

MAY 0 3 2010

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

# Re: Notice of Preliminary Decision – Title V Permit Renewal District Facility # S-1413 Project # S-1085436

Dear Mr. Rios:

Enclosed for your review and comment is the District's analysis of the application to renew the Federally Mandated Operating Permit for Shell Pipeline Company LP for its Pipeline Pump Station at 1801 Petrol Rd. in Bakersfield, California.

The notice of preliminary decision for this project will be published approximately three days from the date of this letter. Please submit your written comments on this project within the 45-day comment period which begins on the date of publication of the public notice.

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

Sincerely,

Warne

Director of Permit Services

Attachments C: Manuel Salinas, 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 www.valleyair.org Southern Region 34946 Flyover Court Bakersfield, CA 93308-9725 Tel: (661) 392-5580 FAX: (661) 392-5585



MAY 0 3 2010

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

# Re: Notice of Preliminary Decision - Title V Permit Renewal District Facility # S-1413 Project # S-1085436

Dear Mr. Tollstrup:

Enclosed for your review and comment is the District's analysis of the application to renew the Federally Mandated Operating Permit for Shell Pipeline Company LP for its Pipeline Pump Station at 1801 Petrol Rd. in Bakersfield, California.

The notice of preliminary decision for this project will be published approximately three days from the date of this letter. Please submit your written comments on this project within the 30-day comment period which begins on the date of publication of the public notice.

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

Sincerely,

David Warner Director of Permit Services

Attachments C: Manuel Salinas, Permit Services Engineer

> Seyed Sadredin Executive Director/Air Pollution Control Officer

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MAY 0 3 2010

Noel Kurai Shell Pipeline Company LP 20945 S. Wilmington Ave. Carson, CA. 90810-1039

# Re: Notice of Preliminary Decision - Title V Permit Renewal District Facility # S-1413 Project # S-1085436

Dear Mr. Kurai:

Enclosed for your review and comment is the District's analysis of the application to renew the Federally Mandated Operating Permit for Shell Pipeline Company LP for its Pipeline Pump Station at 1801 Petrol Rd. in Bakersfield, California.

The notice of preliminary decision for this project will be published approximately three days from the date of this letter. Please submit your written comments on this project within the 30-day comment period which begins on the date of publication of the public notice.

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

Sincerely,

David Warner Director of Permit Services

Attachments C: Manuel Salinas, 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 www.valleyair.org Southern Region 34946 Flyover Court Bakersfield, CA 93308-9725 Tel: (661) 392-5500 FAX: (661) 392-5585 Bakersfield Californian

## NOTICE OF PRELIMINARY DECISION FOR THE PROPOSED RENEWAL OF THE FEDERALLY MANDATED OPERATING PERMIT

NOTICE IS HEREBY GIVEN that the San Joaquin Valley Air Pollution Control District solicits public comment on the proposed renewal of the Federally Mandated Operating Permit to Shell Pipeline Company LP for its Pipeline Pump Station at 1801 Petrol Rd. in Bakersfield, California.

The District's analysis of the legal and factual basis for this proposed action, project #S-1085436. available public is for inspection at http://www.vallevair.org/notices/public notices idx.htm and the District office at the address below. There are no emission changes associated with this proposed action. This will be the public's only opportunity to comment on the specific conditions of the proposed renewal of the Federally Mandated Operating permit. If requested by the public, the District will hold a public hearing regarding issuance of this renewed permit. For additional information, please contact Mr. Jim Swaney, Permit Services Manager, at (559) 230-5900. Written comments on the proposed renewed permit must be submitted within 30 days of the publication date of this notice to DAVID WARNER, DIRECTOR OF PERMIT SERVICES, SAN JOAQUIN VALLEY AIR POLLUTION CONTROL DISTRICT, 1990 E. GETTYSBURG AVE, FRESNO, CALIFORNIA 93726-0244.

# SAN JOAQUIN VALLEY AIR POLLUTION CONTROL DISTRICT

Title V Permit Renewal Evaluation Shell Pipeline Company LP S-1413

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# TITLE V PERMIT RENEWAL EVALUATION Tank Farm

Engineer: Manuel Salinas Date: April 12, 2010

Facility Number:	S-1413
Facility Name:	Shell Pipeline Company LP
Mailing Address:	20945 S Wilmington Ave
-	Carson, CA 90810-1039

Contact Name: Noel Kurai Phone: (310) 816-2069

Responsible Official:Michael W. BringhamTitle:Operations Manager

Project # : S-1085436 Deemed Complete: January 08, 09

# I. PROPOSAL

Shell Pipeline Company LP was issued a Title V permit on June 13, 2005. As required by District Rule 2520, the applicant is requesting a permit renewal. The existing Title V permit shall be reviewed and modified to reflect all applicable District and federal rules updated, removed, or added since the issuance of the initial Title V permit.

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

# II. FACILITY LOCATION

Shell Pipeline Company LP's Tank Farm is located in Section 35, Township 28s. Range 27E. Kern 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 is requesting to use the following model general permit templates:

Facility-wide SJV-UM-0-2

The applicant has requested to utilize template #SJV-UM-0-2 for the facility-wide requirements. Based on the information submitted on the Template Qualification Form (Attachment D), the applicant qualifies for the use of this template.

# V. SCOPE OF EPA AND PUBLIC REVIEW

Certain segments of the proposed Operating Permit are based on model general permit templates that have been previously subject to EPA and public review. The terms and conditions from the model general permit templates are included in the proposed permit and are not subject to further EPA and public review.

For permit applications utilizing model general permit templates, public and agency comments on the District's proposed actions are limited to the applicant's eligibility for model general permit template, applicable requirements not covered by the model general permit template, and the applicable procedural requirements for issuance of Title V Operating Permits.

The following permit conditions, including their underlying applicable requirements, originate from model general permit templates and are not subject to further EPA or public review:

• Conditions 2-42 of the requirements for permit unit S1413-0-2.

# VI. APPLICABLE REQUIREMENTS ADDRESSED BY GENERAL PERMIT TEMPLATES

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 2020, <u>Exemptions</u> (amended March 21, 2002)

District Rule 2031, <u>Transfer of Permits</u> (adopted December 17, 1992)

District Rule 2040, Applications (amended December 17, 1992)

District Rule 2070, <u>Standards for Granting Applications</u> (adopted December 17, 1992)

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

District Rule 2520, <u>Federally Mandated Operating Permits</u> [sections 5.2, 9.1.1, 9.4, 9.5, 9.7, 9.8, 9.9, 9.13.1, 9.13.2, 9.16 and 10.0], (amended June 21, 2001)

District Rule 4101, Visible Emissions (amended February 17, 2005)

District Rule 4601, Architectural Coatings (amended December 17, 2009)

District Rules 8011, 8021, 8031, 8041, 8051, 8061, 8071, <u>Fugitive Dust (PM10)</u> <u>Emissions</u> (amended August 19, 2004)

District Rule 8071, <u>Fugitive Dust (PM10) Emissions</u> (amended September 16, 2004)

40 CFR Part 82, Subpart B and F, Stratospheric Ozone

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

# VII. APPLICABLE REQUIREMENTS NOT ADDRESSED BY GENERAL PERMIT TEMPLATES

District Rule 1081, Source Sampling (amended December 16, 1993)

District Rule 2201, New and Modified Stationary Source Review Rule (amended September 21, 2006)

- District Rule 2520, Federally Mandate Operating Permits (Amended June 21, 2001)
- District Rule 4201, Particulate Matter Concentration (Amended December 17, 1992)
- District Rule 4301, Fuel Burning Equipment (Amended December 17, 1992)
- District Rule 4305, Boilers, Steam Generators and Process Heaters Phase 2 (amended August 21, 2003)
- District Rule 4306, Boilers, Steam Generators and Process Heaters Phase 3 (amended March 17, 2005)
- District Rule 4351, Boilers, Steam Generators and Process Heaters Phase 1 (amended August 21, 2003)
- District Rule 4623, Storage of Organic Liquids (amended May 19, 2005)

District Rule 4801, <u>Sulfur Compounds</u> (Amended December 17, 1992)

40 CFR Part 60 Subpart Dc, <u>Standards of Performance for Small Industrial</u> <u>Commercial-Industrial Steam Generators</u>

40 CFR Part 64, <u>Compliance Assurance Monitoring (CAM)</u>

# VIII. 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.

This facility is subject to the following rules that are not currently federally enforceable:

### 1. District Rule 1070, Inspections (amended December 16, 1993)

The purpose of this rule is to explain the District's authority in determining compliance with the requirements of these rules and regulations.

a. S-1413-4-11: CRUDE OIL STORAGE AND TRANSFER OPERATION CONSISTING OF A 67,000 BBL (2,814,000 GALLON) RIVETED EXTERNAL FLOATING ROOF CRUDE OIL STORAGE TANK #105 WITH A MECHANICAL SHOE PRIMARY SEAL, WIPER TYPE SECONDARY SEAL, AND SLOTTED GUIDEPOLE (BAKERSFIELD PUMP STATION)

Conditions 32 and 48 on permit unit S-1413-4-11 ensure compliance with this rule.

b. S-1413-6-6: CRUDE OIL STORAGE AND TRANSFER OPERATION INCLUDING A 67,000 BARREL (2,81/4,000 GALLON) RIVETED EXTERNAL FLOATING ROOF CRUDE OIL STORAGE TANK #106 WITH MECHANICAL SHOE PRIMARY SEAL AND WIPER TYPE SECONDARY SEAL (BAKERSFIELD PUMP STATION)

Condition 31 on permit unit S-1413-6-6 ensures compliance with this rule.

