JAN 19 2011

Mr. Jeff Randall
ConocoPhillips Pipeline Company
3900 Kilroy Airport Way, Suite 210
Long Beach, CA 90806

Re: Proposed ATC / Certificate of Conformity (Significant Mod)
District Facility # S-1518
Project # S-1104897

Dear Mr. Randall:

Enclosed for your review is the District's analysis of an application for Authorities to Construct for the facility identified above. The applicant is requesting that Certificates of Conformity with the procedural requirements of 40 CFR Part 70 be issued with this project. The project is to change the TVP and throughput limits on two external floating crude oil storage tanks.

After addressing any EPA comments made during the 45-day comment period, the Authorities to Construct will be issued to the facility with Certificates of Conformity. Prior to operating with modifications authorized by the Authorities to Construct, the facility must submit an application to modify the Title V permit as an administrative amendment, in accordance with District Rule 2520, Section 11.5.

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

Thank you for your cooperation in this matter.

Sincerely,

David Warner
Director of Permit Services

DW: DG/cm
JAN 19 2011

Gerardo C. Rios, Chief
Permits Office
Air Division
U.S. EPA - Region IX
75 Hawthorne St.
San Francisco, CA 94105

Re: Proposed ATC / Certificate of Conformity (Significant Mod)
District Facility # S-1518
Project # S-1104897

Dear Mr. Rios:

Enclosed for your review is the District's engineering evaluation of an application for Authorities to Construct for ConocoPhillips Pipeline Company at the Junction Pump Station in Kern County, which has been issued a Title V permit. ConocoPhillips Pipeline Company is requesting that Certificates of Conformity, with the procedural requirements of 40 CFR Part 70, be issued with this project. The project is to change the TVP and throughput limits on two external floating crude oil storage tanks.

Enclosed is the engineering evaluation of this application with a copy of the current Title V permit and proposed Authorities to Construct # ATC S-1518-5-5 and '31-4 with Certificates of Conformity. After demonstrating compliance with the Authority to Construct, the conditions will be incorporated into the facility’s Title V permit through an administrative amendment.

Please submit your written comments on this project within the 45-day comment period that begins on the date you receive this letter. If you have any questions, please contact Mr. Leonard Scandura, Permit Services Manager, at (661) 392-5500.

Thank you for your cooperation in this matter.

Sincerely,

[Signature]

David Warner
Director of Permit Services

DW: DG/cm
JAN 19 2011

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

Re: Proposed ATC / Certificate of Conformity (Significant Mod)
District Facility # S-1518
Project # S-1104897

Dear Mr. Tollstrup:

Enclosed for your review is the District's analysis of an application for Authorities to Construct for the facility identified above. The applicant is requesting that Certificates of Conformity with the procedural requirements of 40 CFR Part 70 be issued with this project. The project is to change the TVP and throughput limits on two external floating crude oil storage tanks.

Enclosed is the engineering evaluation of this application with a copy of the current Title V permit and proposed Authorities to Construct # ATC S-1518-5-5 and '31-4 with Certificates of Conformity. After demonstrating compliance with the Authorities to Construct, the conditions will be incorporated into the facility's Title V permit through an administrative amendment.

Please submit your written comments on this project within the 30-day comment period that begins on the date you receive this letter. If you have any questions, please contact Mr. Leonard Scandura, Permit Services Manager, at (661) 392-5500.

Thank you for your cooperation in this matter.

Sincerely,

[Signature]
David Warner
Director of Permit Services

DW: DG/cm
NOTICE OF PRELIMINARY DECISION
FOR THE ISSUANCE OF AUTHORITY TO CONSTRUCT

NOTICE IS HEREBY GIVEN that the San Joaquin Valley Air Pollution Control District solicits public comment on the proposed modification of ConocoPhillips Pipeline Company for its crude oil transportation at the Junction Pump Station in Kern County, California. The project is to change the TVP and throughput limits on two external floating crude oil storage tanks.

The District's analysis of the legal and factual basis for this proposed action, project #S-1104897, is available for public inspection at http://www.valleyair.org/notices/public_notices_idx.htm and the District office at the address below. This will be the public's only opportunity to comment on the specific conditions of the modification. If requested by the public, the District will hold a public hearing regarding issuance of this modification. For additional information, please call Mr. Leonard Scandura, Permit Services Manager at (661) 392-5500. Written comments on the proposed initial permit must be submitted within 30 days of the publication date of this notice to DAVID WARNER, DIRECTOR OF PERMIT SERVICES, SAN JOAQUIN VALLEY AIR POLLUTION CONTROL DISTRICT, 1990 E. GETTYSBURG AVE, FRESNO, CA 93726-0244.
San Joaquin Valley Air Pollution Control District
Authority to Construct
Application Review
Floating Roof Oil Storage Tanks

Facility Name: ConocoPhillips Pipe Line Company
Mailing Address: 256 E. Polk Street
Coalinga, CA 93210
Contact Person: Jeff Randel
Telephone: 562-290-1506
Application #: S-1518-5-5 and '31-4
Project #: S-1104897
Deemed Complete: 11/23/2010

Date: 12/30/2010
Engineer: Dolores Gough
Lead Engineer: Mike Buss

I. Proposal

ConocoPhillips Pipeline Company (Conoco) is proposing to increase the allowable True Vapor Pressure (TVP) of liquid stored in the tank listed under Permit to Operate (PTO) S-1518-31 from 5.35 psia to 9.5 psia, and set a throughput limit at 275 turnovers per year. In this same project, Conoco is also proposing to decrease the TVP limit from to 9.5 psia to 5.35 psia in the tank listed under PTO S-1518-31, and decrease the throughput limit to 248.83 turnovers per year.

Conoco is an existing Title V facility, which received its Title V permit on January 31, 2005. This modification can be classified as a Title V minor modification pursuant to Rule 2520, Section 3.20, and can be processed with a Certificate of Conformity (COC). Since the facility has specifically requested that this project be processed in that manner, the 45-day EPA comment period will be satisfied prior to the issuance of the Authority to Construct. Conoco must apply to administratively amend their Title V Operating Permit to include the requirements of the ATC(s) issued with this project.

II. Applicable Rules

Rule 2201 New and Modified Stationary Source Review Rule (6/10/10)
Rule 2520 Federally Mandated Operating Permits (6/21/01)
Rule 4001 New Source Performance Standards (4/14/99)
Rule 4101 Visible Emissions (2/17/05)
Rule 4102 Nuisance (12/17/92)
Rule 4623 Storage of Organic Liquids (5/19/05)
CH&SC 41700 Health Risk Assessment
CH&SC 42301.6 School Notice
Public Resources Code 21000-21177: California Environmental Quality Act (CEQA)  
California Code of Regulations, Title 14, Division 6, Chapter 3, Sections 15000-15387: CEQA Guidelines

III. Project Location

The facility, referred to as Junction Pump Station, is located at 14990 State Highway 46, approximately six miles northwest of the intersection of State Highway 46 and State Highway 33 in Lost Hills, CA (Appendix A). This site is not within 1,000 feet of any K-12 school, therefore the public notification requirement of California Health and Safety Code 42301.6 is not applicable to this project.

IV. Process Description

The Conoco pipeline system transfers petroleum products to refineries in Northern California. The Junction Pump Station consists of six petroleum storage tanks and various pumping equipment. The station receives crude oil from the Middlewater Pump Station as well as gas oil and pressure distillate from the Santa Maria Refinery via the Shandon Pump Station. Additional crude oil is received from the various producers in the vicinity of the facility via pipeline and trucks. At the Junction Pump Station, some of the pressure distillate is blended with heavy crude oil to reduce its viscosity thus creating a product referred to as coker. The gas oil pressure distillate, light crude oil and coker are then pumped to a refinery in Northern California. The subject tanks will store crude oil majority of the time and will occasionally store gas oil.

V. Equipment Listing

Pre-Project Equipment Description

S-1518-5-4: 4,620,000 GALLON WELDED EXTERNAL FLOATING ROOF TANK (#110024) WITH METALLIC SHOE PRIMARY SEAL AND SECONDARY WIPER SEAL

S-1518-31-3: 110,000 BBL EXTERNAL FLOATING ROOF TANK (#110026) WITH PRIMARY METALLIC SHOE SEAL AND SECONDARY WIPER TYPE SEAL

Proposed Modification:

S-1518-5-5: MODIFICATION OF 110,000 BBL CRUDE OIL STORAGE TANK (#110024) INCLUDING EXTERNAL FLOATING ROOF WITH METALLIC SHOE TYPE PRIMARY SEAL AND WIPER TYPE SECONDARY SEAL: INCREASE TVP LIMIT FROM 5.35 PSIA TO 9.5 PSIA AND SET THROUGHPUT LIMIT AT 275 TURNOVERS PER YEAR

S-1518-31-4: MODIFICATION OF 110,000 BBL CRUDE OIL STORAGE TANK (#110026) INCLUDING EXTERNAL FLOATING ROOF WITH METALLIC SHOE TYPE PRIMARY SEAL AND WIPER TYPE SECONDARY SEAL: REDUCE TVP
FROM 9.5 PSIA TO 5.35 PSIA AND REDUCE THROUGHPUT LIMIT TO 248.83 TURNOVERS PER YEAR

Post-Project Equipment Description:

S-1518-5-5: 110,000 BBL CRUDE OIL STORAGE TANK (#110024) INCLUDING EXTERNAL FLOATING ROOF WITH METALLIC SHOE TYPE PRIMARY SEAL AND WIPER TYPE SECONDARY SEAL

S-1518-31-4: 110,000 BBL CRUDE OIL STORAGE TANK (#110026) INCLUDING EXTERNAL FLOATING ROOF WITH METALLIC SHOE TYPE PRIMARY SEAL AND WIPER TYPE SECONDARY SEAL

Current Permits to Operate (see Appendix B)

VI. Emission Control Technology Evaluation

The only air emissions from the tanks are VOCs. Each of the subject tanks is equipped with an external floating roof with a metallic shoe primary seal and a wiper secondary seal. An external floating roof tank consists of an open-topped cylindrical steel shell equipped with a roof that floats on the surface of the stored liquid. The external floating roof rises and falls with the liquid level in the tank. The tank will be equipped with a seal system which is attached to the roof perimeter and contacts the tank wall. The purpose of the floating roof and seal system is to reduce evaporative loss of the stored liquid. The seal system slides against the tank wall as the roof is raised and lowered. The primary metallic shoe seal and secondary wiper type seal are considered to be the Best Available Control Technology (BACT) for external floating roof tanks; therefore, no additional control equipment is required for these tanks.

VII. General Calculations

A. Assumptions

- The equipment’s maximum operating schedule is 24 hr/day and 365 day/yr.
- Volatile organic compounds (VOCs) are the only pollutants emitted from the tanks.
- Annual VOC emissions are based on 365 days per year operation.
- The current and proposed permit limits are:

<table>
<thead>
<tr>
<th>Permit Unit</th>
<th>Current TVP Limit (psia)</th>
<th>Proposed TVP Limit (psia)</th>
<th>Current Throughput Limit (turnovers/yr)</th>
<th>Proposed Throughput Limit (turnovers/yr)</th>
</tr>
</thead>
<tbody>
<tr>
<td>S-1518-5</td>
<td>5.35</td>
<td>9.5</td>
<td>158.85</td>
<td>275</td>
</tr>
<tr>
<td>S-1518-31</td>
<td>9.5</td>
<td>5.35</td>
<td>365</td>
<td>248.83</td>
</tr>
</tbody>
</table>
B. Emission Factors

Pre and post-project emissions are calculated using the TANKS 4.0 program by US EPA (Appendix C).

C. Calculations

Calculations of the annual PE, using the TVP and annual throughput (turnovers/yr) are included in Appendix C. The daily emissions are calculated from the annual PE (annual PE divided by 365 days/yr).

1. Pre-Project Potential to Emit (PE1)

   PE1 for Tank S-1518-5:

   The current PTO does not have any throughput limitations. An annual throughput of 158.85 turnovers per year (which equates to VOC emissions of 9,405 lb/yr) will be used. This quantity of VOC emissions was submitted for the Title V permitting and is the presumed current permit limit.

   Daily PE1 = 25.8 lb-VOC/day
   Annual PE1 = 9,405 lb-VOC/day

   PE1 for Tank S-1518-31:

   Daily PE1 = 59.0 lb-VOC/day
   Annual PE1 = 21,539 lb-VOC/day

2. Post Project Potential to Emit (PE2)

   PE2 for Tank S-1518-5:

   Daily PE2 = 48.7 lb-VOC/day
   Annual PE2 = 17,758 lb-VOC/day

   PE2 for Tank S-1518-31:

   Daily PE2 = 36.1 lb-VOC/day
   Annual PE2 = 13,186 lb-VOC/day

3. Pre-Project Stationary Source Potential to Emit (SSPE1)

   SSPE1 is used to determine if the offset threshold will be surpassed during this project, and to determine if public notice is required for a 20,000 lb/yr SSPE.

   Pursuant to Section 4.9 of District Rule 2201, the Pre-Project Stationary Source Potential to Emit (SSPE1) is the Potential to Emit (PE) from all units with valid
Authorities to Construct (ATC) or Permits to Operate (PTO) at the Stationary Source and the quantity of emission reduction credits (ERC) which have been banked since September 19, 1991 for Actual Emissions Reductions that have occurred at the source, and which have not been used on-site.

Facility emissions are already above the Offset and Major Source thresholds for VOC emissions; therefore, SSPE1 calculations are not necessary.

4. Post Project Stationary Source Potential to Emit (SSPE2)

The SSPE2 is used to determine if the source is a Major Source, if the offset threshold is being surpassed during this project, to determine if public notice is required for a 20,000 lb/year SSIP and for offset calculations if necessary.

Pursuant to Section 4.10 of District Rule 2201, the Post Project Stationary Source Potential to Emit (SSPE2) is the Potential to Emit (PE) from all units with valid Authorities to Construct (ATC) or Permits to Operate (PTO) at the Stationary Source and the quantity of emission reduction credits (ERC) which have been banked since September 19, 1991 for Actual Emissions Reductions that have occurred at the source, and which have not been used on-site.

Facility emissions are already above the Offset and Major Source thresholds for VOC emissions; therefore, SSPE2 calculations are not necessary.

5. Major Source Determination

Pursuant to Section 3.23 of District Rule 2201, a Major Source is a stationary source with post-project emissions or a Post-Project Stationary Source Potential to Emit (SSPE2), equal to or exceeding one or more of the threshold values in Table 3-3 of District Rule 2201.

This source is an existing Major Source for VOC emissions and will remain a Major Source for VOC with this project. No change in other criteria pollutants are proposed or expected as a result of this project.

6. Baseline Emissions (BE)

The BE calculation (in lbs/year) is performed pollutant-by-pollutant for each unit within the project, to calculate the QNEC and if applicable, to determine the amount of offsets required.

Pursuant to Section 3.7 of District Rule 2201, BE = Pre-project Potential to Emit for:

BE = Pre-project Potential to Emit for:
• Any unit located at a non-Major Source,
• Any Highly-Utilized Emissions Unit, located at a Major Source,
• Any Fully-Offset Emissions Unit, located at a Major Source, or
• Any Clean Emissions Unit, located at a Major Source.

otherwise,

BE = Historic Actual Emissions (HAE), calculated pursuant to Section 3.23

This facility is a Major Source for VOC emissions. However, the tanks included in this project are considered Clean Emissions Units located at a Major Source, as they meet BACT Guideline 7.3.3 for floating roof tanks. BACT Guideline 7.3.3 requires floating roof tanks to have at least 95% control of VOC emissions by employing the use of a primary metal shoe seal with wiper secondary seal. The tanks in this project are equipped with these types of seals. There has not been another more stringent BACT determination performed for this source category in the last five years.

Since the tanks are considered Clean Emissions Units, BE is equal to PE1 as calculated in Section VII.C.1 above.

7. SB 288 Major Modification

SB 288 Major Modification is defined in 40 CFR Part 51.165 (as in effect on Dec. 19, 2002) as “any physical change in or change in the method of operation of a major stationary source that would result in a significant net emissions increase of any pollutant subject to regulation under the Act.” The calculation procedure, as outlined in the version of 40 CFR 51.165 that existed on 12/19/02, states that for a major source, if a project results in a net emissions increase, i.e. the sum of the differences between the potential to emit and the actual emissions for all new and modified emission units are greater than the SB 288 Major Modification thresholds listed in the following table.

Pursuant to the draft APR XXX-1 “Implementation of Rule 2201 (as amended on 12/18/08 and effective on 6/10/10) for SB288 Major Modifications and Federal Major Modifications”, for calculations for existing emission units:

• The potential to emit (PE) is the post-project potential to emit for the emission unit
• Except for fully offset units, the actual emissions are equal to the average emission rate over a two year period preceding the project unless another period is determined by the APCP to be more representative of normal operation.
• For fully offset units (as defined in Rule 2201), the actual emissions are equal to the pre-project potential to emit.

Alternatively, the applicant may stipulate that the project results in both a significant emission increase and significant net emission increase. In such a case, the project constitutes an SB Major Modification and is subject to all applicable requirements.
As discussed in Section VII.C.5 above, Conoco is an existing Major Source for VOC. The post-project VOC emissions are less than the SB 288 Major Modification threshold as shown below; therefore, the net emissions increase cannot exceed that threshold and this project is not an SB 288 Major modification.

<table>
<thead>
<tr>
<th>SB 288 Major Modification (lb/yr)</th>
<th>NOx</th>
<th>SOx</th>
<th>PM$_{10}$</th>
<th>VOC</th>
</tr>
</thead>
<tbody>
<tr>
<td>S-1518-5 (PE2)</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>17,758</td>
</tr>
<tr>
<td>S-1518-31 (PE2)</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>13,186</td>
</tr>
<tr>
<td>Threshold</td>
<td>50,000</td>
<td>80,000</td>
<td>30,000</td>
<td>50,000</td>
</tr>
<tr>
<td>Federal Major Mod?</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
</tbody>
</table>

8. Federal Major Modification

District Rule 2201, Section 3.17 defines Federal Major Modification the same as "Major modification" as defined in 40 CFR 51.165 and Part D of Title I of the CAA. Section 3.17 also states that an SB 288 Major Modification is not a Federal Major Modification if the emission increase for the project or the net emission increase for the facility (calculated pursuant to 40 CFR 51.165(a)(2)(ii)(B) through (D) and (F) does not result in a significant emission increase as defined in Rule 2201 Table 3-1 (shown below) or the modification does not cause facility wide emissions to exceed a previously established plant wide applicability limit (PAL).

<table>
<thead>
<tr>
<th>Federal Major Modification Thresholds (lb/yr)</th>
<th>NOx</th>
<th>SOx</th>
<th>PM$_{10}$</th>
<th>VOC</th>
</tr>
</thead>
<tbody>
<tr>
<td>S-1518-5 (IPE)</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>8,353</td>
</tr>
<tr>
<td>S-1518-31 (IPE)</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>-8353</td>
</tr>
<tr>
<td>Threshold</td>
<td>0</td>
<td>80,000</td>
<td>30,000</td>
<td>0</td>
</tr>
<tr>
<td>Federal Major Mod?</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
</tr>
</tbody>
</table>

** From Section VII(C)(2)

Pursuant to the District draft policy mentioned above, Federal Major Modification determination involves two steps. The first step is to determine if the project itself results in a significant emissions increase. In this determination, only emissions increases are counted. The second step is to determine if the project results in a significant net emissions increase.

However, for projects involving NOx and VOC emission increases (those pollutants for which the District is in extreme non-attainment), only Step 1 is performed as required in the Federal Clean Air Act Section 182 (e)(2). Step 2 does not need to be performed. Notwithstanding the above, a facility with a project that has an emission increase in NOx or VOCs can elect to offset the emission increase at a ratio of 1.3:1 using emission reductions that occurred at the same stationary source. Such emission reductions
must be surplus of all current Federally enforceable requirements. Such projects shall not constitute a Federal Major Modification.

As shown in the above table, Tank S-1518-5 has an emissions increase over the Federal Major Modification threshold for VOC. Conoco is unable to provide offsets from the same stationary source; therefore, the proposed tank modifications represent a Federal Major Modification.

9. Quarterly Net Emissions Change (QNEC)

The QNEC is calculated solely to establish emissions that are used to complete the District’s PAS emissions profile screen. QNEC is calculated as follows:

\[
\text{QNEC (lb/yr)} = \frac{[\text{PE2 (lb/yr)} - \text{PE1 (lb/yr)}]}{4}
\]

<table>
<thead>
<tr>
<th></th>
<th>NOx</th>
<th>SOx</th>
<th>PM10</th>
<th>CO</th>
<th>VOC</th>
</tr>
</thead>
<tbody>
<tr>
<td>PE2</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>17,758</td>
</tr>
<tr>
<td>PE1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>9,405</td>
</tr>
<tr>
<td>QNEC (lb/qtr)</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>2,088</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>NOx</th>
<th>SOx</th>
<th>PM10</th>
<th>CO</th>
<th>VOC</th>
</tr>
</thead>
<tbody>
<tr>
<td>PE2</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>13,186</td>
</tr>
<tr>
<td>PE1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>21,539</td>
</tr>
<tr>
<td>QNEC (lb/qtr)</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>-2,088</td>
</tr>
</tbody>
</table>

VIII. Compliance

Rule 2201 New and Modified Stationary Source Review Rule

A. Best Available Control Technology (BACT)

1. BACT Applicability

BACT requirements are triggered on a pollutant-by-pollutant basis and on an emissions unit-by-emissions unit basis for the following:

a. Any new emissions unit with a potential to emit exceeding two pounds per day,
b. The relocation from one Stationary Source to another of an existing emissions unit with a potential to emit exceeding two pounds per day,
c. Modifications to an existing emissions unit with a valid Permit to Operate resulting in an AIPE exceeding two pounds per day, and/or
d. Any new or modified emissions unit, in a stationary source project, which results in a Major Modification.
*Except for CO emissions from a new or modified emissions unit at a Stationary Source with an SSPE2 of less than 200,000 pounds per year of CO.

a. **New emissions units – PE > 2 lb/day**

As discussed in Section I above, ConocoPhillips is proposing to modify existing external floating roof storage tanks; therefore, BACT is not triggered for new emission units purposes.

b. **Relocation of emissions units – PE > 2 lb/day**

As discussed in Section I above, there are no emissions units being relocated from one stationary source to another; therefore, BACT is not triggered.

c. **Modification of emissions units – AIPE > 2 lb/day**

Tanks 5 and 31 are being modified; therefore, BACT applicability will be determined by the AIPE calculation.

\[
\text{AIPE} = \text{PE2} - \text{HAPE}
\]

Where,

- \( \text{AIPE} \) = Adjusted Increase in Permitted Emissions, (lb/day)
- \( \text{PE2} \) = Post-Project Potential to Emit, (lb/day)
- \( \text{HAPE} \) = Historically Adjusted Potential to Emit, (lb/day)

\[
\text{HAPE} = \text{PE1} \times (\text{EF2}/\text{EF1})
\]

Where,

- \( \text{PE1} \) = The emissions unit’s Potential to Emit prior to modification or relocation, (lb/day)
- \( \text{EF2} \) = The emissions unit’s permitted emission factor for the pollutant after modification or relocation. If \( \text{EF2} \) is greater than \( \text{EF1} \) then \( \text{EF2}/\text{EF1} \) shall be set to \( 1 \)
- \( \text{EF1} \) = The emissions unit’s permitted emission factor for the pollutant before the modification or relocation

\[
\text{AIPE} = \text{PE2} - (\text{PE1} \times (\text{EF2} / \text{EF1}))
\]

Conoco is not proposing any physical modifications to the tank or the floating roof. The control efficiency for the pre and post-project modification remains unchanged. Therefore, \( \text{EF2} = \text{EF1} \).

