALLON RAW WATER TANK	3020-05 D	1	185.00	185.00	A	84,000 GALLON RAW WATER STORAGE TANK SERVED BY VAPOR CONTROL SYSTEM LISTED ON S-1326-263
S-1326-284-1	42,000 gal (1,000 BBL) Tank	3020-05 C	1	135.00	135.00	D	1,000 BBL PRODUCED WATER STORAGE TANK WITH VAPOR CONTROL.
S-1326-285-2	84,000 GALLON OVERFLOW TANK	3020-05 D	1	185.00	185.00	A	84,000 GALLON OVERFLOW TANK SERVED BY VAPOR CONTROL SYSTEM LISTED ON S-1326-263
S-1326-287-6	130 Controlled Wells	3020-09 A	130	9.34	1,214.20	A	THERMALLY ENHANCED OIL RECOVERY OPERATION WITH 130 STEAM ENHANCED PRODUCTION WELLS CONNECTED TO WELL HEAD CASING VENT VAPOR RECOVERY SYSTEM (CVR) VENTING VAPORS TO SECTION 23 TANK VAPOR RECOVERY SYSTEM (S-1326-263)
S-1326-294-3	62.5 MMBtu/hr burner	3020-02 H	1	1,030.00	1,030.00	A	62.5 MMBTU/HR NATURAL GAS-FIRED STRUTHERS STEAM GENERATOR WITH A NORTH AMERICAN MAGNA-FLAME G-LE ULTRA LOW NOX BURNER AND A FLUE GAS RECIRCULATION (FGR) SYSTEM
S-1326-304-0	84,000 GALLONS	3020-05 D	1	185.00	185.00	D	84,000 GALLON FIXED ROOF PETROLEUM STORAGE TANK #15402, CARIBOU LEASE
S-1326-305-0	84,000 GALLONS	3020-05 D	1	185.00	185.00	D	84,000 GALLON FIXED ROOF PETROLEUM STORAGE TANK #15403, CARIBOU LEASE
S-1326-306-0	42,000 GALLONS	3020-05 C	1	135.00	135.00	D	42,000 GALLON FIXED ROOF PETROLEUM SLOP OIL TANK, CARIBOU LEASE
S-1326-307-0	42,000 GALLONS	3020-05 C	1	135.00	135.00	D	42,000 GALLON FIXED ROOF PETROLEUM STORAGE TANK #12852, MOVIUS LEASE

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S-1326-308-0	42,000 GALLONS	3020-05 C	1	135.00	135.00	D	42,000 GALLON FIXED ROOF PETROLEUM STORAGE TANK #12870, MOVIUS LEASE
S-1326-309-0	63,000 GALLONS	3020-05 D	1	185.00	185.00	D	63,000 GALLON FIXED ROOF PETROLEUM WASH TANK, MOVIUS LEASE
S-1326-310-0	42,000 gallon tank	3020-05 C	1	135.00	135.00	D	42,000 GALLON FIXED ROOF PETROLEUM SHIPPING TANK.
S-1326-311-0	42,000 gallon tank	3020-05 C	1	135.00	135.00	D	42,000 GALLON FIXED ROOF PETROLEUM SHIPPING TANK.
S-1326-312-0	42,000 gallon tank	3020-05 C	1	135.00	135.00	D	42,000 GALLON FIXED ROOF PETROLEUM SHIPPING TANK.
S-1326-313-0	63,000 gallon tank	3020-05 D	1	185.00	185.00	D	63,000 GALLON FIXED ROOF PETROLEUM WASH TANK.
S-1326-314-2	85 MMBtu/hr burner	3020-02 H	1	1,030.00	1,030.00	A	85.0 MMBTU/HR STRUTHERS NATURAL GAS-FIRED STEAM GENERATOR WITH A NORTH AMERICAN MODEL MAGNA-FLAME G-LE ULTRA ULTRA-LOW NOX BURNER WITH FLUE GAS RECIRCULATION (FGR) AND AN O2 CONTROLLER
S-1326-315-0	840,000 Gallon	3020-05 F	1	301.00	301.00	A	20,000 BBL FWKO VENTED TO VAPOR CONTROL SYSTEM LISTED ON S-1326-263
S-1326-316-0	45,486 GALLONS	3020-05 C	1	135.00	135.00	A	45,486 GALLON FIXED ROOF PRODUCED WATER TANK #32346 (TEJON)
S-1326-317-0	45,486 GALLONS	3020-05 C	1	135.00	135.00	A	45,486 GALLON FIXED ROOF PETROLEUM WASH TANK #32384 (TEJON)
S-1326-318-0	45,486 GALLONS	3020-05 C	1	135.00	135.00	A	45,486 GALLON FIXED ROOF PETROLEUM STORAGE TANK #30114 (TEJON)
S-1326-319-0	45,486 GALLONS	3020-05 C	1	135.00	135.00	A	45,486 GALLON FIXED ROOF PETROLEUM STORAGE TANK #30115 (TEJON)
S-1326-320-0	840,000 GALLONS	3020-05 F	1	301.00	301.00	A	ONE 840,000 GALLON FIXED ROOF PETROLEUM WASH TANK (SEC. 9 NO. 1)
S-1326-321-0	840,000 GALLONS	3020-05 F	1	301.00	301.00	A	ONE 840,000 GALLON FIXED ROOF PETROLEUM WASH TANK (SEC. 9 NO. 2)
S-1326-322-0	504,000 GALLONS	3020-05 F	1	301.00	301.00	A	ONE 504,000 GALLON FIXED ROOF PETROLEUM WASH TANK (SEC. 9 NO. 4)
S-1326-323-0	420,000 GALLONS	3020-05 E	1	246.00	246.00	A	ONE 420,000 GALLON FIXED ROOF PETROLEUM STORAGE TANK (SEC. 9 NO. 8)
S-1326-324-0	210,000 GALLON	3020-05 E	1	246.00	246.00	A	ONE 210,000 GALLON FIXED ROOF PETROLEUM WASH TANK (SEC. 9 NO. 9) WITH A VAPOR CONTROL SYSTEM CONSISTING OF ONE COMPRESSOR, TWO SCRUBBERS, PIPING, AND CONTROL HARDWARE (SHARED WITH S-3529-20 AND -21)
S-1326-325-0	420,000 GALLONS	3020-05 E	1	246.00	246.00	A	ONE 420,000 GALLON FIXED ROOF PETROLEUM STORAGE TANK (SEC. 9 NO. 10)
S-1326-326-0	210,000 GALLONS	3020-05 E	1	246.00	246.00	A	210,000 GALLON FIXED ROOF PETROLEUM STORAGE TANK, SEC. 9 #11 CONNECTED TO VAPOR CONTROL SYSTEM LISTED ON S-3529-18