- c. S-1413-7-6: 67,000 BBL (2,814,000 GALLON) INTERNAL FLOATING ROOF CRUDE OIL STORAGE TANK T 670-S-102 WITH ALTECH ALCLAD ALUMINUM PONTOON INTERNAL FLOATING ROOF WITH PRIMARY LIQUID MOUNTED FOAM LOG SEAL AND SECONDARY WIPER SEAL (BAKERSFIELD PUMP STATION)
- d. S-1413-8-6: 67,000 BBL (2,814,000 GALLONS) RIVETED FIXED ROOF CRUDE OIL STORAGE TANK T 670-S-101 WITH PAN INTERNAL FLOATING ROOF WITH ALTECH DOUBLE WIPER SEAL (BAKERSFIELD PUMP STATION)

e. S-1413-9-7: 67,000 BBL (2,814,000 GALLON) INTERNAL FLOATING ROOF CRUDE OIL STORAGE TANK # 103 WITH TOROID PRIMARY SEAL AND SECONDARY WIPER SEAL (BAKERSFIELD PUMP STATION)

Condition 22 on permit units S-1413-7-6, S-1413-8-6, and S-1413-9-7 ensures compliance with this rule.

- f. S-1413-10-8: CRUDE OIL STORAGE AND TRANSFER OPERATION INCLUDING A 67,000 BBL (2,814,000 GALLON) RIVETED INTERNAL FLOATING ROOF CRUDE OIL STORAGE TANK #104 WITH MECHANICAL SHOE PRIMARY SEAL AND WIPER TYPE SECONDARY SEAL (BAKERSFIELD PUMP STATION)
- g. S-1413-11-8: CRUDE OIL STORAGE AND TRANSFER OPERATION INCLUDING A 67,000 BARREL (2,814,000 GALLON) RIVETED INTERNAL FLOATING ROOF CRUDE OIL STORAGE TANK #107 (TK670S107) WITH MECHANICAL SHOE PRIMARY SEAL AND WIPER TYPE SECONDARY SEAL (BAKERSFIELD PUMP STATION)
- h. S-1413-12-8: CRUDE OIL STORAGE AND TRANSFER OPERATION INCLUDING A 67,000 BBL (2,814,000 GALLON) RIVETED INTERNAL FLOATING ROOF CRUDE OIL STORAGE TANK #108 (TK670S108) WITH MECHANICAL SHOE PRIMARY SEAL AND WIPER TYPE SECONDARY SEAL (BAKERSFIELD PUMP STATION)

Condition 24 on permit units S-1413-10-8, S-1413-11-8, and S-1413-12-8 ensures compliance with this rule.

i. S-1413-13-11: 20 MMBTU/HR BROACH NATURAL DRAFT HEATER WITH TWO NORTH AMERICAN MODEL 4211-12-LE-10 ULTRA LOW NOX BURNERS AND A FLUE GAS RECIRCULATION (FGR) SYSTEM

Condition 24 on permit unit S-1413-13-11 ensures compliance with this rule.

j. S-1413-14-2: 400 GALLON FIXED ROOF SOLVENT STORAGE TANK

Conditions 2 and 3 on permit unit S-1413-14-2 ensure compliance with this rule.

# 2. District Rule 4102, Nuisance (amended December 17, 1992)

For this facility, condition 1 of the requirements for permit unit S-1413-0-2 is based on District Rule 4102 and is not Federally enforceable through Title V.

# 3. District Rule 4320, Advanced Emission Reduction Options For Boilers, Steam Generators, and Process Heaters Greater Than 5.0 MMBtu/hr, (adopted October 16, 2008)

The purpose of this rule is to limit emissions of oxides of nitrogen  $(NO_X)$ , carbon monoxide (CO), oxides of sulfur  $(SO_2)$ , and particulate matter 10 microns or less  $(PM_{10})$  from boilers, steam generators, and process heaters.

The rule was adopted on October 16, 2008 and has not yet been approved into the State Implementation Plan (SIP). In addition, the deadline to meet compliance with the requirements of this rule has not yet passed. Therefore, the boiler in this project is not currently subject to the requirements of this rule, and the requirements of this rule will not be addressed in this evaluation.

# IX. COMPLIANCE

## A. Requirements Addressed by Model General Permit Templates

Facility-Wide Requirements

The applicant is proposing to use a general permit template to address federally applicable facility-wide requirements. Section IV of template SJV-UM-0-2 includes a demonstration of compliance for all applicable requirements. Template conditions have been added to the facility wide requirements as condition numbers 2 through 42 to ensure compliance with these requirements.

The current version of template #SJV-UM-0-2 does not address the requirements from the latest versions of District Rules 8011, 8021, 8031, 8041, 8051, 8061, and 8071 (amended 8/19/04). The latest versions of these rules are included in the State Implementation Plan (SIP). Conditions 30 through 35 on the facility-wide permit (S-1413-0-2) demonstrate compliance with the requirements of the latest versions of these rules. A comparison of the changes from the existing versions of the rules to the latest versions of the rules is included in Attachment E.

The current version of template #SJV-UM-0-2 does not address the requirements from the latest version of District Rule 4601 (amended

12/17/09). The latest version of District Rule 4601 has not been SIP approved. Attachment F contains the streamlining of the SIP approved District Rule 4601 (10/31/01) to the current District Rule 4601 to show the current rule is as stringent if not more than the SIP approved version. Conditions 24 through 26 on the facility-wide permit (S-1413-0-2) demonstrate compliance with the requirements of the latest version of this rule.

#### B. Requirements Not Addressed by Model General Permit Templates

# 1. New and Modified Stationary Source Review Rule (District NSR Rule)

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.

### 2. District Rule 2520, Federally Mandated Operating Permits

Section 9.3 requires that each permit shall contain 1) all emissions monitoring and analysis procedures or test methods required under the applicable requirements, 2) periodic monitoring to yield reliable data for the relevant time period that are representative of the source's compliance with the permit where applicable requirements do not require periodic testing or instrumental or non-instrumental monitoring and 3) requirements, as necessary, concerning the use, maintenance, and where appropriate, installation of monitoring equipment or methods. Section 9.4.2 requires that recordkeeping be performed if none is associated with a given emission limit to assure compliance.

Section 9.14.1 of Rule 2520 requires that, for sources in violation of an applicable requirement, a schedule of compliance be included in the Title V permit. This source has not been determined to be in violation of any applicable requirements.

# 3. District Rule 4201 Particulate Matter Concentration (Amended December 17, 1992)

District Rule 4201 requires emissions to be at or below 0.1 grains of particulate matter per dry standard cubic foot of exhaust gas.

The following analysis demonstrates that PM emissions from a boiler fired exclusively on natural gas will not exceed 0.1 gr/dscf:

EPA F-factor: 8,578 dscf/MMBtu (40 CFR 60 Appendix B) PM10 Emission Factor: 0.0066 lb-PM10/MMBtu (Current PTO) Percentage of PM as PM10 in Exhaust: 100% Exhaust Oxygen (O<sub>2</sub>) Concentration: 3% Excess Air Correction to F Factor = 20.9 = 1.17 (20.9 - 3)

$$GL = \left(\frac{0.0066 \ lb - PM}{MMBtu} \times \frac{7,000 \ grain}{lb - PM}\right) / \left(\frac{8,578 \ ft^3}{MMBtu} \times 1.17\right)$$

 $GL = 0.0046 \, grain/dscf < 0.1 \, grain/dscf$ 

a. S-1413-13-11: 20 MMBTU/HR BROACH NATURAL DRAFT HEATER WITH TWO NORTH AMERICAN MODEL 4211-12-LE-10 ULTRA LOW NOX BURNERS AND A FLUE GAS RECIRCULATION (FGR) SYSTEM Condition 2 of the requirements for this permit unit ensures compliance with these requirements.

# 4. District Rule 4301 Fuel Burning Equipment (Amended December 17, 1992)

District Rule 4301 limits the emissions of air contaminants from fuel burning equipment. This rule limits the concentration of combustion contaminants and specifies maximum emission rates for sulfur dioxide, nitrogen oxide and combustion contaminant emissions. Sections 5.1 and 5.2.3 limits particulate matter emission. Section 5.1 limits the emission of combustion contaminants in the form of

Shell Pipleine Company LP Facility S-1413, Project S-1085436

PM to 0.1 grain per cubic foot of gas corrected to 12% carbon dioxide. Section 5.2.3 limits PM to 10 lb/hr. As previously demonstrated in District Rule 4201 - Particulate Matter Concentration the following unit listed shall not exceed 0.1 grain/dscf calculated to 12% CO<sub>2</sub>, nor 10 lb/hr.

