San Joaquin Valley
AIR POLLUTION CONTROL DISTRICT

HEALTHY AIR LIVING™

JAN 1 1 2012

Noel Kurai
Shell Pipeline Company LP
20945 S. Wilmington Ave
Carson, CA 90810

Re: Notice of Final Action - Title V Permit Renewal
District Facility # C-1234
Project # C-1082670

Dear Mr. Kurai:

The District has issued the Final Renewed Title V Permit for Shell Pipeline Company LP. The preliminary decision for this project was made on October 31, 2011. A summary of the comments and the District's response to each comment is included as an attachment to the engineering evaluation.

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

Thank you for your cooperation in this matter. Should you have any questions, please contact Mr. Jim Swaney, Permit Services Manager, at (559) 230-5900.

Sincerely,

David Warner
Director of Permit Services

Attachments

cc: Jonah Aiyabei, Permit Services Engineer

Seyed Sadredin
Executive Director/Air Pollution Control Officer

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

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

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

www.valleyair.org www.healthyairliving.com

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San Joaquin Valley
AIR POLLUTION CONTROL DISTRICT

HEALTHY AIR LIVING™

JAN 11 2012

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

Re: Notice of Final Action - Title V Permit Renewal
District Facility # C-1234
Project # C-1082670

Dear Mr. Rios:

The District has issued the Final Renewed Title V Permit for Shell Pipeline Company LP. The preliminary decision for this project was made on October 31, 2011. A summary of the comments and the District's response to each comment is included as an attachment to the engineering evaluation.

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

I would like to thank you and your staff for working with us. We appreciate your concurrence with this action. Should you have any questions, please contact Mr. Jim Swaney, Permit Services Manager, at (559) 230-5900.

Sincerely,

David Warner
Director of Permit Services

Attachments

cc: Jonah Aiyabei, Permit Services Engineer

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AIR POLLUTION CONTROL DISTRICT

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JAN 11 2012

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

Re: Notice of Final Action - Title V Permit Renewal
District Facility # C-1234
Project # C-1082670

Dear Mr. Tollstrup:

The District has issued the Final Renewed Title V Permit for Shell Pipeline Company LP. The preliminary decision for this project was made on October 31, 2011. A summary of the comments and the District's response to each comment is included as an attachment to the engineering evaluation.

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

I would like to thank you and your staff for working with us. Should you have any questions, please contact Mr. Jim Swaney, Permit Services Manager, at (559) 230-5900.

Sincerely,

David Warner
Director of Permit Services

Attachments

cc: Jonah Aiyabei, Permit Services Engineer

Seyed Sadredin
Executive Director/Air Pollution Control Officer

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Fresno Bee

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

NOTICE IS HEREBY GIVEN that the San Joaquin Valley Air Pollution Control District has made its final decision to issue the renewed Federally Mandated Operating Permit to Shell Pipeline Company LP for its crude oil pumping station in the NW/4, Section 17, Township 20S, Range 15E in Fresno County, California.

The District's analysis of the legal and factual basis for this proposed action, project #C-1082670, is available for public inspection at http://www.valleyair.org/notices/public_notices_idx.htm and the District office at the address below. For additional information regarding this matter, please contact Mr. Jim Swaney, Permit Services Manager, at (559) 230-5900, or contact David Warner, Director of Permit Services, in writing at SAN JOAQUIN VALLEY AIR POLLUTION CONTROL DISTRICT, 1990 E. GETTYSBURG AVE, FRESNO, CA 93726-0244.

SAN JOAQUIN VALLEY
AIR POLLUTION CONTROL DISTRICT

Title V Permit Renewal Evaluation
Shell Pipeline Company LP
C-1234

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TITLE V PERMIT RENEWAL EVALUATION
CREUDE OIL PUMP STATION

Engineer: Jonah Aiyabei
Date: January 9, 2012

Facility Number: C-1234
Facility Name: Shell Pipeline Company LP
Mailing Address: 20945 S. Wilmington Ave
Carson, CA 90810

Contact Name: Noel kurai, Environmental Coordinator
Phone: 310-816-2069

Responsible Official: Michael B. Bringham
Title: Area Manager

Project # : C-1082670
Deemed Complete: June 19, 2008

I. PROPOSAL

Shell Pipeline Company LP was issued a Title V permit on October 6, 1999. As required by District Rule 2520, the applicant has requested a permit renewal. The existing Title V permit shall be reviewed and modified to reflect all applicable District and federal rules updated, removed, or added since the issuance of the initial Title V permit. The purpose of this evaluation is to provide the legal and factual basis for all updated applicable requirements and to determine if the facility will comply with these updated requirements. It also specifically identifies all additions, deletions, and/or changes made to permit conditions or equipment descriptions.

On October 31, 2011, the District issued public notice of its preliminary decision to issue the renewed Title V permit for this facility. In accordance with District Rule 2520, copies of the proposed permit and evaluation were forwarded to the facility, US EPA, and the California Air Resources Board. Copies were also made available for public review.

During the review period that followed the notice of preliminary decision, the District received comments from EPA. Responses to these comments, and the

changes made to the permit as a result, are explained in Attachment H of this document.

II. FACILITY LOCATION

Shell Pipeline Company's Coalinga pump station is located at NW/4 Section 17, Township 20S, Range 15E near the city of Coalinga in Fresno County, CA.

III. EQUIPMENT LISTING

A detailed facility printout listing all permitted equipment at the facility is included as Attachment C.

IV. GENERAL PERMIT TEMPLATE USAGE

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

V. SCOPE OF EPA AND PUBLIC REVIEW

Since the applicant is not proposing to use any model general permit templates, all federally enforceable conditions in this current Title V permit will be subject to EPA and public review.

VI. FEDERALLY ENFORCEABLE REQUIREMENTS

A. Rules Updated

- District Rule 2201, New and Modified Stationary Source Review Rule (amended April 21, 2011)
- District Rule 4101, Visible Emissions (amended November 15, 2001 ⇒ amended February 17, 2005)
- District Rule 4306, Boilers, Steam Generators, and Process Heaters – Phase 3, (adopted October 16, 2008)
- District Rule 4623, Storage of Organic Liquids, (Amended May 19, 2005)
- District Rule 8011, General Requirements (Adopted November 15, 2001; amended August 19, 2004)

- District Rule 8021, Construction, Demolition, Excavation, Extraction, and Other Earthmoving Activities (adopted November 15, 2001; amended August 19, 2004)
- District Rule 8031, Bulk Materials, (adopted November 15, 2001; amended August 19, 2004)
- District Rule 8041, Carryout and Trackout, (adopted November 15, 2001; amended August 19, 2004)
- District Rule 8051, Open Areas, (adopted November 15, 2001; amended August 19, 2004)
- District Rule 8061, Paved and Unpaved Roads, (adopted November 15, 2001; amended August 19, 2004)
- District Rule 8071, Unpaved Vehicle/Equipment Traffic Areas (adopted November 15, 2001; amended September 16, 2004)
- 40 CFR Part 61, Subpart M, National Emission Standard for Asbestos (amended September 18, 2003)
- 40 CFR Part 82, Subpart B, Stratospheric Ozone (amended November 9, 2007)
- 40 CFR Part 82, Subpart F, Stratospheric Ozone (amended June 8, 2008)

The following rule has been amended, but the most recently amended version of the rule has not yet been approved into the State Implementation Plan (SIP):

- District Rule 2020, Exemptions (amended December 20, 2007 ⇒ amended August 18, 2011)
- District Rule 4601, Architectural Coatings (amended October 31, 2001 ⇒ amended December 17, 2009)
- District Rule 4702, Internal Combustion Engines, (amended August 11, 2011)

B. Rules/Requirements Added

- CCR Title 17, Section 93115, Airborne Toxic Control Measure (ATCM) for Stationary Compression-Ignition (CI) Engines
- District Rule 4320, Advanced Emission Reduction Options For Boilers, Steam Generators, and Process Heaters Greater Than 5.0 MMBtu/Hr, (adopted October 16, 2008)

C. Rules Not Updated

- District Rule 1070, Inspections (amended December 17, 1992)
- District Rule 1081, Source Sampling (Amended December 16, 1993)
- District Rule 1100, Equipment Breakdown (amended December 17, 1992)
- District Rule 1160, Emission Statements (adopted November 18, 1992)
- District Rule 2010, Permits Required, (amended December 17, 1992)
- District Rule 2031, Transfer of Permits, (amended December 17, 1992)
- District Rule 2040, Applications, (amended December 17, 1992)
- District Rule 2070, Standards for Granting Applications, (amended December 17, 1992)
- District Rule 2080, Conditional Approval, (amended December 17, 1992)
- District Rule 2520, Federally Mandated Operating Permits (adopted June 15, 1995 ⇒ amended June 21, 2001)
- District Rule 4201, Particulate Matter Concentration (amended December 17, 1992)
- District Rule 4202, Particulate Matter - Emission Rate, (amended December 17, 1992)
- District Rule 4301, Fuel Burning Equipment (amended December 17, 1992)

- District Rule 4305, Boilers, Steam Generators, Process Heaters (amended December 19, 1996 ⇒ amended August 21, 2003)
- District Rule 4351, Boilers, Steam Generators, Process Heaters (amended October 19, 1995 ⇒ amended August 21, 2003)
- District Rule 4701, Internal Combustion Engines – Phase I, (amended August 21, 2003)
- District Rule 4801, Sulfur compounds, Amended December 17, 1992) (Non SIP replacement for Stanislaus County Rule 407)
- 40 CFR Part 60, Subpart Ka, Standards of Performance for Storage Vessels for Petroleum Liquids for which Construction, Reconstruction, or Modification Commenced After May 18, 1978, and Prior to July 23, 1984 (45 FR 23379, Apr. 4, 1980, amended at 65 FR 78275, Dec. 14, 2000)
- 40 CFR Part 60, Subpart Kb, Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for which Construction, Reconstruction, or Modification Commenced After July 23, 1984 (52 FR 11429, Apr. 8, 1987, amended at 68 FR 59332, Oct. 15, 2003)
- 40 CFR Part 64, Compliance Assurance Monitoring (CAM)

VII. REQUIREMENTS NOT FEDERALLY ENFORCEABLE

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

The following rule, which has not been updated since the initial Title V permit was issued, is not federally enforceable and will not be discussed in further detail:

A. District Rule 4102 – Nuisance

This rule is applicable to any source operation which emits or may emit air contaminants or other materials. This rule stipulates that a person shall not discharge from any source whatsoever such quantities of air contaminants or other materials which cause injury, detriment, nuisance or annoyance to any considerable number of persons or to the public or

which endanger the comfort, repose, health or safety of any such person or the public or which cause or have a natural tendency to cause injury or damage to business or property.

C-1234-0-3 – Facilitywide Requirements

Condition 1 of the facilitywide requirements is based on the rule listed above and is not Federally Enforceable through Title V.

B. CCR Title 17, Section 93115, Airborne Toxic Control Measure (ATCM) for Stationary Compression-Ignition (CI) Engines

This ATCM was adopted by the Air Resources Board on February 26, 2004. The purpose of the ATCM is to reduce diesel particulate matter (PM) and criteria pollutant emissions from stationary diesel-fired compression-ignition engines. The ATCM requirements include operational limits, emission limits as well as monitoring and recordkeeping.

a. C-1234-10-5 – 465 BHP CUMMINS MODEL NTTA-855G DIESEL-FIRED EMERGENCY STANDBY IC ENGINE POWERING AN ELECTRICAL GENERATOR

Condition 9 of the requirements for this permit unit is based solely on the ATCM and is therefore not federally enforceable.

b. C-1234-11-5 – 213 BHP CATERPILLAR MODEL 3306 DIESEL-FIRED EMERGENCY IC ENGINE POWERING A FIREWATER PUMP

Condition 8 of the requirements for this permit unit is based solely on the ATCM and is therefore not federally enforceable.

VIII. COMPLIANCE

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

A. District Rule 2020 – Exemptions

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

The amendments to this rule do not have any effect on current permit requirements and will therefore not be addressed in this evaluation.

B. District Rule 2201 – New and Modified Stationary Source Review Rule

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

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

Therefore, the updated requirements of this rule are not applicable at this time.

C. District Rule 2520, Federally Mandated Operating Permits

There are no federally applicable Greenhouse Gas (GHG) requirements for this source. It should be noted that the Mandatory Greenhouse Gas Reporting rule (40CFR Part 98) is not included in the definition of an applicable requirement within Title V (per 40 CFR 71.2). Therefore, there will be no further discussion of GHG in this evaluation.

The following revisions were made to various District Rule 2520 permit conditions:

a. C-1234-6-7 – 10,800,000 GALLON WELDED CRUDE OIL STORAGE TANK #CH12 EQUIPPED WITH EXTERNAL FLOATING ROOF WITH PRIMARY METALLIC SHOE SEAL AND SERRATED MULTI-FINGERED SECONDARY SEAL

Condition 55 has been deleted because the permit shields referred to are not applicable to this permit unit.

b. C-1234-7-5 – 10,800,000 GALLON WELDED STORAGE TANK #CH13 EQUIPPED WITH EXTERNAL FLOATING ROOF WITH PRIMARY METALLIC SHOE SEAL AND WIPER TYPE SECONDARY SEAL

Condition 57 has been deleted because the permit shields referred to are not applicable to this permit unit.

c. C-1234-13-6 – 5,040,000 GALLON (120,000 BBL) WELDED CRUDE OIL STORAGE TANK #120CH-14 EQUIPPED WITH EXTERNAL FLOATING ROOF WITH PRIMARY METALLIC SHOE SEAL AND WIPER TYPE SECONDARY SEAL

Condition 62 has been deleted because it is a duplicate of condition 56. Condition 56 (#53 on draft PTO) has been revised to include the District Rule 2520 citation from the deleted condition 62.
Condition 72 has been deleted because the permit shields referred to are not applicable to this permit unit.

D. District Rule 4101 – Visible Emissions

District Rule 4101 was approved by EPA on August 11, 2005 to replace SIP approved Rule 401 (all counties of the SJVUAPCD).

Section 5.0 prohibits the discharge of any air contaminant for a period or periods aggregating more than 3 minutes in any one hour which is as dark or darker in shade as that designated as No. 1 on the Ringelmann Chart; or is of such opacity as to obscure an observer's view to a degree equal to or greater than the smoke described in Section 5.1 of Rule 4101.

The following permit requirements, which are based on this rule, have been revised as follows:

C-1234-0-3 – Facilitywide Requirements

Condition 23 on the existing permit to operate has been revised to remove the outdated County Rule 401 from the citation section.

Condition 41 on the existing permit to operate has been revised to remove the obsolete permit shield for the superseded County Rule 401.

E. District Rule 4306 – Boilers, Steam Generators and Process Heaters – Phase 3

Section 5.1.1 limits NOx emissions for units with a rated heat input greater than 20.0 MMBtu/hr to 9 ppmv (referenced at dry stack gas conditions and

3.00 percent by volume stack gas oxygen) or 0.011 lb/MMBtu; and CO emissions to 400 ppmvd

Section 5.3 states that on and after the full compliance schedule specified in Section 7.1, the applicable emission limits of Sections 5.1, 5.2.2 and 5.2.3 shall not apply during start-up or shutdown provided an operator complies with the requirements specified in Sections 5.3.1 through 5.3.4.

Section 5.4.2 requires that facilities operating units subject to Section 5.1 emissions limits to either install and maintain Continuous Emission Monitoring (CEM) equipment for NOX, CO and O2, or to install and maintain APCO-approved alternate monitoring.

Section 5.5.1 requires that the operator of any unit shall have the option of complying with either the applicable heat input (lb/MMBtu) emission limits or the concentration (ppmv) emission limits specified in Section 5.1. The emission limits selected to demonstrate compliance shall be specified in the source test proposal pursuant to Rule 1081 (Source Sampling).

Section 5.5.2 requires that all emissions measurements shall be made with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. No determination of compliance shall be established within two hours after a continuous period in which fuel flow to the unit is shut off for 30 minutes or longer, or within 30 minutes after a re-ignition as defined in Section 3.0.

Section 5.5.4 requires that for emissions monitoring pursuant to Sections 5.4.2, 5.4.2.1, and 6.3.1 using a portable NOX analyzer as part of an APCO approved Alternate Emissions Monitoring System, emission readings shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15-consecutive-minute sample reading or by taking at least five (5) readings evenly spaced out over the 15-consecutive-minute period.

Section 5.5.5 requires that for emissions source testing performed pursuant to Section 6.3.1 for the purpose of determining compliance with an applicable standard or numerical limitation of this rule, the arithmetic average of three (3) 30-consecutive-minute test runs shall apply. If two (2) of three (3) runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit.

Section 6.1 requires that the records required by Sections 6.1.1 through 6.1.3 shall be maintained for five calendar years and shall be made available to the APCO upon request. Failure to maintain records or information contained in the records that demonstrate noncompliance with the applicable requirements of this rule shall constitute a violation of this rule.

Section 6.1.3 requires that the operator of a unit subject to Section 5.2.1 or 6.3.1 to maintain records to verify that the required tune-up and the required monitoring of the operational characteristics have been performed.

Section 6.2 identifies the following test methods as District-approved source testing methods for the pollutants listed: (a) NOx - ppmv: EPA Method 7E or ARB Method 100; (b) NOx - lb/MMBtu: EPA Method 19; (c) CO - ppmv: EPA Method 10 or ARB Method 100; (d) Stack gas O2: EPA Method 3 or 3A, or ARB Method 100; (e) Stack gas velocity: EPA Method 2; and (f) Stack gas moisture content: EPA Method 4.

Section 6.3.1 requires that units subject to this rule be tested to determine compliance with the applicable requirements of section 5.1 not less than once every 12 months. Upon demonstrating compliance on two consecutive compliance source tests, the next source test may be deferred for up to thirty-six months.

a. C-1234-2-4 – DORMANT 25.5 MMBTU/HR NATIONAL OIL HEATER #2, WITH NORTH AMERICAN MODEL 5131HCRF BURNER

b. C-1234-3-4 – DORMANT 37.5 MMBTU/HR NATIONAL OIL HEATER #3 WITH NORTH AMERICAN MODEL 513HCRG BURNER

These permit units are currently dormant and are not required to comply with the requirements of this rule. As stated in condition 3 of the proposed renewed permits, the units shall not be operated for any reason until Authority to Construct (ATC) permits are issued approving all necessary modifications required to comply with the applicable requirements of this rule. The updated requirements will then be incorporated into the Title V permit to operate through a minor modification or administrative amendment.

F. District Rule 4320 – Advanced Emission Reduction Options For Boilers, Steam Generators and Process Heaters Greater Than 5.0 MMBtu/Hr

Section 5.2 requires that for units with a total rated heat input greater than 20.0 MMBtu/hr, NOX emissions shall not exceed 7 ppmv or 0.008 lb/MMBtu, and CO emissions shall not exceed 400 ppmv (All ppmv emission limits specified in this section are referenced at dry stack gas conditions and 3.00 percent by volume stack gas oxygen).

Section 5.4.1 of this rule requires the operator to comply with one of the following requirements: (a) Fire the boiler exclusively on PUC-quality natural gas, commercial propane, butane, or liquefied petroleum gas, or a combination of such gases; (b) Limit fuel sulfur content to no more than five

(5) grains of total sulfur per one hundred (100) standard cubic feet; or (c) Install and properly operate an emission control system that reduces SO2 emissions by at least 95% by weight; or limit exhaust SO2 to less than or equal to 9 ppmv corrected to 3.0% O2;

Section 5.6 states that on and after the full compliance deadline in Section 5.0, the applicable emission limits of Sections 5.2 Table 1 and 5.5.2 shall not apply during start-up or shutdown provided an operator complies with the requirements specified in Sections 5.6.1 through 5.6.5.

Section 5.7.1 requires that permit units subject to District Rule 4320, Section 5.2 emissions limits shall either install and maintain Continuous Emission Monitoring (CEM) equipment for NOX, CO and O2, or install and maintain APCO-approved alternate monitoring.

Section 5.8.1 requires that the operator of any unit shall have the option of complying with either the applicable heat input (lb/MMBtu) emission limits or the concentration (ppmv) emission limits specified in Section 5.1. The emission limits selected to demonstrate compliance shall be specified in the source test proposal pursuant to Rule 1081 (Source Sampling).

Section 5.8.2 requires that all emissions measurements shall be made with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. No determination of compliance shall be established within two hours after a continuous period in which fuel flow to the unit is shut off for 30 minutes or longer, or within 30 minutes after a re-ignition as defined in Section 3.0.

Section 5.8.4 requires that for emissions monitoring using a portable NOX analyzer as part of an APCO approved Alternate Emissions Monitoring System, emission readings shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15-consecutive-minute sample reading or by taking at least five (5) readings evenly spaced out over the 15-consecutive-minute period.

Section 5.8.5 requires that for emissions source testing performed pursuant to Section 6.3.1 for the purpose of determining compliance with an applicable standard or numerical limitation of this rule, the arithmetic average of three (3) 30-consecutive-minute test runs shall apply. If two (2) of three (3) runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit.

Section 6.1 requires that the records required by Sections 6.1.1 through 6.1.5 shall be maintained for five calendar years and shall be made available to the APCO upon request. Failure to maintain records or information contained in

the records that demonstrate noncompliance with the applicable requirements of this rule shall constitute a violation of this rule.

Section 6.1.4 requires that the operator of a unit with startup or shutdown provisions keep records of the duration of the startup or shutdowns.

Section 6.1.5 requires that the operator of a unit fired on liquid fuel during PUC-quality natural gas curtailment periods record the sulfur content of the fuel, amount of fuel used, and duration of the natural gas curtailment period.

Section 6.2 identifies the following test methods as District-approved source testing methods for the pollutants listed: (a) NOx - ppmv: EPA Method 7E or ARB Method 100; (b) NOx - lb/MMBtu: EPA Method 19; (c) CO - ppmv: EPA Method 10 or ARB Method 100; (d) Stack gas O2: EPA Method 3 or 3A, or ARB Method 100; (e) Stack gas velocity: EPA Method 2; and (f) Stack gas moisture content: EPA Method 4.

Section 6.3.1 requires that this unit be tested to determine compliance with the applicable requirements of section 5.2 not less than once every 12 months. Upon demonstrating compliance on two consecutive compliance source tests, the following source test may be deferred for up to thirty-six months.

a. C-1234-2-4 – DORMANT 25.5 MMBTU/HR NATIONAL OIL HEATER #2, WITH NORTH AMERICAN MODEL 5131HCRF BURNER

b. C-1234-3-4 – DORMANT 37.5 MMBTU/HR NATIONAL OIL HEATER #3 WITH NORTH AMERICAN MODEL 513HCRG BURNER

These permit units are currently dormant and are not required to comply with the requirements of this rule. As stated in condition 3 of the proposed renewed permits, the units shall not be operated for any reason until Authority to Construct (ATC) permits are issued approving all necessary modifications required to comply with the applicable requirements of this rule. The updated requirements will then be incorporated into the Title V permit to operate through a minor modification or administrative amendment.

G. District Rule 4601 – Architectural Coatings

The purpose of this rule is to limit VOC emissions from architectural coatings.

The provisions of this rule apply to any person who supplies, sells, offers for sale, applies, or solicits the application of any architectural coating, or who

manufactures, blends or repackages any architectural coating for use within the District.

The SIP version of the rule was last amended on October 31, 2001. The current version of the rule was amended on December 17, 2009 but has not yet been approved into the SIP.

The following analysis shows that the proposed requirements of the current non-SIP version of District Rule 4601 are as stringent as, or more stringent than the requirements of the existing SIP version. Streamlining procedures, as documented in the following steps are utilized to substitute the set of requirements in the current non-SIP version of the rule for the otherwise applicable requirements in the SIP version of the rule.

As analyzed, each amended section of the non-SIP version of the rule is at least as stringent as, or more stringent than the corresponding section of the SIP version of the rule. Therefore, it is concluded that, overall, the non-SIP version of the rule is more stringent than the SIP version of the rule.

Stringency Comparison of District Rule 4601 Non-SIP Version (12/17/09) to Current SIP Version (10/31/01)

Requirement Category	SIP Version of Rule 4601 (10/31/01)	Non-SIP Version of Rule 4601 (12/17/09)	Conclusion
2.0 Applicability	This rule is applicable to any person who supplies, sells, offers for sale, applies, or solicits the application of any architectural coating, or who manufactures any architectural coating for use within the District.	This rule is applicable to any person who supplies, sells, offers for sale, applies, or solicits the application of any architectural coating, or who manufactures, blends or repackages any architectural coating for use within the District.	**No change in the applicability, therefore, non-SIP version of rule is as stringent as SIP version.**
4.0 Exemptions	The provisions of this rule shall not apply to: 4.1 Any architectural coating that is sold or manufactured for use outside of the District or for shipment to other manufacturers for reformulation or repackaging. 4.2 Any architectural coating that is sold in a container with a volume of one liter (1.057 quarts) or less. 4.3 Any aerosol coating product.	4.1 The provisions of this rule shall not apply to: 4.1.1 Any architectural coating that is supplied, sold, offered for sale, or manufactured for use outside of the District or for shipment to other manufacturers for reformulation or repackaging. 4.1.2 Any aerosol coating product. 4.2 With the exception of Section 6.2, the provisions of this rule shall not apply to any architectural coating that is sold in a container with a volume of one liter (1.057 quarts) or less.	**The only change is to require reporting requirements as discussed in Section 6.2 of the non-SIP approved version. Therefore, the non-SIP version of the rule is more stringent than the SIP version of the rule.**
5.0 Requirements	**Note: Section 5.0 requirements refer to Table of Standards, Table of Standards 1, and Table of Standards 2. These tables are included as Attachment D.**		
	5.1 VOC Content Limits: Except as provided in Sections 5.2, 5.3, 5.8 and 8.0, no person shall; 5.1.1 manufacture, blend, or repackage for sale within the District; 5.1.2 supply, sell, or offer for sale within the district;	5.1 VOC Content Limits: Except as provided in Sections 5.2 and 5.3, no person shall: manufacture, blend, or repackage for use within the District; or supply, sell, or offer for sale within the District; or solicit for application or apply within the District any architectural coating with a VOC	**Sections 5.8 and 8.0 of the SIP version are not included in the non-SIP version. As discussed in corresponding sections the non-SIP version is more stringent. The**

Requirement Category	SIP Version of Rule 4601 (10/31/01)	Non-SIP Version of Rule 4601 (12/17/09)	Conclusion
	5.1.3 Solicit for application or apply within the District any architectural coating with a VOC content in excess of the corresponding limit specified in the Table of Standards, after the specified effective date in the Table of Standards.	content in excess of the corresponding limit specified in the Table of Standards 1 or the Table of Standards 2, after the specified effective date in the Table of Standards 1 or the Table of Standards 2. Limits are expressed as VOC Regulatory, thinned to the manufacturer's maximum thinning recommendation, excluding any colorant added to tint bases.	**Table of Standards and Table of Standards 1 have the same VOC limits. Table of Standard 2 is more stringent as discussed below. Therefore, the non-SIP version of the rule is more stringent than the SIP version of the rule.**
	5.2 Most Restrictive VOC Limit: If anywhere on the container of any architectural coating, or any label or sticker affixed to the container, or in any sales, advertising, or technical literature supplied by a manufacturer or anyone acting on their behalf, any representation is made that indicates that the coating meets the definition of or is recommended for use for more than one of the coating categories listed in the Table of Standards, then the most restrictive VOC content limit shall apply. This provision does not apply to the following coating categories: 5.2.1 Lacquer coatings (including lacquer sanding sealers) 5.2.2 Metallic pigmented coatings 5.2.3 Shellacs 5.2.4 Fire-retardant coatings 5.2.5 Pretreatment wash primers 5.2.6 Industrial maintenance coatings 5.2.7 Low-solids coatings 5.2.8 Wood preservatives 5.2.9 High temperature coatings 5.2.10 Temperature-indicator safety coatings 5.2.11 Antenna coatings 5.2.12 Antifouling coatings 5.2.13 Flow coatings 5.2.14 Bituminous roof primers 5.2.15 Specialty primers, sealers and undercoaters	5.2 Most Restrictive VOC Limit: If a coating meets the definition in Section 3.0 for one or more specialty coating categories listed in the Table of Standards 1 or the Table of Standards 2, then that coating is not required to meet the VOC limits for Flat, Nonflat, or Nonflat – High Gloss coatings, but is required to meet the VOC limit for the applicable specialty coating listed in the Table of Standards 1 or the Table of Standards 2. 5.2.1 Effective until December 31, 2010, with the exception of the specialty coating categories specified in Section 5.2.3.1 through 5.2.3.15, if a coating is recommended for use in more than one of the specialty coating categories listed in the Table of Standards 1, the most restrictive (or lowest) VOC content limit shall apply. 5.2.2 Effective on and after January 1, 2011, with the exception of the specialty coating categories specified in Sections 5.2.3.2, 5.2.3.3, 5.2.3.5 through 5.2.3.9, and 5.2.3.14 through 5.2.3.18, if a coating is recommended for use in more than one of the specialty coating categories listed in the Table of Standards 2, the most restrictive (or lowest) VOC content limit shall apply. 5.2.3 This requirement applies to: usage recommendations that appear anywhere on the coating container, anywhere on any label or sticker affixed to the container, or in any sales, advertising, or technical literature supplied by a manufacturer or anyone acting on their behalf. 5.2.3.1 Lacquer coatings (including lacquer sanding sealers) 5.2.3.2 Metallic pigmented coatings 5.2.3.3 Shellacs 5.2.3.4 Fire-retardant coatings 5.2.3.5 Pretreatment wash primers 5.2.3.6 Industrial maintenance	**The VOC limit of the non-SIP version is at least as stringent as the SIP version. Therefore, the non-SIP version of the rule is more stringent than the SIP version of the rule.**

Requirement Category	SIP Version of Rule 4601 (10/31/01)	Non-SIP Version of Rule 4601 (12/17/09)	Conclusion
		coatings 5.2.3.7 Low-solids coatings 5.2.3.8 Wood preservatives 5.2.3.9 High temperature coatings 5.2.3.10 Temperature-indicator safety coatings 5.2.3.11 Antenna coatings 5.2.3.12 Antifouling coatings 5.2.3.13 Flow coatings 5.2.3.14 Bituminous roof primers 5.2.3.15 Specialty primers, sealers and undercoaters 5.2.3.16 Aluminum roof coatings 5.2.3.17 Zinc-rich primers 5.2.3.18 Wood Coatings	
	5.3 Sell-Through of Coatings: 5.3.1 A coating manufactured prior to the January 1, 2003 or January 1, 2004 effective date specified for that coating in the Table of Standards may be sold, supplied, or offered for sale for up to three years after the specified effective date. In addition, a coating manufactured before the effective date specified for that coating in the Table of Standards may be applied at any time, both before and after the specified effective date, so long as the coating complied with the standards in effect at the time the coating was manufactured. This Section 5.3 does not apply to any coating that does not display the date or date-code required by Section 6.1.1. 5.3.2 A coating included in an approved Averaging Program that does not comply with the specified limit in the Table of Standards may be sold, supplied, or offered for sale for up to three years after the end of the compliance period specified in the approved Averaging Program. In addition, such a coating may be applied at any time, both during and after the compliance period. This Section 5.3.2 does not apply to any coating that does not display on the container either the statement: "This product is subject to architectural coatings averaging provisions in California" or a substitute symbol specified by the Executive Officer of the California Air Resources Board (ARB). This Section 5.3.2 shall remain in effect until January 1, 2008.	5.3 Sell-Through of Coatings: A coating manufactured prior to the effective date specified for that coating in the Table of Standards 1 or the Table of Standards 2, and that complied with the standards in effect at the time the coating was manufactured, may be sold, supplied, or offered for sale for up to three years after the specified effective date. In addition, a coating manufactured before the effective date specified for that coating in the Table of Standards 1 or the Table of Standards 2 may be applied at any time, both before and after the specified effective date, so long as the coating complied with the standards in effect at the time the coating was manufactured. This Section 5.3 does not apply to any coating that does not display the date or date-code required by Section 6.1.1.	**The VOC limit of the non-SIP version is at least as stringent as the SIP version. Section 5.3.2 was removed it is no longer applicable in the SIP version. Therefore, the non-SIP version of the rule is more stringent than the SIP version of the rule.**
	5.4 Painting Practices: All architectural	5.4 Painting Practices: All architectural	**No change in the**

Requirement Category	SIP Version of Rule 4601 (10/31/01)	Non-SIP Version of Rule 4601 (12/17/09)	Conclusion
	coating containers used to apply the contents therein to a surface directly from the container by pouring, siphoning, brushing, rolling, padding, ragging or other means, shall be closed when not in use. These architectural coating containers include, but are not limited to, drums, buckets, cans, pails, trays or other application containers. Containers of any VOC containing materials used for thinning and cleanup shall also be closed when not in use.	coating containers used to apply the contents therein to a surface directly from the container by pouring, siphoning, brushing, rolling, padding, ragging or other means, shall be closed when not in use. These architectural coating containers include, but are not limited to, drums, buckets, cans, pails, trays or other application containers. Containers of any VOC-containing materials used for thinning and cleanup shall also be closed when not in use.	**requirements, therefore, non-SIP version of rule is as stringent as SIP version.**
	5.5 Thinning: No person who applies or solicits the application of any architectural coating shall apply a coating that is thinned to exceed the applicable VOC limit specified in the Table of Standards.	5.5 Thinning: No person who applies or solicits the application of any architectural coating shall apply a coating that is thinned to exceed the applicable VOC limit specified in the Table of Standards 1 or the Table of Standards 2.	**The VOC limit of the non-SIP version is at least as stringent as the SIP version. Therefore, the non-SIP version of the rule is more stringent than the SIP version of the rule.**
	5.6 Rust Preventative Coatings: Effective January 1, 2004, no person shall apply or solicit the application of any rust preventative coating for industrial use, unless such a rust preventative coating complies with the industrial maintenance coating VOC limit specified in the Table of Standards.	5.6 Rust Preventative Coatings: Effective through December 31, 2010, no person shall apply or solicit the application of any rust preventative coating for industrial use, unless such a rust preventative coating complies with the industrial maintenance coating VOC limit specified in the Table of Standards 1.	**The VOC limit of the non-SIP version is at least as stringent as the SIP version. Therefore, the non-SIP version of the rule is more stringent than the SIP version of the rule.**
	5.7 Coatings Not Listed in the Table of Standards: For any coating that does not meet any of the definitions for the specialty coatings categories listed in the Table of Standards, the VOC content limit shall be determined by classifying the coating as a flat coating or a nonflat coating, based on its gloss, as defined in Sections 3.21, 3.36 and 3.37 and the corresponding flat or nonflat VOC limit shall apply.	5.7 Coatings Not Listed in the Table of Standards 1 or the Table of Standards 2: For any coating that does not meet any of the definitions for the specialty coatings categories listed in the Table of Standards 1 or the Table of Standards 2, the VOC content limit shall be determined by classifying the coating as a Flat, Nonflat, or Nonflat – High Gloss coating, based on its gloss, and the corresponding Flat, Nonflat, or Nonflat – High Gloss VOC limit in the Table of Standards 1 or the Table of Standards 2 shall apply.	**The VOC limit of the non-SIP version is at least as stringent as the SIP version. Therefore, the non-SIP version of the rule is more stringent than the SIP version of the rule.**
	5.8 Lacquers: Notwithstanding the provisions of Section 3.1, a person or facility may add up to 10 percent by volume of VOC to a lacquer to avoid blushing of the finish during days with relative humidity greater than 70 percent and temperature below 65°F, at the time of application, provided that the coating contains acetone and no more than 550 grams of VOC per liter of coating, less water and exempt compounds, prior to the addition of VOC.	---	**This section has been removed. The operation is required to meet the lacquer VOC limit regardless of temperature and humidity. Therefore, non-SIP version of rule is as stringent as SIP version**
	5.9 Averaging Compliance Option: On or after January 1, 2003, in lieu of compliance with the specified limits in The Table of Standards for floor coatings; industrial maintenance coatings; primers, sealers, and undercoaters; quick-dry primers,	---	**This section is removed from the non-SIP version, it is no longer applicable. Therefore, non-SIP version of rule is as stringent as SIP version.**

Requirement Category	SIP Version of Rule 4601 (10/31/01)	Non-SIP Version of Rule 4601 (12/17/09)	Conclusion
	sealers, and undercoaters; quick-dry enamels; roof coatings; bituminous roof coatings; rust preventative coatings; stains; waterproofing sealers, as well as flats and non-flats (excluding recycled coatings), manufacturers may average designated coatings such that their actual cumulative emissions from the averaged coatings are less than or equal to the cumulative emissions that would have been allowed under those limits over a compliance period not to exceed one year. Such manufacturers must also comply with the averaging provisions contained in Section 8.0, as well as maintain and make available for inspection records for at least three years after the end of the compliance period. This Section 5.9 and Section 8.0 shall cease to be effective on January 1, 2005, after which averaging will no longer be allowed.		
	---	5.8 Prior to January 1, 2011, any coating that meets a definition in Section 3.0 for a coating category listed in the Table of Standards 2 and complies with the applicable VOC limit in the Table of Standards 2 and with Sections 5.2 and 6.1 (including those provision of Section 6.1 otherwise effective on January 1, 2011) shall be considered in compliance with this rule.	**Table of Standards 2 is more stringent than the VOC limits of Table of Standards in the SIP-Approved version. Therefore, non-SIP version of rule is as stringent as SIP version.**
	Table of Standards (See Attachment D for Table)	Table of Standards 1 (Effective through 12/31/10) (See Attachment D for Table)	**The non-SIP rule requirements are the same as the Table of Standards in the SIP approved rule, except Table of Standards 1 expires at which time Table of Standards 2 is in effect. As discussed below these standards are more stringent. Therefore, non-SIP version of rule is as stringent as SIP version.**
		Table of Standards 2 (Effective on and after 1/1/11) (See Attachment D for Table)	**The requirements of Table of Standards 2 are more stringent than the Table of Standards in the SIP rule. Therefore, non-SIP version of rule is as stringent as SIP version.**
6.0 Administrative Requirements	6.1 Labeling Requirements: Each manufacturer of any architectural coating subject to this rule shall display the information listed in Sections 6.1.1 through 6.1.9 on the coating container (or label) in which the coating is sold or distributed. 6.1.1 Date Code: The date the coating	6.1 Labeling Requirements: Each manufacturer of any architectural coating subject to this rule shall display the information listed in Sections 6.1.1 through 6.1.14 on the coating container (or label) in which the coating is sold or distributed. 6.1.1 Date Code: The date the coating was manufactured, or a date code	**The non-SIP approved rule contains sections listed in the SIP rule plus additional requirements not found in the SIP version. Therefore, non-SIP version of rule is as stringent as SIP version.**

Requirement Category	SIP Version of Rule 4601 (10/31/01)	Non-SIP Version of Rule 4601 (12/17/09)	Conclusion
	was manufactured, or a date code representing the date, shall be indicated on the label, lid or bottom of the container. If the manufacturer uses a date code for any coating, the manufacturer shall file an explanation of each code with the Executive Officer of the ARB. 6.1.2 Thinning Recommendations: A statement of the manufacturer's recommendation regarding thinning of the coating shall be indicated on the label or lid of the container. This requirement does not apply to the thinning of architectural coatings with water. If thinning of the coating prior to use is not necessary, the recommendation must specify that the coating is to be applied without thinning. 6.1.3 VOC Content: Each container of any coating subject to this rule shall display either the maximum or actual VOC content of the coating, as supplied, including the maximum thinning as recommended by the manufacturer. VOC content shall be displayed in grams of VOC per liter of coating. VOC content displayed shall be calculated using product formulation data, or shall be determined using the test methods in Section 6.3.1. The equations in Sections 3.25 or 3.26, as appropriate, shall be used to calculate VOC content. 6.1.4 Industrial Maintenance Coatings: In addition to the information specified in Sections 6.1.1, 6.1.2 and 6.1.3, each manufacturer of any industrial maintenance coating subject to this rule shall display on the label or lid of the container in which the coating is sold or distributed one or more of the following descriptions listed in Section 6.1.4.1 through 6.1.4.3. 6.1.4.1 "For industrial use only" 6.1.4.2 "For professional use only" 6.1.4.3 "Not for residential use" or "Not intended for residential use" 6.1.5 Clear Brushing Lacquers: Effective January 1, 2003, the labels of all clear brushing lacquers shall prominently display the statements "For brush application only," and "This product must not be thinned or sprayed." 6.1.6 Rust Preventative Coatings: Effective January 1, 2003, the labels of all rust preventative coatings shall prominently display the statement "For Metal Substrates Only" 6.1.7 Specialty Primers, Sealers and	representing the date, shall be indicated on the label, lid or bottom of the container. If the manufacturer uses a date code for any coating, the manufacturer shall file an explanation of each code with the Executive Officer of the ARB. 6.1.2 Thinning Recommendations: A statement of the manufacturer's recommendation regarding thinning of the coating shall be indicated on the label or lid of the container. This requirement does not apply to the thinning of architectural coatings with water. If thinning of the coating prior to use is not necessary, the recommendation must specify that the coating is to be applied without thinning. 6.1.3 VOC Content: Each container of any coating subject to this rule shall display one of the following values, in grams of VOC per liter of coating: 6.1.3.1 Maximum VOC Content, as determined from all potential product formulations; or 6.1.3.2 VOC Content, as determined from actual formulation data; or 6.1.3.3 VOC Content, as determined using the test methods in Section 6.3.2. If the manufacturer does not recommend thinning, the container must display the VOC Content, as supplied. If the manufacturer recommends thinning, the container must display the VOC Content, including the maximum amount of thinning solvent recommended by the manufacturer. If the coating is a multicomponent product, the container must display the VOC content as mixed or catalyzed. If the coating contains silanes, siloxanes, or other ingredients that generate ethanol or other VOCs during the curing process, the VOC content must include the VOCs emitted during curing. 6.1.4 Faux Finishing Coatings: Effective January 1, 2011, the labels of all clear topcoat Faux Finishing coatings shall prominently display the statement "This product can only be sold or used as part of a Faux Finishing coating system". 6.1.5 Industrial Maintenance Coatings: Each manufacturer of any industrial maintenance coating subject to this rule shall display on the label or lid of the container in which the coating is sold or distributed one or more of the following descriptions listed in	

Requirement Category	SIP Version of Rule 4601 (10/31/01)	Non-SIP Version of Rule 4601 (12/17/09)	Conclusion
	Undercoaters: Effective January 1, 2003, the labels of all specialty primers, sealers and undercoaters shall prominently display one or more of the descriptions listed in Section 6.1.7.1 through 6.1.7.5. 6.1.7.1 For blocking stains. 6.1.7.2 For fire-damaged substrates. 6.1.7.3 For smoke-damaged substrates. 6.1.7.4 For water-damaged substrates. 6.1.7.5 For excessively chalky substrates. 6.1.8 Quick Dry Enamels: Effective January 1, 2003, the labels of all quick dry enamels shall prominently display the words "Quick Dry" and the dry hard time. 6.1.9 Non-flat – High Gloss Coatings: Effective January 1, 2003, the labels of all non-flat – high gloss coatings shall prominently display the words "High Gloss".	Section 6.1.5.1 through 6.1.5.3. 6.1.5.1 "For industrial use only" 6.1.5.2 "For professional use only" 6.1.5.3 "Not for residential use" or "Not intended for residential use" 6.1.6 Clear Brushing Lacquers: The labels of all clear brushing lacquers shall prominently display the statements "For brush application only," and "This product must not be thinned or sprayed." (Category deleted effective January 1, 2011.) 6.1.7 Rust Preventative Coatings: The labels of all rust preventative coatings shall prominently display the statement "For Metal Substrates Only". 6.1.8 Specialty Primers, Sealers and Undercoaters: Effective until December 31, 2010, the labels of all specialty primers, sealers and undercoaters shall prominently display one or more of the descriptions listed in Section 6.1.8.1 through 6.1.8.5. Effective on and after January 1, 2011, the labels of all specialty primers, sealers, and undercoaters shall prominently display one or more of the descriptions listed in Sections 6.1.8.1 through 6.1.8.3. On and after January 1, 2011, Sections 6.1.8.4 and 6.1.8.5 will be no longer effective. 6.1.8.1 For fire-damaged substrates. 6.1.8.2 For smoke-damaged substrates. 6.1.8.3 For water-damaged substrates. 6.1.8.4 For excessively chalky substrates. 6.1.8.5 For blocking stains. 6.1.9 Quick Dry Enamels: The labels of all quick dry enamels shall prominently display the words "Quick Dry" and the dry hard time. (Category deleted effective January 1, 2011.) 6.1.10 Reactive Penetrating Sealers: Effective January 1, 2011, the labels of all Reactive Penetrating Sealers shall prominently display the statement "Reactive Penetrating Sealer." 6.1.11 Stone Consolidants: Effective January 1, 2011, the labels of all Stone Consolidants shall prominently display the statement "Stone Consolidant - For Professional Use Only." 6.1.12 Nonflat– High Gloss Coatings: The labels of all Nonflat – high gloss	

Requirement Category	SIP Version of Rule 4601 (10/31/01)	Non-SIP Version of Rule 4601 (12/17/09)	Conclusion
		coatings shall prominently display the words "High Gloss." 6.1.13 Wood Coatings: Effective January 1, 2011, the labels of all Wood Coatings shall prominently display the statement "For Wood Substrates Only." 6.1.14 Zinc Rich Primers: Effective January 1, 2011, the labels of all Zinc Rich Primers shall prominently display one or more of the following descriptions listed in Section 6.1.14.1 through 6.1.14.3. 6.1.14.1 "For industrial use only" 6.1.14.2 "For professional use only" 6.1.14.3 "Not for residential use" or "Not intended for residential use"	
	6.2 Reporting Requirements 6.2.1 Clear Brushing Lacquers: Each manufacturer of clear brushing lacquers shall, on or before April 1 of each calendar year beginning in the year 2004, submit an annual report to the Executive Officer of the ARB. The report shall specify the number of gallons of clear brushing lacquers sold in the State during the preceding calendar year, and shall describe the method used by the manufacturer to calculate State sales. 6.2.2 Rust Preventative Coatings: Each manufacturer of rust preventative coatings shall, on or before April 1 of each calendar year beginning in the year 2004, submit an annual report to the Executive Officer of the ARB. The report shall specify the number of gallons of rust preventative coatings sold in the State during the preceding calendar year, and shall describe the method used by the manufacturer to calculate State sales. 6.2.3 Specialty Primers, Sealers and Undercoaters: Each manufacturer of specialty primers, sealers and undercoaters shall, on or before April 1 of each calendar year beginning in the year 2004, submit an annual report to the Executive Officer of the ARB. The report shall specify the number of gallons of specialty primers, sealers and undercoaters sold in the State during the preceding calendar year, and shall describe the method used by the manufacturer to calculate State sales. 6.2.4 Toxic Exempt Compounds: For each architectural coating that contains perchloroethylene or	6.2 Reporting Requirements The reporting requirements specified in Sections 6.2.1 through 6.2.6 shall apply until December 31, 2010. 6.2.1 Clear Brushing Lacquers: Each manufacturer of clear brushing lacquers shall, on or before April 1 of each calendar year beginning in the year 2004, submit an annual report to the Executive Officer of the ARB. The report shall specify the number of gallons of clear brushing lacquers sold in the State during the preceding calendar year, and shall describe the method used by the manufacturer to calculate State sales. 6.2.2 Rust Preventative Coatings: Each manufacturer of rust preventative coatings shall, on or before April 1 of each calendar year beginning in the year 2004, submit an annual report to the Executive Officer of the ARB. The report shall specify the number of gallons of rust preventative coatings sold in the State during the preceding calendar year, and shall describe the method used by the manufacturer to calculate State sales. 6.2.3 Specialty Primers, Sealers and Undercoaters: Each manufacturer of specialty primers, sealers and undercoaters shall, on or before April 1 of each calendar year beginning in the year 2004, submit an annual report to the Executive Officer of the ARB. The report shall specify the number of gallons of specialty primers, sealers and undercoaters sold in the State during the preceding calendar year, and shall describe the method used by the manufacturer to calculate	**Until December 31, 2010 both versions of the rule have the same reporting requirements. After that date the non-SIP approved rule includes very specific information to be kept and is required for all architectural coatings. Therefore, non-SIP version of rule is as stringent as SIP version.**

Requirement Category	SIP Version of Rule 4601 (10/31/01)	Non-SIP Version of Rule 4601 (12/17/09)	Conclusion
	methylene chloride, the manufacturer shall, on or before April 1 of each calendar year beginning in the year 2004, submit an annual report to the Executive Officer of the ARB the following information for products sold in the State during the preceding year: 6.2.4.1 the product brand name and a copy of the product label with legible usage instructions; 6.2.4.2 the product category listed in the Table of Standards to which the coating belongs; 6.2.4.3 the total sales in California during the calendar year to the nearest gallon; 6.2.4.4 the volume percent, to the nearest 0.10 percent, of perchloroethylene and methylene chloride in the coating. 6.2.5 Recycled Coatings: Manufacturers of recycled coatings must submit a letter to the Executive Officer of the ARB certifying their status as a Recycled Paint Manufacturer. The manufacturer shall, on or before April 1 of each calendar year beginning with the year 2004, submit an annual report to the Executive Officer of the ARB. The report shall include, for all recycled coatings, the total number of gallons distributed in the State during the preceding year, and shall describe the method used by the manufacturer to calculate State distribution. 6.2.6 Bituminous Coatings: Each manufacturer of bituminous roof coatings or bituminous roof primers shall, on or before April 1 of each calendar year beginning with the year 2004, submit an annual report to the Executive Officer of ARB. The report shall specify the number of gallons of bituminous roof coatings or bituminous roof primers sold in the State during the preceding calendar year, and shall describe the method used by the manufacturer to calculate State sales.	State sales. 6.2.4 Toxic Exempt Compounds: For each architectural coating that contains perchloroethylene or methylene chloride, the manufacturer shall, on or before April 1 of each calendar year beginning in the year 2004, submit an annual report to the Executive Officer of the ARB the following information for products sold in the State during the preceding year: 6.2.4.1 the product brand name and a copy of the product label with legible usage instructions; 6.2.4.2 the product category listed in the Table of Standards 1 or the Table of Standards 2 to which the coating belongs; 6.2.4.3 the total sales in California during the calendar year to the nearest gallon; 6.2.4.4 the volume percent, to the nearest 0.10 percent, of perchloroethylene and methylene chloride in the coating. 6.2.5 Recycled Coatings: Manufacturers of recycled coatings must submit a letter to the Executive Officer of the ARB certifying their status as a Recycled Paint Manufacturer. The manufacturer shall, on or before April 1 of each calendar year beginning with the year 2004, submit an annual report to the Executive Officer of the ARB. The report shall include, for all recycled coatings, the total number of gallons distributed in the State during the preceding year, and shall describe the method used by the manufacturer to calculate State distribution. 6.2.6 Bituminous Coatings: Each manufacturer of bituminous roof coatings or bituminous roof primers shall, on or before April 1 of each calendar year beginning with the year 2004, submit an annual report to the Executive Officer of ARB. The report shall specify the number of gallons of bituminous roof coatings or bituminous roof primers sold in the State during the preceding calendar year, and shall describe the method used by the manufacturer to calculate state sales. 6.2.7 Effective on and after January 1, 2011, Sales Data: All sales data listed in Sections 6.2.7.1 to 6.2.7.14	