**Detailed Facility Report**  
For Facility=1326  
Sorted by Facility Name and Permit Number

PERMIT NUMBER	FEE DESCRIPTION	FEE RULE	QTY	FEE AMOUNT	FEE TOTAL	PERMIT STATUS	EQUIPMENT DESCRIPTION
S-1326-327-0	210,000 gallons	3020-05 E	1	246.00	246.00	A	ONE 210,000 GALLON FIXED ROOF PETROLEUM STORAGE TANK (SEC. 9 NO. 12) CONNECTED TO VAPOR CONTROL SYSTEM LISTED ON S-3529-18
S-1326-328-0	31,500 GALLONS	3020-05 C	1	135.00	135.00	A	ONE 31,500 GALLON FIXED ROOF PETROLEUM STORAGE TANK (SO. UNIT TANK FARM NO. 8 )
S-1326-329-0	1 nozzle	3020-11 A	1	34.00	34.00	D	GASOLINE DISPENSING OPERATION WITH ONE 1,000 GALLON ABOVEGROUND GASOLINE STORAGE TANK SERVED BY TWO-POINT PHASE I VAPOR RECOVERY SYSTEM, AND 1 FUELING POINT WITH 1 GASOLINE DISPENSING NOZZLE SERVED BY BALANCE PHASE II VAPOR RECOVERY SYSTEM (G-70-148-A)
S-1326-330-0	42,000 gallon storage container	3020-05 C	1	135.00	135.00	A	42,000 GALLON FIXED ROOF PETROLEUM STORAGE TANK (NORTH UNIT NO. 5) WITH PV VALVE
S-1326-331-0	84,000 gallon storage container	3020-05 D	1	185.00	185.00	A	ONE 84,000 GALLON FIXED ROOF PETROLEUM WASH TANK (NORTH UNIT NO. 6) WITH PV VALVE
S-1326-332-0	84,000 gallon	3020-05 D	1	185.00	185.00	A	ONE 84,000 GALLON FIXED ROOF CRUDE OIL WASH TANK (SOUTH UNIT TANK FARM NO. 1)
S-1326-333-0	84,000 gallon	3020-05 D	1	185.00	185.00	A	ONE 84,000 GALLON FIXED ROOF STOCK TANK (SOUTH UNIT TANK FARM NO. 2)
S-1326-334-0	84,000 gallons	3020-05 D	1	185.00	185.00	A	ONE 84,000 GALLON FIXED ROOF WASH TANK (NO. 1) WITH PRV DEVICE (FUNCTIONALLY IDENTICAL REPLACEMENT UNIT FOR S-3529-30. SECURITY TANK FARM)
S-1326-335-0	84,000 gallons	3020-05 D	1	185.00	185.00	A	ONE 84,000 GALLON FIXED ROOF STORAGE TANK (NO. 2) WITH PRV DEVICE (FUNCTIONALLY IDENTICAL REPLACEMENT UNIT FOR S-3529-31-0 SECURITY TANK FARM)
S-1326-336-0	1380 hp IC engine	3020-10 F	1	749.00	749.00	D	1,380 BHP WAUKESHA, MODEL L5794GSI VHP SERIES FOUR, NATURAL GAS/TEOR/TVR GAS-FIRED RICH BURN IC ENGINE WITH A DCL INTERNATIONAL, MODEL DC76-18 CATALYST POWERING A 920 KW ELECTRICAL GENERATOR
S-1326-337-3	85 MMBtu/hr burner	3020-02 H	1	1,030.00	1,030.00	A	85.0 MMBTU/HR STRUTHERS NATURAL GAS-FIRED STEAM GENERATOR WITH A NORTH AMERICAN MODEL MAGNA-FLAME G-LE ULTRA ULTRA-LOW NOX BURNER WITH FLUE GAS RECIRCULATION (FGR) AND AN O2 CONTROLLER
S-1326-338-3	85 MMBtu/hr burner	3020-02 H	1	1,030.00	1,030.00	A	85.0 MMBTU/HR STRUTHERS NATURAL GAS-FIRED STEAM GENERATOR WITH A NORTH AMERICAN MODEL MAGNA-FLAME G-LE ULTRA ULTRA-LOW NOX BURNER (OR EQUIVALENT) WITH FLUE GAS RECIRCULATION (FGR) AND AN O2 CONTROLLER
S-1326-339-0	3.3 MMBTU	3020-02 F	1	607.00	607.00	D	3.3 MMBTU/HR PETRO-THERM BOILER WITH HAGUE INTERNATIONAL OXYGEN CONTROLLER (ANTHILL LEASE)
S-1326-340-0	22 MMBtu/hr	3020-02 H	1	1,030.00	1,030.00	D	22 MMBTU/HR NATIONAL STEAM GENERATOR WITH LOW NOX BURNER, FLUE GAS RECIRCULATION AND O2 MONITOR CONTROLLER, AND FUEL METER