Section 5.2.1 limits  $SO_x$  emission to 200 lb/hr.

Section 5.2.2 limits nitrogen oxides to 140 pounds per hour calculated as nitrogen dioxide (NO2).

a. S-1413-13-11: 20 MMBTU/HR BROACH NATURAL DRAFT HEATER WITH TWO NORTH AMERICAN MODEL 4211-12-LE-10 ULTRA LOW NOX BURNERS AND A FLUE GAS RECIRCULATION (FGR) SYSTEM

Condition 5 of the requirements for this permit unit ensures compliance with these requirements.

## 5. District Rule 4305, Boilers, Steam Generators and Process Heaters – Phase 2 (amended August 21, 2003)

The purpose of this rule is to limit the emissions of nitrogen oxides  $(NO_x)$  and carbon monoxide (CO) from boilers, steam generators and process heaters. This rule applies to any boiler, steam generator or process heater with a rated capacity greater than 5 MMBtu/hour.

Since emissions limits of District Rule 4306 and all other requirements are equivalent or more stringent than District Rule 4305 requirements, compliance with District Rule 4306 requirements will satisfy requirements of District Rule 4305. Therefore, the requirements of Rule 4305 are subsumed by compliance with District Rule 4306.

### 6. District Rule 4306, Boilers, Steam Generators and Process Heaters – Phase 3 (amended March 17, 2005)

Unit S-1413-13-11 is the only unit at this facility that is subject to the requirements of this rule.

The purpose of this rule is to limit emissions oxides of nitrogen  $(NO_x)$  and carbon monoxide (CO) from the operation of boilers, steam generators, and process heaters.

#### Section 5.1, NO<sub>X</sub> and CO Emissions Limits

Section 5.1.1 requires that except for units subject to Sections 5.2,  $NO_x$  and carbon monoxide (CO) emissions shall not exceed the limits specified in the following table. All ppmv emission limits specified in this section are referenced at dry stack gas conditions and 3.0 percent by volume stack gas oxygen. Emission concentrations shall be corrected to 3.0 percent oxygen in accordance with Section 8.1.

Cätegory	Operated on gaseous fuel		Operated on liquid fuel	
	NO <sub>x</sub> Limit	CO Limit	NO <sub>x</sub> Limit	CO Limit
A. Units with a rated heat input equal to or less than 20.0 MMBtu/hour, except for Categories C, D, E, F, G, H, and I units	15 ppmv or 0.018 Ib/MMBtu	400 ppmv	40 ppmv or 0.052 lb/MMBtu	400 ppmv

a. S-1413-13-11: 20 MMBTU/HR BROACH NATURAL DRAFT HEATER WITH TWO NORTH AMERICAN MODEL 4211-12-LE-10 ULTRA LOW NOX BURNERS AND A FLUE GAS RECIRCULATION (FGR) SYSTEM

Condition 5 of the requirements for this unit ensures compliance with these requirements.

#### Section 5.2, Low Use

The units at this facility annual heat input will exceed the 9 billion Btu heat input per calendar year criteria limit addressed by this section. Since the units are not subject to Section 5.2, the requirements of this section will not be discussed.

#### Section 5.3, Startup and Shutdown Provisions

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.

a. S-1413-13-11: 20 MMBTU/HR BROACH NATURAL DRAFT HEATER WITH TWO NORTH AMERICAN MODEL 4211-12-LE-10 ULTRA LOW NOX BURNERS AND A FLUE GAS RECIRCULATION (FGR) SYSTEM

Conditions 7 and 8 of the requirements for this unit ensure compliance with these requirements.

#### Section 5.4, Monitoring Provisions

Section 5.4.1 states that the operator of any unit which simultaneously fires gaseous and liquid fuels, and is subject to the requirements of Section 5.1, shall install and maintain an operational non-resettable, totalizing mass or volumetric flow meter in each fuel line to each unit. Volumetric flow measurements shall be periodically compensated for temperature and pressure.

Section 5.4.2 states that the operator of any unit subject to the applicable emission limits in Sections 5.1 shall install and maintain an operational APCO approved Continuous Emissions Monitoring System (CEMS) for NOx, CO, and oxygen, or implement an APCO-approved Alternate Monitoring System. An APCO approved CEMS shall comply 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 Part 60 Appendix B (Performance Specifications) and 40 CFR Part 60 Appendix F (Quality Assurance Procedures, and applicable provisions of Rule 1080 (Stack Monitoring). An APCO approved Alternate Monitoring System shall monitor one or more of the following:

- periodic NOx and CO exhaust emission concentrations,
- periodic exhaust oxygen concentration,
- flow rate of reducing agent added to exhaust,
- catalyst inlet and exhaust temperature,
- catalyst inlet and exhaust oxygen concentration,
- periodic flue gas recirculation rate,
- other operational characteristics.

Section 5.4.3 states requirements for units that are limited to a heat input less than 9 billion Btu per year. The applicant does not operate any units that are limit to an annual heat input less than 9 billion Btu; therefore the requirements of this section are not applicable to the unit in this project. Section 5.4.4 states requirements for units included in Category H. Since the boiler at this facility is not included in Category H, it is not subject to the requirements of this section.

Section 5.4.5 states the requirements for an APCO approve alternative monitoring system. The applicant only uses APCO approved monitoring schemes; therefore the requirements of this section are applicable.

a. S-1413-13-11: 20 MMBTU/HR BROACH NATURAL DRAFT HEATER WITH TWO NORTH AMERICAN MODEL 4211-12-LE-10 ULTRA LOW NOX BURNERS AND A FLUE GAS RECIRCULATION (FGR) SYSTEM

Conditions 10 through 14 of the requirements for this unit ensures compliance with these requirements.

#### Section 5.5, Compliance Determination

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 NO<sub>x</sub> 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.

a. S-1413-13-11: 20 MMBTU/HR BROACH NATURAL DRAFT HEATER WITH TWO NORTH AMERICAN MODEL 4211-12-LE-10 ULTRA LOW NOX BURNERS AND A FLUE GAS RECIRCULATION (FGR) SYSTEM

Conditions 5, 12, 14, 16, and 21 of the requirements for this unit ensures compliance with these requirements.

#### Section 6.1, Recordkeeping

Section 6.1 requires that the records required by Sections 6.1.1 through 6.1.4 shall be maintained for five calendar years and shall be made available to the APCO upon request. 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 6.1.1 applies to units seeking exemption under Section 4.2. None of the units at this facility are subject to the exemption.

Section 6.1.2 requires that the operator of a unit subject to Category H unit listed in Section 5.1.1 Table 1 or to Section 5.2 shall record the amount of fuel use at least on a monthly basis. No unit at this facility is subject to the requirements of Category H; therefore the requirements of this section are not applicable.

Section 6.1.3 requires that the operator of a unit subject to Section 5.2.1 or 6.3.1 shall maintain records to verify that the required tuneup and the required monitoring of the operational characteristics have been performed. Section 6.3.1 states that tune-ups required by Sections 5.2.1 and 6.3.1 do not need to be performed for units that operate and maintain an APCO approved CEMS or an APCO approved Alternate Monitoring System where the applicable emission limits are periodically monitored. All the units in this project maintain an APCO approved Alternate Monitoring System where the applicable emission limits are periodically monitored, therefore the requirements of this section are not applicable to the units in this project.

Section 6.1.4 requires the operator performing start-up or shutdown of a unit shall keep records of the duration of start-up or shutdown.

a. S-1413-13-11: 20 MMBTU/HR BROACH NATURAL DRAFT HEATER WITH TWO NORTH AMERICAN MODEL 4211-12-LE-10 ULTRA LOW NOX BURNERS AND A FLUE GAS RECIRCULATION (FGR) SYSTEM

Condition 9 of the requirements for this unit ensures compliance with these requirements.

#### Section 6.2, Test Methods

Section 6.2 identifies the following test methods as Districtapproved source testing methods for the pollutants listed:

Pollutant	Units	Test Method Required
NO <sub>X</sub>	ppmv	EPA Method 7E or ARB Method 100
NO <sub>X</sub>	lb/MMBtu	EPA Method 19
СО	ppmv	EPA Method 10 or ARB Method 100
Stack Gas O <sub>2</sub>	%	EPA Method 3 or 3A, or ARB Method 100
Stack Gas Velocities	ft/min	EPA Method 2
Stack Gas Moisture Content	%	EPA Method 4

In addition, fuel hhv shall be certified by third party fuel supplier or determined by: 6.2.1.1 ASTM D 240-87 or D 2382-88 for liquid hydrocarbon fuels; 6.2.1.2 ASTM D 1826-88 or D 1945-81 in conjunction with ASTM D 3588-89 for gaseous fuels.

a. S-1413-13-11: 20 MMBTU/HR BROACH NATURAL DRAFT HEATER WITH TWO NORTH AMERICAN MODEL 4211-12-LE-10 ULTRA LOW NOX BURNERS AND A FLUE GAS RECIRCULATION (FGR) SYSTEM

Conditions 17 through 20 of the requirements for this unit ensures compliance with these requirements.