<table>
<thead>
<tr>
<th></th>
<th>PE2 (lb-VOC/day)</th>
<th>PE1 (lb-VOC/day)</th>
<th>EF2/EF1</th>
<th>AIPE (lb-VOC/day)</th>
</tr>
</thead>
<tbody>
<tr>
<td>S-1518-5</td>
<td>48.7</td>
<td>25.8</td>
<td>1</td>
<td>22.9</td>
</tr>
<tr>
<td>S-1518-31</td>
<td>36.1</td>
<td>51.0</td>
<td>1</td>
<td>-14.9</td>
</tr>
</tbody>
</table>
As shown above, AIPE is > 2 lb/day for Tank 5; therefore, BACT is triggered only for Tank 5.

2. BACT Guideline and Analysis

BACT Guideline 7.3.3 for Petroleum and Petrochemical Production – Floating Roof Organic Liquid Storage or Processing Tank, ≥ 471 bbl Tank Capacity ≥ 0.5 psig, currently addresses the equipment in this project.

The tanks are equipped with primary metal shoe seal with secondary wiper seal to achieve 95% VOC control. The BACT analysis is included as Appendix D.

B. Offsets

1. Offset Applicability

Pursuant to Section 4.5.3, offset requirements shall be triggered on a pollutant by pollutant basis and shall be required if the Post Project Stationary Source Potential to Emit (SSPE2) equals or exceeds the offset threshold levels in Table 4-1 or Rule 2201.

It has already been determined and conceded by Conoco that they are a Major Source for VOC emissions. Since the only pollutant of concern in this project is VOC, any increases in emissions of this pollutant will need to be offset.

2. Quantity of Offsets Required

As stated above, the facility is an existing Major Source for VOC and the SSPE2 is greater than the offset thresholds; therefore, offset calculations will be required for this project.

Per Sections 4.7.1 and 4.7.3, the quantity of offsets in pounds per year for VOC is calculated as follows for sources with an SSPE1 greater than the offset threshold levels before implementing the project being evaluated.

Offsets Required (lb/year) = \( \Sigma [\text{PE2} - \text{BE}] + \text{ICCE}) \times \text{DOR} \), for all new or modified emissions units in the project,

Where,
- \( \text{PE2} \) = Post-Project Potential to Emit, (lb/year)
- \( \text{BE} \) = Baseline Emissions, (lb/year)
- \( \text{ICCE} \) = Increase in Cargo Carrier Emissions, (lb/year)
- \( \text{DOR} \) = Distance Offset Ratio, determined pursuant to Section 4.8

\( \text{BE} \) = Pre-project Potential to Emit for:
- Any unit located at a non-Major Source,
- Any Highly-Utilized Emissions Unit, located at a Major Source,
• Any Fully-Offset Emissions Unit, located at a Major Source, or
• Any Clean Emissions Unit, Located at a Major Source.

otherwise,

\[ BE = \text{Historic Actual Emissions (HAE)} \]

As determined in Section VII.C.6 above, the Baseline Emissions (BE) from these units are equal to the Pre-Project Potential to Emit (PE1) since the units are Clean Emissions Units. Further, there is no increase in cargo carrier emissions, therefore this value will be zero.

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\[ (17,758 - 9,405 + 0) \times \text{DOR} = 8,353 \times \text{DOR} \]

\[ \text{S1518-31} \]

\[ (13,186 - 21,539 + 0) \times \text{DOR} = -8,353 \times \text{DOR} \]

The offsets for this project would be: \([8,353 + (-8,353)] \times \text{DOR} = 0\); therefore, offsets are not required.

C. Public Notification

1. Applicability

Public noticing is required for:
a. Any new Major Source, which is a new facility that is also a Major Source,
b. Major Modifications,
c. Any new emissions unit with a Potential to Emit greater than 100 pounds during any one day for any one pollutant,
d. Any project which results in the offset thresholds being surpassed, and/or
e. Any project with an SSIPE of greater than 20,000 lb/year for any pollutant.

a. New Major Source

New Major Sources are new facilities, which are also Major Sources. Since this is not a new facility, public noticing is not required for this project for New Major Source purposes.

b. Major Modification

As demonstrated in VII.C.7, this project does constitute a Federal Major Modification; therefore, public noticing for Major Modification purposes is required.
c. PE > 100 lb/day

Applications which include a new emissions unit with a Potential to Emit greater than 100 pounds during any one day for any pollutant will trigger public noticing requirements. There are no new emissions units associated with this project; therefore, public noticing is not required for this project for Potential to Emit Purposes.

d. Offset Threshold

Public notification is required if the Pre-Project Stationary Source Potential to Emit (SSPE1) is increased from a level below the offset threshold to a level exceeding the emissions offset threshold, for any pollutant. Since ConocoPhillips is already a Major Source for VOC emissions, and the only pollutant of concern in this project is VOCs, the offset threshold was not surpassed in this project. Public noticing for surpassing the offset threshold is not required.

e. SSIP E > 20,000 lb/year

Public notification is required for any permitting action that results in a Stationary Source Increase in Permitted Emissions (SSIPE) of more than 20,000 lb/year of any affected pollutant. According to District policy, the SSIPE is calculated as the Post Project Stationary Source Potential to Emit (SSPE2) minus the Pre-Project Stationary Source Potential to Emit (SSPE1), i.e. SSIPE = SSPE2 - SSPE1. Similarly, it can be stated that the SSIPE is based upon any emissions increases in a project. Since it has already been shown above that there is no net emissions increase; then the SSIPE cannot exceed 20,000 lb/year for VOCs. Public noticing is therefore not required for SSIPE purposes.

2. Public Notice Action

As discussed above, public noticing is required for this project for VOC emissions exceeding Federal Major Modification threshold. Therefore, public notice documents will be submitted to the California Air Resources Board (CARB) and a public notice will be published in a local newspaper of general circulation prior to the issuance of the ATC for this equipment.

D. Daily Emission Limits (DELs)

Daily Emissions Limitations (DELs) and other enforceable conditions are required by Section 3.15 to restrict a unit’s maximum daily emissions, to a level at or below the emissions associated with the maximum design capacity. Per Sections 3.15.1 and 3.15.2, the DEL must be contained in the latest ATC and contained in or enforced by the latest PTO and enforceable, in a practicable manner, on a daily basis. DELs are also required to enforce the applicability of BACT.
For both tank units, the DEL is in the form of TVP limits and will be expressed on an annual throughput limit:

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- The true vapor pressure (TVP) of any organic liquid placed or stored shall be less than 9.5 psia. [District Rules 2201 and 4623]

- The maximum amount of material introduced into this tank shall not exceed 30,250,000 bbl/yr (275 turnovers/yr). [District Rule 2201]

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- The true vapor pressure (TVP) of any organic liquid placed or stored shall not exceed 5.35 psia. [District Rules 2201 and 4623]

- The maximum amount of material introduced into this tank shall not exceed 27,371,300 bbl/yr (248.83 turnovers/yr). [District Rule 2201]

E. Compliance Assurance

1. Source Testing

Pursuant to District Policy APR 1705, source testing is not required to demonstrate compliance with Rule 2201.

2. Monitoring

The tank DELs are based on TVP and throughput. The ATCs will include a requirement for annual testing of TVP as discussed in the rule compliance section below.

3. Recordkeeping

Permittee is required to keep records pursuant to Rules 4001 (40 CFR 60) and 4623. Recordkeeping requirements are discussed in the rule compliance section below.

4. Reporting

No reporting is required to demonstrate compliance with Rule 2201.

F. Alternative Siting Analysis

Section 4.15.1 of this Rule requires that an analysis of alternative sites, sizes and production processes is required under Section 173 of the Federal Clean Air Act. The applicant is required to prepare an analysis functionally equivalent to the requirements of Division 13, Section 21000 et seq. of the public Resources Code.
The proposed operational modifications to the tanks represent a change of operations at an existing stationary source (which is properly zoned) and cannot be relocated since it is an existing heavy crude oil pump station. Therefore, an alternate location is not viable for this project.

G. Compliance by Other Owned, Operated or Controlled Source

Pursuant to Section 4.15.2, the owner of the proposed new major source or federal major modification shall demonstrate to the satisfaction of the APCO that all major stationary sources owned or operated by such person (or any entity controlling, controlled by, or under common control with such person) in California which are subject to emission limitations are in compliance or on a schedule for compliance with all applicable limitations and standards. Conoco provided verification that all major Stationary Sources owned or operated by Conoco in California are in compliance or on a schedule for compliance with all applicable emission limitations and standards (Appendix F).

Rule 2520 Federally Mandated Operating Permits

This facility is subject to this Rule, and has received their Title V Operating Permit. The proposed modification may be considered a significant modification to the Title V Permit. As discussed above, the facility has applied for a Certificate of Conformity (COC); therefore, the facility must apply to modify their Title V permit with an administrative amendment/minor modification, prior to operating with the proposed modifications. See Appendix F for Title V Compliance Certification.

The following permit conditions will be listed to ensure compliance:

- {1830} This Authority to Construct serves as a written certificate of conformity with the procedural requirements of 40 CFR 70.7 and 70.8 and with the compliance requirements of 40 CFR 70.6(c). [District Rule 2201]

- {1831} Prior to operating with modifications authorized by this Authority to Construct, the facility shall submit an application to modify the Title V permit with an administrative amendment in accordance with District Rule 2520 Section 5.3.4. [District Rule 2520, 5.3.4]

Rule 4001 New Source Performance Standards


Pursuant to 40 CFR Part 60 Section 60.110b(a), Applicability And Designation Of Affected Facility, except as provided in paragraph (b) of this section, the affected facility to which this subpart applies is each storage vessel with a capacity greater than or equal to 75 cubic meters (m³) (equivalent to 19,813 gal) that is used to store volatile organic liquids (VOL) for which construction, reconstruction, or modification is commenced after July 23, 1984.
A modification is defined in NSPS as follows: "Any physical or operational change to an existing facility which results in an increase in the emission rate to the atmosphere of any pollutant to which a standard applies shall be considered a modification within the meaning of Section 111 of the Act. Upon modification, an existing facility shall become an affected facility for each pollutant to which a standard applies and for which there is an increase in emission rate to the atmosphere."

Tank 5 is increasing its emissions in this project and is of the proper size to be subject to subpart Kb. Therefore, this modification makes this tank subject to the control requirements of NSPS. Conoco became a Title V facility in District Project S-1031621. NSPS conditions were added to this tank at the time of Title V permitting. These conditions will be retained in the new ATC to ensure continued compliance with this rule.

Tank 31 is decreasing its emissions in this project and therefore this modification is not considered an NSPS modification. However, this tank had already one NSPS modification in District Project S-1054851, which increased the TVP from 0.5 to 9.5 psia. This project made this tank subject to the control requirements of NSPS. Therefore, the existing NSPS conditions will be retained in the new ATC to ensure continued compliance with this rule.

Sections 60.113b(b)(1) through (6) outline the requirements for monitoring of the floating roof tank and the test requirements for each of them. The following conditions will ensure compliance with this Subpart of the CFR. Please note that all conditions discussed in this section may overlap with Rule 4623 requirements as discussed later in this evaluation. In the Rule 4623 discussion section, overlapping requirements are denoted in the rule reference section of the condition.

- The tank shall be equipped with a floating roof consisting of a pan type that was installed before December 20, 2001, pontoon-type or double-deck-type cover which rests upon the surface of the liquid being stored and is equipped with a closure device between the tank shell and roof edge consisting of a primary and a secondary seal. [40 CFR 60.112b(a)(2) & (i)]

- The external floating roof shall float on the surface of the stored liquid at all times (i.e., off the roof leg supports) except during the initial fill until the roof is lifted off the leg supports and when the tank is completely emptied and subsequently refilled. When the roof is resting on the leg supports, the process of filling, emptying, or refilling shall be continuous and shall be accomplished as rapidly as possible. Whenever the permittee intends to land the roof on its legs, the permittee shall notify the APCO in writing at least five calendar days prior to performing the work. The tank must be in compliance with this rule before it may land on its legs. [40CFR 60.112b(a)(2)(iii)]

- Primary seal (lower seal) shall be either a mechanical shoe seal or a liquid-mounted seal. [40CFR 60.112b(a)(2)(i) and 60.112b(a)(2)(i)(A)]
accumulated area of gaps between the tank wall and the mechanical shoe or liquid-mounted primary seal shall not exceed 212 cm² per meter of tank diameter, and the width of any gap shall not exceed 3.81 cm. [40CFR 60.113(b)(4)(i)]

• Accumulated area of gaps between the tank wall and the secondary seal shall not exceed 21.2 cm² per meter of tank diameter, and the width of any portion of any gap shall not exceed 1.27 cm (1/2 inch). [40CFR 60.113(b)(4)(ii)(B)]

• There shall be no holes, tears, or openings in the secondary seal or in the primary seal envelope that surrounds the annular vapor space enclosed by the roof edge, seal fabric, and secondary seal. [40 CFR 60.112(b)(4)(ii)(C)]

• Secondary seal shall completely cover the annular space between the external floating roof and the wall of the storage vessel in a continuous fashion. [40CFR 60.112(b)(2)(i)(B)]

• All openings in the roof used for sampling and gauging, except pressure-vacuum valves which shall be set to within 10% of the maximum allowable working pressure of the roof, shall provide a projection below the liquid surface to prevent belching of liquid and to prevent entrained or formed organic vapor from escaping from the liquid contents of the tank and shall be equipped with a cover, seal or lid that shall be in a closed position at all times, with no visible gaps and be gas tight, except when the device or appurtenance is in use [District Rule 4623, 5.5.1]

• Automatic bleeder vents shall be equipped with a gasket and shall be closed at all times when the roof is floating except when the roof is being floated off or is being landed on the roof leg supports. [40CFR 60.112(b)(2)(ii)]

• Rim vents shall be equipped with a gasket and shall be set to open when the roof is being floated off the roof leg supports or at the manufacturer's recommended setting. [40CFR 60.112(b)(2)(ii)]

• Operator shall perform gap measurements on primary and secondary seals within 60 days of the initial fill and at least once every year thereafter to determine compliance with the requirements of Rule 4623. The actual gap measurements of the floating roof primary and secondary seals shall be recorded. The inspection results shall be submitted to the APCO as specified in Section 6.3.5. [40 CFR 60.113(b)(1)(i) & (ii)]

• Operator shall also perform gap measurements on primary seals during hydrostatic testing of the vessel. [40CFR 60.113(b)(1)(i)]

• If unit is out of service for a period of one year or more, subsequent refilling with volatile organic liquid shall be considered initial fill in accordance with the conditions of this permit. [40CFR60.113(b)(1)(iii)]
• Permittee shall inspect the primary and secondary seals every time this tank is emptied or degassed. Actual gap measurements shall be performed when the liquid level is static but not more than 24 hours after the tank roof is re-floated. [40CFR 60.113b(b)(6)]

• If the external floating roof has defects, or the primary seal or secondary seal has holes, tears, or other openings in the seal or seal fabric, the operator shall repair the items as necessary so that none of these conditions exist before filling or refilling the storage vessel with VOL. [40CFR 60.113b(b)(6)(i)]

• If the seals do not meet the required specifications of this permit, operator shall repair or empty the storage vessel within 45 days of identification. [40CFR 60.113b(b)(4)]

• Operator shall determine the true vapor pressure of each VOL, other than crude oil or refined petroleum products, from standard reference texts, by ASTM Method D2879, or by using an appropriate method approved by EPA. [40CFR 60.116b(e)(3)]

• For storage vessels operated above or below ambient temperatures, the operator shall determine the maximum true vapor pressure as calculated based upon highest expected calendar month average of the storage temperature. For vessels operated at ambient temperature, the maximum true vapor pressure shall be calculated based upon the maximum local monthly average ambient temperature as reported by the National Weather Service. [40CFR 60.116b(e)(1)]

• Maximum true vapor pressure for crude oil or refined petroleum products may be determined from nomographs contained in API Bulletin 2517, by using the typical Reid vapor pressure and the maximum expected storage temperature based on the highest expected calendar-month average temperature of the stored product, unless the APCO specifically requests that the liquid be sampled, the actual storage temperature determined, and the Reid vapor pressure determined from the sample(s). [40CFR 60.116b(e)(2)(i)]

• Operator of a tank storing a waste mixture of indeterminate or variable composition shall determine the highest maximum true vapor pressure for the range of liquid compositions to be stored prior to the initial filling, using methods specified for maximum true vapor pressure in this permit. [40CFR 60.116b(f)]

Sections 60.116b(c), 60.115b(3), and 60.116b (a) through (b) prescribe the recordkeeping requirements of this Subpart. Sections 60.113b(b)(4)(iii), (b)(5), (b)(6)(ii), and Sections 60.115b, (b)(1), (2), and (4) prescribe the reporting requirements of this Subpart. The following conditions will ensure compliance with these requirements:

• Permittee shall maintain the records of the external floating roof landing activities that are performed pursuant to Rule 4623, Sections 5.3.1.3 and 5.4.3. The records shall include information on the maximum true vapor pressure (TVP), API gravity, storage temperature, type of organic liquid stored in the tank, the purpose of landing the roof on its legs, the date of roof landing, duration the roof was on its legs, the level or height at
which the tank roof was set to land on its legs, and the lowest liquid level in the tank. [40 CFR 60.116b(c)]

- Operator shall notify the APCO 30 days in advance of any gap measurements required by this permit to afford the APCO opportunity to have an observer present. [40CFR 60.113b(b)(5)]

- For all visual inspections required by this permit, the operator shall notify the APCO in writing at least 30 days prior to the filling or refilling of each storage vessel to afford the APCO the opportunity to inspect the storage vessel prior to refilling, except when notification is specifically allowed otherwise by this permit. [40CFR 60.113b(b)(6)(ii)]

- If a visual inspection required by this permit is not planned and the operator could not have known about the inspection 30 days in advance of refilling the tank, the operator shall notify the APCO at least 7 days prior to the refilling of the storage vessel. Notification shall be made by telephone immediately followed by written documentation demonstrating why the inspection was unplanned. Alternatively, this notification including the written documentation may be made in writing and sent by express mail so it is received by the APCO at least 7 days prior to the refilling. [40CFR 60.113b(b)(6)(ii)]

- Operator shall record the vessel on which the measurement was performed, date of the seal gap measurement, raw data obtained in the measurement process in accordance with the conditions of this permit. [40CFR 60.115b(b)(3)]

- Within 60 days of performing the seal gap measurements required by this permit, the operator shall furnish the APCO with a report containing the date of measurement, raw data obtained in the measurement process, and all such gap calculations as required by this permit. [40CFR 60.115b(b)(2)]

- After each seal gap measurement that detects gaps exceeding any limit of this permit, the operator shall submit a report to the APCO within 30 days of the inspection. The report will identify the vessel and contain the date of measurement, raw data obtained in the measurement process, all such gap calculations as required by this permit, and the date the vessel was emptied or the repairs made and the date of repair. [40CFR 60.115b(b)(4)]

- Operator shall maintain, for the life of the source, a record showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel. [40CFR 60.116b(a) and (b)]

- Operator shall determine the true vapor pressure of each type of crude oil, with a Reid vapor pressure less than 2.0 psia or whose physical properties preclude determination by the recommended method, using available data and record if the estimated maximum true vapor pressure is greater than 0.5 psia. [40CFR 60.116b(e)(2)]
• Operator of each storage vessel, either with a design capacity greater than or equal to 151 m³ storing a liquid with a maximum true vapor pressure that is normally less than 0.75 psia or with a design capacity greater than or equal to 75 m³ but less than 151 m³ storing a liquid with a maximum true vapor pressure normally less than 4.0 psia, shall notify the APCO within 30 days when the maximum true vapor pressure of the liquid exceeds the respective maximum true vapor pressure values for each volume range. [40CFR 60.116b(d)]

Rule 4101 Visible Emissions

Per Section 5.0, no person shall discharge into the atmosphere emissions of any air contaminant aggregating more than 3 minutes in any hour which is as dark as or darker than Ringelmann 1 (or 20% opacity). Since the only pollutant of concern from these two tanks is VOC, no visible emissions will be created, and continued compliance with this rule is expected.

Rule 4102 Nuisance

Section 4.0 prohibits discharge of air contaminants which could cause injury, detriment, nuisance or annoyance to the public. Public nuisance conditions are not expected as a result of these operations, provided the equipment is well maintained. Therefore, compliance with this rule is expected.

California Health & Safety Code 41700 (Health Risk Assessment)

District Policy APR 1905 – Risk Management Policy for Permitting New and Modified Sources specifies that for an increase in emissions associated with a proposed new source or modification, the District perform an analysis to determine the possible impact to the nearest resident or worksite.

As demonstrated above, there are no increases in emissions associated with this project; therefore, a health risk assessment is not necessary and no further risk analysis is required.

Rule 4623 Storage of Organic Liquids

Please note that several requirements from this rule overlap with the requirements of 40 CFR Part 60 Subpart Kb as discussed previously. Where these overlaps occur, both regulations will be cited.

Section 5.1.1 outlines control requirements based on the vapor pressure of the liquid stored. Since the tank involved in this project has an external floating roof and store crude oil with TVP less than 11 psia, compliance is assured.

Section 5.1.2 applies only to small producers and therefore is not applicable. Section 5.1.3 requires the tanks to be "leak-free" and seals and fitting to comply with the rule. (See discussion under Section 5.5.1 below).
Section 5.3.1 applies to external floating roof tanks and requires 1) a cover that rests on the surface of the liquid, 2) primary and secondary seals, 3) and the roof to be floating at all times except during initial and subsequent fills until the roof is lifted off the leg supports. The following conditions ensure compliance:

- {2504} This tank shall be equipped with a closure device between the tank shell and roof edge consisting of two seals mounted one above the other; the one below shall be referred to as the primary seal, and the one above shall be referred as the secondary seal. [District Rule 4623]

- Modified{2505} The external floating roof shall float on the surface of the stored liquid at all times (i.e., off the roof leg supports) except during the initial fill until the roof is lifted off the leg supports and when the tank is completely emptied and subsequently refilled. When the roof is resting on the leg supports, the process of filling, emptying, or refilling shall be continuous and shall be accomplished as rapidly as possible. Whenever the permittee intends to land the roof on it’s legs, the permittee shall notify the APCO in writing at least five calendar days prior to performing the work. The tank must be in compliance with this rule before it may land on its legs. [District Rule 4623, 5.3.1 and 40 CFR 60.112a(a)(1)]

Section 5.3.2.1 provides specifications for welded external floating roof tanks with primary metallic-shoe type seals. The following conditions ensure compliance.