**Detailed Facility Report**  
For Facility=1326  
Sorted by Facility Name and Permit Number

PERMIT NUMBER	FEE DESCRIPTION	FEE RULE	QTY	FEE AMOUNT	FEE TOTAL	PERMIT STATUS	EQUIPMENT DESCRIPTION
S-1326-341-0	90 WELLS	3020-09 A	90	9.34	840.60	A	THERMALLY ENHANCED OIL RECOVERY OPERATION WELL VENT VAPOR CONTROL SYSTEM SERVING UP TO 50 STEAM DRIVE WELLS AND 40 CYCLIC WELLS (MOVIUS FEE LEASE)
S-1326-342-0	126,000 gallons	3020-05 E	1	246.00	246.00	D	126,000 GALLON (3,000 BBL) FIXED ROOF HEATED PETROLEUM STORAGE TANK WITH VAPOR CONTROL (FEE LEASE)
S-1326-343-0	84,000 gallon	3020-05 D	1	185.00	185.00	D	84,000 GALLON (2,000 BBL) FIXED ROOF HEATED PETROLEUM STORAGE TANK WITH VAPOR CONTROL (20X1535, FEE LEASE)
S-1326-344-0	84,000 gallon	3020-05 D	1	185.00	185.00	D	84,000 GALLON (2,000 BBL) FIXED ROOF HEATED PETROLEUM STORAGE TANK WITH VAPOR CONTROL (20X1536, FEE LEASE)
S-1326-345-0	84,000 gallon	3020-05 D	1	185.00	185.00	D	84,000 GALLON (2,000 BBL) FIXED ROOF HEATED PETROLEUM STORAGE TANK WITH VAPOR CONTROL (20X1537, MOVIUS LEASE)
S-1326-346-0	84,000 gallon	3020-05 D	1	185.00	185.00	D	84,000 GALLON (2,000 BBL) FIXED ROOF HEATED PETROLEUM STORAGE TANK WITH VAPOR CONTROL (20X1538, MOVIUS LEASE)
S-1326-347-0	63,000 gallon	3020-05 D	1	185.00	185.00	D	63,000 GALLON (1,500 BBL) FIXED ROOF HEATED WASH TANK WITH VAPOR CONTROL (MOVIUS LEASE)
S-1326-348-0	10 WELLS	3020-09 A	10	9.34	93.40	A	10 CLOSED VENTS CYCLIC WELLS
S-1326-349-0	42,000 GALLONS	3020-05 C	1	135.00	135.00	A	42,000 GALLON FIXED ROOF PETROLEUM STOCK TANK WITH PRESSURE VACUUM VENT (#156744, TEJON LEASE)
S-1326-350-0	42,000 GALLONS	3020-05 C	1	135.00	135.00	D	42,000 GALLON FIXED ROOF PETROLEUM STOCK TANK WITH PRESSURE/VACUUM VENT (#156571, PORTALS #3 LEASE)
S-1326-351-0	31,500 GALLONS	3020-05 C	1	135.00	135.00	D	31,500 GALLON FIXED ROOF WASH TANK (PORTALS #3 LEASE)
S-1326-352-0	42,000 GALLONS	3020-05 C	1	135.00	135.00	D	42,000 GALLON FIXED ROOF PETROLEUM STOCK TANK WITH PRESSURE/VACUUM VENT (#156510, PORTALS #3 LEASE)
S-1326-353-0	21,000 GALLONS	3020-05 C	1	135.00	135.00	A	21,000 GALLON FIXED ROOF PETROLEUM STORAGE TANK WITH PRESSURE/VACUUM VENT (ANTHILL LEASE)
S-1326-354-0	21,000 GALLONS	3020-05 C	1	135.00	135.00	A	21,000 GALLON FIXED ROOF PETROLEUM STOCK TANK WITH PRESSURE/VACUUM VENT (#5X705, GRAPEVINE LEASE)
S-1326-355-0	21,000 GALLONS	3020-05 C	1	135.00	135.00	A	21,000 GALLON FIXED ROOF PETROLEUM STOCK TANK WITH PRESSURE/VACUUM VENT (GRAPEVINE LEASE)
S-1326-356-0	42,000 GALLONS	3020-05 C	1	135.00	135.00	A	42,000 GALLON FIXED ROOF WASH TANK WITH PRESSURE/VACUUM VENT (#56569, GRAPEVINE LEASE)
S-1326-357-0	42,000 GALLON STORAGE CONTAINER	3020-05 C	1	135.00	135.00	A	42,000 GALLON FIXED ROOF PETROLEUM STORAGE TANK WITH PRESSURE/VACUUM VENT (#117049, DAVIES LEASE)
S-1326-358-0	42,000 GALLONS	3020-05 C	1	135.00	135.00	A	42,000 GALLON FIXED ROOF PETROLEUM STORAGE TANK WITH PRESSURE/VACUUM VENT (#117050, DAVIES LEASE)
S-1326-359-0	34 WELLS	3020-09 A	34	9.34	317.56	D	34 UNCONTROLLED CYCLIC WELLS