Requirement Category	SIP Version of Rule 4601 (10/31/01)	Non-SIP Version of Rule 4601 (12/17/09)	Conclusion
		shall be maintained on-site by the responsible official for a minimum of three years. A responsible official from each manufacturer shall upon request of the Executive Officer of the ARB, or his or her delegate, provide data concerning the distribution and sales of architectural coatings. Sales data submitted by the responsible official to the Executive Officer of the ARB may be claimed as confidential, and such information shall be handled in accordance with the procedures specified in Title 17, California Code of Regulations Sections 91000-91022. The responsible official shall within 180 days provide information, including, but not limited to the data listed in Sections 6.2.7.1 through 6.2.7.14: 6.2.7.1 the name and mailing address of the manufacturer; 6.2.7.2 the name, address and telephone number of a contact person; 6.2.7.3 the name of the coating product as it appears on the label and the applicable coating category; 6.2.7.4 whether the product is marketed for interior or exterior use or both; 6.2.7.5 the number of gallons sold in California in containers greater than one liter (1.057 quart) and equal to or less than one liter (1.057 quart); 6.2.7.6 the VOC Actual content and VOC Regulatory content in grams per liter. If thinning is recommended, list the VOC Actual content and VOC Regulatory content after maximum recommended thinning. If containers less than one liter have a different VOC content than containers greater than one liter, list separately. If the coating is a multi-component product, provide the VOC content as mixed or catalyzed; 6.2.7.7 the names and CAS numbers of the VOC constituents in the product; 6.2.7.8 the names and CAS numbers of any compounds in the product specifically exempted from the VOC definition; 6.2.7.9 whether the product is marketed as solvent-borne,	

Requirement Category	SIP Version of Rule 4601 (10/31/01)	Non-SIP Version of Rule 4601 (12/17/09)	Conclusion
		waterborne, or 100% solids; 6.2.7.10 description of resin or binder in the product; 6.2.7.11 whether the coating is a single-component or multi-component product; 6.2.7.12 the density of the product in pounds per gallon; 6.2.7.13 the percent by weight of: solids, all volatile materials, water, and any compounds in the product specifically exempted from the VOC definition; and 6.2.7.14 the percent by volume of: solids, water, and any compounds in the product specifically exempted from the VOC definition.	
	6.3 Test Methods 6.3.1 VOC Content of Coatings: To determine the physical properties of a coating in order to perform the calculations in Section 3.26 and 3.27, the reference method for VOC content is U.S. EPA Method 24, except as provided in Sections 6.3.2 and 6.3.15. An alternative method to determine the VOC content of coatings is SCAQMD Method 304-91 (Revised February 1996), incorporated by reference in Section 6.3.14. The exempt compounds content shall be determined by SCAQMD Method 303-91 (Revised August 1996), incorporated by reference in Section 6.3.12. To determine the VOC content of a coating, the manufacturer may use U.S. EPA Method 24, or an alternative method as provided in Section 6.3.2, formulation data, or any other reasonable means for predicting that the coating has been formulated as intended (e.g., quality assurance checks, recordkeeping). However, if there are any inconsistencies between the results of a Method 24 test and any other means for determining VOC content, the Method 24 test results will govern, except when an alternative method is approved as specified in Section 6.3.2. The District Air Pollution Control Officer (APCO) may require the manufacturer to conduct a Method 24 analysis. 6.3.2 Alternative Test Methods: Other test methods demonstrated to provide results that are	6.3 Test Methods The test methods listed below shall be used to demonstrate compliance with this rule. Alternate equivalent test methods may be used provided the test methods have been approved by the APCO and EPA. 6.3.1 Calculation of VOC Content: For the purpose of determining compliance with the VOC content limits in the Table of Standards 1 or the Table of Standards 2, the VOC content of a coating shall be determined as defined in Section 3.77, 3.78, or 3.79 as appropriate. The VOC content of a tint base shall be determined without colorant that is added after the tint base is manufactured. If the manufacturer does not recommend thinning, the VOC Content must be calculated for the product as supplied. If the manufacturer recommends thinning, the VOC Content must be calculated including the maximum amount of thinning solvent recommended by the manufacturer. If the coating is a multi-component product, the VOC content must be calculated as mixed or catalyzed. If the coating contains silanes, siloxanes, or other ingredients that generate ethanol or other VOC during the curing process, the VOC content must include the VOCs emitted during curing. 6.3.2 VOC Content of Coatings: To determine the physical properties of a coating in order to perform the calculations in Section 3.77 and 3.79, the reference method for VOC content is EPA Method 24, except as provided in Sections 6.3.3 and	**The non-SIP version includes all the requirements of the SIP version. Therefore, the non-SIP version of the rule is more stringent than the SIP version of the rule.**

Requirement Category	SIP Version of Rule 4601 (10/31/01)	Non-SIP Version of Rule 4601 (12/17/09)	Conclusion
	acceptable for purposes of determining compliance with Section 6.3.1, after review and approved in writing by the staffs of the District, the ARB and the U.S. EPA, may also be used. 6.3.3 Methacrylate Traffic Marking Coatings: Analysis of methacrylate multicomponent coatings used as traffic marking coatings shall be conducted according to a modification of U.S. EPA Method 24 (40 CFR 59, subpart D, Appendix A), incorporated by reference in Section 6.3.15. This method has not been approved for methacrylate multicomponent coatings used for other purposes than as traffic marking coatings or for other classes of multicomponent coatings. 6.3.4 Flame Spread Index: The flame spread index of a fire-retardant coating shall be determined by ASTM Designation E 84-99, "Standard Test Method for Surface Burning Characteristics of Building Materials"(see Section 3, Fire-Retardant Coating). 6.3.5 Fire Resistance Rating: The fire resistance rating of a fire-resistive coating shall be determined by ASTM Designation E 119-98, "Standard Test Methods for Fire Tests of Building Construction Materials"(see Section 3, Fire-Resistive Coating). 6.3.6 Gloss Determination: The gloss of a coating shall be determined by ASTM Designation D 523-89 (1999), "Standard Test Method for Specular Gloss"(see Section 3, Flat Coating, Nonflat Coating, Nonflat-High Gloss Coating and Quick-Dry Enamel). 6.3.7 Metal Content of Coatings: The metallic content of a coating shall be determined by SCAQMD Method 318-95, Determination of Weight Percent Elemental Metal in Coatings by X-Ray Diffraction, *SCAQMD Laboratory Methods of Analysis for Enforcement Samples* (see Section 3, Metallic Pigmented Coating). 6.3.8 Acid Content of Coatings: The acid content of a coating shall be determined by ASTM Designation D 1613-96, "Standard Test Method for Acidity in Volatile Solvents and Chemical Intermediates Used in Paint, Varnish, Lacquer and related products"(see Section 3, Pre-	6.3.16. An alternative method to determine the VOC content of coatings is SCAQMD Method 304-91 (Revised February 1996). The exempt compounds content shall be determined by SCAQMD Method 303-91 (Revised 1993), BAAQMD Method 43 (Revised 1996), or BAAQMD Method 41 (Revised 1995), as applicable. To determine the VOC content of a coating, the manufacturer may use EPA Method 24, or an alternative method as provided in Section 6.3.3, formulation data, or any other reasonable means for predicting that the coating has been formulated as intended (e.g., quality assurance checks, recordkeeping). However, if there are any inconsistencies between the results of EPA Method 24 test and any other means for determining VOC content, the EPA Method 24 test results will govern, except when an alternative method is approved as specified in Section 6.3.3. The District Air Pollution Control Officer (APCO) may require the manufacturer to conduct an EPA Method 24 analysis. 6.3.3 Alternative Test Methods: Other test methods demonstrated to provide results that are acceptable for purposes of determining compliance with Section 6.3.2 ~~1~~, after review and approved in writing by the staffs of the District, ARB and EPA, may also be used. 6.3.4 Methacrylate Traffic Marking Coatings: Analysis of methacrylate multicomponent coatings used as traffic marking coatings shall be conducted according to a modification of EPA Method 24 (40 CFR 59, subpart D, Appendix A). This method has not been approved for methacrylate multicomponent coatings used for other purposes than as traffic marking coatings or for other classes of multicomponent coatings. 6.3.5 Flame Spread Index: The flame spread index of a fire-retardant coating shall be determined by ASTM E84-07, "Standard Test Method for Surface Burning Characteristics of Building Materials" (see Section 3.0, Fire-Retardant Coating). 6.3.6 Fire Resistance Rating: The fire resistance rating of a fire-resistive coating shall be determined by ASTM E119-07, "Standard Test Methods for Fire Tests of Building	

Requirement Category	SIP Version of Rule 4601 (10/31/01)	Non-SIP Version of Rule 4601 (12/17/09)	Conclusion
	Treatment Wash Primer). 6.3.9 Drying Times: The set-to-touch, dry-hard, dry-to-touch and dry-to-recoat times of a coating shall be determined by ASTM Designation D 1640-95, "Standard Test Methods for Drying, Curing, or Film Formation of Organic Coatings at Room Temperature" (see Section 3, Quick-Dry Enamel and Quick-Dry Primer, Sealer and Undercoater) The tack-free time of a quickdry enamel coating shall be determined by the Mechanical Test Method of ASTM Designation D 1640-95. 6.3.10 Surface Chalkiness: The chalkiness of a surface shall be determined using ASTM Designation D4214-98, "Standard Test Methods for Evaluating the Degree of Chalking of Exterior Paint Films"(see Section 3, Specialty Primer, Sealer and Undercoater). 6.3.11 Exempt Compounds—Siloxanes: Exempt compounds that are cyclic, branched, or linear completely methylated siloxanes, shall be analyzed as exempt compounds for compliance with Section 6 by BAAQMD Method 43, "Determination of Volatile Methylsiloxanes in Solvent-Based Coatings, Inks, and Related Materials," *BAAQMD Manual of Procedures*, Volume III, adopted 11/6/96 (see Section 3, Volatile Organic Compound, and Section 6.3.1). 6.3.12 Exempt Compounds—Parachlorobenzotrifluoride (PCBTF): The exempt compound parachlorobenzotrifluoride, shall be analyzed as an exempt compound for compliance with Section 6 by BAAQMD Method 41, "Determination of Volatile Organic Compounds in Solvent Based Coatings and Related Materials Containing Parachlorobenzotriflouride," *BAAQMD Manual of Procedures*, Volume III, adopted 12/20/95 (see Section 3, Volatile Organic Compound, and Section 6.3.1). 6.3.13 Exempt Compounds: The content of compounds under U.S. EPA Method 24 shall be analyzed by SCAQMD Method 303-91 (Revised 1996), "Determination of Exempt Compounds," *SCAQMD Laboratory Methods of Analysis for Enforcement Samples* (see	Construction Materials" (see Section 3.0, Fire-Resistive Coating). 6.3.7 Gloss Determination: The gloss of a coating shall be determined by ASTM D523-89 (1999), "Standard Test Method for Specular Gloss" (see Section 3.0, Flat Coating, Nonflat Coating, Nonflat-High Gloss Coating and Quick-Dry Enamel). 6.3.8 Metal Content of Coatings: The metallic content of a coating shall be determined by SCAQMD Method 318-95, Determination of Weight Percent Elemental Metal in Coatings by X-Ray Diffraction, *SCAQMD Laboratory Methods of Analysis for Enforcement Samples* (see Section 3.0, Metallic Pigmented Coating, Aluminum Roof Coating and Faux Finish. 6.3.9 Acid Content of Coatings: The acid content of a coating shall be determined by ASTM D1613-06, "Standard Test Method for Acidity in Volatile Solvents and Chemical Intermediates Used in Paint, Varnish, Lacquer and related products" (see Section 3.0, Pre-Treatment Wash Primer). 6.3.10 Drying Times: The set-to-touch, dry-hard, dry-to-touch and dry-to-recoat times of a coating shall be determined by ASTM D1640-95, "Standard Test Methods for Drying, Curing, or Film Formation of Organic Coatings at Room Temperature" (see Section 3.0, Quick-Dry Enamel and Quick-Dry Primer, Sealer and Undercoater) The tack-free time of a quick-dry enamel coating shall be determined by the Mechanical Test Method of ASTM D1640-95. (Category deleted effective January 1, 2011.) 6.3.11 Surface Chalkiness: The chalkiness of a surface shall be determined using ASTM D4214-98, "Standard Test Methods for Evaluating the Degree of Chalking of Exterior Paint Films"(see Section 3, Specialty Primer, Sealer and Undercoater). (Category deleted effective January 1, 2011.) 6.3.12 Exempt Compounds—Siloxanes: Exempt compounds that are cyclic, branched, or linear completely methylated siloxanes, shall be analyzed as exempt compounds for compliance with Section 6 by BAAQMD Method 43, "Determination of Volatile Methylsiloxanes in Solvent-Based Coatings, Inks, and Related Materials," *BAAQMD Manual of Procedures*, Volume III, adopted	

Requirement Category	SIP Version of Rule 4601 (10/31/01)	Non-SIP Version of Rule 4601 (12/17/09)	Conclusion
	Section 3, Volatile Organic Compound, and Section 6.3.1). 6.3.14 VOC Content of Coatings: The VOC content of a coating shall be determined by U.S. EPA Method 24 as it exists in appendix A of 40 *Code of Federal Regulations* (CFR) part 60, "Determination of Volatile Matter Content, Water Content, Density, Volume Solids and Weight Solids of Surface Coatings"(see Section 6.3.1). 6.3.15 Alternative VOC Content of Coatings: The VOC content of coatings may be analyzed either by U.S. EPA Method 24 or SCAQMD Method 304-91 (Revised 1996), "Determination of Volatile Organic Compounds (VOC) in Various Materials," *SCAQMD Laboratory Methods of Analysis for Enforcement Samples* (see Section 6.3.1). 6.3.16 Methacrylate Traffic Marking Coatings: The VOC content of methacrylate multicomponent coatings used as traffic marking coatings shall be analyzed by the procedures in 40 CFR part 59, subpart D, appendix A, "Determination of Volatile Matter Content of Methacrylate Multicomponent Coatings Used as Traffic Marking Coatings" (September 11, 1998) (see Section 6.3.3).	11/6/96 (see Section 3.0, Volatile Organic Compound, and Section 6.3.2). 6.3.13 Exempt Compounds—Parachlorobenzotrifluoride (PCBTF): The exempt compound parachlorobenzotrifluoride, shall be analyzed as an exempt compound for compliance with Section 6 by BAAQMD Method 41, "Determination of Volatile Organic Compounds in Solvent Based Coatings and Related Materials Containing Parachlorobenzotriflouride," *BAAQMD Manual of Procedures*, Volume III, adopted 12/20/95 (see Section 3.0, Volatile Organic Compound, and Section 6.3.2). 6.3.14 Exempt Compounds: The content of compounds under U.S. EPA Method 24 shall be analyzed by SCAQMD Method 303-91 (Revised 1993), "Determination of Exempt Compounds," *SCAQMD Laboratory Methods of Analysis for Enforcement Samples* (see Section 3.0, Volatile Organic Compound, and Section 6.3.2). 6.3.15 VOC Content of Coatings: The VOC content of a coating shall be determined by EPA Method 24 as it exists in appendix A of 40 *Code of Federal Regulations* (CFR) part 60, "Determination of Volatile Matter Content, Water Content, Density, Volume Solids and Weight Solids of Surface Coatings" (see Section 6.3.2). 6.3.16 Alternative VOC Content of Coatings: The VOC content of coatings may be analyzed either by U.S. EPA Method 24 or SCAQMD Method 304-91 (Revised 1996), "Determination of Volatile Organic Compounds (VOC) in Various Materials," *SCAQMD Laboratory Methods of Analysis for Enforcement Samples.* 6.3.17 Methacrylate Traffic Marking Coatings: The VOC content of methacrylate multicomponent coatings used as traffic marking coatings shall be analyzed by the procedures in 40 CFR part 59, subpart D, appendix A, "Determination of Volatile Matter Content of Methacrylate Multicomponent Coatings Used as Traffic Marking Coatings" (September 11, 1998). 6.3.18 Hydrostatic Pressure for Basement Specialty Coatings: The hydrostatic pressure resistance for	

Requirement Category	SIP Version of Rule 4601 (10/31/01)	Non-SIP Version of Rule 4601 (12/17/09)	Conclusion
		basement specialty coatings shall be analyzed using ASTM D7088-04, "Standard Practice for Resistance to Hydrostatic Pressure for Coatings Used in Below Grade Applications Applied to Masonry". 6.3.19 Tub and Tile Refinish Coating Adhesion: The adhesion of tub and tile coating shall be determined by ASTM D4585-99, "Standard Practice for Testing Water Resistance of Coatings Using Controlled Condensation" and ASTM D3359-02, "Standard Test Methods for Measuring Adhesion by Tape Test". 6.3.20 Tub and Tile Refinish Coating Hardness: The hardness of tub and tile refinish coating shall be determined by ASTM D3363-05, "Standard Test Method for Film Hardness by Pencil Test". 6.3.21 Tub and Tile Refinish Coating Abrasion Resistance: Abrasion resistance of tub and tile refinish coating shall be analyzed by ASTM D4060-07, "Standard Test Methods for Abrasion Resistance of Organic Coatings by the Taber Abraser". 6.3.22 Tub and Tile Refinish Coating Water Resistance: Water resistance of tub and tile refinish coatings shall be determined by ASTM D4585-99, "Standard Practice for Testing Water Resistance of Coatings Using Controlled Condensation" and ASTM D714-02e1, "Standard Test Method for Evaluating Degree of Blistering of Paints". 6.3.23 Waterproofing Membrane: Waterproofing membrane shall be tested by ASTM C836-06, "Standard Specification for High Solids Content, Cold Liquid-Applied Elastomeric Waterproofing Membrane for Use with Separate Wearing Course". 6.3.24 Mold and Mildew Growth for Basement Specialty Coatings: Mold and mildew growth resistance for basement specialty coatings shall be determined by ASTM D3273-00, "Standard Test Method for Resistance to Growth of Mold on the Surface of Interior Coatings in an Environmental Chamber" and ASTM D3274-95, "Standard Test Method for Evaluating Degree of Surface Disfigurement of Paint Films by Microbial (Fungal or Algal) Growth or Soil and Dirt Accumulation". 6.3.25 Reactive Penetrating Sealer Water Repellency: Reactive penetrating sealer water repellency shall be analyzed by ASTM C67-07,	

Requirement Category	SIP Version of Rule 4601 (10/31/01)	Non-SIP Version of Rule 4601 (12/17/09)	Conclusion
		"Standard Test Methods for Sampling and Testing Brick and Structural Clay Tile"; or ASTM C97-02, "Standard Test Methods for Absorption and Bulk Specific Gravity of Dimension Stone"; or ASTM C140-06, "Standard Test Methods for Sampling and Testing Concrete Masonry Units and Related Units". 6.3.26 Reactive Penetrating Sealer Water Vapor Transmission: Reactive penetrating sealer water vapor transmission shall be analyzed ASTM E96/E96M-05, "Standard Test Method for Water Vapor Transmission of Materials". 6.3.27 Reactive Penetrating Sealer - Chloride Screening Applications: Reactive penetrating sealers shall be analyzed by National Cooperative Highway Research Report 244 (1981), "Concrete Sealers for the Protection of Bridge Structures". 6.3.28 Stone Consolidants: Stone consolidants shall be tested using ASTM E2167-01, "Standard Guide for Selection and Use of Stone Consolidants".	
7.0 Compliance Schedule	Persons subject to this rule shall be in compliance with this rule by October 31, 2001.	Persons subject to this rule shall be in compliance with this rule by the dates specified within the rule.	**No change in the requirements, therefore, non-SIP version of rule is as stringent as SIP version.**
8.0 Averaging Compliance Option	8.1 On or after January 1, 2003, in lieu of compliance with the specified limits in the Table of Standards for floor coatings; industrial maintenance coatings; primers, sealers, and undercoaters; quick-dry primers, sealers, and undercoaters; quick-dry enamels; roof coatings; rust preventative coatings; stains; waterproofing sealers, as well as flats and non-flats (excluding recycled coatings), manufacturers may average designated coatings such that their actual cumulative emissions from the averaged coatings are less than or equal to the cumulative emissions that would have been allowed under those limits over a compliance period not to exceed one year. Such manufacturers must also comply with the averaging provisions contained in this Section, as well as maintain and make available for inspection records for at least three years after the end of the compliance period. This Section shall cease to be effective on January 1, 2005, after which		**No change in the requirements, therefore, non-SIP version of rule is as stringent as SIP version.**

Requirement Category	SIP Version of Rule 4601 (10/31/01)	Non-SIP Version of Rule 4601 (12/17/09)	Conclusion
	averaging will no longer be allowed. Per Section 8.1, averaging is no longer applicable. Therefore, Sections 8.2 through 8.14 are not listed.		

C-1234-0-3 - Facilitywide Requirements

Conditions 24 through 26 on the proposed permit to operate ensure compliance with the requirements of this rule. The conditions were revised to cite the correct amendment date for the current version of the rule.

H. District Rule 4623 – Storage of Organic Liquids

District Rule 4623 was last amended on May 19, 2005, and the current version was approved into the SIP on September 13, 2005.

The purpose of this rule is to limit volatile organic compound (VOC) emissions from the storage of organic liquids.

Section 5.1.1 requires that tanks greater than 39,600 gallons in capacity storing liquids with a TVP of 0.5 psia or greater, but less than 11.0 psia, shall be equipped with an internal floating roof, external floating roof, or vapor recovery system. This section also requires that if the TVP of the stored liquid is 11.0 psia or greater, the tank shall be equipped with a vapor recovery system, or a pressure vessel shall be used for storage.

Section 5.3.1.2 states that floating roof tanks shall be equipped with a closure device between the tank shell and roof edge consisting of two seals, one above the other; the one below shall be referred to as the primary seal, and the one above shall be referred to as the secondary seal.

Section 5.3.1.3 states that the floating roof shall be floating 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 processes of filling or emptying and refilling the tank shall be continuous and shall be accomplished as rapidly as possible. Whenever the operator intends to land the roof on its legs, an operator 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 the operator may land the roof on its legs.

Section 5.3.2.1.1 requires that for welded tanks with primary metallic-shoe type seals: (a) no gap between the tank shell and the primary seal shall exceed one and one half (1-1/2) inches; (b) the cumulative length of all gaps between the tank shell and the primary seal greater than one-half (1/2) inch shall not exceed ten (10) percent of the circumference of the tank; (c) the cumulative length of all primary seal gaps greater than one-eighth (1/8) inch shall not exceed 30 percent of the tank circumference; and (d) no continuous gap greater than one-eighth (1/8) inch shall exceed ten (10) percent of the tank circumference.

Section 5.3.2.1.2 requires that: (a) no gap between the tank shell and the secondary seal shall exceed one-half (1/2) inch; and (b) the cumulative length of all gaps between the tank shell and the secondary seal, greater than one-eighth (1/8) inch shall not exceed five (5) percent of the tank circumference.

Section 5.3.2.1.4 requires that the geometry of the metallic-shoe type seal shall be such that the maximum gap between the shoe and the tank shell is no greater than double the gap allowed by the seal gap criteria specified in Section 5.3.2.1.1 for a length of at least 18 inches in the vertical plane above the liquid surface.

Section 5.3.2.1.5 requires that 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.

Section 5.3.2.1.6 requires that the secondary seal shall allow easy insertion of probes up to one and one-half (1-1/2) inches in width in order to measure gaps in the primary seal.

Section 5.3.2.1.7 requires that the secondary seal shall extend from the roof to the tank shell and shall not be attached to the primary seal.

Section 5.4.1 requires that internal floating roof tanks shall be equipped with seals that meet the criteria set forth in Section 5.3, except that, instead of the requirement specified in section 5.3.2.1.3, the metallic-shoe type seals 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 18 inches above the stored liquid surface.

Section 5.5.1 requires that all openings in the roof used for sampling or gauging, except pressure-vacuum valves complying with Section 5.2, 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. The cover, seal, or lid shall at all times be in a closed position, with no visible gaps and leak-free, except when the device or appurtenance is in use for sampling or gauging.

Section 5.5.2.1.1 requires that each opening in a non-contact internal floating roof except for automatic bleeder vents (vacuum breaker vents) and rim space vents shall provide a projection below the liquid surface.

Section 5.5.2.1.2 requires that each opening in the internal floating roof except for leg sleeves, automatic bleeder vents, rim space vents, column wells, ladder wells, sample wells, combination manway/vacuum breakers, and stub drains shall be equipped with a cover, or a lid shall be maintained in a closed position at all times (i.e., no visible gap) except when the device is in use. The cover or lid shall be equipped with a gasket. Covers on each access hatch and automatic gauge float well shall be bolted in place except when they are in use.

Section 5.5.2.1.3 requires that 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 leg roof supports.

Section 5.5.2.1.4 requires that rim vents shall be equipped with a gasket and shall be set to open only when the internal floating roof is not floating or set to open at the manufacturer's recommended setting.

Section 5.5.2.1.5 requires that each penetration of the internal floating roof for the purpose of sampling shall be a sample well. The well shall have a slit fabric cover that covers at least 90 percent of the opening. The fabric cover must be impermeable.

Section 5.5.2.1.6 requires that each penetration of the internal floating roof that allows for passage of a column supporting the fixed roof shall have a flexible fabric sleeve seal or a gasketed sliding cover. The fabric sleeve must be impermeable.

Section 5.5.2.3.1 requires that solid sampling or gauging wells and similar fixed projections through a floating roof such as an anti-rotational pipe shall provide a projection below the liquid surface.

Section 5.5.2.3.2 requires that the solid sampling or gauging wells 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.

Section 5.5.2.3.3 requires that the gap between the pole wiper and the guidepole shall be added to the gaps measured to determine compliance with the secondary seal requirement, and in no case shall exceed one-half (1/2) inch.

Section 5.5.2.4.2 requires that slotted guidepole wells 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 one-eighth (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.

Section 5.5.2.4.3 requires that 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 one-eighth (1/8) inch.

Section 6.1.1 requires that the operator of internal floating roof tanks shall make the primary seal envelope available for unobstructed inspection by the APCO on an annual basis at a minimum of four (4) locations. 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.

Section 6.1.2 requires that 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.

Section 6.1.4.1 requires that for newly constructed, repaired, or rebuilt internal floating roof tanks, the operator shall visually inspect the internal floating roof and its appurtenant parts, fittings, etc., and measure the gaps of the primary seal and/or secondary seal prior to filling the tank. If there are holes, tears, or other openings in the primary seal, the secondary seal, or the seal fabric or defects in the internal floating roof or its appurtenant parts, components, fittings, etc., the operator shall repair the defects before filling the tank.

Section 6.1.4.2 requires that the operator shall visually inspect, through the manholes, roof hatches, or other openings on the fixed roof, the internal floating roof and its appurtenant parts, fittings, etc., and the primary seal and/or secondary seal at least once every 12 months after the tank is initially filled with an organic liquid. There should be no visible organic liquid on the roof, tank walls, or anywhere. Other than the gap criteria specified by this

rule, no holes, tears, or other openings are allowed that would permit the escape of hydrocarbon vapors. Any defects found are violations of this rule.

Section 6.1.4.3 requires that the operator shall conduct actual gap measurements of the primary seal and/or secondary seal at least once every 60 months. Other than the gap criteria specified by this rule, no holes, tears, or other openings are allowed that would permit the escape of hydrocarbon vapors. Any defects found shall constitute a violation of this rule.

Section 6.3 requires that an operator shall retain accurate records required by this rule for a period of five years, and that records shall be made available to the APCO upon request, except for certain records that need to be submitted as specified in the respective sections of the rule.

Section 6.3.5 requires that 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 on the tank in order to comply with rule 4623 and the date(s) such actions were taken.

Section 6.3.7 requires that the permittee shall maintain the records of the internal 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.

In addition, the applicant has proposed that the requirements of District Rule

4623 be streamlined with those of 40 CFR 60 Subpart Ka and 40 CFR 60 Subpart Kb, where applicable. Permit units C-1234-6 and C-1234-7 are subject to Subpart Ka, and permit unit C-1234-13 is subject to Subpart Kb. The detailed streamlining analyses are included in Attachments F and G.

The applicant has also requested various minor revisions to District Rule 4623 permit conditions.

Changes to permit conditions are discussed below. Condition text in strikethrough has been removed, whereas text in bold has been inserted:

a. C-1234-4-9 - 10,836,000 GALLON (258,000 BBL) WELDED CRUDE OIL STORAGE TANK #CH7 EQUIPPED WITH EXTERNAL FLOATING ROOF WITH PRIMARY METALLIC SHOE SEALS AND SECONDARY SEALS, TRUCK UNLOADING RACK #2 WITH PUMP AND TRUCK UNLOADING RACK #1, EAST AND WEST

   For this permit unit, compliance with the requirements of District Rule 4623 is ensured by conditions 10, 11, 13, 14 through 45, 48 through 50, 52, and 53 on the proposed renewed permit.

   Condition 45 has been revised to remove reference to section 5.4.3, which is not applicable to this permit unit.

b. C-1234-5-7 – 10,836,000 GALLON (258,000 BBL) WELDED CRUDE OIL STORAGE TANK #CH8 EQUIPPED WITH EXTERNAL FLOATING ROOF WITH PRIMARY METALLIC SHOE SEAL AND SECONDARY SEALS

   For this permit unit, compliance with the requirements of District Rule 4623 is ensured by conditions 2, 3, 5 through 37, 41, 42, 44, and 45 on the proposed renewed permit.

   Condition 37 has been revised to remove reference to section 5.4.3, which is not applicable to this permit unit.

c. C-1234-6-7 – 10,800,000 GALLON WELDED CRUDE OIL STORAGE TANK #CH12 EQUIPPED WITH EXTERNAL FLOATING ROOF WITH PRIMARY METALLIC SHOE SEAL AND SERRATED MULTI-FINGERED SECONDARY SEAL

   For this permit unit, compliance with the requirements of District Rule 4623 and 40 CFR 60 Subpart Ka is ensured by conditions 2 through 4, 7 through 38, 41 through 48, 50 and 51 on the proposed renewed permit.

Condition 2 has been revised to add the applicable Subpart Ka citation.

Condition 3 has been revised to remove reference to Subpart Ka, since the revised condition will be applicable only under District Rule 4623.

A new condition (# 4 on renewed PTO) has been added to enforce the TVP exemption level applicable under Subpart Ka.

Condition 4 (# 5 on the renewed PTO) has been revised to remove reference to Subpart Ka, since the revised condition will be applicable only under District Rule 4623.

A new condition (# 6 on renewed PTO) has been added to enforce Subpart Ka requirements for the transition from exempt liquids to liquids above the exemption threshold.

Condition 6 (#8 on renewed PTO) has been revised as follows:

> 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~~; 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, 5.3.1 and 40 CFR 60.112a(a)(1)] Y

Condition 8 (#10 on renewed PTO) has been revised as follows:

> Primary seal (lower seal) shall be a metallic shoe seal~~, a liquid-mounted seal, or a vapor-mounted seal~~. [**District Rule 2080 and** 40 CFR 60.112a(a)(1)(i)] Y

Conditions 9 through 12 have been combined into a single condition (#11 on draft PTO).

Conditions 13 and 15 have been combined into a single condition (#18 on renewed PTO). The text from condition 13 was revised as follows:

> ~~If the secondary seal is used in combination with a metallic shoe or liquid-mounted primary seal, accumulated area of gaps between tank wall and the secondary seal shall not exceed 1.0 in2 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)~~] Y

Condition 14 (# 15 on renewed PTO) has been revised as follows:

The owner or operator **is** ~~shall be~~ exempt**ed** from the requirements for secondary seals and the secondary seal gap criteria when performing gap measurements or inspections of the primary seal. [40 CFR 60.112a(a)(1)(ii)~~(D)~~] Y

Condition 16 (# 12 on renewed PTO) has been revised as follows:

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)~~(i)(C)~~] Y

Condition 18 (#14 on renewed PTO) has been revised as follows:

The secondary seal is to be installed above the primary seal so that it completely covers the space between the roof edge and the tank wall. 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)~~(B)~~] Y

Condition 39 (# 37 on renewed PTO) has been revised as follows:

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 ~~(Amended December 20, 2001)~~, Sections 5.2 through 5.5. **The reports shall identify the vessels and contain the dates of the measurements, raw data obtained in the measurement process, all such gap calculations as required by this permit, and the schedule for corrective action(s) to be made.** 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 **4623 (Amended May 19, 2005) and 40 CFR 60 Subpart Ka**~~, 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 **and 40 CFR 60.113a(a)(i)(E)**] Y

Condition 46 has been deleted because its requirements have been subsumed by condition 37 on the draft PTO.

d. C-1234-7-5 – 10,800,000 GALLON WELDED STORAGE TANK #CH13 EQUIPPED WITH EXTERNAL FLOATING ROOF WITH PRIMARY METALLIC SHOE SEAL AND WIPER TYPE SECONDARY SEAL

For this permit unit, compliance with the requirements of District Rule 4623 and 40 CFR 60 Subpart Ka is ensured by conditions 2 through 4, 7 through 38, 41 through 48, 50 and 51 on the proposed renewed permit.

Condition 2 has been revised to add the applicable Subpart Ka citation.

Two new conditions (# 3 and # 5 on the renewed PTO) for provisions related to storage of exempt liquids have been added.

Condition 3 (#8 on renewed PTO) has been revised as follows:

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~~; 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, 5.3.1 and 40 CFR 60.112a(a)(1)] Y

Condition 5 (#10 on renewed PTO) has been revised as follows:

Primary seal (lower seal) shall be a metallic shoe seal~~, a liquid-mounted seal, or a vapor-mounted seal~~. [**District Rule 2080 and** 40 CFR 60.112a(a)(1)(i)] Y

Conditions 6 through 9 have been combined into a single condition (#11 on renewed PTO).

Conditions 10 and 12 have been combined into a single condition (#18 on renewed PTO). The text from condition 13 was revised as follows:

~~If the secondary seal is used in combination with a metallic shoe or liquid-mounted primary seal, accumulated area of gaps between tank wall and the secondary seal shall not exceed 1.0 in2 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)~~] Y

Condition 11 (# 15 on renewed PTO) has been revised as follows:

The owner or operator **is** ~~shall be~~ exempt**ed** from the requirements for secondary seals and the secondary seal gap criteria when performing gap measurements or inspections of the primary seal. [40 CFR 60.112a(a)(1)(ii)~~(D)~~] Y

Condition 13 (# 12 on renewed PTO) has been revised as follows:

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)~~(i)(C)~~] Y

Condition 15 (#14 on renewed PTO) has been revised as follows:

The secondary seal is to be installed above the primary seal so that it completely covers the space between the roof edge and the tank wall. 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)~~(B)~~] Y

Condition 35 (# 37 on renewed PTO) has been revised as follows:

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 ~~(Amended December 20, 2001)~~, Sections 5.2 through 5.5. **The reports shall identify the vessels and contain the dates of the measurements, raw data obtained in the measurement process, all such gap calculations as required by this permit, and the schedule for corrective action(s) to be made.** 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 **4623 (Amended May 19, 2005) and 40 CFR 60 Subpart Ka**~~, 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 **and 40 CFR 60.113a(a)(i)(E)**] Y

Condition 42 has been deleted because its requirements have been subsumed by condition 37 on the draft PTO.

Condition 43 (#44 on renewed PTO) has been revised as follows:

When the unit is storing organic liquids with true vapor pressure less than 0.5 psia and is exempted from Sections 5.3, 5.5, and 6.1 of District Rule 4623 (Amended May 19, 2005), permittee shall conduct True Vapor Pressure (TVP) testing of the organic liquid **stored in this tank at least once every 24 months during summer (July - September), and/or** whenever there is a change in the source or type of organic liquid stored in this tank **in order to maintain exemption from control requirements of District Rule 4623**. [District Rules 2520, 9.3.2 **and 4623, 6.2.2**] Y

Condition 49 (# 4 on the renewed PTO) has been revised as follows:

When storing ~~applicable~~ organic liquids with true vapor pressure less than 1.5 psia ~~as measured on a quarterly basis using vapor pressure test methods described in this permit~~, the requirements of 40 CFR 60 Subpart Ka shall not apply to this unit. This exemption applies to all conditions in this permit referencing only 40 CFR 60 Subpart Ka. [~~District Rule 2520, 9.3.2 and~~ 40 CFR 60.112a(a)] Y

Condition 50 is now condition 6 on the renewed PTO.

Condition 51 (# 7 on the renewed PTO) has been revised as follows:

Within one week after switching from storage of organic liquids with TVP greater than or equal to **0.5** ~~1.5~~ psia to storage of organic liquids with TVP less than **0.5** ~~1.5~~ psia, the TVP of the organic liquid shall be determined in accordance with the test methods approved in this permit or an equivalent method approved by the APCO, ARB, and EPA. [District Rules 2520, 9.3.2 and 4623, 6.4] Y

e. C-1234-12-3 – 3,360,000 GALLON (80,000 BBL) FIXED ROOF STORAGE TANK #80GC11, 114.5' DIAMETER X 30' HEIGHT, EMERGENCY STANDBY USE ONLY

For this permit unit, compliance with the preceding requirements for floating roofs is ensured by conditions 1 through 6 on the renewed permit.

f. C-1234-13-6 – 5,040,000 GALLON (120,000 BBL) WELDED CRUDE OIL STORAGE TANK #120CH-14 EQUIPPED WITH EXTERNAL FLOATING ROOF WITH PRIMARY METALLIC SHOE SEAL AND WIPER TYPE SECONDARY SEAL

For this permit unit, compliance with the requirements of District Rule 4623 and 40 CFR 60 Subpart Kb is ensured by conditions 1, 6, 7, 10 through 17, 19 through 43, 45, 47 through 59, and 61 through 65 on the proposed renewed permit.

Condition 1 has been revised to add the applicable Subpart Kb citation.

Condition 6 has been revised to remove reference to Subpart Kb, since the revised condition will be applicable only under District Rule 4623.

A new condition (# 7 on renewed PTO) has been added to enforce the TVP exemption level applicable under Subpart Kb.

Condition 7 (# 8 on the renewed PTO) has been revised to remove reference to Subpart Kb, since the revised condition will be applicable only under District Rule 4623.

A new condition (# 9 on renewed PTO) has been added to enforce Subpart Kb requirements for the transition from exempt liquids to liquids above the exemption threshold.

Condition 9 (#11 on renewed PTO) has been revised as follows:

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~~; 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, 5.3.1 and 40 CFR 60.112b(a)(2)~~ & (a)(2)(i)~~] Y

Condition 11 (#13 on renewed PTO) has been revised as follows:

Primary seal (lower seal) shall be ~~either~~ a ~~mechanical~~ metallic shoe seal~~, a liquid-mounted seal, or a vapor-mounted seal~~. [**District Rule 2080 and** 40CFR 60.112b(a)(2)~~(i) and 60.112b(a)(2)(i)(A)~~] Y

Conditions 12 through 16 have been combined into a single condition (#14 on renewed PTO).

Conditions 17 and 18 have been combined into a single condition (#21 on renewed PTO). The text from condition 17 was revised as follows:

~~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~~)~~. [District Rule 4623, 5.3.2.1~~.2~~ and 40 CFR 60.113b(b~~)(4)(ii)(B)~~] Y

Condition 19 (# 15 on renewed PTO) has been revised to add the applicable Subpart Kb citation.

Condition 21 (#17 on renewed PTO) has been revised as follows:

The secondary seal is to be installed above the primary seal so that it completely covers the space between the roof edge and the tank wall. 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(a~~b~~)(2 ~~4)(ii)(C)~~] Y

A new condition (#18 on renewed PTO) has been added to provide an exemption from secondary seal requirements during primary seal inspections.

Two new conditions (#32 and #33 on renewed PTO) have been added to address solid guidepole requirements.

Condition 42 (# 41 on renewed PTO) has been revised as follows:

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 ~~(Amended December 20, 2001)~~, Sections 5.2 through 5.5. **The reports shall identify the vessels and contain the dates of the measurements, raw data obtained in the measurement process, all such gap calculations as required by this permit, and the schedule for corrective action(s) to be made.** 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 **4623 (Amended May 19, 2005) and 40 CFR 60 Subpart Kb**~~, 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 **and 40CFR 60.115b(b)(4)**] Y

Conditions 52 and 53 have been deleted because their requirements have been subsumed by condition 41 on the draft PTO.

I. District Rule 4702, Internal Combustion Engines – Phase 2

District rule 4702 was most recently amended on August 11, 2011. Pursuant to the stringency analysis included in Attachment E, each amended section of the non-SIP version of the rule is at least as stringent as, or more stringent than the corresponding section of the SIP version of the rule. Therefore, it is concluded that overall the non-SIP version of the rule is more stringent than the SIP version of the rule.

Section 4.2 provides that, except for the requirements of Sections 5.9 and 6.2.3, the requirements of this rule shall not apply to an emergency standby engine or a low-use engine, provided that the engine is operated with an operating nonresettable elapsed time meter. In lieu of operating a nonresettable elapsed time meter, the operator may use an alternative

device, method, or technique, in determining operating time, provided that the alternative is approved by the APCO and EPA and is allowed by the Permit-to-Operate or Permit-Exempt Equipment Registration. The operator must demonstrate that the alternative device, method, or technique is equivalent to using a nonresettable elapsed time meter. The operator shall properly maintain and operate the nonresettable elapsed time meter or alternative device in accordance with the manufacturer's instructions.

Section 4.3 provides that except for the administrative requirements of section 6.2.3, the requirements of this rule shall not apply to an engine that is: (a) operated exclusively to preserve or protect property, human life, or public health during a disaster or state of emergency, such as a fire or flood; (b) except for operations associated with (a), limited to operate no more than 100 hours per calendar year as determined by an operational nonresettable elapsed operating time meter, for periodic maintenance, periodic readiness testing, and readiness testing during and after repair work of the engine, and (c) operated with a nonresettable elapsed operating time meter. In lieu of installing a nonresettable time meter, the owner of an engine may use an alternative device, method, or technique, in determining operating time provided that the alternative is approved by the APCO. The owner of the engine shall properly maintain and operate the time meter or alternative device in accordance with the manufacturer's instructions.

Section 5.9.2 requires the operator to properly operate and maintain each engine as recommended by the engine manufacturer or emission control system supplier, monitor the operational characteristics of each engine as recommended by the engine manufacturer or emission control system supplier, and install and operate a nonresettable elapsed time meter or an APCO-approved alternative.

Section 6.2.3 requires that an owner claiming an exemption under section 4.3 shall maintain annual operating records. This information shall be retained for at least five years, shall be readily available, and provided to the APCO upon request. The records shall include, but are not limited to, the following: total hours of operation, the type of fuel used, the purpose for operating the engine, for emergency standby engines, all hours of non-emergency and emergency operation shall be reported, and other support documentation necessary to demonstrate claim to the exemption.

a. C-1234-10-5 – 465 BHP CUMMINS MODEL NTTA-855G DIESEL-FIRED EMERGENCY STANDBY IC ENGINE POWERING AN ELECTRICAL GENERATOR

For this permit unit, compliance with the preceding requirements is ensured by conditions 2, 3, and 5 through 8 on the renewed permit.

b. C-1234-11-5 – 213 BHP CATERPILLAR MODEL 3306 DIESEL-FIRED EMERGENCY IC ENGINE POWERING A FIREWATER PUMP

For this permit unit, compliance with the preceding requirements is ensured by conditions 3, 4, 6, and 7 on the renewed permit.

J. District Rule 8011 – General Requirements

The purpose of Regulation VIII (Fugitive PM10 Prohibitions) is to reduce ambient concentrations of fine particulate matter (PM10) by requiring actions to prevent, reduce or mitigate anthropogenic fugitive dust emissions. The rules contained in this regulation have been developed pursuant to United States Environmental Protection Agency guidance for Serious PM10 Nonattainment Areas. The rules are applicable to specified anthropogenic fugitive dust sources. Fugitive dust contains PM10 and particles larger than PM10. Controlling fugitive dust missions when visible emissions are detected will not prevent all PM10 emissions, but will substantially reduce PM10 emissions.

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

C-1234-0-3 – Facilitywide Requirements

For this permit unit, conditions 30 through 35 on the renewed permit to operate ensure compliance with the updated requirements.

K. District Rule 8021 – Construction, Demolition, Excavation, Extraction, and Other Earthmoving Activities

The purpose of this rule is to limit fugitive dust emissions from construction, demolition, excavation, extraction, and other earthmoving activities.

This rule applies to any construction, demolition, excavation, extraction, and other earthmoving activities, including, but not limited to, land clearing, grubbing, scraping, travel on site, and travel on access roads to and from the site. This rule also applies to the construction of new landfill disposal sites or modification to existing landfill disposal sites prior to commencement of landfilling activities.

Section 5.0 requires that no person shall perform any construction, demolition, excavation, extraction, or other earthmoving activities unless the appropriate requirements in sections 5.1 and 5.2 are sufficiently implemented to limit VDE to 20% opacity. In addition to the requirements of this rule, a person shall comply with all other applicable requirements of Regulation VIII.

C-1234-0-3 – Facilitywide Requirements

For this permit unit, condition 30 on the renewed permit to operate ensures compliance with the updated requirements.

L. District Rule 8031 – Bulk Materials

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

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

Section 5.0 requires that no person shall perform any outdoor handling, storage, and transport of bulk materials unless the appropriate requirements in Table 8031-1 of this rule are sufficiently implemented to limit VDE to 20% opacity or to comply with the conditions for a stabilized surface as defined in Rule 8011. In addition to the requirements of this rule, a person shall comply with all other applicable requirements of Regulation VIII.

C-1234-0-3 – Facilitywide Requirements

For this permit unit, condition 31 on the renewed permit to operate ensures cornpliance with the updated requirements.

M. District Rule 8041 – Carryout and Trackout

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

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

Section 5.0 requires that an owner/operator shall sufficiently prevent or cleanup carryout and trackout as specified in sections 5.1 through 5.8. In addition to the requirements of this rule, a person shall comply with all other applicable requirements of Regulation VIII. The use of blower devices, or dry rotary brushes or brooms, for removal of carryout and trackout on public roads is expressly prohibited. The removal of carryout and trackout from paved public roads does not exempt an owner/operator from obtaining state or local agency permits which may be required for the cleanup of mud and dirt on paved public roads.

C-1234-0-3 – Facilitywide Requirements

For this permit unit, condition 32 on the renewed permit to operate ensures compliance with the updated requirements.

N. District Rule 8051 – Open Areas

The purpose of this rule is to limit fugitive dust emissions from open areas. This rule applies to any open area having 3.0 acres or more of disturbed surface area that has remained undeveloped, unoccupied, unused, or vacant for more than seven days.

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

C-1234-0-3 – Facilitywide Requirements

For this permit unit, condition 33 on the proposed renewed permit to operate ensures compliance with the updated requirements.

O. District Rule 8061 – Paved and Unpaved Roads

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

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

The following permit conditions, which are based on the requirements of this rule, have been modified as follows:

C-1234-0-3 – Facilitywide Requirements

For this permit unit, condition 34 on the renewed permit to operate ensures compliance with the updated requirements.

P. District Rule 8071 – Unpaved Vehicle/Equipment Traffic Area

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

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

C-1234-0-3 – Facilitywide Requirements

For this permit unit, condition 35 on the renewed permit to operate ensures compliance with the updated requirements.

Q. 40 CFR Part 61, Subpart M – National Emission Standard for Asbestos

These regulations apply to demolition or renovation activity, as defined in 40 CFR 61.141. 40 CFR Section 61.150 of this Subpart was amended September 18, 2003.

C-1234-0-3 – Facilitywide Requirements

Condition 36 on the renewed permit to operate ensures compliance with this requirement.

R. 40 CFR Part 82, Subparts B and F – Stratospheric Ozone

These regulations apply to servicing motor vehicles when this service involves the ozone-depleting refrigerant in the motor vehicle air conditioner (MVAC). Sections of this regulation were amended in 2007 and 2008.

C-1234-0-3 – Facilitywide Requirements

Conditions 28 and 29 on the renewed permit to operate ensure compliance with these requirements.

S. 40 CFR Part 64 – Compliance Assurance Monitoring

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

1) the unit must have an emission limit for the pollutant;

2) the unit must have add-on controls for the pollutant (devices such as flue gas recirculation (FGR), baghouses, and catalytic oxidizers); and

3) the unit must have a pre-control potential to emit of greater than the major source thresholds.

a. C-1234-2-4 - DORMANT 25.5 MMBTU/HR NATIONAL OIL HEATER #2, WITH NORTH AMERICAN MODEL 5131HCRF BURNER

This unit not subject to CAM because it does not have any add-on controls for any pollutant.

b. C-1234-3-4 – DORMANT 37.5 MMBTU/HR NATIONAL OIL HEATER #3 WITH NORTH AMERICAN MODEL 513HCRG BURNER

This unit not subject to CAM because it does not have any add-on controls for any pollutant.

c. C-1234-4-9 – 10,836,000 GALLON (258,000 BBL) WELDED CRUDE OIL STORAGE TANK #CH7 EQUIPPED WITH EXTERNAL FLOATING ROOF WITH PRIMARY METALLIC SHOE SEALS AND SECONDARY SEALS, TRUCK UNLOADING RACK #2 WITH PUMP AND TRUCK UNLOADING RACK #1, EAST AND WEST

This unit not subject to CAM because it does not have any add-on controls for any pollutant

d. C-1234-5-7 – 10,836,000 GALLON (258,000 BBL) WELDED CRUDE OIL STORAGE TANK #CH8 EQUIPPED WITH EXTERNAL FLOATING ROOF WITH PRIMARY METALLIC SHOE SEAL AND SECONDARY SEALS

This unit not subject to CAM because it does not have any add-on controls for any pollutant

e. C-1234-6-7 – 10,800,000 GALLON WELDED CRUDE OIL STORAGE TANK #CH12 EQUIPPED WITH EXTERNAL FLOATING ROOF WITH

PRIMARY METALLIC SHOE SEAL AND SERRATED MULTI-FINGERED SECONDARY SEAL

This unit not subject to CAM because it does not have any add-on controls for any pollutant

f. C-1234-7-5 – 10,800,000 GALLON WELDED STORAGE TANK #CH13 EQUIPPED WITH EXTERNAL FLOATING ROOF WITH PRIMARY METALLIC SHOE SEAL AND WIPER TYPE SECONDARY SEAL

This unit not subject to CAM because it does not have any add-on controls for any pollutant

g. C-1234-10-5 – 465 BHP CUMMINS MODEL NTTA-855G DIESEL-FIRED EMERGENCY STANDBY IC ENGINE POWERING AN ELECTRICAL GENERATOR

This unit not subject to CAM because it does not have any add-on controls for any pollutant.

h. C-1234-11-5 – 213 BHP CATERPILLAR MODEL 3306 DIESEL-FIRED EMERGENCY IC ENGINE POWERING A FIREWATER PUMP

This unit not subject to CAM because it does not have any add-on controls for any pollutant.

i. C-1234-12-3 – 3,360,000 GALLON (80,000 BBL) FIXED ROOF STORAGE TANK #80GC11, 114.5' DIAMETER X 30' HEIGHT, EMERGENCY STANDBY USE ONLY

This unit not subject to CAM because it does not have any add-on controls for any pollutant

j. C-1234-13-6 – 5,040,000 GALLON (120,000 BBL) WELDED CRUDE OIL STORAGE TANK #120CH-14 EQUIPPED WITH EXTERNAL FLOATING ROOF WITH PRIMARY METALLIC SHOE SEAL AND WIPER TYPE SECONDARY SEAL

This unit not subject to CAM because it does not have any add-on controls for any pollutant

IX. PERMIT SHIELD

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

The permit shields are included in conditions 40 and 41 of permit unit C-1234-0-3; condition 52 of permit unit C-1234-6-7; conditions 52 and 53 of permit unit C-1234-7-5; condition 10 of permit unit C-1234-10-5; condition 2 of permit unit c-1234-11-5; and conditions 66 and 67 of permit unit C-1234-13-6.