#### Section 6.3, Compliance Testing

Section 6.3.1 requires that this unit be tested to determine compliance with the applicable requirements of section 5.1 and 5.2.3 not less than once every 12 months.

In addition, since the applicant has proposed to use pre-approved Alternate Monitoring Scheme "A" using a portable analyzer, the tune-up requirements listed in Section 6.3.1 is not applicable to the boiler. Section 6.3.1 also requires that, during the 36-month source testing interval, the owner/operator shall monthly monitor the operational characteristics recommended by the unit manufacturer. Since the pre-approved Alternate Monitoring Scheme "A" using a portable analyzer requires monthly monitoring of  $NO_X$ , CO, and  $O_2$  exhaust emissions concentrations, operational characteristics monitoring requirement is satisfied, and no further discussion is required.

a. S-1413-13-11: 20 MMBTU/HR BROACH NATURAL DRAFT HEATER WITH TWO NORTH AMERICAN MODEL 4211-12-LE-10 ULTRA LOW NOX BURNERS AND A FLUE GAS RECIRCULATION (FGR) SYSTEM

Condition 10 of the requirements for this unit ensures compliance with these requirements.

## 7. District Rule 4351, Boilers, Steam Generators and Process Heaters – Phase 1 (amended August 21, 2003)

The purpose of this rule is to limit the emissions of nitrogen oxides  $(NO_x)$  and carbon monoxide (CO) from boilers, steam generators and process heaters. This rule applies to any boiler, steam generator or process heater with a rated capacity greater than 5 MMBtu/hour.

Since emissions limits of District Rule 4306 and all other requirements are equivalent or more stringent than District Rule 4351 requirements, compliance with District Rule 4306 requirements will satisfy requirements of District Rule 4351. Therefore, the requirements of Rule 4351 are subsumed by compliance with District Rule 4306.

# 8. District Rule 4623, Storage of Organic Liquids (amended May 19, 2005)

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

### 4.0 Exemptions

Section 4.4 states that tanks exclusively receiving and/or storing an organic liquid with a true vapor pressure (TVP) less than 0.5 psia are exempt from all other requirements of the rule except for complying with TVP and API gravity testing, recordkeeping provisions, and test methods.

# a. S-1413-14-2: 400 GALLON FIXED ROOF SOLVENT STORAGE TANK

For permit unit S-1413-14-1 condition 1 ensures compliance with this requirement.

## 5.0 Requirements

Section 5.1.1 states that except for small producers who are required to comply with the VOC control system requirements in Section 5.1.2, an operator shall not place, hold, or store organic liquid in any tank unless such tank is equipped with a VOC control system identified in Table 1. The specifications for the VOC control system are described in Sections 5.2, 5.3, 5.4, 5.5, and 5.6.

Tank	True Vapor Pressure (TVP) of Organic Liquid			
Capacity (Gallons)	0.5 psia to <1.5 psia	1.5 psia to <11 psia	≥11.0 psia	
(Group A) 1,100 to 19,800	Pressure-vacuum relief valve, or internal floating roof, or external floating roof, or vapor recovery system	Pressure-vacuum relief valve, or internal floating roof, or external floating roof, or vapor recovery system	Pressure vessel or vapor recovery system	
(Group B) >19,800 to 39,600	Pressure-vacuum relief valve, or internal floating roof, or external floating roof, or vapor recovery system	Internal floating roof, or external floating roof, or vapor recovery system	Pressure vessel or vapor recovery system	
(Group C) >39,600	Internal floating roof, or external floating roof, or vapor recovery system	Internal floating roof, or external floating roof, or vapor recovery system	Pressure vessel or vapor recovery system	

Section 5.1.1 states that any fixed roof tank with a storage capacity of 39,600 gallons or larger and which stores an organic liquid with a True Vapor Pressure (TVP) of greater than 0.5 psia, but less than 11 psia shall control the VOC emissions by the use of an internal floating roof, or external floating roof, or a vapor recovery system.

a. Permit Unit S-1413-4-11

• Conditions 6 and 15 will assure compliance with the TVP and floating roof requirements of this section.

- b. Permit Unit S-1413-6-6
  - Conditions 4 and 13 will assure compliance with the TVP and floating roof requirements of this section.
- c. Permit Units S-1413-7-6, '-8-6, and '-9-7
  - Conditions 1 and 12 of the requirements of these permits will assure compliance with the TVP and floating roof requirements of this section.
- d. Permit Units S-1413-10-8, '-11-8, and '-12-8
  - Conditions 1 and 14 of the requirements of these permits will assure compliance with the TVP and floating roof requirements of this section.

Section 5.2 states that the pressure-vacuum relief valve shall be in leak-free condition and that the pressure-vacuum relief valve shall be set to within ten (10) percent of the maximum allowable working pressure of the tank.

- a. Permit Unit S-1413-4-11
  - Condition 19 will assure compliance with the pressure-vacuum relief valve requirements of this section.
- b. Permit Unit S-1413-6-6
  - Condition 17 will assure compliance with the pressure-vacuum relief valve requirements of this section.
- c. Permit Unit S-1413-7-6
  - Condition 13 will assure compliance with the pressure-vacuum relief valve requirements of this section.
- d. Permit Units S-1413-8-6 and '-9-7
  - Conditions 11 and 13 will assure compliance with the pressurevacuum relief valve requirements of this section.
- e. Permit Units S-1413-10-8, '-11-8, and'-12-8
  - Conditions 13 and 15 of the requirements of these permits will assure compliance with the pressure-vacuum relief valve requirements of this section.

Section 5.3.1 sets forth the requirements for the type of external floating roof that shall be operated, the type of closure device between the tank shell and roof edge that shall be operated and the floating roof landing requirements.

- a. Permit Unit S-1413-4-11
  - Conditions 5 and 6 of the requirements of this permit will assure compliance with the external floating roof requirements of this section.
- b. Permit Unit S-1413-6-6
  - Conditions 3 and 4 will assure compliance with the external floating roof requirements of this section.
- c. Permit Units S-1413-7-6, '-8-6, '-9-7, '-10-8, '-11-8, and '-12-8
  - Condition 1 of the requirements of these permits will assure compliance with the external floating roof requirements of this section.

Section 5.3.2 sets forth the requirements for the installation and operation of the primary and secondary seals on external floating roof storage tanks.

- a. Permit Unit S-1413-4-11
  - Conditions 5 and 6 of the requirements of this permit will assure compliance with the primary and secondary seal requirements of this section.
- b. Permit Unit S-1413-6-6
  - Conditions 3 and 4 will assure compliance with the primary and secondary seal requirements of this section.
- c. Permit Units S-1413-7-6, '-8-6, '-9-7, '-10-8, '-11-8, and '-12-8
  - Condition 1 of the requirements of these permits will assure compliance with the primary and secondary seal requirements of this section.

Section 5.4.1 sets forth the requirements for the installation and operation of the primary and secondary seals on internal floating roofs. It also states that for metallic-shoe type seals on internal floating roofs 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.

- a. Permit Unit S-1413-4-11
  - Conditions 3 and 5 through 18 of the requirements of this permit will assure compliance with the primary and secondary seal requirements for internal floating roof tanks.
- b. Permit Unit S-1413-6-6
  - Conditions 1, 3, and 5 through 16 of the requirements of this permit will assure compliance with the primary and secondary seal requirements for internal floating roof tanks.
- c. Permit Units S-1413-7-6, '-8-6, '-9-7
  - Conditions 2 through 10 of the requirements of this permit will assure compliance with the primary and secondary seal requirements for internal floating roof tanks.
- d. Permit Units S-1413-10-8, '-11-8, and '-12-8
  - Conditions 2 through 12 of the requirements of this permit will assure compliance with the primary and secondary seal requirements for internal floating roof tanks.

Section 5.4.2 describes the seal designs that have been found to be equivalent to the seals meeting the criteria set forth in Section 5.3. When installed with zero gap: 1) Ultraflote, model Single Ultraseal. When installed and maintained to meet the gap criteria for primary and secondary seals set forth in Sections 5.3.2.1 through 5.3.2.3: 1) Ultraflote, model Dual Ultraseal; and 2) Altech, model Double Wiper Seal.

- a. Permit Unit S-1413-4-11
  - Conditions 3 and 5 through 18 of the requirements of this permit will assure compliance with the with the seal requirements of this section.
- b. Permit Unit S-1413-6-6
  - Conditions 1, 3, and 5 through 16 of the requirements of this permit will assure compliance with the seal requirements of this section.
- c. Permit Units S-1413-7-6, '-8-6, '-9-7
  - Conditions 2 through 10 of the requirements of this permit will assure compliance with the seal requirements of this section.