**Detailed Facility Report**  
For Facility=1326  
Sorted by Facility Name and Permit Number

PERMIT NUMBER	FEE DESCRIPTION	FEE RULE	QTY	FEE AMOUNT	FEE TOTAL	PERMIT STATUS	EQUIPMENT DESCRIPTION
S-1326-360-0	126,000 Gallons	3020-05 E	1	246.00	246.00	A	126,000 GALLON, 29 FT. DIA., FIXED ROOF WASH TANK INCLUDING: FWKO VESSEL, WEMCO OIL/WATER SEPARATOR, AND SHARED VAPOR CONTROL SYSTEM (ANTHILL LEASE)
S-1326-361-0	84,000 GALLON TANK	3020-05 D	1	185.00	185.00	A	84,000 GALLON, 29 FT. DIA., FIXED ROOF STORAGE TANK WITH SHARED VAPOR CONTROL (ANTHILL LEASE)
S-1326-362-0	84,000 GALLON TANK	3020-05 D	1	185.00	185.00	A	84,000 GALLON, 29 FT. DIA., FIXED ROOF STORAGE TANK WITH SHARED VAPOR CONTROL (ANTHILL LEASE)
S-1326-363-0	31,500 GALLONS	3020-05 C	1	135.00	135.00	A	31,500 GALLON FIXED ROOF PETROLEUM STORAGE TANK NO. 002317 WITH PRESSURE/VACUUM VENT (ANTHILL LEASE)
S-1326-364-0	63,000 GALLONS	3020-05 D	1	185.00	185.00	D	63,000 GALLON FIXED ROOF PETROLEUM TEST TANK WITH PRESSURE/VACUUM VENT (JV LEASE)
S-1326-365-0	52,500 GALLONS	3020-05 D	1	185.00	185.00	A	52,500 GALLON FIXED ROOF WASH TANK (JV LEASE)
S-1326-366-0	42,000 GALLONS	3020-05 C	1	135.00	135.00	A	42,000 GALLON FIXED ROOF PETROLEUM STOCK TANK WITH PRESSURE/VACUUM VENT (#10X901, JV LEASE)
S-1326-367-0	42,000 GALLONS	3020-05 C	1	135.00	135.00	A	42,000 GALLON FIXED ROOF PETROLEUM STORAGE TANK WITH PRESSURE VACUUM VENT #10X1853 (OMB LEASE)
S-1326-368-0	21,000 GALLON TANK	3020-05 C	1	135.00	135.00	A	21,000 GALLON (500 BBL) FIXED ROOF PETROLEUM STORAGE TANK WITH PRESSURE/VACUUM VENT (CARREC FEE LEASE)
S-1326-369-0	25 MMBtu/hr	3020-02 H	1	1,030.00	1,030.00	A	25 MM BTU/HR STEAM GENERATOR WITH NORTH AMERICAN LOW-NOX BURNER AND O2 MONITOR/CONTROLLER
S-1326-370-0	10,500 GALLONS	3020-05 B	1	93.00	93.00	A	10,500 GALLON FIXED ROOF DRAIN TANK WITH VAPOR CONTROL
S-1326-371-0	180 hp engine	3020-10 B	1	117.00	117.00	A	180 HP DIESEL FIRED DETROIT DIESEL 6V53 TRANSPORTABLE IC ENGINE DRIVING POSITIVE DISPLACEMENT PUMP IN WELL PUMP SERVICE
S-1326-372-0	23 STEAM ENHANCED WELLS	3020-09 B	23	9.34	214.82	A	23 STEAM ENHANCED CRUDE OIL PRODUCTION WELLS WITH CLOSED WELL VENTS
S-1326-373-4	126,000 gallons	3020-05 E	1	246.00	246.00	A	3000 BBL HEATED, FIXED ROOF WASH TANK WITH VAPOR CONTROL SYSTEM ALSO SERVING TANKS S-1326-374, -375, AND -381, CONSISTING OF A FWKO, A COMPRESSOR AND PIPING TO VAPOR INCINERATION DEVICES
S-1326-374-0	84,000 Gallons.	3020-05 D	1	185.00	185.00	A	2000 BBL (84,000 GALLON) HEATED FIXED ROOF STOCK TANK SERVED BY VRS SHARED WITH S-1326-373
S-1326-375-0	84,000 Gallons	3020-05 D	1	185.00	185.00	A	2000 BBL (84,000 GALLON) HEATED FIXED ROOF STOCK TANK SERVED BY VRS SHARED WITH S-1326-373
S-1326-376-0	6100 kBTu/hr flare	3020-02 G	1	815.00	815.00	A	6.1 MMBTU/HR FLARE INCINERATING WASTE GAS FROM VAPOR COLLECTION SYSTEM
S-1326-377-0	31,500 GAL	3020-05 C	1	135.00	135.00	A	750 BBL (31,500 GAL) FIXED ROOF CRUDE OIL WASH TANK - OMB LEASE