- Accumulated area of gaps between tank wall and the secondary seal shall not exceed 1.0 sq in. per foot of tank diameter and the width of any portion of any gap shall not exceed 1/2 inch. [District Rule 4623, 5.3.2.1.2 and 40 CFR 60.112a(a)(1)(ii)(B)]

- {2507} The cumulative length of all gaps between the tank shell and the primary seal greater than 1/2 inch shall not exceed 10% of the circumference of the tank. [District Rule 4623]

- {2508} The cumulative length of all primary seal gaps greater than 1/8 inch shall not exceed 30% of the circumference of the tank. [District Rule 4623]

- {2509} No continuous gap in the primary seal greater than 1/8 inch wide shall exceed 10% of the tank circumference. [District Rule 4623]

- {2511} The cumulative length of all gaps between the tank shell and the secondary seal, greater than 1/8 inch shall not exceed 5% of the tank circumference. [District Rule 4623]

- Modified{2512} The metallic shoe-type seal shall be installed so that one end of the shoe extends into the stored liquid and the other end extends a minimum vertical distance of 24 inches above the stored liquid surface. [District Rule 4623, 5.3.2.1.3 and 40 CFR 60.112a(a)(1)(ii)(C)]
• (2513) The geometry of the metallic-shoe type seal shall be such that the maximum gap between the shoe and the tank shell shall be no greater than 3 inches for a length of at least 18 inches in the vertical plane above the liquid. [District Rule 4623]

• Modified[2514] There shall be no holes, tears, or openings in the secondary seal or in the primary seal envelope that surrounds the annular vapor space enclosed by the roof edge, seal fabric, and secondary seal. [District Rule 4623, 5.3.2.1.5; 40 CFR 60.112a(a)(1)(i)(D); and 40 CFR 60.112a(a)(1)(ii)(C)]

• (2515) The secondary seal shall allow easy insertion of probes of up to 1 1/2 inches in width in order to measure gaps in the primary seal. [District Rule 4623]

• (2516) The secondary seal shall extend from the roof to the tank shell and shall not be attached to the primary seal. [District Rule 4623]

Section 5.3.2.2 provides specifications for riveted external floating roof tanks. Since the tank involved in this project is not rivetted and does not have an external floating roof, this section is not applicable.

Section 5.3.2.3 provides specifications for tanks with resilient toroid seals. Since the tank involved in this project does not contain resilient toroid seals, this section is not applicable.

Section 5.3.2.4 provides specifications for approved alternative seals, which are not used for this project. Therefore, this section is not applicable.

Section 5.4 provides specifications for internal floating roof tanks and requires 1) seals that meet all the requirements set forth in Section 5.3 except for Section 5.3.2.1.3; 2) metallic-shoe type seals to be installed so that one end of the shoe extends into the stored liquid, and the other end extends a minimum vertical distance of 18 inches above the stored liquid surface; and 3) compliance with the floating roof landing requirements in Section 5.3.1.3. Since the tank involved in this project is an external floating roof tank, this section is not applicable.

Section 5.5 specifies requirements for floating roof deck fittings. Section 5.5.1 requires all openings in roofs used for sampling or gauging, except pressure-vacuum valves complying with Section 5.2, to provide a projection below the liquid surface, and all covers and seals must be closed at all times, with no visible gaps and leak-free, except when in use. The following conditions will ensure continued compliance:

• Modified[2517] All openings in the roof used for sampling and gauging, except pressure-vacuum valves which shall be set to within 10% of the maximum allowable working pressure of the roof, shall provide a projection below the liquid surface to prevent belching of liquid and to prevent entrained or formed organic vapor from escaping from the liquid contents of the tank and shall be equipped with a cover, seal or lid that shall be in a closed position at all times, with no visible gaps and be leak-free, except when the device or appurtenance is in use. [District Rule 4623, 5.5.1 and 40 CFR 60.112a(a)(1)(iii)]
• Modified[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. 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]

Section 5.5.2.1 outlines requirements for internal floating roof deck fittings. Since the tank involved in this project is an external floating roof tank, this section is not applicable.

Section 5.5.2.2 outlines requirements for external floating roof deck fittings. The following conditions ensure compliance:

• Modified[2518] Except for automatic bleeder vents, rim vents, and pressure relief vents, each opening in a non-contact external floating roof shall provide a projection below the liquid surface. [District Rule 4623, 5.5.2.2.1 and 40 CFR 60.112a(a)(1)(iii)]

• Modified[2519] Except for automatic bleeder vents and rim vents, roof drains, and leg sleeves, each opening in the roof shall be equipped with a gasketed cover, seal, or lid that shall be maintained in a closed position at all times (i.e., no visible gap) except when in actual use. [District Rule 4623, 5.5.2.1.2 and 40 CFR 60.112a(a)(1)(iii)]

• Modified[2520] Automatic bleeder vents shall be equipped with a gasket and shall be closed at all times when the roof is floating except when the roof is being floated off or is being landed on the roof leg supports. [District Rule 4623, 5.5.2.1.3 and 40 CFR 60.112a(a)(1)(iii)]

• Modified[2521] Rim vents shall be equipped with a gasket and shall be set to open when the roof is being floated off the roof leg supports or at the manufacturer's recommended setting. [District Rule 4623, 5.5.2.1.4 and 40 CFR 60.112a(a)(1)(iii)]

• Modified[2522] Each emergency roof drain shall be provided with a slotted membrane fabric cover that covers at least 90 percent of the area of the opening. The fabric cover must be impermeable if the liquid is drained into the contents of the tanks. [District Rule 4623, 5.5.2.2.5 and 40 CFR 60.112a(a)(1)(iv)]

• [2523] External floating roof legs shall be equipped with vapor socks or vapor barriers in order to maintain a gas-tight condition so as to prevent VOC emissions from escaping through the roof leg opening. [District Rule 4623]

Section 5.5.2.3 outlines requirements for solid guidepoles. The following conditions ensure compliance.

• [2524] All wells and similar fixed projections through the floating roof shall provide a projection below the liquid surface. [District Rule 4623]
• {2525} The solid guidepole well shall be equipped with a pole wiper and a gasketed cover, seal or lid which shall be in a closed position at all times (i.e., no visible gap) except when the well is in use. [District Rule 4623]

• {2526} The gap between the pole wiper and the solid guidepole shall be added to the gaps measured to determine compliance with the secondary seal requirement, and in no case shall exceed 1/2 inch. [District Rule 4623]

Section 5.5.2.4 outlines requirements for slotted guidepoles. Since this tank does not use slotted guidepoles, this section is not applicable.

Section 5.6 outlines vapor recovery system requirements for fixed roof tanks. The tank involved in this project is not a fixed roof tank; therefore, this section is not applicable.

Section 5.7 outlines the provisions for voluntary tank preventative inspection and maintenance, and tank interior cleaning program. The operator has not elected to participate in this program; therefore, no conditions are required to ensure compliance.

Section 6 outlines recordkeeping requirements and requires accurate record retention for a period of five years. Compliance is assured by the following condition and the remaining sections:

• All records required for monitoring data and support information for inspection 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] Y

Section 6.1.1 requires the operator of external floating roof tanks to make the primary seal envelope available for unobstructed inspection by the APCO on an annual basis. A minimum of eight locations is required for riveted tanks with toroid-type seals, and a minimum of four locations is required for other cases. Since the tank involved in this project is a welded tank, the following conditions ensure compliance:

• {2529} The permittee shall make the primary seal envelope available for unobstructed inspection by the APCO on an annual basis at locations selected along its circumference at random by the APCO. In the case of riveted tanks with toroid-type seals, a minimum of eight locations shall be made available; in all other cases, a minimum of four locations shall be made available. If the APCO suspects a violation may exist the APCO may require such further unobstructed inspection of the primary seal as may be necessary to determine the seal condition for its entire circumference. [District Rule 4623]

Section 6.1.2 requires the operator of floating roof tanks to submit a tank inspection plan to the APCO for approval. The following condition ensures compliance:

• Operators of floating roof tanks shall submit a tank inspection plan to the APCO for approval. The plan shall include an inventory of the tanks subject to this rule and a tank inspection schedule. A copy of the operator’s tank safety procedures shall be made available to the APCO upon request. The tank inventory shall include tank’s identification
number, PTO number, maximum tank capacity, dimensions of tank (height and diameter),
organic liquid stored, type of primary and secondary seal, type of floating roof (internal or
external floating roof), construction date of tank, and location of tank. Any revision to a
previously approved tank inspection schedule shall be submitted to the APCO for approval
prior to conducting an inspection. [District Rule 4623]

Section 6.1.3 requires external floating roof tanks to be inspected at least once every 12
months, or every time a tank is emptied or degassed. The actual gap measurements must be
recorded and submitted to the APCO as specified in Section 6.3.5. The following conditions
ensure compliance:

• The permittee shall inspect all floating roof tanks within 60 days of the initial fill with
petroleum liquid and at least once every 12 months thereafter to determine compliance with
the requirements of Rule 4623. The actual gap measurements of the floating roof primary
and secondary seals shall be recorded. The inspection results shall be submitted to the
APCO as specified in Section 6.3.5. [District Rule 4623, 6.1.3.1.1 and 40 CFR
60.113a(a)(1)(i)(B)]

• {2531} The permittee shall inspect the primary and secondary seals for compliance with the
requirements of this rule every time a tank is emptied or degassed. Actual gap
measurements shall be performed when the liquid level is static but not more than 24 hours
after the tank roof is re-floated. [District Rule 4623]

Section 6.1.4 requires internal floating roof tanks to be inspected at least once every 12
months after a tank is initially filled, or prior to refilling if the tank is newly constructed, repaired,
or rebuilt. In addition, actual gap measurements of the primary seal and/or secondary seal
must be conducted at least once every 60 months. The tank involved in this project is not an
internal floating roof tank; therefore, this section is not applicable.

Section 6.2 outlines requirements for TVP and API gravity testing for uncontrolled fixed roof
tanks. Section 6.3.1 does not apply to floating roof tanks and fixed roof tanks with vapor
recovery systems. Section 6.3.2 only applies to emergency standby tanks. Section 6.3.3 only
applies to temporary tanks. Section 6.3.4 only applies to small producers. Therefore, the
requirements for these sections are not applicable.

Section 6.3.5 requires the inspection reports of floating roof tanks to be submitted to the APCO
within five calendar days after the inspection for tanks that failed. For tanks that demonstrated
compliance the inspection reports do not need to be submitted but must remain on-site and
made available upon request by the APCO. In addition, this section also outlines the required
information. The following conditions ensure compliance:

• Modified{2532} Permittee shall submit the reports of the floating roof tank inspections to the
APCO within five calendar days after the completion of the inspection only for those tanks
that failed to meet the applicable requirements of Rule 4623, Sections 5.2 through 5.5. The
inspection report for tanks that have been determined to be in compliance with the
requirements of Sections 5.2 through 5.5 need not be submitted to the APCO, but the
inspection report shall be kept on-site and made available upon request by the APCO. The
inspection report shall contain all necessary information to demonstrate compliance with the provisions of this rule, including the following: 1) Date of inspection and names and titles of company personnel doing the inspection. 2) Tank identification number and Permit to Operate number. 3) Measurements of the gaps between the tank shell and primary and secondary seals. 4) Gas-tight status of the tank and floating roof deck fittings. Records of the gas-tight status shall include the vapor concentration values measured in parts per million by volume (ppmv). 5) Data, supported by calculations, demonstrating compliance with the requirements specified in Sections 5.3, 5.5.2.3.3, 5.5.2.4.2, and 5.5.2.4.3 of Rule 4623. 6) Any corrective actions or repairs performed on the tank in order to comply with rule 4623 and the date(s) such actions were taken. [District Rule 4623]

Section 6.3.6 requires submittal of TVP and API gravity records as required by Section 6.2; however, the tank in this project is not subject to 6.2. Therefore, this section is not applicable.

Section 6.3.7 requires the operator to maintain the records of floating roof landing activities pursuant to Section 5.3.1.3 and 5.4.3. The following conditions ensure compliance:

- Modified{2533} Permittee shall maintain the records of the external floating roof landing activities that are performed pursuant to Rule 4623, Sections 5.3.1.3 and 5.4.3. The records shall include information on the true vapor pressure (TVP), API gravity, storage temperature, type of organic liquid stored in the tank, the purpose of landing the roof on its legs, the date of roof landing, duration the roof was on its legs, the level or height at which the tank roof was set to land on its legs, and the lowest liquid level in the tank. [District Rule 4623, 6.3.7 and 40 CFR 60.115a(a)]

Section 6.4 outlines approved test methods for analysis of halogenated exempt compounds, API gravity, TVP, control efficiency of VOC destruction device, and gas leak concentration. Since the facility will now be required to test and record API gravity and TVP, the following testing conditions will be added:

- 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]


- For crude oil with an API gravity of 26 degrees or less, the TVP shall be determined using the latest version of the Lawrence Berkeley National Laboratory “Test Method for Vapor Pressure of Reactive Organic Compounds in Heavy Crude Oil Using Gas Chromatograph”, as approved by ARB and EPA. [District Rules 2201 and 4623]
• For any organic liquid, except crude oil with an API gravity of 26 degrees or less, the true vapor pressure (TVP) shall be determined by measuring Reid Vapor Pressure (RVP) with ASTM Method D 323 and converting the RVP to TVP at the tank’s maximum organic liquid storage temperature. The conversion of RVP to TVP shall be done in accordance with the oil and gas section of "California Air Resources Boards (ARB) Technical Guidance Document to the Criteria and Guidelines Regulation for AB 2588", dated August 1989. As an alternative to using ASTM D 323, the TVP of crude oil with an API gravity range of greater than 26 degrees up to 30 degrees may be determined by using other equivalent test methods approved by APCO, ARB and EPA. [District Rules 2201 and 4623]

Section 7 requires that any tank installed or constructed on and after May 19, 2005 be in full compliance upon initial operation, and any previously exempt tank must be in full compliance upon the date the exemption status is lost. The tank involved in this project is in full compliance, as discussed in the previous sections. Therefore, compliance is assured.

California Health & Safety Code 42301.6 (School Notice)

The District has verified that this site is not located within 1,000 feet of a school. Therefore, pursuant to California Health and Safety Code 42301.6, a school notice is not required.

California Environmental Quality Act (CEQA)

The California Environmental Quality Act (CEQA) requires each public agency to adopt objectives, criteria, and specific procedures consistent with CEQA Statutes and the CEQA Guidelines for administering its responsibilities under CEQA, including the orderly evaluation of projects and preparation of environmental documents. The San Joaquin Valley Unified Air Pollution Control District (District) adopted its Environmental Review Guidelines (ERG) in 2001. The basic purposes of CEQA are to:

• Inform governmental decision-makers and the public about the potential, significant environmental effects of proposed activities.
• Identify the ways that environmental damage can be avoided or significantly reduced.
• Prevent significant, avoidable damage to the environment by requiring changes in projects through the use of alternatives or mitigation measures when the governmental agency finds the changes to be feasible.
• Disclose to the public the reasons why a governmental agency approved the project in the manner the agency chose if significant environmental effects are involved.

Greenhouse Gas (GHG) Significance Determination

It is determined that no other agency has or will prepare an environmental review document for the project. Thus the District is the Lead Agency for this project.

The District's engineering evaluation (this document) demonstrates that the project would not result in an increase in project specific greenhouse gas emissions. The District therefore concludes that the project would have a less than cumulatively significant impact on global climate change.
The District is the Lead Agency for this project because there is no other agency with broader statutory authority over this project. The District performed an Engineering Evaluation (this document) for the proposed project and determined that the activity will occur at an existing facility and the project involves negligible expansion of the existing use. Furthermore, the District determined that the activity will not have a significant effect on the environment. The District finds that the activity is categorically exempt from the provisions of CEQA pursuant to CEQA Guideline § 15031 (Existing Facilities), and finds that the project is exempt per the general rule that CEQA applies only to projects which have the potential for causing a significant effect on the environment (CEQA Guidelines §15061(b)(3)).

IX. Recommendation

Compliance with all applicable rules and regulations is expected. Pending a successful NSR Public Noticing period, issue Authority to Construct S-1518-5-5 and -31-4 subject to the permit conditions on the attached draft Authority to Construct in Appendix E.

X. Billing Information

<table>
<thead>
<tr>
<th>Permit Number</th>
<th>Fee Schedule</th>
<th>Fee Description</th>
<th>Annual Fee</th>
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<tbody>
<tr>
<td>S-1518-5-5</td>
<td>3020-05-G</td>
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<tr>
<td>S-1518-31-4</td>
<td>3020-05-G</td>
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</table>

Appendices

A: Project Location Map
B: Current Permits to Operate
C: TANKS 4.0 Emissions Summaries
D: BACT Guideline 7.3.3 and Analysis
E: Draft ATGs
F: Compliance Certifications
APPENDIX A

Project Location Map
APPENDIX B

Current Permits to Operate
San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1518-5-4
SECTION: SE19  TOWNSHIP: 26S  RANGE: 19E
EXPIRATION DATE: 05/31/2014
EQUIPMENT DESCRIPTION:
4,620,000 GALLON WELDED EXTERNAL FLOATING ROOF TANK (#110024) WITH METALLIC SHOE PRIMARY SEAL AND SECONDARY WIPER SEAL

PERMIT UNIT REQUIREMENTS

1. True vapor pressure of the organic liquid stored shall be less than 5.35 psia. [District NSR Rule] Federally Enforceable Through Title V Permit

2. The tank shall be equipped with a floating roof consisting of a pan type that was installed before December 20, 2001, pontoon-type or double-deck-type cover which rests upon the surface of the liquid being stored and is equipped with a closure device between the tank shell and roof edge consisting of a primary and a secondary seal. [District Rule 4623, 5.3.1 and 40 CFR 60.112b(a)(2) & (i)] Federally Enforceable Through Title V Permit

3. The external floating roof shall float on the surface of the stored liquid at all times (i.e., off the roof leg supports) except during the initial fill until the roof is lifted off the leg supports and when the tank is completely emptied and subsequently refilled. When the roof is resting on the leg supports, the process of filling, emptying, or refilling shall be continuous and shall be accomplished as rapidly as possible. Whenever the permittee intends to land the roof on its legs, the permittee shall notify the APCO in writing at least five calendar days prior to performing the work. The tank must be in compliance with this rule before it may land on its legs. [District Rule 4623, 5.3.1.3 and 40 CFR 60.112b(a)(2)(iii)] Federally Enforceable Through Title V Permit

4. This tank shall be equipped with a closure device between the tank shell and roof edge consisting of two seals mounted one above the other; the one below shall be referred to as the primary seal, and the one above shall be referred as the secondary seal. [District Rule 4623] Federally Enforceable Through Title V Permit

5. Primary seal (lower seal) shall be either a mechanical shoe seal or a liquid-mounted seal. [40 CFR 60.112b(a)(2)(i) and 60.112b(a)(2)(i)(A)] Federally Enforceable Through Title V Permit

6. Operators of floating roof tanks shall submit a tank inspection plan to the APCO for approval. The plan shall include an inventory of the tanks subject to this rule and a tank inspection schedule. A copy of the operator's tank safety procedures shall be made available to the APCO upon request. The tank inventory shall include tank's identification number, PTO number, maximum tank capacity, dimensions of tank (height and diameter), organic liquid stored, type of primary and secondary seal, type of floating roof (internal or external floating roof), construction date of tank, and location of tank. Any revision to a previously approved tank inspection schedule shall be submitted to the APCO for approval prior to conducting an inspection. [District Rule 4623] Federally Enforceable Through Title V Permit

7. Accumulated area of gaps between the tank wall and the mechanical shoe or liquid-mounted primary seal shall not exceed 212 cm² per meter (10.01 in² per foot) of tank diameter, and the width of any gap shall not exceed 3.81 cm (1.5 inches). [40 CFR 60.113b(b)(4)] Federally Enforceable Through Title V Permit

8. Gaps between the tank shell and the primary seal shall not exceed 1 1/2 inches. [District Rule 4623, 5.3.2.1.1] Federally Enforceable Through Title V Permit

9. The cumulative length of all gaps between the tank shell and the primary seal greater than 1/2 inch shall not exceed 10% of the circumference of the tank. [District Rule 4623, 5.3.2.1.1] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.
10. The cumulative length of all primary seal gaps greater than 1/8 inch shall not exceed 30% of the circumference of the tank. [District Rule 4623, 5.3.2.1.1] Federally Enforceable Through Title V Permit

11. No continuous gap in the primary seal greater than 1/8 inch wide shall exceed 10% of the tank circumference. [District Rule 4623, 5.3.2.1.1] Federally Enforceable Through Title V Permit

12. Accumulated area of gaps between the tank wall and the secondary seal shall not exceed 21.2 cm² per meter (1.00 in² per foot) of tank diameter, and the width of any portion of any gap shall not exceed 1.27 cm (1/2 inch). [District Rule 4623, 5.3.2.1.2 and 40 CFR 60.113(b)(4)(ii)(B)] Federally Enforceable Through Title V Permit

13. The cumulative length of all gaps between the tank shell and the secondary seal, greater than 1/8 inch shall not exceed 5% of the tank circumference. [District Rule 4623, 5.3.2.1.2] Federally Enforceable Through Title V Permit

14. The metallic shoe-type seal shall be installed so that one end of the shoe extends into the stored liquid and the other end extends a minimum vertical distance of 24 inches above the stored liquid surface. [District Rule 4623, 5.3.2.1.3] Federally Enforceable Through Title V Permit

15. The geometry of the metallic-shoe type seal shall be such that the maximum gap between the shoe and the tank shell shall be no greater than 3 inches for a length of at least 18 inches in the vertical plane above the liquid. [District Rule 4623, 5.3.2.1.4] Federally Enforceable Through Title V Permit

16. There shall be no holes, tears, or openings in the secondary seal or in the primary seal envelope that surrounds the annular vapor space enclosed by the roof edge, seal fabric, and secondary seal. [District Rule 4623, 5.3.2.1.5 and 40 CFR 60.112(b)(4)(ii)(C)] Federally Enforceable Through Title V Permit

17. The secondary seal shall allow easy insertion of probes of up to 1 1/2 inches in width in order to measure gaps in the primary seal. [District Rule 4623, 5.3.2.1.6] Federally Enforceable Through Title V Permit

18. The secondary seal shall extend from the roof to the tank shell and shall not be attached to the primary seal. [District Rule 4623, 5.3.2.1.7] Federally Enforceable Through Title V Permit

19. Secondary seal shall completely cover the annular space between the external floating roof and the wall of the storage vessel in a continuous fashion. [40 CFR 60.112(b)(a)(2)(ii)(B)] Federally Enforceable Through Title V Permit

20. All openings in the roof used for sampling and gauging, except pressure-vacuum valves which shall be set to within 10% of the maximum allowable working pressure of the roof, shall provide a projection below the liquid surface to prevent belching of liquid and to prevent entrained or formed organic vapor from escaping from the liquid contents of the tank and shall be equipped with a cover, seal or lid that shall be in a closed position at all times, with no visible gaps and be gas tight, except when the device or appurtenance is in use [District Rule 4623, 5.5.1] Federally Enforceable Through Title V Permit

21. 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, 3.9 and 6.4.8] Federally Enforceable Through Title V Permit

22. Except for automatic bleeder vents, rim vents, and pressure relief vents, each opening in a non-contact external floating roof shall provide a projection below the liquid surface. [District Rule 4623, 5.5.2.2.1] Federally Enforceable Through Title V Permit

23. Except for automatic bleeder vents and rim vents, roof drains, and leg sleeves, each opening in the roof shall be equipped with a gasketed cover, seal, or lid that shall be maintained in a closed position at all times (i.e., no visible gap) except when in actual use. [District Rule 4623, 5.5.2.2.2] Federally Enforceable Through Title V Permit