X. PERMIT CONDITIONS

See Attachment A – Renewed Title V Operating Permit.

XI. ATTACHMENTS

A. Renewed Title V Operating Permit
B. Previous Title V Operating Permit
C. Detailed Facility List
D. District Rule 4601 Tables of Standards
E. District Rule 4702 Stringency Analysis
F. Streamlining Analysis for District Rule 4623 And 40 CFR 60 Subpart Ka
G. Streamlining Analysis for District Rule 4623 And 40 CFR 60 Subpart Kb
H. Comments

Shell Pipeline Company LP
C-1234
C-1082670

ATTACHMENT A

Renewed Title V Operating Permit

San Joaquin Valley
AIR POLLUTION CONTROL DISTRICT

HEALTHY AIR LIVING™

Permit to Operate

FACILITY: C-1234 **EXPIRATION DATE:** 04/30/2016

LEGAL OWNER OR OPERATOR: SHELL PIPELINE COMPANY LP
MAILING ADDRESS: 20945 S WILMINGTON AVE
CARSON, CA 90810-1039

FACILITY LOCATION: COALINGA PUMP STATION
37509 OIL CITY RD
COALINGA, CA 93210

FACILITY DESCRIPTION: PETROLEUM TRANSPORTATION

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

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

Seyed Sadredin
Executive Director / APCO

David Warner
Director of Permit Services

Jan 9 2012 11.05AM – AIYABEIJ

San Joaquin Valley
Air Pollution Control District

FACILITY: C-1234-0-3 **EXPIRATION DATE:** 04/30/2016

FACILITY-WIDE REQUIREMENTS

1. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
2. The owner or operator shall notify the District of any breakdown condition as soon as reasonably possible, but no later than one hour after its detection, unless the owner or operator demonstrates to the District's satisfaction that the longer reporting period was necessary. [District Rule 1100, 6.1; County Rules 110 (Fresno, Stanislaus, San Joaquin); 109 (Merced); 113 (Madera); and 111 (Kern, Tulare, Kings)] Federally Enforceable Through Title V Permit
3. The District shall be notified in writing within ten days following the correction of any breakdown condition. The breakdown notification shall include a description of the equipment malfunction or failure, the date and cause of the initial failure, the estimated emissions in excess of those allowed, and the methods utilized to restore normal operations. [District Rule 1100, 7.0; County Rules 110 (Fresno, Stanislaus, San Joaquin); 109 (Merced); 113 (Madera); and 111 (Kern, Tulare, Kings)] Federally Enforceable Through Title V Permit
4. The owner or operator of any stationary source operation that emits more than 25 tons per year of nitrogen oxides or reactive organic compounds, shall provide the District annually with a written statement in such form and at such time as the District prescribes, showing actual emissions of nitrogen oxides and reactive organic compounds from that source. [District Rule 1160, 5.0] Federally Enforceable Through Title V Permit
5. Any person building, altering or replacing any operation, article, machine, equipment, or other contrivance, the use of which may cause the issuance of air contaminants or the use of which may eliminate, reduce, or control the issuance of air contaminants, shall first obtain an Authority to Construct (ATC) from the District unless exempted by District Rule 2020 (12/20/07). [District Rule 2010, 3.0 and 4.0; and 2020] Federally Enforceable Through Title V Permit
6. The permittee must comply with all conditions of the permit including permit revisions originated by the District. All terms and conditions of a permit that are required pursuant to the Clean Air Act (CAA), including provisions to limit potential to emit, are enforceable by the EPA and Citizens under the CAA. Any permit noncompliance constitutes a violation of the CAA and the District Rules and Regulations, and is grounds for enforcement action, for permit termination, revocation, reopening and reissuance, or modification; or for denial of a permit renewal application. [District Rules 2070, 7.0; 2080; and 2520, 9.9.1 and 9.13.1] Federally Enforceable Through Title V Permit
7. A Permit to Operate or an Authority to Construct shall not be transferred unless a new application is filed with and approved by the District. [District Rule 2031] Federally Enforceable Through Title V Permit
8. Every application for a permit required under Rule 2010 (12/17/92) shall be filed in a manner and form prescribed by the District. [District Rule 2040] Federally Enforceable Through Title V Permit
9. The operator shall maintain records of required monitoring that include: 1) the date, place, and time of sampling or measurement; 2) the date(s) analyses were performed; 3) the company or entity that performed the analysis; 4) the analytical techniques or methods used; 5) the results of such analysis; and 6) the operating conditions at the time of sampling or measurement. [District Rule 2520, 9.4.1] Federally Enforceable Through Title V Permit
10. The operator shall retain records of all required monitoring data and support information for a period of at least 5 years from the date of the monitoring sample, measurement, or report. Support information includes copies of all reports required by the permit and, for continuous monitoring instrumentation, all calibration and maintenance records and all original strip-chart recordings. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

FACILITY-WIDE REQUIREMENTS CONTINUE ON NEXT PAGE

11. The operator shall submit reports of any required monitoring at least every six months unless a different frequency is required by an applicable requirement. All instances of deviations from permit requirements must be clearly identified in such reports. [District Rule 2520, 9.5.1] Federally Enforceable Through Title V Permit

12. Deviations from permit conditions must be promptly reported, including deviations attributable to upset conditions, as defined in the permit. For the purpose of this condition, promptly means as soon as reasonably possible, but no later than 10 days after detection. The report shall include the probable cause of such deviations, and any corrective actions or preventive measures taken. All required reports must be certified by a responsible official consistent with section 10.0 of District Rule 2520 (6/21/01). [District Rules 2520, 9.5.2 and 1100, 7.0] Federally Enforceable Through Title V Permit

13. If for any reason a permit requirement or condition is being challenged for its constitutionality or validity by a court of competent jurisdiction, the outcome of such challenge shall not affect or invalidate the remainder of the conditions or requirements in that permit. [District Rule 2520, 9.7] Federally Enforceable Through Title V Permit

14. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit. [District Rule 2520, 9.8.2] Federally Enforceable Through Title V Permit

15. The permit may be modified, revoked, reopened and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition. [District Rule 2520, 9.8.3] Federally Enforceable Through Title V Permit

16. The permit does not convey any property rights of any sort, or any exclusive privilege. [District Rule 2520, 9.8.4] Federally Enforceable Through Title V Permit

17. The Permittee shall furnish to the District, within a reasonable time, any information that the District may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the District copies of records required to be kept by the permit or, for information claimed to be confidential, the permittee may furnish such records directly to EPA along with a claim of confidentiality. [District Rule 2520, 9.8.5] Federally Enforceable Through Title V Permit

18. The permittee shall pay annual permit fees and other applicable fees as prescribed in Regulation III of the District Rules and Regulations. [District Rule 2520, 9.9] Federally Enforceable Through Title V Permit

19. Upon presentation of appropriate credentials, a permittee shall allow an authorized representative of the District to enter the permittee's premises where a permitted source is located or emissions related activity is conducted, or where records must be kept under condition of the permit. [District Rule 2520, 9.13.2.1] Federally Enforceable Through Title V Permit

20. Upon presentation of appropriate credentials, a permittee shall allow an authorized representative of the District to have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit. [District Rule 2520, 9.13.2.2] Federally Enforceable Through Title V Permit

21. Upon presentation of appropriate credentials, a permittee shall allow an authorized representative of the District to inspect at reasonable times any facilities, equipment, practices, or operations regulated or required under the permit. [District Rule 2520, 9.13.2.3] Federally Enforceable Through Title V Permit

22. Upon presentation of appropriate credentials, a permittee shall allow an authorized representative of the District to sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with the permit or applicable requirements. [District Rule 2520, 9.13.2.4] Federally Enforceable Through Title V Permit

23. No air contaminants shall be discharged into the atmosphere for a period or periods aggregating more than 3 minutes in any one hour which is as dark or darker than Ringelmann #1 or equivalent to 20% opacity and greater, unless specifically exempted by District Rule 4101 (02/17/05). If the equipment or operation is subject to a more stringent visible emission standard as prescribed in a permit condition, the more stringent visible emission limit shall supersede this condition. [District Rule 4101, and County Rules 401 (in all eight counties in the San Joaquin Valley)] Federally Enforceable Through Title V Permit

FACILITY-WIDE REQUIREMENTS CONTINUE ON NEXT PAGE

24. No person shall manufacture, blend, repackage, supply, sell, solicit or apply any architectural coating with a VOC content in excess of the corresponding limit specified in Table of Standards 1 effective until 12/30/10 or Table of Standards 2 effective on and after 1/1/11 of District Rule 4601 (12/17/09) for use or sale within the District. [District Rule 4601, 5.1] Federally Enforceable Through Title V Permit

25. All VOC-containing materials subject to Rule 4601 (12/17/09) shall be stored in closed containers when not in use. [District Rule 4601, 5.4] Federally Enforceable Through Title V Permit

26. The permittee shall comply with all the Labeling and Test Methods requirements outlined in Rule 4601 sections 6.1 and 6.3 (12/17/09). [District Rule 4601, 6.1 and 6.3] Federally Enforceable Through Title V Permit

27. With each report or document submitted under a permit requirement or a request for information by the District or EPA, the permittee shall include a certification of truth, accuracy, and completeness by a responsible official. [District Rule 2520, 9.13.1 and 10.0] Federally Enforceable Through Title V Permit

28. If the permittee performs maintenance on, or services, repairs, or disposes of appliances, the permittee shall comply with the standards for Recycling and Emissions Reduction pursuant to 40 CFR Part 82, Subpart F. [40 CFR 82 Subpart F] Federally Enforceable Through Title V Permit

29. If the permittee performs service on motor vehicles when this service involves the ozone-depleting refrigerant in the motor vehicle air conditioner (MVAC), the permittee shall comply with the standards for Servicing of Motor Vehicle Air Conditioners pursuant to all the applicable requirements as specified in 40 CFR Part 82, Subpart B. [40 CFR Part 82, Subpart B] Federally Enforceable Through Title V Permit

30. Disturbances of soil related to any construction, demolition, excavation, extraction, or other earthmoving activities shall comply with the requirements for fugitive dust control in District Rule 8021 unless specifically exempted under Section 4.0 of Rule 8021 (8/19/2004) or Rule 8011 (8/19/2004). [District Rule 8021 and 8011] Federally Enforceable Through Title V Permit

31. Outdoor handling, storage and transport of any bulk material which emits dust shall comply with the requirements of District Rule 8031, unless specifically exempted under Section 4.0 of Rule 8031 (8/19/2004) or Rule 8011 (8/19/2004). [District Rule 8031 and 8011] Federally Enforceable Through Title V Permit

32. An owner/operator shall prevent or cleanup any carryout or trackout in accordance with the requirements of District Rule 8041 Section 5.0, unless specifically exempted under Section 4.0 of Rule 8041 (8/19/2004) or Rule 8011 (8/19/2004). [District Rule 8041 and 8011] Federally Enforceable Through Title V Permit

33. Whenever open areas are disturbed, or vehicles are used in open areas, the facility shall comply with the requirements of Section 5.0 of District Rule 8051, unless specifically exempted under Section 4.0 of Rule 8051 (8/19/2004) or Rule 8011 (8/19/2004). [District Rule 8051 and 8011] Federally Enforceable Through Title V Permit

34. Any paved road or unpaved road shall comply with the requirements of District Rule 8061 unless specifically exempted under Section 4.0 of Rule 8061 (8/19/2004) or Rule 8011 (8/19/2004). [District Rule 8061 and Rule 8011] Federally Enforceable Through Title V Permit

35. Any unpaved vehicle/equipment area that anticipates more than 50 Average annual daily Trips (AADT) shall comply with the requirements of Section 5.1.1 of District Rule 8071. Any unpaved vehicle/equipment area that anticipates more than 150 vehicle trips per day (VDT) shall comply with the requirements of Section 5.1.2 of District Rule 8071. On each day that 25 or more VDT with 3 or more axles will occur on an unpaved vehicle/equipment traffic area, the owner/operator shall comply with the requirements of Section 5.1.3 of District Rule 8071. On each day when a special event will result in 1,000 or more vehicles that will travel/park on an unpaved area, the owner/operator shall comply with the requirements of Section 5.1.4 of District Rule 8071. All sources shall comply with the requirements of Section 5.0 of District Rule 8071 unless specifically exempted under Section 4.0 of Rule 8071 (9/16/2004) or Rule 8011 (8/19/2004). [District Rule 8071 and Rule 8011] Federally Enforceable Through Title V Permit

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

FACILITY-WIDE REQUIREMENTS CONTINUE ON NEXT PAGE

37. The permittee shall submit certifications of compliance with the terms and standards contained in Title V permits, including emission limits, standards and work practices, to the District and the EPA annually (or more frequently as specified in an applicable requirement or as specified by the District). The certification shall include the identification of each permit term or condition, the compliance status, whether compliance was continuous or intermittent, the methods used for determining the compliance status, and any other facts required by the District to determine the compliance status of the source. [District Rule 2520, 9.16] Federally Enforceable Through Title V Permit

38. The permittee shall submit an application for Title V permit renewal to the District at least six months, but not greater than 18 months, prior to the permit expiration date. [District Rule 2520, 5.2] Federally Enforceable Through Title V Permit

39. When a term is not defined in a Title V permit condition, the definition in the rule cited as the origin and authority for the condition in a Title V permits shall apply. [District Rule 2520, 9.1.1] Federally Enforceable Through Title V Permit

40. Compliance with permit conditions in the Title V permit shall be deemed in compliance with the following outdated SIP requirements: Rule 401 (Madera, Fresno, Kern, Kings, San Joaquin, Stanislaus, Tulare and Merced), Rule 110 (Fresno, Stanislaus, San Joaquin), Rule 109 (Merced), Rule 113 (Madera), Rule 111 (Kern, Tulare, Kings), and Rule 202 (Fresno, Kern, Tulare, Kings, Madera, Stanislaus, Merced, San Joaquin). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

41. Compliance with permit conditions in the Title V permit shall be deemed in compliance with the following applicable requirements: SJVUAPCD Rules 1100, sections 6.1 and 7.0 (12/17/92); 2010, sections 3.0 and 4.0 (12/17/92); 2031 (12/17/92); 2040 (12/17/92); 2070, section 7.0 (12/17/92); 2080 (12/17/92); 4101 (2/17/05); 4601 (12/17/09); 8021 (8/19/2004); 8031 (8/19/2004); 8041 (8/19/2004); 8051 (8/19/2004); 8061 (8/19/2004); and 8071 (9/16/2004). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

42. The reporting periods for the Report of Required Monitoring and the Compliance Certification Report begin November 1 of every year, unless alternative dates are approved by the District Compliance Division. These reports are due within 30 days after the end of the reporting period. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: C-1234-2-4 **EXPIRATION DATE:** 04/30/2016

EQUIPMENT DESCRIPTION:
DORMANT 25.5 MMBTU/HR NATIONAL OIL HEATER #2, WITH NORTH AMERICAN MODEL 5131HCRF BURNER

PERMIT UNIT REQUIREMENTS

1. No modification to this unit shall be performed without an Authority to Construct for such modification(s). [District Rule 2010] Federally Enforceable Through Title V Permit
2. The fuel supply line shall be physically disconnected from this unit. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
3. This equipment shall not be operated for any reason until an Authority to Construct (ATC) permit is issued approving all necessary modifications required to comply with the applicable requirements of District Rule 4305, District Rule 4306, District Rule 4320, and all other applicable District regulations. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
4. All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District NSR Rule] Federally Enforceable Through Title V Permit
5. Use of oil fired heaters permitted under C-1234-2 and C-1234-3 shall be limited to 30 days/year for maintenance of turbines permitted under C-1234-8 and C-1234-9. [District NSR Rule and District Rule 4305, 5.2] Federally Enforceable Through Title V Permit
6. Crude oil consumption shall not exceed 170 gal/hour. [District NSR Rule] Federally Enforceable Through Title V Permit
7. The sulfur content of the crude oil shall not exceed 1.1% by weight. [District NSR Rule] Federally Enforceable Through Title V Permit
8. Natural gas consumption shall not exceed 25,500 scf/hour. [District NSR Rule] Federally Enforceable Through Title V Permit
9. Particulate matter emissions shall not exceed 0.1 grain/dscf at operating conditions, nor 0.1 grain/dscf calculated to 12% CO2, nor 10 lb/hr. [District Rule 4201 and District Rule 4301, 5.1 and 5.2.3] Federally Enforceable Through Title V Permit
10. Nitrogen Oxide (NOx) emissions shall not exceed 140 lb/hr, calculated as NO2. For residual and crude oil fired units, NOx emissions may be calculated using supplier certification of the nitrogen content and heating value, or using reference materials approved by the District. Hourly emissions shall be calculated using the heating value, maximum rated unit capacity, and the following formula: lb NO2/1000 gal = 20.54 + 104.39 (N), where N is the weight % nitrogen in the fuel. [District Rules 2520, 9.3.2 and 4301, 5.2.2, 5.3, and 5.5] Federally Enforceable Through Title V Permit
11. Emissions of sulfur compounds from this unit shall not exceed 200 lb per hour, calculated as SO2. If this unit is not fired on PUC or FERC regulated natural gas, then the hourly emissions shall be determined by calculating the maximum hourly emissions of sulfur compounds by multiplying the sulfur content of each fuel in lb/MMBtu by the maximum heat input rating of the unit. [District Rules 2520, 9.3.2 and 4301, 5.2.1] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

12. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [District Rule 4801 and Fresno County Rule 406] Federally Enforceable Through Title V Permit
13. If the unit is fired on natural gas, then the natural gas sulfur content shall be less than or equal to 3.3% by weight. [District Rule 4801 and Fresno County Rule 406] Federally Enforceable Through Title V Permit
14. The permittee shall monitor and record the monthly and cumulative annual fuel heat input of the unit in Btus. [District Rule 4305, 6.1.3] Federally Enforceable Through Title V Permit
15. The higher heating value (hhv) for each fuel shall be certified by a third party fuel supplier or determined by ASTM D 240 or D 2382 for liquid hydrocarbon fuels; or ASTM D 1826 or D 1945 in conjunction with ASTM D 3588 for gaseous fuels. [District Rule 4305, 6.2.1] Federally Enforceable Through Title V Permit
16. If the unit is not fired on a PUC-regulated natural gas or fuel certified by a third party fuel supplier, then the sulfur content and higher heating value (hhv) of each fuel source shall be tested weekly except that if compliance with the fuel sulfur content limit has been demonstrated for 8 consecutive weeks for a fuel source, then the testing frequency shall be quarterly. If a test shows noncompliance with the sulfur content requirement, the source must return to weekly testing until eight consecutive weeks show compliance. [District Rules 2520, 9.3.2 and Rule 4801; Fresno County Rule 407] Federally Enforceable Through Title V Permit
17. If the unit is fired on noncertified gaseous fuel, then the sulfur content of gaseous fuel being fired in the unit shall be determined using ASTM D 1072, D 3246, D 4084, or grab sample analysis by GC-FPD/TCD performed in the laboratory. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
18. The sulfur content of the liquid fuel being fired in the unit shall be determined using ASTM D 2880. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
19. If the unit is not fired on PUC-regulated natural gas, the permittee shall maintain records of fuel sulfur content. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
20. Copies of all fuel invoices, gas purchase contracts, natural gas bills, supplier certifications, and test results to determine compliance with the conditions of this permit shall be maintained. The operator shall record daily amount and type(s) of fuel(s) combusted and all dates on which unit is fired on any noncertified fuel and record specific type of noncertified fuel used. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
21. While firing on crude oil, the permittee shall inspect the heater exhaust stack weekly for excessive visible emissions. The inspection shall include verifying the equipment is performing normal, design functions, and is being operated according to standard procedures and per the manufacturer's recommendations. If the equipment is not performing according to design and procedures or if excessive visible emissions are observed from the exhaust stack, the permittee shall take corrective action within 24 hours. If excessive visible emission cannot be corrected within 24 hours, EPA Method 9, except for data reduction (Section 2.5), shall be conducted to determine compliance with the 20% facility-wide opacity limit. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
22. All records of required monitoring data and support information shall be maintained for a period of at least five years and shall be made readily available for District inspection upon request. [District Rules 2520, 9.4.2 and 4305, 6.1] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: C-1234-3-4 **EXPIRATION DATE:** 04/30/2016

EQUIPMENT DESCRIPTION:
DORMANT 37.5 MMBTU/HR NATIONAL OIL HEATER #3 WITH NORTH AMERICAN MODEL 513HCRG BURNER

PERMIT UNIT REQUIREMENTS

1. No modification to this unit shall be performed without an Authority to Construct for such modification(s). [District Rule 2010] Federally Enforceable Through Title V Permit
2. The fuel supply line shall be physically disconnected from this unit. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
3. This equipment shall not be operated for any reason until an Authority to Construct (ATC) permit is issued approving all necessary modifications required to comply with the applicable requirements of District Rule 4305, District Rule 4306, District Rule 4320, and all other applicable District regulations. [District Rules 4305, 4306, and 4320] Federally Enforceable Through Title V Permit
4. All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District NSR Rule] Federally Enforceable Through Title V Permit
5. Use of oil fired heaters permitted under C-1234-2 and C-1234-3 shall be limited to 30 days/year for maintenance of turbines permitted under C-1234-8 and C-1234-9. [District NSR Rule and District Rule 4305, 5.2] Federally Enforceable Through Title V Permit
6. Crude oil consumption shall not exceed 170 gal/hour. [District NSR Rule] Federally Enforceable Through Title V Permit
7. The sulfur content of the crude oil shall not exceed 1.1% by weight. [District NSR Rule] Federally Enforceable Through Title V Permit
8. Natural gas consumption shall not exceed 37,500 scf/hour. [District NSR Rule] Federally Enforceable Through Title V Permit
9. Particulate matter emissions shall not exceed 0.1 grain/dscf at operating conditions, nor 0.1 grain/dscf calculated to 12% CO2, nor 10 lb/hr. [District Rule 4201 and District Rule 4301, 5.1 and 5.2.3] Federally Enforceable Through Title V Permit
10. Nitrogen Oxide (NOx) emissions shall not exceed 140 lb/hr, calculated as NO2. For residual and crude oil fired units, NOx emissions may be calculated using supplier certification of the nitrogen content and heating value, or using reference materials approved by the District. Hourly emissions shall be calculated using the heating value, maximum rated unit capacity, and the following formula: lb NO2/1000 gal = 20.54 + 104.39 (N), where N is the weight % nitrogen in the fuel. [District Rules 2520, 9.3.2 and 4301, 5.2.2, 5.3, and 5.5] Federally Enforceable Through Title V Permit
11. Emissions of sulfur compounds from this unit shall not exceed 200 lb per hour, calculated as SO2. If this unit is not fired on PUC or FERC regulated natural gas, then the hourly emissions shall be determined by calculating the maximum hourly emissions of sulfur compounds by multiplying the sulfur content of each fuel in lb/MMBtu by the maximum heat input rating of the unit. [District Rules 2520, 9.3.2 and 4301, 5.2.1] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

12. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [District Rule 4801 and Fresno County Rule 406] Federally Enforceable Through Title V Permit
13. If the unit is fired on natural gas, then the natural gas sulfur content shall be less than or equal to 3.3% by weight. [District Rule 4801 and Fresno County Rule 406] Federally Enforceable Through Title V Permit
14. The permittee shall monitor and record the monthly and cumulative annual fuel heat input of the unit in Btus. [District Rule 4305, 6.1.3] Federally Enforceable Through Title V Permit
15. The higher heating value (hhv) for each fuel shall be certified by a third party fuel supplier or determined by ASTM D 240 or D 2382 for liquid hydrocarbon fuels; or ASTM D 1826 or D 1945 in conjunction with ASTM D 3588 for gaseous fuels. [District Rule 4305, 6.2.1] Federally Enforceable Through Title V Permit
16. If the unit is not fired on a PUC-regulated natural gas or fuel certified by a third party fuel supplier, then the sulfur content and higher heating value (hhv) of each fuel source shall be tested weekly except that if compliance with the fuel sulfur content limit has been demonstrated for 8 consecutive weeks for a fuel source, then the testing frequency shall be quarterly. If a test shows noncompliance with the sulfur content requirement, the source must return to weekly testing until eight consecutive weeks show compliance. [District Rules 2520, 9.3.2 and Rule 4801; Fresno County Rule 407] Federally Enforceable Through Title V Permit
17. If the unit is fired on noncertified gaseous fuel, then the sulfur content of gaseous fuel being fired in the unit shall be determined using ASTM D 1072, D 3246, D 4084, or grab sample analysis by GC-FPD/TCD performed in the laboratory. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
18. The sulfur content of the liquid fuel being fired in the unit shall be determined using ASTM D 2880. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
19. If the unit is not fired on PUC-regulated natural gas, the permittee shall maintain records of fuel sulfur content. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
20. Copies of all fuel invoices, gas purchase contracts, natural gas bills, supplier certifications, and test results to determine compliance with the conditions of this permit shall be maintained. The operator shall record daily amount and type(s) of fuel(s) combusted and all dates on which unit is fired on any noncertified fuel and record specific type of noncertified fuel used. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
21. While firing on crude oil, the permittee shall inspect the heater exhaust stack weekly for excessive visible emissions. The inspection shall include verifying the equipment is performing normal, design functions, and is being operated according to standard procedures and per the manufacturer's recommendations. If the equipment is not performing according to design and procedures or if excessive visible emissions are observed from the exhaust stack, the permittee shall take corrective action within 24 hours. If excessive visible emission cannot be corrected within 24 hours, EPA Method 9, except for data reduction (Section 2.5), shall be conducted to determine compliance with the 20% facility-wide opacity limit. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
22. All records of required monitoring data and support information shall be maintained for a period of at least five years and shall be made readily available for District inspection upon request. [District Rules 2520, 9.4.2 and 4305, 6.1] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: C-1234-4-9 **EXPIRATION DATE:** 04/30/2016

EQUIPMENT DESCRIPTION:
10,836,000 GALLON (258,000 BBL) WELDED CRUDE OIL STORAGE TANK #CH7 EQUIPPED WITH EXTERNAL FLOATING ROOF WITH PRIMARY METALLIC SHOE SEALS AND SECONDARY SEALS, TRUCK UNLOADING RACK #2 WITH PUMP AND TRUCK UNLOADING RACK #1, EAST AND WEST

PERMIT UNIT REQUIREMENTS

1. All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District NSR Rule] Federally Enforceable Through Title V Permit
2. Unloading rack shall be only used to unload trucks. Rack shall not be used to load trucks or other delivery vessels. [District NSR Rule] Federally Enforceable Through Title V Permit
3. All unloading rack components containing VOCs will be inspected by the facility operator annually to ensure compliance with the provisions of District Rule 4403. The inspections will be conducted in accordance with EPA Method 21, with the instrument calibrated with methane. However, if any of the components of any type 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 all of the components of that type subject to the prohibitions of this rule are subsequently found to be leaking during five (5) consecutive quarterly inspections, the inspection frequency for that component type may be changed from quarterly to annual. [District NSR Rule] Federally Enforceable Through Title V Permit
4. A facility operator, upon detection of a leaking unloading rack components shall affix to that component a weatherproof readily visible tag bearing the date on which the leak is detected. The tag shall remain in place until the leaking component is repaired, reinspected and found to be in compliance with the requirements of this permit. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
5. Operator shall reinspect an unloading rack component for leaks within thirty working days after the date on which the component is repaired. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
6. Emissions from unloading rack components which have been tagged by the facility operator for repair within 15 calendar days or which have been repaired and are awaiting reinspection shall not be in violation of this permit. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
7. Any unloading rack component leak shall be repaired to a leak-free condition within fifteen (15) calendar days of detection. The APCO may grant a ten (10) calendar day extension provided the operator demonstrates that necessary and sufficient actions are being taken to correct the leak within this time period. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
8. If the leaking unloading rack component is an essential part of a critical process unit which cannot be immediately shut down for repairs, the operator shall 1) Minimize the leak within 15 calendar days; and 2) If the leak which has been minimized still exceeds the concentration allowed by this permit, the essential component shall be repaired to eliminate the leak during the next process unit turnaround, but in no case later than one year from the date of the original leak detection. A critical process unit is any process unit which would result in the automatic shutdown of other process units if it were shut down. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

9. Operator shall maintain an inspection log for the unloading racks containing the following: 1) Type of component leaking; 2) Date of leak detection, and method of detection; 3) Date and emission level of recheck after leak is repaired; 4) Identification and location of essential parts of critical process units found leaking that cannot be repaired until the next process unit turnaround; and 5) Method used to minimize the leak from essential parts of critical process units which cannot be repaired until the next process unit turnaround. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

10. True vapor pressure of the organic liquid stored shall be less than 11 psia. [District Rule 4623, 5.1.1] Federally Enforceable Through Title V Permit

11. When storing organic liquids with true vapor pressure less than 0.5 psia, the requirements of Sections 5.3, 5.5, and 6.1 of District Rule 4623 (Amended May 19, 2005) shall not apply to this unit. This exemption applies to all conditions in this permit referencing only Sections 5.3, 5.5, or 6.1 of District Rule 4623. [District Rule 4623, 2.0] Federally Enforceable Through Title V Permit

12. Before switching to the storage of organic liquids with true vapor pressure greater than or equal to 0.5 psia, all covers, seals, and lids shall be inspected by the facility operator to ensure compliance with the provisions of this permit. This includes all conditions containing District Rule 4623 references. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

13. Within one week after switching from storage of organic liquids with TVP greater than or equal to 0.5 psia to storage of organic liquids with TVP less than 0.5 psia, the TVP of the organic liquid shall be determined in accordance with the test methods approved in this permit or an equivalent method approved by the APCO, ARB, and EPA. [District Rules 2520, 9.3.2 and 4623, 6.4] Federally Enforceable Through Title V Permit

14. 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; 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, 5.3.1] Federally Enforceable Through Title V Permit

15. 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 District Rule 4623 (Amended May 19, 2005) before it may land on its legs. [District Rule 4623, 5.3.1.3] Federally Enforceable Through Title V Permit

16. No gap between the tank shell and the primary seal shall exceed one and one half (1-1/2) inches. [District Rule 4623, 5.3.2.1.1] Federally Enforceable Through Title V Permit

17. 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

18. 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

19. 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

20. No gap between the tank shell and the secondary seal shall exceed one-half (1/2) inch. [District Rule 4623, 5.3.2.1.2] Federally Enforceable Through Title V Permit

21. 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

22. 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

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

23. 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

24. 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] Federally Enforceable Through Title V Permit

25. 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

26. 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

27. 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

28. The tank pressure-vacuum (PV) relief valve shall be set to within 10% of the maximum allowable working pressure of the tank. The PV relief valve shall be permanently labeled with the operating pressure settings. The PV relief valve shall be properly installed and maintained in good operating order in accordance with the manufacturer's instructions, and shall remain in gas-tight condition except when the operating pressure exceeds the valve's set pressure. [District Rule 4623, Section 5.2] Federally Enforceable Through Title V Permit

29. A gas-tight condition is defined as a condition without a gas leak. A gas leak is defined as a reading in excess of 10,000 ppmv, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21. A reading in excess of 10,000 ppmv above background is a violation of this permit and Rule 4623 and shall be reported as a deviation. [District Rule 4623, 3.9 and 6.4.8] Federally Enforceable Through Title V Permit

30. Each opening in the roof, except for automatic bleeder vents, rim vents, and pressure relief vents, 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

31. 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

32. 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 and 5.5.2.1.3] Federally Enforceable Through Title V Permit

33. 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] Federally Enforceable Through Title V Permit

34. 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] Federally Enforceable Through Title V Permit

35. 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

36. 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

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

37. 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

38. The gap between the pole wiper and the solid guidepole shall be included in 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

39. 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

40. The gap between the pole wiper and the slotted guidepole shall be included in 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

41. 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

42. Operator shall perform gap measurements on primary and secondary seals at least once every year to determine compliance with the requirements of Rule 4623 (Amended May 19, 2005). 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 of Rule 4623. [District Rule 4623, 6.1.3.1.1] Federally Enforceable Through Title V Permit

43. The permittee shall inspect the primary and secondary seals for compliance with the requirements of Rule 4623 (Amended May 19, 2005) 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] Federally Enforceable Through Title V Permit

44. 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 (Amended May 19, 2005), 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 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

45. Permittee shall maintain the records of the external floating roof landing activities that are performed pursuant to Rule 4623 (Amended May 19, 2005), Section 5.3.1.3. 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] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

46. 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. Components located in unsafe areas shall be inspected and repaired at the next process unit turnaround. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

47. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date of leak detection, and method of detection; 3) Date and emission level of recheck after leak is repaired; 4) Identification components that are located in inaccessible locations or in unsafe areas. Leaks over 10,000 ppmv shall be reported as a deviation. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

48. When the unit is storing organic liquids with true vapor pressure less than 0.5 psia and is exempted from Sections 5.3, 5.5, and 6.1 of District Rule 4623 (Amended May 19, 2005), permittee shall conduct True Vapor Pressure (TVP) testing of the organic liquid stored in this tank at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored in this tank in order to maintain exemption from control requirements of District Rule 4623. [District Rules 2520, 9.3.2 and 4623, 6.2.2] Federally Enforceable Through Title V Permit

49. Permittee shall submit the records of TVP 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 2520, 9.3.2 and 4623, 6.3.6] Federally Enforceable Through Title V Permit

50. The true vapor pressure (TVP) shall be measured using Reid vapor pressure ASTM Method D323, 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 of the oil and gas section of "California Air Resources Boards (ARB) Technical Guidance Document to the Criteria and Guidelines Regulations for AB 2588", dated August 1989. As an alternative to using ASTM D 323, the TVP may be determined using ASTM Method D2879 or other equivalent test methods approved by APCO, ARB, and EPA. [District Rule 4623, 6.4.3] Federally Enforceable Through Title V Permit

51. 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

52. The permittee shall keep a accurate records of each liquid stored in the tank, including its period of storage, storage temperature, Reid vapor pressure, maximum true vapor pressure, and API gravity. [District Rules 2520, 9.3.2 and 4623, 6.3] Federally Enforceable Through Title V Permit

53. All records of required monitoring data and support information shall be maintained for a period of at least five years and shall be made readily available for District inspection upon request. [District Rules 2520, 9.4.2 and 4623, 6.3] Federally Enforceable Through Title V Permit

54. This unit was constructed in 1968 and has not been modified (as defined in 40 CFR 60.14) or reconstructed (as defined in 40 CFR 60.15) since 1968. Therefore, it is exempt from the requirements of 40 CFR 60. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: C-1234-5-7 **EXPIRATION DATE:** 04/30/2016

EQUIPMENT DESCRIPTION:
10,836,000 GALLON (258,000 BBL) WELDED CRUDE OIL STORAGE TANK #CH8 EQUIPPED WITH EXTERNAL FLOATING ROOF WITH PRIMARY METALLIC SHOE SEAL AND SECONDARY SEALS

PERMIT UNIT REQUIREMENTS

1. All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District NSR Rule] Federally Enforceable Through Title V Permit
2. True vapor pressure of the organic liquid stored shall be less than 11 psia. [District Rule 4623, 5.1.1] Federally Enforceable Through Title V Permit
3. When storing organic liquids with true vapor pressure less than 0.5 psia, the requirements of Sections 5.3, 5.5, and 6.1 of District Rule 4623 (Amended May 19, 2005) shall not apply to this unit. This exemption applies to all conditions in this permit referencing only Sections 5.3, 5.5, or 6.1 of District Rule 4623. [District Rule 4623, 2.0] Federally Enforceable Through Title V Permit
4. Before switching to the storage of organic liquids with true vapor pressure greater than or equal to 0.5 psia, all covers, seals, and lids shall be inspected by the facility operator to ensure compliance with the provisions of this permit. This includes all conditions containing District Rule 4623 references. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
5. Within one week after switching from storage of organic liquids with TVP greater than or equal to 0.5 psia to storage of organic liquids with TVP less than 0.5 psia, the TVP of the organic liquid shall be determined in accordance with the test methods approved in this permit or an equivalent method approved by the APCO, ARB, and EPA. [District Rules 2520, 9.3.2 and 4623, 6.4] Federally Enforceable Through Title V Permit
6. 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; 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, 5.3.1] Federally Enforceable Through Title V Permit
7. 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 District Rule 4623 (Amended May 19, 2005) before it may land on its legs. [District Rule 4623, 5.3.1.3] Federally Enforceable Through Title V Permit
8. No gap between the tank shell and the primary seal shall exceed one and one half (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

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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. No gap between the tank shell and the secondary seal shall exceed one-half (1/2) inch. [District Rule 4623, 5.3.2.1.2] 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] 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. 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

20. The tank pressure-vacuum (PV) relief valve shall be set to within 10% of the maximum allowable working pressure of the tank. The PV relief valve shall be permanently labeled with the operating pressure settings. The PV relief valve shall be properly installed and maintained in good operating order in accordance with the manufacturer's instructions, and shall remain in gas-tight condition except when the operating pressure exceeds the valve's set pressure. [District Rule 4623, Section 5.2] Federally Enforceable Through Title V Permit

21. A gas-tight condition is defined as a condition without a gas leak. A gas leak is defined as a reading in excess of 10,000 ppmv, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21. A reading in excess of 10,000 ppmv above background is a violation of this permit and Rule 4623 and shall be reported as a deviation. [District Rule 4623, 3.9 and 6.4.8] Federally Enforceable Through Title V Permit

22. Each opening in the roof, except for automatic bleeder vents, rim vents, and pressure relief vents, 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 and 5.5.2.1.3] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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] Federally Enforceable Through Title V Permit

26. 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] 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 included in 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 included in 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 at least once every year to determine compliance with the requirements of Rule 4623 (Amended May 19, 2005). 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 of Rule 4623. [District Rule 4623, 6.1.3.1.1] Federally Enforceable Through Title V Permit

35. The permittee shall inspect the primary and secondary seals for compliance with the requirements of Rule 4623 (Amended May 19, 2005) 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] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

36. 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 (Amended May 19, 2005), 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 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

37. Permittee shall maintain the records of the external floating roof landing activities that are performed pursuant to Rule 4623 (Amended May 19, 2005), Section 5.3.1.3. 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] Federally Enforceable Through Title V Permit

38. 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. Components located in unsafe areas shall be inspected and repaired at the next process unit turnaround. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

39. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date of leak detection, and method of detection; 3) Date and emission level of recheck after leak is repaired; 4) Identification components that are located in inaccessible locations or in unsafe areas. Leaks over 10,000 ppmv shall be reported as a deviation. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

40. When the unit is storing organic liquids with true vapor pressure less than 0.5 psia and is exempted from Sections 5.3, 5.5, and 6.1 of District Rule 4623 (Amended May 19, 2005), permittee shall conduct True Vapor Pressure (TVP) testing of the organic liquid stored in this tank at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored in this tank in order to maintain exemption from control requirements of District Rule 4623. [District Rules 2520, 9.3.2 and 4623, 6.2.2] Federally Enforceable Through Title V Permit

41. Permittee shall submit the records of TVP 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 2520, 9.3.2 and 4623, 6.3.6] Federally Enforceable Through Title V Permit

42. The true vapor pressure (TVP) shall be measured using Reid vapor pressure ASTM Method D323, 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 of the oil and gas section of "California Air Resources Boards (ARB) Technical Guidance Document to the Criteria and Guidelines Regulations for AB 2588", dated August 1989. As an alternative to using ASTM D 323, the TVP may be determined using ASTM Method D2879 or other equivalent test methods approved by APCO, ARB, and EPA. [District Rule 4623, 6.4.3] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

43. 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

44. The permittee shall keep a accurate records of each liquid stored in the tank, including its period of storage, storage temperature, Reid vapor pressure, maximum true vapor pressure, and API gravity. [District Rules 2520, 9.3.2 and 4623, 6.3] Federally Enforceable Through Title V Permit

45. All records of required monitoring data and support information shall be maintained for a period of at least five years and shall be made readily available for District inspection upon request. [District Rules 2520, 9.4.2 and 4623, 6.3] Federally Enforceable Through Title V Permit

46. This unit was constructed in 1968 and has not been modified (as defined in 40 CFR 60.14) or reconstructed (as defined in 40 CFR 60.15) since 1968. Therefore, it is exempt from the requirements of 40 CFR 60. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: C-1234-6-7 **EXPIRATION DATE:** 04/30/2016

EQUIPMENT DESCRIPTION:
10,800,000 GALLON WELDED CRUDE OIL STORAGE TANK #CH12 EQUIPPED WITH EXTERNAL FLOATING ROOF WITH PRIMARY METALLIC SHOE SEAL AND SERRATED MULTI-FINGERED SECONDARY SEAL

PERMIT UNIT REQUIREMENTS

1. All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District NSR Rule] Federally Enforceable Through Title V Permit
2. True vapor pressure of the organic liquid stored shall be less than 11 psia. [District Rule 4623, 5.1.1; and 40 CFR 60.110a & 60.112a] Federally Enforceable Through Title V Permit
3. When storing organic liquids with true vapor pressure less than 0.5 psia, the requirements of Sections 5.3, 5.5, and 6.1 of District Rule 4623 (Amended May 19, 2005) shall not apply to this unit. This exemption applies to all conditions in this permit referencing only Sections 5.3, 5.5, or 6.1 of District Rule 4623. [District Rule 4623, 2.0] Federally Enforceable Through Title V Permit
4. When storing organic liquids with true vapor pressure less than 1.5 psia, the requirements of 40 CFR 60 Subpart Ka shall not apply to this unit. This exemption applies to all conditions in this permit referencing only 40 CFR 60 Subpart Ka. [40 CFR 60.112a(a)] Federally Enforceable Through Title V Permit
5. Before switching to the storage of organic liquids with true vapor pressure greater than or equal to 0.5 psia, all covers, seals, and lids shall be inspected by the facility operator to ensure compliance with the provisions of this permit. This includes all conditions containing District Rule 4623 references. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
6. Before switching to the storage of organic liquids with true vapor pressure greater than or equal to 1.5 psia, all covers, seals, and lids shall be inspected by the facility operator to ensure compliance with the provisions of this permit. This includes all conditions containing District Rule 4623 or 40 CFR 60 Subpart Ka references. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
7. Within one week after switching from storage of organic liquids with TVP greater than or equal to 0.5 psia to storage of organic liquids with TVP less than 0.5 psia, the TVP of the organic liquid shall be determined in accordance with the test methods approved in this permit or an equivalent method approved by the APCO, ARB, and EPA. [District Rules 2520, 9.3.2 and 4623, 6.4] Federally Enforceable Through Title V Permit
8. The tank shall be equipped with a floating roof consisting of a 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 60.112a(a)(1)] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

9. 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 and 40 CFR 60.112a(a)(1)] Federally Enforceable Through Title V Permit

10. Primary seal (lower seal) shall be a metallic shoe seal. [District Rule 2080 and 40 CFR 60.112a(a)(1)(i)] 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. No continuous gap in the primary seal greater than 1/8 inch wide shall exceed 10% of the tank circumference. 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. The width of any portion of any gap in the primary seal shall not exceed 1-1/2 inches. [District Rule 4623, 5.3.2.1; and 40 CFR 60.112a(a)(1)] Federally Enforceable Through Title V Permit

12. 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 and 40 CFR 60.112a(a)(1)] Federally Enforceable Through Title V Permit

13. 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 surface. [District Rule 4623, 5.3.2.1] Federally Enforceable Through Title V Permit

14. The secondary seal is to be installed above the primary seal so that it completely covers the space between the roof edge and the tank wall. 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; and 40 CFR 60.112a(a)(1)(ii)] Federally Enforceable Through Title V Permit

15. The owner or operator is exempted from the requirements for the secondary seals and the secondary seal gap criteria when performing gap measurements or inspections of the primary seal. [40 CFR 60.112a(a)(1)(ii)] Federally Enforceable Through Title V Permit

16. 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] Federally Enforceable Through Title V Permit

17. 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] Federally Enforceable Through Title V Permit

18. 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. The width of any portion of any gap in the secondary seal shall not exceed 1/2 inch. [District Rule 4623, 5.3.2.1; and 40 CFR 60.112a(a)(1)(ii)] Federally Enforceable Through Title V Permit

19. 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 and 40 CFR 60.112a(a)(1)(iii)] Federally Enforceable Through Title V Permit

20. The tank pressure-vacuum (PV) relief valve shall be set to within 10% of the maximum allowable working pressure of the tank. The PV relief valve shall be permanently labeled with the operating pressure settings. The PV relief valve shall be properly installed and maintained in good operating order in accordance with the manufacturer's instructions, and shall remain in gas-tight condition except when the operating pressure exceeds the valve's set pressure. [District Rule 4623, Section 5.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

21. A gas-tight condition is defined as a condition without a gas leak. A gas leak is defined as a reading in excess of 10,000 ppmv, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21. A reading in excess of 10,000 ppmv above background is a violation of this permit and Rule 4623 and shall be reported as a deviation. [District Rule 4623, 3.9 and 6.4.8] Federally Enforceable Through Title V Permit

22. Each opening in the roof, except for automatic bleeder vents, rim vents, and pressure relief vents, in a non-contact external floating roof shall provide a projection below the liquid surface. [District Rule 4623, 5.5.2.2.1, 40 CFR 60.112a(a)(1)(iii)] 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 60.112a(a)(1)(iii)] Federally Enforceable Through Title V Permit

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 40 CFR 60.112a(a)(1)(iii)] Federally Enforceable Through Title V Permit

26. 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)] 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 included in 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 included in 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

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

34. Operator shall perform gap measurements on primary and secondary seals within 60 days of the initial fill with petroleum liquid 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 60.113a(a)(1)(i)(B)] Federally Enforceable Through Title V Permit

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

36. The permittee shall inspect the primary and secondary seals for compliance with the requirements of Rule 4623 (Amended May 19, 2005) 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] Federally Enforceable Through Title V Permit

37. 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 reports shall identify the vessels and contain the dates of the measurements, raw data obtained in the measurement process, all such gap calculations as required by this permit, and the schedule for corrective action(s) to be made. 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 4623 (Amended May 19, 2005) and 40 CFR 60 Subpart Ka. [District Rule 4623, 6.3.5 and 40 CFR 60.113a(a)(i)(E)] Federally Enforceable Through Title V Permit

38. 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)] Federally Enforceable Through Title V Permit

39. 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. Components located in unsafe areas shall be inspected and repaired at the next process unit turnaround. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

40. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date of leak detection, and method of detection; 3) Date and emission level of recheck after leak is repaired; 4) Identification components that are located in inaccessible locations or in unsafe areas. Leaks over 10,000 ppmv shall be reported as a deviation. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

41. Operator shall determine gap widths in the primary and secondary seals using the following procedure: 1) Measure seal gaps, at one or more floating roof levels when the roof is floating off leg supports; 2) Measure seal gaps around entire circumference of the tank in each place where a one-eighth (1/8) inch diameter uniform probe passes freely (without forcing or binding against seal) between the seal and the tank wall and measure the circumferential distance of each such location; 3), Total surface area of each gap shall be determined by using probes of various widths to accurately measure the actual distance from the tank wall to the seal and multiplying each such width by its respective circumferential distance; 4) Add the gap surface area of each gap location for the primary seal and the secondary seal individually. Divide the sum for each seal by the nominal diameter of the tank. [40 CFR 60.113a(a)(1)(ii) and (iii)] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

42. Operator shall record the vessel on which the measurement was performed, date of the seal gap measurement, and raw data obtained in the measurement process in accordance with the conditions of this permit. [40 CFR 60.113a(a)(1)(i)(D)] Federally Enforceable Through Title V Permit

43. Operator shall provide the APCO with 30 days notice of the gap measurement to afford the District the opportunity to have an observer present. [40 CFR 60.113a(a)(1)(iv)] Federally Enforceable Through Title V Permit

44. When the unit is storing organic liquids with true vapor pressure less than 0.5 psia and is exempted from Sections 5.3, 5.5, and 6.1 of District Rule 4623 (Amended May 19, 2005), permittee shall conduct True Vapor Pressure (TVP) testing of the organic liquid stored in this tank at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored in this tank in order to maintain exemption from control requirements of District Rule 4623. [District Rules 2520, 9.3.2 and 4623, 6.2.2] Federally Enforceable Through Title V Permit

45. Permittee shall submit the records of TVP 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 2520, 9.3.2 and 4623, 6.3.6] Federally Enforceable Through Title V Permit

46. The true vapor pressure (TVP) shall be measured using Reid vapor pressure ASTM Method D323, 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 of the oil and gas section of "California Air Resources Boards (ARB) Technical Guidance Document to the Criteria and Guidelines Regulations for AB 2588", dated August 1989. As an alternative to using ASTM D 323, the TVP may be determined using ASTM Method D2879 or other equivalent test methods approved by APCO, ARB, and EPA. [District Rule 4623, 6.4.3] Federally Enforceable Through Title V Permit

47. Maximum true vapor pressure may be determined from nomographs contained in API Bulletin 2517, by using the typical Reid vapor pressure and the maximum expected storage 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 60.115a(b)] Federally Enforceable Through Title V Permit

48. 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 1.0 psia. [40 CFR 60.115a(c)] Federally Enforceable Through Title V Permit

49. 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

50. The permittee shall keep accurate records of each liquid stored in the tank, including its period of storage, storage temperature, Reid vapor pressure, maximum true vapor pressure, and API gravity. [District Rules 2520, 9.3.2 and 4623, 6.3] Federally Enforceable Through Title V Permit