**Detailed Facility Report**  
For Facility=1326  
Sorted by Facility Name and Permit Number

PERMIT NUMBER	FEE DESCRIPTION	FEE RULE	QTY	FEE AMOUNT	FEE TOTAL	PERMIT STATUS	EQUIPMENT DESCRIPTION
S-1326-378-0	42,000 Gallon Tank	3020-05 C	1	135.00	135.00	A	42,000 GALLON FIXED ROOF PETROLEUM STORAGE TANK: ID #10X898 STOCK TANK
S-1326-379-0	42,000 Gallon Tank	3020-05 C	1	135.00	135.00	D	42,000 GALLON FIXED ROOF PETROLEUM STORAGE TANK (ID # 10X1756)
S-1326-380-0	42,000 Gallon Tank	3020-05 C	1	135.00	135.00	D	42,000 GALLON FIXED ROOF PETROLEUM STORAGE TANK (ID # 10X900)
S-1326-381-0	84,000 Gallons	3020-05 D	1	185.00	185.00	A	84,000 GALLON CRUDE OIL PRODUCTION TANK SERVED BY A VAPOR RECOVERY SYSTEM SHARED WITH PERMIT UNIT S-1326-373
S-1326-382-0	> 15 MMBtu/hr	3020-02 H	1	1,030.00	1,030.00	A	25 FOOT TALL MACTRONIC AIR-ASSISTED PROCESS FLARE WITH 6 INCH DIAMETER FLARE STACK AND AUTOMATIC RE-IGNITION
S-1326-383-0	42,000 gal. tank	3020-05 C	1	135.00	135.00	A	1000 BARREL, FIXED ROOF, CONSTANT LEVEL CRUDE OIL STORAGE TANK WITH PRESSURE/VACUUM VENT
S-1326-384-0	84,000 gallon	3020-05 D	1	185.00	185.00	A	2,000 BBL SKIM TANK (JV LEASE)
S-1326-385-1	85 MMBtu/hr	3020-02 H	1	1,030.00	1,030.00	A	85 MMBTU/HR NATURAL GAS-FIRED STEAM GENERATOR WITH A NORTH AMERICAN 4231-85 GLE BURNER (OR EQUIVALENT), AND FLUE GAS RECIRCULATION (FGR)
S-1326-387-0	4,200 gallon tank	3020-05S A	1	32.00	32.00	A	100 BBL (4200 GALLON) FIXED ROOF CRUDE OIL STORAGE TANK
S-1326-388-0	42,000 gallon tank	3020-05 C	1	135.00	135.00	A	1000 BBL (42,000 GALLON) FIXED ROOF CRUDE OIL STORAGE TANK
S-1326-389-0	84,000 gallon tank	3020-05 D	1	185.00	185.00	A	2000 BBL (84,000 GALLON) FIXED ROOF CRUDE OIL STORAGE TANK
S-1326-398-0	105,000 gallons	3020-05 E	1	246.00	246.00	A	2,500 BBL FIXED ROOF CRUDE OIL STOCK TANK WITH PRESSURE-VACUUM VALVE (MT. POSO OIL FIELD, GLIDE 33 LEASE)
S-1326-399-0	105,000 GALLONS	3020-05 E	1	246.00	246.00	A	2,500 BBL FIXED ROOF CONSTANT-LEVEL CRUDE OIL WASH TANK WITH PRESSURE-VACUUM VALVE (MT. POSO OIL FIELD, GLIDE 33 LEASE)

Number of Facilities Reported: 1

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# ATTACHMENT D

Vintage Production California, LLC Comments  
And District Responses

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Listed below are Vintages Production California's comments on the draft PTO's associated with the draft Title V renewal permits:

Permit: S-1326-9:

Comment:

Permit description of draft permit only lists the steam generator. There is no mention of a low NOx burner and flue gas recirculation (FGR system)

District Response:

The equipment Description will be revised as follows to include the burner and FGR:

62.5 MMBTU/HR NATURAL GAS-FIRED STRUTHERS STEAM GENERATOR WITH A NORTH AMERICAN MAGNA-FLAME G-LE ULTRA LOW NOX BURNER AND A FLUE GAS RECIRCULATION (FGR) SYSTEM - DIS# 21928-82 (NORTH TREATING PLANT)

Permit: S-1326-35:

Comment:

The facility is permitted for 150 steam enhanced wells. Condition 34, limits the number of steam enhanced wells to 100.

District Response:

ATC S-1326-35-11 was converted October 6, 2011. It was evaluated during in the renewal project; however, the conditions were not updated in the Districts electronic database. The permit will be updated to reflect the current evaluated permit. The condition was removed from the permit because the number of wells is included in the equipment description (see permit in Appendix A)

Permit: S-1326-46:

Comment:

"The control efficiency determination condition has been removed; Permit S-1326-47 and S-1326-48 still have this condition; current permit condition 18:

Control efficiency shall be determined by a comparison of controlled emissions to those emissions which would occur from a fixed or cone roof tank in the same product service without a vapor recovery system. Emissions shall be determined based on tank emission factors in USEPA Publication AP-42, component counts

for fugitive emissions sources, recognized emission factors for fugitive emission sources and the efficiency of any VOC destruction device.”