24. Automatic bleeder vents shall be equipped with a gasket and shall be closed at all times when the roof is floating except when the roof is being floated off or is being landed on the roof leg supports. [District Rule 4623, 5.5.2.2.3, 5.5.2.1.3 and 40 CFR 60.112(b)(a)(2)(ii)] Federally Enforceable Through Title V Permit

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

Facility Name: CONOCOPHILLIPS PIPE LINE COMPANY
Location: JUNCTION PUMP STATION, 14980 HWY 46, LOST HILLS, CA 93249
S-1519-6.1, Dec 28 2019 11:16AM - GOVBD
25. Rim vents shall be equipped with a gasket and shall be set to open when the roof is being floated off the roof leg supports or at the manufacturer's recommended setting. [District Rule 4623, 5.5.2.2.4 and 40CFR 60.112b(a)(2)(ii)] Federally Enforceable Through Title V Permit

26. Each roof drain that drains rainwater into the contents of the tank shall be provided with an impermeable slotted membrane fabric cover that covers at least 90 percent of the area of the opening. [District Rule 4623, 5.5.2.2.5] Federally Enforceable Through Title V Permit

27. External floating roof legs shall be equipped with vapor socks or vapor barriers in order to maintain a gas-tight condition so as to prevent VOC emissions from escaping through the roof leg opening. [District Rule 4623, 5.5.2.2.6] Federally Enforceable Through Title V Permit

28. All wells and similar fixed projections through the floating roof shall provide a projection below the liquid surface. [District Rule 4623, 5.5.2.3.1] Federally Enforceable Through Title V Permit

29. The solid guidepole well shall be equipped with a pole wiper and a gasketed cover, seal or lid which shall be in a closed position at all times (i.e., no visible gap) except when the well is in use. [District Rule 4623, 5.5.2.3.2] Federally Enforceable Through Title V Permit

30. The gap between the pole wiper and the solid guidepole shall be added to the gaps measured to determine compliance with the secondary seal requirement, and in no case shall exceed 1/2 inch. [District Rule 4623, 5.5.2.3.2] Federally Enforceable Through Title V Permit

31. The slotted guidepole well on the external floating roof shall be equipped with the following: a sliding cover, a well gasket, a pole sleeve, a pole wiper, and an internal float and float wiper designed to minimize the gap between the float and the well, and provided the gap shall not exceed 1/8 inch; or shall be equipped with a well gasket, a zero gap pole wiper seal and a pole sleeve that projects below the liquid surface. [District Rule 4623, 5.5.2.4.2] Federally Enforceable Through Title V Permit

32. The gap between the pole wiper and the slotted guidepole shall be added to the gaps measured to determine compliance with the secondary seal requirement, and in no case shall exceed 1/8 inch. [District Rule 4623, 5.5.2.4.3] Federally Enforceable Through Title V Permit

33. The permittee shall make the primary seal envelope available for unobstructed inspection by the APCO on an annual basis at locations selected along its circumference at random by the APCO. In the case of riveted tanks with toroid-type seals, a minimum of eight locations shall be made available; in all other cases, a minimum of four locations shall be made available. If the APCO suspects a violation may exist the APCO may require such further unobstructed inspection of the primary seal as may be necessary to determine the seal condition for its entire circumference. [District Rule 4623, 6.1.1] Federally Enforceable Through Title V Permit

34. Operator shall perform gap measurements on primary and secondary seals within 60 days of the initial fill and at least once every year thereafter to determine compliance with the requirements of Rule 4623. The actual gap measurements of the floating roof primary and secondary seals shall be recorded. The inspection results shall be submitted to the APCO as specified in Section 6.3.5. [District Rule 4623, 6.1.3.1.1 and 40 CFR 60.113b(b)(1)(i) & (ii)] Federally Enforceable Through Title V Permit

35. Operator shall also perform gap measurements on primary seals during hydrostatic testing of the vessel. [40CFR 60.113b(b)(1)(i)] Federally Enforceable Through Title V Permit

36. If unit is out of service for a period of one year or more, subsequent refilling with volatile organic liquid shall be considered initial fill in accordance with the conditions of this permit. [40CFR60.113b(b)(1)(iii)] Federally Enforceable Through Title V Permit

37. The permittee shall inspect the primary and secondary seals for compliance with the requirements of Rule 4623 every time this tank is emptied or degassed. Actual gap measurements shall be performed when the liquid level is static but not more than 24 hours after the tank roof is re-floated. [District Rule 4623, 6.1.3.1.2 and 40CFR 60.113b(b)(6)] Federally Enforceable Through Title V Permit
38. The permittee shall submit the reports of the floating roof tank inspections to the APCO within five calendar days after the completion of the inspection only for those tanks that failed to meet the applicable requirements of Rule 4623, Sections 5.2 through 5.5. The inspection report for tanks that have been determined to be in compliance with the requirements of Sections 5.2 through 5.5 need not be submitted to the APCO, but the inspection report shall be kept on-site and made available upon request by the APCO. The inspection report shall contain all necessary information to demonstrate compliance with the provisions of this rule, including the following: 1) Date of inspection and names and titles of company personnel doing the inspection. 2) Tank identification number and Permit to Operate number. 3) Measurements of the gaps between the tank shell and primary and secondary seals. 4) Gas-tight status of the tank and floating roof deck fittings. Records of the gas-tight status shall include the vapor concentration values measured in parts per million by volume (ppmv). 5) Data, supported by calculations, demonstrating compliance with the requirements specified in Sections 5.3, 5.5.2.3.3, 5.5.2.4.2, and 5.5.2.4.3 of Rule 4623. 6) Any corrective actions or repairs performed on the tank in order to comply with rule 4623 and the date(s) such actions were taken. [District Rule 4623, 6.3.5] Federally Enforceable Through Title V Permit

39. Permittee shall maintain the records of the external floating roof landing activities that are performed pursuant to Rule 4623, Sections 5.3.1.3 and 5.4.3. The records shall include information on the maximum true vapor pressure (TVP), API gravity, storage temperature, type of organic liquid stored in the tank, the purpose of landing the roof on its legs, the date of roof landing, duration the roof was on its legs, the level or height at which the tank roof was set to land on its legs, and the lowest liquid level in the tank. [District Rule 4623, 6.3.7 and 40 CFR 60.116b(c)] Federally Enforceable Through Title V Permit

40. All covers, seals and lids covering openings in the roof used for sampling and gauging, except pressure-vacuum valves set to within 10 percent of the maximum allowable working pressure of the roof, shall be inspected annually by the facility operator to ensure compliance with the provisions of this permit. However, if one or more of the components are found to be leak during an annual inspection, the inspection frequency for that component type shall be changed from annual to quarterly. If none of the components of that type are subsequently found to be leaking during five consecutive inspections, the inspection frequency may be changed from quarterly to annual. Components located in inaccessible (over 15 feet above ground when access is required from the ground or over 6 feet away from a platform when access is required from the platform) locations shall be inspected at least annually and components located in unsafe areas shall be inspected and repaired upon detection. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

41. Operator shall determine the presence of VOC leaks by EPA Method 21. The instrument shall be calibrated before use each day of its use by the procedures specified in Method 21 using the following calibration gases: 1.) Zero air (less than 10 ppm of hydrocarbon in air); and 2.) A mixture of methane or n-hexane and air at a concentration of about, but less than, 10,000 ppm methane or n-hexane. [40 CFR 60.112b(a)(3)(i)] Federally Enforceable Through Title V Permit

42. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date of leak detection, and method of detection; 3) Date and emission level of recheck after leak is repaired. Leaks over 10,000 ppmv shall be reported as a deviation. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

43. Operator shall notify the APCO 30 days in advance of any gap measurements required by this permit to afford the APCO opportunity to have an observer present. [40 CFR 60.113(b)(5)] Federally Enforceable Through Title V Permit

44. If the external floating roof has defects, or the primary seal or secondary seal has holes, tears, or other openings in the seal or seal fabric, the operator shall repair the items as necessary so that none of these conditions exist before filling or refilling the storage vessel with VOL. [40 CFR 60.113(b)(6)(i)] Federally Enforceable Through Title V Permit

45. For all visual inspections required by this permit, the operator shall notify the APCO in writing at least 30 days prior to the filling or refilling of each storage vessel to afford the APCO the opportunity to inspect the storage vessel prior to refilling, except when notification is specifically allowed otherwise by this permit. [40 CFR 60.113(b)(6)(ii)] Federally Enforceable Through Title V Permit
46. If a visual inspection required by this permit is not planned and the operator could not have known about the inspection 30 days in advance of refilling the tank, the operator shall notify the APCO at least 7 days prior to the refilling of the storage vessel. Notification shall be made by telephone immediately followed by written documentation demonstrating why the inspection was unplanned. Alternatively, this notification including the written documentation may be made in writing and sent by express mail so it is received by the APCO at least 7 days prior to the refilling. [40CFR 60.113(b)(6)(ii)] Federally Enforceable Through Title V Permit

47. Operator shall record the vessel on which the measurement was performed, date of the seal gap measurement, raw data obtained in the measurement process in accordance with the conditions of this permit. [40CFR 60.115(b)(3)] Federally Enforceable Through Title V Permit

48. Within 60 days of performing the seal gap measurements required by this permit, the operator shall furnish the APCO with a report containing the date of measurement, raw data obtained in the measurement process, and all such gap calculations as required by this permit. [40CFR 60.115(b)(2)] Federally Enforceable Through Title V Permit

49. After each seal gap measurement that detects gaps exceeding any limit of this permit, the operator shall submit a report to the APCO within 30 days of the inspection. The report will identify the vessel and contain the date of measurement, raw data obtained in the measurement process, all such gap calculations as required by this permit, and the date the vessel was emptied or the repairs made and the date of repair. [40CFR 60.115(b)(4)] Federally Enforceable Through Title V Permit

50. If the seals do not meet the required specifications of this permit, operator shall repair or empty the storage vessel within 45 days of identification. [40CFR 60.113(b)(4)] Federally Enforceable Through Title V Permit

51. Operator shall maintain a record showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel. The record shall be maintained for the life of the vessel. [40 CFR 60.116(b)] Federally Enforceable Through Title V Permit

52. Operator shall determine the true vapor pressure of each type of crude oil with a Reid vapor pressure less than 2.0 psia or whose physical properties preclude determination by the recommended method from available data and record if the true vapor pressure is greater than 0.5 psia. [40 CFR 60.116b(e)(2)(ii)] Federally Enforceable Through Title V Permit

53. Operator shall determine the true vapor pressure of each VOL, other than crude oil or refined petroleum products, from standard reference texts, by ASTM Method D2879, or by using an appropriate method approved by EPA. [40 CFR 60.116b(e)(3)(iii)] Federally Enforceable Through Title V Permit

54. For storage vessels operated above or below ambient temperatures, the operator shall calculate the maximum true vapor pressure based upon the highest expected calendar-month average of the storage temperature. For vessels operated at ambient temperatures, the maximum true vapor pressure is calculated based upon the maximum local monthly average ambient temperature as reported by the National Weather Service. [40 CFR 60.116b(e)(1)] Federally Enforceable Through Title V Permit

55. Maximum true vapor pressure, for crude oil or refined petroleum products, may be determined from nomographs contained in API Bulletin 2517, by using the typical Reid vapor pressure and the maximum expected storage temperature based on the highest expected calendar-month average temperature of the stored product, unless the APCO specifically requests that the liquid be sampled, the actual storage temperature determined, and the Reid vapor pressure determined from the sample(s). [40 CFR 60.116b(e)(2)(i)] Federally Enforceable Through Title V Permit

56. Operator of a tank storing a waste mixture of indeterminate or variable composition shall determine the highest maximum true vapor pressure for the range of liquid compositions to be stored prior to the initial filling, using methods specified for maximum true vapor pressure in this permit. [40CFR 60.116b(f)] Federally Enforceable Through Title V Permit

57. Operator shall determine the true vapor pressure of each type of crude oil, with a Reid vapor pressure less than 2.0 psia or whose physical properties preclude determination by the recommended method, using available data and record if the estimated maximum true vapor pressure is greater than 0.5 psia. [40 CFR 60.116b(e)(2)] Federally Enforceable Through Title V Permit
58. Permittee shall conduct true vapor pressure (TVP) testing of the organic liquid 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

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


61. For crude oil with an API gravity of 26 degrees or less, the TVP shall be determined using the latest version of the Lawrence Berkeley National Laboratory "Test Method for Vapor Pressure of Reactive Organic Compounds in Heavy Crude Oil Using Gas Chromatograph", as approved by ARB and EPA. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit

62. For any organic liquid, except crude oil with an API gravity of 26 degrees or less, the true vapor pressure (TVP) shall be determined by measuring Reid Vapor Pressure (RVP) with ASTM Method D 323 and converting the RVP to TVP at the tank’s maximum organic liquid storage temperature. The conversion of RVP to TVP shall be done in accordance with the oil and gas section of "California Air Resources Boards (ARB) Technical Guidance Document to the Criteria and Guidelines Regulation for AB 2588", dated August 1989. As an alternative to using ASTM D 323, the TVP of crude oil with an API gravity range of greater than 26 degrees up to 30 degrees may be determined by using other equivalent test methods approved by APCO, ARB and EPA. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit

63. Permittee shall maintain accurate records of true vapor pressure (TVP), storage temperature, type of liquids stored, and daily tank throughput. [District Rules 2201 and 4623 and 40 CFR 60.115a(a)] Federally Enforceable Through Title V Permit

64. 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 1070 and 2201] Federally Enforceable Through Title V Permit

65. Permittee shall keep annual records of the throughput of this tank. [District Rule 2201] Federally Enforceable Through Title V Permit

66. All records required for monitoring data and support information for inspection 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

67. Operator of each storage vessel, either with a design capacity greater than or equal to 151 m3 (39,890 gallons) storing a liquid with a maximum true vapor pressure that is normally less than 0.75 psia or with a design capacity greater than or equal to 75 m3 (19,813 gallons) but less than 151 m3 (39,890 gallons) storing a liquid with a maximum true vapor pressure normally less than 4.0 psia, shall notify the APCO within 30 days when the maximum true vapor pressure of the liquid exceeds the respective maximum true vapor pressure values for each volume range. [40CFR 60.116b(d)] 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-1518-31-3  EXPIRATION DATE: 05/31/2014
SECTION: SE19  TOWNSHIP: 26S  RANGE: 19E

EQUIPMENT DESCRIPTION:
110,000 BBL EXTERNAL FLOATING ROOF TANK (#110026) WITH PRIMARY METALLIC SHOE SEAL AND SECONDARY WIPER TYPE SEAL

PERMIT UNIT REQUIREMENTS

1. True vapor pressure of the organic liquid stored shall not exceed 9.5 psia. [District Rule 4623, 5.1.1] Federally Enforceable Through Title V Permit

2. Maximum amount of material introduced into tank shall not exceed 40,150,000 bbl/year. [District Rule 2201] Federally Enforceable Through Title V Permit

3. The tank shall be equipped with a floating roof consisting of a pan type that was installed before December 20, 2001, pontoon-type or double-deck-type cover which rests upon the surface of the liquid being stored and is equipped with a closure device between the tank shell and roof edge consisting of a primary and a secondary seal. [District Rule 4623, 5.3.1 and 40 CFR 60.112b(a)(2) & (i)] Federally Enforceable Through Title V Permit

4. The external floating roof shall float on the surface of the stored liquid at all times (i.e., off the roof leg supports) except during the initial fill until the roof is lifted off the leg supports and when the tank is completely emptied and subsequently refilled. When the roof is resting on the leg supports, the process of filling, emptying, or refilling shall be continuous and shall be accomplished as rapidly as possible. Whenever the permittee intends to land the roof on its legs, the permittee shall notify the APCO in writing at least five calendar days prior to performing the work. The tank must be in compliance with this rule before it may land on its legs. [District Rule 4623, 5.3.1.3 and 40 CFR 60.112b(a)(2)(iii)] Federally Enforceable Through Title V Permit

5. This tank shall be equipped with a closure device between the tank shell and roof edge consisting of two seals mounted one above the other; the one below shall be referred to as the primary seal, and the one above shall be referred as the secondary seal. [District Rule 4623] Federally Enforceable Through Title V Permit

6. Primary seal (lower seal) shall be either a mechanical shoe seal or a liquid-mounted seal. [40 CFR 60.112b(a)(2)(i) and 60.112b(a)(2)(i)(A)] Federally Enforceable Through Title V Permit

7. Operators of floating roof tanks shall submit a tank inspection plan to the APCO for approval. The plan shall include an inventory of the tanks subject to this rule and a tank inspection schedule. A copy of the operator's tank safety procedures shall be made available to the APCO upon request. The tank inventory shall include tank's identification number, PTO number, maximum tank capacity, dimensions of tank (height and diameter), organic liquid stored, type of primary and secondary seal, type of floating roof (internal or external floating roof), construction date of tank, and location of tank. Any revision to a previously approved tank inspection schedule shall be submitted to the APCO for approval prior to conducting an inspection. [District Rule 4623] Federally Enforceable Through Title V Permit

8. Accumulated area of gaps between the tank wall and the mechanical shoe or liquid-mounted primary seal shall not exceed 212 cm² per meter (10.01 in² per foot) of tank diameter, and the width of any gap shall not exceed 3.81 cm (1.5 inches). [40 CFR 60.113b(b)(4)(i)] Federally Enforceable Through Title V Permit

9. Gaps between the tank shell and the primary seal shall not exceed 1 1/2 inches. [District Rule 4623, 5.3.2.1.1] 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.

Facility Name: CONOCOPHILLIPS PIPE LINE COMPANY
Location: JUNCTION PUMP STATION, 14600 HWY 48, LOST HILLS, CA 93248
S-10-8.314.1 (Rev 03 2010) 11-18AM - 03/04/15
10. The cumulative length of all gaps between the tank shell and the primary seal greater than 1/2 inch shall not exceed 10% of the circumference of the tank. [District Rule 4623, 5.3.2.1.1] Federally Enforceable Through Title V Permit

11. The cumulative length of all primary seal gaps greater than 1/8 inch shall not exceed 30% of the circumference of the tank. [District Rule 4623, 5.3.2.1.1] Federally Enforceable Through Title V Permit

12. No continuous gap in the primary seal greater than 1/8 inch wide shall exceed 10% of the tank circumference. [District Rule 4623, 5.3.2.1.1] Federally Enforceable Through Title V Permit

13. Accumulated area of gaps between the tank wall and the secondary seal shall not exceed 21.2 cm² per meter (1.00 in² per foot) of tank diameter, and the width of any portion of any gap shall not exceed 1.27 cm (1/2 inch). [District Rule 4623, 5.3.2.1.2 and 40 CFR 60.113b(b)(4)(ii)(B)] Federally Enforceable Through Title V Permit

14. The cumulative length of all gaps between the tank shell and the secondary seal, greater than 1/8 inch shall not exceed 5% of the tank circumference. [District Rule 4623, 5.3.2.1.2] Federally Enforceable Through Title V Permit

15. The metallic shoe-type seal shall be installed so that one end of the shoe extends into the stored liquid and the other end extends a minimum vertical distance of 24 inches above the stored liquid surface. [District Rule 4623, 5.3.2.1.3] Federally Enforceable Through Title V Permit

16. The geometry of the metallic-shoe type seal shall be such that the maximum gap between the shoe and the tank shell shall be no greater than 3 inches for a length of at least 18 inches in the vertical plane above the liquid. [District Rule 4623, 5.3.2.1.4] Federally Enforceable Through Title V Permit

17. There shall be no holes, tears, or openings in the secondary seal or in the primary seal envelope that surrounds the annular vapor space enclosed by the roof edge, seal fabric, and secondary seal. [District Rule 4623, 5.3.2.1.5 and 40 CFR 60.112b(b)(4)(ii)(C)] Federally Enforceable Through Title V Permit

18. The secondary seal shall allow easy insertion of probes of up to 1 1/2 inches in width in order to measure gaps in the primary seal. [District Rule 4623, 5.3.2.1.6] Federally Enforceable Through Title V Permit

19. The secondary seal shall extend from the roof to the tank shell and shall not be attached to the primary seal. [District Rule 4623, 5.3.2.1.7] Federally Enforceable Through Title V Permit

20. Secondary seal shall completely cover the annular space between the external floating roof and the wall of the storage vessel in a continuous fashion. [40 CFR 60.112b(a)(2)(i)(B)] Federally Enforceable Through Title V Permit

21. All openings in the roof used for sampling and gauging, except pressure-vacuum valves which shall be set to within 10% of the maximum allowable working pressure of the roof, shall provide a projection below the liquid surface to prevent beveling of liquid and to prevent entrained or formed organic vapor from escaping from the liquid contents of the tank and shall be equipped with a cover, seal or lid that shall be in a closed position at all times, with no visible gaps and be gas tight, except when the device or appurtenance is in use [District Rule 4623, 5.5.1] Federally Enforceable Through Title V Permit

22. 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, 3.9 and 6.4.8] Federally Enforceable Through Title V Permit

23. Except for automatic bleeder vents, rim vents, and pressure relief vents, each opening in a non-contact external floating roof shall provide a projection below the liquid surface. [District Rule 4623, 5.5.2.2.1] Federally Enforceable Through Title V Permit

24. Except for automatic bleeder vents and rim vents, roof drains, and leg sleeves, each opening in the roof shall be equipped with a gasketed cover, seal, or lid that shall be maintained in a closed position at all times (i.e., no visible gap) except when in actual use. [District Rule 4623, 5.5.2.2.2] Federally Enforceable Through Title V Permit

25. Automatic bleeder vents shall be equipped with a gasket and shall be closed at all times when the roof is floating except when the roof is being floated off or is being landed on the roof leg supports. [District Rule 4623, 5.5.2.2.3, 5.5.2.1.3 and 40 CFR 60.112b(a)(2)(ii)] 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.
Permit Unit Requirements for S-1518-31-3 (continued)

26. Rim vents shall be equipped with a gasket and shall be set to open when the roof is being floated off the roof leg supports or at the manufacturer's recommended setting. [District Rule 4623, 5.5.2.2.4 and 40CFR 60.112b(a)(2)(ii)] Federally Enforceable Through Title V Permit

27. Each roof drain that drains rainwater into the contents of the tank shall be provided with an impermeable slotted membrane fabric cover that covers at least 90 percent of the area of the opening. [District Rule 4623, 5.5.2.2.5] Federally Enforceable Through Title V Permit

28. External floating roof legs shall be equipped with vapor socks or vapor barriers in order to maintain a gas-tight condition so as to prevent VOC emissions from escaping through the roof leg opening. [District Rule 4623, 5.5.2.2.6] Federally Enforceable Through Title V Permit

29. All wells and similar fixed projections through the floating roof shall provide a projection below the liquid surface. [District Rule 4623, 5.5.2.3.1] Federally Enforceable Through Title V Permit

30. The solid guidepole well shall be equipped with a pole wiper and a gasketed cover, seal or lid which shall be in a closed position at all times (i.e., no visible gap) except when the well is in use. [District Rule 4623, 5.5.2.3.2] Federally Enforceable Through Title V Permit

31. The gap between the pole wiper and the solid guidepole shall be added to the gaps measured to determine compliance with the secondary seal requirement, and in no case shall exceed 1/2 inch. [District Rule 4623, 5.5.2.3.2] Federally Enforceable Through Title V Permit

32. The slotted guidepole well on the external floating roof shall be equipped with the following: a sliding cover, a well gasket, a pole sleeve, a pole wiper, and an internal float and float wiper designed to minimize the gap between the float and the well, and provided the gap shall not exceed 1/8 inch; or shall be equipped with a well gasket, a zero gap pole wiper seal and a pole sleeve that projects below the liquid surface. [District Rule 4623, 5.5.2.4.2] Federally Enforceable Through Title V Permit

33. The gap between the pole wiper and the slotted guidepole shall be added to the gaps measured to determine compliance with the secondary seal requirement, and in no case shall exceed 1/8 inch. [District Rule 4623, 5.5.2.4.3] Federally Enforceable Through Title V Permit

34. The permittee shall make the primary seal envelope available for unobstructed inspection by the APCO on an annual basis at locations selected along its circumference at random by the APCO. In the case of riveted tanks with toroid-type seals, a minimum of eight locations shall be made available; in all other cases, a minimum of four locations shall be made available. If the APCO suspects a violation may exist the APCO may require such further unobstructed inspection of the primary seal as may be necessary to determine the seal condition for its entire circumference. [District Rule 4623, 6.1.1] Federally Enforceable Through Title V Permit

35. Operator shall perform gap measurements on primary and secondary seals within 60 days of the initial fill and at least once every year thereafter to determine compliance with the requirements of Rule 4623. The actual gap measurements of the floating roof primary and secondary seals shall be recorded. The inspection results shall be submitted to the APCO as specified in Section 6.3.5. [District Rule 4623, 6.1.3.1.1 and 40 CFR 60.113b(b)(1)(i) & (ii)] Federally Enforceable Through Title V Permit

36. Operator shall also perform gap measurements on primary seals during hydrostatic testing of the vessel. [40CFR 60.113b(b)(1)(i)] Federally Enforceable Through Title V Permit

37. If unit is out of service for a period of one year or more, subsequent refilling with volatile organic liquid shall be considered initial fill in accordance with the conditions of this permit. [40CFR60.113b(b)(1)(iii)] Federally Enforceable Through Title V Permit

38. The permittee shall inspect the primary and secondary seals for compliance with the requirements of Rule 4623 every time this tank is emptied or degassed. Actual gap measurements shall be performed when the liquid level is static but not more than 24 hours after the tank roof is re-floated. [District Rule 4623, 6.1.3.1.2 and 40CFR 60.113b(b)(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.