51. All records of required monitoring data and support information shall be maintained for a period of at least five years and shall be made readily available for District inspection upon request. [District Rules 2520, 9.4.2 and 4623, 6.3] Federally Enforceable Through Title V Permit

52. Compliance with permit conditions in the Title V permit shall be deemed compliance with 40 CFR 60 Subpart Ka and District Rule 4623 (Amended May 19, 2005). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: C-1234-7-5 **EXPIRATION DATE:** 04/30/2016

EQUIPMENT DESCRIPTION:
10,800,000 GALLON WELDED STORAGE TANK #CH13 EQUIPPED WITH EXTERNAL FLOATING ROOF WITH PRIMARY METALLIC SHOE SEAL AND WIPER TYPE SECONDARY SEAL

PERMIT UNIT REQUIREMENTS

1. All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District NSR Rule] Federally Enforceable Through Title V Permit
2. True vapor pressure of the organic liquid stored shall be less than 11 psia. [District Rule 4623, 5.1.1; and 40 CFR 60.110a & 60.112a] Federally Enforceable Through Title V Permit
3. When storing organic liquids with true vapor pressure less than 0.5 psia, the requirements of Sections 5.3, 5.5, and 6.1 of District Rule 4623 (Amended May 19, 2005) shall not apply to this unit. This exemption applies to all conditions in this permit referencing only Sections 5.3, 5.5, or 6.1 of District Rule 4623. [District Rule 4623, 2.0] Federally Enforceable Through Title V Permit
4. When storing organic liquids with true vapor pressure less than 1.5 psia, the requirements of 40 CFR 60 Subpart Ka shall not apply to this unit. This exemption applies to all conditions in this permit referencing only 40 CFR 60 Subpart Ka. [40 CFR 60.112a(a)] Federally Enforceable Through Title V Permit
5. Before switching to the storage of organic liquids with true vapor pressure greater than or equal to 0.5 psia, all covers, seals, and lids shall be inspected by the facility operator to ensure compliance with the provisions of this permit. This includes all conditions containing District Rule 4623 references. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
6. Before switching to the storage of organic liquids with true vapor pressure greater than or equal to 1.5 psia, all covers, seals, and lids shall be inspected by the facility operator to ensure compliance with the provisions of this permit. This includes all conditions containing District Rule 4623 or 40 CFR 60 Subpart Ka references. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
7. Within one week after switching from storage of organic liquids with TVP greater than or equal to 0.5 psia to storage of organic liquids with TVP less than 0.5 psia, the TVP of the organic liquid shall be determined in accordance with the test methods approved in this permit or an equivalent method approved by the APCO, ARB, and EPA. [District Rules 2520, 9.3.2 and 4623, 6.4] Federally Enforceable Through Title V Permit
8. The tank shall be equipped with a floating roof consisting of a 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 60.112a(a)(1)] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

9. 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 and 40 CFR 60.112a(a)(1)] Federally Enforceable Through Title V Permit

10. Primary seal (lower seal) shall be a metallic shoe seal. [40 CFR 60.112a(a)(1)(i)] 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. No continuous gap in the primary seal greater than 1/8 inch wide shall exceed 10% of the tank circumference. 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. The width of any portion of any gap in the primary seal shall not exceed 1-1/2 inches. [District Rule 4623, 5.3.2.1; and 40 CFR 60.112a(a)(1)] Federally Enforceable Through Title V Permit

12. 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 and 40 CFR 60.112a(a)(1)] Federally Enforceable Through Title V Permit

13. 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 surface. [District Rule 4623, 5.3.2.1] Federally Enforceable Through Title V Permit

14. The secondary seal is to be installed above the primary seal so that it completely covers the space between the roof edge and the tank wall. 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; and 40 CFR 60.112a(a)(1)(ii)] Federally Enforceable Through Title V Permit

15. The owner or operator is exempted from the requirements for the secondary seals and the secondary seal gap criteria when performing gap measurements or inspections of the primary seal. [40 CFR 60.112a(a)(1)(ii)] Federally Enforceable Through Title V Permit

16. 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] Federally Enforceable Through Title V Permit

17. 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] Federally Enforceable Through Title V Permit

18. 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. The width of any portion of any gap in the secondary seal shall not exceed 1/2 inch. [District Rule 4623, 5.3.2.1; and 40 CFR 60.112a(a)(1)(ii)] Federally Enforceable Through Title V Permit

19. 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 and 40 CFR 60.112a(a)(1)(iii)] Federally Enforceable Through Title V Permit

20. The tank pressure-vacuum (PV) relief valve shall be set to within 10% of the maximum allowable working pressure of the tank. The PV relief valve shall be permanently labeled with the operating pressure settings. The PV relief valve shall be properly installed and maintained in good operating order in accordance with the manufacturer's instructions, and shall remain in gas-tight condition except when the operating pressure exceeds the valve's set pressure. [District Rule 4623, Section 5.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

21. A gas-tight condition is defined as a condition without a gas leak. A gas leak is defined as a reading in excess of 10,000 ppmv, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21. A reading in excess of 10,000 ppmv above background is a violation of this permit and Rule 4623 and shall be reported as a deviation. [District Rule 4623, 3.9 and 6.4.8] Federally Enforceable Through Title V Permit

22. Each opening in the roof, except for automatic bleeder vents, rim vents, and pressure relief vents, in a non-contact external floating roof shall provide a projection below the liquid surface. [District Rule 4623, 5.5.2.2.1, 40 CFR 60.112a(a)(1)(iii)] 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 60.112a(a)(1)(iii)] Federally Enforceable Through Title V Permit

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 40 CFR 60.112a(a)(1)(iii)] Federally Enforceable Through Title V Permit

26. 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)] 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 included in 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 included in 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

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

34. Operator shall perform gap measurements on primary and secondary seals within 60 days of the initial fill with petroleum liquid 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 60.113a(a)(1)(i)(B)] Federally Enforceable Through Title V Permit

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

36. The permittee shall inspect the primary and secondary seals for compliance with the requirements of Rule 4623 (Amended May 19, 2005) 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] Federally Enforceable Through Title V Permit

37. 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 reports shall identify the vessels and contain the dates of the measurements, raw data obtained in the measurement process, all such gap calculations as required by this permit, and the schedule for corrective action(s) to be made. 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 4623 (Amended May 19, 2005) and 40 CFR 60 Subpart Ka. [District Rule 4623, 6.3.5 and 40 CFR 60.113a(a)(i)(E)] Federally Enforceable Through Title V Permit

38. 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)] Federally Enforceable Through Title V Permit

39. 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. Components located in unsafe areas shall be inspected and repaired at the next process unit turnaround. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

40. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date of leak detection, and method of detection; 3) Date and emission level of recheck after leak is repaired; 4) Identification components that are located in inaccessible locations or in unsafe areas. Leaks over 10,000 ppmv shall be reported as a deviation. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

41. Operator shall determine gap widths in the primary and secondary seals using the following procedure: 1) Measure seal gaps, at one or more floating roof levels when the roof is floating off leg supports; 2) Measure seal gaps around entire circumference of the tank in each place where a one-eighth (1/8) inch diameter uniform probe passes freely (without forcing or binding against seal) between the seal and the tank wall and measure the circumferential distance of each such location; 3), Total surface area of each gap shall be determined by using probes of various widths to accurately measure the actual distance from the tank wall to the seal and multiplying each such width by its respective circumferential distance; 4) Add the gap surface area of each gap location for the primary seal and the secondary seal individually. Divide the sum for each seal by the nominal diameter of the tank. [40 CFR 60.113a(a)(1)(ii) and (iii)] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

42. Operator shall record the vessel on which the measurement was performed, date of the seal gap measurement, and raw data obtained in the measurement process in accordance with the conditions of this permit. [40 CFR 60.113a(a)(1)(i)(D)] Federally Enforceable Through Title V Permit

43. Operator shall provide the APCO with 30 days notice of the gap measurement to afford the District the opportunity to have an observer present. [40 CFR 60.113a(a)(1)(iv)] Federally Enforceable Through Title V Permit

44. When the unit is storing organic liquids with true vapor pressure less than 0.5 psia and is exempted from Sections 5.3, 5.5, and 6.1 of District Rule 4623 (Amended May 19, 2005), permittee shall conduct True Vapor Pressure (TVP) testing of the organic liquid stored in this tank at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored in this tank in order to maintain exemption from control requirements of District Rule 4623. [District Rules 2520, 9.3.2 and 4623, 6.2.2] Federally Enforceable Through Title V Permit

45. Permittee shall submit the records of TVP 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 2520, 9.3.2 and 4623, 6.3.6] Federally Enforceable Through Title V Permit

46. The true vapor pressure (TVP) shall be measured using Reid vapor pressure ASTM Method D323, 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 of the oil and gas section of "California Air Resources Boards (ARB) Technical Guidance Document to the Criteria and Guidelines Regulations for AB 2588", dated August 1989. As an alternative to using ASTM D 323, the TVP may be determined using ASTM Method D2879 or other equivalent test methods approved by APCO, ARB, and EPA. [District Rule 4623, 6.4.3] Federally Enforceable Through Title V Permit

47. Maximum true vapor pressure may be determined from nomographs contained in API Bulletin 2517, by using the typical Reid vapor pressure and the maximum expected storage 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 60.115a(b)] Federally Enforceable Through Title V Permit

48. 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 1.0 psia. [40 CFR 60.115a(c)] Federally Enforceable Through Title V Permit

49. 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

50. The permittee shall keep accurate records of each liquid stored in the tank, including its period of storage, storage temperature, Reid vapor pressure, maximum true vapor pressure, and API gravity. [District Rules 2520, 9.3.2 and 4623, 6.3] Federally Enforceable Through Title V Permit

51. All records of required monitoring data and support information shall be maintained for a period of at least five years and shall be made readily available for District inspection upon request. [District Rules 2520, 9.4.2 and 4623, 6.3] Federally Enforceable Through Title V Permit

52. Compliance with permit conditions in the Title V permit shall be deemed compliance with 40 CFR 60 Subpart Ka and District Rule 4623 (Amended May 19, 2005). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

53. This unit commenced construction, modification, or reconstruction between May 18, 1978 and July 23, 1984. Therefore, the requirements of 40 CFR 60 Subpart K and Kb do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: C-1234-10-5 **EXPIRATION DATE:** 04/30/2016

SECTION: 17 **TOWNSHIP:** 20S **RANGE:** 15E

EQUIPMENT DESCRIPTION:
465 BHP CUMMINS MODEL NTTA-855G DIESEL-FIRED EMERGENCY STANDBY IC ENGINE POWERING AN ELECTRICAL GENERATOR

PERMIT UNIT REQUIREMENTS

1. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201, 3.1] Federally Enforceable Through Title V Permit
2. This engine shall be equipped with an operational non-resettable elapsed time meter or other APCO approved alternative. [District Rule 4702 and 17 CCR 93115] Federally Enforceable Through Title V Permit
3. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rule 4702 and 17 CCR 93115] Federally Enforceable Through Title V Permit
4. Only CARB certified diesel fuel containing not more than 0.0015% sulfur by weight is to be used. [District Rule 2201, 4801 and 17 CCR 93115] Federally Enforceable Through Title V Permit
5. This engine shall be operated and maintained in proper operating condition as recommended by the engine manufacturer or emissions control system supplier. [District Rule 4702] Federally Enforceable Through Title V Permit
6. During periods of operation for maintenance, testing, and required regulatory purposes, the permittee shall monitor the operational characteristics of the engine as recommended by the manufacturer or emission control system supplier (for example: check engine fluid levels, battery, cables and connections; change engine oil and filters; replace engine coolant; and/or other operational characteristics as recommended by the manufacturer or supplier). [District Rule 4702] Federally Enforceable Through Title V Permit
7. The permittee shall maintain monthly records of emergency and non-emergency operation. Records shall include the number of hours of emergency operation, the date and number of hours of all testing and maintenance operations, the purpose of the operation (for example: load testing, weekly testing, rolling blackout, general area power outage, etc.) and records of operational characteristics monitoring. For units with automated testing systems, the operator may, as an alternative to keeping records of actual operation for testing purposes, maintain a readily accessible written record of the automated testing schedule. [District Rule 4702 and 17 CCR 93115] Federally Enforceable Through Title V Permit
8. This engine shall be operated only for maintenance, testing, and required regulatory purposes, and during emergency situations. Operation of the engine for maintenance, testing, and required regulatory purposes shall not exceed 20 hours per calendar year. [District Rule 4702 and 17 CCR 93115] Federally Enforceable Through Title V Permit
9. The permittee shall maintain monthly records of the type of fuel purchased, the amount of fuel purchased, date when the fuel was purchased, signature of the permittee who received the fuel, and signature of the fuel supplier indicating that the fuel was delivered. [17 CCR 93115]

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

10. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements of SJVUAPCD Rule 4201 (Amended December 17, 1992); Rule 404 (Madera), 406 (Fresno), and 407 (Kings, Merced, San Joaquin, Tulare, Kern, and Stanislaus). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: C-1234-11-5 **EXPIRATION DATE:** 04/30/2016

SECTION: 17 **TOWNSHIP:** 20S **RANGE:** 15E

EQUIPMENT DESCRIPTION:
213 BHP CATERPILLAR MODEL 3306 DIESEL-FIRED EMERGENCY IC ENGINE POWERING A FIREWATER PUMP

PERMIT UNIT REQUIREMENTS

1. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201, 3.1] Federally Enforceable Through Title V Permit
2. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements of SJVUAPCD Rule 4201 (Amended December 17, 1992); Rule 404 (Madera), 406 (Fresno), and 407 (Kings, Merced, San Joaquin, Tulare, Kern, and Stanislaus). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
3. This engine shall be equipped with an operational non-resettable elapsed time meter or other APCO approved alternative. [District Rule 4702] Federally Enforceable Through Title V Permit
4. All records shall be maintained and retained on-site for a minimum of (5) five years, and shall be made available for DIstrict inspection upon request. [District Rule 4702 and 17 CCR 93115] Federally Enforceable Through Title V Permit
5. Only CARB certified diesel fuel containing not more than 0.0015% sulfur by weight is to be used. [District Rules 2201 and 4801 and 17 CCR 93115] Federally Enforceable Through Title V Permit
6. The permittee shall maintain monthly records of emergency and non-emergency operation. Records shall include the number of hours of emergency operation, the date and number of hours of all testing and maintenance operations and the purpose of the operation (for example: load testing, weekly testing, rolling blackout, general area power outage, etc.). For units with automated testing systems, the operator may, as an alternative to keeping records of actual operation for testing purposes, maintain a readily accessible written record of the automated testing schedule. [District Rule 4702 and 17 CCR 93115] Federally Enforceable Through Title V Permit
7. This engine shall be operated only for maintenance, testing, and required regulatory purposes, and during emergency situations. For testing purposes, the engine shall only be operated the number of hours necessary to comply with the testing requirements of the National Fire Protection Association (NFPA) 25 - "Standard for the Inspection, Testing, and Maintenance of Water-Based Fire Protection Systems" , 1998 edition. Total hours of operation for all maintenance, testing and required regulatory purposes shall not exceed 100 hours per calendar year. [District Rule 4702 and 17 CCR 93115] Federally Enforceable Through Title V Permit
8. The permittee shall maintain monthly records of the type of fuel purchased, the amount of fuel purchased, date when the fuel was purchased, signature of the permittee who received the fuel, and signature of the fuel supplier indicating that the fuel was delivered. [17 CCR 93115]

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: C-1234-12-3 **EXPIRATION DATE:** 04/30/2016

SECTION: 17 **TOWNSHIP:** 20S **RANGE:** 15E

EQUIPMENT DESCRIPTION:
3,360,000 GALLON (80,000 BBL) FIXED ROOF STORAGE TANK #80GC11, 114.5' DIAMETER X 30' HEIGHT, EMERGENCY STANDBY USE ONLY

PERMIT UNIT REQUIREMENTS

1. Tank shall not be used (filled or partially filled) for more than 60 cumulative days during any 12-month period. [District Rule 4623, 3.6] Federally Enforceable Through Title V Permit
2. Tank shall exclusively store petroleum distillates or crude oil. [District Rule 4623, 4.2.1] Federally Enforceable Through Title V Permit
3. Prior to return to Emergency Standby status, the contents of the tank shall be drained to the maximum extent feasible. After the tank has been used (filled or partially filled) and draining of the tank has begun, any further filling of the tank shall constitute a separate use of the tank, and the number of days the tank is used shall be counted towards the 60 cumulative day limit specified in the definition of an emergency standby tank in Section 3.6 of District Rule 4623 (Amended May 19, 2005). [District Rule 4623, 4.2.1] Federally Enforceable Through Title V Permit
4. The tank shall be in gas-tight condition and shall be equipped with a pressure-vacuum (PV) relief valve. The pressure-vacuum (PV) relief valve shall be set to within 10% of the maximum allowable working pressure of the tank, permanently labeled with the operating pressure settings, properly maintained in good operating order in accordance with the manufacturer's instructions, and shall remain in gas-tight condition except when the operating pressure exceeds the valve's set pressure. [District Rule 4623, 4.2.1 and 5.2] Federally Enforceable Through Title V Permit
5. A gas-tight condition is defined as a condition without a gas leak. A gas leak is defined as a reading in excess of 10,000 ppmv, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21. A reading in excess of 10,000 ppmv above background is a violation of this permit and Rule 4623 and shall be reported as a deviation. [District Rule 4623, 3.9 and 6.4.8] Federally Enforceable Through Title V Permit
6. Permitee shall maintain records showing date(s) the organic liquid is first introduced into the tank, and date(s) each tank is fully drained. Such records shall be submitted to the APCO 60 days prior to permit renewal. [District Rule 4623, 6.3.2] Federally Enforceable Through Title V Permit
7. All records of required monitoring data and support information 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

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: C-1234-13-6 **EXPIRATION DATE:** 04/30/2016

SECTION: 17 **TOWNSHIP:** 20S **RANGE:** 15E

EQUIPMENT DESCRIPTION:
5,040,000 GALLON (120,000 BBL) WELDED CRUDE OIL STORAGE TANK #120CH-14 EQUIPPED WITH EXTERNAL FLOATING ROOF WITH PRIMARY METALLIC SHOE SEAL AND WIPER TYPE SECONDARY SEAL

PERMIT UNIT REQUIREMENTS

1. This tank shall only store liquid with a true vapor pressure (TVP) of 5.7 psia or less under all storage conditions. [District NSR Rule; District Rule 4623, 5.1.1; and 40 CFR 60.110b(a) & 112b(a)] Federally Enforceable Through Title V Permit
2. All equipment shall be maintained in good working order so as to minimize VOC emissions to the atmosphere. [District NSR Rule] Federally Enforceable Through Title V Permit
3. Maximum daily throughput of organic liquid with a true vapor pressure of 1.28 psia or less shall not exceed 45,000 barrels. [District NSR Rule] Federally Enforceable Through Title V Permit
4. Maximum daily throughput of organic liquid with a true vapor pressure of between 1.8 and 5.7 shall not exceed 24,500 barrels. [District NSR Rule] Federally Enforceable Through Title V Permit
5. Records of daily throughput of crude oil and the type of crude oil stored shall be maintained. [District 2520, 9.4.2] Federally Enforceable Through Title V Permit
6. When storing organic liquids with true vapor pressure less than 0.5 psia, the requirements of Sections 5.3, 5.5, and 6.1 of District Rule 4623 (Amended May 19, 2005) shall not apply to this unit. This exemption applies to all conditions in this permit referencing only Sections 5.3, 5.5, or 6.1 of District Rule 4623. [District Rule 4623, 2.0] Federally Enforceable Through Title V Permit
7. When storing organic liquids with true vapor pressure less than 0.75 psia, the requirements of 40 CFR 60 Subpart Kb shall not apply to this unit. This exemption applies to all conditions in this permit referencing only 40 CFR 60 Subpart Kb. [40 CFR 60.112b(a)] Federally Enforceable Through Title V Permit
8. Before switching to the storage of organic liquids with true vapor pressure greater than or equal to 0.5 psia, all covers, seals, and lids shall be inspected by the facility operator to ensure compliance with the provisions of this permit. This includes all conditions containing District Rule 4623 references. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
9. Before switching to the storage of organic liquids with true vapor pressure greater than or equal to 0.75 psia, all covers, seals, and lids shall be inspected by the facility operator to ensure compliance with the provisions of this permit. This includes all conditions containing District Rule 4623 or 40 CFR 60 Subpart Kb references. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
10. Within one week after switching from storage of organic liquids with TVP greater than or equal to 0.5 psia to storage of organic liquids with TVP less than 0.5 psia, the TVP of the organic liquid shall be determined in accordance with the test methods approved in this permit or an equivalent method approved by the APCO, ARB, and EPA. [District Rules 2520, 9.3.2 and 4623, 6.4] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

11. The tank shall be equipped with a floating roof consisting of a 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)] Federally Enforceable Through Title V Permit

12. 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 and 40CFR 60.112b(a)(2)] Federally Enforceable Through Title V Permit

13. Primary seal (lower seal) shall be a metallic shoe seal. [District Rule 2080 and 40 CFR 60.112b(a)(2)] Federally Enforceable Through Title V Permit

14. The cumulative length of all primary seal gaps greater than 1/8 inch shall not exceed 30% of the circumference of the tank. No continuous gap in the primary seal greater than 1/8 inch wide shall exceed 10% of the tank circumference. 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. The width of any portion of any gap in the primary seal shall not exceed 1-1/2 inches. [District Rule 4623, 5.3.2.1; and 40 CFR 60.113b(b)(4)] 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 and 40 CFR 60.113b(b)(4)] 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 surface. [District Rule 4623, 5.3.2.1] Federally Enforceable Through Title V Permit

17. The secondary seal is to be installed above the primary seal so that it completely covers the space between the roof edge and the tank wall. 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; and 40 CFR 60.112b(a)(2)] Federally Enforceable Through Title V Permit

18. The owner or operator is exempted from the requirements for the secondary seals and the secondary seal gap criteria when performing gap measurements or inspections of the primary seal. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

19. 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] Federally Enforceable Through Title V Permit

20. 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] Federally Enforceable Through Title V Permit

21. 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. The width of any portion of any gap in the secondary seal shall not exceed 1/2 inch. [District Rule 4623, 5.3.2.1; and 40 CFR 60.113b(b)(4)] Federally Enforceable Through Title V Permit

22. 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

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

23. The tank pressure-vacuum (PV) relief valve shall be set to within 10% of the maximum allowable working pressure of the tank. The PV relief valve shall be permanently labeled with the operating pressure settings. The PV relief valve shall be properly installed and maintained in good operating order in accordance with the manufacturer's instructions, and shall remain in gas-tight condition except when the operating pressure exceeds the valve's set pressure. [District Rule 4623, Section 5.2] Federally Enforceable Through Title V Permit

24. A gas-tight condition is defined as a condition without a gas leak. A gas leak is defined as a reading in excess of 10,000 ppmv, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21. A reading in excess of 10,000 ppmv above background is a violation of this permit and Rule 4623 (Amended May 19, 2005) and shall be reported as a deviation. [District Rule 4623, 3.9 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. 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. 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 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] 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 included in 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 included in 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

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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 District Rule 4623 (Amended May 19, 2005). 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 of District Rule 4623. [District Rule 4623 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. [40CFR 60.113b(b)(1)(i)] 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. [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 (Amended May 19, 2005) every time this tank is emptied or degassed. Actual gap measurements shall be performed when the liquid level is static but not more than 48 hours after the tank roof is re-floated. [District Rule 4623 and 40CFR 60.113b(b)(6)] Federally Enforceable Through Title V Permit

41. 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 reports shall identify the vessels and contain the dates of measurements, raw data obtained in the measurement process, all such gap calculations as required by this permit, and the schedule for corrective action(s) to be made. 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 Rule 4623 (Amended May 19, 2005) and 40 CFR 60 Subpart Kb. [District Rule 4623, 6.3.5; and 40CFR 60.115b(b)(4)] 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 (Amended May 19, 2005), 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 and 40 CFR 60.116b(c)] Federally Enforceable Through Title V Permit

43. Operator shall determine gap widths in the primary and secondary seals using the following procedure: 1) Measure seal gaps, at one or more floating roof levels when the roof is floating off leg supports; 2) Measure seal gaps around entire circumference of the tank in each place where a one-eighth (1/8) inch diameter uniform probe passes freely (without forcing or binding against seal) between the seal and the tank wall and measure the circumferential distance of each such location; 3), Total surface area of each gap shall be determined by using probes of various widths to accurately measure the actual distance from the tank wall to the seal and multiplying each such width by its respective circumferential distance; 4) Add the gap surface area of each gap location for the primary seal and the secondary seal individually. Divide the sum for each seal by the nominal diameter of the tank. [40 CFR 60.113b(b)(2)] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

44. 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

45. 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

46. 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

47. 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)] Federally Enforceable Through Title V Permit

48. 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)] Federally Enforceable Through Title V Permit

49. 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)] Federally Enforceable Through Title V Permit

50. 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)] Federally Enforceable Through Title V Permit

51. 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)] Federally Enforceable Through Title V Permit

52. 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)] Federally Enforceable Through Title V Permit

53. 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. [District Rule 2520, 9.4; and 40 CFR 60.116b(b)] 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 60.116b(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 60.116b(e)(1)] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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 60.116b(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. [40CFR 60.116b(f)] Federally Enforceable Through Title V Permit

58. 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)] Federally Enforceable Through Title V Permit

59. Permittee shall conduct True Vapor Pressure (TVP) testing of the organic liquid stored in this tank at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored in this tank. [District Rules 2520, 9.3.2 and 4623, 6.2.2] 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

61. Permittee shall submit the records of TVP 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 2520, 9.3.2 and 4623, 6.3.6] Federally Enforceable Through Title V Permit

62. The true vapor pressure (TVP) shall be measured using Reid vapor pressure ASTM Method D323, 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 of the oil and gas section of "California Air Resources Boards (ARB) Technical Guidance Document to the Criteria and Guidelines Regulations for AB 2588", dated August 1989. As an alternative to using ASTM D 323, the TVP may be determined using ASTM Method D2879 or other equivalent test methods approved by APCO, ARB, and EPA. [District Rules 2520, 9.3.2 and 4623, 6.4.3] Federally Enforceable Through Title V Permit

63. 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

64. The permittee shall keep a accurate records of each liquid stored in the tank, including its period of storage, storage temperature, Reid vapor pressure, maximum true vapor pressure, and API gravity. [District Rules 2520, 9.3.2 and 4623, 6.3] Federally Enforceable Through Title V Permit

65. All records of required monitoring data and support information shall be maintained for a period of at least five years and shall be made readily available for District inspection upon request. [District Rules 2520, 9.4.2 and 4623, 6.3] Federally Enforceable Through Title V Permit

66. Compliance with permit conditions in the Title V permit shall be deemed compliance with District Rule 4623 (Amended May 19, 2005) and 40 CFR 60, Subpart Kb. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

67. This unit commenced construction, modification, or reconstruction after July 23, 1984. Therefore, the requirements of 40 CFR 60 Subpart K and Ka do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

Shell Pipeline Company LP
C-1234
C-1082670

ATTACHMENT B

Previous Title V Operating Permit

San Joaquin Valley
AIR POLLUTION CONTROL DISTRICT

HEALTHY AIR LIVING™

Permit to Operate

FACILITY: C-1234 **EXPIRATION DATE:** 04/30/2009

LEGAL OWNER OR OPERATOR: SHELL PIPELINE COMPANY LP
MAILING ADDRESS: 20945 S WILMINGTON AVE
CARSON, CA 90810-1039

FACILITY LOCATION: COALINGA PUMP STATION
37509 OIL CITY RD
COALINGA, CA 93210

FACILITY DESCRIPTION: PETROLEUM TRANSPORTATION

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

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

Seyed Sadredin
Executive Director / APCO

David Warner
Director of Permit Services

Central Regional Office • 1990 E. Gettysburg Ave. • Fresno, CA 93726 • (559) 230-5900 • Fax (559) 230-6061

San Joaquin Valley
Air Pollution Control District

FACILITY: C-1234-0-2 **EXPIRATION DATE:** 04/30/2009

FACILITY-WIDE REQUIREMENTS

1. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
2. The owner or operator shall notify the District of any breakdown condition as soon as reasonably possible, but no later than one hour after its detection, unless the owner or operator demonstrates to the District's satisfaction that the longer reporting period was necessary. [District Rule 1100, 6.1; County Rules 110 (Fresno, Stanislaus, San Joaquin); 109 (Merced); 113 (Madera); and 111 (Kern, Tulare, Kings)] Federally Enforceable Through Title V Permit
3. The District shall be notified in writing within ten days following the correction of any breakdown condition. The breakdown notification shall include a description of the equipment malfunction or failure, the date and cause of the initial failure, the estimated emissions in excess of those allowed, and the methods utilized to restore normal operations. [District Rule 1100, 7.0; County Rules 110 (Fresno, Stanislaus, San Joaquin); 109 (Merced); 113 (Madera); and 111 (Kern, Tulare, Kings)] Federally Enforceable Through Title V Permit
4. The owner or operator of any stationary source operation that emits more than 25 tons per year of nitrogen oxides or reactive organic compounds, shall provide the District annually with a written statement in such form and at such time as the District prescribes, showing actual emissions of nitrogen oxides and reactive organic compounds from that source. [District Rule 1160, 5.0] Federally Enforceable Through Title V Permit
5. Any person building, altering or replacing any operation, article, machine, equipment, or other contrivance, the use of which may cause the issuance of air contaminants or the use of which may eliminate, reduce, or control the issuance of air contaminants, shall first obtain an Authority to Construct (ATC) from the District unless exempted by District Rule 2020 (3/21/02). [District Rule 2010, 3.0 and 4.0; and 2020] Federally Enforceable Through Title V Permit
6. The permittee must comply with all conditions of the permit including permit revisions originated by the District. All terms and conditions of a permit that are required pursuant to the Clean Air Act (CAA), including provisions to limit potential to emit, are enforceable by the EPA and Citizens under the CAA. Any permit noncompliance constitutes a violation of the CAA and the District Rules and Regulations, and is grounds for enforcement action, for permit termination, revocation, reopening and reissuance, or modification; or for denial of a permit renewal application. [District Rules 2070, 7.0; 2080; and 2520, 9.8.1 and 9.12.1] Federally Enforceable Through Title V Permit
7. A Permit to Operate or an Authority to Construct shall not be transferred unless a new application is filed with and approved by the District. [District Rule 2031] Federally Enforceable Through Title V Permit
8. Every application for a permit required under Rule 2010 (12/17/92) shall be filed in a manner and form prescribed by the District. [District Rule 2040] Federally Enforceable Through Title V Permit
9. The operator shall maintain records of required monitoring that include: 1) the date, place, and time of sampling or measurement; 2) the date(s) analyses were performed; 3) the company or entity that performed the analysis; 4) the analytical techniques or methods used; 5) the results of such analysis; and 6) the operating conditions at the time of sampling or measurement. [District Rule 2520, 9.4.1] Federally Enforceable Through Title V Permit
10. The operator shall retain records of all required monitoring data and support information for a period of at least 5 years from the date of the monitoring sample, measurement, or report. Support information includes copies of all reports required by the permit and, for continuous monitoring instrumentation, all calibration and maintenance records and all original strip-chart recordings. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

FACILITY-WIDE REQUIREMENTS CONTINUE ON NEXT PAGE

11. The operator shall submit reports of any required monitoring at least every six months unless a different frequency is required by an applicable requirement. All instances of deviations from permit requirements must be clearly identified in such reports. [District Rule 2520, 9.5.1] Federally Enforceable Through Title V Permit

12. Deviations from permit conditions must be promptly reported, including deviations attributable to upset conditions, as defined in the permit. For the purpose of this condition, promptly means as soon as reasonably possible, but no later than 10 days after detection. The report shall include the probable cause of such deviations, and any corrective actions or preventive measures taken. All required reports must be certified by a responsible official consistent with section 10.0 of District Rule 2520 (6/21/01). [District Rules 2520, 9.5.2 and 1100, 7.0] Federally Enforceable Through Title V Permit

13. If for any reason a permit requirement or condition is being challenged for its constitutionality or validity by a court of competent jurisdiction, the outcome of such challenge shall not affect or invalidate the remainder of the conditions or requirements in that permit. [District Rule 2520, 9.7] Federally Enforceable Through Title V Permit

14. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit. [District Rule 2520, 9.8.2] Federally Enforceable Through Title V Permit

15. The permit may be modified, revoked, reopened and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition. [District Rule 2520, 9.8.3] Federally Enforceable Through Title V Permit

16. The permit does not convey any property rights of any sort, or any exclusive privilege. [District Rule 2520, 9.8.4] Federally Enforceable Through Title V Permit

17. The Permittee shall furnish to the District, within a reasonable time, any information that the District may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the District copies of records required to be kept by the permit or, for information claimed to be confidential, the permittee may furnish such records directly to EPA along with a claim of confidentiality. [District Rule 2520, 9.8.5] Federally Enforceable Through Title V Permit

18. The permittee shall pay annual permit fees and other applicable fees as prescribed in Regulation III of the District Rules and Regulations. [District Rule 2520, 9.9] Federally Enforceable Through Title V Permit

19. Upon presentation of appropriate credentials, a permittee shall allow an authorized representative of the District to enter the permittee's premises where a permitted source is located or emissions related activity is conducted, or where records must be kept under condition of the permit. [District Rule 2520, 9.13.2.1] Federally Enforceable Through Title V Permit

20. Upon presentation of appropriate credentials, a permittee shall allow an authorized representative of the District to have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit. [District Rule 2520, 9.13.2.2] Federally Enforceable Through Title V Permit

21. Upon presentation of appropriate credentials, a permittee shall allow an authorized representative of the District to inspect at reasonable times any facilities, equipment, practices, or operations regulated or required under the permit. [District Rule 2520, 9.13.2.3] Federally Enforceable Through Title V Permit

22. Upon presentation of appropriate credentials, a permittee shall allow an authorized representative of the District to sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with the permit or applicable requirements. [District Rule 2520, 9.13.2.4] Federally Enforceable Through Title V Permit

23. No air contaminants shall be discharged into the atmosphere for a period or periods aggregating more than 3 minutes in any one hour which is as dark or darker than Ringelmann #1 or equivalent to 20% opacity and greater, unless specifically exempted by District Rule 4101 (11/15/01). If the equipment or operation is subject to a more stringent visible emission standard as prescribed in a permit condition, the more stringent visible emission limit shall supersede this condition. [District Rule 4101, and County Rules 401 (in all eight counties in the San Joaquin Valley)] Federally Enforceable Through Title V Permit

FACILITY-WIDE REQUIREMENTS CONTINUE ON NEXT PAGE

24. No person shall manufacture, blend, repackage, supply, sell, solicit or apply any architectural coating with a VOC content in excess of the corresponding limit specified in the Table of Standards of District Rule 4601 (10/31/01) for use or sale within the District. [District Rule 4601, 5.1] Federally Enforceable Through Title V Permit

25. All VOC-containing materials for architectural coatings subject to Rule 4601 (10/31/01) shall be stored in closed containers when not in use. [District Rule 4601, 5.4] Federally Enforceable Through Title V Permit

26. The permittee shall comply with all the Labeling and Test Methods requirements outlined in Rule 4601 sections 6.1 and 6.3 (10/31/01). [District Rule 4601, 6.1 and 6.3] Federally Enforceable Through Title V Permit

27. With each report or document submitted under a permit requirement or a request for information by the District or EPA, the permittee shall include a certification of truth, accuracy, and completeness by a responsible official. [District Rule 2520, 9.13.1 and 10.0] Federally Enforceable Through Title V Permit

28. If the permittee performs maintenance on, or services, repairs, or disposes of appliances, the permittee shall comply with the standards for Recycling and Emissions Reduction pursuant to 40 CFR 82, Subpart F. [40 CFR 82 Subpart F] Federally Enforceable Through Title V Permit

29. If the permittee performs service on motor vehicles when this service involves the ozone-depleting refrigerant in the motor vehicle air conditioner (MVAC), the permittee shall comply with the standards for Servicing of Motor Vehicle Air Conditioners pursuant to all the applicable requirements as specified in 40 CFR 82, Subpart B. [40 CFR 82, Subpart B] Federally Enforceable Through Title V Permit

30. Disturbances of soil related to any construction, demolition, excavation, extraction, or other earthmoving activities shall comply with the requirements for fugitive dust control in District Rule 8021 unless specifically exempted under Section 4.0 of Rule 8021 (11/15/01) or Rule 8011 (11/15/01). [District Rule 8021 and 8011] Federally Enforceable Through Title V Permit

31. Outdoor handling, storage and transport of any bulk material which emits dust shall comply with the requirements of District Rule 8031, unless specifically exempted under Section 4.0 of Rule 8031 (11/15/01) or Rule 8011 (11/15/01). [District Rule 8031 and 8011] Federally Enforceable Through Title V Permit

32. An owner/operator shall prevent or cleanup any carryout or trackout in accordance with the requirements of District Rule 8041 Section 5.0, unless specifically exempted under Section 4.0 of Rule 8041 (11/15/01) or Rule 8011 (11/15/01). [District Rule 8041 and 8011] Federally Enforceable Through Title V Permit

33. Whenever open areas are disturbed or vehicles are used in open areas, the facility shall comply with the requirements of Section 5.0 of District Rule 8051, unless specifically exempted under Section 4.0 of Rule 8051 (11/15/01) or Rule 8011 (11/15/01). [District Rule 8051 and 8011] Federally Enforceable Through Title V Permit

34. Any paved road or unpaved road shall comply with the requirements of District Rule 8061 unless specifically exempted under Section 4.0 of Rule 8061 (11/15/01) or Rule 8011 (11/15/01). [District Rule 8061 and Rule 8011] Federally Enforceable Through Title V Permit

35. Any unpaved vehicle/equipment area that anticipates more than 75 vehicle trips per day shall comply with the requirements of Section 5.1.1 of District Rule 8071. Any unpaved vehicle/equipment area that anticipates more than 100 vehicle trips per day shall comply with the requirements of Section 5.1.2 of District Rule 8071. All sources shall comply with the requirements of Section 5.0 of District Rule 8071 unless specifically exempted under Section 4.0 of Rule 8071 (11/15/01) or Rule 8011 (11/15/01). [District Rule 8071 and Rule 8011] Federally Enforceable Through Title V Permit

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

FACILITY-WIDE REQUIREMENTS CONTINUE ON NEXT PAGE

37. The permittee shall submit certifications of compliance with the terms and standards contained in Title V permits, including emission limits, standards and work practices, to the District and the EPA annually (or more frequently as specified in an applicable requirement or as specified by the District). The certification shall include the identification of each permit term or condition, the compliance status, whether compliance was continuous or intermittent, the methods used for determining the compliance status, and any other facts required by the District to determine the compliance status of the source. [District Rule 2520, 9.16] Federally Enforceable Through Title V Permit

38. The permittee shall submit an application for Title V permit renewal to the District at least six months, but not greater than 18 months, prior to the permit expiration date. [District Rule 2520, 5.2] Federally Enforceable Through Title V Permit

39. When a term is not defined in a Title V permit condition, the definition in the rule cited as the origin and authority for the condition in a Title V permits shall apply. [District Rule 2520, 9.1.1] Federally Enforceable Through Title V Permit

40. Compliance with permit conditions in the Title V permit shall be deemed in compliance with the following outdated SIP requirements: Rule 401 (Madera, Fresno, Kern, Kings, San Joaquin, Stanislaus, Tulare and Merced), Rule 110 (Fresno, Stanislaus, San Joaquin), Rule 109 (Merced), Rule 113 (Madera), and Rule 111 (Kern, Tulare, Kings). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

41. Compliance with permit conditions in the Title V permit shall be deemed in compliance with the following applicable requirements: SJVUAPCD Rules 1100, sections 6.1 and 7.0 (12/17/92); 2010, sections 3.0 and 4.0 (12/17/92); 2031 (12/17/92); 2040 (12/17/92); 2070, section 7.0 (12/17/92); 2080 (12/17/92); 4101 (11/15/01); 4601, sections 5.1, 5.2, 5.3, 5.8 and 8.0 (10/31/01); 8021 (11/15/01); 8031 (11/15/01); 8041 (11/15/01); 8051 (11/15/01); 8061 (11/15/01); and 8071 (11/15/01). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

42. The reporting periods for the Report of Required Monitoring and the Compliance Certification Report begin November 1 of every year, unless alternative dates are approved by the District Compliance Division. These reports are due within 30 days after the end of the reporting period. [District Rule 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: C-1234-2-2 **EXPIRATION DATE:** 04/30/2009

EQUIPMENT DESCRIPTION:
DORMANT 25.5 MMBTU/HR NATIONAL OIL HEATER #2, WITH NORTH AMERICAN MODEL 5131HCRF BURNER

PERMIT UNIT REQUIREMENTS

1. No modification to this unit shall be performed without an Authority to Construct for such modification(s). [District Rule 2010] Federally Enforceable Through Title V Permit
2. The fuel supply line shall be physically disconnected from this unit. [District Rule 4305 and 4306] Federally Enforceable Through Title V Permit
3. This equipment shall not be operated for any reason until an Authority to Construct (ATC) permit is issued approving all necessary modifications required to comply with the applicable requirements of District Rule 4305, District Rule 4306, and all other applicable District regulations. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
4. All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District NSR Rule] Federally Enforceable Through Title V Permit
5. Use of oil fired heaters permitted under C-1234-2 and C-1234-3 shall be limited to 30 days/year for maintenance of turbines permitted under C-1234-8 and C-1234-9. [District NSR Rule and District Rule 4305, 5.2] Federally Enforceable Through Title V Permit
6. Crude oil consumption shall not exceed 170 gal/hour. [District NSR Rule] Federally Enforceable Through Title V Permit
7. The sulfur content of the crude oil shall not exceed 1.1% by weight. [District NSR Rule] Federally Enforceable Through Title V Permit
8. Natural gas consumption shall not exceed 25,500 scf/hour. [District NSR Rule] Federally Enforceable Through Title V Permit
9. Particulate matter emissions shall not exceed 0.1 grain/dscf at operating conditions, nor 0.1 grain/dscf calculated to 12% CO2, nor 10 lb/hr. [District Rule 4201 and District Rule 4301, 5.1 and 5.2.3] Federally Enforceable Through Title V Permit
10. Nitrogen Oxide (NOx) emissions shall not exceed 140 lb/hr, calculated as NO2. For residual and crude oil fired units, NOx emissions may be calculated using supplier certification of the nitrogen content and heating value, or using reference materials approved by the District. Hourly emissions shall be calculated using the heating value, maximum rated unit capacity, and the following formula: lb NO2/1000 gal = 20.54 + 104.39 (N), where N is the weight % nitrogen in the fuel. [District Rules 2520, 9.3.2 and 4301, 5.2.2, 5.3, and 5.5] Federally Enforceable Through Title V Permit
11. Emissions of sulfur compounds from this unit shall not exceed 200 lb per hour, calculated as SO2. If this unit is not fired on PUC or FERC regulated natural gas, then the hourly emissions shall be determined by calculating the maximum hourly emissions of sulfur compounds by multiplying the sulfur content of each fuel in lb/MMBtu by the maximum heat input rating of the unit. [District Rules 2520, 9.3.2 and 4301, 5.2.1] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

12. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [District Rule 4801 and Fresno County Rule 406] Federally Enforceable Through Title V Permit

13. If the unit is fired on natural gas, then the natural gas sulfur content shall be less than or equal to 3.3% by weight. [District Rule 4801 and Fresno County Rule 406] Federally Enforceable Through Title V Permit

14. The permittee shall monitor and record the monthly and cumulative annual fuel heat input of the unit in Btus. [District Rule 4305, 6.1.3] Federally Enforceable Through Title V Permit

15. The higher heating value (hhv) for each fuel shall be certified by a third party fuel supplier or determined by ASTM D 240 or D 2382 for liquid hydrocarbon fuels; or ASTM D 1826 or D 1945 in conjunction with ASTM D 3588 for gaseous fuels. [District Rule 4305, 6.2.1] Federally Enforceable Through Title V Permit

16. If the unit is not fired on a PUC-regulated natural gas or fuel certified by a third party fuel supplier, then the sulfur content and higher heating value (hhv) of each fuel source shall be tested weekly except that if compliance with the fuel sulfur content limit has been demonstrated for 8 consecutive weeks for a fuel source, then the testing frequency shall be quarterly. If a test shows noncompliance with the sulfur content requirement, the source must return to weekly testing until eight consecutive weeks show compliance. [District Rules 2520, 9.3.2 and Rule 4801; Fresno County Rule 407] Federally Enforceable Through Title V Permit

17. If the unit is fired on noncertified gaseous fuel, then the sulfur content of gaseous fuel being fired in the unit shall be determined using ASTM D 1072, D 3246, D 4084, or grab sample analysis by GC-FPD/TCD performed in the laboratory. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

18. The sulfur content of the liquid fuel being fired in the unit shall be determined using ASTM D 2880. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

19. If the unit is not fired on PUC-regulated natural gas, the permittee shall maintain records of fuel sulfur content. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

20. Copies of all fuel invoices, gas purchase contracts, natural gas bills, supplier certifications, and test results to determine compliance with the conditions of this permit shall be maintained. The operator shall record daily amount and type(s) of fuel(s) combusted and all dates on which unit is fired on any noncertified fuel and record specific type of noncertified fuel used. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

21. While firing on crude oil, the permittee shall inspect the heater exhaust stack weekly for excessive visible emissions. The inspection shall include verifying the equipment is performing normal, design functions, and is being operated according to standard procedures and per the manufacturer's recommendations. If the equipment is not performing according to design and procedures or if excessive visible emissions are observed from the exhaust stack, the permittee shall take corrective action within 24 hours. If excessive visible emission cannot be corrected within 24 hours, EPA Method 9, except for data reduction (Section 2.5), shall be conducted to determine compliance with the 20% facility-wide opacity limit. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

22. All records of required monitoring data and support information shall be maintained for a period of at least five years and shall be made readily available for District inspection upon request. [District Rules 2520, 9.4.2 and 4305, 6.1] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: C-1234-3-2 **EXPIRATION DATE:** 04/30/2009

EQUIPMENT DESCRIPTION:
DORMANT 37.5 MMBTU/HR NATIONAL OIL HEATER #3 WITH NORTH AMERICAN MODEL 513HCRG BURNER

PERMIT UNIT REQUIREMENTS

1. No modification to this unit shall be performed without an Authority to Construct for such modification(s). [District Rule 2010] Federally Enforceable Through Title V Permit
2. The fuel supply line shall be physically disconnected from this unit. [District Rule 4305 and 4306] Federally Enforceable Through Title V Permit
3. This equipment shall not be operated for any reason until an Authority to Construct (ATC) permit is issued approving all necessary modifications required to comply with the applicable requirements of District Rule 4305, District Rule 4306, and all other applicable District regulations. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
4. All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District NSR Rule] Federally Enforceable Through Title V Permit
5. Use of oil fired heaters permitted under C-1234-2 and C-1234-3 shall be limited to 30 days/year for maintenance of turbines permitted under C-1234-8 and C-1234-9. [District NSR Rule and District Rule 4305, 5.2] Federally Enforceable Through Title V Permit
6. Crude oil consumption shall not exceed 170 gal/hour. [District NSR Rule] Federally Enforceable Through Title V Permit
7. The sulfur content of the crude oil shall not exceed 1.1% by weight. [District NSR Rule] Federally Enforceable Through Title V Permit
8. Natural gas consumption shall not exceed 37,500 scf/hour. [District NSR Rule] Federally Enforceable Through Title V Permit
9. Particulate matter emissions shall not exceed 0.1 grain/dscf at operating conditions, nor 0.1 grain/dscf calculated to 12% CO2, nor 10 lb/hr. [District Rule 4201 and District Rule 4301, 5.1 and 5.2.3] Federally Enforceable Through Title V Permit
10. Nitrogen Oxide (NOx) emissions shall not exceed 140 lb/hr, calculated as NO2. For residual and crude oil fired units, NOx emissions may be calculated using supplier certification of the nitrogen content and heating value, or using reference materials approved by the District. Hourly emissions shall be calculated using the heating value, maximum rated unit capacity, and the following formula: lb NO2/1000 gal = 20.54 + 104.39 (N), where N is the weight % nitrogen in the fuel. [District Rules 2520, 9.3.2 and 4301, 5.2.2, 5.3, and 5.5] Federally Enforceable Through Title V Permit
11. Emissions of sulfur compounds from this unit shall not exceed 200 lb per hour, calculated as SO2. If this unit is not fired on PUC or FERC regulated natural gas, then the hourly emissions shall be determined by calculating the maximum hourly emissions of sulfur compounds by multiplying the sulfur content of each fuel in lb/MMBtu by the maximum heat input rating of the unit. [District Rules 2520, 9.3.2 and 4301, 5.2.1] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

12. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [District Rule 4801 and Fresno County Rule 406] Federally Enforceable Through Title V Permit

13. If the unit is fired on natural gas, then the natural gas sulfur content shall be less than or equal to 3.3% by weight. [District Rule 4801 and Fresno County Rule 406] Federally Enforceable Through Title V Permit

14. The permittee shall monitor and record the monthly and cumulative annual fuel heat input of the unit in Btus. [District Rule 4305, 6.1.3] Federally Enforceable Through Title V Permit

15. The higher heating value (hhv) for each fuel shall be certified by a third party fuel supplier or determined by ASTM D 240 or D 2382 for liquid hydrocarbon fuels; or ASTM D 1826 or D 1945 in conjunction with ASTM D 3588 for gaseous fuels. [District Rule 4305, 6.2.1] Federally Enforceable Through Title V Permit

16. If the unit is not fired on a PUC-regulated natural gas or fuel certified by a third party fuel supplier, then the sulfur content and higher heating value (hhv) of each fuel source shall be tested weekly except that if compliance with the fuel sulfur content limit has been demonstrated for 8 consecutive weeks for a fuel source, then the testing frequency shall be quarterly. If a test shows noncompliance with the sulfur content requirement, the source must return to weekly testing until eight consecutive weeks show compliance. [District Rules 2520, 9.3.2 and Rule 4801; Fresno County Rule 407] Federally Enforceable Through Title V Permit

17. If the unit is fired on noncertified gaseous fuel, then the sulfur content of gaseous fuel being fired in the unit shall be determined using ASTM D 1072, D 3246, D 4084, or grab sample analysis by GC-FPD/TCD performed in the laboratory. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

18. The sulfur content of the liquid fuel being fired in the unit shall be determined using ASTM D 2880. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

19. If the unit is not fired on PUC-regulated natural gas, the permittee shall maintain records of fuel sulfur content. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

20. Copies of all fuel invoices, gas purchase contracts, natural gas bills, supplier certifications, and test results to determine compliance with the conditions of this permit shall be maintained. The operator shall record daily amount and type(s) of fuel(s) combusted and all dates on which unit is fired on any noncertified fuel and record specific type of noncertified fuel used. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