District Response:

The condition will be replaced on the permit

Permit: S-1326-48:

Comment:

The permit description lists the tank size as 500 bbl

District Response:

Typographical error will be corrected to 5000 bbls

Permit: S-1326-126:

Comment:

The permit description lists the tank size as 2,000 gallons

District Response:

Typographical error will be corrected to 2000 bbls

Permit: S-1326-158:

Comment:

The permit description lists the tank size as 500 bbl

District Response:

Typographical error will be corrected to 5000 bbls

Permit: S-1326-201:

Comment:

The printed draft permit is missing page 2 of 3

District Response:

Page 2 will be included in final copy

Permit: S-1326-204:

Comment:

"The draft permit removed current permit condition 21. Similar permits still have this condition:

"Operator shall determine the true vapor pressure of the petroleum liquid stored in the tank located at the beginning of the process flow after the production header at least once per year in accordance with methods described in Section 6.2 of District Rule 4623 (Amended 12/17/92). Determinations shall be made annually during summer and whenever there is a change in the source or type of petroleum entering the tank."

District Response:

The condition will be replaced on the permit

Permit: S-1326-205:

Comment:

Has an average daily throughput on condition 4 but there was not one before, also has a VOC emission rate limit in condition 5, but there was not one before. There is no explanation why these conditions were added

Condition 4:

The average daily throughput for this tank (on an annual basis) shall not exceed 4,000 bbl/day.

Condition 5:

VOC emission rate shall not exceed 1.9 lb/day.

District Response:

The conditions were placed on the permit in error and will be removed.

Permit: S-1326-215:

Comment:

Condition 18 and condition 19 have the same intent, so there is some redundancy;

Draft Permit Condition 18:

The permittee shall keep accurate records of each organic liquid stored in the tank, including its storage temperature, TVP, and API gravity.

Draft Permit Condition 19:

The permittee shall keep accurate records of liquids stored and true vapor pressure of such liquids.

District Response:

The following condition will remain to enforce Rule 4623, section 6.3.6.

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, 6.3.6] Y

Permit: S-1326-260:

Comment:

There are no condition references to District Rule 4311 even though this permit is for a flare

District Response:

The District agrees with Rule 4331 should have been evaluated in the renewal project. Therefore, the following conditions will be placed on the flare permit to ensure compliance with the Rule:

Flare shall comply with all of the applicable requirements of Rule 4311. [District Rule 4311]

The flame shall be present at all times when combustible gases are vented through the flare. [District Rule 4311, 5.2]

The flare outlet shall be equipped with an automatic ignition system, or, shall operate with a pilot flame present at all times when combustible gases are vented through the flare, except during purge periods for automatic-ignition equipped flares. [District Rule 4311, 5.3]

Except for flares equipped with a flow-sensing ignition system, a heat sensing device such as a thermocouple, ultraviolet beam sensor, infrared sensor, or an equivalent device, capable of continuously detecting at least one pilot flame or the flare flame is present shall be installed and operated. [District Rule 4311, 5.4]

Flares using flow-sensing automatic ignition systems and not using a continuous flame pilot shall use purge gas for purging. [District Rule 4311, 5.5]

Open flares (air-assisted, steam-assisted, or non-assisted) in which the flare gas pressure is less than 5 psig shall be operated in such a manner that meets the provisions of 40 CFR 60.18. [District Rule 4311, 5.6]

Flaring is prohibited unless it is consistent with an approved flare minimization plan (FMP), pursuant to Rule 4311, Section 6.5, and all commitments listed in that plan have been met. This standard shall not apply if the APCO determines that the flaring is caused by an emergency as defined by Section 3.7 and is necessary to prevent an accident, hazard or release of vent gas directly to the atmosphere [District Rule 4311, 5.8]

The operator of a flare subject to flare minimization requirements pursuant to Section 5.8 shall monitor the vent gas flow to the flare with a flow measuring device or other parameters as specified in the Permit to Operate. The operator shall maintain records pursuant to Section 6.1.7. Flares that the operator can verify, based on permit conditions, are not capable of producing reportable flare events pursuant to Section 6.2.2 shall not be required to monitor vent gas flow to the flare. [District Rule 4311, 5.10]

The following records shall be maintained, retained on-site for a minimum of five years, and made available to the APCO, ARB, and EPA upon request: 1) A copy of the compliance determination conducted pursuant to Section 6.4.1., 2) For flares used during an emergency, record of the duration of flare operation, amount of gas burned, and the nature of the emergency situation, 3) A copy of the approved flare minimization plan pursuant to Section 6.5, 4) On and after July 1, 2012, where applicable, a copy of annual reports submitted to the APCO pursuant to Section 6.2, and 5) Where applicable, monitoring data collected pursuant to Sections 5.10. [District Rule 4311, 6.1]

The operator of a flare subject to flare minimization plans pursuant to Section 5.8 of Rule 4311 shall notify the APCO of an unplanned flaring event within 24 hours after the start of the next business day or within 24 hours of their discovery, whichever occurs first. The notification shall include the flare source identification, the start date and time, and the end date and time. [District Rule 4311, 6.2.1]

Effective on and after July 1, 2012, and annually thereafter, the operator of a flare subject to flare minimization plans pursuant to Section 5.8 shall

submit an annual report to the APCO that summarizes all Reportable Flaring Events as defined in Section 3.0 that occurred during the previous 12 month period. The report shall be submitted within 30 days following the end of the twelve month period of the previous year. The report shall include, but is not limited to all of the following: 1) The results of an investigation to determine the primary cause and contributing factors of the flaring event; 2) Any prevention measures considered or implemented to prevent recurrence together with a justification for rejecting any measures that were considered but not implemented; 3) If appropriate, an explanation of why the flaring was an emergency and necessary to prevent accident, hazard or release of vent gas to the atmosphere, or where, due to a regulatory mandate to vent a flare, it cannot be recovered, treated and used as a fuel gas at the facility; and 4) The date, time, and duration of the flaring event. [District Rule 4311, 6.2.2]