Facility Name: CONOCOPHILLIPS PIPE LINE COMPANY
Location: JUNCTION PUMP STATION, 14990 HWY 48, LOST HILLS, CA 93219
39. The permittee shall submit the reports of the floating roof tank inspections to the APCO within five calendar days after the completion of the inspection only for those tanks that failed to meet the applicable requirements of Rule 4623, Sections 5.2 through 5.5. The inspection report for tanks that have been determined to be in compliance with the requirements of Sections 5.2 through 5.5 need not be submitted to the APCO, but the inspection report shall be kept on-site and made available upon request by the APCO. The inspection report shall contain all necessary information to demonstrate compliance with the provisions of this rule, including the following: 1) Date of inspection and names and titles of company personnel doing the inspection. 2) Tank identification number and Permit to Operate number. 3) Measurements of the gaps between the tank shell and primary and secondary seals. 4) Gas-tight status of the tank and floating roof deck fittings. Records of the gas-tight status shall include the vapor concentration values measured in parts per million by volume (ppm). 5) Data, supported by calculations, demonstrating compliance with the requirements specified in Sections 5.3, 5.5.2.3.3, 5.5.2.4.2, and 5.5.2.4.3 of Rule 4623. 6) Any corrective actions or repairs performed on the tank in order to comply with rule 4623 and the date(s) such actions were taken. [District Rule 4623, 6.3.5] Federally Enforceable Through Title V Permit

40. Permittee shall maintain the records of the external floating roof landing activities that are performed pursuant to Rule 4623, Sections 5.3.1.3 and 5.4.3. The records shall include information on the maximum true vapor pressure (TVP), API gravity, storage temperature, type of organic liquid stored in the tank, the purpose of landing the roof on its legs, the date of roof landing, duration the roof was on its legs, the level or height at which the tank roof was set to land on its legs, and the lowest liquid level in the tank. [District Rule 4623, 6.3.7 and 40 CFR 60.116b(c)] Federally Enforceable Through Title V Permit

41. All covers, seals and lids covering openings in the roof used for sampling and gauging, except pressure-vacuum valves set to within 10 percent of the maximum allowable working pressure of the roof, shall be inspected annually by the facility operator to ensure compliance with the provisions of this permit. However, if one or more of the components are found to leak during an annual inspection, the inspection frequency for that component type shall be changed from annual to quarterly. If none of the components of that type are subsequently found to be leaking during five consecutive inspections, the inspection frequency may be changed from quarterly to annual. Components located in inaccessible (over 15 feet above ground when access is required from the ground or over 6 feet away from a platform when access is required from the platform) locations shall be inspected at least annually and components located in unsafe areas shall be inspected and repaired upon detection. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

42. Operator shall determine the presence of VOC leaks by EPA Method 21. The instrument shall be calibrated before use each day of its use by the procedures specified in Method 21 using the following calibration gases; 1.) Zero air (less than 10 ppm of hydrocarbon in air); and 2.) A mixture of methane or n-hexane and air at a concentration of about, but less than, 10,000 ppm methane or n-hexane. [40 CFR 60.112b(a)(3)(i)] Federally Enforceable Through Title V Permit

43. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date of leak detection, and method of detection; 3) Date and emission level of recheck after leak is repaired. Leaks over 10,000 ppmv shall be reported as a deviation. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

44. Operator shall notify the APCO 30 days in advance of any gap measurements required by this permit to afford the APCO opportunity to have an observer present. [40CFR 60.113(b)(5)] Federally Enforceable Through Title V Permit

45. If the external floating roof has defects, or the primary seal or secondary seal has holes, tears, or other openings in the seal or seal fabric, the operator shall repair the items as necessary so that none of these conditions exist before filling or refilling the storage vessel with VOL. [40CFR 60.113(b)(6)(i)] Federally Enforceable Through Title V Permit

46. For all visual inspections required by this permit, the operator shall notify the APCO in writing at least 30 days prior to the filling or refilling of each storage vessel to afford the APCO the opportunity to inspect the storage vessel prior to refilling, except when notification is specifically allowed otherwise by this permit. [40CFR 60.113(b)(6)(ii)] Federally Enforceable Through Title V Permit
47. If a visual inspection required by this permit is not planned and the operator could not have known about the inspection 30 days in advance of refilling the tank, the operator shall notify the APCO at least 7 days prior to the refilling of the storage vessel. Notification shall be made by telephone immediately followed by written documentation demonstrating why the inspection was unplanned. Alternatively, this notification including the written documentation may be made in writing and sent by express mail so it is received by the APCO at least 7 days prior to the refilling. [40 CFR 60.113(b)(6)(ii)] Federally Enforceable Through Title V Permit

48. Operator shall record the vessel on which the measurement was performed, date of the seal gap measurement, raw data obtained in the measurement process in accordance with the conditions of this permit. [40 CFR 60.115(b)(3)] Federally Enforceable Through Title V Permit

49. Within 60 days of performing the seal gap measurements required by this permit, the operator shall furnish the APCO with a report containing the date of measurement, raw data obtained in the measurement process, and all such gap calculations as required by this permit. [40 CFR 60.115(b)(2)] Federally Enforceable Through Title V Permit

50. After each seal gap measurement that detects gaps exceeding any limit of this permit, the operator shall submit a report to the APCO within 30 days of the inspection. The report will identify the vessel and contain the date of measurement, raw data obtained in the measurement process, all such gap calculations as required by this permit, and the date the vessel was emptied or the repairs made and the date of repair. [40 CFR 60.115(b)(4)] Federally Enforceable Through Title V Permit

51. If the seals do not meet the required specifications of this permit, operator shall repair or empty the storage vessel within 45 days of identification. [40 CFR 60.113(b)(4)] Federally Enforceable Through Title V Permit

52. Operator shall maintain a record showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel. The record shall be maintained for the life of the vessel. [40 CFR 60.116(b)(b)] Federally Enforceable Through Title V Permit

53. Operator shall determine the true vapor pressure of each type of crude oil with a Reid vapor pressure less than 2.0 psia or whose physical properties preclude determination by the recommended method from available data and record if the true vapor pressure is greater than 0.5 psia. [40 CFR 60.116(b)(e)(2)(ii)] Federally Enforceable Through Title V Permit

54. Operator shall determine the true vapor pressure of each VOL, other than crude oil or refined petroleum products, from standard reference texts, by ASTM Method D2879, or by using an appropriate method approved by EPA. [40 CFR 60.116(b)(e)(3)(iii)] Federally Enforceable Through Title V Permit

55. For storage vessels operated above or below ambient temperatures, the operator shall calculate the maximum true vapor pressure based upon the highest expected calendar-month average of the storage temperature. For vessels operated at ambient temperatures, the maximum true vapor pressure is calculated based upon the maximum local monthly average ambient temperature as reported by the National Weather Service. [40 CFR 60.116(b)(e)(1)] Federally Enforceable Through Title V Permit

56. Maximum true vapor pressure, for crude oil or refined petroleum products, may be determined from nomographs contained in API Bulletin 2517, by using the typical Reid vapor pressure and the maximum expected storage temperature based on the highest expected calendar-month average temperature of the stored product, unless the APCO specifically requests that the liquid be sampled, the actual storage temperature determined, and the Reid vapor pressure determined from the sample(s). [40 CFR 60.116(b)(e)(2)(i)] Federally Enforceable Through Title V Permit

57. Operator of a tank storing a waste mixture of indeterminate or variable composition shall determine the highest maximum true vapor pressure for the range of liquid compositions to be stored prior to the initial filling, using methods specified for maximum true vapor pressure in this permit. [40 CFR 60.116(b)] Federally Enforceable Through Title V Permit

58. Operator shall determine the true vapor pressure of each type of crude oil, with a Reid vapor pressure less than 2.0 psia or whose physical properties preclude determination by the recommended method, using available data and record if the estimated maximum true vapor pressure is greater than 0.5 psia. [40 CFR 60.116(b)(e)(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.
59. Permittee shall conduct true vapor pressure (TVP) testing of the organic liquid 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

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


62. For crude oil with an API gravity of 26 degrees or less, the TVP shall be determined using the latest version of the Lawrence Berkeley National Laboratory "Test Method for Vapor Pressure of Reactive Organic Compounds in Heavy Crude Oil Using Gas Chromatograph", as approved by ARB and EPA. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit

63. For any organic liquid, except crude oil with an API gravity of 26 degrees or less, the true vapor pressure (TVP) shall be determined by measuring Reid Vapor Pressure (RVP) with ASTM Method D 323 and converting the RVP to TVP at the tank's maximum organic liquid storage temperature. The conversion of RVP to TVP shall be done in accordance with the oil and gas section of "California Air Resources Boards (ARB) Technical Guidance Document to the Criteria and Guidelines Regulation for AB 2588", dated August 1989. As an alternative to using ASTM D 323, the TVP of crude oil with an API gravity range of greater than 26 degrees up to 30 degrees may be determined by using other equivalent test methods approved by APCO, ARB and EPA. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit

64. Permittee shall maintain accurate records of true vapor pressure (TVP), storage temperature, type of liquids stored, and daily tank throughput. [District Rules 2201 and 4623 and 40 CFR 60.115a(a)] Federally Enforceable Through Title V Permit

65. 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 1070 and 2201] Federally Enforceable Through Title V Permit

66. Permittee shall keep annual records of the throughput of this tank. [District Rule 2201] Federally Enforceable Through Title V Permit

67. All records required for monitoring data and support information for inspection 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

68. Operator of each storage vessel, either with a design capacity greater than or equal to 151 m3 (39,890 gallons) storing a liquid with a maximum true vapor pressure that is normally less than 0.75 psia or with a design capacity greater than or equal to 75 m3 (19,813 gallons) but less than 151 m3 (39,890 gallons) storing a liquid with a maximum true vapor pressure normally less than 4.0 psia, shall notify the APCO within 30 days when the maximum true vapor pressure of the liquid exceeds the respective maximum true vapor pressure values for each volume range. [40CFR 60.116b(d)] Federally Enforceable Through Title V Permit

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

TANKS 4.0 Emissions Summaries
TANKS 4.0.9d
Emissions Report - Detail Format
Tank Identification and Physical Characteristics

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<td>Rim-mounted</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Deck Fitting/Status</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Access Hatch (24-in. Dia.)/Boiled Cover, Gasketed</td>
<td>1</td>
</tr>
<tr>
<td>Automatic Gauge Float Well/Unboiled Cover, Gasketed</td>
<td>1</td>
</tr>
<tr>
<td>Vacuum Breaker (10-in. Dia.)/Weighted Mech. Actuation, Gask.</td>
<td>1</td>
</tr>
<tr>
<td>Slotted Guide-Pole/Standard Well/Gasket, Sliding Cover, w. Float, Wiper</td>
<td>1</td>
</tr>
<tr>
<td>Gauge-Hatch/Standard Well (8-in. Dia.)/Weighted Mech. Actuation, Gask.</td>
<td>1</td>
</tr>
<tr>
<td>Roof Leg (3-in. Diameter)/Adjustable, Pontoon Area, Sock</td>
<td>12</td>
</tr>
<tr>
<td>Roof Leg (9-in. Diameter)/Adjustable, Center Area, Sock</td>
<td>26</td>
</tr>
<tr>
<td>Rim Vent (8-in. Diameter)/Weighted Mech. Actuation, Gask.</td>
<td>1</td>
</tr>
</tbody>
</table>

Meteorological Data used in Emissions Calculations: Bakersfield, California (Avg Atmospheric Pressure = 14.47 psia)
## Liquid Contents of Storage Tank

S-1518-5-4 (Junction - 111024) - PE1 - External Floating Roof Tank  
Bakersfield, California

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Code Oil TVP 6.35</td>
<td>All</td>
<td>Avg. 67.63 Min 61.25 Max 74.00</td>
<td>Avg 65.42 Min N/A Max N/A</td>
<td>5.3500 N/A</td>
<td>N/A</td>
<td>100.0000</td>
<td>200.00</td>
<td>Option 1: VP90 = 5.35 VP70 = 5.35</td>
</tr>
</tbody>
</table>

file://C:\Program Files\Tanks409d\summarydisplay.htm
TANKS 4.0.9d
Emissions Report - Detail Format
Detail Calculations (AP-42)

S-1518-5-4 (Junction - 111024) - PE1 - External Floating Roof Tank
Bakersfield, California

Annual Emission Calculations

<table>
<thead>
<tr>
<th>Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rim Seal Losses (lb)</td>
<td>1,709.8830</td>
</tr>
<tr>
<td>Seal Factor A (b-mole/hr-mbar)</td>
<td>9.0200</td>
</tr>
<tr>
<td>Seal Factor B (b-mole/hr-mbar²)</td>
<td>0.4020</td>
</tr>
<tr>
<td>Average Wind Speed (mph)</td>
<td>3.2300</td>
</tr>
<tr>
<td>Seal-related Wind Speed Exponent</td>
<td>1.0300</td>
</tr>
<tr>
<td>Value of Vapor Pressure Function</td>
<td>0.1149</td>
</tr>
<tr>
<td>Vapor Pressure at Daily Average Liquid Surface Temperature (psia)</td>
<td>5.5300</td>
</tr>
<tr>
<td>Tank Diameter (ft)</td>
<td>118.5000</td>
</tr>
<tr>
<td>Vapor Molecular Weight (b-mole/mole)</td>
<td>3.0400</td>
</tr>
<tr>
<td>Product Factor</td>
<td>2.6240</td>
</tr>
</tbody>
</table>

Withdrawal Losses (lb):

<table>
<thead>
<tr>
<th>Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Annual Net Throughput (gal/hr):</td>
<td>8.874.4346</td>
</tr>
<tr>
<td>Shell Circumference Factor (bbl/10000 sq-ft)</td>
<td>0.0069</td>
</tr>
<tr>
<td>Average Organic Liquid Density (lb/gal):</td>
<td>8.0000</td>
</tr>
<tr>
<td>Tank Diameter (ft)</td>
<td>118.5000</td>
</tr>
</tbody>
</table>

Rim Fitting Losses (lb): 1,029.5823

<table>
<thead>
<tr>
<th>Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Value of Vapor Pressure Function</td>
<td>0.1149</td>
</tr>
<tr>
<td>Vapor Molecular Weight (b-mole/mole)</td>
<td>3.0400</td>
</tr>
<tr>
<td>Product Factor</td>
<td>2.6240</td>
</tr>
<tr>
<td>Total Rim Fitting Losses (lb)</td>
<td>222.1734</td>
</tr>
<tr>
<td>Average Wind Speed (mph)</td>
<td>4.3500</td>
</tr>
</tbody>
</table>

Total Losses (lb): 4,035,249

<table>
<thead>
<tr>
<th>Roof Fitting/Status</th>
<th>Quantity</th>
<th>$F_a$(b-mole/yr)</th>
<th>$K_F$(b-mole/yr/m²h)</th>
<th>$m$</th>
<th>Losses (lb)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Access Hatch (24-in. Diameter, Unbolled Cover, Gasket)</td>
<td>1</td>
<td>1.60</td>
<td>0.00</td>
<td>0.00</td>
<td>7.1455</td>
</tr>
<tr>
<td>Automatic Gauge Float Well, Unbolled Cover, Gasket</td>
<td>1</td>
<td>4.30</td>
<td>17.00</td>
<td>0.38</td>
<td>137.4600</td>
</tr>
<tr>
<td>Vacuum Breaker (10-in. Diameter, Unbolled Cover, Gasket)</td>
<td>1</td>
<td>6.20</td>
<td>1.20</td>
<td>0.94</td>
<td>50.9355</td>
</tr>
<tr>
<td>Road Guide Plate, Unbolled Cover, Gasket</td>
<td>1</td>
<td>21.00</td>
<td>7.60</td>
<td>1.80</td>
<td>428.7437</td>
</tr>
<tr>
<td>Gauge-Measure (5-in. Diameter, Unbolled Cover, Gasket)</td>
<td>1</td>
<td>0.47</td>
<td>0.02</td>
<td>0.97</td>
<td>2.5504</td>
</tr>
<tr>
<td>Roof Leg (3-in. Diameter, Adjustable, Perforated, Gasket)</td>
<td>12</td>
<td>1.20</td>
<td>0.14</td>
<td>0.85</td>
<td>86.5504</td>
</tr>
<tr>
<td>Roof Leg (3-in. Diameter, Adjustable, Center Area, Gasket)</td>
<td>26</td>
<td>0.49</td>
<td>0.16</td>
<td>0.14</td>
<td>82.1004</td>
</tr>
<tr>
<td>Rim Vent (6-in. Diameter, Weighted Cover, Gasket)</td>
<td>1</td>
<td>0.71</td>
<td>0.10</td>
<td>1.00</td>
<td>5.3053</td>
</tr>
</tbody>
</table>

file://C:\Program Files\Tanks409d\summarydisplay.htm 11/8/2010
## Emissions Report for: Annual

**S-1518-5-4 (Junction - 111024) - PE1 - External Floating Roof Tank**  
Bakersfield, California

<table>
<thead>
<tr>
<th>Components</th>
<th>Losses (lbs)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Rim Seal Loss</td>
</tr>
<tr>
<td>Crude Oil TVP 5.25</td>
<td>1,709.86</td>
</tr>
</tbody>
</table>
Identification
User Identification: S-1518-31-3 (Junction 110026) - PE1
City: Bakersfield
State: California
Company: ConocoPhillips
Type of Tank: External Floating Roof Tank
Description: 110,000 barrel capacity external floating roof crude oil storage tank

Tank Dimensions
Diameter (ft): 118.50
Volume (gallons): 4,620,000.00
Turnovers: 365.00

Paint Characteristics
Internal Shell Condition: Light Rust
Shell Color/Shade: White/White
Shell Condition: Good

Roof Characteristics
Type: Pontoon
Fitting Category: Detail

Tank Construction and Rim-Seat System
Primary Seat: Mechanical Shoe
Secondary Seal: Rim-mounted

Deck Fitting/Status
Access Hatch (24-in. Diam.)/Bolted Cover, Gasketed
Automatic Gauge Float Well/Unbolted Cover, Gasketed
Slotted Guide-Pole/Sample Well/Gask. Sliding Cover, w. Float. Viper
Rim Leg (3-in. Diameter)/Adjustable, Pontoon Area, Sock
Rim Leg (3-in. Diameter)/Adjustable, Center Area, Sock

Quantity
1
1
1
1
1
12
26
1

Meteorological Data used in Emissions Calculations: Bakersfield, California (Avg Atmospheric Pressure = 14.47 psia)
### Liquid Contents of Storage Tank

**S-1518-31-3 (Junction 110026) - PE1 - External Floating Roof Tank**  
**Bakersfield, California**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Crude Oil TVP 9.5</td>
<td>All</td>
<td>67.63 61.25 74.00 65.42 9.5000 N/A N/A 100.0000</td>
<td>200.00</td>
<td>Option 1: VP80 = 9.5 VP70 = 9.5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
TANKS 4.0.9d
Emissions Report - Detail Format
Detail Calculations (AP-42)

S-1518-31-3 (Junction 110026) - PE1 - External Floating Roof Tank
Bakersfield, California

Annual Emission Calculations

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rim Seal Losses (lb)</td>
<td>3,663,2268</td>
</tr>
<tr>
<td>Seal Factor A (lb-mole/l-ft yr)</td>
<td>0.6000</td>
</tr>
<tr>
<td>Seal Factor B (lb-mole/l-ft mph ft)</td>
<td>0.4000</td>
</tr>
<tr>
<td>Average Wind Speed (mph)</td>
<td>6.3500</td>
</tr>
<tr>
<td>Seal-related Wind Speed Exponent</td>
<td>1.0000</td>
</tr>
<tr>
<td>Value of Vapor Pressure Function</td>
<td>0.2610</td>
</tr>
<tr>
<td>Vapor Pressure at Daily Average Liquid Surface Temperature (°F)</td>
<td>9.5000</td>
</tr>
<tr>
<td>Tank Diameter (ft)</td>
<td>118.0000</td>
</tr>
<tr>
<td>Vapor Molecular Weight (lb/mole)</td>
<td>100.0000</td>
</tr>
<tr>
<td>Product Factor</td>
<td>0.4000</td>
</tr>
<tr>
<td>Withdrawal Losses (lb)</td>
<td>15,394,3435</td>
</tr>
<tr>
<td>Annual Net Throughput (ggey)</td>
<td>1,466,300,000.0000</td>
</tr>
<tr>
<td>Shell Cladding Factor (btu/1000 sqft)</td>
<td>0.0280</td>
</tr>
<tr>
<td>Average Organic Liquid Density (sgal)</td>
<td>8.0000</td>
</tr>
<tr>
<td>Tank Diameter (ft)</td>
<td>118.0000</td>
</tr>
<tr>
<td>Roof Fitting Losses (lb)</td>
<td>2,319,0781</td>
</tr>
<tr>
<td>Value of Vapor Pressure Function</td>
<td>0.2610</td>
</tr>
<tr>
<td>Vapor Molecular Weight (lb/mole)</td>
<td>100.0000</td>
</tr>
<tr>
<td>Product Factor</td>
<td>0.4000</td>
</tr>
<tr>
<td>Total, Roof Fitting Losses (lb-mole/yr)</td>
<td>222.1734</td>
</tr>
<tr>
<td>Average Wind Speed (mph)</td>
<td>6.3500</td>
</tr>
</tbody>
</table>