21. While firing on crude oil, the permittee shall inspect the heater exhaust stack weekly for excessive visible emissions. The inspection shall include verifying the equipment is performing normal, design functions, and is being operated according to standard procedures and per the manufacturer's recommendations. If the equipment is not performing according to design and procedures or if excessive visible emissions are observed from the exhaust stack, the permittee shall take corrective action within 24 hours. If excessive visible emission cannot be corrected within 24 hours, EPA Method 9, except for data reduction (Section 2.5), shall be conducted to determine compliance with the 20% facility-wide opacity limit. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

22. All records of required monitoring data and support information shall be maintained for a period of at least five years and shall be made readily available for District inspection upon request. [District Rules 2520, 9.4.2 and 4305, 6.1] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: C-1234-4-8 **EXPIRATION DATE:** 04/30/2009

EQUIPMENT DESCRIPTION:
10,836,000 GALLON (258,000 BBL) WELDED CRUDE OIL STORAGE TANK #CH7 EQUIPPED WITH EXTERNAL FLOATING ROOF WITH PRIMARY METALLIC SHOE SEALS AND SECONDARY SEALS, TRUCK UNLOADING RACK #2 WITH PUMP AND TRUCK UNLOADING RACK #1, EAST AND WEST

PERMIT UNIT REQUIREMENTS

1. All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District NSR Rule] Federally Enforceable Through Title V Permit
2. Unloading rack shall be only used to unload trucks. Rack shall not be used to load trucks or other delivery vessels. [District NSR Rule] Federally Enforceable Through Title V Permit
3. All unloading rack components containing VOCs will be inspected by the facility operator annually to ensure compliance with the provisions of District Rule 4403. The inspections will be conducted in accordance with EPA Method 21, with the instrument calibrated with methane. However, if any of the components of any type 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 all of the components of that type subject to the prohibitions of this rule are subsequently found to be leaking during five (5) consecutive quarterly inspections, the inspection frequency for that component type may be changed from quarterly to annual. [District NSR Rule] Federally Enforceable Through Title V Permit
4. A facility operator, upon detection of a leaking unloading rack components shall affix to that component a weatherproof readily visible tag bearing the date on which the leak is detected. The tag shall remain in place until the leaking component is repaired, reinspected and found to be in compliance with the requirements of this permit. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
5. Operator shall reinspect an unloading rack component for leaks within thirty working days after the date on which the component is repaired. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
6. Emissions from unloading rack components which have been tagged by the facility operator for repair within 15 calendar days or which have been repaired and are awaiting reinspection shall not be in violation of this permit. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
7. Any unloading rack component leak shall be repaired to a leak-free condition within fifteen (15) calendar days of detection. The APCO may grant a ten (10) calendar day extension provided the operator demonstrates that necessary and sufficient actions are being taken to correct the leak within this time period. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
8. If the leaking unloading rack component is an essential part of a critical process unit which cannot be immediately shut down for repairs, the operator shall 1) Minimize the leak within 15 calendar days; and 2) If the leak which has been minimized still exceeds the concentration allowed by this permit, the essential component shall be repaired to eliminate the leak during the next process unit turnaround, but in no case later than one year from the date of the original leak detection. A critical process unit is any process unit which would result in the automatic shutdown of other process units if it were shut down. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

9. Operator shall maintain an inspection log for the unloading racks containing the following: 1) Type of component leaking; 2) Date of leak detection, and method of detection; 3) Date and emission level of recheck after leak is repaired; 4) Identification and location of essential parts of critical process units found leaking that cannot be repaired until the next process unit turnaround; and 5) Method used to minimize the leak from essential parts of critical process units which cannot be repaired until the next process unit turnaround. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

10. True vapor pressure of the organic liquid stored shall be less than 11 psia. [District Rule 4623, 5.1.1] Federally Enforceable Through Title V Permit

11. When storing organic liquids with true vapor pressure less than 0.5 psia, the requirements of Sections 5.3, 5.5, and 6.1 of District Rule 4623 (Amended December 20, 2001) shall not apply to this unit. This exemption applies to all conditions in this permit referencing only Sections 5.3, 5.5, or 6.1 of District Rule 4623. [District Rule 4623, 2.0] Federally Enforceable Through Title V Permit

12. Before switching to the storage of organic liquids with true vapor pressure greater than or equal to 0.5 psia, all covers, seals, and lids shall be inspected by the facility operator to ensure compliance with the provisions of this permit. This includes all conditions containing District Rule 4623 references. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

13. Within one week after switching from storage of organic liquids with TVP greater than or equal to 0.5 psia to storage of organic liquids with TVP less than 0.5 psia, the TVP of the organic liquid shall be determined in accordance with the test methods approved in this permit or an equivalent method approved by the APCO, ARB, and EPA. [District Rules 2520, 9.3.2 and 4623, 6.4] Federally Enforceable Through Title V Permit

14. 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; 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, 5.3.1] Federally Enforceable Through Title V Permit

15. 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 District Rule 4623 (Amended December 20, 2001) before it may land on its legs. [District Rule 4623, 5.3.1.3] Federally Enforceable Through Title V Permit

16. No gap between the tank shell and the primary seal shall exceed one and one half (1-1/2) inches. [District Rule 4623, 5.3.2.1.1] Federally Enforceable Through Title V Permit

17. 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

18. 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

19. 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

20. No gap between the tank shell and the secondary seal shall exceed one-half (1/2) inch. [District Rule 4623, 5.3.2.1.2] Federally Enforceable Through Title V Permit

21. 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

22. 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

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

23. 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

24. 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] Federally Enforceable Through Title V Permit

25. 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

26. 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

27. 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

28. The tank pressure-vacuum (PV) relief valve shall be set to within 10% of the maximum allowable working pressure of the tank. The PV relief valve shall be permanently labeled with the operating pressure settings. The PV relief valve shall be properly installed and maintained in good operating order in accordance with the manufacturer's instructions, and shall remain in gas-tight condition except when the operating pressure exceeds the valve's set pressure. [District Rule 4623, Section 5.2] Federally Enforceable Through Title V Permit

29. A gas-tight condition is defined as a condition without a gas leak. A gas leak is defined as a reading in excess of 10,000 ppmv, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21. A reading in excess of 10,000 ppmv above background is a violation of this permit and Rule 4623 and shall be reported as a deviation. [District Rule 4623, 3.9 and 6.4.8] Federally Enforceable Through Title V Permit

30. Each opening in the roof, except for automatic bleeder vents, rim vents, and pressure relief vents, 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

31. 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

32. 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 and 5.5.2.1.3] Federally Enforceable Through Title V Permit

33. 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] Federally Enforceable Through Title V Permit

34. 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] Federally Enforceable Through Title V Permit

35. 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

36. 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

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

37. 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

38. The gap between the pole wiper and the solid guidepole shall be included in 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

39. 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

40. The gap between the pole wiper and the slotted guidepole shall be included in 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

41. 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

42. Operator shall perform gap measurements on primary and secondary seals at least once every year to determine compliance with the requirements of Rule 4623 (Amended December 20, 2001). 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 of Rule 4623. [District Rule 4623, 6.1.3.1.1] Federally Enforceable Through Title V Permit

43. The permittee shall inspect the primary and secondary seals for compliance with the requirements of Rule 4623 (Amended December 20, 2001) 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] Federally Enforceable Through Title V Permit

44. 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 (Amended December 20, 2001), 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 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

45. Permittee shall maintain the records of the external floating roof landing activities that are performed pursuant to Rule 4623 (Amended December 20, 2001), 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] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

46. 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. Components located in unsafe areas shall be inspected and repaired at the next process unit turnaround. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

47. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date of leak detection, and method of detection; 3) Date and emission level of recheck after leak is repaired; 4) Identification components that are located in inaccessible locations or in unsafe areas. Leaks over 10,000 ppmv shall be reported as a deviation. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

48. When the unit is storing organic liquids with true vapor pressure less than 0.5 psia and is exempted from Sections 5.3, 5.5, and 6.1 of District Rule 4623 (Amended December 20, 2001), permittee shall conduct True Vapor Pressure (TVP) testing of the organic liquid stored in this tank at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored in this tank in order to maintain exemption from control requirements of District Rule 4623. [District Rules 2520, 9.3.2 and 4623, 6.2.2] Federally Enforceable Through Title V Permit

49. Permittee shall submit the records of TVP 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 2520, 9.3.2 and 4623, 6.3.6] Federally Enforceable Through Title V Permit

50. The true vapor pressure (TVP) shall be measured using Reid vapor pressure ASTM Method D323, 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 of the oil and gas section of "California Air Resources Boards (ARB) Technical Guidance Document to the Criteria and Guidelines Regulations for AB 2588", dated August 1989. As an alternative to using ASTM D 323, the TVP may be determined using ASTM Method D2879 or other equivalent test methods approved by APCO, ARB, and EPA. [District Rule 4623, 6.4.3] Federally Enforceable Through Title V Permit

51. 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

52. The permittee shall keep a accurate records of each liquid stored in the tank, including its period of storage, storage temperature, Reid vapor pressure, maximum true vapor pressure, and API gravity. [District Rules 2520, 9.3.2 and 4623, 6.3] Federally Enforceable Through Title V Permit

53. All records of required monitoring data and support information shall be maintained for a period of at least five years and shall be made readily available for District inspection upon request. [District Rules 2520, 9.4.2 and 4623, 6.3] Federally Enforceable Through Title V Permit

54. This unit was constructed in 1968 and has not been modified (as defined in 40 CFR 60.14) or reconstructed (as defined in 40 CFR 60.15) since 1968. Therefore, it is exempt from the requirements of 40 CFR 60. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: C-1234-5-6 **EXPIRATION DATE:** 04/30/2009

EQUIPMENT DESCRIPTION:
10,836,000 GALLON (258,000 BBL) WELDED CRUDE OIL STORAGE TANK #CH8 EQUIPPED WITH EXTERNAL FLOATING ROOF WITH PRIMARY METALLIC SHOE SEAL AND SECONDARY SEALS

PERMIT UNIT REQUIREMENTS

1. All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District NSR Rule] Federally Enforceable Through Title V Permit
2. True vapor pressure of the organic liquid stored shall be less than 11 psia. [District Rule 4623, 5.1.1] Federally Enforceable Through Title V Permit
3. When storing organic liquids with true vapor pressure less than 0.5 psia, the requirements of Sections 5.3, 5.5, and 6.1 of District Rule 4623 (Amended December 20, 2001) shall not apply to this unit. This exemption applies to all conditions in this permit referencing only Sections 5.3, 5.5, or 6.1 of District Rule 4623. [District Rule 4623, 2.0] Federally Enforceable Through Title V Permit
4. Before switching to the storage of organic liquids with true vapor pressure greater than or equal to 0.5 psia, all covers, seals, and lids shall be inspected by the facility operator to ensure compliance with the provisions of this permit. This includes all conditions containing District Rule 4623 references. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
5. Within one week after switching from storage of organic liquids with TVP greater than or equal to 0.5 psia to storage of organic liquids with TVP less than 0.5 psia, the TVP of the organic liquid shall be determined in accordance with the test methods approved in this permit or an equivalent method approved by the APCO, ARB, and EPA. [District Rules 2520, 9.3.2 and 4623, 6.4] Federally Enforceable Through Title V Permit
6. 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; 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, 5.3.1] Federally Enforceable Through Title V Permit
7. 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 District Rule 4623 (Amended December 20, 2001) before it may land on its legs. [District Rule 4623, 5.3.1.3] Federally Enforceable Through Title V Permit
8. No gap between the tank shell and the primary seal shall exceed one and one half (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

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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. No gap between the tank shell and the secondary seal shall exceed one-half (1/2) inch. [District Rule 4623, 5.3.2.1.2] 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] 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. 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

20. The tank pressure-vacuum (PV) relief valve shall be set to within 10% of the maximum allowable working pressure of the tank. The PV relief valve shall be permanently labeled with the operating pressure settings. The PV relief valve shall be properly installed and maintained in good operating order in accordance with the manufacturer's instructions, and shall remain in gas-tight condition except when the operating pressure exceeds the valve's set pressure. [District Rule 4623, Section 5.2] Federally Enforceable Through Title V Permit

21. A gas-tight condition is defined as a condition without a gas leak. A gas leak is defined as a reading in excess of 10,000 ppmv, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21. A reading in excess of 10,000 ppmv above background is a violation of this permit and Rule 4623 and shall be reported as a deviation. [District Rule 4623, 3.9 and 6.4.8] Federally Enforceable Through Title V Permit

22. Each opening in the roof, except for automatic bleeder vents, rim vents, and pressure relief vents, 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 and 5.5.2.1.3] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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] Federally Enforceable Through Title V Permit

26. 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] 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 included in 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 included in 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 at least once every year to determine compliance with the requirements of Rule 4623 (Amended December 20, 2001). 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 of Rule 4623. [District Rule 4623, 6.1.3.1.1] Federally Enforceable Through Title V Permit

35. The permittee shall inspect the primary and secondary seals for compliance with the requirements of Rule 4623 (Amended December 20, 2001) 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] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

36. 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 (Amended December 20, 2001), 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 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

37. Permittee shall maintain the records of the external floating roof landing activities that are performed pursuant to Rule 4623 (Amended December 20, 2001), 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] Federally Enforceable Through Title V Permit

38. 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. Components located in unsafe areas shall be inspected and repaired at the next process unit turnaround. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

39. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date of leak detection, and method of detection; 3) Date and emission level of recheck after leak is repaired; 4) Identification components that are located in inaccessible locations or in unsafe areas. Leaks over 10,000 ppmv shall be reported as a deviation. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

40. When the unit is storing organic liquids with true vapor pressure less than 0.5 psia and is exempted from Sections 5.3, 5.5, and 6.1 of District Rule 4623 (Amended December 20, 2001), permittee shall conduct True Vapor Pressure (TVP) testing of the organic liquid stored in this tank at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored in this tank in order to maintain exemption from control requirements of District Rule 4623. [District Rules 2520, 9.3.2 and 4623, 6.2.2] Federally Enforceable Through Title V Permit

41. Permittee shall submit the records of TVP 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 2520, 9.3.2 and 4623, 6.3.6] Federally Enforceable Through Title V Permit

42. The true vapor pressure (TVP) shall be measured using Reid vapor pressure ASTM Method D323, 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 of the oil and gas section of "California Air Resources Boards (ARB) Technical Guidance Document to the Criteria and Guidelines Regulations for AB 2588", dated August 1989. As an alternative to using ASTM D 323, the TVP may be determined using ASTM Method D2879 or other equivalent test methods approved by APCO, ARB, and EPA. [District Rule 4623, 6.4.3] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

43. 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

44. The permittee shall keep a accurate records of each liquid stored in the tank, including its period of storage, storage temperature, Reid vapor pressure, maximum true vapor pressure, and API gravity. [District Rules 2520, 9.3.2 and 4623, 6.3] Federally Enforceable Through Title V Permit

45. All records of required monitoring data and support information shall be maintained for a period of at least five years and shall be made readily available for District inspection upon request. [District Rules 2520, 9.4.2 and 4623, 6.3] Federally Enforceable Through Title V Permit

46. This unit was constructed in 1968 and has not been modified (as defined in 40 CFR 60.14) or reconstructed (as defined in 40 CFR 60.15) since 1968. Therefore, it is exempt from the requirements of 40 CFR 60. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: C-1234-6-6 **EXPIRATION DATE:** 04/30/2009

EQUIPMENT DESCRIPTION:
10,800,000 GALLON WELDED CRUDE OIL STORAGE TANK #CH12 EQUIPPED WITH EXTERNAL FLOATING ROOF WITH PRIMARY METALLIC SHOE SEAL AND SERRATED MULTI-FINGERED SECONDARY SEAL

PERMIT UNIT REQUIREMENTS

1. All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District NSR Rule] Federally Enforceable Through Title V Permit
2. True vapor pressure of the organic liquid stored shall be less than 11 psia. [District Rule 4623, 5.1.1] Federally Enforceable Through Title V Permit
3. When storing organic liquids with true vapor pressure less than 0.5 psia, the requirements of Sections 5.3, 5.5, and 6.1 of District Rule 4623 (Amended December 20, 2001) and 40 CFR 60 Subpart Ka shall not apply to this unit. This exemption applies to all conditions in this permit referencing only Sections 5.3, 5.5, or 6.1 of District Rule 4623 and 40 CFR 60 Subpart Ka. [District Rule 4623, 2.0 and 40 CFR 60.112a(a)] Federally Enforceable Through Title V Permit
4. Before switching to the storage of organic liquids with true vapor pressure greater than or equal to 0.5 psia, all covers, seals, and lids shall be inspected by the facility operator to ensure compliance with the provisions of this permit. This includes all conditions containing District Rule 4623 or 40 CFR 60 Subpart Ka references. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
5. Within one week after switching from storage of organic liquids with TVP greater than or equal to 0.5 psia to storage of organic liquids with TVP less than 0.5 psia, the TVP of the organic liquid shall be determined in accordance with the test methods approved in this permit or an equivalent method approved by the APCO, ARB, and EPA. [District Rules 2520, 9.3.2 and 4623, 6.4] Federally Enforceable Through Title V Permit
6. 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; 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, 5.3.1 and 40 CFR 60.112a(a)(1)] Federally Enforceable Through Title V Permit
7. 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 60.112a(a)(1)] Federally Enforceable Through Title V Permit
8. Primary seal (lower seal) shall be a metallic shoe seal, a liquid-mounted seal, or a vapor-mounted seal. [40 CFR 60.112a(a)(1)(i)] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

9. Accumulated area of gaps between tank wall and primary seal shall not exceed: 1) 10.0 in2 per foot of tank diameter and the width of any portion of any gap shall not exceed 1-1/2 inch, for a metallic shoe seal or a liquid-mounted seal; 2) 1.0 in2 per foot of tank diameter and the width of any portion of any gap shall not exceed 1/2 inch for a vapor mounted seal. [40 CFR 60.112a(a)(1)(i)(A) & (B) and District Rule 4623, 5.3.2.1.1] Federally Enforceable Through Title V Permit
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. If the secondary seal is used in combination with a metallic shoe or liquid-mounted primary seal, accumulated area of gaps between tank wall and the secondary seal shall not exceed 1.0 in2 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)(i)(B)] Federally Enforceable Through Title V Permit
14. Operator shall be exempt from the requirements for secondary seals and the secondary seal gap criteria when performing gap measurements or inspections of the primary seal. [40 CFR 60.112a(a)(1)(ii)(D)] Federally Enforceable Through Title V Permit
15. 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
16. 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)(i)(C)] Federally Enforceable Through Title V Permit
17. 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
18. 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)(B)] Federally Enforceable Through Title V Permit
19. 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
20. 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
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 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 and 40 CFR 60.112a(a)(1)(iii)] Federally Enforceable Through Title V Permit
22. The tank pressure-vacuum (PV) relief valve shall be set to within 10% of the maximum allowable working pressure of the tank. The PV relief valve shall be permanently labeled with the operating pressure settings. The PV relief valve shall be properly installed and maintained in good operating order in accordance with the manufacturer's instructions, and shall remain in gas-tight condition except when the operating pressure exceeds the valve's set pressure. [District Rule 4623, Section 5.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

23. A gas-tight condition is defined as a condition without a gas leak. A gas leak is defined as a reading in excess of 10,000 ppmv, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21. A reading in excess of 10,000 ppmv above background is a violation of this permit and Rule 4623 and shall be reported as a deviation. [District Rule 4623, 3.9 and 6.4.8] Federally Enforceable Through Title V Permit

24. Each opening in the roof, except for automatic bleeder vents, rim vents, and pressure relief vents, in a non-contact external floating roof shall provide a projection below the liquid surface. [District Rule 4623, 5.5.2.2.1, 40 CFR 60.112a(a)(1)(iii)] Federally Enforceable Through Title V Permit

25. 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

26. 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 60.112a(a)(1)(iii)] Federally Enforceable Through Title V Permit

27. 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 40 CFR 60.112a(a)(1)(iii)] Federally Enforceable Through Title V Permit

28. 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)] Federally Enforceable Through Title V Permit

29. 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

30. 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

31. 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

32. The gap between the pole wiper and the solid guidepole shall be included in 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

33. 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

34. The gap between the pole wiper and the slotted guidepole shall be included in 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

35. 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

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

36. Operator shall perform gap measurements on primary and secondary seals within 60 days of the initial fill with petroleum liquid 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 60.113a(a)(1)(i)(B)] Federally Enforceable Through Title V Permit

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

38. The permittee shall inspect the primary and secondary seals for compliance with the requirements of Rule 4623 (Amended December 20, 2001) 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] Federally Enforceable Through Title V Permit

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 (Amended December 20, 2001), 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 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 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)] 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. Components located in unsafe areas shall be inspected and repaired at the next process unit turnaround. [District Rule 2520, 9.3.2] 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; 4) Identification components that are located in inaccessible locations or in unsafe areas. Leaks over 10,000 ppmv shall be reported as a deviation. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

43. Operator shall determine gap widths in the primary and secondary seals using the following procedure: 1) Measure seal gaps, at one or more floating roof levels when the roof is floating off leg supports; 2) Measure seal gaps around entire circumference of the tank in each place where a one-eighth (1/8) inch diameter uniform probe passes freely (without forcing or binding against seal) between the seal and the tank wall and measure the circumferential distance of each such location; 3), Total surface area of each gap shall be determined by using probes of various widths to accurately measure the actual distance from the tank wall to the seal and multiplying each such width by its respective circumferential distance; 4) Add the gap surface area of each gap location for the primary seal and the secondary seal individually. Divide the sum for each seal by the nominal diameter of the tank. [40 CFR 60.113a(a)(1)(ii) and (iii)] Federally Enforceable Through Title V Permit

44. Operator shall record the vessel on which the measurement was performed, date of the seal gap measurement, and raw data obtained in the measurement process in accordance with the conditions of this permit. [40 CFR 60.113a(a)(1)(i)(D)] Federally Enforceable Through Title V Permit

45. Operator shall provide the APCO with 30 days notice of the gap measurement to afford the District the opportunity to have an observer present. [40 CFR 60.113a(a)(1)(iv)] Federally Enforceable Through Title V Permit

46. If the accumulated area of gaps or gap width exceed limits, operator shall submit a report to the APCO within 60 days of the date of measurement. Report should include identification of the vessel, reason vessel did not meet the specifications, and a description of the actions necessary to bring the storage vessel into compliance. [40 CFR 60.113a(a)(1)(i)(E)] Federally Enforceable Through Title V Permit

47. When the unit is storing organic liquids with true vapor pressure less than 0.5 psia and is exempted from Sections 5.3, 5.5, and 6.1 of District Rule 4623 (Amended December 20, 2001), permittee shall conduct True Vapor Pressure (TVP) testing of the organic liquid stored in this tank at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored in this tank in order to maintain exemption from control requirements of District Rule 4623. [District Rules 2520, 9.3.2 and 4623, 6.2.2] Federally Enforceable Through Title V Permit

48. Permittee shall submit the records of TVP 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 2520, 9.3.2 and 4623, 6.3.6] Federally Enforceable Through Title V Permit

49. The true vapor pressure (TVP) shall be measured using Reid vapor pressure ASTM Method D323, 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 of the oil and gas section of "California Air Resources Boards (ARB) Technical Guidance Document to the Criteria and Guidelines Regulations for AB 2588", dated August 1989. As an alternative to using ASTM D 323, the TVP may be determined using ASTM Method D2879 or other equivalent test methods approved by APCO, ARB, and EPA. [District Rule 4623, 6.4.3] Federally Enforceable Through Title V Permit

50. Maximum true vapor pressure may be determined from nomographs contained in API Bulletin 2517, by using the typical Reid vapor pressure and the maximum expected storage 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 60.115a(b)] Federally Enforceable Through Title V Permit

51. 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 1.0 psia. [40 CFR 60.115a(c)] Federally Enforceable Through Title V Permit

52. 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

53. The permittee shall keep accurate records of each liquid stored in the tank, including its period of storage, storage temperature, Reid vapor pressure, maximum true vapor pressure, and API gravity. [District Rules 2520, 9.3.2 and 4623, 6.3] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

54. All records of required monitoring data and support information shall be maintained for a period of at least five years and shall be made readily available for District inspection upon request. [District Rules 2520, 9.4.2 and 4623, 6.3] Federally Enforceable Through Title V Permit

55. Compliance with permit conditions in the Title V permit shall be deemed compliance with 40 CFR 60 Subpart Ka and District Rule 4623 (Amended December 20, 2001). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: C-1234-7-4 **EXPIRATION DATE:** 04/30/2009

EQUIPMENT DESCRIPTION:
10,800,000 GALLON WELDED STORAGE TANK #CH13 EQUIPPED WITH EXTERNAL FLOATING ROOF WITH PRIMARY METALLIC SHOE SEAL AND WIPER TYPE SECONDARY SEAL

PERMIT UNIT REQUIREMENTS

1. All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District NSR Rule] Federally Enforceable Through Title V Permit
2. True vapor pressure of the organic liquid stored shall be less than 11 psia. [District Rule 4623, 5.1.1] 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; 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, 5.3.1 and 40 CFR 60.112a(a)(1)] 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 60.112a(a)(1)] Federally Enforceable Through Title V Permit
5. Primary seal (lower seal) shall be a metallic shoe seal, a liquid-mounted seal, or a vapor-mounted seal. [40 CFR 60.112a(a)(1)(i)] Federally Enforceable Through Title V Permit
6. Accumulated area of gaps between tank wall and primary seal shall not exceed: 1) 10.0 in2 per foot of tank diameter and the width of any portion of any gap shall not exceed 1-1/2 inch, for a metallic shoe seal or a liquid-mounted seal; 2) 1.0 in2 per foot of tank diameter and the width of any portion of any gap shall not exceed 1/2 inch for a vapor mounted seal. [40 CFR 60.112a(a)(1)(i)(A) & (B) and District Rule 4623, 5.3.2.1.1] Federally Enforceable Through Title V Permit
7. 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
8. 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
9. 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
10. If the secondary seal is used in combination with a metallic shoe or liquid-mounted primary seal, accumulated area of gaps between tank wall and the secondary seal shall not exceed 1.0 in2 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)(i)(B)] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

11. Operator shall be exempt from the requirements for secondary seals and the secondary seal gap criteria when performing gap measurements or inspections of the primary seal. [40 CFR 60.112a(a)(1)(ii)(D)] Federally Enforceable Through Title V Permit

12. 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

13. 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)(i)(C)] Federally Enforceable Through Title V Permit

14. 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

15. 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)(B)] Federally Enforceable Through Title V Permit

16. 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

17. 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

18. 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 and 40 CFR 60.112a(a)(1)(iii)] Federally Enforceable Through Title V Permit

19. A gas-tight condition is defined as a condition without a gas leak. A gas leak is defined as a reading in excess of 10,000 ppmv, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21. A reading in excess of 10,000 ppmv above background is a violation of this permit and Rule 4623 and shall be reported as a deviation. [District Rule 4623, 3.9 and 6.4.8] Federally Enforceable Through Title V Permit

20. Each opening in the roof, except for automatic bleeder vents, rim vents, and pressure relief vents, in a non-contact external floating roof shall provide a projection below the liquid surface. [District Rule 4623, 5.5.2.2.1, 40 CFR 60.112a(a)(1)(iii)] Federally Enforceable Through Title V Permit

21. 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

22. 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 60.112a(a)(1)(iii)] Federally Enforceable Through Title V Permit

23. 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 40 CFR 60.112a(a)(1)(iii)] Federally Enforceable Through Title V Permit

24. 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)] Federally Enforceable Through Title V Permit

25. 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

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

26. 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

27. 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

28. The gap between the pole wiper and the solid guidepole shall be included in 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

29. 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

30. The gap between the pole wiper and the slotted guidepole shall be included in 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

31. 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

32. Operator shall perform gap measurements on primary and secondary seals within 60 days of the initial fill with petroleum liquid 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 60.113a(a)(1)(i)(B)] Federally Enforceable Through Title V Permit

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

34. The permittee shall inspect the primary and secondary seals for compliance with the requirements of Rule 4623 (Amended December 20, 2001) 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] Federally Enforceable Through Title V Permit

35. 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 (Amended December 20, 2001), 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 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

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

36. 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)] Federally Enforceable Through Title V Permit

37. 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. Components located in unsafe areas shall be inspected and repaired at the next process unit turnaround. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

38. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date of leak detection, and method of detection; 3) Date and emission level of recheck after leak is repaired; 4) Identification components that are located in inaccessible locations or in unsafe areas. Leaks over 10,000 ppmv shall be reported as a deviation. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

39. Operator shall determine gap widths in the primary and secondary seals using the following procedure: 1) Measure seal gaps, at one or more floating roof levels when the roof is floating off leg supports; 2) Measure seal gaps around entire circumference of the tank in each place where a one-eighth (1/8) inch diameter uniform probe passes freely (without forcing or binding against seal) between the seal and the tank wall and measure the circumferential distance of each such location; 3), Total surface area of each gap shall be determined by using probes of various widths to accurately measure the actual distance from the tank wall to the seal and multiplying each such width by its respective circumferential distance; 4) Add the gap surface area of each gap location for the primary seal and the secondary seal individually. Divide the sum for each seal by the nominal diameter of the tank. [40 CFR 60.113a(a)(1)(ii) and (iii)] Federally Enforceable Through Title V Permit

40. Operator shall record the vessel on which the measurement was performed, date of the seal gap measurement, and raw data obtained in the measurement process in accordance with the conditions of this permit. [40 CFR 60.113a(a)(1)(i)(D)] Federally Enforceable Through Title V Permit

41. Operator shall provide the APCO with 30 days notice of the gap measurement to afford the District the opportunity to have an observer present. [40 CFR 60.113a(a)(1)(iv)] Federally Enforceable Through Title V Permit

42. If the accumulated area of gaps or gap width exceed limits, operator shall submit a report to the APCO within 60 days of the date of measurement. Report should include identification of the vessel, reason vessel did not meet the specifications, and a description of the actions necessary to bring the storage vessel into compliance. [40 CFR 60.113a(a)(1)(i)(E)] Federally Enforceable Through Title V Permit

43. 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

44. For crude oil with an API gravity of 26 degrees or less, the TVP shall be determined using the latest version of the Lawrence Berkeley National Laboratory "test Method for Vapor pressure of Reactive Organic Compounds in Heavy Crude Oil Using Gas Chromatograph", as approved by ARB and EPA. [District Rule 4623, 6.4.4] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

45. For other organic liquids, the true vapor pressure (TVP) shall be measured using Reid vapor pressure ASTM Method D323, 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 of the oil and gas section of "California Air Resources Boards (ARB) Technical Guidance Document to the Criteria and Guidelines Regulations 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 Rule 4623, 6.4.3] Federally Enforceable Through Title V Permit

46. Maximum true vapor pressure may be determined from nomographs contained in API Bulletin 2517, by using the typical Reid vapor pressure and the maximum expected storage 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 60.115a(b)] Federally Enforceable Through Title V Permit

47. 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 1.0 psia. [40 CFR 60.115a(c)] Federally Enforceable Through Title V Permit

48. 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

49. When storing applicable organic liquids with true vapor pressure less than 1.5 psia as measured on a quarterly basis using vapor pressure test methods described in this permit, the requirements of 40 CFR 60 Subpart Ka shall not apply to this unit. This exemption applies to all conditions in this permit referencing only 40 CFR 60 Subpart Ka. [District Rule 2520, 9.3.2 and 40 CFR 60.112a(a)] Federally Enforceable Through Title V Permit

50. Before switching to the storage of organic liquids with true vapor pressure greater than or equal to 1.5 psia, all covers, seals, and lids shall be inspected by the facility operator to ensure compliance with the provisions of this permit. This includes all conditions containing District Rule 4623 or 40 CFR 60 Subpart Ka references. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

51. Within one week after switching from storage of organic liquids with TVP greater than or equal to 1.5 psia to storage of organic liquids with TVP less than 1.5 psia, the TVP of the organic liquid shall be determined in accordance with the test methods approved in this permit or an equivalent method approved by the APCO, ARB, and EPA. [District Rules 2520, 9.3.2 and 4623, 6.4] Federally Enforceable Through Title V Permit.

52. The true vapor pressure (TVP) shall be measured using Reid vapor pressure ASTM Method D323, 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 of the oil and gas section of "California Air Resources Boards (ARB) Technical Guidance Document to the Criteria and Guidelines Regulations for AB 2588", dated August 1989. As an alternative to using ASTM D 323, the TVP may be determined using ASTM Method D2879 or other equivalent test methods approved by APCO, ARB, and EPA. [District Rules 2520, 9.3.2 and 4623, 6.4.3] Federally Enforceable Through Title V Permit

53. The permittee shall keep accurate records of each liquid stored in the tank, including its period of storage, storage temperature, Reid vapor pressure, maximum true vapor pressure, and API gravity. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

54. All records of required monitoring data and support information shall be maintained for a period of at least five years and shall be made readily available for District inspection upon request. [District Rules 2520, 9.4.2 and 4623, 6.3] Federally Enforceable Through Title V Permit

55. Compliance with permit conditions in the Title V permit shall be deemed compliance with 40 CFR 60 Subpart Ka and District Rule 4623 (Amended December 20, 2001). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

56. This unit commenced construction, modification, or reconstruction between May 18, 1978 and July 23, 1984. Therefore, the requirements of 40 CFR 60 Subpart K and Kb do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

57. The requirements of District Rule 4801 (Amended December 17, 1992) and Fresno County Rule 406 do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: C-1234-10-4 **EXPIRATION DATE:** 04/30/2009

SECTION: 17 **TOWNSHIP:** 20S **RANGE:** 15E

EQUIPMENT DESCRIPTION:
465 BHP CUMMINS MODEL NTTA-855G DIESEL-FIRED EMERGENCY STANDBY IC ENGINE POWERING AN ELECTRICAL GENERATOR

PERMIT UNIT REQUIREMENTS

1. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201, 3.1] Federally Enforceable Through Title V Permit
2. This engine shall be equipped with an operational non-resettable elapsed time meter or other APCO approved alternative. [District Rule 4702 and 17 CCR 93115] Federally Enforceable Through Title V Permit
3. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rule 4702 and 17 CCR 93115] Federally Enforceable Through Title V Permit
4. Only CARB certified diesel fuel containing not more than 0.0015% sulfur by weight is to be used. [District Rule 2201, 4801 and 17 CCR 93115] Federally Enforceable Through Title V Permit
5. This engine shall be operated and maintained in proper operating condition as recommended by the engine manufacturer or emissions control system supplier. [District Rule 4702] Federally Enforceable Through Title V Permit
6. During periods of operation for maintenance, testing, and required regulatory purposes, the permittee shall monitor the operational characteristics of the engine as recommended by the manufacturer or emission control system supplier (for example: check engine fluid levels, battery, cables and connections; change engine oil and filters; replace engine coolant; and/or other operational characteristics as recommended by the manufacturer or supplier). [District Rule 4702] Federally Enforceable Through Title V Permit
7. The permittee shall maintain monthly records of emergency and non-emergency operation. Records shall include the number of hours of emergency operation, the date and number of hours of all testing and maintenance operations, the purpose of the operation (for example: load testing, weekly testing, rolling blackout, general area power outage, etc.) and records of operational characteristics monitoring. For units with automated testing systems, the operator may, as an alternative to keeping records of actual operation for testing purposes, maintain a readily accessible written record of the automated testing schedule. [District Rule 4702 and 17 CCR 93115] Federally Enforceable Through Title V Permit
8. This engine shall be operated only for maintenance, testing, and required regulatory purposes, and during emergency situations. Operation of the engine for maintenance, testing, and required regulatory purposes shall not exceed 20 hours per calendar year. [District Rule 4702 and 17 CCR 93115] Federally Enforceable Through Title V Permit
9. The permittee shall maintain monthly records of the type of fuel purchased, the amount of fuel purchased, date when the fuel was purchased, signature of the permittee who received the fuel, and signature of the fuel supplier indicating that the fuel was delivered. [17 CCR 93115] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

10. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements of SJVUAPCD Rule 4201 (Amended December 17, 1992); Rule 404 (Madera), 406 (Fresno), and 407 (Kings, Merced, San Joaquin, Tulare, Kern, and Stanislaus). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: C-1234-11-4 **EXPIRATION DATE:** 04/30/2009

SECTION: 17 **TOWNSHIP:** 20S **RANGE:** 15E

EQUIPMENT DESCRIPTION:
213 BHP CATERPILLAR MODEL 3306 DIESEL-FIRED EMERGENCY IC ENGINE POWERING A FIREWATER PUMP

PERMIT UNIT REQUIREMENTS

1. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201, 3.1] Federally Enforceable Through Title V Permit
2. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements of SJVUAPCD Rule 4201 (Amended December 17, 1992); Rule 404 (Madera), 406 (Fresno), and 407 (Kings, Merced, San Joaquin, Tulare, Kern, and Stanislaus). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
3. This engine shall be equipped with an operational non-resettable elapsed time meter or other APCO approved alternative. [District Rule 4702]
4. All records shall be maintained and retained on-site for a minimum of (5) five years, and shall be made available for DIstrict inspection upon request. [District Rule 4702 and 17 CCR 93115] Federally Enforceable Through Title V Permit
5. Only CARB certified diesel fuel containing not more than 0.0015% sulfur by weight is to be used. [District Rules 2201 and 4801 and 17 CCR 93115]
6. The permittee shall maintain monthly records of emergency and non-emergency operation. Records shall include the number of hours of emergency operation, the date and number of hours of all testing and maintenance operations and the purpose of the operation (for example: load testing, weekly testing, rolling blackout, general area power outage, etc.). For units with automated testing systems, the operator may, as an alternative to keeping records of actual operation for testing purposes, maintain a readily accessible written record of the automated testing schedule. [District Rule 4702 and 17 CCR 93115] Federally Enforceable Through Title V Permit
7. This engine shall be operated only for maintenance, testing, and required regulatory purposes, and during emergency situations. For testing purposes, the engine shall only be operated the number of hours necessary to comply with the testing requirements of the National Fire Protection Association (NFPA) 25 - "Standard for the Inspection, Testing, and Maintenance of Water-Based Fire Protection Systems" , 1998 edition. Total hours of operation for all maintenance, testing and required regulatory purposes shall not exceed 100 hours per calendar year. [District Rule 4702 and 17 CCR 93115]
8. The permittee shall maintain monthly records of the type of fuel purchased, the amount of fuel purchased, date when the fuel was purchased, signature of the permittee who received the fuel, and signature of the fuel supplier indicating that the fuel was delivered. [17 CCR 93115]

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: C-1234-12-2 **EXPIRATION DATE:** 04/30/2009

SECTION: 17 **TOWNSHIP:** 20S **RANGE:** 15E

EQUIPMENT DESCRIPTION:
3,360,000 GALLON (80,000 BBL) FIXED ROOF STORAGE TANK #80GC11, 114.5' DIAMETER X 30' HEIGHT, EMERGENCY STANDBY USE ONLY

PERMIT UNIT REQUIREMENTS

1. Tank shall not be used (filled or partially filled) for more than 60 cumulative days during any 12-month period. [District Rule 4623, 3.6] Federally Enforceable Through Title V Permit
2. Tank shall exclusively store petroleum distillates or crude oil. [District Rule 4623, 4.2.1] Federally Enforceable Through Title V Permit
3. Prior to return to Emergency Standby status, the contents of the tank shall be drained to the maximum extent feasible. After the tank has been used (filled or partially filled) and draining of the tank has begun, any further filling of the tank shall constitute a separate use of the tank, and the number of days the tank is used shall be counted towards the 60 cumulative day limit specified in the definition of an emergency standby tank in Section 3.6 of District Rule 4623 (Amended December 20, 2001). [District Rule 4623, 4.2.1] Federally Enforceable Through Title V Permit
4. The tank shall be in gas-tight condition and shall be equipped with a pressure-vacuum (PV) relief valve. The pressure-vacuum (PV) relief valve shall be set to within 10% of the maximum allowable working pressure of the tank, permanently labeled with the operating pressure settings, properly maintained in good operating order in accordance with the manufacturer's instructions, and shall remain in gas-tight condition except when the operating pressure exceeds the valve's set pressure. [District Rule 4623, 4.2.1 and 5.2] Federally Enforceable Through Title V Permit
5. A gas-tight condition is defined as a condition without a gas leak. A gas leak is defined as a reading in excess of 10,000 ppmv, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21. A reading in excess of 10,000 ppmv above background is a violation of this permit and Rule 4623 and shall be reported as a deviation. [District Rule 4623, 3.9 and 6.4.8] Federally Enforceable Through Title V Permit
6. Permitee shall maintain records showing date(s) the organic liquid is first introduced into the tank, and date(s) each tank is fully drained. Such records shall be submitted to the APCO 60 days prior to permit renewal. [District Rule 4623, 6.3.2] Federally Enforceable Through Title V Permit
7. All records of required monitoring data and support information 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

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: C-1234-13-8 **EXPIRATION DATE:** 04/30/2009

SECTION: 17 **TOWNSHIP:** 20S **RANGE:** 15E

EQUIPMENT DESCRIPTION:
5,040,000 GALLON (120,000 BBL) WELDED CRUDE OIL STORAGE TANK #120CH-14 EQUIPPED WITH EXTERNAL FLOATING ROOF WITH PRIMARY METALLIC SHOE SEAL AND WIPER TYPE SECONDARY SEAL

PERMIT UNIT REQUIREMENTS

1. This tank shall only store liquid with a true vapor pressure (TVP) of 5.7 psia or less under all storage conditions. [District NSR Rule and District Rule 4623, 5.1.1] Federally Enforceable Through Title V Permit
2. All equipment shall be maintained in good working order so as to minimize VOC emissions to the atmosphere. [District NSR Rule] Federally Enforceable Through Title V Permit
3. Maximum daily throughput of organic liquid with a true vapor pressure of 1.28 psia or less shall not exceed 45,000 barrels. [District NSR Rule] Federally Enforceable Through Title V Permit
4. Maximum daily throughput of organic liquid with a true vapor pressure of between 1.8 and 5.7 shall not exceed 24,500 barrels. [District NSR Rule] Federally Enforceable Through Title V Permit
5. Records of daily throughput of crude oil and the type of crude oil stored shall be maintained. [District 2520, 9.3.2] Federally Enforceable Through Title V Permit
6. When storing organic liquids with true vapor pressure less than 0.5 psia, the requirements of Sections 5.3, 5.5, and 6.1 of District Rule 4623 (Amended May 19, 2005) and 40 CFR 60 Subpart Kb shall not apply to this unit. This exemption applies to all conditions in this permit referencing only Sections 5.3, 5.5, or 6.1 of District Rule 4623 and 40 CFR 60 Subpart Kb. [District Rule 4623 and 40 CFR 60.110b(b)] Federally Enforceable Through Title V Permit
7. Before switching to the storage of organic liquids with true vapor pressure greater than or equal to 0.5 psia, all covers, seals, and lids shall be inspected by the facility operator to ensure compliance with the provisions of this permit. This includes all conditions containing District Rule 4623 or 40 CFR 60 Subpart Kb references. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
8. Within one week after switching from storage of organic liquids with TVP greater than or equal to 0.5 psia to storage of organic liquids with TVP less than 0.5 psia, the TVP of the organic liquid shall be determined in accordance with the test methods of Section 6.4 of District Rule 4623 (Amended May 19, 2005) or an equivalent method approved by the APCO, ARB, and EPA. [District Rules 2520, 9.3.2 and 4623] Federally Enforceable Through Title V Permit
9. The tank shall be equipped with a floating roof consisting of a 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; 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, 5.3.1 and 40 CFR 60.112b(a)(2) & (a)(2)(i)] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

10. 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 60.112b(a)(2)(iii)] Federally Enforceable Through Title V Permit
11. 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
12. 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 60.113b(b)(4)(i)] Federally Enforceable Through Title V Permit
13. 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
14. 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
15. 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
16. 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
17. 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). [District Rule 4623, 5.3.2.1.2 and 40CFR 60.113b(b)(4)(ii)(B)] Federally Enforceable Through Title V Permit
18. 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
19. 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
20. 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
21. 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
22. 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
23. 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
24. 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)(i)(B)] Federally Enforceable Through Title V Permit
25. 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

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

26. The tank pressure-vacuum (PV) relief valve shall be set to within 10% of the maximum allowable working pressure of the tank. The PV relief valve shall be permanently labeled with the operating pressure settings. The PV relief valve shall be properly installed and maintained in good operating order in accordance with the manufacturer's instructions, and shall remain in gas-tight condition except when the operating pressure exceeds the valve's set pressure. [District Rule 4623, Section 5.2] Federally Enforceable Through Title V Permit

27. A gas-tight condition is defined as a condition without a gas leak. A gas leak is defined as a reading in excess of 10,000 ppmv, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21. A reading in excess of 10,000 ppmv above background is a violation of this permit and Rule 4623 (Amended December 20, 2001) and shall be reported as a deviation. [District Rule 4623, 3.9 and 6.4.8] Federally Enforceable Through Title V Permit

28. 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

29. 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

30. 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

31. 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

32. 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] Federally Enforceable Through Title V Permit

33. 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

34. 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

35. 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

36. The gap between the pole wiper and the slotted guidepole shall be included in 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

37. 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

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

38. 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 District Rule 4623 (Amended May 19, 2005). 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 of District Rule 4623. [District Rule 4623 and 40 CFR 60.113b(b)(1)(i) & (ii)] Federally Enforceable Through Title V Permit

39. 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

40. 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

41. The permittee shall inspect the primary and secondary seals for compliance with the requirements of Rule 4623 (Amended May 19, 2005) every time this tank is emptied or degassed. Actual gap measurements shall be performed when the liquid level is static but not more than 48 hours after the tank roof is re-floated. [District Rule 4623 and 40CFR 60.113b(b)(6)] Federally Enforceable Through Title V Permit

42. 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 (Amended May 19, 2005), 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 on the tank in order to comply with rule 4623 and the date(s) such actions were taken. [District Rule 4623] Federally Enforceable Through Title V Permit

43. Permittee shall maintain the records of the external floating roof landing activities that are performed pursuant to Rule 4623 (Amended May 19, 2005), 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 and 40 CFR 60.116b(c)] Federally Enforceable Through Title V Permit

44. Operator shall determine gap widths in the primary and secondary seals using the following procedure: 1) Measure seal gaps, at one or more floating roof levels when the roof is floating off leg supports; 2) Measure seal gaps around entire circumference of the tank in each place where a one-eighth (1/8) inch diameter uniform probe passes freely (without forcing or binding against seal) between the seal and the tank wall and measure the circumferential distance of each such location; 3), Total surface area of each gap shall be determined by using probes of various widths to accurately measure the actual distance from the tank wall to the seal and multiplying each such width by its respective circumferential distance; 4) Add the gap surface area of each gap location for the primary seal and the secondary seal individually. Divide the sum for each seal by the nominal diameter of the tank. [40 CFR 60.113b(b)(2)] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

45. 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

46. 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

47. 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

48. 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)] Federally Enforceable Through Title V Permit

49. 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)] Federally Enforceable Through Title V Permit

50. 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)] Federally Enforceable Through Title V Permit

51. 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)] Federally Enforceable Through Title V Permit

52. 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)] Federally Enforceable Through Title V Permit

53. 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)] Federally Enforceable Through Title V Permit

54. 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)] Federally Enforceable Through Title V Permit

55. 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)] Federally Enforceable Through Title V Permit

56. 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

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

57. 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

58. 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

59. 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

60. 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

61. 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)] Federally Enforceable Through Title V Permit

62. 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. [District Rule 2520, 9.4] Federally Enforceable Through Title V Permit

63. Permittee shall conduct True Vapor Pressure (TVP) testing of the organic liquid stored in this tank at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored in this tank. [District Rules 2520, 9.3.2 and 4623, 6.2.2] Federally Enforceable Through Title V Permit

64. 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

65. Permittee shall submit the records of TVP 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 2520, 9.3.2 and 4623, 6.3.6] Federally Enforceable Through Title V Permit

66. The true vapor pressure (TVP) shall be measured using Reid vapor pressure ASTM Method D323, 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 of the oil and gas section of "California Air Resources Boards (ARB) Technical Guidance Document to the Criteria and Guidelines Regulations for AB 2588", dated August 1989. As an alternative to using ASTM D 323; the TVP may be determined using ASTM Method D2879 or other equivalent test methods approved by APCO, ARB, and EPA. [District Rules 2520, 9.3.2 and 4623, 6.4.3] Federally Enforceable Through Title V Permit

67. 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

68. The permittee shall keep a accurate records of each liquid stored in the tank, including its period of storage, storage temperature, Reid vapor pressure, maximum true vapor pressure, and API gravity. [District Rules 2520, 9.3.2 and 4623, 6.3] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

69. All records of required monitoring data and support information shall be maintained for a period of at least five years and shall be made readily available for District inspection upon request. [District Rules 2520, 9.4.2 and 4623, 6.3] Federally Enforceable Through Title V Permit

70. Compliance with permit conditions in the Title V permit shall be deemed compliance with District Rule 4623 (Amended May 19, 2005) and 40 CFR 60, Subpart Kb (except 60.115b(b)(1)). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

71. This unit commenced construction, modification, or reconstruction after July 23, 1984. Therefore, the requirements of 40 CFR 60 Subpart K and Ka do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

72. The requirements of District Rule 4801 (Amended December 17, 1992) and Fresno County Rule 406 do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

Shell Pipeline Company LP
C-1234
C-1082670

ATTACHMENT C

Detailed Facility List

Detailed Facility Report

For Facility=1234
Sorted by Facility Name and Permit Number

SHELL PIPELINE COMPANY LP
COALINGA PUMP STATION
37609 OIL CITY RD
COALINGA, CA 93210

FAC # **C 1234**
STATUS: **A**
TELEPHONE:

TYPE: **TitleV**
TOXIC ID: **40228**

EXPIRE ON: **04/30/2016**
AREA: **5 /**
INSP. DATE: **05/12**

PERMIT NUMBER	FEE DESCRIPTION	FEE RULE	QTY	FEE AMOUNT	FEE TOTAL	PERMIT STATUS	EQUIPMENT DESCRIPTION
C-1234-2-4	25,500 kBtu/hr	3020-02 H	1	1,030.00	1,030.00	A	DORMANT 25.5 MMBTU/HR NATIONAL OIL HEATER #2, WITH NORTH AMERICAN MODEL 5131HCRF BURNER
C-1234-3-4	37,500 kBtu/hr	3020-02 H	1	1,030.00	1,030.00	A	DORMANT 37.5 MMBTU/HR NATIONAL OIL HEATER #3 WITH NORTH AMERICAN MODEL 513HCRG BURNER
C-1234-4-9	10,836,000-GALLON TANK	3020-05 G	1	382.00	382.00	A	10,836,000 GALLON (258,000 BBL) WELDED CRUDE OIL STORAGE TANK #CH7 EQUIPPED WITH EXTERNAL FLOATING ROOF WITH PRIMARY METALLIC SHOE SEALS AND SECONDARY SEALS, TRUCK UNLOADING RACK #2 WITH PUMP AND TRUCK UNLOADING RACK #1, EAST AND WEST
C-1234-5-7	10,836,000 GAL TANK #CH8	3020-05 G	1	382.00	382.00	A	10,836,000 GALLON (258,000 BBL) WELDED CRUDE OIL STORAGE TANK #CH8 EQUIPPED WITH EXTERNAL FLOATING ROOF WITH PRIMARY METALLIC SHOE SEAL AND SECONDARY SEALS
C-1234-6-7	10,800,000 GAL TANK #CH12	3020-05 G	1	382.00	382.00	A	10,800,000 GALLON WELDED CRUDE OIL STORAGE TANK #CH12 EQUIPPED WITH EXTERNAL FLOATING ROOF WITH PRIMARY METALLIC SHOE SEAL AND SERRATED MULTI-FINGERED SECONDARY SEAL
C-1234-7-5	10,800,000 gallons	3020-05 G	1	382.00	382.00	A	10,800,000 GALLON WELDED STORAGE TANK #CH13 EQUIPPED WITH EXTERNAL FLOATING ROOF WITH PRIMARY METALLIC SHOE SEAL AND WIPER TYPE SECONDARY SEAL
C-1234-8-8	39.5 MMBTU/HR FUEL BURNING EQUIPMENT	3020-02 H	1	1,030.00	1,030.00	D	39.5 MMBTU/HR SOLAR CENTAUR MODEL 40S GAS TURBINE #1, WITH SOLONOX DRY LOW-NOX CONTROL SYSTEM USING LEAN-PREMIXED COMBUSTION
C-1234-9-7	39.5 MMBTU/HR FUEL BURNING EQUIPMENT	3020-02 H	1	1,030.00	1,030.00	D	39.5 MMBTU/HR SOLAR CENTAUR MODEL 40S GAS TURBINE #2, WITH SOLONOX DRY LOW-NOX CONTROL SYSTEM USING LEAN-PREMIXED COMBUSTION
C-1234-10-5	465 hp IC engine	3020-10 D	1	479.00	479.00	A	465 BHP CUMMINS MODEL NTTA-855G DIESEL-FIRED EMERGENCY STANDBY IC ENGINE POWERING AN ELECTRICAL GENERATOR
C-1234-11-5	213 hp IC engine	3020-10 C	1	240.00	240.00	A	213 BHP CATERPILLAR MODEL 3306 DIESEL-FIRED EMERGENCY IC ENGINE POWERING A FIREWATER PUMP
C-1234-12-3	3,360,000 GALLON TANK	3020-05 G	1	382.00	382.00	A	3,360,000 GALLON (80,000 BBL) FIXED ROOF STORAGE TANK #80GC11, 114.5' DIAMETER X 30' HEIGHT, EMERGENCY STANDBY USE ONLY
C-1234-13-6	5,040,000 gallons	3020-05 G	1	382.00	382.00	A	5,040,000 GALLON (120,000 BBL) WELDED CRUDE OIL STORAGE TANK #120CH-14 EQUIPPED WITH EXTERNAL FLOATING ROOF WITH PRIMARY METALLIC SHOE SEAL AND WIPER TYPE SECONDARY SEAL

Number of Facilities Reported: 1

Shell Pipeline Company LP
C-1234
C-1082670

ATTACHMENT D

District Rule 4601 Tables of Standards

TABLE OF STANDARDS 1 (Effective through 12/31/10)

Limits are expressed in grams of VOC per liter[a] of coating thinned to the manufacturer's maximum recommendation, excluding the volume of any water, exempt compounds, or colorant added to tint bases. Manufacturer's maximum recommendation means the maximum recommendation for thinning that is indicated on the label or lid of the coating container.