- d. Permit Units S-1413-10-8, '-11-8, and '-12-8
  - Conditions 2 through 12 of the requirements of this permit will assure compliance with the seal requirements of this section.

Section 5.4.3 states that internal floating roofs shall comply with the external floating roof landing requirements specified in Section 5.3.1.3.

a. Permit Unit S-1413-4-11

- Condition 6 will assure compliance with the floating roof landing requirements of this section.
- b. Permit Unit S-1413-6-6
  - Condition 4 will assure compliance with the floating roof landing requirements of this section.
- c. Permit Units S-1413-7-6, '-8-6, and '-9-7
  - Condition 1 of the requirements of these permits will assure compliance with the floating roof landing requirements of this section.
- d. Permit Units S-1413-10-8, '-11-8, and '-12-8
  - Condition 1 of the requirements of these permits will assure compliance with the floating roof landing requirements of this section.

Section 5.5.1 describes the requirements for all openings in the roof used for sampling or gauging, except for pressure-vacuum valves which shall be set to within ten (10) percent of the maximum allowable working pressure of the roof.

- a. Permit Unit S-1413-4-11
  - Condition 19 will assure compliance with the floating roof landing requirements of this section.
- b. Permit Unit S-1413-6-6
  - Condition 17 will assure compliance with the floating roof landing requirements of this section.
- c. Permit Units S-1413-7-6, '-8-6, and '-9-7

- Condition 13 of the requirements of these permits will assure compliance with the floating roof landing requirements of this section.
- d. Permit Units S-1413-10-8, '-11-8, and '-12-8
  - Condition 15 of the requirements of these permits will assure compliance with the floating roof landing requirements of this section.

Section 5.5.2.1 establishes the requirements for all internal floating roof deck fittings.

- a. Permit Units S-1413-7-6, '-8-6, and '-9-7
  - Conditions 15 through 20 of the requirements of these permits will assure compliance with the internal floating roof deck fitting requirements of this section.
- b. Permit Units S-1413-10-8, '-11-8, and '-12-8
  - Conditions 17 through 22 of the requirements of these permits will assure compliance with the internal floating roof deck fitting requirements of this section.

Section 5.5.2.2 establishes the requirements for all external floating roof deck fittings.

- a. Permit Unit S-1413-4-11
  - Conditions 21 through 26 of the requirements of this permit will assure compliance with the external floating roof deck fitting requirements of this section.
- b. Permit Unit S-1413-6-6
  - Conditions 19 through 24 will assure compliance with the external floating roof deck fitting requirements of this section.

Section 5.5.2.3 establishes the requirements for all solid guidepoles.

- a. Permit Unit S-1413-4-11
  - Conditions 28 and 29 of the requirements of this permit will assure compliance with the solid guidepole requirements of this section.

## b. Permit Unit S-1413-6-6

• Conditions 19 through 24 will assure compliance with the solid guidepole requirements of this section.

## 9. 40 CFR Part 60, Subpart Dc – <u>Standards of Performance for</u> Small Industrial-Commercial-Industrial Steam Generators

This rule incorporates NSPS from Part 60, Chapter 1, Title 40, Code of Federal Regulations (CFR); and applies to all new sources of air pollution and modifications of existing sources of air pollution listed in 40 CFR Part 60. 40 CFR Part 60, Subpart Dc applies to Small Industrial-Commercial-Industrial Steam Generators between 10 MMBtu/hr and 100 MMBtu/hr (post-6/9/89 construction, modification or, reconstruction). Subpart Dc has standards for SO<sub>X</sub> and PM<sub>10</sub>. The 20 MMBtu/hr boiler is subject to Subpart Dc requirements.

### §60.332 Standard for Sulfur Dioxide:

Since coal is not combusted by the boiler in this project, the requirements of this section are not applicable.

### § 60.43c Standards for Particulate Matter

The boiler is not fired on coal, combusts mixtures of coal with other fuels, combusts wood, combusts mixtured of wood with other fuels, or oil; therefore it will not be subject to the requirements of this section.

## <u>§60.44c Compliance and Performance Tests Methods and</u> <u>Procedures for Sulfur Dioxide.</u>

Since the boiler in this project is not subject to the sulfur dioxide requirements of this subpart, no testing to show compliance is required. Therefore, the requirements of this section are not applicable to the boiler in this project.

## <u>§60.45c</u> <u>Compliance and Performance Test Methods and</u> <u>Procedures for Particulate Matter</u>

Since the boiler in this project is not subject to the particulae matter requirements of this subpart, no testing to show compliance is required. Therefore, the requirements of this section are not applicable to the boiler in this project.

#### §60.46c Emission Monitoring for Sulfur Dioxide

Since the boiler in this project is not subject to the sulfur dioxide requirements of this subpart, no monitoring is required. Therefore, the requirements of this section are not applicable to the boiler in this project.

#### <u>§60.47c Emission Monitoring for Particulate Matter</u>

Since the boiler in this project is not subject to the particulate matter requirements of this subpart, no monitoring is required. Therefore, the requirements of this section are not applicable to the boiler in this project.

#### §60.48c Reporting and Recordingkeeping Requirements

Section 60.48c (a) states that the owner or operator of each affected facility shall submit notification of the date of construction or reconstruction, anticipated startup, and actual startup, as provided by §60.7 of this part. This notification shall include:

- (1) The design heat input capacity of the affected facility and identification of fuels to be combusted in the affected facility. The design heat input capacity and type of fuel combusted at the facility will be listed on the unit's equipment description. No conditions are required to show compliance with this requirement.
- (2) If applicable, a copy of any Federally enforceable requirement that limits the annual capacity factor for any fuel mixture of fuels under §60.42c or §40.43c.

This requirement is not applicable since the units are not subject to §60.42c or §40.43c.

(3) The annual capacity factor at which the owner or operator anticipates operating the affected facility based on all fuels fired and based on each individual fuel fired.

The facility has not proposed an annual capacity factor, therefore one will not be required.

(4) Notification if an emerging technology will be used for controlling SO<sub>2</sub> emissions. The Administrator will examine the description of the control device and will determine whether the technology qualifies as an emerging technology. In making this determination, the Administrator may require the owner or operator of the affected facility to submit additional information concerning the control device. The affected facility is subject to the provisions of §60.42c(a) or (b)(1), unless and until this determination is made by the Administrator

This requirement is not applicable since the unit will not be equipped with an emerging technology used to control SO<sub>2</sub> emissions.

Section 60.48 c (g) states that the owner or operator of each affected facility shall record and maintain records of the amounts of each fuel combusted during each day.

Section 60.48 c (i) states that all records required under this section shall be maintained by the owner or operator of the affected facility for a period of two years following the date of such record. District Rule 4306 requires that records be kept for five years.

a. S-1413-13-11: 20 MMBTU/HR BROACH NATURAL DRAFT HEATER WITH TWO NORTH AMERICAN MODEL 4211-12-LE-10 ULTRA LOW NOX BURNERS AND A FLUE GAS RECIRCULATION (FGR) SYSTEM

Conditions 23 and 24 of the requirements for this unit ensures compliance with these requirements

## 10. 40 CFR Part 64, <u>Compliance Assurance Monitoring (CAM)</u> <u>§64.2 – Applicability</u>

This section requires Compliance Assurance Monitoring (CAM) for units that meet the following three criteria:

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

Pollutant	Major Source Threshold (Ib/year)
VOC	50,000
NOx	50,000
CO	200,000
PM <sub>10</sub>	140,000
SOx	140,000

- a. S-1413-13-11: 20 MMBTU/HR BROACH NATURAL DRAFT HEATER WITH TWO NORTH AMERICAN MODEL 4211-12-LE-10 ULTRA LOW NOX BURNERS AND A FLUE GAS RECIRCULATION (FGR) SYSTEM
  - 1) This unit contains emission limits for NO<sub>X</sub>, SO<sub>X</sub>, PM<sub>10</sub>, CO, and VOC.
  - 2) This unit is served by a Flue Gas Recirculation (FGR) system to control NO<sub>x</sub> emissions.
  - 3) The FGR system will be assumed to have 70% control efficiency.

#### Pre-control Annual PE:

- PE = EF (lb/MMBtu) x Heat Input (MMBtu/hr) x 8,760 hr/year = (0.015 lb-NO<sub>x</sub>/MMBtu) x (20 MMBtu/hr) x (8,760
  - hr/vear)
  - = 2,628 lb-NO<sub>X</sub>/year

Pre-control PE = PE ÷ (1 – CE) = (2,628 lb-NO<sub>X</sub>/year) ÷ (1 – 0.7) = **8,760 lb-NO<sub>X</sub>/year** 

Since 8,760 lb-NO<sub>x</sub>/yr < 50,000 lb-NO<sub>x</sub>/yr (Major Source threshold for NO<sub>x</sub>), this unit is not subject to CAM for NO<sub>x</sub> emissions.

b. Permit Units S-1413-4-11, '-6-6, '7-6, '-8-6, '-9-7, '-10-8, '-11-8, '-12-8, and '-14-2

These emissions units do not have emission limits for any criteria pollutants and are therefore not subject to CAM.