Total Losses (lb): 21,559,2905

<table>
<thead>
<tr>
<th>Roof Fitting/Status</th>
<th>Quantity</th>
<th>KFe(lb-mole/yr)</th>
<th>Roof Fitting Loss Factors KFe(lb-mole/yr mph*ft)</th>
<th>m</th>
<th>Losses(lb)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Access Hatch (24-in. Dia.)/Belted Cover, Gasketed</td>
<td>1</td>
<td>1.60</td>
<td>0.00</td>
<td>0.03</td>
<td>16.7010</td>
</tr>
<tr>
<td>Automatic Gauge Jet Well/Unbelted Cover, Gasketed</td>
<td>1</td>
<td>4.30</td>
<td>17.00</td>
<td>0.38</td>
<td>357.8417</td>
</tr>
<tr>
<td>Vacuum Breather (10-in. Dia.)/Weighted Mech. Actuation, Gasket.</td>
<td>1</td>
<td>6.26</td>
<td>1.20</td>
<td>0.94</td>
<td>115.6266</td>
</tr>
<tr>
<td>Sunked Guide-Pot/Plain Well/Gasket, Sliding Cover, w. Float, Wiper</td>
<td>1</td>
<td>21.00</td>
<td>7.00</td>
<td>1.80</td>
<td>1,008.1822</td>
</tr>
<tr>
<td>Gauge-Hatch/Sample Well (8-in. Dia.)/Weighted Mech. Actuation, Gasket.</td>
<td>1</td>
<td>0.47</td>
<td>0.02</td>
<td>0.97</td>
<td>6.7933</td>
</tr>
<tr>
<td>Roof Leg (3-in. Diameter)Adjustable, Pentoxen Cover, Sock</td>
<td>12</td>
<td>1.35</td>
<td>0.14</td>
<td>0.65</td>
<td>196.5283</td>
</tr>
<tr>
<td>Roof Leg (3-in. Diameter)Adjustable, Center Area, Sock</td>
<td>26</td>
<td>0.49</td>
<td>0.16</td>
<td>0.14</td>
<td>186.4899</td>
</tr>
<tr>
<td>Rim Vent (6-in. Diameter)/Weighted Mech. Actuation, Gasket.</td>
<td>1</td>
<td>0.71</td>
<td>0.10</td>
<td>1.00</td>
<td>12.0508</td>
</tr>
</tbody>
</table>

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11/8/2010
Emissions Report for: Annual

S-1518-31-3 (Junction 110026) - PE1 - External Floating Roof Tank
Bakersfield, California

<table>
<thead>
<tr>
<th>Components</th>
<th>Rim Seal Loss</th>
<th>Withdrawal Loss</th>
<th>Deck Fitting Loss</th>
<th>Deck Seam Loss</th>
<th>Total Emissions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Crude Oil TVP 9.5</td>
<td>3,883.93</td>
<td>15,336.28</td>
<td>2,319.06</td>
<td>0.00</td>
<td>21,539.29</td>
</tr>
</tbody>
</table>
TANKS 4.0.9d
Emissions Report - Detail Format

Tank Identification and Physical Characteristics

Identification
- User Identification: S-1515-S-X (Junction - 110024) - PE2
- City: Bakersfield
- State: California
- Company: ConocoPhillips
- Type of Tank: External Floating Roof Tank
- Description: 110,000 barrel capacity external floating roof crude oil storage tank

Tank Dimensions
- Diameter (ft): 118.50
- Volume (gallons): 4,620,000.00
- Turnover: 275.00

Paint Characteristics
- Internal Shell Condition: Light Rust
- Shell Color/Shade: White/White
- Shell Condition: Good

Roof Characteristics
- Type: Pontoon
- Fitting Category: Detail

Tank Construction and Rim-Seat System
- Construction: Welded
- Primary Seal: Mechanical Shoe
- Secondary Seal: Rim-mounted

Deck Fitting/Status

<table>
<thead>
<tr>
<th>Access Hatch (24-in. Diam.)/Bolted Cover, Gasketed</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Automatic Gauge Float Well/Unbolted Cover, Gasketed</td>
<td>1</td>
</tr>
<tr>
<td>Vacuum Breaker (10-in. Diam.)/Weighted Mech. Actuation, Gask.</td>
<td>1</td>
</tr>
<tr>
<td>Slotted Guide-Pole/Sample Well/Gask. Sliding Cover, w. Float, Wiper</td>
<td>1</td>
</tr>
<tr>
<td>Gauge-Hatch/Sample Well (8-in. Diam.)/Weighted Mech. Actuation, Gask.</td>
<td>1</td>
</tr>
<tr>
<td>Roof Leg (3-In. Diameter)/Adjustable, Pontoon Area, Sock</td>
<td>12</td>
</tr>
<tr>
<td>Roof Leg (3-In. Diameter)/Adjustable, Center Area, Sock</td>
<td>26</td>
</tr>
<tr>
<td>Rim Vent (6-In. Diameter)/Weighted Mech. Actuation, Gask.</td>
<td>1</td>
</tr>
</tbody>
</table>

Meteorological Data used in Emissions Calculations: Bakersfield, California (Avg Atmospheric Pressure = 14.47 psia)

TANKS 4.0.9d
Emissions Report - Detail Format

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11/8/2010
## Liquid Contents of Storage Tank

**S-1518-5-X (Junction - 110024) - PE2 - External Floating Roof Tank**  
Bakersfield, California

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Crude Oil TVP 9.5</td>
<td>All 67.5</td>
<td>51.2</td>
<td>74.00</td>
<td>65.42</td>
<td>9.5000</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>
### Annual Emission Calculations

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rim Seal Losses (lb)</td>
<td>3,883.9288</td>
</tr>
<tr>
<td>Seal Factor A (b-mole/L)(y)</td>
<td>0.6000</td>
</tr>
<tr>
<td>Seal Factor B (b-mole/L)(CFL)(mph)(psi)</td>
<td>0.4500</td>
</tr>
<tr>
<td>Average Wind Speed (mph)</td>
<td>85.500</td>
</tr>
<tr>
<td>Gear-related Wind Speed Exponent</td>
<td>1.0000</td>
</tr>
<tr>
<td>Value of Vapor Pressure Function</td>
<td>0.2819</td>
</tr>
<tr>
<td>Vapor Pressure at Daily Average Liquid</td>
<td></td>
</tr>
<tr>
<td>Surface Temperature (psia)</td>
<td>0.5000</td>
</tr>
<tr>
<td>Tank Diameter (ft)</td>
<td>116.5000</td>
</tr>
<tr>
<td>Vapor Molecular Weight (b-mole/mole)</td>
<td>103.0000</td>
</tr>
<tr>
<td>Product Factor</td>
<td>0.4000</td>
</tr>
<tr>
<td>Withdrawal Losses (lb)</td>
<td>11,554.7542</td>
</tr>
<tr>
<td>Annual Net Throughput (gal/yr)</td>
<td>1,720,500,000.00000</td>
</tr>
<tr>
<td>Shall Closing Factor (gal/1000 sqft)</td>
<td>0.0000</td>
</tr>
<tr>
<td>Average Organic Liquid Density (kg/m³)</td>
<td>9,0000</td>
</tr>
<tr>
<td>Tank Diameter (ft)</td>
<td>118.5000</td>
</tr>
<tr>
<td>Roof Fitting Losses (lb)</td>
<td>2,319.0781</td>
</tr>
<tr>
<td>Value of Vapor Pressure Function</td>
<td>0.2810</td>
</tr>
<tr>
<td>Vapor Molecular Weight (b-mole)</td>
<td>103.0000</td>
</tr>
<tr>
<td>Product Factor</td>
<td>0.4000</td>
</tr>
<tr>
<td>Total Roof Fitting Loss (b-mole/yr)</td>
<td>222.1734</td>
</tr>
<tr>
<td>Average Wind Speed (mph)</td>
<td>8.3500</td>
</tr>
<tr>
<td>Total Losses (lb)</td>
<td>17,757.7411</td>
</tr>
</tbody>
</table>

### Roof Fitting/Status Calculations

<table>
<thead>
<tr>
<th>Fitting/Status</th>
<th>Quantity</th>
<th>rFe(b-mole/yr)</th>
<th>%(b-mole/yr/mph)(psi)</th>
<th>m</th>
<th>Losses (lb)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Access Hatch (24-in. Diam.) (Bolted Cover, Gasketed)</td>
<td>1</td>
<td>1.60</td>
<td>0.00</td>
<td>0.00</td>
<td>10.7100</td>
</tr>
<tr>
<td>Automatic Gauge Print Well/Unbolted Cover, Gasketed</td>
<td>1</td>
<td>4.30</td>
<td>17.00</td>
<td>0.38</td>
<td>337.8817</td>
</tr>
<tr>
<td>Vacuum Breaker (10-in. Diam.) (Weighted Mach, Actuator, Gasket)</td>
<td>1</td>
<td>8.23</td>
<td>1.20</td>
<td>0.94</td>
<td>115.4265</td>
</tr>
<tr>
<td>Baffled Gauging Plate (4-in. Diam.) (Weighted Mach, Actuator, Gasket)</td>
<td>1</td>
<td>21.00</td>
<td>1.20</td>
<td>1.00</td>
<td>1,459.1922</td>
</tr>
<tr>
<td>Gauge-Hatch/Sample Well (8-in. Diam.) (Weighted Mach, Actuator, Gasket)</td>
<td>1</td>
<td>0.47</td>
<td>0.02</td>
<td>0.97</td>
<td>5.7333</td>
</tr>
<tr>
<td>Roof Leg (3-in. Diameter) Adjustable, Perforated Area, Sock</td>
<td>12</td>
<td>1.20</td>
<td>0.14</td>
<td>0.65</td>
<td>198.5556</td>
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<tr>
<td>Roof Leg (3-in. Diameter) Adjustable, Center Area, Sock</td>
<td>26</td>
<td>0.49</td>
<td>0.15</td>
<td>0.14</td>
<td>198.4599</td>
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<tr>
<td>Rim Vent (6-in. Diameter) Weighted Mach. Actuator, Gasket.</td>
<td>1</td>
<td>0.71</td>
<td>0.10</td>
<td>1.00</td>
<td>12.0508</td>
</tr>
</tbody>
</table>

file://C:\Program Files\Tanks409d\summarydisplay.htm 11/8/2010
Emissions Report for: Annual

S-1518-5-X (Junction - 110024) - PE2 - External Floating Roof Tank
Bakersfield, California

<table>
<thead>
<tr>
<th>Components</th>
<th>Losses(lbs)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Rim Seal Loss</td>
</tr>
<tr>
<td>Crude Oil TVP 9.5</td>
<td>3,663.93</td>
</tr>
</tbody>
</table>
TANKS 4.0.9d
Emissions Report - Detail Format
Tank Identification and Physical Characteristics

Identification
User Identification: S-1518-31-X (Junction - 110026) - PE2
City: Bakersfield
State: California
Company: ConocoPhillips
Type of Tank: External Floating Roof Tank
Description: 110,000 barrel Crude Oil external floating roof storage tank

Tank Dimensions
Diameter (ft): 118.50
Volume (gallons): 4,620,000.00
Turnovers: 248.83

Paint Characteristics
Internal Shell Condition: Light Rust
Shell Color/Shade: White/White
Shell Condition: Good

Roof Characteristics
Type: Pontoon
Fitting Category: Detail

Tank Construction and Rim-Seal System
Construction: Welded
Primary Seal: Mechanical Shoe
Secondary Seal: Rim-mounted

Deck Fitting/Status
| Access Hatch (24-in. Diam.)/Bolted Cover, Gasketed | 1 |
| Automatic Gauge Float Well/Unbolted Cover, Gasketed | 1 |
| Vacuum Breaker (10-in. Diam.)/Weighted Mech. Actuation, Gask. | 1 |
| Slotted Guide-Fole/Sample Well/Gask. Sliding Cover, w. Float, Wiper | 1 |
| Gauge-Hatch/Sample Well (8-in. Diam.)/Weighted Mech. Actuation, Gask. | 1 |
| Roof Leg (3-in. Diameter)/Adjustable, Pontoon Area, Sock | 12 |
| Roof Leg (3-in. Diameter)/Adjustable, Center Area, Sock | 26 |
| Rim Vent (6-in. Diameter)/Weighted Mech. Actuation, Gask. | 1 |

Meteorological Data used in Emissions Calculations: Bakersfield, California (Avg Atmospheric Pressure = 14.47 psia)

TANKS 4.0.9d
Emissions Report - Detail Format
## Liquid Contents of Storage Tank

**S-1518-31-X (Junction - 110026) - PE2 - External Floating Roof Tank**  
Bakersfield, California

<table>
<thead>
<tr>
<th>Mixture/Component</th>
<th>Monthly Liquid Surf. Temperature (deg F)</th>
<th>Liquid Bulk Temp (deg F)</th>
<th>Vapor Pressure (psia)</th>
<th>Vapor Mol. Weight</th>
<th>Liquid Mol. Fract.</th>
<th>Basis for Vapor Pressure Calculations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Crude Oil TVP 5.35</td>
<td>All 67.63 61.25 74.00 65.42 5.3500 N/A N/A 100.0000</td>
<td>200.00</td>
<td>Option 1: $V_{P50} = 5.35 \ V_P^{70} = 5.38$</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
**TANKS 4.0.9d**

Emissions Report - Detail Format

Detail Calculations (AP-42)

S-1518-31-X (Junction - 110026) - PE2 - External Floating Roof Tank

Bakersfield, California

### Annual Emission Calculations

<table>
<thead>
<tr>
<th>Calculation</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rim Seal Losses (lb)</td>
<td>1,709.8630</td>
</tr>
<tr>
<td>Seal Factor A (b-mole/hr-yr)</td>
<td>0.0000</td>
</tr>
<tr>
<td>Seal Factor B (b-mole/hr-yr)</td>
<td>0.0000</td>
</tr>
<tr>
<td>Average Wind Speed (mph)</td>
<td>5.8500</td>
</tr>
<tr>
<td>Seal-related Wind Speed Exponent</td>
<td>1.6300</td>
</tr>
<tr>
<td>Value of Vapor Pressure Function</td>
<td>0.1419</td>
</tr>
<tr>
<td>Vapor Pressure at Daily Average Liquid</td>
<td></td>
</tr>
<tr>
<td>Surface Temperature (°F)</td>
<td>5.9500</td>
</tr>
<tr>
<td>Tank Diameter (ft)</td>
<td>118.5000</td>
</tr>
<tr>
<td>Vapor Molecular Weight (lb-mole)</td>
<td>100.0000</td>
</tr>
<tr>
<td>Product Factor</td>
<td>0.4000</td>
</tr>
<tr>
<td>Withdrawal Losses (lb)</td>
<td>10,455.1437</td>
</tr>
<tr>
<td>Annual Net Throughput (gal/yr)</td>
<td>1,149,594,800,000</td>
</tr>
<tr>
<td>Shell Clipping Factor (lb/1000 sqft)</td>
<td>0.0050</td>
</tr>
<tr>
<td>Average Organic Liquid Density (lb/gal)</td>
<td>8.0200</td>
</tr>
<tr>
<td>Tank Diameter (ft)</td>
<td>118.5000</td>
</tr>
<tr>
<td>Roof Fitting Losses (lb)</td>
<td>1,020.9223</td>
</tr>
<tr>
<td>Value of Vapor Pressure Function</td>
<td>0.1419</td>
</tr>
<tr>
<td>Vapor Molecular Weight (lb-mole)</td>
<td>100.0000</td>
</tr>
<tr>
<td>Product Factor</td>
<td>0.4000</td>
</tr>
<tr>
<td>Tot. Roof Fitting Loss Factor (lb-mole/yr)</td>
<td>222.1734</td>
</tr>
<tr>
<td>Averages Water Speed (mph)</td>
<td>8.3500</td>
</tr>
<tr>
<td>Total Losses (lb)</td>
<td>13,185.9589</td>
</tr>
</tbody>
</table>

### Roof Fitting/Status

<table>
<thead>
<tr>
<th>Roof Fitting/Status</th>
<th>Quantity</th>
<th>KFe(b-mole/yr)</th>
<th>KFP(b-mole/yr m²/°F)</th>
<th>m</th>
<th>Losses (lb)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Access Hatch (24-in. Dia.) Bolted Cover, Gasketed</td>
<td>1</td>
<td>1.69</td>
<td>0.00</td>
<td>0.00</td>
<td>7.3525</td>
</tr>
<tr>
<td>Automatic Gauge Float Well Unbolted Cover, Gasketed</td>
<td>1</td>
<td>4.38</td>
<td>0.00</td>
<td>0.38</td>
<td>167.4400</td>
</tr>
<tr>
<td>Vacuum Breaker (10-in. Dia.) Weighted Mach. Actuation, Gasket</td>
<td>1</td>
<td>0.20</td>
<td>1.20</td>
<td>0.94</td>
<td>50.9035</td>
</tr>
<tr>
<td>Boltsed Guide-Pole Sample Wall/Coil, Sliding Cover, etc. (Pivel, 1/4th)</td>
<td>1</td>
<td>21.00</td>
<td>7.90</td>
<td>1.80</td>
<td>658.7437</td>
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<tr>
<td>Gauge-Hatch Sample Wall (6-in. Dia.) Weighted Mach. Actuation, Gasket, Coated</td>
<td>1</td>
<td>0.47</td>
<td>0.02</td>
<td>0.97</td>
<td>2.5504</td>
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<tr>
<td>Roof Leg (3-in. Diameter) Adjustable, Portion Arc, Sock</td>
<td>12</td>
<td>1.20</td>
<td>0.14</td>
<td>0.85</td>
<td>86.6504</td>
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<tr>
<td>Roof Leg (3-in. Diameter) Adjustable, Center Arc, Sock</td>
<td>20</td>
<td>0.49</td>
<td>0.15</td>
<td>0.14</td>
<td>82.1004</td>
</tr>
<tr>
<td>Rim Vent (6-in. Diameter) Weighted Mach. Actuation, Gasket, Coated</td>
<td>1</td>
<td>0.71</td>
<td>0.10</td>
<td>1.00</td>
<td>5.3023</td>
</tr>
</tbody>
</table>
TANKS 4.0.9d
Emissions Report - Detail Format
Individual Tank Emission Totals

Emissions Report for: Annual

S-1518-31-X (Junction - 110026) - PE2 - External Floating Roof Tank
Bakersfield, California

<table>
<thead>
<tr>
<th>Components</th>
<th>Losses(lbs)</th>
<th>Rim Seal Loss</th>
<th>Withdraw Loss</th>
<th>Deck Fitting Loss</th>
<th>Deck Seam Loss</th>
<th>Total Emissions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Crude Oil TVP 5.35</td>
<td></td>
<td>1,709.86</td>
<td>10,455.14</td>
<td>1,020.95</td>
<td>0.00</td>
<td>13,185.98</td>
</tr>
</tbody>
</table>
San Joaquin Valley  
Unified Air Pollution Control District  

Best Available Control Technology (BACT) Guideline 7.3.3*  
Last Update:  10/1/2002

Petroleum and Petrochemical Production - Floating Roof Organic  
Liquid Storage or Processing Tank, = or > 471 bbl Tank capacity, = or > 0.5 psia  
TVP

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>Achieved In Practice or contained in the SIP</th>
<th>Technologically Feasible</th>
<th>Alternate Basic Equipment</th>
</tr>
</thead>
<tbody>
<tr>
<td>VOC</td>
<td>95% control (Primary metal shoe seal with secondary wiper seal, or equal)</td>
<td>95% Control (Dual wiper seal with drip curtain or primary metal shoe seal with secondary wiper seal, or equal.)</td>
<td>✓</td>
</tr>
</tbody>
</table>

BACT is the most stringent control technique for the emissions unit and class of source. Control techniques that are not achieved in practice or contained in a state implementation plan must be cost effective as well as feasible. Economic analysis to demonstrate cost effectiveness is required for all determinations that are not achieved in practice or contained in an EPA approved State Implementation Plan. *This is a Summary Page for this Class of Source - Permit Specific BACT Determinations on Next Page(s)

7.3.3
Top Down BACT Analysis for VOC Emissions:

Step 1 – Identify All Control Technologies

BACT Guideline 7.3.3 lists 95% control (dual wiper seal with drip curtain or primary metal shoe seal with secondary wiper seal, or equal) as Technologically Feasible BACT. Achieved-in-Practice option is 95% control (primary metal shoe seal with secondary wiper seal, or equal).

Step 2 – Eliminate Technologically Infeasible Options

There are no technologically infeasible options listed.

Step 3 – Rank Remaining Control Technologies by Control Effectiveness

It is noted that Technologically Feasible option is equivalent in control effectiveness to the Achieved-in-Practice option.

a) 95% control (dual wiper seal with drip curtain or primary metal shoe seal with secondary wiper seal, or equal)

a) 95% control (primary metal shoe seal with secondary wiper seal, or equal)

Step 4 – Cost Effectiveness Analysis

The applicant is proposing the most stringent control technology presented in Step 3, (95% control (primary metal shoe seal with secondary wiper seal)); therefore, no cost effectiveness analysis is required.