Effective on and after July 1, 2012, and annually thereafter, the operator of a flare subject to flare monitoring requirements pursuant to Rule 4311, Sections 5.10, 6.6, 6.7, 6.8, 6.9, and 6.10, as appropriate, shall submit an annual report to the APCO within 30 days following the end of each 12 month period. The report shall include the following: 1) The total volumetric flow of vent gas in standard cubic feet for each day, 2) Hydrogen sulfide content, methane content, and hydrocarbon content of vent gas composition pursuant to Section 6.6, 3) If vent gas composition is monitored by a continuous analyzer or analyzers pursuant to Section 5.11, average total hydrocarbon content by volume, average methane content by volume, and depending upon the analytical method used pursuant to Section 6.3.4, total reduced sulfur content by volume or hydrogen sulfide content by volume of vent gas flared for each hour of the month, 4) If the flow monitor used pursuant to Section 5.10 measures molecular weight, the average molecular weight for each hour of each month, 5) For any pilot and purge gas used, the type of gas used, the volumetric flow for each day and for each month, and the means used to determine flow, 6) Flare monitoring system downtime periods, including dates and times, 7) For each day and for each month provide calculated sulfur dioxide emissions, and 8) A flow verification report for each flare subject to this rule. The flow verification report shall include flow verification testing pursuant to Section 6.3.5. [District Rule 4311, 6.2.3]

Hydrogen sulfide content of vent gas shall be determined using ASTM Method D 1945-96, ASTM Method UOP 539-97, ASTM Method D 4084-94, or ASTM Method D 4810-88. [District Rule 4311, 6.3.4]

Upon request, the operator of flares that are subject to Section 5.6 shall make available to the APCO the compliance determination records that

demonstrate compliance with the provisions of 40 CFR 60.18, (c)(3) through (c)(5). [District Rule 4311, 6.4.1]

Permit: S-1326-261:

Comment:

Condition 11 and condition 12 have the same intent, so there is some redundancy

Draft Permit Condition 11:

Any tank gauging or sampling 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.

Draft Permit Condition 12:

Any tank gauging or sampling 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 Response:

Condition 11 will be removed. Condition 12 contains the "Leak-free" terminology contained in Rule 4623

Permit: S-1326-261:

Comment:

Condition 15 and condition 22 have the same intent, so there is some redundancy

Draft Permit Condition 15:

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.

Draft Permit Condition 22:

Any component found to be leaking on two consecutive annual inspections is in violation of this rule, even if it is under the voluntary inspection and maintenance program.

District Response:

The following condition will remain:

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

Permit: S-1326-262:

Comment:

Condition 10 and condition 11 have the same intent, so there is some redundancy

Draft Permit Condition 10:

Any tank gauging or sampling 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.

Draft Permit Condition 11:

Any tank gauging or sampling 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 Response:

Condition 10 will be removed. Condition 11 contains the "Leak-free" terminology contained in Rule 4623

Permit: S-1326-262:

Comment:

Condition 14 and condition 21 have the same intent, so there is some redundancy

Draft Permit Condition 14:

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.

Draft Permit Condition 21:

Any component found to be leaking on two consecutive annual inspections is in violation of this rule, even if it is under the voluntary inspection and maintenance program.

District Response:



The following condition will remain:

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

Permit: S-1326-262:

Comment:

The draft permit removed condition 22. Similar permits still have this condition.

Operator shall determine the true vapor pressure of the petroleum liquid stored in the tank located at the beginning of the process flow after the production header at least once per year in accordance with methods described in Section 6.2 of District Rule 4623 (Amended 12/17/92). Determinations shall be made annually during summer and whenever there is a change in the source or type of petroleum entering the tank.

District Response:

The condition will be replaced on the permit

Permit: S-1326-158, S-1326-268, S-1326-269, S-1326-270, S-1326-271, S-1326-272, S-1326-273, S-1326-274, S-1326-279, S-1326-280, S-1326-281, S-1326-283, S-1326-285, S-1326-287, S-1326-294, S-1326-314, S-1326-315, S-1326-316, S-1326-317, S-1326-318, S-1326-319, S-1326-320, S-1326-321, S-1326-322, S-1326-323, S-1326-324, S-1326-325, and S-1326-326

Comment:

No draft permits provided with Title V Renewal. Had to review draft permits from CD

District Response:

The above listed draft permits were mailed to EPA, ARB, and the applicant on November 30, 2011

Permit: S-1326-316:

Comment:

The permit description lists the tank as 1000 bbl

District Response:

Although the tank size is nominally greater than 1000 BBL (1083 BBL), The Districts current practice to avoid confusion and follow industry standard practice and round the tanks size to 1000 BBLs. The equipment description will remain 1000 BBL

Permit: S-1326-317:

Comment:

The permit description lists the tank as 1000 bbl

District Response:

Although the tank size is nominally greater than 1000 BBL (1083 BBL), The Districts current practice to avoid confusion and follow industry standard practice and round the tanks size to 1000 BBLs. The equipment description will remain 1000 BBL

Permit: S-1326-318:

Comment:

The permit description lists the tank as 1000 bbl

District Response:

Although the tank size is nominally greater than 1000 BBL (1083 BBL), The Districts current practice to avoid confusion and follow industry standard practice and round the tanks size to 1000 BBLs. The equipment description will remain 1000 BBL