# X. 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

Shell Pipleine Company LP Facility S-1413, Project S-1085436

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.

#### **Requirements Addressed by Model General Permit Templates**

By using the model general permit template(s) listed in Section IV of this evaluation, the applicant has requested that a permit shield be issued for requirements addressed in the template(s). The basis for each permit shield is discussed in the Permit Shield section of each template.

## XI. PERMIT CONDITIONS

See Attachment A - Draft Renewed Title V Operating Permit.

# XII. ATTACHMENTS

- A. Draft Renewed Title V Operating Permit
- B. Existing Title V Operating Permit and Implemented ATC's
- C. Detailed Facility List
- D. Template Qualification Form
- E. Current District Rule SIP Comparisons
- F. Rule 4601 SIP Comparison

# ATTACHMENT A

Draft Renewed Title V Operating Permit

.

# San Joaquin Valley Air Pollution Control District

FACILITY: S-1413-0-2

EXPIRATION

# FACILITY-WIDE REQUIREMENTS

- 1. {98} No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
- {2285} 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
- {2286} 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. {2287} 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. {2288} 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. {2289} 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. {2290} 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. {2291} 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. {2292} 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

# FACILITY-WIDE REDUREMENTS CONTINUE ON NEXT PAGE

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

Location: BAKERSFIELD PUMP STATION, 1801 PETROL RD, BAKERSFIELD, CA 93308-9793 5/113-02: Apr 29 2010 11:23AM - SALINASM Facility-wide Requirements for S-1413-0-2 (continued)

- 10. {2293} 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
- 11. {2294} 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. {2295} 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. {2296} 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. {2297} 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. {2298} 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. {2299} 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. {2300} 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. {2301} 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. {2302} 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. {2303} 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. {2304} 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. {2305} 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

Facility-wide Requirements for S-1413-0-2 (continued)

- 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
- 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 (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 for architectural coatings subject to Rule 4601 (12/17/09) shall be stored in closed containers when not in use. [District Rule 4601, 5.4] Federally Enforceable Through Title V Permit
- 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. {2310} 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. {2311} 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
- {2312} 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 (08/19/04) or Rule 8011 (08/19/04). [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 (08/19/04) or Rule 8011 (08/19/04). [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 (08/19/04) or Rule 8011 (08/19/04). [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 (08/19/04) or Rule 8011 (08/19/04). [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 (08/19/04) or Rule 8011 (08/19/04). [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 (09/16/04) or Rule 8011 (08/19/04). [District Rule 8071 and Rule 8011] Federally Enforceable Through Title V Permit

Facility-wide Requirements for S-1413-0-2 (continued)

- 36. {2319} 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
- 37. {2320} 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. {2321} 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. {2322} 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. {2323} 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
- 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 (02/17/05); 4601, sections 5.1, 5.2, 5.3, and 5.8 (12/17/09); 8021 (08/19/04); 8031 (08/19/04); 8041 (08/19/04); 8051 (08/19/04); 8061 (08/19/04); and 8071 (09/16/04). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
- 42. On June 30, 2005, the initial Title V permit was issued. The reporting periods for the Report of Required Monitoring and the Compliance Certification Report begin July 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

These terms and conditions are part of the Facility-wide Permit to Operate. Facility Name: SHELL PIPELINE COMPANY LP Location: BAKERSFIELD PUMP STATION, 1801 PETROL RD, BAKERSFIELD, CA 93308-9793

PERMIT UNIT: S-1413-4-11

SECTION: SW35 TOWNSHIP: 28S RANGE: 27E

#### **EQUIPMENT DESCRIPTION:**

EXPIRATION 2010

CRUDE OIL STORAGE AND TRANSFER OPERATION CONSISTING OF A 67,000 BBL (2,814,000 GALLON) RIVETED EXTERNAL FLOATING ROOF CRUDE OIL STORAGE TANK #105 WITH A MECHANICAL SHOE PRIMARY SEAL, WIPER TYPE SECONDARY SEAL, AND SLOTTED GUIDEPOLE (BAKERSFIELD PUMP STATION)

## PERMIT UNIT REQUIREMENTS

- 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
- 2. Tank throughput shall not exceed 67,000 bbl/day. [District Rule 2201] Federally Enforceable Through Title V Permit
- 3. Tank shall be equipped with Weather Guard mechanical shoe primary seal and wiper type secondary seal. [District NSR Rule and District Rule 4623, 5.3.2.4.1] Federally Enforceable Through Title V Permit
- 4. The operation shall include four centrifugal loading pumps, three centrifugal recirculation pumps, two heat exchangers, piping network, and an underground steel sump tank. [District NSR Rule] Federally Enforceable Through Title V Permit
- 5. This tank shall be equipped with a closure device between the tank shell and roof edge consisting of two seals mounted one above the other; the one below shall be referred to as the primary seal, and the one above shall be referred as the secondary seal. [District Rule 4623, 5.3.1.2] Federally Enforceable Through Title V Permit
- 6. 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 Rules 4623, 5.3.1.3] Federally Enforceable Through Title V Permit
- 7. Gaps between the tank shell and the primary seal shall not exceed 2 1/2 inches. [District Rule 4623, 5.3.2.2.1] Federally Enforceable Through Title V Permit
- 8. The cumulative length of all primary seal gaps greater than 1 1/2 inches shall not exceed 10% of the circumference of the tank. [District Rule 4623, 5.3.2.2.1] Federally Enforceable Through Title V Permit
- 9. 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, 5.3.2.2.1] Federally Enforceable Through Title V Permit
- 10. No continuous gap in the primary seal greater than 1/8 inch wide shall exceed 10% of the tank circumference. [District Rule 4623, 5.3.2.2.1] Federally Enforceable Through Fitle V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE These terms and conditions are part of the Facility-wide Permit to Operate. Permit Unit Requirements for S-1413-4-11 (continued)

- 11. No gap between the tank shell and the secondary seal shall exceed 1/2 inch. [District Rule 4623, 5.3.2.2.2] 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, 5.3.2.2.2] 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, 5.3.2.2.3] 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 5 inches for a length of at least 18 inches in the vertical plane above the liquid. [District Rule 4623, 5.3.2.2.3] Federally Enforceable Through Title V Permit
- 15. True vapor pressure of crude oil stored, transferred, or heated shall not exceed 8.0 psia. [District NSR Rule] 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, 5.3.2.2.4] Federally Enforceable Through Title V Permit
- 17. The secondary seal shall allow easy insertion of probes up to 2 1/2 inches in width in order to measure gaps in the primary seal. [District Rule 4623, 5.3.2.2.5] 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, 5.3.2.2.6] 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 leak-free, except when the device or appurtenance is in use. [District Rule 4623, 5.5.1] Federally Enforceable Through Title V Permit
- 20. A leak-free condition is defined as a condition without a gas leak or a liquid leak. A liquid leak is defined as the dripping of organic liquid at a rate of more than 3 drops per minute. A gas leak is defined as a reading in excess of 10,000 ppmv, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21. A liquid leak or reading in excess of 10,000 ppmv above background is a violation of this permit and Rule 4623 and shall be reported as a deviation. [District Rule 4623] Federally Enforceable Through Title V Permit
- 21. 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
- 22. 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
- 23. 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] Federally Enforceable Through Title V Permit
- 24. 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 Rules 4623, 5.5.2.2.4] Federally Enforceable Through Title V Permit
- 25. 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

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

Permit Unit Requirements for S-1413-4-11 (continued)

- 26. External floating roof legs shall be equipped with vapor socks or vapor barriers in order to maintain a leak-free 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
- 27. All wells and similar fixed projections through the floating roof shall provide a projection below the liquid surface. [District Rule 4623, 5.5.2.4.1] Federally Enforceable Through Title V Permit
- 28. The slotted guidepole well on a 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
- 29. The gap between the pole wiper and the slotted guidepole shall be added to the gaps measured to determine compliance with the secondary seal requirement, and in no case shall exceed 1/8 inch. [District Rule 4623, 5.5.2.4.3]
- Oil throughput of sump shall not exceed 5,200 gal/day. [District NSR Rule] Federally Enforceable Through Title V Permit
- 31. Permittee shall notify the District in writing upon each occasion when the crude oil received, stored, handled, transferred, or loaded into railcars is heated in the heat exchangers. [District NSR Rule] Federally Enforceable Through Title V Permit
- 32. Permittee shall notify District at least 7 days prior to the date when unobstructed primary and secondary seal/gap measurements will occur. [District Rule 1070] Federally Enforceable Through Title V Permit
- 33. Combustion contaminant emissions from fired equipment shall not increase due to increased throughput at heat exchangers. [District NSR Rule] Federally Enforceable Through Title V Permit
- 34. Fugitive volatile organic compound (VOC) emissions shall not exceed 17.7 lb/day (combined fugitive emissions from permits S-1413-4 and S-1413-6). [District Rule 2201] Federally Enforceable Through Title V Permit
- 35. The permittee of external floating roof tanks 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. 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
- 36. The permittee shall inspect all floating tanks at least once every 12 months to determine compliance with the requirements of this rule. 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] Federally Enforceable Through Title V Permit
- 37. The permittee shall inspect the primary and secondary seals for compliance with the requirements of this rule every time a tank is emptied or degassed. Actual gap measurements shall be performed when the liquid level is static but not more than 24 hours after the tank roof is re-floated. [District Rule 4623, 6.1.3.1.2] Federally Enforceable Through Title V Permit
- 38. 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 Rule 4623. [District Rule 4623, 6.3.5] Federally Enforceable Through Title V Permit
- 39. Permittee shall maintain record of liquids stored, daily throughput, storage temperature, storage period, maximum RVP & TVP of liquid during respective storage period, and shall make such records readily available for District inspection upon request. [District NSR Rule] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