Step 5 – Select BACT

BACT for this unit is 95% control (primary metal shoe seal with secondary wiper seal, or equal).
APPENDIX E

Draft ATCs
San Joaquin Valley
Air Pollution Control District

AUTHORITY TO CONSTRUCT

PERMIT NO: S-1518-5-5

LEGAL OWNER OR OPERATOR: CONOCOPHILLIPS PIPE LINE COMPANY
MAILING ADDRESS: 256 E POLK ST
COALINGA, CA 93210

LOCATION: JUNCTION PUMP STATION
14990 HWY 46
LOST HILLS, CA 93249

SECTION: SE19    TOWNSHIP: 26S    RANGE: 19E

EQUIPMENT DESCRIPTION:
MODIFICATION OF 110,000 BBL CRUDE OIL STORAGE TANK (#110024) INCLUDING EXTERNAL FLOATING ROOF WITH SHOE TYPE PRIMARY SEAL AND WIPER TYPE SECONDARY SEAL: INCREASE TVP LIMIT FROM 5.35 PSIA TO 9.5 PSIA AND SET THROUGHPUT LIMIT AT 275 TURNOVERS PER YEAR

CONDITIONS

1. {1830} This Authority to Construct serves as a written certificate of conformity with the procedural requirements of 40 CFR 70.7 and 70.8 and with the compliance requirements of 40 CFR 70.6(c). [District NSR Rule] Federally Enforceable Through Title V Permit

2. {1831} Prior to operating with modifications authorized by this Authority to Construct, the facility shall submit an application to modify the Title V permit with an administrative amendment in accordance with District Rule 2520 Section 5.3.4. [District Rule 2520, 5.3.4] Federally Enforceable Through Title V Permit

3. The true vapor pressure (TVP) of the organic liquid placed or stored shall be less than 9.5 psia. [District Rule 2201] Federally Enforceable Through Title V Permit

4. The maximum amount of material introduced into this tank shall not exceed 30,250,000 bbl/yr (275 turnovers/yr). [District Rule 2201] Federally Enforceable Through Title V Permit

5. {2736} The tank shall be equipped with a floating roof consisting of a pan type that was installed before December 20, 2001, pontoon-type or double-deck-type cover which rests upon the surface of the liquid being stored and is equipped with a closure device between the tank shell and roof edge consisting of a primary and a secondary seal. [District Rule 4623, 5.3.1 and 40 CFR 60.112b(a)(2) & (i)] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

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

Seyed Sadredin, Executive Director APCO

DAVID WARNER, Director of Permit Services
S-1518-5-5   Jan 11, 2011 4:59PM - G004HD - Jan inspection required with G004HD
Southern Regional Office • 34946 Flyover Court • Bakersfield, CA 93308 • (661) 392-5500 • Fax (661) 392-5585
6. [2737] The external floating roof shall float on the surface of the stored liquid at all times (i.e., off the roof leg supports) except during the initial fill until the roof is lifted off the leg supports and when the tank is completely emptied and subsequently refilled. When the roof is resting on the leg supports, the process of filling, emptying, or refilling shall be continuous and shall be accomplished as rapidly as possible. Whenever the permittee intends to land the roof on it's legs, the permittee shall notify the APCO in writing at least five calendar days prior to performing the work. The tank must be in compliance with this rule before it may land on its legs. [District Rule 4623, 5.3.1.3 and 40CFR 60.112(b)(2)(iii)] Federally Enforceable Through Title V Permit

7. This tank shall be equipped with a closure device between the tank shell and roof edge consisting of two seals mounted one above the other; the one below shall be referred to as the primary seal, and the one above shall be referred as the secondary seal. [District Rule 4623, 5.3] Federally Enforceable Through Title V Permit

8. [2738] Primary seal (lower seal) shall be either a mechanical shoe seal or a liquid-mounted seal. [40CFR 60.112b(a)(2)(i) and 60.112b(a)(2)(ii)(A)] Federally Enforceable Through Title V Permit

9. Operators of floating roof tanks shall submit a tank inspection plan to the APCO for approval. The plan shall include an inventory of the tanks subject to this rule and a tank inspection schedule. A copy of the operator's tank safety procedures shall be made available to the APCO upon request. The tank inventory shall include tank's identification number, PTO number, maximum tank capacity, dimensions of tank (height and diameter), organic liquid stored, type of primary and secondary seal, type of floating roof (internal or external floating roof), construction date of tank, and location of tank. Any revision to a previously approved tank inspection schedule shall be submitted to the APCO for approval prior to conducting an inspection. [District Rule 4623, 6.1] Federally Enforceable Through Title V Permit

10. Accumulated area of gaps between the tank wall and the mechanical shoe or liquid-mounted primary seal shall not exceed 212 cm² per meter (10.01 in² per foot) of tank diameter, and the width of any gap shall not exceed 3.81 cm (1.5 inches). [40CFR 60.113b(b)(4)(ii)] Federally Enforceable Through Title V Permit

11. [2656] Gaps between the tank shell and the primary seal shall not exceed 1 1/2 inches. [District Rule 4623, 5.3.2.1.1] Federally Enforceable Through Title V Permit

12. [2657] The cumulative length of all gaps between the tank shell and the primary seal greater than 1/2 inch shall not exceed 10% of the circumference of the tank. [District Rule 4623, 5.3.2.1.1] Federally Enforceable Through Title V Permit

13. [2658] The cumulative length of all primary seal gaps greater than 1/8 inch shall not exceed 30% of the circumference of the tank. [District Rule 4623, 5.3.2.1.1] Federally Enforceable Through Title V Permit

14. [2659] No continuous gap in the primary seal greater than 1/8 inch wide shall exceed 10% of the tank circumference. [District Rule 4623, 5.3.2.1.1] Federally Enforceable Through Title V Permit

15. Accumulated area of gaps between the tank wall and the secondary seal shall not exceed 21.2 cm² per meter (1.00 in² per foot) of tank diameter, and the width of any portion of any gap shall not exceed 1.27 cm (1/2 inch). [District Rule 4623, 5.3.2.1.2 and 40CFR 60.113b(b)(4)(ii)(B)] Federally Enforceable Through Title V Permit

16. [2661] The cumulative length of all gaps between the tank shell and the secondary seal greater than 1/8 inch shall not exceed 5% of the tank circumference. [District Rule 4623, 5.3.2.1.2] Federally Enforceable Through Title V Permit

17. [2662] The metallic shoe-type seal shall be installed so that one end of the shoe extends into the stored liquid and the other end extends a minimum vertical distance of 24 inches above the stored liquid surface. [District Rule 4623, 5.3.2.1.3] Federally Enforceable Through Title V Permit

18. [2663] The geometry of the metallic-shoe type seal shall be such that the maximum gap between the shoe and the tank shell shall be no greater than 3 inches for a length of at least 18 inches in the vertical plane above the liquid. [District Rule 4623, 5.3.2.1.4] Federally Enforceable Through Title V Permit

19. [2741] There shall be no holes, tears, or openings in the secondary seal or in the primary seal envelope that surrounds the annular vapor space enclosed by the roof edge, seal fabric, and secondary seal. [District Rule 4623, 5.3.2.1.5 and 40 CFR 60.112b(b)(4)(ii)(C)] Federally Enforceable Through Title V Permit

20. [2665] The secondary seal shall allow easy insertion of probe up to 1 1/2 inches in width in order to measure gaps in the primary seal. [District Rule 4623, 5.3.2.1.6] Federally Enforceable Through Title V Permit
21. {2666} The secondary seal shall extend from the roof to the tank shell and shall not be attached to the primary seal. [District Rule 4623, 5.3.2.1.7] Federally Enforceable Through Title V Permit

22. {2742} Secondary seal shall completely cover the annular space between the external floating roof and the wall of the storage vessel in a continuous fashion. [40CFR 60.112b(a)(2)(ii)(B)] Federally Enforceable Through Title V Permit

23. All openings in the roof used for sampling and gauging, except pressure-vacuum valves which shall be set to within 10% of the maximum allowable working pressure of the roof, shall provide a projection below the liquid surface to prevent belching of liquid and to prevent entrained or formed organic vapor from escaping from the liquid contents of the tank and shall be equipped with a cover, seal or lid that shall be in a closed position at all times, with no visible gaps and be leak-free, except when the device or appurtenance is in use [District Rule 4623, 5.5.1] Federally Enforceable Through Title V Permit

24. 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, 3.11, 3.17 and 6.4.8] Federally Enforceable Through Title V Permit

25. Except for automatic bleeder vents, rim vents, and pressure relief vents, each opening in a non-contact external floating roof shall provide a projection below the liquid surface. [District Rule 4623, 5.5.2.2.1] Federally Enforceable Through Title V Permit

26. Except for automatic bleeder vents and rim vents, roof drains, and leg sleeves, each opening in the roof shall be equipped with a gasketed cover, seal, or lid that shall be maintained in a closed position at all times (i.e., no visible gap) except when in actual use. [District Rule 4623, 5.5.2.2.2] Federally Enforceable Through Title V Permit

27. {2749} Automatic bleeder vents shall be equipped with a gasket and shall be closed at all times when the roof is floating except when the roof is being floated off or is being landed on the roof leg supports. [District Rule 4623, 5.5.2.2.3, 5.5.2.1.3 and 40CFR 60.112b(a)(2)(i)] Federally Enforceable Through Title V Permit

28. {2750} Rim vents shall be equipped with a gasket and shall be set to open when the roof is being floated off the roof leg supports or at the manufacturer's recommended setting. [District Rule 4623, 5.5.2.2.4 and 40CFR 60.112b(a)(2)(ii)] Federally Enforceable Through Title V Permit

29. Each roof drain that drains rainwater into the contents of the tank shall be provided with an impermeable slotted membrane fabric cover that covers at least 90 percent of the area of the opening. [District Rule 4623, 5.5.2.2.5] Federally Enforceable Through Title V Permit

30. External floating roof legs shall be equipped with vapor socks or vapor barriers in order to maintain a gas-tight condition so as to prevent VOC emissions from escaping through the roof leg opening. [District Rule 4623, 5.5.2.2.6] Federally Enforceable Through Title V Permit

31. All wells and similar fixed projections through the floating roof shall provide a projection below the liquid surface. [District Rule 4623, 5.5.2.3.1] Federally Enforceable Through Title V Permit

32. The solid guidepole well shall be equipped with a pole wiper and a gasketed cover, seal or lid which shall be in a closed position at all times (i.e., no visible gap) except when the well is in use. [District Rule 4623, 5.5.2.3.2] Federally Enforceable Through Title V Permit

33. The gap between the pole wiper and the solid guidepole shall be added to the gaps measured to determine compliance with the secondary seal requirement, and in no case shall exceed 1/2 inch. [District Rule 4623, 5.5.2.3.2] Federally Enforceable Through Title V Permit

34. The slotted guidepole well on the external floating roof shall be equipped with the following: a sliding cover, a well gasket, a pole sleeve, a pole wiper, and an internal float and float wiper designed to minimize the gap between the float and the well, and provided the gap shall not exceed 1/8 inch; or shall be equipped with a well gasket, a zero gap pole wiper seal and a pole sleeve that projects below the liquid surface. [District Rule 4623, 5.5.2.4.2] Federally Enforceable Through Title V Permit
35. The gap between the pole wiper and the slotted guidepole shall be added to the gaps measured to determine compliance with the secondary seal requirement, and in no case shall exceed 1/8 inch. [District Rule 4623, 5.5.2.4.3] Federally Enforceable Through Title V Permit

36. The permittee shall make the primary seal envelope available for unobstructed inspection by the APCO on an annual basis at locations selected along its circumference at random by the APCO. In the case of riveted tanks with toroid-type seals, a minimum of eight locations shall be made available; in all other cases, a minimum of four locations shall be made available. If the APCO suspects a violation may exist the APCO may require such further unobstructed inspection of the primary seal as may be necessary to determine the seal condition for its entire circumference. [District Rule 4623, 6.1.1] Federally Enforceable Through Title V Permit

37. Operator shall perform gap measurements on primary and secondary seals within 60 days of the initial fill and at least once every year thereafter to determine compliance with the requirements of Rule 4623. The actual gap measurements of the floating roof primary and secondary seals shall be recorded. The inspection results shall be submitted to the APCO as specified in Section 6.3.5. [District Rule 4623, 6.1.3.1.1 and 40 CFR 60.113b(b)(1)(i) & (ii)] Federally Enforceable Through Title V Permit

38. Operator shall also perform gap measurements on primary seals during hydrostatic testing of the vessel. [40 CFR 60.113b(b)(1)(ii)] Federally Enforceable Through Title V Permit

39. If unit is out of service for a period of one year or more, subsequent refilling with volatile organic liquid shall be considered initial fill in accordance with the conditions of this permit. [40 CFR 60.113b(b)(1)(iii)] Federally Enforceable Through Title V Permit

40. The permittee shall inspect the primary and secondary seals for compliance with the requirements of Rule 4623 every time this tank is emptied or degassed. Actual gap measurements shall be performed when the liquid level is static but not more than 24 hours after the tank roof is re-floated. [District Rule 4623, 6.1.3.1.2 and 40 CFR 60.113b(b)(6)] Federally Enforceable Through Title V Permit

41. The permittee shall submit the reports of the floating roof tank inspections to the APCO within five calendar days after the completion of the inspection only for those tanks that failed to meet the applicable requirements of Rule 4623, Sections 5.2 through 5.5. The inspection report for tanks that that have been determined to be in compliance with the requirements of Sections 5.2 through 5.5 need not be submitted to the APCO, but the inspection report shall be kept on-site and made available upon request by the APCO. The inspection report shall contain all necessary information to demonstrate compliance with the provisions of this rule, including the following: 1) Date of inspection and names and titles of company personnel doing the inspection. 2) Tank identification number and Permit to Operate number. 3) Measurements of the gaps between the tank shell and primary and secondary seals. 4) Gas-tight status of the tank and floating roof deck fittings. Records of the gas-tight status shall include the vapor concentration values measured in parts per million by volume (ppmv). 5) Data, supported by calculations, demonstrating compliance with the requirements specified in Sections 5.3, 5.5.2.3.3, 5.5.2.4.2, and 5.5.2.4.3 of Rule 4623. 6) Any corrective actions or repairs performed in the tank in order to comply with rule 4623 and the date(s) such actions were taken. [District Rule 4623, 6.3.5] Federally Enforceable Through Title V Permit

42. Permittee shall maintain the records of the external floating roof landing activities that are performed pursuant to Rule 4623, Sections 5.3.1.3 and 5.4.3. The records shall include information on the maximum true vapor pressure (1VP), API gravity, storage temperature, type of organic liquid stored in the tank, the purpose of landing the roof on its legs, the date of roof landing, duration the roof was on its legs, the level or height at which the tank roof was set to land on its legs, and the lowest liquid level in the tank. [District Rule 4623, 6.3.7 and 40 CFR 60.116b(c)] Federally Enforceable Through Title V Permit

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CONDITIONS CONTINUE ON NEXT PAGE
43. (2728) All covers, seals and lids covering openings in the roof used for sampling and gauging, except pressure-vacuum valves set to within 10 percent of the maximum allowable working pressure of the roof, shall be inspected annually by the facility operator to ensure compliance with the provisions of this permit. However, if one or more of the components are found to leak during an annual inspection, the inspection frequency for that component type shall be changed from annual to quarterly. If none of the components of that type are subsequently found to be leaking during five consecutive inspections, the inspection frequency may be changed from quarterly to annual. Components located in inaccessible (over 15 feet above ground when access is required from the ground or over 6 feet away from a platform when access is required from the platform) locations shall be inspected at least annually and components located in unsafe areas shall be inspected and repaired upon detection. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

44. (2619) Operator shall determine the presence of VOC leaks by EPA Method 21. The instrument shall be calibrated before use each day of its use by the procedures specified in Method 21 using the following calibration gases; 1.) Zero air (less than 10 ppm of hydrocarbon in air); and 2.) A mixture of methane or n-hexane and air at a concentration of about, but less than, 10,000 ppm methane or n-hexane. [40 CFR 60.112b(a)(3)(i)] Federally Enforceable Through Title V Permit

45. (2605) Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date of leak detection, and method of detection; 3) Date and emission level of recheck after leak is repaired. Leaks over 10,000 ppmv shall be reported as a deviation. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

46. (2756) Operator shall notify the APCO 30 days in advance of any gap measurements required by this permit to afford the APCO opportunity to have an observer present. [40 CFR 60.113b(b)(5)] Federally Enforceable Through Title V Permit

47. (2757) If the external floating roof has defects, or the primary seal or secondary seal has holes, tears, or other openings in the seal or seal fabric, the operator shall repair the items as necessary so that none of these conditions exist before filling or refilling the storage vessel with VOL. [40 CFR 60.113b(b)(6)(i)] Federally Enforceable Through Title V Permit

48. (2758) For all visual inspections required by this permit, the operator shall notify the APCO in writing at least 30 days prior to the filling or refilling of each storage vessel to afford the APCO the opportunity to inspect the storage vessel prior to refilling, except when notification is specifically allowed otherwise by this permit. [40 CFR 60.113b(b)(6)(ii)] Federally Enforceable Through Title V Permit

49. (2759) If a visual inspection required by this permit is not planned and the operator could not have known about the inspection 30 days in advance of filling the tank, the operator shall notify the APCO at least 7 days prior to the refilling of the storage vessel. Notification shall be made by telephone immediately followed by written documentation demonstrating why the inspection was unplanned. Alternatively, this notification including the written documentation may be made in writing and sent by express mail so it is received by the APCO at least 7 days prior to the refilling. [40 CFR 60.113b(b)(6)(ii)] Federally Enforceable Through Title V Permit

50. (2760) Operator shall record the vessel on which the measurement was performed, date of the seal gap measurement, raw data obtained in the measurement process in accordance with the conditions of this permit. [40 CFR 60.115b(b)(3)] Federally Enforceable Through Title V Permit

51. (2761) Within 60 days of performing the seal gap measurements required by this permit, the operator shall furnish the APCO with a report containing the date of measurement, raw data obtained in the measurement process, and all such gap calculations as required by this permit. [40 CFR 60.115b(b)(2)] Federally Enforceable Through Title V Permit

52. (2762) After each seal gap measurement that detects gaps exceeding any limit of this permit, the operator shall submit a report to the APCO within 30 days of the inspection. The report will identify the vessel and contain the date of measurement, raw data obtained in the measurement process, all such gap calculations as required by this permit, and the date the vessel was emptied or the repairs made and the date of repair. [40 CFR 60.115b(b)(4)] Federally Enforceable Through Title V Permit

53. (2763) If the seals do not meet the required specifications of this permit, operator shall repair or empty the storage vessel within 45 days of identification. [40 CFR 60.113b(b)(4)] Federally Enforceable Through Title V Permit
54. [2630] Operator shall maintain a record showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel. The record shall be maintained for the life of the vessel. [40 CFR 60.116b(b)] Federally Enforceable Through Title V Permit

55. [2626] Operator shall determine the true vapor pressure of each VOL, other than crude oil or refined petroleum products, from standard reference texts, by ASTM Method D2879, or by using an appropriate method approved by EPA. [40 CFR 60.116b(e)(3)(iii)] Federally Enforceable Through Title V Permit

56. [2627] For storage vessels operated above or below ambient temperatures, the operator shall calculate the maximum true vapor pressure based upon the highest expected calendar-month average of the storage temperature. For vessels operated at ambient temperatures, the maximum true vapor pressure is calculated based upon the maximum local monthly average ambient temperature as reported by the National Weather Service. [40 CFR 60.116b(e)(1)] Federally Enforceable Through Title V Permit

57. [2623] Maximum true vapor pressure, for crude oil or refined petroleum products, may be determined from nomographs contained in API Bulletin 2517, by using the typical Reid vapor pressure and the maximum expected storage temperature based on the highest expected calendar-month average temperature of the stored product, unless the APCO specifically requests that the liquid be sampled, the actual storage temperature determined, and the Reid vapor pressure determined from the sample(s). [40 CFR 60.116b(e)(2)(i)] Federally Enforceable Through Title V Permit

58. [2764] Operator of a tank storing a waste mixture of indeterminate or variable composition shall determine the highest maximum true vapor pressure for the range of liquid compositions to be stored prior to the initial filling, using methods specified for maximum true vapor pressure in this permit. [40 CFR 60.116b(f)] Federally Enforceable Through Title V Permit

59. Operator shall determine the true vapor pressure of each type of crude oil, with a Reid vapor pressure less than 2.0 psia or whose physical properties preclude determination by the recommended method, using available data and record if the estimated maximum true vapor pressure is greater than 0.5 psia. [40 CFR 60.116b(e)(2)] Federally Enforceable Through Title V Permit

60. [2706] Permittee shall conduct true vapor pressure (TVP) testing of the organic liquid whenever there is a change in the source or type of organic liquid stored in this tank. [District Rules 2520, 9.3.2] Federally Enforceable Through Title V Permit

61. [2592] As used in this permit, the term "source or type" shall mean liquids with similar characteristics. The operator shall maintain records of API gravity of petroleum liquids stored in this unit to determine which are from common source. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit


63. For crude oil with an API gravity of 26 degrees or less, the TVP shall be determined using the latest version of the Lawrence Berkeley National Laboratory "Test Method for Vapor Pressure of Reactive Organic Compounds in Heavy Crude Oil Using Gas Chromatograph", as approved by ARB and EPA. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit

64. For any organic liquid, except crude oil with an API gravity of 26 degrees or less, the true vapor pressure (TVP) shall be determined by measuring Reid Vapor Pressure (RVP) with ASTM Method D 323 and converting the RVP to TVP at the tank's maximum organic liquid storage temperature. The conversion of RVP to TVP shall be done in accordance with the oil and gas section of "California Air Resources Boards (ARB) Technical Guidance Document to the Criteria and Guidelines Regulation for AB 2588", dated August 1989. As an alternative to using ASTM D 323, the TVP of crude oil with an API gravity range of greater than 26 degrees up to 30 degrees may be determined by using other equivalent test methods approved by APCO, ARB and EPA. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit

65. Permittee shall maintain accurate records of true vapor pressure (TVP), storage temperature, type of liquids stored, and daily tank throughput. [District Rules 2201 and 4623 and 40 CFR 60.115a(a)] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE
66. 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 1070 and 2201] Federally Enforceable Through Title V Permit

67. Permittee shall keep annual records of the throughput of this tank. [District Rule 2201] Federally Enforceable Through Title V Permit

68. All records required for monitoring data and support information for inspection 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

69. Operator of each storage vessel, either with a design capacity greater than or equal to 151 m3 (39,890 gallons) storing a liquid with a maximum true vapor pressure that is normally less than 0.75 psia or with a design capacity greater than or equal to 75 m³ (19,813 gallons) but less than 151 m³ (39,890 gallons) storing a liquid with a maximum true vapor pressure normally less than 4.0 psia, shall notify the APCO within 30 days when the maximum true vapor pressure of the liquid exceeds the respective maximum true vapor pressure values for each volume range. [40CFR 60.116b(d)] Federally Enforceable Through Title V Permit
San Joaquin Valley
Air Pollution Control District

AUTHORITY TO CONSTRUCT

PERMIT NO: S-1518-31-4
LEGAL OWNER OR OPERATOR: CONOCOPHILLIPS PIPE LINE COMPANY
MAILING ADDRESS: 256 E POLK ST
                      COALINGA, CA 93210
LOCATION: JUNCTION PUMP STATION
14990 HWY 46
LOST HILLS, CA 93249
SECTION: SE19  TOWNSHIP: 26S  RANGE: 19E

EQUIPMENT DESCRIPTION:
MODIFICATION OF 110,000 BBL CRUDE OIL STORAGE TANK (#110026) INCLUDING EXTERNAL FLOATING ROOF WITH SHOE TYPE PRIMARY SEAL AND WIPER TYPE SECONDARY SEAL: REDUCE TVP LIMIT FROM 9.5 PSIA TO 5.35 PSIA AND SET THROUGHPUT LIMIT AT 248.83 TURNOVERS PER YEAR

CONDITIONS

1. {1830} This Authority to Construct serves as a written certificate of conformity with the procedural requirements of 40 CFR 70.7 and 70.8 and with the compliance requirements of 40 CFR 70.6(c). [District NSR Rule] Federally Enforceable Through Title V Permit

2. {1831} Prior to operating with modifications authorized by this Authority to Construct, the facility shall submit an application to modify the Title V permit with an administrative amendment in accordance with District Rule 2520 Section 5.3.4. [District Rule 2520, 5.3.4] Federally Enforceable Through Title V Permit

3. The true vapor pressure (TVP) of the organic liquid placed or stored shall not exceed 5.35 psia. [District Rules 2201 and 4623, 5.1.1] Federally Enforceable Through Title V Permit

4. The maximum amount of material introduced into this tank shall not exceed 27,371,300 bbl/yr or 248.83 turnovers/yr. [District Rule 2201] Federally Enforceable Through Title V Permit

5. {2736} The tank shall be equipped with a floating roof consisting of a pan type that was installed before December 20, 2001, pontoon-type or double-deck-type cover which rests upon the surface of the liquid being stored and is equipped with a closure device between the tank shell and roof edge consisting of a primary and a secondary seal. [District Rule 4623, 5.3.1 and 40 CFR 60.112b(a)(2) & (i)] Federally Enforceable Through Title V Permit