COATING CATEGORY	Effective Date: 1/1/2003
Flat Coatings	100
Nonflat Coatings	150
Nonflat - High Gloss Coatings	250
Specialty Coatings	
Antenna Coatings	530
Antifouling Coatings	400
Bituminous Roof Coatings	300
Bituminous Roof Primers	350
Bond Breakers	350
Clear Wood Coatings:	
Clear Brushing Lacquers	680
Lacquers (including lacquer sanding sealers)	550
Sanding Sealers (other than lacquer sanding sealers)	350
Varnishes	350
Concrete Curing Compounds	350
Dry Fog Coatings	400
Faux Finishing Coatings	350
Fire Resistive Coatings	350
Fire-Retardant Coatings:	
Clear	650
Opaque	350
Floor Coatings	250
Flow Coatings	420
Form-Release Compounds	250
Graphic Arts Coatings (Sign Paints)	500
High Temperature Coatings	420
Industrial Maintenance Coatings	250
Low Solids Coatings	120[b]
Magnesite Cement Coatings	450
Mastic Texture Coatings	300
Metallic Pigmented Coatings	500
Multi-Color Coatings	250

TABLE OF STANDARDS 1, continued (Effective through 12/31/10)

COATING CATEGORY	Effective Date: 1/1/2003
Pre-Treatment Wash Primers	420
Primers, Sealers, and Undercoaters	200
Quick-Dry Enamels	250
Quick-Dry Primers, Sealers and Undercoaters	200
Recycled Coatings	250
Roof Coatings	250
Rust Preventative Coatings	400
Shellacs:	
Clear	730
Opaque	550
Specialty Primers, Sealers, and Undercoaters	350
Stains	250
Swimming Pool Coatings	340
Swimming Pool Repair and Maintenance Coatings	340
Temperature-Indicator Safety Coatings	550
Traffic Marking Coatings	150
Waterproofing Sealers	250
Waterproofing Concrete/Masonry Sealers	400
Wood Preservatives	350

a Conversion factor: one pound VOC per gallon (U.S.) = 119.95 grams VOC per liter.
b Units are grams of VOC per liter of coating, including water and exempt compounds in accordance with Section 3.27.

TABLE OF STANDARDS 2 (Effective on and after 1/1/11)

Limits are expressed as VOC Regulatory, thinned to the manufacturer's maximum thinning recommendation, excluding any colorant added to tint bases.

COATING CATEGORY	VOC Limit (g/l) Effective 1/1/2011 through 12/31/2011[2]	VOC Limit (g/l) Effective on and after 1/1/2012[2]
Flat Coatings	50	50
Nonflat Coatings	100	100
Nonflat - High Gloss Coatings	150	150
Specialty Coatings		
Aluminum Roof Coatings	400	400
Basement Specialty Coatings	400	400
Bituminous Roof Coatings	50	50
Bituminous Roof Primers	350	350
Bond Breakers	350	350
Concrete Curing Compounds	350	350
Concrete/Masonry Sealers	100	100
Driveway Sealers	50	50
Dry Fog Coatings	150	150
Faux Finishing Coatings	350	350
Fire Resistive Coatings	350	350
Floor Coatings	100	100
Form-Release Compounds	250	250
Graphic Arts Coatings (Sign Paints)	500	500
High Temperature Coatings	420	420
Industrial Maintenance Coatings	250	250
Low Solids Coatings[1]	120[1]	120[1]
Magnesite Cement Coatings	450	450
Mastic Texture Coatings	100	100
Metallic Pigmented Coatings	500	500
Multi-Color Coatings	250	250
Pre-Treatment Wash Primers	420	420
Primers, Sealers, and Undercoaters	100	100
Reactive Penetrating Sealers	350	350
Recycled Coatings	250	250
Roof Coatings	50	50
Rust Preventative Coatings	400	250

TABLE OF STANDARDS 2 (continued) (Effective on and after 1/1/11)

Limits are expressed as VOC Regulatory, thinned to the manufacturer's maximum thinning recommendation, excluding any colorant added to tint bases.

COATING CATEGORY	VOC Limit (g/l) Effective 1/1/2011 through 12/31/2011[2]	VOC Limit (g/l) Effective on and after 1/1/2012[2]
Shellacs:		
Clear	730	730
Opaque	550	550
Specialty Primers, Sealers, and Undercoaters	350	100
Stains	250	250
Stone Consolidants	450	450
Swimming Pool Coatings	340	340
Traffic Marking Coatings	100	100
Tub and Tile Refinish Coatings	420	420
Waterproofing Membranes	250	250
Wood Coatings	275	275
Wood Preservatives	350	350
Zinc-Rich Primers	340	340

1 Units are grams of VOC per liter of coating, including water and exempt compounds in accordance with Section 3.77.

2 The dates listed do not preclude voluntary compliance with the applicable limit prior to those dates.

6.0 Administrative Requirements

6.1 Labeling Requirements: Each manufacturer of any architectural coating subject to this rule shall display the information listed in Sections 6.1.1 through 6.1.14 on the coating container (or label) in which the coating is sold or distributed.

6.1.1 Date Code: The date the coating was manufactured, or a date code representing the date, shall be indicated on the label, lid or bottom of the container. If the manufacturer uses a date code for any coating, the manufacturer shall file an explanation of each code with the Executive Officer of the ARB.

Shell Pipeline Company LP
C-1234
C-1082670

ATTACHMENT E

District Rule 4702 Stringency Analysis

Comparison of the Non-SIP amended version (amended August 18, 2011) of District Rule 4702 (Internal Combustion Engines) with the SIP approved version (amended January 18, 2007) of District Rule 4702 (Internal Combustion Engines – Phase 2)			
Section	**SIP Version of Rule 4702 (Amended January 18, 2007)**	**Non-SIP Version of Rule 4702 (Amended August 18, 2011)**	**Conclusion**
1.0 Purpose	1.0 The purpose of this rule is to limit the emissions of nitrogen oxides (NOx), carbon monoxide (CO), and volatile organic compounds (VOC) from internal combustion engines.	1.0 The purpose of this rule is to limit the emissions of nitrogen oxides (NOx), carbon monoxide (CO), volatile organic compounds (VOC), and sulfur oxides (SOx) from internal combustion engines.	There is no change in the requirements of this section. Therefore, the non-SIP version of the rule is as stringent as the SIP version of the rule.
2.0 Applicability	2.0 This rule applies to any internal combustion engine with a rated brake horsepower greater than 50 horsepower.	2.0 This rule applies to any internal combustion engine rated at 25 brake horsepower or greater.	There is no change in the requirements of this section. Therefore, the non-SIP version of the rule is as stringent as the SIP version of the rule.
4.0 Exemptions	4.1 The requirements of this rule shall not apply to the following engines: 4.1.1 An engine used to propel implements of husbandry, as that term is defined in Section 36000 of the California Vehicle Code, as that section existed on January 1, 2003. 4.1.2 An engine used exclusively to power a wind machine. 4.1.3 A de-rated spark-ignited engine not used in agricultural operations, provided the de-rating occurred before June 1, 2004. 4.1.4 A de-rated spark-ignited engine used in agricultural operations or a de-rated compression-ignited engine, provided the de-rating occurred before June 1, 2005. 4.1.5 An engine used exclusively to power Mobile Agricultural Equipment. 4.2 Except for the requirements of Section 5.7 and Section 6.2.3, the requirements of this rule shall not apply to: 4.2.1 An emergency standby engine as defined in Section 3.0 of this rule, and provided that it is operated with a nonresettable elapsed operating time meter. In lieu of a nonresettable time meter, the owner of an emergency engine may use an alternative device, method, or technique, in determining operating time provided that the alternative is approved by the APCO. The owner of the engine shall properly maintain and operate the time meter or alternative device in accordance with the manufacturer's instructions. 4.2.2 An internal combustion engine that is	4.1 The requirements of this rule shall not apply to the following engines: 4.1.1 An engine used to propel implements of husbandry, as that term is defined in Section 36000 of the California Vehicle Code, as that section existed on January 1, 2003. 4.1.2 An engine used exclusively to power a wind machine. 4.1.3 A de-rated spark-ignited engine not used in agricultural operations, provided the de-rating occurred before June 1, 2004. 4.1.4 A de-rated spark-ignited engine used in agricultural operations or a de-rated compression-ignited engine, provided the de-rating occurred before June 1, 2005. 4.1.5 An engine used exclusively to power Mobile Agricultural Equipment. 4.1.6 An internal combustion engine registered as a portable emissions unit under the Statewide Portable Equipment Registration Program pursuant to California Code of Regulations Title 13, Division 3, Chapter 9, Article 5, Sections 2450-2465. 4.1.7 An internal combustion engine registered as a portable emissions unit under Rule 2280 (Portable Equipment Registration). 4.2 Except for the requirements of Sections 5.9 and 6.2.3, the requirements of this rule shall not apply to an emergency standby engine or a low-use engine, provided that the engine is operated with an operating nonresettable elapsed time meter. 4.2.1 In lieu of operating a nonresettable	The non-SIP version of this rule includes several operations that are not required to meet the requirements of this rule. These operations were added to clarify what operations are subject to this rule. Therefore, the non-SIP version of the rule is as stringent as the SIP version of the rule.

	operated no more than 200 hours per calendar year as determined by an operational nonresettable elapsed operating time meter and provided the engine is not used to perform any of the functions specified in Section 4.2.2.1 through Section 4.2.2.3 below. In lieu of a nonresettable time meter, the owner of an engine may use an alternative device, method, or technique, in determining operating time provided that the alternative is approved by the APCO. The owner of the engine shall properly maintain and operate the time meter or alternative device in accordance with the manufacturer's instructions. 4.2.2.1 To generate electrical power that is either fed into the electrical utility power grid or used to reduce electrical power purchased by a stationary source, 4.2.2.2 To generate mechanical power that is used to reduce electrical power purchased by a stationary source, or 4.2.2.3 In a distributed generation application. 4.3 Except for the administrative requirements of Section 6.2.3, the requirements of this rule shall not apply to: 4.3.1 An internal combustion engine that meets the following conditions: 4.3.1.1 The engine is operated exclusively to preserve or protect property, human life, or public health during a disaster or state of emergency, such as a fire or flood, and 4.3.1.2 Except for operations associated with Section 4.3.1.1, the engine is limited to operate no more than 100 hours per calendar year as determined by an operational nonresettable elapsed operating time meter, for periodic maintenance, periodic readiness testing, and readiness testing during and after repair work of the engine, and 4.3.1.3 The engine is operated with a nonresettable elapsed operating time meter. In lieu of installing a nonresettable time meter, the owner of an engine may use an alternative device, method, or technique, in determining operating time provided that the alternative is approved by the APCO. The owner of the engine shall properly maintain and operate the time meter or alternative device in accordance with the manufacturer's instructions. 4.3.2 An internal combustion engine registered as a portable emissions unit	elapsed time meter, the operator may use an alternative device, method, or technique, in determining operating time, provided that the alternative is approved by the APCO and EPA and is allowed by the Permit-to-Operate or Permit-Exempt Equipment Registration. The operator must demonstrate that the alternative device, method, or technique is equivalent to using a nonresettable elapsed time meter. 4.2.2 The operator shall properly maintain and operate the nonresettable elapsed time meter or alternative device in accordance with the manufacturer's instructions. 4.3 Except for the administrative requirements of Section 6.2.3, the requirements of this rule shall not apply to the following: 4.3.1 An internal combustion engine that meets the following conditions: 4.3.1.1 The engine is operated exclusively to preserve or protect property, human life, or public health during a disaster or state of emergency, such as a fire or flood; and 4.3.1.2 Except for operations associated with Section 4.3.1.1, the engine is limited to operate no more than 100 hours per calendar year as determined by an operational nonresettable elapsed time meter, for periodic maintenance, periodic readiness testing, and readiness testing during and after repair work of the engine; and 4.3.1.3 The engine is operated with an operational nonresettable elapsed time meter. In lieu of installing a nonresettable elapsed time meter, the operator of an engine may use an alternative device, method, or technique, in determining operating time provided that the alternative is approved by the APCO and EPA. The operator of the engine shall properly maintain and operate the nonresettable elapsed time meter or alternative device in accordance with the manufacturer's instructions. 4.3.2 Military Tactical Equipment and engines used to retract military aircraft arresting gear cables. 4.4 For existing facilities, a replacement unit installed for the sole purpose of complying with the requirements of this rule shall be considered to be an emission control technique and shall be exempt from the Best Available Control Technology (BACT) and offsets requirements of District Rule 2201 (New and Modified Stationary Source Review Rule) provided that all other requirements of Rule 2201 are met.	

	under Rule 2280 (Portable Equipment Registration) or the Statewide Portable Equipment Registration Program pursuant to Sections 2450-2465, Article 5, Title 13, California Code of Regulations. 4.3.3 Military Tactical Equipment and engines used to retract military aircraft arresting gear cables. 4.4. A replacement engine installed for the sole purpose of complying with the requirements of this rule shall be exempt from the Best Available Control Technology (BACT) and Offsets requirements of District Rule 2201 (New and Modified Stationary Source Review Rule) provided that all of the following conditions are met: 4.4.1 The replacement engine is of equal or lesser horsepower rating of the engine being replaced, 4.4.2 The replacement engine is subject to the same operational parameters (e.g. hours of operation, fuel use limitations, etc.) as the engine being replaced, 4.4.3 The replacement engine performs the same function as the engine being replaced, and 4.4.4 The emissions of the replacement engine are no greater than the emissions of the engine being replaced.	4.5 Except for the requirements of Section 5.1, the requirements of this rule shall not apply to stationary engines rated at least 25 Brake Horsepower, up to, and including 50 Brake Horsepower.	
5.0 Requirements	**Note:** Secton 5.0 requirements refer to Tables 1 through 4, which list the emission limits/standards for various categories of IC engines subject to this rule. These Tables are included at the end of this Stringency Comparison for each version of the rule.		
	N/A	5.1 Stationary Engines Rated at Least 25 Brake Horsepower, Up To, and Including 50 Brake Horsepower and Used In Non-Agricultural Operations (Non-AO) 5.1.1 On and after July 1, 2012, no person shall sell or offer for sale any non-AO spark-ignited engine or any non-AO compression-ignited engine unless the engine meets the applicable requirements and emission limits specified in 40 Code of Federal Regulation (CFR) 60 Subpart IIII (Standards of Performance for Stationary Compression Ignition Internal Combustion Engines) and 40 CFR 60 Subpart JJJJ (Standards of Performance for Stationary Spark Ignition Internal Combustion Engines) for the year in which the ownership of the engine changes. 5.1.2 By January 1, 2013, the operator shall submit a one-time report that includes the number of engines at the stationary source, and the following information for each engine: 5.1.2.1 Location of each engine, 5.1.2.2 Engine manufacturer,	**The SIP version does not apply to engines rated between 25 and 50 bhp. Therefore, the Non-SIP Version of the rule is more stringent.**

		5.1.2.3 Model designation and engine serial number, 5.1.2.4 Rated brake horsepower, 5.1.2.5 Type of fuel and type of ignition, 5.1.2.6 Combustion type: rich-burn, lean-burn, or compression ignition, 5.1.2.7 Purpose, and intended use, of the engine, 5.1.2.8 Typical daily operating schedule, and 5.1.2.9 Fuel consumption (cubic feet for gas or gallons for liquid fuel) for the previous one-year period.	
	5.1 Engine Emission Limits/Standards 5.1.1 Spark-Ignited Internal Combustion Engine Emission Limits/Standards - The owner of a spark-ignited internal combustion engine shall not operate it in such a manner that results in emissions exceeding the limits in Table 1 below for the appropriate engine type according to the compliance schedules listed in Section 7.0 or according to the compliance dates specified in Table 1 below. A spark-ignited engine shall comply with the applicable emission limits pursuant to Section 5.1 or Section 8.0.	5.2 Stationary Engines Rated at Greater than 50 Brake Horsepower (>50 bhp) 5.2.1 Spark Ignited Engines Used in non-AO - Table 1 Emission Limits/Standards The operator of a spark-ignited internal combustion engine rated at >50 bhp that is used exclusively in non-AO shall not operate it in such a manner that results in emissions exceeding the limits in Table 1 for the appropriate engine type until such time that the engine has demonstrated compliance with Table 2 emission limits pursuant to the compliance deadlines in Section 7.5. In lieu of complying with Table 1 emission limits, the operator of a spark-ignited engine shall comply with the applicable emission limits pursuant to Section 8.0. 5.2.2 Spark-Ignited Engines Used in non-AO – Table 2 Emission Limits/Standards On and after the compliance schedule specified in Section 7.5, the operator of a spark-ignited engine > 50 bhp that is used in non-AO shall comply with all the applicable requirements of the rule and one of the following, on an engine-by-engine basis: 5.2.2.1 On and after the compliance schedule specified in Section 7.5, the operator of a spark-ignited engine that is used exclusively in non-AO shall comply with Sections 5.2.2.1.1 through 5.2.2.1.3 on an engine-by-engine basis: 5.2.2.1.1 NOx, CO, and VOC emission limits pursuant to Table 2; 5.2.2.1.2 SOx control requirements of Section 5.7, pursuant to the deadlines specified in Section 7.5; and 5.2.2.1.3 Monitoring requirements of Section 5.10, pursuant to the deadlines specified in Section 7.5. 5.2.2.2 In lieu of complying with the NOx emission limit requirement of Section 5.2.2.1.1, an operator may pay an annual fee to the District, as specified in Section 5.6, pursuant to Section 7.6.	**The requirements of Table 1 of both versions of the rule are identical. Table 2 from the non-SIP version found at the end of this document has emissions requirements that are more stringent than the requirements of Table 1 in both versions of the Rule. The standards of the non-SIP version are at least as stringent as the SIP version. Therefore, the non-SIP version of the rule is more stringent than the SIP version of the rule.**

		5.2.2.2.1 Engines in the fee payment program shall have actual emissions not greater than the applicable limits in Table 1 during the entire time the engine is part of the fee payment program. 5.2.2.2.2 Compliance with Section 5.7 and 5.10, pursuant to the deadlines specified in Section 7.5, is also required as part of the fee payment option. 5.2.2.3 In lieu of complying with the NOx, CO, and VOC limits of Table 2 on an engine-by-engine basis, an operator may elect to implement an alternative emission control plan pursuant to Section 8.0. An operator electing this option shall not be eligible to participate in the fee payment option outlined in Section 5.2.2.2 and Section 5.6. 5.2.3 Spark-Ignited Engines Used Exclusively in Agricultural Operations (AO) 5.2.3.1 The operator of a spark-ignited internal combustion engine rated at >50 bhp that is used exclusively in AO shall not operate it in such a manner that results in emissions exceeding the limits in Table 3 for the appropriate engine type on an engine-by-engine basis. 5.2.3.2 In lieu of complying with the NOx, CO, and VOC limits of Table 3 on an engine-by-engine basis, an operator may elect to implement an alternative emission control plan pursuant to Section 8.0. 5.2.3.3 An operator of an AO spark-ignited engine that is subject to the applicable requirements of Table 3 shall not replace such engine with an engine that emits more emissions of NOx, VOC, and CO, on a ppmv basis, (corrected to 15% oxygen on a dry basis) than the engine being replaced.	

	5.1.2 Compression-Ignited Internal Combustion Engine Emission Limits/Standards and Compliance Schedules – The owner of a compression-ignited internal combustion engine shall repower, replace or control the engine to comply with the applicable limits/standards and compliance dates in Table 2 below. The annual hours of operation shall be determined on a calendar year basis. A compression-ignited engine shall comply with the applicable emission limits/standards pursuant to Section 5.1.2 or Section 8.0. 5.1.3 On and after June 1, 2006, the owner of an AO rich-burn spark-ignited engine, AO lean-burn spark-ignited engine, or AO compression-ignited engine that is subject to the requirements of Section 5.1 shall not replace such engine with a rich-burn spark-ignited, lean-burn spark-ignited, or compression-ignited engine, respectively, that emits more emissions of NOx, VOC, and CO, on a ppmv basis, (corrected to 15% oxygen on a dry basis) than the engine being replaced. 5.1.4 The owner of a non-certified compression-ignited engine, in place on June 1, 2006, shall comply with the Emission Limit/Standard and Compliance Date in Table 2 based on the non-certified compression-ignited engine that was in place on June 1, 2006, unless the owner meets one of the following conditions: 5.1.4.1Replaces the non-certified compression-ignited engine with a non-modified Tier 3 or a non-modified Tier 4 engine after June 1, 2006, 5.1.4.2 Controls the non-certified compression-ignited engine after June 1, 2006, to emit emissions less than, or equal to, 80 ppm NOx, 2,000 ppm CO, and 750 ppm VOC, (corrected to 15% oxygen on a dry basis), or 5.1.4.3 Replaces the non-certified compression-ignited engine after June 1, 2006, with an engine or other source with emissions less than, or equal to, 80 ppm NOx, 2,000 ppm CO, and 750 ppm VOC (corrected to 15% oxygen on a dry basis).	5.2.4 Certified Compression-Ignited Engines (AO and non-AO) The operator of a certified compression-ignited engine rated >50 bhp shall comply with the following requirements: 5.2.4.1 Repower, replace, or control the engine's emissions to comply with the applicable limits/standards in Table 4 on an engine-by-engine basis by the compliance dates as specified in Table 4. 5.2.4.2 The annual hours of operation shall be determined on a calendar year basis. 5.2.4.3 In lieu of complying with the NOx, CO, and VOC limits of Table 4 on an engine-by-engine basis, an operator may elect to implement an alternative emission control plan pursuant to Section 8.0. 5.2.4.4 An operator of an AO compression-ignited engine that is subject to the applicable requirements of Table 4 shall not replace such engine with an engine that emits more emissions of NOx, VOC, and CO, on a ppmv basis, (corrected to 15% oxygen on a dry basis) than the engine being replaced. 5.2.5 Non-Certified Compression-Ignited Engines (AO and Non-AO) The operator of a non-certified compression-ignited engine, in place on or before June 1, 2006, shall comply with the Emission Limit/Standard and Compliance Date in Table 4 based on the non-certified compression ignited engine that was in place on June 1, 2006, unless the operator meets one of the following conditions: 5.2.5.1 Replace the non-certified compression-ignited engine with a nonmodified Tier 3 or a non-modified Tier 4 engine after June 1, 2006; 5.2.5.2 Control the non-certified compression-ignited engine after June 1, 2006, to emit emissions less than, or equal to, 80 ppmv NOx, 2,000 ppmv CO, and 750 ppmv VOC (corrected to 15% oxygen on a dry basis); or 5.2.5.3 Replace the non-certified compression-ignited engine after June 1, 2006, with an engine or other source with emissions less than, or equal to, 80 ppmv NOx, 2,000 ppmv CO, and 750 ppmv VOC (corrected to 15% oxygen on a dry basis).	**There is no change in the requirements of this section. Therefore, the non-SIP version of the rule is as stringent as the SIP version of the rule.**

	5.2 All continuous emission monitoring systems (CEMS) emissions measurements shall be averaged over a period of 15 consecutive minutes. Any 15-consecutive-minute block average CEMS measurement exceeding the applicable emission limits of this rule shall constitute a violation of this rule. 5.3 Percent emission reductions, if used to comply with the NOx emission limits of Section 5.1, shall be calculated as follows: 5.3.1 For engines with external control devices that are not operated in combination with a second emission control device or technique, percent reduction shall be calculated using emission samples taken at the inlet and outlet of the control device. 5.3.2 For engines without external control devices and for engines with an external control device in combination with a second emission control device or technique, percent reduction shall be based on source test results for the uncontrolled engine and the engine after the control device or technique has been employed. In this situation, the engine's typical operating parameters, loading, and duty cycle shall be documented and repeated at each successive post-control source test to ensure that the engine is meeting the percent reduction limit. When representative source sampling prior to the application of an emissions control technology or technique is not available, the APCO may approve the use of a manufacturer's uncontrolled emissions information or source sampling from a similar, uncontrolled engine. 5.4 The owner of an internal combustion engine that uses percent emission reduction to comply with the NOx emission limits of Section 5.1 shall provide an accessible inlet and outlet on the external control device or the engine as appropriate for taking emission samples and as approved by the APCO.	5.3 All continuous emission monitoring systems (CEMS) emissions measurements shall be averaged over a period of 15 consecutive minutes. Any 15-consecutiveminute block average CEMS measurement exceeding the applicable emission limits of this rule shall constitute a violation of this rule. 5.4 Percent emission reductions, if used to comply with the NOx emission limits of Section 5.2, shall be calculated as follows: 5.4.1 For engines with external control devices that are not operated in combination with a second emission control device or technique, percent reduction shall be calculated using emission samples taken at the inlet and outlet of the control device. 5.4.2 For engines without external control devices and for engines with an external control device in combination with a second emission control device or technique, percent reduction shall be based on source test results for the uncontrolled engine and the engine after the control device or technique has been employed. In this situation, the engine's typical operating parameters, loading, and duty cycle shall be documented and repeated at each successive post-control source test to ensure that the engine is meeting the percent reduction limit. When representative source sampling prior to the application of an emissions control technology or technique is not available, the APCO may approve the use of a manufacturer's uncontrolled emissions information or source sampling from a similar, uncontrolled engine. 5.5 The operator of an internal combustion engine that uses percent emission reduction to comply with the NOx emission limits of Section 5.2 shall provide an accessible inlet and outlet on the external control device or the engine as appropriate for taking emission samples and as approved by the APCO.	**There is no change in the requirements of this section. Therefore, the non-SIP version of the rule is as stringent as the SIP version of the rule.**
	N/A	5.6 Payment of an Annual Fee In Lieu of Complying with a NOx Emission Limit The operator of a non-AO spark-ignited engine who elects to comply under Section 5.2.2.2 shall comply with the requirements of Sections 5.6 by the schedule specified in Section 7.6 and all other applicable provisions of this rule. 5.6.1 An operator shall pay a total annual fee to the District based on the total NO_x emissions from those engines that will be subject to Section 5.2.2.2. The annual fee shall be calculated in the following manner: 5.6.1.1 The operator shall calculate the total emissions for all engines operating at a stationary source that will comply with Section 5.2.2.2. The total NOx emissions	**The annual fee option applies to units subject to Table 2.**

		shall be calculated in accordance with Section 5.6.1.3. 5.6.1.2 The total annual fee shall be calculated in accordance with Section 5.6.1.4. These calculations include only the units that have been identified to comply with Section 5.2.2.2. 5.6.1.3 Total Emissions (TE) Calculation E (engine) = A x B x C x D x 2.147 x 10-16 Where: E (engine) = Annual NOx emissions for each unit, in tons/year. A = NOx emission limit for the Permit-to-Operate, in ppmvd corrected to 15% oxygen. B = Annual fuel use (ft3/year) C = Fuel higher heating value (Btu/ft3) – for natural gas use 1,000 Btu/ft3 D = Fuel F-Factor at 60oF (Dscf/MMBtu) – for natural gas use 8,579 Dscf/MMBtu TE = ΣE(engine) Where: ΣE(engine) = Sum of all NOx emissions from all units in the annual fee program, in tons per year. 5.6.1.4 Total Annual Fee Calculation Total Annual Fee = (TE x FR) + Administrative Fee Where: TE = Total Emissions, in tons per year, as calculated in Section 5.6.1.3. FR (Fee Rate) = the cost of NOx reductions, in dollars per ton, as established by District Rule 9510. Under no circumstances shall the cost per ton of NO_x reductions exceed the cost effectiveness threshold for the Carl Moyer Cost Effectiveness, as established by the applicable state law. Administrative Fee = 4% x (TE x FR)	

	5.5 California Reformulated Gasoline shall be used as the fuel for all gasoline-fired, spark-ignited internal combustion engines.	5.7 Sulfur Oxides (SOx) Emission Control Requirements On and after the compliance schedule specified in Section 7.5, operators of non-AO spark-ignited engines and non-AO compression-ignited engines shall comply with one of the following requirements: 5.7.1 Operate the engine exclusively on PUC-quality natural gas, commercial propane, butane, or liquefied petroleum gas, or a combination of such gases; or 5.7.2 Limit gaseous fuel sulfur content to no more than five (5) grains of total sulfur per one hundred (100) standard cubic feet; or 5.7.3 Use California Reformulated Gasoline for gasoline-fired spark-ignited engines; or 5.7.4 Use California Reformulated Diesel for compression-ignited engines; or 5.7.5 Operate the engine on liquid fuel that contains no more than 15 ppm sulfur, as determined by the test method specified in Section 6.4.6; or 5.7.6 Install and properly operate an emission control system that reduces SO2 emissions by at least 95% by weight as determined by the test method specified in Section 6.4.6.	**The non-SIP version of this rule contains SOx emissions control requirements not found in the SIP approved version. Therefore, the non-SIP version of the rule is as stringent as the SIP version of the rule.**
	5.6 Monitoring Requirements A The owner of a non-AO spark-ignited engine subject to the requirements of Section 5.1 or any engine subject to the requirements of Section 8.0 shall comply with the following requirements: 5.6.1 For each engine with a rated brake horsepower of 1,000 hp or greater and which is allowed by Permit-to-Operate or Permit-Exempt Equipment Registration condition to operate more than 2,000 hours per calendar year, or with an external emission control device, either install, operate, and maintain continuous monitoring equipment for NOx, CO, and oxygen, as identified in Rule 1080 (Stack Monitoring), or install, operate, and maintain APCO-approved alternate monitoring. The monitoring system may be a continuous emissions monitoring system (CEMS), a parametric emissions monitoring system (PEMS), or an alternative monitoring system approved by the APCO. APCO-approved alternate monitoring shall consist of one or more of the following: 5.6.1.1 Periodic NOx and CO emission concentrations, 5.6.1.2 Engine exhaust oxygen concentration, 5.6.1.3 Air-to-fuel ratio, 5.6.1.4 Flow rate of reducing agents added to engine exhaust, 5.6.1.5 Catalyst inlet and exhaust temperature,	5.8 Monitoring Requirements: Non-AO Spark-Ignited Engines and Engines in an AECP (Section 8.0) The operator of a non-AO spark-ignited engine subject to the requirements of Section 5.2 or any engine subject to the requirements of Section 8.0 shall comply with the following requirements: 5.8.1 For each engine with a rated brake horsepower of 1,000 bhp or greater and which is allowed by Permit-to-Operate or Permit-Exempt Equipment Registration condition to operate more than 2,000 hours per calendar year, or with an external emission control device, either install, operate, and maintain continuous monitoring equipment for NOx, CO, and oxygen, as identified in Rule 1080 (Stack Monitoring), or install, operate, and maintain APCO approved alternate monitoring. The monitoring system may be a continuous emissions monitoring system (CEMS), a parametric emissions monitoring system (PEMS), or an alternative monitoring system approved by the APCO. APCO-approved alternate monitoring shall consist of one or more of the following: 5.8.1.1 Periodic NOx and CO emission concentrations, 5.8.1.2 Engine exhaust oxygen concentration, 5.8.1.3 Air-to-fuel ratio, 5.8.1.4 Flow rate of reducing agents added to engine exhaust,	**There is no change in the requirements of this section. Therefore, the non-SIP version of the rule is as stringent as the SIP version of the rule.**

	5.6.1.6 Catalyst inlet and exhaust oxygen concentration, 5.6.1.7 Other operational characteristics. 5.6.2 For each engine not subject to Section 5.6.1, monitor operational characteristics recommended by the engine manufacturer or emission control system supplier, and approved by the APCO. 5.6.3 For each engine with an alternative monitoring system, submit to, and receive approval from the APCO, adequate verification of the alternative monitoring system's acceptability. This would include data demonstrating the system's accuracy under typical operating conditions for the specific application and any other information or data deemed necessary in assessing the acceptability of the alternative monitoring system. 5.6.4 For each engine with an APCO approved CEMS, operate the CEMS in compliance with the requirements of 40 Code of Federal Regulations (CFR) Part 51, 40 CFR Parts 60.7 and 60.13 (except subsection h), 40 CFR Appendix B (Performance Specifications), 40 CFR Appendix F (Quality Assurance Procedures), and applicable provisions of Rule 1080 (Stack Monitoring). 5.6.5 For each engine, have the data gathering and retrieval capabilities of an installed monitoring system described in Section 5.6 approved by the APCO. 5.6.6 For each engine, install and operate a nonresettable elapsed operating time meter. In lieu of installing a nonresettable time meter, the owner of an engine may use an alternative device, method, or technique, in determining operating time provided that the alternative is approved by the APCO and is allowed by Permit-to-Operate or Permit-Exempt Equipment Registration condition. The owner of the engine shall properly maintain and operate the time meter or alternative device in accordance with the manufacturer's instructions. 5.6.7 For each engine, implement the Inspection and Monitoring (I&M) plan, if any, submitted to and approved by the APCO pursuant to Section 6.5. 5.6.8 For each engine, collect data through the I&M plan in a form approved by the APCO. 5.6.9 For each engine use a portable NOx analyzer to take NOx emission readings to verify compliance with the emission requirements of Section 5.1 or Section 8.0 during each calendar quarter in which a source test is not performed and the engine is operated. All emission readings shall be taken with the engine operating either at conditions representative of normal operations or conditions specified in the Permit-to-Operate or Permit-Exempt	5.8.1.5 Catalyst inlet and exhaust temperature, 5.8.1.6 Catalyst inlet and exhaust oxygen concentration, or 5.8.1.7 Other operational characteristics. 5.8.2 For each engine not subject to Section 5.8.1, monitor operational characteristics recommended by the engine manufacturer or emission control system supplier, and approved by the APCO. 5.8.3 For each engine with an alternative monitoring system, submit to, and receive approval from the APCO, adequate verification of the alternative monitoring system's acceptability. This would include data demonstrating the system's accuracy under typical operating conditions for the specific application and any other information or data deemed necessary in assessing the acceptability of the alternative monitoring system. 5.8.4 For each engine with an APCO approved CEMS, operate the CEMS in compliance with the requirements of 40 Code of Federal Regulations (CFR) Part 51, 40 CFR Parts 60.7 and 60.13 (except subsection h), 40 CFR Appendix B (Performance Specifications), 40 CFR Appendix F (Quality Assurance Procedures), and applicable provisions of Rule 1080 (Stack Monitoring). 5.8.5 For each engine, have the data gathering and retrieval capabilities of an installed monitoring system described in Section 5.8 approved by the APCO. 5.8.6 For each engine, install and operate a nonresettable elapsed time meter. 5.8.6.1 In lieu of installing a nonresettable elapsed time meter, the operator may use an alternative device, method, or technique, in determining operating time provided that the alternative is approved by the APCO and EPA and is allowed by a Permit-to- Operate or Permit-Exempt Equipment Registration condition. 5.8.6.2 The operator shall properly maintain and operate the nonresettable elapsed time meter or alternative device in accordance with the manufacturer's instructions. 5.8.7 For each engine, implement the Inspection and Monitoring (I&M) plan, if any, submitted to and approved by the APCO pursuant to Section 6.5. 5.8.8 For each engine, collect data through the I&M plan in a form approved by the APCO. 5.8.9 For each engine, use a portable NOx analyzer to take NOx emission readings to verify compliance with the emission requirements of Section 5.2 or Section 8.0 during each calendar quarter in which a	

	Equipment Registration. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. All NOx emissions readings shall be reported to the APCO in a manner approved by the APCO. NOx emission readings taken pursuant to this section shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings evenly spaced out over the 15 consecutive-minute period. 5.6.10 The APCO shall not approve an alternative monitoring system unless it is documented that continued operation within ranges of specified emissions-related performance indicators or operational characteristics provides a reasonable assurance of compliance with applicable emission limits. The operator shall source test over the proposed range of surrogate operating parameters to demonstrate compliance with the applicable emission standards. 5.6.11 For each engine subject to Section 8.0, install and operate a nonresettable fuel meter. In lieu of installing a nonresettable fuel meter, the owner may use an alternative device, method, or technique in determining daily fuel consumption provided that the alternative is approved by the APCO. The owner shall properly maintain, operate, and calibrate the required fuel meter in accordance with the manufacturer's instructions.	source test is not performed and the engine is operated. 5.8.9.1 If an engine is operated less than 120 calendar days per calendar year, take one NOx emission reading during the calendar year in which a source test is not performed and the engine is operated. 5.8.9.2 All emission readings shall be taken with the engine operating either at conditions representative of normal operations or conditions specified in the Permit-to-Operate or Permit-Exempt Equipment Registration. 5.8.9.3 The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. 5.8.9.4 All NOx emissions readings shall be reported to the APCO in a manner approved by the APCO. 5.8.9.5 NOx emission readings taken pursuant to this section shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings evenly spaced out over the 15 consecutive minute period. 5.8.10 The APCO shall not approve an alternative monitoring system unless it is documented that continued operation within ranges of specified emissions related performance indicators or operational characteristics provides a reasonable assurance of compliance with applicable emission limits. The operator shall source test over the proposed range of surrogate operating parameters to demonstrate compliance with the applicable emission standards. 5.8.11 For each engine subject to Section 8.0, install and operate a nonresettable fuel meter. 5.8.11.1 In lieu of installing a nonresettable fuel meter, the operator may use an alternative device, method, or technique in determining daily fuel consumption provided that the alternative is approved by the APCO and EPA. 5.8.11.2 The operator shall properly maintain, operate, and calibrate the required fuel meter in accordance with the manufacturer's instructions.	
	5.7 Monitoring Requirements B 5.7.1 The owner of any of the following engines shall comply with the requirements specified	5.9 Monitoring Requirements: All Other Engines 5.9.1 The operator of any of the following engines shall comply with the requirements	**There is no change in the requirements of this section. Therefore, the non-SIP version of the**

	in Section 5.7.2 through Section 5.7.5 below: 5.7.1.1 An AO spark-ignited engine subject to the requirements of Section 5.1, 5.7.1.2 A compression-ignited engine subject to the requirements of Section 5.1, or 5.7.1.3 An engine subject to Section 4.2. 5.7.2 Properly operate and maintain each engine as recommended by the engine manufacturer or emission control system supplier. 5.7.3 Monitor the operational characteristics of each engine as recommended by the engine manufacturer or emission control system supplier. 5.7.4 Install and operate a nonresettable elapsed operating time meter. In lieu of installing a nonresettable time meter, the owner of an engine may use an alternative device, method, or technique, in determining operating time provided that the alternative is approved by the APCO and is allowed by Permit-to-Operate or Permit-Exempt Equipment Registration condition. The owner of the engine shall properly maintain and operate the time meter or alternative device in accordance with the manufacturer's instructions. 5.7.5 The owner of an AO spark-ignited engine that has been retro-fitted with a NOx exhaust control that has not been certified in accordance with Section 9.0 Exhaust Control System Certification Requirements, or a compression-ignited engine that has been retro-fitted with a NOx exhaust control shall comply with the following: 5.7.5.1 Use a portable NOx analyzer to take NOx emission readings to demonstrate compliance with the emission requirements of Section 5.1. 5.7.5.2 The owner of a compression-ignited engine that is subject to the limits/standards of Section 5.1.2 Table 2 Category 1.d shall use a portable NOx analyzer to take NOx emission readings at least once every six months that the engine is operated. 5.7.5.3 The owner of any other engine that has been retro-fitted with a NOx exhaust control shall use a portable NOx analyzer to take NOx emission readings at least once every 24 months that the engine is operated. 5.7.5.4 All emission readings shall be taken with the engine operating either at conditions representative of normal operations or conditions specified in the Permit-to-Operate or Permit-Exempt Equipment Registration.	specified in Section 5.9.2 through Section 5.9.5 below: 5.9.1.1 An AO spark-ignited engine subject to the requirements of Section 5.2; 5.9.1.2 A compression-ignited engine subject to the requirements of Section 5.2; or 5.9.1.3 An engine subject to Section 4.2. 5.9.2 Properly operate and maintain each engine as recommended by the engine manufacturer or emission control system supplier. 5.9.3 Monitor the operational characteristics of each engine as recommended by the engine manufacturer or emission control system supplier. 5.9.4 Install and operate a nonresettable elapsed time meter. 5.9.4.1 In lieu of installing a nonresettable elapsed time meter, the operator may use an alternative device, method, or technique, in determining operating time provided that the alternative is approved by the APCO and EPA and is allowed by a Permit-to- Operate or Permit-Exempt Equipment Registration condition. 5.9.4.2 The operator shall properly maintain and operate the nonresettable elapsed time meter or alternative device in accordance with the manufacturer's instructions. 5.9.5 The operator of an AO spark-ignited engine that has been retro-fitted with a NOx exhaust control that has not been certified in accordance with Section 9.0 Exhaust Control System Certification Requirements, or a compression ignited engine that has been retro-fitted with a NOx exhaust control shall comply with the following: 5.9.5.1 Use a portable NOx analyzer to take NOx emission readings to demonstrate compliance with the emission requirements of Section 5.2. 5.9.5.2 The operator of a compression-ignited engine that is subject to the limits/standards of Section 5.2 Table 4 Category 1.d shall use a portable NOx analyzer to take NOx emission readings at least once every six (6) months that the engine is operated. 5.9.5.3 The operator of any other engine that has been retro-fitted with a NOx exhaust control shall use a portable NOx analyzer to take NOx emission readings at least once every 24 months that the engine is operated. 5.9.5.4 All emission readings shall be taken with the engine operating either at	**rule is as stringent as the SIP version of the rule.**

	5.7.5.5 The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. 5.7.5.6 All NOx emissions readings shall be reported to the APCO in a manner approved by the APCO. 5.7.5.7 NOx emission readings taken pursuant to this section shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings evenly spaced out over the 15 consecutive-minute period.	conditions representative of normal operations or conditions specified in the Permit-to-Operate or Permit-Exempt Equipment Registration. 5.9.5.5 The portable NOx analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. 5.9.5.6 All NOx emissions readings shall be reported to the APCO in a manner approved by the APCO. 5.9.5.7 NOx emission readings taken pursuant to this section shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings evenly spaced out over the 15 consecutive minute period.	
		5.10 SOx Emissions Monitoring Requirements On and after the compliance schedule specified in Section 7.5, an operator of a non-AO engine shall comply with the following requirements: 5.10.1 An operator of an engine complying with Sections 5.7.2 or 5.7.5 shall perform an annual sulfur fuel analysis in accordance with the test methods in Section 6.4. The operator shall keep the records of the fuel analysis and shall provide it to the District upon request, 5.10.2 An operator of an engine complying with Section 5.7.6 by installing and operating a control device with at least 95% by weight SOx reduction efficiency shall submit for approval by the APCO the proposed the key system operating parameters and frequency of the monitoring and recording not later than July 1, 2013, and 5.10.3 An operator of an engine complying with Section 5.7.6 shall perform an annual source test unless a more frequent sampling and reporting period is included in the Permit-to-Operate. Source tests shall be performed in accordance with the test methods in Section 6.4.	**The non-SIP approved version contains SO_x emissions monitoring requirements not required in the SIP approved version. Therefore, the non-SIP version of the rule is as stringent as the SIP version of the rule.**

	5.8 Permit-Exempt Equipment Registration Requirements The owner of an engine used exclusively in agricultural operations shall register such engine pursuant to Rule 2250 (Permit-Exempt Equipment Registration), except for an engine that meets any one of the following conditions: 5.8.1 The engine is required to have a Permit-to-Operate pursuant to California Health and Safety Code Section 42301.16, or 5.8.2 The engine is not required to comply with Section 5.1 of this rule.	5.11 Permit-Exempt Equipment Registration Requirements The operator of an engine used exclusively in agricultural operations shall register such engine pursuant to Rule 2250 (Permit-Exempt Equipment Registration), except for an engine that meets any one of the following conditions: 5.11.1 The engine is required to have a Permit-to-Operate pursuant to California Health and Safety Code Section 42301.16; or 5.11.2 The engine is not required to comply with Section 5.2 of this rule.	**There is no change in the requirements of this section. Therefore, the non-SIP version of the rule is as stringent as the SIP version of the rule.**
6.0 Administrative Requirements	6.1 Emission Control Plan The owner of an engine subject to the requirements of Section 5.1 or Section 8.0, except for an engine specified in Section 6.1.1, of this rule shall submit to the APCO an APCO-approvable emission control plan of all actions to be taken to satisfy the emission requirements of Section 5.1 and the compliance schedules of Section 7.0. 6.1.1 The requirement to submit an emission control plan shall not apply to an engine specified below: 6.1.1.1 A certified compression-ignited engine that has not been retro-fitted with an exhaust control and is not subject to the requirements of Section 8.0, 6.1.1.2 A certified spark-ignited engine that has not been retro-fitted with an exhaust control and is not subject to the requirements of Section 8.0, 6.1.1.3 An AO spark-ignited engine that has not been retro-fitted with a catalytic emission control device and is not subject to the requirements of Section 8.0, 6.1.1.4 An engine subject to Section 4.2, or 6.1.1.5 An engine subject to Section 4.3. 6.1.1.6 An engine with an operating exhaust control system that has been certified in accordance with Section 9.0 Exhaust Control System Certification Requirements. 6.1.2 Such emission control plan shall contain the following information, as applicable for each engine: 6.1.2.1 Permit-to-Operate number, Authority-to-Construct number, or Permit-Exempt Equipment Registration number 6.1.2.2 Engine manufacturer 6.1.2.3 Model designation and engine serial	6.1 Emission Control Plan The operator of an engine subject to the requirements of Section 5.2 of this rule shall submit to the APCO an APCO-approvable emission control plan of all actions to be taken to satisfy the emission requirements of Section 5.2 and the compliance schedules of Section 7.0. If there is no change to the previously-approved emission control plan, the operator shall submit a letter to the District indicating that the previously approved plan is still valid. 6.1.1 The requirement to submit an emission control plan shall apply to the following engines: 6.1.1.1 Engines that have been retrofitted with an exhaust control device, except those certified per Section 9.0; 6.1.1.2 Engines subject to Section 8.0; 6.1.1.3 An AO spark-ignited engine that is subject to the requirements of Section 8.0; 6.1.1.4 An AO spark-ignited engine that has been retrofitted with a catalytic emission control and is not subject to the requirements of Section 8.0. 6.1.2 Such emission control plan shall contain the following information, as applicable for each engine: 6.1.2.1 Permit-to-Operate number, Authority-to-Construct number, or Permit-Exempt Equipment Registration number, 6.1.2.2 Engine manufacturer, 6.1.2.3 Model designation and engine serial number, 6.1.2.4 Rated brake horsepower, 6.1.2.5 Type of fuel and type of ignition, 6.1.2.6 Combustion type: rich-burn or lean-	**The non-SIP approved version of this rule includes what engine categories are subject to this section. The SIP approved version has a list of what engines are exempt from this section. However, there is no change in the actual engine categories that are required to meet these section requirements. Therefore, the non-SIP version of the rule is as stringent as the SIP version of the rule.**

	number 6.1.2.4 Rated brake horsepower 6.1.2.5 Type of fuel and type of ignition 6.1.2.6 Combustion type: rich-burn or lean-burn 6.1.2.7 Total hours of operation in the previous one-year period, including typical daily operating schedule 6.1.2.8 Fuel consumption (cubic feet for gas or gallons for liquid) for the previous one-year period 6.1.2.9 Stack modifications to facilitate continuous in-stack monitoring and to facilitate source testing 6.1.2.10 Type of control to be applied, including in-stack monitoring specifications 6.1.2.11 Applicable emission limits 6.1.2.12 Documentation showing existing emissions of NOx, VOC, and CO, and 6.1.2.13 Date that the engine will be in full compliance with Rule 4702. 6.1.3 The emission control plan shall identify the type of emission control device or technique to be applied to each engine and a construction/removal schedule, or shall provide support documentation sufficient to demonstrate that the engine is in compliance with the emission requirements of this rule. 6.1.4 For an engine being permanently removed from service, the emission control plan shall include a letter of intent pursuant to Section 7.2.	burn, 6.1.2.7 Total hours of operation in the previous one-year period, including typical daily operating schedule, 6.1.2.8 Fuel consumption (cubic feet for gas or gallons for liquid) for the previous one-year period, 6.1.2.9 Stack modifications to facilitate continuous in-stack monitoring and to facilitate source testing, 6.1.2.10 Type of control to be applied, including in-stack monitoring specifications, 6.1.2.11 Applicable emission limits, 6.1.2.12 Documentation showing existing emissions of NOx, VOC, and CO, and 6.1.2.13 Date that the engine will be in full compliance with this rule. 6.1.3 The emission control plan shall identify the type of emission control device or technique to be applied to each engine and a construction/removal schedule, or shall provide support documentation sufficient to demonstrate that the engine is in compliance with the emission requirements of this rule. 6.1.4 For an engine being permanently removed from service, the emission control plan shall include a letter of intent pursuant to Section 7.2.	
	6.2 Recordkeeping 6.2.1 Except for engines subject to Section 4.0, the owner of an engine subject to the requirements of Section 5.1 of this rule shall maintain an engine operating log to demonstrate compliance with this rule. This information shall be retained for a period of at least five years, shall be readily available, and be made available to the APCO upon request. The engine operating log shall include, on a monthly basis, the following information: 6.2.1.1 Total hours of operation, 6.2.1.2 Type of fuel used, 6.2.1.3 Maintenance or modifications performed, 6.2.1.4 Monitoring data, 6.2.1.5 Compliance source test results, and	6.2 Recordkeeping 6.2.1 The operator of an engine subject to the requirements of Section 5.2 of this rule shall maintain an engine operating log to demonstrate compliance with this rule. This information shall be retained for a period of at least five years, shall be readily available, and be made available to the APCO upon request. The engine operating log shall include, on a monthly basis, the following information: 6.2.1.1 Total hours of operation, 6.2.1.2 Type of fuel used, 6.2.1.3 Maintenance or modifications performed, 6.2.1.4 Monitoring data, 6.2.1.5 Compliance source test results, and	**There is no change in the requirements of this section. Therefore, the non-SIP version of the rule is as stringent as the SIP version of the rule.**