Permit Unit Requirements for S-1413-4-11 (continued)

- 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] Federally Enforceable Through Title V Permit
- 41. All records required to be maintained by this permit shall be maintained for a period of at least five years and shall be made readily available for District inspection upon request. [District Rule 4623, 6.3] Federally Enforceable Through Title V Permit
- 42. This unit was constructed prior to 1973 and has not been modified (as defined in 40 CFR 60.14) or reconstructed (as defined in 40 CFR 60.15) since 1973. Therefore, the requirements of 40 CFR 60 are not applicable to this unit. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
- 43. Permittee shall conduct API gravity and True Vapor Pressure (TVP) testing of the organic liquid stored in this tank at actual storage temperature of the organic liquid in the tank within 30 days of tank filling and annually thereafter during summer (July September), and/or whenever there is a change in the source or type of organic liquid stored in this tank. [District Rule 2201] Federally Enforceable Through Title V Permit
- 44. 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 2201] Federally Enforceable Through Title V Permit
- 45. The API gravity of crude oil or petroleum distillate shall be determine by using ASTM Method D 287 e1 "Standard Test Method for API gravity of Crude Petroleum and Petroleum Products (Hydrometer Method)". Sampling for API gravity shall be performed in accordance with ASTM Method D 4057 "Standard Practices for Manual Sampling of Petroleum and Petroleum Products". [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
- 46. For crude oil with an API gravity of 26 degrees or less, the TVP shall be determined using the latest version of the Lawrence Berkeley National Laboratory "Test Method for Vapor Pressure of Reactive Organic Compounds in Heavy Crude Oil Using Gas Chromatograph", as approved by ARB and EPA. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
- 47. For any organic liquid, except crude oil with an API gravity of 26 degrees or less, the true vapor pressure (TVP) shall be determined by measuring Reid Vapor Pressure (RVP) with ASTM Method D 323 and converting the RVP to TVP at the tank's maximum organic liquid storage temperature. The conversion of RVP to TVP shall be done in accordance with the oil and gas section of "California Air Resources Boards (ARB) Technical Guidance Document to the Criteria and Guidelines Regulation for AB 2588", dated August 1989. As an alternative to using ASTM D 323, the TVP of crude oil with an API gravity range of greater than 26 degrees up to 30 degrees may be determined by using other equivalent test methods approved by APCO, ARB and EPA. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
- 48. Permittee shall submit the records of TVP and API gravity testing to the APCO within 45 days after the date of testing. The records shall include the tank identification number, Permit to Operate number, type of stored organic liquid, TVP and API gravity of the organic liquid, test methods used, and a copy of the test results. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
- 49. Operators of floating roof tanks shall submit a tank inspection plan to the APCO for approval. The plan shall include an inventory of the tanks subject to this rule and a tank inspection schedule. A copy of the operator's tank safety procedures shall be made available to the APCO upon request. The tank inventory shall include tank's identification number, PTO number, maximum tank capacity, dimensions of tank (height and diameter), organic liquid stored, type of primary and secondary seal, type of floating roof (internal or external floating roof), construction date of tank, and location of tank. Any revision to a previously approved tank inspection schedule shall be submitted to the APCO for approval prior to conducting an inspection. [District Rule 4623, 6.1.2] Federally Enforceable Through Title V Permit

PERMIT UNIT: S-1413-6-6

### SECTION: SW35 TOWNSHIP: 28S RANGE: 27E

#### **EQUIPMENT DESCRIPTION:**

EXPIRATIONDALE: 04/30/2010

CRUDE OIL STORAGE AND TRANSFER OPERATION INCLUDING A 67,000 BARREL (2,814,000 GALLON) RIVETED EXTERNAL FLOATING ROOF CRUDE OIL STORAGE TANK #106 WITH MECHANICAL SHOE PRIMARY SEAL AND WIPER TYPE SECONDARY SEAL (BAKERSFIELD PUMP STATION)

### **PERMIT UNIT REQUIREMENTS**

- 1. Tank shall be equipped with Weather Guard mechanical shoe primary seal and wiper type secondary seal. [District NSR Rule and District Rule 4623, 5.3.2.4.1] Federally Enforceable Through Title V Permit
- The operation shall include four centrifugal loading pumps, three centrifugal recirculation pumps, two heat exchangers, piping network, and an underground steel sump tank. [District NSR Rule] Federally Enforceable Through Title V Permit
- 3. This tank shall be equipped with a closure device between the tank shell and roof edge consisting of two seals mounted one above the other; the one below shall be referred to as the primary seal, and the one above shall be referred as the secondary seal. [District Rule 4623] Federally Enforceable Through Title V Permit
- 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] Federally Enforceable Through Title V Permit
- 5. Gaps between the tank shell and the primary seal shall not exceed 2 1/2 inches. [District Rule 4623] Federally Enforceable Through Title V Permit
- 6. The cumulative length of all primary seal gaps greater than 1 1/2 inches shall not exceed 10% of the circumference of the tank. [District Rule 4623] Federally Enforceable Through Title V Permit
- 7. 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] Federally Enforceable Through Title V Permit
- 8. No continuous gap in the primary seal greater than 1/8 inch wide shall exceed 10% of the tank circumference. [District Rule 4623] Federally Enforceable Through Title V Permit
- 9. No gap between the tank shell and the secondary seal shall exceed 1/2 inch. [District Rule 4623] Federally Enforceable Through Title V Permit
- 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] Federally Enforceable Through Title V Permit
- 11. 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] Federally Enforceable Through Title V Permit

PERMIT UNIT REPHIREMENTS CONTINUE ON NEXT PAGE

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

Facility Name: SHELL PIPELINE COMPANY LP Location: BAKERSFIELD PUMP STATION, 1801 PETROL RD, BAKERSFIELD, CA 93308-9793 Permit Unit Requirements for S-1413-6-6 (continued)

- 12. 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 5 inches for a length of at least 18 inches in the vertical plane above the liquid. [District Rule 4623] Federally Enforceable Through Title V Permit
- 13. The true vapor pressure (TVP) of crude oil stored, transferred, or heated shall not exceed 8.0 psia. [District NSR Rule] Federally Enforceable Through Title V Permit
- 14. 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] Federally Enforceable Through Title V Permit
- 15. The secondary seal shall allow easy insertion of probes up to 2 1/2 inches in width in order to measure gaps in the primary seal. [District Rule 4623] Federally Enforceable Through Title V Permit
- 16. The secondary seal shall extend from the roof to the tank shell and shall not be attached to the primary seal. [District Rule 4623] Federally Enforceable Through Title V Permit
- 17. All openings in the roof used for sampling and gauging, except pressure-vacuum valves which shall be set to within 10% of the maximum allowable working pressure of the roof, shall provide a projection below the liquid surface to prevent belching of liquid and to prevent entrained or formed organic vapor from escaping from the liquid contents of the tank and shall be equipped with a cover, seal or lid that shall be in a closed position at all times, with no visible gaps and be leak-free, except when the device or appurtenance is in use. [District Rule 4623] Federally Enforceable Through Title V Permit
- 18. A leak-free condition is defined as a condition without a gas leak or a liquid leak. A liquid leak is defined as the dripping of organic liquid at a rate of more than 3 drops per minute. A gas leak is defined as a reading in excess of 10,000 ppmv, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21. A liquid leak or reading in excess of 10,000 ppmv above background is a violation of this permit and Rule 4623 and shall be reported as a deviation. [District Rule 4623] Federally Enforceable Through Title V Permit
- 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] Federally Enforceable Through Title V Permit
- 20. 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] Federally Enforceable Through Title V Permit
- 21. 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] Federally Enforceable Through Title V Permit
- 22. 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] Federally Enforceable Through Title V Permit
- 23. 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] Federally Enforceable Through Title V Permit
- 24. External floating roof legs shall be equipped with vapor socks or vapor barriers in order to maintain a leak-free condition so as to prevent VOC emissions from escaping through the roof leg opening. [District Rule 4623] Federally Enforceable Through Title V Permit
- 25. All wells and similar fixed projections through the floating roof shall provide a projection below the liquid surface. [District Rule 4623] Federally Enforceable Through Title V Permit