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

Seyed Sadedin, Executive Director APCO

DAVID WARNER  Director of Permit Services
S-1518-314  Jan 11 2011  4:59 PM  G05640B  - Joint Inspection Required with G05640C
Southern Regional Office  34946 Flyover Court  Bakersfield, CA 93308  (661) 392-5500  Fax (661) 392-5585
6. [2737] The external floating roof shall float on the surface of the stored liquid at all times (i.e., off the roof leg supports) except during the initial fill until the roof is lifted off the leg supports and when the tank is completely emptied and subsequently refilled. When the roof is resting on the leg supports, the process of filling, emptying, or refilling shall be continuous and shall be accomplished as rapidly as possible. Whenever the permittee intends to land the roof on its legs, the permittee shall notify the APCO in writing at least five calendar days prior to performing the work. The tank must be in compliance with this rule before it may land on its legs. [District Rule 4623, 5.3.1.3 and 40CFR 60.112b(a)(2)(iii)] Federally Enforceable Through Title V Permit

7. This tank shall be equipped with a closure device between the tank shell and roof edge consisting of two seals mounted one above the other; the one below shall be referred to as the primary seal, and the one above shall be referred as the secondary seal. [District Rule 4623] Federally Enforceable Through Title V Permit

8. [2738] Primary seal (lower seal) shall be either a mechanical shoe seal or a liquid-mounted seal. [40CFR 60.112b(a)(2)(i) and 60.112b(a)(2)(i)(A)] Federally Enforceable Through Title V Permit

9. Operators of floating roof tanks shall submit a tank inspection plan to the APCO for approval. The plan shall include an inventory of the tanks subject to this rule and a tank inspection schedule. A copy of the operator's tank safety procedures shall be made available to the APCO upon request. The tank inventory shall include tank's identification number, PTO number, maximum tank capacity, dimensions of tank (height and diameter), organic liquid stored, type of primary and secondary seal, type of floating roof (internal or external floating roof), construction date of tank, and location of tank. Any revision to a previously approved tank inspection schedule shall be submitted to the APCO for approval prior to conducting an inspection. [District Rule 4623, 6.1] Federally Enforceable Through Title V Permit

10. Accumulated area of gaps between the tank wall and the mechanical shoe or liquid-mounted primary seal shall not exceed 212 cm² per meter (10.01 in² per foot) of tank diameter, and the width of any gap shall not exceed 3.81 cm (1.5 inches). [40CFR 60.113(b)(4)(i)] Federally Enforceable Through Title V Permit

11. [2656] Gaps between the shell and the primary seal shall not exceed 1 1/2 inches. [District Rule 4623, 5.3.2.1.1] Federally Enforceable Through Title V Permit

12. [2657] The cumulative length of all gaps between the tank shell and the primary seal greater than 1/2 inch shall not exceed 10% of the circumference of the tank. [District Rule 4623, 5.3.2.1.1] Federally Enforceable Through Title V Permit

13. [2658] The cumulative length of all primary seal gaps greater than 1/8 inch shall not exceed 30% of the circumference of the tank. [District Rule 4623, 5.3.2.1.1] Federally Enforceable Through Title V Permit

14. [2659] No continuous gap in the primary seal greater than 1/8 inch wide shall exceed 10% of the tank circumference. [District Rule 4623, 5.3.2.1.1] Federally Enforceable Through Title V Permit

15. Accumulated area of gaps between the tank wall and the secondary seal shall not exceed 21.2 cm² per meter (1.00 in² per foot) of tank diameter, and the width of any portion of any gap shall not exceed 1.27 cm (1/2 inch). [District Rule 4623, 5.3.2.1.2 and 40CFR 60.113(b)(4)(ii)(B)] Federally Enforceable Through Title V Permit

16. [2661] The cumulative length of all gaps between the tank shell and the secondary seal, greater than 1/8 inch shall not exceed 5% of the tank circumference. [District Rule 4623, 5.3.2.1.2] Federally Enforceable Through Title V Permit

17. [2662] The metallic shoe-type seal shall be installed so that one end of the shoe extends into the stored liquid and the other end extends a minimum vertical distance of 24 inches above the stored liquid surface. [District Rule 4623, 5.3.2.1.3] Federally Enforceable Through Title V Permit

18. [2663] The geometry of the metallic-shoe type seal shall be such that the maximum gap between the shoe and the tank shell shall be no greater than 3 inches for a length of at least 18 inches in the vertical plane above the liquid. [District Rule 4623, 5.3.2.1.4] Federally Enforceable Through Title V Permit

19. [2741] There shall be no holes, tears, or openings in the secondary seal or in the primary seal envelope that surrounds the annular vapor space enclosed by the roof edge, seal fabric, and secondary seal. [District Rule 4623, 5.3.2.1.5 and 40 CFR 60.112(b)(4)(ii)(C)] Federally Enforceable Through Title V Permit

20. [2665] The secondary seal shall allow easy insertion of probes up to 1 1/2 inches in width in order to measure gaps in the primary seal. [District Rule 4623, 5.3.2.1.6] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE
21. {2666} The secondary seal shall extend from the roof to the tank shell and shall not be attached to the primary seal. [District Rule 4623, 5.3.2.1.7] Federally Enforceable Through Title V Permit

22. {2742} Secondary seal shall completely cover the annular space between the external floating roof and the wall of the storage vessel in a continuous fashion. [40CFR 60.112(b)(2)(i)(B)] Federally Enforceable Through Title V Permit

23. All openings in the roof used for sampling and gauging, except pressure-vacuum valves which shall be set to within 10% of the maximum allowable working pressure of the roof, shall provide a projection below the liquid surface to prevent belching of liquid and to prevent entrained or formed organic vapor from escaping from the liquid contents of the tank and shall be equipped with a cover, seal or lid that shall be in a closed position at all times, with no visible gaps and be leak-free, except when the device or appurtenance is in use [District Rule 4623, 5.5.1.1] Federally Enforceable Through Title V Permit

24. 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, 3.11, 3.17 and 6.4.8] Federally Enforceable Through Title V Permit

25. Except for automatic bleeder vents, rim vents, and pressure relief vents, each opening in a non-contact external floating roof shall provide a projection below the liquid surface. [District Rule 4623, 5.5.2.2.1] Federally Enforceable Through Title V Permit

26. Except for automatic bleeder vents and rim vents, roof drains, and leg sleeves, each opening in the roof shall be equipped with a gasketed cover, seal, or lid that shall be maintained in a closed position at all times (i.e., no visible gap) except when in actual use. [District Rule 4623, 5.5.2.2.2] Federally Enforceable Through Title V Permit

27. {2749} Automatic bleeder vents shall be equipped with a gasket and shall be closed at all times when the roof is floating except when the roof is being floated off or is being landed on the roof leg supports. [District Rule 4623, 5.5.2.2.3, 5.5.2.1.3 and 40CFR 60.112b(a)(2)(ii)] Federally Enforceable Through Title V Permit

28. {2750} Rim vents shall be equipped with a gasket and shall be set to open when the roof is being floated off the roof leg supports or at the manufacturer’s recommended setting. [District Rule 4623, 5.5.2.2.4 and 40CFR 60.112b(a)(2)(ii)] Federally Enforceable Through Title V Permit

29. Each roof drain that drains rainwater into the contents of the tank shall be provided with an impermeable slotted membrane fabric cover that covers at least 90 percent of the area of the opening. [District Rule 4623, 5.5.2.2.5] Federally Enforceable Through Title V Permit

30. External floating roof legs shall be equipped with vapor socks or vapor barriers in order to maintain a gas-tight condition so as to prevent VOC emissions from escaping through the roof leg opening. [District Rule 4623, 5.5.2.2.6] Federally Enforceable Through Title V Permit

31. All wells and similar fixed projections through the floating roof shall provide a projection below the liquid surface. [District Rule 4623, 5.5.2.3.1] Federally Enforceable Through Title V Permit

32. The solid guidepole well shall be equipped with a pole wiper and a gasketed cover, seal or lid which shall be in a closed position at all times (i.e., no visible gap) except when the well is in use. [District Rule 4623, 5.5.2.3.2] Federally Enforceable Through Title V Permit

33. The gap between the pole wiper and the solid guidepole shall be added to the gaps measured to determine compliance with the secondary seal requirement, and in no case shall exceed 1/2 inch. [District Rule 4623, 5.5.2.3.2] Federally Enforceable Through Title V Permit

34. The slotted guidepole well on the external floating roof shall be equipped with the following: a sliding cover, a well gasket, a pole sleeve, a pole wiper, and an internal float and float wiper designed to minimize the gap between the float and the well, and provided the gap shall not exceed 1/8 inch; or shall be equipped with a well gasket, a zero gap pole wiper seal and a pole sleeve that projects below the liquid surface. [District Rule 4623, 5.5.2.4.2] Federally Enforceable Through Title V Permit
35. The gap between the pole wiper and the slotted guidepole shall be added to the gaps measured to determine compliance with the secondary seal requirement, and in no case shall exceed 1/8 inch. [District Rule 4623, 5.5.2.4.3] Federally Enforceable Through Title V Permit

36. [2699] The permittee shall make the primary seal envelope available for unobstructed inspection by the APCO on an annual basis at locations selected along its circumference at random by the APCO. In the case of riveted tanks with toroid-type seals, a minimum of eight locations shall be made available; in all other cases, a minimum of four locations shall be made available. If the APCO suspects a violation may exist the APCO may require such further unobstructed inspection of the primary seal as may be necessary to determine the seal condition for its entire circumference. [District Rule 4623, 6.1.1.1] Federally Enforceable Through Title V Permit

37. [2751] Operator shall perform gap measurements on primary and secondary seals within 60 days of the initial fill and at least once every year thereafter to determine compliance with the requirements of Rule 4623. The actual gap measurements of the floating roof primary and secondary seals shall be recorded. The inspection results shall be submitted to the APCO as specified in Section 6.3.5. [District Rule 4623, 6.1.3.1.1 and 40 CFR 60.113b(b)(1)(i) & (ii)] Federally Enforceable Through Title V Permit

38. [2752] Operator shall also perform gap measurements on primary seals during hydrostatic testing of the vessel. [40CFR 60.113b(b)(1)(i)] Federally Enforceable Through Title V Permit

39. [2753] If unit is out of service for a period of one year or more, subsequent refilling with volatile organic liquid shall be considered initial fill in accordance with the conditions of this permit. [40CFR60.113b(b)(1)(iii)] Federally Enforceable Through Title V Permit

40. The permittee shall inspect the primary and secondary seals for compliance with the requirements of Rule 4623 every time this tank is emptied or degassed. Actual gap measurements shall be performed when the liquid level is static but not more than 24 hours after the tank roof is re-floated. [District Rule 4623, 6.1.3.1.2 and 40CFR 60.113b(b)(6)] Federally Enforceable Through Title V Permit

41. The permittee shall submit the reports of the floating roof tank inspections to the APCO within five calendar days after the completion of the inspection only for those tanks that failed to meet the applicable requirements of Rule 4623, Sections 5.2 through 5.5. The inspection report for tanks that that have been determined to be in compliance with the requirements of Sections 5.2 through 5.5 need not be submitted to the APCO, but the inspection report shall be kept on-site and made available upon request by the APCO. The inspection report shall contain all necessary information to demonstrate compliance with the provisions of this rule, including the following: 1) Date of inspection and names and titles of company personnel doing the inspection. 2) Tank identification number and Permit to Operate number. 3) Measurements of the gaps between the tank shell and primary and secondary seals. 4) Leak-free status of the tank and floating roof deck fittings. Records of the leak-free status shall include the vapor concentration values measured in parts per million by volume (ppmv). 5) Data, supported by calculations, demonstrating compliance with the requirements specified in Sections 5.3, 5.5.2.3.3, 5.5.2.4.2, and 5.5.2.4.3 of Rule 4623. 6) Any corrective actions or repairs performed on the tank in order to comply with rule 4623 and the date(s) such actions were taken. [District Rule 4623, 6.3.5, 40 CFR 60.115b(b)(4)] Federally Enforceable Through Title V Permit

42. [2755] Permittee shall maintain the records of the external floating roof landing activities that are performed pursuant to Rule 4623, Sections 5.3.1.3 and 5.4.3. The records shall include information on the maximum true vapor pressure (TVP), API gravity, storage temperature, type of organic liquid stored in the tank, the purpose of landing the roof on its legs, the date of roof landing, duration the roof was on its legs, the level or height at which the tank roof was set to land on its legs, and the lowest liquid level in the tank. [District Rule 4623, 6.3.7 and 40 CFR 60.116b(c)] Federally Enforceable Through Title V Permit

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CONDITIONS CONTINUE ON NEXT PAGE
43. [2728] All covers, seals and lids covering openings in the roof used for sampling and gauging, except pressure-vacuum valves set to within 10 percent of the maximum allowable working pressure of the roof, shall be inspected annually by the facility operator to ensure compliance with the provisions of this permit. However, if one or more of the components are found to leak during an annual inspection, the inspection frequency for that component type shall be changed from annual to quarterly. If none of the components of that type are subsequently found to be leaking during five consecutive inspections, the inspection frequency may be changed from quarterly to annual. Components located in inaccessible (over 15 feet above ground when access is required from the ground or over 6 feet away from a platform when access is required from the platform) locations shall be inspected at least annually and components located in unsafe areas shall be inspected and repaired upon detection. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

44. [2619] Operator shall determine the presence of VOC leaks by EPA Method 21. The instrument shall be calibrated before use each day of its use by the procedures specified in Method 21 using the following calibration gases; 1.) Zero air (less than 10 ppm of hydrocarbon in air); and 2.) A mixture of methane or n-hexane and air at a concentration of about, but less than, 10,006 ppm methane or n-hexane. [40 CFR 60.112(b)(a)(3)(i)] Federally Enforceable Through Title V Permit

45. [2605] Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date of leak detection, and method of detection; 3) Date and emission level of recheck after leak is repaired. Leaks over 10,000 ppmv shall be reported as a deviation. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

46. [2756] Operator shall notify the APCO 30 days in advance of any gap measurements required by this permit to afford the APCO opportunity to have an observer present. [40 CFR 60.113(b)(5)] Federally Enforceable Through Title V Permit

47. [2757] If the external floating roof has defects, or the primary seal or secondary seal has holes, tears, or other openings in the seal or seal fabric, the operator shall repair the items as necessary so that none of these conditions exist before filling or refilling the storage vessel with VOL. [40 CFR 60.113(b)(6)(i)] Federally Enforceable Through Title V Permit

48. [2758] For all visual inspections required by this permit, the operator shall notify the APCO in writing at least 30 days prior to the filling or refilling of each storage vessel to afford the APCO the opportunity to inspect the storage vessel prior to refilling, except when notification is specifically allowed otherwise by this permit. [40 CFR 60.113(b)(6)(ii)] Federally Enforceable Through Title V Permit

49. [2759] If a visual inspection required by this permit is not planned and the operator could not have known about the inspection 30 days in advance of refilling the tank, the operator shall notify the APCO at least 7 days prior to the refilling of the storage vessel. Notification shall be made by telephone immediately followed by written documentation demonstrating why the inspection was unplanned. Alternatively, this notification including the written documentation may be made in writing and sent by express mail so it is received by the APCO at least 7 days prior to the refilling. [40 CFR 60.113(b)(6)(ii)] Federally Enforceable Through Title V Permit

50. [2760] Operator shall record the vessel on which the measurement was performed, date of the seal gap measurement, raw data obtained in the measurement process in accordance with the conditions of this permit. [40 CFR 60.115(b)(b)(3)] Federally Enforceable Through Title V Permit

51. [2761] Within 60 days of performing the seal gap measurements required by this permit, the operator shall furnish the APCO with a report containing the date of measurement, raw data obtained in the measurement process, and all such gap calculations as required by this permit. [40 CFR 60.115(b)(b)(2)] Federally Enforceable Through Title V Permit

52. [2762] After each seal gap measurement that detects gaps exceeding any limit of this permit, the operator shall submit a report to the APCO within 30 days of the inspection. The report will identify the vessel and contain the date of measurement, raw data obtained in the measurement process, all such gap calculations as required by this permit, and the date the vessel was emptied or the repairs made and the date of repair. [40 CFR 60.115(b)(b)(4)] Federally Enforceable Through Title V Permit

53. [2763] If the seals do not meet the required specifications of this permit, operator shall repair or empty the storage vessel within 45 days of identification. [40 CFR 60.113(b)(4)] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE
54. [2630] Operator shall maintain a record showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel. The record shall be maintained for the life of the vessel. [40 CFR 60.116(b)] Federally Enforceable Through Title V Permit

55. [2626] Operator shall determine the true vapor pressure of each VOL, other than crude oil or refined petroleum products, from standard reference texts, by ASTM Method D2879, or by using an appropriate method approved by EPA. [40 CFR 60.116(e)(3)(iii)] Federally Enforceable Through Title V Permit

56. [2627] For storage vessels operated above or below ambient temperatures, the operator shall calculate the maximum true vapor pressure based upon the highest expected calendar-month average of the storage temperature. For vessels operated at ambient temperatures, the maximum true vapor pressure is calculated based upon the maximum local monthly average ambient temperature as reported by the National Weather Service. [40 CFR 60.116(e)(1)] Federally Enforceable Through Title V Permit

57. [2623] Maximum true vapor pressure, for crude oil or refined petroleum products, may be determined from nomographs contained in API Bulletin 2517, by using the typical Reid vapor pressure and the maximum expected storage temperature based on the highest expected calendar-month average temperature of the stored product, unless the APCO specifically requests that the liquid be sampled, the actual storage temperature determined, and the Reid vapor pressure determined from the sample(s). [40 CFR 60.116(e)(2)(i)] Federally Enforceable Through Title V Permit

58. [2764] Operator of a tank storing a waste mixture of indeterminate or variable composition shall determine the highest maximum true vapor pressure for the range of liquid compositions to be stored prior to the initial filling, using methods specified for maximum true vapor pressure in this permit. [40 CFR 60.116(b)] Federally Enforceable Through Title V Permit

59. Operator shall determine the true vapor pressure of each type of crude oil, with a Reid vapor pressure less than 2.0 psia or whose physical properties preclude determination by the recommended method, using available data and record if the estimated maximum true vapor pressure is greater than 0.5 psia. [40 CFR 60.116(e)(2)] Federally Enforceable Through Title V Permit

60. [2706] Permittee shall conduct true vapor pressure (TVP) testing of the organic liquid 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

61. [2592] As used in this permit, the term "source or type" shall mean liquids with similar characteristics. The operator shall maintain records of API gravity of petroleum liquids stored in this unit to determine which are from common source. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit


63. For crude oil with an API gravity of 26 degrees or less, the TVP shall be determined using the latest version of the Lawrence Berkeley National Laboratory "Test Method for Vapor Pressure of Reactive Organic Compounds in Heavy Crude Oil Using Gas Chromatograph", as approved by ARB and EPA. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit

64. For any organic liquid, except crude oil with an API gravity of 26 degrees or less, the true vapor pressure (TVP) shall be determined by measuring Reid Vapor Pressure (RVP) with ASTM Method D 323 and converting the RVP to TVP at the tank's maximum organic liquid storage temperature. The conversion of RVP to TVP shall be done in accordance with the oil and gas section of "California Air Resources Board (ARB) Technical Guidance Document to the Criteria and Guidelines Regulation for AB 2588", dated August 1989. As an alternative to using ASTM D 323, the TVP of crude oil with an API gravity range of greater than 26 degrees up to 30 degrees may be determined by using other equivalent test methods approved by APCO, ARB and EPA. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit

65. Permittee shall maintain accurate records of true vapor pressure (TVP), storage temperature, type of liquids stored, and daily tank throughput. [District Rules 2201 and 4623 and 40 CFR 60.115a(a)] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE
66. 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 1070 and 2201]
Federally Enforceable Through Title V Permit

67. Permittee shall keep annual records of the throughput of this tank. [District Rule 2201] Federally Enforceable Through Title V Permit

68. All records required for monitoring data and support information for inspection 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

69. Operator of each storage vessel, either with a design capacity greater than or equal to 151 m³ (39,890 gallons) storing a liquid with a maximum true vapor pressure that is normally less than 0.75 psia or with a design capacity greater than or equal to 75 m³ (19,813 gallons) but less than 151 m³ (39,890 gallons) storing a liquid with a maximum true vapor pressure normally less than 4.0 psia, shall notify the APCO within 30 days when the maximum true vapor pressure of the liquid exceeds the respective maximum true vapor pressure values for each volume range. [40 CFR 60.116b(d)]
Federally Enforceable Through Title V Permit
APPENDIX F

Compliance Certifications
San Joaquin Valley  
Unified Air Pollution Control District  

TITLE V MODIFICATION - COMPLIANCE CERTIFICATION FORM

I. TYPE OF PERMIT ACTION (Check appropriate box)

[X] SIGNIFICANT PERMIT MODIFICATION  [ ] ADMINISTRATIVE AMENDMENT

[ ] MINOR PERMIT MODIFICATION

<table>
<thead>
<tr>
<th>COMPANY NAME: ConocoPhillips</th>
<th>FACILITY ID: S - 1518</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Type of Organization: [X] Corporation [ ] Sole Ownership [ ] Government [ ] Partnership [ ] Utility</td>
<td></td>
</tr>
<tr>
<td>2. Owner's Name:</td>
<td></td>
</tr>
<tr>
<td>3. Agent to the Owner:</td>
<td></td>
</tr>
</tbody>
</table>

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

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

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

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

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

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

[Signature]
Signature of Responsible Official

[11-11-10]
Date

Jeff Randel  
Name of Responsible Official (please print)

WC Pipeline Division Manager  
Title of Responsible Official (please print)

Swap Storage Tank TVP Limits.

Mailing Address: Central Regional Office * 1990 E. Gettysburg Avenue * Fresno, California 93726-6244 * (559) 230-5900 * FAX (559) 230-6061

TVFORM-009
CERTIFICATION

ConocoPhillips Pipeline Company hereby certifies as follows:

1. ConocoPhillips owns or operates certain major stationary sources in the State of California. Such sources are comprised of a vast number of emission points. As used in this certification, the term "major stationary source" shall, with respect to ConocoPhillips stationary sources in the SJVUAPCD, have the meaning ascribed thereto in SJVUAPCD Rule 2201, Section 3.23, and shall, with respect to all of ConocoPhillips other stationary sources in the State of California, have the meaning ascribed thereto in section 302(J) of the Clean Air Act (42 U.S.C. Section 7602 (J)).

2. Subject to paragraphs 3 and 4 below, all major stationary sources owned or operated by ConocoPhillips in the State of California are either in compliance, or on an approved schedule of compliance, with all applicable emission limitations and standards under the Clean Air Act and all of the State Implementation Plan approved by the Environmental Protection Agency.

3. This certification is made on information and belief and is based upon a review of ConocoPhillips major stationary sources in the State of California by those employees of ConocoPhillips who have operational responsibility for compliance. In conducting such reviews, ConocoPhillips and its employees have acted in good faith and have exercised best efforts to identify any exceedance of the emission limitations and standards referred to in paragraph 2 thereof.

4. This certification shall speak as of the time and date of its execution.

CERTIFICATION

By: Jeff Randel  Date: 11-11-10

Title: WC Pipeline Division Manager  Time: 10:50 AM