Permit: S-1326-319:

Comment:

The permit description lists the tank as 1000 bbl

District Response:

Although the tank size is nominally greater than 1000 BBL (1083 BBL), The Districts current practice to avoid confusion and follow industry standard practice

and round the tanks size to 1000 BBLs. The equipment description will remain 1000 BBL

Permit: S-1326-338:

Comment:

Permit S-1326-337 and S-1326-338 both have the same equipment description, but permit S-1326-338 does not include startup and shutdown conditions like S-1326-337 does:

85.0 MMBTU/HR STRUTHERS NATURAL GAS-FIRED STEAM GENERATOR WITH A NORTH AMERICAN MODEL MAGNA-FLAME G-LE ULTRA ULTRA-LOW NOX BURNER WITH FLUE GAS RECIRCULATION (FGR) AND AN O2 CONTROLLER"

District Response:

Startup and shutdown conditions have been placed on the permit

Permit: S-1326-348:

Comment:

Condition 37 references District Rule 4401.1.2, which is incorrect

District Response:

Typographical error occurs in condition 38. Error has been corrected to District Rule 4401, 6.1.2

Permit: S-1326-353:

Comment:

"No longer has the 3-day rolling average crude oil throughput condition

Current permit condition 7:

Permittee shall maintain records of 3-day rolling average crude oil throughput and shall keep accurate records of each organic liquid stored in the tank, including its storage temperature, TVP, and API gravity.

District Response:

Condition 9 has been placed on the permit

Permit: S-1326-361:

Comment:

The proposed Title V document specifies that the tank size of permit is 3,000 bbl instead of 2,000 bbl since the size of the tank is 84,000 gallon. The draft permit has the correct value.

District Response:

The tank volume will be listed as 2000 bbls

Permit: S-1326-368:

Comment:

Has a different throughput listed for condition 1. the throughput doubled on the draft permit

Current permit condition 1:

Throughput of oil shall not exceed 21,000 gallons per 3 day period.

Draft permit condition 1:

Throughput of oil shall not exceed 42,000 gallons per 3 day period.

District Response:

Typographical error will be corrected to 500 bbls per 3 day period

Permit: S-1326-369:

Comment:

Adding permit condition 21 does not make any sense since the unit is dormant and the fuel line was disconnected

Draft permit condition 21:

Permittee shall maintain accurate records of heating value (in Btu/scf) and daily consumption of natural gas, and such records shall be made readily available for District inspection upon request for a period of 2 years.

District Response:

Per GEAR 28 Policy, Dormant Emissions Units, "To ensure uniformity, two standard set of conditions (one set for non-compliant dormant units and another for compliant dormant units) to be added to the ATC are included. In general, no

conditions are to be removed from the current PTO." Therefore, an Authority to Construct application to remove the condition, if appropriate, would be required prior to removing the condition from the Permit.

The condition will not be removed at this time.

Permit: S-1326-372:

Comment:

Condition 38 reference District Rule 4401.1.2 which is incorrect

District Response:

Typographical error occurs in condition 37. Error has been corrected to District Rule 4401, 6.1.2

Permit: S-1326-376:

Comment:

Condition 7 and condition 9 state the same requirement

Condition 7:

The flame shall be present at all times when combustible gases are vented through the flare. [District Rule 4311, 5.2] Federally Enforceable Through Title V Permit

Condition 9:

Flare shall be operated with a flame present at all times when combustible gases vented through the flare. [District Rule 4311, 5.2] Federally Enforceable Through Title V Permit"

District Response:

The following condition will remain on the permit:

Condition 7:

The flame shall be present at all times when combustible gases are vented through the flare. [District Rule 4311, 5.2] Federally Enforceable Through Title V Permit

Permit: S-1326-377:

Comment:

The conditions have been updated to meet the requirements of being exempt from District Rule 4623, but condition 1 still lists the true vapor pressure limit is still listed as 1.5 psia and not 0.5 psia

District Response:

Condition 1 has been updated.

Permit: S-1326-381:

Comment:

The current permit description reads 84,000 gallons

District Response:

Tank volume will be updated to 2000 bbls

Permit: S-1326-390:

Comment:

Showing pending administrative amendment, has not been converted to permit

District Response:

On October 25, 2011, Minor Modification Project S-1092155 was finalized, implementing ATC S-1326-390-0 into Vintage's Title V permit. On October 28, 2011 the District issued the preliminary decision for the Title V renewal of this facility. Because the EPA had recently reviewed Minor Modification S-1326-390-1, It can be reasonable assumed that the conditions are up to date with current regulation and the permit will be renewed as permit S-1326-390-2 and no further discussion is required. The permit and will be issued with the renewal permits.

Permit: S-1326-391:

Comment:

Showing pending administrative amendment, has not been converted to permit

District Response:

On October 25, 2011, Minor Modification Project S-1092155 was finalized, implementing ATC S-1326-391-0 into Vintage's Title V permit. On October 28, 2011 the District issued the preliminary decision for the Title V renewal of this facility. Because the EPA had recently reviewed Minor Modification S-1326-

391-1, It can be reasonable assumed that the conditions are up to date with current regulation and the permit will be renewed as permit S-1326-391-2 and no further discussion is required. The permit will and will be issued with the renewal permits.

Permit: S-1326-398:

Comment:

Shown as an active permit, but is not listed in Title V review

District Response:

The Permit has been included in the Final Title V review evaluation and will be issued with the renewal permits.