	6.2.1.6 Any other information necessary to demonstrate compliance with this rule. 6.2.1.7 For an engine subject to Section 8.0, the quantity (cubic feet of gas or gallons of liquid) of fuel used on a daily basis. 6.2.2 The data collected pursuant to the requirements of Section 5.6 and Section 5.7 shall be maintained for at least five years, shall be readily available, and made available to the APCO upon request. 6.2.3 An owner claiming an exemption under Section 4.2 or Section 4.3 shall maintain annual operating records. This information shall be retained for at least five years, shall be readily available, and provided to the APCO upon request. The records shall include, but are not limited to, the following: 6.2.3.1 Total hours of operation, 6.2.3.2 The type of fuel used, 6.2.3.3 The purpose for operating the engine, 6.2.3.4 For emergency standby engines, all hours of non-emergency and emergency operation shall be reported, and 6.2.3.5 Other support documentation necessary to demonstrate claim to the exemption.	6.2.1.6 Any other information necessary to demonstrate compliance with this rule. 6.2.1.7 For an engine subject to Section 8.0, the quantity (cubic feet of gas or gallons of liquid) of fuel used on a daily basis. 6.2.2 The data collected pursuant to the requirements of Section 5.8 and Section 5.9 shall be maintained for at least five years, shall be readily available, and made available to the APCO upon request. 6.2.3 An operator claiming an exemption under Section 4.2 or Section 4.3 shall maintain annual operating records. This information shall be retained for at least five years, shall be readily available, and provided to the APCO upon request. The records shall include, but are not limited to, the following: 6.2.3.1 Total hours of operation, 6.2.3.2 The type of fuel used, 6.2.3.3 The purpose for operating the engine, 6.2.3.4 For emergency standby engines, all hours of non-emergency and emergency operation shall be reported, and 6.2.3.5 Other support documentation necessary to demonstrate claim to the exemption.	
	6.3 Compliance Testing The owner of an engine subject to the requirements of Section 5.1 or the requirements of Section 8.0, shall comply with the following requirements, except for an engine specified in Section 6.3.1: 6.3.1 The requirements of Section 6.3.2 through Section 6.3.4 shall not apply to any of the following engines: 6.3.1.1 A certified compression-ignited engine that has not been retro-fitted with an exhaust control and is not subject to the requirements of Section 8.0. 6.3.1.2 A certified spark-ignited engine that has not been retro-fitted with an exhaust control and is not subject to the requirements of Section 8.0. 6.3.1.3 An AO spark-ignited engine that has not been retro-fitted with a catalytic emission control device and is not subject to the requirements of Section 8.0. 6.3.1.4 An engine subject to Section 4.2. 6.3.1.5 An engine subject to Section 4.3. 6.3.1.6 An engine with an operating exhaust	6.3 Compliance Testing The operator of an engine subject to the requirements of Section 5.2 or the requirements of Section 8.0 shall comply with the following requirements: 6.3.1 The requirements of Section 6.3.2 through Section 6.3.4 shall apply to the following engines: 6.3.1.1 Engines that have been retrofitted with an exhaust control device, except those certified per Section 9.0; 6.3.1.2 Engines subject to Section 8.0; 6.3.1.3 An AO spark-ignited engine that is subject to the requirements of Section 8.0; 6.3.1.4 An AO spark-ignited engine that has been retrofitted with a catalytic emission control and is not subject to the requirements of Section 8.0. 6.3.2 Demonstrate compliance with applicable limits, ppmv or percent reduction, in accordance with the test methods in Section 6.4, as specified below: 6.3.2.1 By the applicable date specified in	**The non-SIP approved version of this rule includes what engine categories are subject to this section. The SIP approved version has a list of what engines are exempt from this section. However, there is no change in the actual engine categories that are required to meet this section requirements. Therefore, the non-SIP version of the rule is as stringent as the SIP version of the rule.**

	control system that has been certified in accordance with Section 9.0 Exhaust Control System Certification Requirements. 6.3.2 Demonstrate compliance with applicable limits, ppmv or percent reduction, in accordance with the test methods in Section 6.4, as specified below: 6.3.2.1 By the applicable date specified in Section 5.1.1, Section 5.1.2, Section 7.3, Section 7.4, Section 7.5, or Section 7.6 and at least once every 24 months thereafter, except for an engine subject to Section 6.3.2.2. 6.3.2.2 By the applicable date specified in Section 5.1.1, Section 5.1.2,Section 7.3, Section 7.4, Section 7.5, or Section 7.6 and at least once every 60 months thereafter, for an AO spark-ignited engine that has been retro-fitted with a catalytic emission control device and is not subject to the requirements of Section 8.0. 6.3.2.3 A portable NOx analyzer may be used to show initial compliance with the applicable limits/standards in Section 5.1 for AO spark-ignited engines, provided the criteria specified in Sections 6.3.2.3.1 to 6.3.2.3.5 are met, and a source test is conducted in accordance with Section 6.3.2 within 12 months from the required compliance date. 6.3.2.3.1 A minimum of 15 minutes of runtime must be measured with data recorded at a minimum of 15, evenly spaced time intervals. Compliance is to be determined with the arithmetic average of the oxygen-corrected data. 6.3.2.3.2 The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Analyzer calibration records shall be made available at the District's request. 6.3.2.3.3 The analyzer shall be checked with EPA protocol span gas at the beginning and end of each test day. The results of these checks shall be recorded and copies submitted to the District with each engine test. If the analyzer exhibits more than a 10% deviation from the span check, the instrument must be re-calibrated. Any analysis performed prior to an end-of-day span check failure shall be void. 6.3.2.3.4. The test results of each engine, including span check results, shall be submitted to the District within 30 days of the test date. Test results shall clearly identify the engine tested including owner, location, permit or	Section 5.2, and at least once every 24 months thereafter, except for an engine subject to Section 6.3.2.2 By the applicable date specified in Section 5.2 and at least once every 60 months thereafter, for an AO spark-ignited engine that has been retro-fitted with a catalytic emission control device. 6.3.2.3 A portable NOx analyzer may be used to show initial compliance with the applicable limits/standards in Section 5.2 for AO spark ignited engines, provided the criteria specified in Sections 6.3.2.3.1 to 6.3.2.3.5 are met, and a source test is conducted in accordance with Section 6.3.2 within 12 months from the required compliance date. 6.3.2.3.1 A minimum of 15 minutes of runtime must be measured with data recorded at a minimum of 15, evenly spaced time intervals. Compliance is to be determined with the arithmetic average of the oxygen corrected data; 6.3.2.3.2 The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Analyzer calibration records shall be made available at the District's request; 6.3.2.3.3 The anatyzer shall be checked with EPA protocol span gas at the beginning and end of each test day. The results of these checks shall be recorded and copies submitted to the District with each engine test. If the analyzer exhibits more than a 10% deviation from the span check, the instrument must be recalibrated. Any analysis performed prior to an end-of-day span check failure shall be void; 6.3.2.3.4 The test results of each engine, including span check results, shall be submitted to the District within 30 days of the test date. Test results shall clearly identify the engine tested including operator, location, permit or registration number, manufacturer, model, and serial number; and 6.3.2.3.5 The analyzer utilized for each check shall be clearly identified in the material submitted with the test results. Identification shall include manufacturer and serial number of the analyzer used, and the last calibration date. 6.3.3 Conduct emissions source testing with the engine operating either at conditions representative of normal operations or conditions specified in the Permit-to-Operate or Permit-Exempt Equipment Registration. For emissions source testing performed pursuant to Section 6.3.2 for the	

	registration number, manufacturer, model, and serial number. 6.3.2.3.5. The analyzer utilized for each check shall be clearly identified in the material submitted with the test results. Identification shall include manufacturer and serial number of the analyzer used, and the last calibration date. 6.3.3 Conduct emissions source testing with the engine operating either at conditions representative of normal operations or conditions specified in the Permit-to-Operate or Permit-Exempt Equipment Registration. For emissions source testing performed pursuant to Section 6.3.2 for the purpose of determining compliance with an applicable standard or numerical limitation, the arithmetic average of three (3) 30-consecutive-minute test runs shall apply. If two (2) of three (3) runs are above an applicable limit, the test cannot be used to demonstrate compliance with an applicable limit. VOC shall be reported as methane. VOC, NOx, and CO concentrations shall be reported in ppmv, corrected to 15 percent oxygen. For engines that comply with a percent reduction limit in Table 1, the percent reduction of NOx emissions shall also be reported. 6.3.4 In addition to other information, the source test protocol shall describe which critical parameters will be measured and how the appropriate range for these parameters shall be established. The range for these parameters shall be incorporated into the I&M plan. 6.3.5 Engines that are limited by Permit-to-Operate or Permit-Exempt Equipment Registration condition to be fueled exclusively with PUC quality natural gas shall not be subject to the reoccurring source test requirements of Section 6.3.2 for VOC emissions.	purpose of determining compliance with an applicable standard or numerical limitation, the arithmetic average of three (3) 30-consecutive-minute test runs shall apply. If two (2) of three (3) runs are above an applicable limit, the test cannot be used to demonstrate compliance with an applicable limit. VOC shall be reported as methane. VOC, NOx, and CO concentrations shall be reported in ppmv, corrected to 15 percent oxygen. For engines that comply with a percent reduction limit, the percent reduction of NO_x emissions shall also be reported. 6.3.4 In addition to other information, the source test protocol shall describe which critical parameters will be measured and how the appropriate range for these parameters shall be established. The range for these parameters shall be incorporated into the I&M plan. 6.3.5 Engines that are limited by Permit-to-Operate or Permit-Exempt Equipment Registration condition to be fueled exclusively with PUC quality natural gas shall not be subject to the reoccurring source test requirements of Section 6.3.2 for VOC emissions.	
	6.3.6 Representative Testing For spark-ignited engines, in lieu of compliance with the applicable requirements of Section 6.3.2, compliance with the applicable emission limits in Section 5.1 shall be demonstrated by submittal of annual emission test results, within 30 days of the test date, to the District, from a unit or units that represents a specified group of units, provided all of the following are requirements are satisfied: 6.3.6.1 The units are located at the same stationary source; 6.3.6.2 The units were produced by the same manufacturer, have the same model number or other manufacturer's designation in common, and have the same rated capacity and operating specifications;	6.3.6 Representative Testing For spark-ignited engines, in lieu of compliance with the applicable requirements of Section 6.3.2, compliance with the applicable emission limits in Section 5.2 shall be demonstrated by submittal of annual emission test results, within 30 days of the test date, to the District, from a unit or units that represents a specified group of units, provided all of the following requirements are satisfied: 6.3.6.1 The units are located at the same stationary source; 6.3.6.2 The units were produced by the same manufacturer, have the same model number or other manufacturer's designation in common, and have the same rated	**There is no change in the requirements of this section. Therefore, the non-SIP version of the rule is as stringent as the SIP version of the rule.**

	6.3.6.3 The units are operated and maintained in a similar manner; and 6.3.6.4 At least 20% of the total number of units are tested during each annual test cycle. 6.3.6.5 The District, based on documentation submitted by the stationary source: 6.3.6.5.1 Determines that the margin of compliance for the identical units tested is significant and can be maintained on an on-going basis; or 6.3.6.5.2 Determines based on a review of sufficient emissions data that, though the margin of compliance is not substantial, other factors allow for the determination that the variability of emissions for identical tested units is low enough for confidence that the untested unit will be in compliance. These factors may include, but are not limited to, the following: 6.3.6.5.2.1 Historical records at the tested unit 6.3.6.5.2.2 Fuel characteristics yielding low variability and therefore assurance that emissions will be constant and below allowable levels; 6.3.6.5.2.3 Statistical analysis of a robust emissions data set demonstrate sufficiently low variability to convey assurance that the margin of compliance, though small, is reliable. 6.3.6.6 Should any of the representative units exceed the required emission limits, or if the District notifies the operator that the criteria in Sections 6.3.6.1 through 6.3.6.5 have not been fulfilled, each of the units in the group shall individually demonstrate compliance by emissions testing. Failure to complete emissions testing within 90 days of the failed test shall result in the untested units being in violation of this rule. After compliance with the requirements of Section 6.3.6.6 has been demonstrated, subsequent source testing shall be performed pursuant to Sections 6.3.2 or 6.3.6.	capacity and operating specifications; 6.3.6.3 The units are operated and maintained in a similar manner; and 6.3.6.4 At least 20% of the total number of units are tested during each annual test cycle. 6.3.6.5 The District, based on documentation submitted by the stationary source: 6.3.6.5.1 Determines that the margin of compliance for the identical units tested is significant and can be maintained on an on-going basis; or 6.3.6.5.2 Determines based on a review of sufficient emissions data that, though the margin of compliance is not substantial, other factors allow for the determination that the variability of emissions for identical tested units is low enough for confidence that the untested unit will be in compliance. These factors may include, but are not limited to, the following: 6.3.6.5.2.1 Historical records at the tested unit showing consistent invariant load; 6.3.6.5.2.2 Fuel characteristics yielding low variability and therefore assurance that emissions will be constant and below allowable levels; 6.3.6.5.2.3 Statistical analysis of a robust emissions data set demonstrating sufficiently low variability to convey assurance that the margin of compliance, though small, is reliable. 6.3.6.6 Should any of the representative units exceed the required emission limits, or if the District notifies the operator that the criteria in Sections 6.3.6.1 through 6.3.6.5 have not been fulfilled, each of the units in the group shall individually demonstrate compliance by emissions testing. Failure to complete emissions testing within 90 days of the failed test shall result in the untested units being in violation of this rule. After compliance with the requirements of this section has been demonstrated, subsequent source testing shall be performed pursuant to Sections 6.3.2 or 6.3.6.	
	6.4 Test Methods Compliance with the requirements of Section 5.0 shall be determined, as required, in accordance with the following test procedures or any other method approved by EPA and the APCO: 6.4.1 Oxides of nitrogen - EPA Method 7E, or ARB Method 100. 6.4.2 Carbon monoxide - EPA Method 10, or ARB Method 100.	6.4 Test Methods Compliance with the requirements of Section 5.2 shall be determined, as required, in accordance with the following test procedures or any other method approved by EPA and the APCO: 6.4.1 Oxides of nitrogen - EPA Method 7E, or ARB Method 100. 6.4.2 Carbon monoxide - EPA Method 10, or ARB Method 100.	**The Non-SIP approved version of this rule added SO_X test methods to the SIP approved version of this rule. Therefore, the non-SIP version of the rule is as stringent as the SIP version of the rule.**

	6.4.3 Stack gas oxygen - EPA Method 3 or 3A, or ARB Method 100. 6.4.4 Volatile organic compounds - EPA Method 25A or 25B, or ARB Method 100. 6.4.5 Operating horsepower determination - any method approved by EPA and the APCO.	6.4.3 Stack gas oxygen - EPA Method 3 or 3A, or ARB Method 100. 6.4.4 Volatile organic compounds - EPA Method 25A or 25B, or ARB Method 100. Methane and ethane, which are exempt compounds, shall be excluded from the result of the test. 6.4.5 Operating horsepower determination - any method approved by EPA and the APCO. 6.4.6 SOx Test Methods 6.4.6.1 Oxides of sulfur – EPA Method 6C, EPA Method 8, or ARB Method 100. 6.4.6.2 Determination of total sulfur as hydrogen sulfide (H2S) content – EPA Method 11 or EPA Method 15, as appropriate. 6.4.6.3 Sulfur content of liquid fuel – American Society for Testing and Materials (ASTM) D 6920-03 or ASTM D 5453-99. 6.4.6.4 The SOx emission control system efficiency shall be determined using the following: % Control Efficiency = [(CSO2, inlet – CSO2, outlet) / CSO2, inlet] X 100 Where: CSO2, inlet = concentration of SOx (expressed as SO2) at the inlet side of the SOx emission control system, in lb/Dscf CSO2, outlet = concentration of SOx (expressed as SO2) at the outlet side of the SOx emission control system, in lb/Dscf 6.4.7 The Higher Heating Value (hhv) of the fuel shall be determined by one of the following test methods: 6.4.7.1 ASTM D 240-02 or ASTM D 3282-88 for liquid hydrocarbon fuels. 6.4.7.2 ASTM D 1826-94 or ASTM 1945-96 in conjunction with ASTM D 3588-89 for gaseous fuel.	

	6.5 Inspection and Monitoring (I&M) Plan The owner of an engine that is subject to the requirements of Section 5.1 or the requirements of Section 8.0, except for an engine specified in Section 6.5.1, shall submit to the APCO for approval, an I&M plan that specifies all actions to be taken to satisfy the following requirements and the requirements of Section 5.6. The actions to be identified in the I&M plan shall include, but are not limited to, the information specified below: 6.5.1 The requirements of Section 6.5.2 through Section 6.5.9 shall not apply to any of the following engines: 6.5.1.1 A certified compression-ignited engine that has not been retro-fitted with an exhaust control and is not subject to the requirements of Section 8.0. 6.5.1.2 A certified spark-ignited engine that has not been retro-fitted with an exhaust control and is not subject to the requirements of Section 8.0. 6.5.1.3 An AO spark-ignited engine that has not been retro-fitted with a catalytic emission control device and is not subject to the requirements of Section 8.0. 6.5.1.4 An engine subject to Section 4.2. 6.5.1.5 An engine subject to Section 4.3. 6.5.1.6 An engine with an operating exhaust control system that has been certified in accordance with Section 9.0 Exhaust Control System Certification Requirements. 6.5.2 Procedures requiring the owner or operator to establish ranges for control equipment parameters, engine operating parameters, and engine exhaust oxygen concentrations that source testing has shown result in pollutant concentrations within the rule limits. 6.5.3 Procedures for monthly inspections as approved by the APCO. The applicable control equipment parameters and engine operating parameters will be inspected and monitored monthly in conformance with a regular inspection schedule listed in the I&M plan. 6.5.4 Procedures for the corrective actions on the noncompliant parameter(s) that the owner or operator will take when an engine is found to be operating outside the acceptable range for control equipment parameters, engine operating parameters, and engine exhaust NOx, CO, VOC, or oxygen concentrations. 6.5.5 Procedures for the owner or operator to notify the APCO when an engine is found to be operating outside the acceptable range for control equipment parameters, engine operating parameters, and engine exhaust	6.5 Inspection and Monitoring (I&M) Plan The operator of an engine that is subject to the requirements of Section 5.2 or the requirements of Section 8.0 shall submit to the APCO for approval, an I&M plan that specifies all actions to be taken to satisfy the following requirements and the requirements of Section 5.8. The actions to be identified in the I&M plan shall include, but are not limited to, the information specified below. If there is no change to the previously approved I&M plan, the operator shall submit a letter to the District indicating that previously approved plan is still valid. 6.5.1 The requirements of Section 6.5.2 through Section 6.5.9 shall apply to the following engines: 6.5.1.1 Engines that have been retrofitted with an exhaust control device, except those certified per Section 9.0; 6.5.1.2 Engines subject to Section 8.0; 6.5.1.3 An AO spark-ignited engine that is subject to the requirements of Section 8.0. 6.5.1.4 An AO spark-ignited engine that has been retrofitted with a catalytic emission control and is not subject to the requirements of Section 8.0. 6.5.2 Procedures requiring the operator to establish ranges for control equipment parameters, engine operating parameters, and engine exhaust oxygen concentrations that source testing has shown result in pollutant concentrations within the rule limits. 6.5.3 Procedures for monthly inspections as approved by the APCO. The applicable control equipment parameters and engine operating parameters will be inspected and monitored monthly in conformance with a regular inspection schedule listed in the I&M plan. 6.5.4 Procedures for the corrective actions on the noncompliant parameter(s) that the operator will take when an engine is found to be operating outside the acceptable range for control equipment parameters, engine operating parameters, and engine exhaust NOx, CO, VOC, or oxygen concentrations. 6.5.5 Procedures for the operator to notify the APCO when an engine is found to be operating outside the acceptable range for control equipment parameters, engine operating parameters, and engine exhaust NOx, CO, VOC, or oxygen concentrations. 6.5.6 Procedures for preventive and corrective maintenance performed for the purpose of maintaining an engine in proper operating	**The non-SIP approved version of this rule includes what engine categories are subject to this section. The SIP approved version has a list of what engines are exempt from this section. However, there is no change in the actual engine categories that are required to meet these section requirements. Therefore, the non-SIP version of the rule is as stringent as the SIP version of the rule.**

	NOx, CO, VOC, or oxygen concentrations. 6.5.6 Procedures for preventive and corrective maintenance performed for the purpose of maintaining an engine in proper operating condition. 6.5.7 Procedures and a schedule for using a portable NOx analyzer to take NOx emission readings pursuant to Section 5.6.9. 6.5.8 Procedures for collecting and recording required data and other information in a form approved by the APCO including, but not limited to, data collected through the I&M plan and the monitoring systems described in Sections 5.6.1 and 5.6.2. Data collected through the I&M plan shall have retrieval capabilities as approved by the APCO. 6.5.9 Procedures for revising the I&M plan. The I&M plan shall be updated to reflect any change in operation. The I&M plan shall be updated prior to any planned change in operation. An engine owner that changes significant I&M plan elements must notify the District no later than seven days after the change and must submit an updated I&M plan to the APCO no later than 14 days after the change for approval. The date and time of the change to the I&M plan shall be recorded in the engine operating log. For new engines and modifications to existing engines, the I&M plan shall be submitted to and approved by the APCO prior to issuance of the Permit-to-Operate or Permit-Exempt Equipment Registration. The owner of an engine may request a change to the I&M plan at any time.	condition. 6.5.7 Procedures and a schedule for using a portable NOx analyzer to take NO_x emission readings pursuant to Section 5.8.9. 6.5.8 Procedures for collecting and recording required data and other information in a form approved by the APCO including, but not limited to, data collected through the I&M plan and the monitoring systems described in Sections 5.8.1 and 5.8.2. Data collected through the I&M plan shall have retrieval capabilities as approved by the APCO. 6.5.9 Procedures for revising the I&M plan. The I&M plan shall be updated to reflect any change in operation. The I&M plan shall be updated prior to any planned change in operation. An engine operator that changes significant I&M plan elements must notify the District no later than seven days after the change and must submit an updated I&M plan to the APCO no later than 14 days after the change for approval. The date and time of the change to the I&M plan shall be recorded in the engine operating log. For new engines and modifications to existing engines, the I&M plan shall be submitted to and approved by the APCO prior to issuance of the Permit-to-Operate or Permit-Exempt Equipment Registration. The operator of an engine may request a change to the I&M plan at any time.	
7.0 Compliance Schedules	7.1 Loss of Exemption The owner of an engine which becomes subject to the emission limits/standards of this rule through loss of exemption shall not operate the subject engine, except as required for obtaining a new or modified Permit-to-Operate or Permit-Exempt Equipment Registration for the engine, until the owner demonstrates that the subject engine is in full compliance with the requirements of this rule.	7.1 Loss of Exemption The operator of an engine which becomes subject to the emission limits/standards of this rule through loss of exemption shall not operate the subject engine, except as required for obtaining a new or modified Permit-to-Operate or Permit-Exempt Equipment Registration for the engine, until the operator demonstrates that the subject engine is in full compliance with the requirements of this rule.	**There is no change in the requirements of this section. Therefore, the non-SIP version of the rule is as stringent as the SIP version of the rule.**
	7.2 Permanent Removal of an Engine The owner of an engine who elects to permanently remove the engine from service shall comply with all of the following conditions: 7.2.1 Comply with all applicable requirements of this rule until the engine is permanently removed from service; 7.2.2 Submit a letter to the APCO no later than 14 days before the engine is permanently removed from service, stating the intent to	7.2 Permanent Removal of an Engine The operator of an engine who elects to permanently remove the engine from service shall comply with all of the following conditions: 7.2.1 Comply with all applicable requirements of this rule until the engine is permanently removed from service; 7.2.2 Submit a letter to the APCO no later than 14 days before the engine is permanently	**There is no change in the requirements of this section. Therefore, the non-SIP version of the rule is as stringent as the SIP version of the rule.**

	permanently remove the engine from service. The engine removal letter can be submitted with the emission control plan, if any; and 7.2.3 Permanently remove the engine from service and officially surrender the Permit-to-Operate or Permit-Exempt Equipment Registration, if any, to the APCO no later than 30 days after the engine is permanently removed from service.	removed from service, stating the intent to permanently remove the engine from service. The engine removal letter can be submitted with the emission control plan, if any; and 7.2.3 Permanently remove the engine from service and officially surrender the Permit-to-Operate or Permit-Exempt Equipment Registration, if any, to the APCO no later than 30 days after the engine is permanently removed from	
	7.3 Compliance Schedule for an AO Compression-Ignited Engine 7.3.1 Compliance Schedule - Submission of Emission Control Plan, I&M Plan, Permit-Exempt Equipment Registration Application and Authority-to-Construct for an AO Compression-Ignited Engine 7.3.1.1 The owner of an engine that is subject to Section 4.2 or Section 4.3 and that is required to submit an Emission Control Plan, an I&M Plan, or an Authority-to-Construct in order to comply with the requirements of Rule 4702, shall submit such document(s) no later than January 1, 2006. 7.3.1.2 The owner of an engine that is subject to Section 5.1 and that is required to submit an Authority-to-Construct application in order to comply with the requirements of Rule 4702, shall submit the Authority-to-Construct application, and any required Emission Control Plan or I&M Plan, no later than six months before the engine is required to be in compliance with the requirements of Section 5.1 of Rule 4702. 7.3.1.3 The owner of an engine that is subject to Section 5.1 and that is required to submit a Permit-Exempt Equipment Registration application in order to comply with the requirements of Rule 4702, shall submit the Permit-Exempt Equipment Registration application, and any required Emission Control Plan or I&M Plan, no later than three months before the engine is required to be in compliance with the requirements of Section 5.1 of Rule 4702. 7.3.2 Compliance Schedule - Monitoring and Recordkeeping for an AO Compression-Ignited Engine Subject to Section 5.1 and Section 5.7 On and after June 1, 2006, the owner of an engine that is subject to Section 5.1 and Section 5.7 of Rule 4702 shall be in compliance with the requirements of Section 5.7, Section 6.2.1.1, and Section 6.2.1.2. 7.3.3 Compliance Schedule - General for an AO Compression-Ignited Engine	7.3 AO Compression-Ignited Engine 7.3.1 The operator of an AO compression-ignited engine that is subject to Section 5.2 and that is required to submit an Authority-to-Construct application in order to comply with the requirements of this rule, shall submit the Authority-to-Construct application, and any required Emission Control Plan or I&M Plan, no later than six months before the engine is required to be in compliance with the requirements of Section 5.2. 7.3.2 The operator of an AO compression-ignited engine that is subject to Section 5.2 and that is required to submit a Permit-Exempt Equipment Registration application in order to comply with the requirements of Rule 4702, shall submit the Permit-Exempt Equipment Registration application, and any required Emission Control Plan or I&M Plan, no later than three months before the engine is required to be in compliance with the requirements of Section 5.2. 7.3.3 Unless otherwise specified, the operator of an engine that is subject to the requirements of Section 5.2 of Rule 4702 shall be in full compliance with Rule 4702 by the indicated dates in Table 4.	**The Non-SIP approved version of this rule only includes current requirements from the SIP approved version. Therefore, the non-SIP version of the rule is as stringent as the SIP version of the rule.**

	7.3.3.1 On and after January 1, 2006, unless otherwise specified, the owner of an engine that is subject to the requirements of Section 4.2 or Section 4.3 of Rule 4702 shall be in full compliance with Rule 4702. 7.3.3.2 Unless otherwise specified, the owner of an engine that is subject to the requirements of Section 5.1 of Rule 4702 shall be in full compliance with Rule 4702 by the indicated dates pursuant to Section 5.1.2.		
	7.4 Compliance Schedule for an AO Spark-Ignited Engine 7.4.1 Compliance Schedule - Submission of Emission Control Plan, I&M Plan, Permit-Exempt Equipment Registration Application and Authority-to-Construct for an AO Spark-Ignited Engine 7.4.1.1 The owner of an engine that is subject to Section 4.2 or Section 4.3 and that is required to submit an Emission Control Plan, an I&M Plan, or an Authority-to-Construct in order to comply with the requirements of Rule 4702, shall submit such document(s) no later than January 1, 2006. 7.4.1.2 The owner of an engine that is subject to Section 5.1 and that is required to submit an Authority-to-Construct application in order to comply with the requirements of Rule 4702, shall submit the Authority-to-Construct application, and any required Emission Control Plan or I&M Plan, by June 1, 2006, or six months before the engine is required to be in compliance with the requirements of Section 5.1 of Rule 4702, whichever is later. 7.4.1.3 The owner of an engine that is subject to Section 5.1 and that is required to submit a Permit-Exempt Equipment Registration application in order to comply with the requirements of Rule 4702, shall submit the Permit-Exempt Equipment Registration application, and any required Emission Control Plan or I&M Plan by January 1, 2007, or three months before the engine is required to be in compliance with the requirements of Section 5.1 of Rule 4702, whichever is later. 7.4.2 Compliance Schedule - Monitoring and Recordkeeping for an AO Spark-Ignited Engine Subject to Section 5.1 and Section 5.7 On and after June 1, 2006, the owner of an engine that is subject to Section 5.1 and Section 5.7 of Rule 4702 shall be in compliance with the requirements of Section 5.7.3 through Section		**AO speak-ignited engines are were required to be in full compliance with this rule by 1/1/10. The requirements from this section of the rule are obsolete and not required on the Non-SIP approved version of the rule. Therefore, the non-SIP version of the rule is as stringent as the SIP version of the rule.**

	5.7.5, Section 6.2.1.1, and Section 6.2.1.2. 7.4.3 Compliance Schedule - General for an AO Spark-Ignited Engine 7.4.3.1 On and after June 1, 2006, unless otherwise specified, the owner of an engine that is subject to the requirements of Section 4.2 or Section 4.3 of Rule 4702 shall be in full compliance with Rule 4702. 7.4.3.2 Unless otherwise specified, the owner of an engine that is subject to the requirements of Section 5.1 of Rule 4702 shall be in full compliance with Rule 4702 by the indicated dates pursuant to Section 5.1.1.		
	7.5 Compliance Schedule for a Non-AO Compression-Ignited Engine 7.5.1 Compliance Schedule - Submission of Emission Control Plan, I&M Plan, and Authority-to-Construct for a Non-AO Compression-Ignited Engine 7.5.1.1 The owner of an engine that is subject to Section 4.2 or Section 4.3 and that is required to submit an Emission Control Plan, an I&M Plan, or an Authority-to-Construct in order to comply with the requirements of Rule 4702, shall submit such document(s) no later than June 1, 2006. 7.5.1.2 The owner of an engine that is subject to Section 5.1 and that is required to submit an Emission Control Plan, an I&M Plan, or an Authority-to-Construct in order to comply with the requirements of Rule 4702, shall submit such document(s) by June 1, 2006 or six months before the engine is required to be in compliance with the requirements of Section 5.1 of Rule 4702, whichever is later. 7.5.2 Compliance Schedule - General for a Non-AO Compression-Ignited Engine 7.5.2.1 On and after June 1, 2006, unless otherwise specified, the owner of an engine that is subject to the requirements of Section 4.1, Section 4.2, or Section 4.3 of Rule 4702 shall be in full compliance with Rule 4702. 7.5.2.2 Unless otherwise specified, the owner of an engine that is subject to the requirements of Section 5.1 of Rule 4702 shall be in full compliance with Rule 4702 by the indicated dates pursuant to Section 5.1.2. 7.5.2.3 The owner of an engine that is subject to the requirements of Section 4.0 or Section 5.0 of Rule 4701 (Internal Combustion Engines – Phase 1) shall no longer be subject to the requirements of Rule 4701 pursuant to the following requirements: 7.5.2.3.1 For an engine that is subject to the requirements of Section 4.1, Section 4.2, or	7.4 Non-AO Compression-Ignited Engine 7.4.1 The operator of a non-AO compression-ignited engine that is subject to Section 5.2 and that is required to submit an Emission Control Plan, an I&M Plan, or an Authority-to-Construct in order to comply with rule requirements, shall submit such document(s) no later than six months before the engine is required to be in compliance with the requirements of Section 5.2. 7.4.2 Unless otherwise specified, the operator of an engine that is subject to the requirements of Section 5.2 shall be in full compliance with Rule 4702 by the indicated dates in Table 4.	**The Non-SIP approved version of this rule only includes current requirements from the SIP approved version. Therefore, the non-SIP version of the rule is as stringent as the SIP version of the rule.**

	Section 4.3 of Rule 4702, the requirements of Rule 4701 shall not apply effective on the date that such engine is required to be in full compliance with Rule 4702, or 7.5.2.3.2 For an engine that is subject to the requirements of Section 5.1 of Rule 4702, the requirements of Rule 4701 shall not apply effective on the date that such engine is required to be in full compliance with Rule 4702.		
	7.6 Compliance Schedule for a Non-AO Spark-Ignited Engine 7.6.1Compliance Schedule - Submission of Emission Control Plan, I&M Plan, and Authority-to-Construct for a Non-AO Spark-Ignited Engine Effective on and after June 16, 2005, the owner of an engine that is required to submit an Emission Control Plan, an I&M Plan, or an Authority-to-Construct in order to comply with the requirements of Rule 4702, shall submit such document(s) no later than six months before the engine is required to be in full compliance with Rule 4702. 7.6.2Compliance Schedule – Emission Limits for a Non-AO Spark-Ignited Engine The owner of a non-AO spark-ignited engine subject to the requirements of Rule 4702 shall not operate the engine unless the owner demonstrates and maintains the engine in compliance with the applicable requirements of Rule 4702 by the indicated dates below. Compliance Schedule 1 – Non-AO Spark-Ignited Engine For the purposes of Section 7.6, the total number of non-AO spark-ignited engines at a stationary source on a specified date includes those non-AO spark-ignited engines subject to Rule 4702 pursuant to Section 2.0 and excludes any engines exempt from Rule 4702 pursuant to Section 4.1 on the specified date. 7.6.3Compliance Schedule - General for a Non-AO Spark-Ignited Engine 7.6.3.1 On and after January 1, 2006, unless otherwise specified, the owner of an engine that is subject to the requirements of Section 4.1 of Rule 4702 shall be in full compliance with Rule 4702.	Note: This section refers to Table 5. Table 5 can be found as an attachment to this document. 7.5 Non-AO Spark-Ignited Engine 7.5.1 An operator with non-AO spark-ignited engines at a stationary source subject to Table 2 or Section 8.0 emission limits, SOx control requirements of Section 5.7, and the SOx monitoring requirements of Section 5.10 shall comply with the schedule specified in Table 5. 7.5.2 As shown in Table 5, the column labeled: 7.5.2.1 "Emission Control Plan" identifies the date by which the operator shall submit an emission control plan pursuant to the applicable provisions of Section 6.1. The emission control plan shall identify all the Non-AO spark-ignited engines subject to Table 2 emission limits, SOx control and monitoring requirements. The emission control plan shall identify all the steps to be taken to comply with this rule. If there is no change to the previously approved emission control plan, the operator does not need to submit a new emission control plan. However, the operator shall submit a letter to the District indicating that previously approved plan is still valid. 7.5.2.2 "Authority to Construct and Inspection and Maintenance Plan" identifies the date by which the operator shall submit an Authority to Construct (if needed) and an Inspection and Monitoring Plan as specified in the applicable provisions of Section 6.5 for each engine subject to Table 2 emission limits, SOx control and monitoring requirements. If there is no change to the previously approved I&M plan, the operator does not need to submit a new I&M Plan. However, the operator shall submit a letter to the District indicating that previously approved I&M plan is still valid. 7.5.2.3 "Full Compliance" identifies the date by which the operator shall demonstrate that each unit is in compliance with Table 2	**The Non-SIP approved version of this rule only includes current requirements from the SIP approved version. Therefore, the non-SIP version of the rule is as stringent as the SIP version of the rule.**

	7.6.3.2 Unless otherwise specified, the owner of an engine subject to the requirements of Rule 4702 shall be in full compliance with Rule 4702 by the applicable compliance date pursuant to Section 7.6.2. 7.6.3.3 The owner of an engine that is subject to the requirements of Rule 4701 shall no longer be subject to the requirements of Rule 4701 pursuant to the following requirements: 7.6.3.3.1 For an engine that is subject to the requirements of Section 4.1 of Rule 4702, the requirements of Rule 4701 shall not apply effective on and after January 1, 2006, or 7.6.3.3.2 For an engine that is subject to the requirements of Section 4.2, Section 4.3, or Section 5.1 of Rule 4702, the requirements of Rule 4701 shall not apply effective on the date that such engine is required to be in full compliance with Rule 4702.	emission limits, SOx control and monitoring requirements.	
		7.6 Operator of Non-AO Spark-Ignited Engine Who Elects to Pay Fees In lieu of complying with Table 2 NOx emission limits, the operator of a non-AO spark-ignited engine who elects to pay annual fees under Section 5.2.2.2 and Section 5.6 shall comply with the following requirements: 7.6.1 By the date specified in Table 5, submit an Emission Control Plan which includes the following information: 7.6.1.1 Number of engines at a stationary source that will comply under Section 5.2.2.2, 7.6.1.2 Location of each engine, 7.6.1.3 Engine manufacturer, model designation, engine serial number, and Permit-to-Operate number, and 7.6.1.4 Each engine's rated brake horsepower, fuel type, and type of ignition. 7.6.2 The total annual fees shall be paid to the District in the following manner: 7.6.2.1 Payment shall be paid no later than June 30 of each year, for the emissions of the previous calendar year, 7.6.2.2 The first payment is due to the District no later than June 30 of the year in which full compliance is required for the specified percent of engines at a stationary as specified in Table 5 that the operator has opted to pay the annual fees,	**This section was added to address a new unit category. Therefore, the non-SIP version of the rule is as stringent as the SIP version of the rule.**

		7.6.2.3 Should June 30 fall on a day when the District is closed, the payment shall be made by the next District working day after June 30, and 7.6.2.4 Payments shall continue annually until the engine either is permanently removed from use in the San Joaquin Valley Air Basin and the Permit-to-Operate is surrendered or the operator demonstrates compliance with the applicable Table 2 emission limits. 7.6.2.5 The emissions fee for units that operate for less than the full calendar year before demonstrating compliance under Section 5.2, shall be based on the actual fuel used during the portion of the calendar year prior to demonstrating compliance or removing the unit from operation within the San Joaquin Valley Air Basin.	
8.0 Alternative Emission Control Plan (AECP)	An owner may comply with the NOx emission requirements of Section 5.1 for a group of engines by meeting the requirements below. An owner that is subject to the requirements below shall also comply with all the applicable requirements of Sections 5.0, 6.0, and 7.0. An engine that is not subject to Section 5.1 is not eligible for inclusion in an AECP. 8.1 During any 7 (seven) consecutive calendar day period, the owner shall operate all engines in the AECP to achieve an actual aggregate NOx emission level that is not greater than 90 percent of the NOx emissions that would be obtained by controlling the engines to comply individually with the NOx limits in Section 5.1. The owner shall operate engines in the AECP such that $AE_{Actual} <= 0.90\ (AE_{Limit})$ and shall notify the APCO within 24 hours of a violation of this section. 8.1.1 The actual aggregate NOx emissions (AE_{Actual}) is the sum of the actual NOX emissions, over a 7 (seven) consecutive calendar day period, from all engines in the AECP which were actually operated during that period. AE_{Actual} shall be calculated as follows: $$AE_{Actual} = \sum_i (EF_i)(F_i)(k_i)$$ where: i identifies each engine in the AECP. EF_i is the NOx emission factor of the engine established pursuant to Section 8.2 and approved by the APCO. F_i is the actual total fuel used by the engine	An operator may comply with the NOx emission requirements of Section 5.2 for a group of engines by meeting the requirements below. An operator that is subject to the requirements below shall also comply with all the applicable requirements of Sections 5.0, 6.0, and 7.0. Only engines subject to Section 5.2 are eligible for inclusion in an AECP. 8.1 During any seven (7) consecutive calendar day period, the operator shall operate all engines in the AECP to achieve an actual aggregate NOx emission level that is not greater than 90 percent of the NOx emissions that would be obtained by controlling the engines to comply individually with the NOx limits in Section 5.2. The operator shall operate engines in the AECP such that $AE_{Actual} \leq 0.90\ (AE_{Limit})$ and shall notify the APCO within 24 hours of any violation of this section. 8.1.1 The actual aggregate NOx emissions (AE_{Actual}) is the sum of the actual NO_x emissions, over a seven (7) consecutive calendar day period, from all engines in the AECP which were actually operated during that period. AE_{Actual} shall be calculated as follows: $$AE_{Actual} = \sum_i (EF_i)(F_i)(k_i)$$ where: i identifies each engine in the AECP. EF_i is the NOx emission factor of the engine established pursuant to Section 8.2 and approved by the APCO. F_i is the actual total fuel used by the engine	**There is no change in the requirements of this section. Therefore, the non-SIP version of the rule is as stringent as the SIP version of the rule.**

	during the 7 (seven) consecutive calendar day period. k_i is a constant used to convert an engine's fuel use and NOx emission factor to the amount of NOx emitted. k_i is dependent on the engine and the pollutant emitted. Calculation of k_i shall be accomplished using 40 CFR Part 60, Appendix A, Method 19, or an equivalent method approved by EPA, ARB and the APCO. 8.1.2 The estimated aggregate NOx emissions limit (AE_{Limit}) is the sum of the NOx emissions, over a 7 (seven) consecutive calendar day period, for the same engines in the AECP which were actually operated during the same period as considered in Section 8.1.1, calculated with the NOx limits of Section 5.1 and the actual fuel usage during that 7 (seven) consecutive calendar day period. AE_{Limit} shall be calculated as follows: $$AE_{Limit} = \sum_i (EL_i)(F_i)(k_i)$$ where: i identifies each engine in the AECP. EL_i is the NOx emission limit from Section 5.1 for each engine. F_i is the actual total fuel used by the engine during the 7 (seven) consecutive calendar day period. k_i is a constant used to convert an engine's fuel use and NOx emission limit to the amount of NOx emitted. k_i is dependent on the engine and the pollutant emitted. Calculation of k_i shall be accomplished using 40 CFR Part 60, Appendix A, Method 19, or an equivalent method approved by EPA, ARB and the APCO. 8.1.3 Only engines in the AECP which were operated during the 7 (seven) consecutive calendar day period shall be included in the calculations of AE_{Limit} and AE_{Actual}. 8.1.4 The owner shall, at least one time each day the AECP is used, calculate and record the actual aggregate NOx emissions (AE_{Actual}) and the aggregate NOx emission limit (AE_{Limit}) for the preceding 7 (seven) consecutive calendar day period.	during the 7 (seven) consecutive calendar day period. k_i is a constant used to convert an engine's fuel use and NOx emission factor to the amount of NOx emitted. k_i is dependent on the engine and the pollutant emitted. Calculation of k_i shall be accomplished using 40 CFR Part 60, Appendix A, Method 19, or an equivalent method approved by EPA, ARB and the APCO. 8.1.2 The estimated aggregate NOx emissions limit (AE_{Limit}) is the sum of the NOx emissions, over a seven (7) consecutive calendar day period, for the same engines in the AECP which were actually operated during the same period as considered in Section 8.1.1, calculated with the NOx limits of Section 5.2 and the actual fuel usage during that seven (7) consecutive calendar day period. AE_{Limit} shall be calculated as follows: $$AE_{Limit} = \sum_i (EL_i)(F_i)(k_i)$$ where: i = identifies each engine in the AECP. EL_i = the NOx emission limit from Section 5.2 for each engine. F_i = the actual total fuel used by the engine during the seven (7) consecutive calendar day period. k_i = a constant used to convert an engine's fuel use and NOx emission limit to the amount of NOx emitted. k_i is dependent on the engine and the pollutant emitted. Calculation of k_i shall be accomplished using 40 CFR Part 60, Appendix A, Method 19, or an equivalent method approved by EPA, ARB and the APCO. 8.1.3 Only engines in the AECP which were operated during the seven (7) consecutive calendar day period shall be included in the calculations of AE_{Limit} and AE_{Actual}. 8.1.4 The operator shall, at least one time each day the AECP is used, calculate and record the actual aggregate NOx emissions (AE_{Actual}) and the aggregate NOx emission limit (AE_{Limit}) for the preceding seven (7) consecutive calendar day period.	
	8.2 The owner shall establish a NOx emission factor limit for each engine. The established NOx emission factor of an engine shall be no less than the NOx emission factor of the engine from the most recent source test conducted pursuant to Section 6.3 and approved by the APCO. The owner shall not operate an AECP engine in such a manner that NOx emissions exceed the established NOx emission factor of the engine.	8.2 The operator shall establish a NOx emission factor limit for each engine. The established NOx emission factor of an engine shall be no less than the NOx emission factor of the engine from the most recent source test conducted pursuant to Section 6.3 and approved by the APCO. The operator shall not operate an AECP engine in such a manner that NOx emissions exceed the established NOx emission factor of the engine.	**There is no change in the requirements of this section. Therefore, the non-SIP version of the rule is as stringent as the SIP version of the rule.**

	8.3 The owner shall submit the AECP to the APCO at least 18 months before compliance with the emission limits in Section 5.1 is required. The AECP shall: 8.3.1 Not be implemented prior to APCO approval. 8.3.2 Be enforceable on a daily basis by the District. 8.3.3 Contain any information necessary to determine eligibility of the engines for alternative emission control, including, but not limited to: 8.3.3.1 A list of engines subject to the AECP. All engines in an AECP shall be under the operational control of a single owner and shall be located at a single stationary source. 8.3.3.2 The NOx emission factor established by the engine owner for each engine pursuant to Section 8.2. 8.3.3.3 The estimated aggregate NOx emissions calculated according to Section 8.1.2. 8.3.4 Present the methodology for determining equivalency of actual NOx emissions under the proposed AECP as compared to the estimated NOx emissions allowed by this rule. 8.3.5 Detail the method of recording and verifying daily compliance with the AECP. 8.3.6 Demonstrate to the satisfaction of the APCO that the difference between the NOx emission limits of this rule and any lower actual NOx emissions will not be used to increase emissions from the same or another source. 8.3.7 Demonstrate that the engines subject to the requirements of Section 5.1 are in compliance with or on an approved schedule for compliance with all applicable District rules.	8.3 The operator shall submit the AECP to the APCO at least 18 months before compliance with the emission limits in section 5.2 is required. The AECP shall: 8.3.1 Not be implemented prior to APCO approval. 8.3.2 Be enforceable on a daily basis by the District. 8.3.3 Contain any information necessary to determine eligibility of the engines for alternative emission control, including, but not limited to: 8.3.3.1 A list of engines subject to the AECP. All engines in an AECP shall be under the operational control of a single operator and shall be located at a single stationary source, 8.3.3.2 The NOx emission factor established by the engine operator for each engine pursuant to Section 8.2, and 8.3.3.3 The estimated aggregate NOx emissions calculated according to Section 8.1.2. 8.3.4 Present the methodology for determining equivalency of actual NO_x emissions under the proposed AECP as compared to the estimated NO_x emissions allowed by this rule. 8.3.5 Detail the method of recording and verifying daily compliance with the AECP. 8.3.6 Demonstrate to the satisfaction of the APCO that the difference between the NOx emission limits of this rule and any lower actual NOx emissions will not be used to increase emissions from the same or another source. 8.3.7 Demonstrate that the engines subject to the requirements of Section 5.2 are in compliance with or on an approved schedule for compliance with all applicable District rules.	**There is no change in the requirements of this section. Therefore, the non-SIP version of the rule is as stringent as the SIP version of the rule.**
	8.4 The owner shall submit an updated or modified AECP for approval by the APCO prior to any of the following: 8.4.1 Modification of the engine(s) which would require an Authority-to-Construct. 8.4.2 When new or amended rules are adopted which regulate the emissions from the engines. 8.4.3 When the NOx emission factor established by the engine owner for an engine pursuant to Section 8.2 is modified.	8.4 The operator shall submit an updated or modified AECP for approval by the APCO prior to any of the following: 8.4.1 Modification of the engine(s) which would require an Authority-to- Construct; 8.4.2 When new or amended rules are adopted which regulate the emissions from the engines; or 8.4.3 When the NOx emission factor established by the engine operator for an engine pursuant to Section 8.2 is modified.	**There is no change in the requirements of this section. Therefore, the non-SIP version of the rule is as stringent as the SIP version of the rule.**

	8.5 In addition to the records kept pursuant to Section 6.2, the owner shall maintain records, on a daily basis, of the parameters needed to demonstrate compliance with the applicable NOx emission limits when operating under the AECP. These records shall be retained for at least five years, shall be readily available, and be made available to the APCO upon request. The records shall include, but are not limited to, the following for each engine unless otherwise indicated: 8.5.1 Total hours of operation. 8.5.2 Type and quantity (cubic feet of gas or gallons of liquid) of fuel used. 8.5.3 The actual NOx emissions limits to be included in the calculation of AE_{Actual} pursuant to Section 8.1.1. 8.5.4 The actual aggregate NOx emissions (AE_{Actual}) for all the engines in the AECP calculated pursuant to Section 8.1.1. 8.5.5 The estimated NOx emissions limits to be included in the calculation of AE_{Limit} pursuant to Section 8.1.2. 8.5.6 The estimated aggregate NOx emissions (AE_{Limit}) for all the engines in the AECP calculated pursuant to Section 8.1.2. 8.5.7 The comparison of the actual aggregate NOx emissions (AE_{Actual}) for all the engines in the AECP and 90 percent of the estimated aggregate NOx emissions (AE_{Limit}) for all the engines in the AECP to demonstrate compliance with Section 8.1. 8.5.8 Any other parameters needed to demonstrate daily compliance with the applicable NOx emission limits when operating under the AECP.	8.5 In addition to the records kept pursuant to Section 6.2, the operator shall maintain records, on a daily basis, of the parameters needed to demonstrate compliance with the applicable NOx emission limits when operating under the AECP. These records shall be retained for at least five years, shall be readily available, and be made available to the APCO upon request. The records shall include, but are not limited to, the following for each engine unless otherwise indicated: 8.5.1 Total hours of operation, 8.5.2 Type and quantity (cubic feet of gas or gallons of liquid) of fuel used, 8.5.3 The actual NOx emissions limits to be included in the calculation of AE_{Actual} pursuant to Section 8.1.1, 8.5.4 The actual aggregate NOx emissions (AE_{Actual}) for all the engines in the AECP calculated pursuant to Section 8.1.1, 8.5.5 The estimated NOx emissions limits to be included in the calculation of AE_{Limit} pursuant to Section 8.1.2, 8.5.6 The estimated aggregate NOx emissions (AE_{Limit}) for all the engines in the AECP calculated pursuant to Section 8.1.2, 8.5.7 The comparison of the actual aggregate NOx emissions (AE_{Actual}) for all the engines in the AECP and 90 percent of the estimated aggregate NO_X emissions (AE_{Limit}) for all the engines in the AECP to demonstrate compliance with Section 8.1, and 8.5.8 Any other parameters needed to demonstrate daily compliance with the applicable NOx emission limits when operating under the AECP.	**There is no change in the requirements of this section. Therefore, the non-SIP version of the rule is as stringent as the SIP version of the rule.**
	8.6 For the purpose of determining the quantity of spark-ignited engines in compliance pursuant to Section 7.6, a spark-ignited engine in an AECP shall not be considered to be in compliance until all spark-ignited engines in the AECP that have been designated to meet more stringent NOx emission factors pursuant to Section 8.2 are in compliance with the rule.	8.6 For the purpose of determining the quantity of spark-ignited engines in compliance pursuant to Section 7.5, a spark-ignited engine in an AECP shall not be considered to be in compliance until all spark-ignited engines in the AECP that have been designated to meet more stringent NOx emission factors pursuant to Section 8.2 are in compliance with the rule.	**There is no change in the requirements of this section. Therefore, the non-SIP version of the rule is as stringent as the SIP version of the rule.**

9.0 Exhaust Control System Certification Requirements	9.1 To be considered for APCO certification, the manufacturer or operator shall comply with all of the following requirements: 9.1.1 Certification shall be based upon the emission source testing results of a specific exhaust control system. 9.1.2 A source testing protocol shall be submitted in accordance with the provisions of Rule 1081 (Source Sampling) for approval by the APCO prior to conducting the source test. The source testing protocol approved by the APCO shall be strictly adhered to during certification source testing. 9.1.3 Source testing shall be conducted over the range of operating parameters for which the unit(s) will be operated. 9.1.4 The source testing results shall demonstrate compliance with the emission limits of this rule for each model of exhaust control system(s) to be certified. 9.1.5 The source testing procedure and reports shall be prepared by an ARB- approved independent testing laboratory, and shall contain all the elements identified in the APCO-approved source testing protocol. 9.1.6 Source testing shall be conducted no more than 90 days prior to the date of submission of request for certification by the APCO. 9.1.7 Any additional supporting information required by the APCO to address other performance parameters.	9.1 To be considered for APCO certification, the manufacturer or operator shall comply with all of the following requirements: 9.1.1 Certification shall be based upon the emission source testing results of a specific exhaust control system, 9.1.2 A source testing protocol shall be submitted in accordance with the provisions of Rule 1081 (Source Sampling) for approval by the APCO prior to conducting the source test. The source testing protocol approved by the APCO shall be strictly adhered to during certification source testing, 9.1.3 Source testing shall be conducted over the range of operating parameters for which the unit(s) will be operated, 9.1.4 The source testing results shall demonstrate compliance with the emission limits of this rule for each model of exhaust control system(s) to be certified, 9.1.5 The source testing procedure and reports shall be prepared by an ARB approved independent testing laboratory, and shall contain all the elements identified in the APCO-approved source testing protocol, 9.1.6 Source testing shall be conducted no more than 90 days prior to the date of submission of request for certification by the APCO, and 9.1.7 Any additional supporting information required by the APCO to address other performance parameters.	**There is no change in the requirements of this section. Therefore, the non-SIP version of the rule is as stringent as the SIP version of the rule.**
	9.2 The manufacturer or operator requesting certification shall submit to the APCO the following information: 9.2.1 Copies of the source testing results conducted pursuant to the requirements of Section 9.1, and other pertinent technical data to demonstrate compliance with the emission limits of this rule. 9.2.2 The applicant shall sign and date the statement attesting to the accuracy of all information in the statement. 9.2.3 Name and address of the exhaust control system manufacturer or operator, brand name of the exhaust control unit, model number, and description of model of system(s) being certified.	9.2 The manufacturer or operator requesting certification shall submit to the APCO the following information: 9.2.1 Copies of the source testing results conducted pursuant to the requirements of Section 9.1, and other pertinent technical data to demonstrate compliance with the emission limits of this rule, 9.2.2 The applicant shall sign and date the statement attesting to the accuracy of all information in the statement, and 9.2.3 Name and address of the exhaust control system manufacturer or operator, brand name of the exhaust control unit, model number, and description of model of system(s) being certified.	**There is no change in the requirements of this section. Therefore, the non-SIP version of the rule is as stringent as the SIP version of the rule.**

	9.3 The APCO will only approve an application for certification to the extent that the requirements of Sections 9.1 through 9.2 are met and the source testing results demonstrate that the emission limits of this rule are met.	9.3 The APCO will only approve an application for certification to the extent that the requirements of Sections 9.1 through 9.2 are met and the source testing results demonstrate that the emission limits of this rule are met.	**There is no change in the requirements of this section. Therefore, the non-SIP version of the rule is as stringent as the SIP version of the rule.**
	9.4 The APCO-approved certification is valid only for the range of operating parameters and conditions for which certification is issued.	9.4 The APCO-approved certification is valid only for the range of operating parameters and conditions for which certification is issued.	**There is no change in the requirements of this section. Therefore, the non-SIP version of the rule is as stringent as the SIP version of the rule.**
	9.5 The APCO shall publish a list of certified exhaust control systems after the certification process is completed.	9.5 The APCO shall publish a list of certified exhaust control systems after the certification process is completed.	**There is no change in the requirements of this section. Therefore, the non-SIP version of the rule is as stringent as the SIP version of the rule.**

District Rule 4702 was amended (8/18/2011). As analyzed, each amended section of the non-SIP version of the rule is at least as stringent as, or more stringent than the corresponding section of the SIP version of the rule. Therefore, it is concluded that overall the non-SIP version of the rule is more stringent than the SIP version of the rule

SIP APPROVED VERSION OF DISTRICT RULE 4702

Table 1 Emission Limits/Standards for a Spark-Ignited Internal Combustion Engine and Emission Limits/Standards and Compliance Schedule for a Spark-Ignited Engine Used Exclusively in Agricultural Operations (corrected to 15% oxygen on a dry basis)

Engine Type	NOx	CO	VOC
1. Rich-Burn			
a. Waste gas fueled	50 ppmv or 90% reduction	2000 ppmv	250 ppmv
b. Cyclic loaded, field gas fueled	50 ppmv	2000 ppmv	250 ppmv
c. All other engines	25 ppmv or 96% reduction	2000 ppmv	250 ppmv
2. Lean-Burn			
a. Two stroke, gaseous fueled, less than 100 horsepower	75 ppmv or 85% reduction	2000 ppmv	750 ppmv
b. All other engines	65 ppmv or 90% reduction	2000 ppmv	750 ppmv
3. Rich-Burn Engine Used Exclusively in Agricultural Operations			
a. Comply by 1/1/2009, or if owner has an agreement to electrify, comply by 1/1/2010	90 ppmv or 80% reduction	2000 ppmv	250 ppmv
4. Lean-Burn Engine Used Exclusively in Agricultural Operations			
a. Comply by 1/1/2009 or if owner has an agreement to electrify comply by 1/1/2010	150 ppmv or 70% reduction	2000 ppmv	750 ppmv
5. Certified Spark-Ignited Engine Used Exclusively in AO and installed on or before June 16, 2005			
a. Comply by 6/1/2006	Meet Certified Spark-Ignited Engine Standard of HC+NOx < 0.6 g/bhp-hr		

SIP APPROVED VERSION OF DISTRICT RULE 4702

Table 2 Emission Limits/Standards and Compliance Schedule for a Compression-Ignited Internal Combustion Engine (corrected to 15% oxygen on a dry basis)

Engine Type	Emission Limit/ Standard	Compliance Date
1. Non-Certified Compression-Ignited Engine		
a. Greater than 50 bhp but not more than 500 bhp	EPA Tier 3 or Tier 4	1/1/2010
b. Greater than 500 bhp but not more than 750 bhp and less than 1000 annual operating hours	EPA Tier 3	1/1/2010
c. Greater than 750 bhp and less than 1000 annual operating hours	EPA Tier 4	7/1/2011
d. Greater than 500 bhp and greater than or equal to 1000 annual operating hours	80 ppm NOx, 2,000 ppm CO, 750 ppm VOC	1/1/2008 or, if owner has an agreement to electrify, comply by 1/1/2010
2. Certified Compression-Ignited Engine		
a. EPA Certified Tier 1 or Tier 2 Engine	EPA Tier 4	1/1/2015 or 12 years after installation date, whichever is later
b. EPA Certified Tier 3 or Tier 4 Engine	Meet Certified Compression-Ignited Engine Standard in effect at time of installation	At time of installation

SIP APPROVED VERSION OF DISTRICT RULE 4702

Compliance Schedule 1 - Non-AO Spark-Ignited Engine

Quantity of Non-AO Spark-Ignited Engines to be in Compliance at a Stationary Source	Compliance Date
a. 25% or more of the total number of non-AO spark-ignited engines at a stationary source on June 1, 2005	6/1/05
b. 62.5% or more of the total number of non-AO spark-ignited engines at a stationary source on June 1, 2006	6/1/06
c. 100% of the total number of non-AO spark-ignited engines at a stationary source on June 1, 2007	6/1/07

NON-SIP APPROVED VERSION OF DISTRICT RULE 4702

Table 1 Emission Limits/Standards for a Spark-Ignited Internal Combustion Engine rated at > 50 bhp Used Exclusively in Non-AO (All ppmv limits are corrected to 15% oxygen on a dry basis.).			
Engine Type	NOx	CO	VOC
1. Rich-Burn			
a. Waste gas fueled	50 ppmv or 90% reduction	2000 ppmv	250 ppmv
b. Cyclic loaded, field gas fueled	50 ppmv	2000 ppmv	250 ppmv
c. All other engines	25 ppmv or 96% reduction	2000 ppmv	250 ppmv
2. Lean-Burn			
a. Two stroke, gaseous fueled, less than 100 horsepower	75 ppmv or 85% reduction	2000 ppmv	750 ppmv
b. All other engines	65 ppmv or 90% reduction	2000 ppmv	750 ppmv

Table 2 Emission Limits for a Spark-Ignited Internal Combustion Engine Rated at > 50 bhp Used Exclusively in Non-AO (All ppmv limits are corrected to 15% oxygen on a dry basis). Emission Limits are effective according to the compliance schedule specified in Section 7.5.			
Engine Type	NOx (ppmv)	CO (ppmv)	VOC (ppmv)
1. Rich-Burn			
a. Waste Gas Fueled	50	2000	250
b. Cyclic Loaded, Field Gas Fueled	50	2000	250
c. Limited Use	25	2000	250
d. Rich-Burn Engine, not listed above	11	2000	250
2. Lean-Burn Engines			
a. Two-Stroke, Gaseous Fueled, >50 bhp and < 100 bhp	75	2000	750
b. Limited Use	65	2000	750
c. Lean-Burn Engine used for gas compression	65 ppmv or 93% reduction	2000	750
d. Lean-Burn Engine, not listed above	11	2000	750

Table 3 Emission Limits/Standards and Compliance Schedule for a Spark-Ignited Internal Combustion Engine >50 bhp Used Exclusively in AO (All ppmv limits are corrected to 15% oxygen on a dry basis).			
Engine Type	NOx Limit	CO Limit	VOC Limit
1. Rich-Burn	90 ppmv or 80% reduction	2000 ppmv	250 ppmv
2. Lean-Burn	150 ppmv or 70% reduction	2000 ppmv	750 ppmv
3. Certified and installed on or before June 16, 2005	Meet a Certified Spark-Ignited Engine Standard of HC + NOx < 0.6 g/bhp-hr		

Table 4 Emission Limits/Standards and Compliance Schedule for Compression-Ignited Internal Combustion Engine (corrected to 15% oxygen on a dry basis)		
Engine Type	Emission Limit/ Standard	Compliance Date
1. Non-Certified Compression-Ignited Engine Installed on or before June 1, 2006		
a. Greater than 50 bhp but not more than 500 bhp	EPA Tier 3 or Tier 4	1/1/2010
b. Greater than 500 bhp but not more than 750 bhp and less than 1000 annual operating hours	EPA Tier 3	1/1/2010
c. Greater than 750 bhp and less than 1000 annual operating hours	EPA Tier 4	7/1/2011
d. Greater than 500 bhp and greater than or equal to 1000 annual operating hours	80 ppmv NOx, 2,000 ppmv CO, 750 ppmv VOC	1/1/2008 or, if owner has an agreement to electrify, comply by 1/1/2010
2. Certified Compression-Ignited Engine		
a. EPA Certified Tier 1 or Tier 2 Engine	EPA Tier 4	1/1/2015 or 12 years after installation date, but not later than 6/1/2018
b. EPA Certified Tier 3 or Tier 4 Engine	Meet Certified Compression-Ignited Engine Standard in effect at time of installation	At time of installation

Table 5 Compliance Schedule for Non-AO Spark-Ignited Engines Subject to Table 2 Emission Limits, and SOx Control and Monitoring Requirements			
Engines to be in Compliance at a Stationary Source	Emission Control Plan	Authority to Construct and Inspection and Monitoring Plan	Full Compliance
Operator with a single engine at a stationary source			
Single Engine	1/1/12	1/1/13	1/1/14
Operator with at least two engines, but less than 12 engines at a stationary source			
33% or more of the engines subject to Table 2 emission limits as of August 18, 2011	7/1/12	1/1/13	1/1/14
66% or more of the engines subject to Table 2 emission limits as of August 18, 2011	7/1/12	1/1/14	1/1/15
100% of the engines subject to Table 2 emission limits	7/1/12	1/1/15	1/1/16
Operator with at least 12 engines at a stationary source			
25% or more of the engines subject to Table 2 emission limits as of August 18, 2011	7/1/12	1/1/13	1/1/14
50% or more of the engines subject to Table 2 emission limits as of August 18, 2011	7/1/12	1/1/14	1/1/15
75% or more of the engines subject to Table 2 emission limits as of August 18, 2011	7/1/12	1/1/15	1/1/16
100% of the engines subject to Table 2 emission limits	7/1/12	1/1/16	1/1/17

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ATTACHMENT F

Streamlining Analysis for District Rule 4623 and 40 CFR 60 Subpart Ka

Streamlining Demonstration for Rule 4623 and 40 CFR 60 Subpart Ka

These rules contain performance standards for organic liquid storage tanks. The following analysis shows that the overlapping requirements of these rules, as applied to welded external floating roof tanks with metallic shoe primary seals, can be condensed into clear and concise requirements that state clearly for the operator and the District what the most stringent requirement shall be. Streamlining procedures, as documented in the following steps, are used to substitute the proposed set of requirements for the current permit requirements. This streamlining exercise is proposed to clarify only the overlapping requirements of District Rule 4623 and 40 CFR 60 Subpart Ka; all other applicable portions of these rules will be incorporated as previously permitted through the Air District.

Step 1. Side-by-side Comparison of Overlapping Applicable Requirements:

VOC			
CITATION:	**District Rule 4623**	**40 CFR 60 Subpart Ka**	**Proposed Permit Condition**
APPLICABILITY / EXEMPTION:	Applies to tank ≥ 1,100 gallons, and 0.5 psia ≤ TVP < 11 psia. [4623, 2.0, 5.1]	Applies to tank > 40,000 gallons, and 1.5 psia ≤ TVP ≤ 11.1 psia, and construction commenced between May 18, 1978 and July 23, 1984. [60.110a & 60.112a]	True vapor pressure of the organic liquid stored shall be less than 11 psia. [Rule 4623, 5.1.1 and 40 CFR 60.110a and 60.112a] When storing organic liquids with true vapor pressure less than 0.5 psia, the requirements of Sections 5.3, 5.5 and 6.1 of District Rule 4623 (Amended May 19, 2005) shall not apply to this unit. This exemption applies to all conditions in this permit referencing Rule 4623 Sections 5.3, 5.5 or 6.1 only. [Rule 4623, 2.0] When storing organic liquids with true vapor pressure less than 1.5 psia, the requirements of 40 CFR 60 Subpart Ka shall not apply to this unit. This exemption applies to all conditions in this permit referencing 40 CFR 60 Subpart Ka only. [40 CFR 60.112a(a)] Before switching to the storage of organic liquids with true vapor pressure greater than or equal to 0.5 psia, all covers, seals, and lids shall be inspected by the facility operator to ensure compliance with the provisions of this permit. This includes all conditions containing District Rule 4623 reference. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit Before switching to the storage of organic liquids with true vapor pressure greater than or equal to 1.5 psia, all covers, seals, and lids shall be inspected by the facility operator to ensure compliance with the provisions of this permit. This includes all conditions containing District Rule 4623 or 40 CFR 60 Subpart Ka reference. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

PERFORMANCE STANDARD, CONSTRUCTION:	The storage vessel shall be equipped with a floating roof consisting of a pan type that is installed before December 20, 2001, pontoon-type, or double-deck type cover, that rests on the surface of the liquid contents; and equipped with a closure device between the tank shell and roof edge consisting of two seals, one above the other. [4623, 5.3.1] The floating roof shall be floating 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 processes of filling or emptying and refilling the tank shall be continuous and shall be accomplished as rapidly as possible. Whenever the operator intends to land the roof on its legs, an operator 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 the operator may land the roof on its legs. [4623, 5.3.1]	The storage vessel shall be equipped with an external floating roof, consisting of a pontoon-type or double-deck-type cover that rests on the surface of the liquid contents and is equipped with a closure device between the tank wall and the roof edge. Except as provided in paragraph (a)(1)(ii)(D) of this section, the closure device is to consist of two seals, one above the other. The roof is to be floating on the liquid at all times (i.e., off the roof leg supports) except during initial fill and when the tank is completely emptied and subsequently refilled. The process of emptying and refilling when the roof is resting on the leg supports shall be continuous and shall be accomplished as rapidly as possible. [60.112a(a)]	The tank shall be equipped with a floating roof consisting of a 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 60.112a(a)(1)] 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 and 40 CFR 60.112a(a)(1)]

PERFORMANCE STANDARD, METALLIC SHOE PRIMARY SEAL:	No gap between the tank shell and the primary seal shall exceed one and one half (1-1/2) inches. The cumulative length of all gaps between the tank shell and the primary seal greater than one-half (1/2) inch shall not exceed ten (10) percent of the circumference of the tank. The cumulative length of all primary seal gaps greater than one-eighth (1/8) inch shall not exceed 30 percent of the tank circumference. No continuous gap greater than one-eighth (1/8) inch shall exceed ten (10) percent of the tank circumference. [4623, 5.3.2.1] Metallic-shoe-type seals 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. [4623, 5.3.2.1] The geometry of the metallic-shoe type seal shall be such that the maximum gap between the shoe and the tank shell is no greater than 3 inches for a length of at least 18 inches in the vertical plane above the liquid surface. [4623, 5.3.2.1]	Primary seal (lower seal) shall be a metallic shoe seal, a liquid-mounted seal, or a vapor-mounted seal. Each seal is to meet the following requirements: (A) The accumulated area of gaps between the tank wall and the metallic shoe seal or the liquid-mounted seal shall not exceed 212 cm^2 per meter of tank diameter (10.0 in^2 per ft of tank diameter) and the width of any portion of any gap shall not exceed 3.81 cm (1 1/2 in). (B) The accumulated area of gaps between the tank wall and the vapor-mounted seal shall not exceed 21.2 cm^2 per meter of tank diameter (1.0 in^2 per ft of tank diameter) and the width of any portion of any gap shall not exceed 1.27 cm (1/2in). (C) One end of the metallic shoe is to extend into the stored liquid and the other end is to extend a minimum vertical distance of 61 cm (24 in) above the stored liquid surface. (D) There are to be no holes, tears, or other openings in the shoe, seal fabric, or seal envelope. [40 CFR 60.112a(a)(1)(i)]	Primary seal (lower seal) shall be a metallic shoe seal. [District Rule 2080 and 40 CFR 60.112a(a)(1)(i)] The cumulative length of all primary seal gaps greater than 1/8 inch shall not exceed 30% of the circumference of the tank. No continuous gap in the primary seal greater than 1/8 inch wide shall exceed 10% of the tank circumference. 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. The width of any portion of any gap in the primary seal shall not exceed 1 1/2 inches. [District Rule 4623, 5.3.2.1; 40CFR 60.112a(a)(1)] 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 and 40 CFR 60.112a(a)(1)] The geometry of the metallic-shoe type seal shall be such that the maximum gap between the shoe and the tank shell is no greater than 3 inches for a length of at least 18 inches in the vertical plane above the liquid surface. [4623, 5.3.2.1]

PERFORMANCE STANDARD, SECONDARY SEAL:	No gap between the tank shell and the secondary seal shall exceed one-half (1/2) inch. The cumulative length of all gaps between the tank shell and the secondary seal, greater than one-eighth (1/8) inch shall not exceed five (5) percent of the tank circumference. [4623, 5.3.2.1] 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] 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] 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]	The secondary seal is to be installed above the primary seal so that it completely covers the space between the roof edge and the tank wall except as provided in 40 CFR 60.112a(a)(1)(ii)(B). [40 CFR 60.112a(a)(1)(ii)] The accumulated area of gaps between the tank wall and the secondary seal used in combination with a metallic shoe or liquid-mounted primary seal shall not exceed 21.2 cm^2 per meter of tank diameter (1.0 in^2 per ft. of tank diameter) and the width of any portion of any gap shall not exceed 1.27 cm (1/2in.). There shall be no gaps between the tank wall and the secondary seal used in combination with a vapor-mounted primary seal. [40 CFR 60.112a(a)(1)(ii)] There are to be no holes, tears or other openings in the seal or seal fabric. [40 CFR 60.112a(a)(1)(ii)] The owner or operator is exempted from the requirements for secondary seals and the secondary seal gap criteria when performing gap measurements or inspections of the primary seal. [40 CFR 60.112a(a)(1)(ii)]	The secondary seal is to be installed above the primary seal so that it completely covers the space between the roof edge and the tank wall. 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, and 40 CFR 60.112a(a)(1)(ii)] The owner or operator is exempted from the requirements for secondary seals and the secondary seal gap criteria when performing gap measurements or inspections of the primary seal. [40 CFR 60.112a(a)(1)(ii)] 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] 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] 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. The width of any portion of any gap in the secondary seal shall not exceed 1/2 inch. [District Rule 4623, 5.3.2.1, and 40 CFR 60.112a(a)(1)(ii)]

REPORTING:	An operator 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 on the tank in order to comply with rule 4623 and the date(s) such actions were taken. [District Rule 4623, 6.3.5]	If either the seal gap calculated in accord with 40 CFR 60.113a(a)(1)(iii) or the measured maximum seal gap exceeds the limitations specified by 40 CFR 60.112a, a report shall be furnished to the Administrator within 60 days of the date of measurements. The report shall identify the vessel and list each reason why the vessel did not meet the specifications of 40 CFR 60.112a. The report shall also describe the actions necessary to bring the storage vessel into compliance with the specifications of 40 CFR 60.112a. [40 CFR 60.113a(a)(1)(i)(E)]	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. This 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 schedule for corrective action(s) to be made. 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 Rule 4623 (Amended May 19, 2005) and 40 CFR 60 Subpart Ka. [District Rule 4623, 6.3.5; 40CFR 60.113a(a)(i)(E)]
PERMIT SHIELD	N/A	N/A	Compliance with permit conditions in the Title V permit shall be deemed compliance with SJVUAPCD Rule 4623 (Amended May 19, 2005) and 40 CFR 60, Subpart Ka. A permit shield is granted from this requirement. [District Rule 2520, 13.2]

Step 2: Select most stringent emission limit or performance standard:

Applicability:

40 CFR 60 Subpart Ka is not applicable to the storage of organic liquid with a TVP of less than 1.5 psia. Therefore, the applicability and exemptions listed in the permit must be clarified.

Roof Construction:

District Rule 4623 authorizes a pan-type external floating roof, if it was installed prior to December 20, 2001. 40 CFR 60.112a(a) does not authorize the installation of a pan-type external floating roof for tanks subject to this subpart. The more stringent requirement must exclude equipping a tank with a pan-type external floating roof.

Primary Seal Gaps:

40 CFR 60.112a(a)(1) authorizes liquid-mounted primary seal and vapor-mounted primary seal. Since the tanks subject to this streamlining exercise are existing welded tanks with a metallic-shoe primary seal, and metallic-shoe construction is enforced by permit equipment description, reference to liquid-mounted primary seal and vapor-mounted primary seal should be deleted from permit conditions.

District Rule 4623 prohibits primary seal gaps greater than 1-1/2", allows cumulative primary seal gaps greater than 1/8" not to exceed 30% of the tank's circumference, cumulative primary seal gaps greater than 1/2" not to exceed 10% of the tank's circumference, and any continuous primary seal gaps greater than 1/8" not to exceed 10% of the tank's circumference. 40 CFR 60 Subpart Ka also prohibits any metallic shoe seal gaps greater than 1-1/2", and only allows accumulated metallic shoe seal gaps shall not exceed 10 square inches per each foot of tank diameter.

As demonstrated in the summary and calculations below, the maximum primary seal gaps allowed by District Rule 4623 results in fewer square feet of gaps than allowed by 40 CFR 60 Subpart Ka; therefore, compliance with Rule 4623 primary seal gap requirements satisfies the 40 CFR 60 subpart Ka primary seal gap requirements.

	Rule 4623	Section	40 CFR 60 Subpart Ka	Section
Primary Seal:				
Max gap width =	1.5"	5.3.2.1.1	1.5"	60.112a(a)(1)(i)(A)
Accumulated gaps:				
gaps > 0.5" =	10% of Circumference	5.3.2.1.1	n/a	
gaps > 0.125" =	30% of circumference	5.3.2.1.1	n/a	
Any Gap Sizes =	n/a		10 sq inch per 1 ft dia	60.112a(a)(1)(i)(A)
Continuous Gaps > 0.125" =	10% of Circumference	5.3.2.1.1	n/a	

Calculation:
assume a 100 foot diameter tank
assume a worst-case 1.5" gap width for all area calculations

circumference =	Pi * Diameter =	314.16
Any Gap Sizes allowed =	10 in^2 * Diameter =	1000.00 in^2
	Calculated area (ft^2) =	6.944
max length allowed, gaps > 0.5" =	10% * Pi * Diameter	31.42
	Calculated area (ft^2) =	3.93

max length allowed, gaps > 0.125" =	30% * Pi * Diameter	94.25
(0.125" ≥ 20% gaps < 0.5 + 0.5 ≥ 10% gaps)	Calculated area (ft^2) =	6.49
max length allowed, continuous gap > 0.125" =	10% * Pi * Diameter	31.42
	Calculated area (ft^2) =	3.93

Note: Since only 10% of all gaps can be greater than 1/2", 20% of all gaps must be between 1/8" and 1/2"; therefore, Rule 4623 is more stringent than Subpart Ka (6.49 sq ft vs 6.94 sq ft)

Secondary Seal Gaps:

District Rule 4623 prohibits secondary seal gaps greater than 1/2", allows cumulative secondary seal gaps greater than 1/8" not to exceed 5% of the tank's circumference. 40 CFR 60 Subpart Ka also prohibits any secondary seal gaps, when used in combination with metallic shoe primary seal, greater than 1/2", and only allows accumulated secondary seal gaps shall not exceed 1 square inch per each foot of tank diameter. 40 CFR 60 Subpart Ka specifies the owner or operator is exempted from the requirements for secondary seals and the secondary seal gap criteria when performing gap measurements or inspections of the primary seal.

As demonstrated in the summary and calculations below, the maximum secondary seal gaps allowed by District Rule 4623 results in fewer square feet of gaps than allowed by 40 CFR 60 Subpart Ka; therefore, compliance with Rule 4623 secondary seal gap requirements satisfies the 40 CFR 60 subpart Ka secondary seal gap requirements.

	Rule 4623	Section	40 CFR 60 Subpart Ka	Section
Secondary Seal:				
Max gap width =	0.5"	5.3.2.1.2	0.5"	60.112a(a)(1)(ii)(B)
Accumulated gaps > 0.125" =	5% of Circumference	5.3.2.1.2	n/a	
Any Gap Sizes =	n/a		1 sq inch per 1 ft dia	60.112a(a)(1)(ii)(B)
Calculation:				
assume a 100 foot diameter tank				
assume a worst-case 0.5" gap width for all area calculations				
circumference =	Pi * Diameter =	314.16		
Any Gap Sizes allowed =	1 in^2 * Diameter =	100.00 in^2		
	Calculated area (ft^2) =	0.69		
max length allowed, gaps > 0.125" =	5% * Pi * Diameter	15.71		
	Calculated area (ft^2) =	0.65		

Reporting Requirements:

40 CFR 60.113a(a) requires the operator to submit a report of non compliance within 60 days of the date of seal measurement. District Rule 4623 requires the operator to submit a report of non-compliance within 5 days of the date of seal measurement. The more stringent requirement of submitting a report of non-compliance within 5 days of measurement subsumes the federal 60-day requirement.

Step 3: Conditions ensuring compliance with applicable requirements:

The units qualifying to use this streamlining demonstration shall be required by permit condition to comply with the most stringent performance standard developed as part of the streamlining demonstration, summarized in the table under step 1, above.

Step 4: Certify compliance

By using this streamlining demonstration as part of the Title V renewal application, the applicant is certifying compliance with all proposed conditions developed as part of the streamlining demonstration.

Step 5: Compliance schedule for new monitoring requirements

Not applicable.

Step 6: Request for permit shield

By this streamlining action, the applicant is requesting permit shield from the requirements of District Rule 4623 and Subpart Ka of 40 CFR that pertain to primary and secondary seal gap measurement requirements as of the Title V renewal application submittal date.

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ATTACHMENT G

Streamlining Analysis for District Rule 4623 and 40 CFR 60 Subpart Kb

Streamlining Demonstration for Rule 4623 and 40 CFR 60 Subpart Kb

These rules contain performance standards for organic liquid storage tanks. The following analysis shows that the overlapping requirements of these rules, as applied to welded external floating roof tanks with metallic shoe primary seals, can be condensed into clear and concise requirements that state clearly for the operator and the District what the most stringent requirement shall be. Streamlining procedures, as documented in the following steps, are used to substitute the proposed set of requirements for the current permit requirements. This streamlining exercise is proposed to clarify only the overlapping requirements of District Rule 4623 and 40 CFR 60 Subpart Kb; all other applicable portions of these rules will be incorporated as previously permitted through the Air District.

Step 1. Side-by-side Comparison of Overlapping Applicable Requirements:

VOC			
CITATION:	**District Rule 4623**	**40 CFR 60 Subpart Kb**	**Proposed Permit Condition**
APPLICABILITY / EXEMPTION:	Applies to tank ≥ 1,100 gallons, and 0.5 psia ≤ TVP < 11 psia. [4623, 2.0, 5.1]	Applies to tank ≥ 19,813 gallons, TVP ≥ 0.5 psia, and construction commenced after July 23, 1984. [60.110b(a)] Exemption for tank ≥ 39,890 gallons, TVP ≤ 0.5 psia, and construction commenced after July 23, 1984. [60.110b(b)] Exemption for 19,813 gallons ≤ tank < 39,890 gallons, TVP < 2.16 psia, and construction commenced after July 23, 1984. [60.110b(b)] Equipment standards of Subpart Kb applies to tank ≥ 39,890 gallons, 0.75 psia ≤ TVP < 11.1 psia. [60.112b(a)] Equipment standards of Subpart Kb applies to 19,813 gallons ≤ tank < 39,890 gallons, 4.00 psia ≤ TVP < 11.1 psia. [60. 112b(a)]	This tank shall only store liquid with a true vapor pressure (TVP) of 5.7 psia or less under all storage conditions. [District Rules 2201and 4623, 5.1.1 and 40 CFR 60.110b(a), 112b(a)] When storing organic liquids with true vapor pressure less than 0.5 psia, the requirements of Sections 5.3, 5.5 and 6.1 of District Rule 4623 (Amended May 19, 2005) shall not apply to this unit. This exemption applies to all conditions in this permit referencing Rule 4623 Sections 5.3, 5.5 or 6.1 only. [Rule 4623, 2.0] When storing organic liquids with true vapor pressure less than 0.75 psia, the requirements of 40 CFR 60 Subpart Kb shall not apply to this unit. This exemption applies to all conditions in this permit referencing 40 CFR 60 Subpart Kb only. [40 CFR 60.112b(a)] Before switching to the storage of organic liquids with true vapor pressure greater than or equal to 0.5 psia, all covers, seals, and lids shall be inspected by the facility operator to ensure compliance with the provisions of this permit. This includes all conditions containing District Rule 4623 reference. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit Before switching to the storage of organic liquids with true vapor pressure greater than or equal to 0.75 psia, all covers, seals, and lids shall be inspected by the facility operator to ensure compliance with the provisions of this permit. This includes all conditions containing District Rule 4623 or 40 CFR 60 Subpart Kb reference. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

PERFORMANCE STANDARD, CONSTRUCTION:	The storage vessel shall be equipped with a floating roof consisting of a pan type that is installed before December 20, 2001, pontoon-type, or double-deck type cover, that rests on the surface of the liquid contents; and equipped with a closure device between the tank shell and roof edge consisting of two seals, one above the other. [4623, 5.3.1] The floating roof shall be floating 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 processes of filling or emptying and refilling the tank shall be continuous and shall be accomplished as rapidly as possible. Whenever the operator intends to land the roof on its legs, an operator 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 the operator may land the roof on its legs. [4623, 5.3.1]	The storage vessel shall be equipped with an external floating roof. An external floating roof means a pontoon-type or double-deck type cover that rests on the liquid surface in a vessel with no fixed roof. Each external floating roof must meet the following specifications: (i) Each external floating roof shall be equipped with a closure device between the wall of the storage vessel and the roof edge. The closure device is to consist of two seals, one above the other. The lower seal is referred to as the primary seal, and the upper seal is referred to as the secondary seal. (A) The primary seal shall be either a mechanical shoe seal or a liquid-mounted seal. Except as provided in §60.113b(b)(4), the seal shall completely cover the annular space between the edge of the floating roof and tank wall. (B) The secondary seal shall completely cover the annular space between the external floating roof and the wall of the storage vessel in a continuous fashion except as allowed in §60.113b(b)(4). [60.112b(a)(2)]	The tank shall be equipped with a floating roof consisting of a 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)] 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 and 40 CFR 60.112b(a)(2)]

PERFORMANCE STANDARD, METALLIC SHOE PRIMARY SEAL:	No gap between the tank shell and the primary seal shall exceed one and one half (1-1/2) inches. The cumulative length of all gaps between the tank shell and the primary seal greater than one-half (1/2) inch shall not exceed ten (10) percent of the circumference of the tank. The cumulative length of all primary seal gaps greater than one-eighth (1/8) inch shall not exceed 30 percent of the tank circumference. No continuous gap greater than one-eighth (1/8) inch shall exceed ten (10) percent of the tank circumference. [4623, 5.3.2.1] Metallic-shoe-type seals 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. [4623, 5.3.2.1] The geometry of the metallic-shoe type seal shall be such that the maximum gap between the shoe and the tank shell is no greater than 3 inches for a length of at least 18 inches in the vertical plane above the liquid surface. [4623, 5.3.2.1]	The primary seal shall be either a mechanical shoe seal or a liquid-mounted seal. Except as provided in §60.113b(b)(4), the seal shall completely cover the annular space between the edge of the floating roof and tank wall. [40 CFR 60.112b(a)(2)] The owner or operator shall make necessary repairs or empty the storage vessel within 45 days of identification in any inspection for seals not meeting the requirements listed in (b)(4) (i) and (ii) of this section: (i) The accumulated area of gaps between the tank wall and the mechanical shoe or liquid-mounted primary seal shall not exceed 212 cm^2 per meter of tank diameter [10.0 in^2 per ft of tank diameter], and the width of any portion of any gap shall not exceed 3.81 cm [1.50 in]. (A) One end of the mechanical shoe is to extend into the stored liquid, and the other end is to extend a minimum vertical distance of 61 cm [24 in] above the stored liquid surface. (B) There are to be no holes, tears, or other openings in the shoe, seal fabric, or seal envelope. [40 CFR 60.113b(b)(4)]	Primary seal (lower seal) shall be a metallic shoe seal. [District Rule 2080 and 40 CFR 60.112b(a)(2)] The cumulative length of all primary seal gaps greater than 1/8 inch shall not exceed 30% of the circumference of the tank. No continuous gap in the primary seal greater than 1/8 inch wide shall exceed 10% of the tank circumference. 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. The width of any portion of any gap in the primary seal shall not exceed 1 1/2 inches. [District Rule 4623, 5.3.2.1; 40CFR 60.113b(b)(4)] 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 and 40 CFR 60. 113b(b)(4)] The geometry of the metallic-shoe type seal shall be such that the maximum gap between the shoe and the tank shell is no greater than 3 inches for a length of at least 18 inches in the vertical plane above the liquid surface. [4623, 5.3.2.1]

PERFORMANCE STANDARD, SECONDARY SEAL:	No gap between the tank shell and the secondary seal shall exceed one-half (1/2) inch. The cumulative length of all gaps between the tank shell and the secondary seal, greater than one-eighth (1/8) inch shall not exceed five (5) percent of the tank circumference. [4623, 5.3.2.1] 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] 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] 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]	The secondary seal shall completely cover the annular space between the external floating roof and the wall of the storage vessel in a continuous fashion except as allowed in §60.113b(b)(4). [40 CFR 60. 112b(a)(2)] The owner or operator shall make necessary repairs or empty the storage vessel within 45 days of identification in any inspection for seals not meeting the requirements listed in (b)(4) (i) and (ii) of this section: (ii) The secondary seal is to meet the following requirements: (A) The secondary seal is to be installed above the primary seal so that it completely covers the space between the roof edge and the tank wall except as provided in paragraph (b)(2)(iii) of this section. (B) The accumulated area of gaps between the tank wall and the secondary seal shall not exceed 21.2 cm^2 per meter of tank diameter [1.0 in^2 per ft. of tank diameter], and the width of any portion of any gap shall not exceed 1.27 cm [0.5 in]. (C) There are to be no holes, tears, or other openings in the seal or seal fabric. [40 CFR 60.113b(b)(4)]	The secondary seal is to be installed above the primary seal so that it completely covers the space between the roof edge and the tank wall. 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, and 40 CFR 60.112b(a)(2)] The owner or operator is exempted from the requirements for secondary seals and the secondary seal gap criteria when performing gap measurements or inspections of the primary seal. [District Rule 2520, 9.3.2] 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] 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] 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. The width of any portion of any gap in the secondary seal shall not exceed 1/2 inch. [District Rule 4623, 5.3.2.1, and 40 CFR 60.113b(b)(4)]

REPORTING:	An operator 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 on the tank in order to comply with rule 4623 and the date(s) such actions were taken. [District Rule 4623, 6.3.5]	The owner or operator shall meet the following requirements: (1) Furnish the Administrator with a report that describes the control equipment and certifies that the control equipment meets the specifications of §60.112b(a)(2) and §60.113b(b)(2), (b)(3), and (b)(4). This report shall be an attachment to the notification required by §60.7(a)(3). (2) Within 60 days of performing the seal gap measurements required by §60.113b(b)(1), furnish the Administrator with a report that contains: (i) The date of measurement. (ii) The raw data obtained in the measurement. (iii) The calculations described in §60.113b(b)(2) and (b)(3). (3) Keep a record of each gap measurement performed as required by §60.113b(b). Each record shall identify the storage vessel in which the measurement was performed and shall contain: (i) The date of measurement. (ii) The raw data obtained in the measurement. (iii) The calculations described in §60.113b(b)(2) and (b)(3). (4) After each seal gap measurement that detects gaps exceeding the limitations specified by §60.113b(b)(4), submit a report to the Administrator within 30 days of the inspection. The report will identify the vessel and contain the information specified in paragraph (b)(2) of this section and the date the vessel was emptied or the repairs made and date of repair. [40 CFR 60.115b(b)]	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. This 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 schedule for corrective action(s) to be made. 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 Rule 4623 (Amended May 19, 2005) and 40 CFR 60 Subpart Kb. [District Rule 4623, 6.3.5; 40CFR 60.115b(b)(4)]
PERMIT SHIELD	N/A	N/A	Compliance with permit conditions in the Title V permit shall be deemed compliance with SJVUAPCD Rule 4623 (Amended May 19, 2005) and 40 CFR 60, Subpart Kb. A permit shield is granted from this requirement. [District Rule 2520, 13.2]

Step 2: Select most stringent emission limit or performance standard:

Applicability:

The performance requirements of 40 CFR 60 Subpart Kb are not applicable to the storage of organic liquid with a TVP of less than 0.75 psia. Therefore, the applicability and exemptions listed in the permit must be clarified.

Roof Construction:

District Rule 4623 authorizes a pan-type external floating roof, if it was installed prior to December 20, 2001. 40 CFR 60.112b(a) does not authorize the installation of a pan-type external floating roof for tanks subject to this subpart. The more stringent requirement must exclude equipping a tank with a pan-type external floating roof.

Primary Seal Gaps:

40 CFR 60.112b(a)(2) authorizes liquid-mounted primary seal and mechanical shoe primary seal. Since the tanks subject to this streamlining exercise are existing welded tanks with a metallic-shoe primary seal, and metallic-shoe construction is enforced by permit equipment description, reference to liquid-mounted primary seal should be deleted from permit conditions.

District Rule 4623 prohibits primary seal gaps greater than 1-1/2", allows cumulative primary seal gaps greater than 1/8" not to exceed 30% of the tank's circumference, cumulative primary seal gaps greater than 1/2" not to exceed 10% of the tank's circumference, and any continuous primary seal gaps greater than 1/8" not to exceed 10% of the tank's circumference. 40 CFR 60 Subpart Kb also prohibits any metallic shoe seal gaps greater than 1-1/2", and only allows accumulated metallic shoe seal gaps shall not exceed 10 square inches per each foot of tank diameter.

As demonstrated in the summary and calculations below, the maximum primary seal gaps allowed by District Rule 4623 results in fewer square feet of gaps than allowed by 40 CFR 60 Subpart Kb; therefore, compliance with Rule 4623 primary seal gap requirements satisfies the 40 CFR 60 subpart Kb primary seal gap requirements.

	Rule 4623	Section	40 CFR 60 Subpart Kb	Section
Primary Seal:				
Max gap width =	1.5"	5.3.2.1.1	1.5"	60.113b(b)(4)(i)
Accumulated gaps:				
gaps > 0.5" =	10% of Circumference	5.3.2.1.1	n/a	
gaps > 0.125" =	30% of circumference	5.3.2.1.1	n/a	
Any Gap Sizes =	n/a		10 sq inch per 1 ft dia	60.113b(b)(4)(i)
Continuous Gaps > 0.125" =	10% of Circumference	5.3.2.1.1	n/a	

Calculation:
assume a 100 foot diameter tank
assume a worst-case 1.5" gap width for all area calculations

circumference =	Pi * Diameter =	314.16
Any Gap Sizes allowed =	10 in^2 * Diameter =	1000.00 in^2
	Calculated area (ft^2) =	6.944
max length allowed, gaps > 0.5" =	10% * Pi * Diameter	31.42
	Calculated area (ft^2) =	3.93
max length allowed, gaps > 0.125" =	30% * Pi * Diameter	94.25

(0.125" ≥ 20% gaps < 0.5 + 0.5 ≥ 10% gaps)	Calculated area (ft^2) =	6.49
max length allowed, continuous gap > 0.125" =	10% * Pi * Diameter	31.42
	Calculated area (ft^2) =	3.93

Note: Since only 10% of all gaps can be greater than 1/2", 20% of all gaps must be between 1/8" and 1/2"; therefore, Rule 4623 is more stringent than Subpart Kb (6.49 sq ft vs 6.94 sq ft)

Secondary Seal Gaps:

District Rule 4623 prohibits secondary seal gaps greater than 1/2", allows cumulative secondary seal gaps greater than 1/8" not to exceed 5% of the tank's circumference. 40 CFR 60 Subpart Kb also prohibits any secondary seal gaps, when used in combination with metallic shoe primary seal, greater than 1/2", and only allows accumulated secondary seal gaps shall not exceed 1 square inch per each foot of tank diameter.

40 CFR 60 Subpart Kb does not specify the owner or operator is exempted from the requirements for secondary seals and the secondary seal gap criteria when performing gap measurements or inspections of the primary seal. However, it is not logical to assess gap criteria during an inspection process. Therefore, a condition requesting relief from secondary seal gap criteria, for the purpose and duration of primary seal inspection, is requested.

As demonstrated in the summary and calculations below, the maximum secondary seal gaps allowed by District Rule 4623 results in fewer square feet of gaps than allowed by 40 CFR 60 Subpart Kb; therefore, compliance with Rule 4623 secondary seal gap requirements satisfies the 40 CFR 60 subpart Kb secondary seal gap requirements.

	Rule 4623	Section	40 CFR 60 Subpart Kb	Section
Secondary Seal:				
Max gap width =	0.5"	5.3.2.1.2	0.5"	60.113b(b)(4)(ii)
Accumulated gaps > 0.125" =	5% of Circumference	5.3.2.1.2	n/a	
Any Gap Sizes =	n/a		1 sq inch per 1 ft dia	60.113b(b)(4)(ii)

Calculation:
assume a 100 foot diameter tank
assume a worst-case 0.5" gap width for all area calculations

circumference =	Pi * Diameter =	314.16
Any Gap Sizes allowed =	1 in^2 * Diameter =	100.00 in^2
	Calculated area (ft^2) =	0.69
max length allowed, gaps > 0.125" =	5% * Pi * Diameter	15.71
	Calculated area (ft^2) =	0.65

Reporting Requirements:

40 CFR 60.115b(b) requires the operator to submit a report of compliance within 60 days of the date of seal measurement and a report of non-compliance within 30 days of the date of seal measurement. District Rule 4623 requires the operator to submit a report of non-compliance within 5 days of the date of seal measurement. The more stringent requirement of submitting a report of non-compliance within 5 days of measurement subsumes the federal 30-day requirement.

Rule 4623 is SIP-approved. Therefore, for tanks demonstrating compliance with the gap measurement requirements, the reporting requirements of rule 4623 could be the authority for compliance. The inspection report for tanks that that have been determined to be in compliance with the requirements of District Rule 4623, 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 Rule 4623 and 40 CFR 60 Subpart Kb.

Step 3: Conditions ensuring compliance with applicable requirements:

The units qualifying to use this streamlining demonstration shall be required by permit condition to comply with the most stringent performance standard developed as part of the streamlining demonstration, summarized in the table under step 1, above.

Step 4: Certify compliance

By using this streamlining demonstration as part of the Title V renewal application, the applicant is certifying compliance with all proposed conditions developed as part of the streamlining demonstration.

Step 5: Compliance schedule for new monitoring requirements

Not applicable.

Step 6: Request for permit shield

By this streamlining action, the applicant is requesting permit shield from the requirements of District Rule 4623 and Subpart Kb of 40 CFR that pertain to primary and secondary seal gap measurement requirements as of the Title V renewal application submittal date. The equipment affected by this streamlining demonstration is existing; therefore the startup notification of 40 CFR 60.115b(b)(1) and 40 CFR 60.7(a)(3) has previously been satisfied and should be removed from the permit shield language.

ATTACHMENT H

Comments

Shell Pipeline Company
Facility # C-1234
Project # C-1082670
Title V Permit Renewal
Comments

The following comment was received from EPA:

Comment 1:

EPA agrees that CAM for VOC does not apply to the crude oil storage tanks, but not for the reason that the District states in its evaluation. In several instances in its evaluation of CAM applicability for tanks, the District states that CAM does not apply because the tank does not have any VOC emission limits. However, the definition of "emission limitation or standard" in the CAM rule states that "An emission limitation or standard may also be expressed either as a work practice, process or control device parameter, or other form of specific design, equipment, operational, or operation and maintenance requirement." The tanks are subject to various work practice and design requirements, including floating roof and seal requirements. These are emission limits for CAM purposes. But these tanks are not subject to CAM because they do not have control devices. The definition of "control device" in the CAM rule states that "a control device does not include passive control measures that act to prevent pollutants from forming, such as the use of seals, lids, or roofs to prevent the release of pollutants..." The District should revise its explanation of CAM applicability for the tanks in this permit (and any other permits in the current batch of proposed title V renewals that include similar tanks), to state that CAM does not apply because the passive control measures in use are not control devices for CAM purposes.

District Response:

The District has revised the CAM applicability explanations as suggested by EPA.