Permit Unit Requirements for S-1413-6-6 (continued)

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- 26. The slotted guidepole well on a 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] Federally Enforceable Through Title V Permit
- 27. The gap between the pole wiper and the slotted guidepole shall be added to the gaps measured to determine compliance with the secondary seal requirement, and in no case shall exceed 1/8 inch. [District Rule 4623] Federally Enforceable Through Title V Permit
- 28. Oil throughput of sump shall not exceed 5,200 gal/day. [District NSR Rule] Federally Enforceable Through Title V Permit
- 29. Upon commencement of 88,000 bbl/day throughput, the District shall be provided with the previous years of combustion data, and monthly after 88,000 bbl/day throughput, the District shall be provided with previous months combustion data. [District NSR Rule] Federally Enforceable Through Title V Permit
- 30. Permittee shall notify the District in writing upon each occasion when the crude oil received, stored, handled, transferred, or loaded into railcars is heated in the heat exchangers. [District NSR Rule] Federally Enforceable Through Title V Permit
- 31. Permittee shall notify District at least 7 days prior to the date when unobstructed primary and secondary seal/gap measurements will occur. [District Rule 1070] Federally Enforceable Through Title V Permit
- 32. Combustion contaminant emissions from fired equipment shall not increase due to increased throughput at heat exchangers. [District NSR Rule] Federally Enforceable Through Title V Permit
- 33. Volatile organic compound (VOC) emission rate shall not exceed 45.1 lb/day and 17.7 lb/day fugitive (combined fugitive emissions from permits S-1413-4 and -6). [District NSR Rule] Federally Enforceable Through Title V Permit
- 34. The permittee of external floating roof tanks 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] Federally Enforceable Through Title V Permit
- 35. The permittee shall inspect all floating tanks at least once every 12 months to determine compliance with the requirements of this rule. 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] Federally Enforceable Through Title V Permit
- 36. The permittee shall inspect the primary and secondary seals for compliance with the requirements of this rule every time a tank is emptied or degassed. Actual gap measurements shall be performed when the liquid level is static but not more than 24 hours after the tank roof is re-floated. [District Rule 4623] Federally Enforceable Through Title V Permit
- 37. 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 Rule 4623. [District Rule 4623] Federally Enforceable Through Title V Permit
- Permittee shall maintain record of liquids stored, daily throughput, storage temperature, storage period, maximum RVP & TVP of liquid during respective storage period, and shall make such records readily available for District inspection upon request. [District NSR Rule] Federally Enforceable Through Title V Permit

Permit Unit Requirements for S-1413-6-6 (continued)

- 39. Permittee shall maintain the records of the external floating roof landing activities that are performed pursuant to Rule 4623, Sections 5.3.1.3 and 5.4.3. The records shall include information on the 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] Federally Enforceable Through Title V Permit
- 40. Permittee shall maintain accurate records of the types and amount of fuel burned in the boilers since 1980 to document that no increase in combustion emissions due to Saco Railcar Crude Oil Loading occurs. [District NSR Rule] Federally Enforceable Through Title V Permit
- 41. All records required to be maintained by this permit shall be maintained for a period of at least five years and shall be made readily available for District inspection upon request. [District Rule 4623] Federally Enforceable Through Title V Permit
- 42. This unit was constructed prior to 1973 and has not been modified (as defined in 40 CFR 60.14) or reconstructed (as defined in 40 CFR 60.15) since 1973. Therefore, the requirements of 40 CFR 60 are not applicable to this unit. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
- 43. Permittee shall conduct true vapor pressure (TVP) testing of the organic liquid stored in this tank at least once every 12 months and/or whenever there is a change in the source or type of organic liquid stored in the tank. The TVP of any organic liquid shall be determined by measuring the Reid Vapor Pressure (RVP) using ASTM D 323 (Test Method for Vapor Pressure for Petroleum Products), and converting the RVP to TVP at the tank's maximum organic liquid storage temperature. The conversion of RVP to TVP shall be done in accordance with the procedures in appendix B of District Rule 4623. Records of TVP testing shall be maintained. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

PERMIT UNIT: S-1413-7-6

### SECTION: SW35 TOWNSHIP: 28S RANGE: 27E

#### **EQUIPMENT DESCRIPTION:**

67,000 BBL (2,814,000 GALLON) INTERNAL FLOATING ROOF CRUDE OIL STORAGE TANK T 670-S-102 WITH ALTECH ALCLAD ALUMINUM PONTOON INTERNAL FLOATING ROOF WITH PRIMARY LIQUID MOUNTED FOAM LOG SEAL AND SECONDARY WIPER SEAL (BAKERSFIELD PUMP STATION)

### PERMIT UNIT REQUIREMENTS

- 1. The internal floating roof shall rest or float on the liquid surface (but not necessarily in complete contact with it) inside a storage vessel that has a fixed roof. The internal roof shall be floating on the liquid surface except during initial fill and when the storage vessel is completely emptied or subsequently emptied and 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 days prior to performing the work. [District Rule 4623, 5.3.1.3] Federally Enforceable Through Title V Permit
- The primary resilient toroid seal shall be mounted on the perimeter of the roof such that it is in contact with the tank's liquid contents at all times while the roof is floating. [District Rule 4623, 5.3.2.3.1] Federally Enforceable Through Title V Permit
- 3. No gap between the tank shell and the primary seal shall exceed 1/2 inch. [District Rule 4623, 5.3.2.3.2] Federally Enforceable Through Title V Permit
- 4. The cumulative length of all primary seal gaps greater than 1/8 inch shall not exceed 5% of the tank circumference. [District Rule 4623, 5.3.2.3.2] Federally Enforceable Through Title V Permit
- 5. No continuous gap in the primary seal greater than 1/8 inch wide shall exceed 10% of the tank circumference. [District Rule 4623, 5.3.2.3.2] Federally Enforceable Through Title V Permit
- 6. No gap between the tank shell and the secondary seal shall exceed 1/2 inch. [District Rules 4623, 5.3.2.3.3] Federally Enforceable Through Title V Permit
- 7. 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, 5.3.2.3.3] Federally Enforceable Through Title V Permit
- 8. 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, 5.3.2.3.4] Federally Enforceable Through Title V Permit
- 9. The secondary seal shall allow easy insertion of probes up to 1/2 inch in width in order to measure gaps in the primary seal. [District Rule 4623, 5.3.2.3.5] Federally Enforceable Through Title V Permit
- 10. The secondary seal shall extend from the roof to the tank shell and shall not be attached to the primary seal. [District Rule 4623, 5.3.2.3.6] Federally Enforceable Through Title V Permit



#### Permit Unit Requirements for S-1413-7-6 (continued)

- 11. 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 leak-free condition except when the operating pressure exceeds the valve's set pressure. [District Rule 4623, 5.2] Federally Enforceable Through Title V Permit
- 12. Stored petroleum liquid true vapor pressure shall not exceed 8.0 psia. [District NSR Rule] Federally Enforceable Through Title V Permit
- 13. 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
- 14. A leak-free condition is defined as a condition without a gas leak or a liquid leak. A liquid leak is defined as the dripping of organic liquid at a rate of more than 3 drops per minute. A gas leak is defined as a reading in excess of 10,000 ppmv, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21. A liquid leak or reading in excess of 10,000 ppmv above background is a violation of this permit and Rule 4623 and shall be reported as a deviation. [District Rule 4623] Federally Enforceable Through Title V Permit
- 15. 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. [District Rule 4623, 5.5.2.1.1] Federally Enforceable Through Title V Permit
- 16. Each opening in the internal floating roof except for leg sleeves, automatic bleeder vents, rim space vents, column wells, ladder wells, sample wells, and stub drains is to be equipped with a cover or lid which is to be maintained in a closed position at all times (i.e., no visible gap) except when the device is in actual use. The cover or lid shall be equipped with a gasket. Covers on each access hatch and automatic gauge float well shall be bolted except when they are in use. [District Rule 4623, 5.5.2.1.2] Federally Enforceable Through Title V Permit
- 17. Automatic bleeder vents shall be equipped with a gasket and shall be closed at all times when the roof is floating except when the roof is being floated off or is being landed on the roof leg supports. [District Rule 4623, 5.5.2.1.3] Federally Enforceable Through Title V Permit
- Rim vents shall be equipped with a gasket and are to be set to open only when the internal floating roof is not floating or at the manufacturer's recommended setting. [District Rule 4623, 5.5.2.1.4] Federally Enforceable Through Title V Permit
- 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% of the opening. The fabric cover must be impermeable. [District Rule 4623, 5.5.2.1.5] Federally Enforceable Through Title V Permit
- 20. 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. [District Rule 4623, 5.5.2.1.6] Federally Enforceable Through Title V Permit
- 21. Daily tank liquid throughput shall not exceed 30,000 bbl. [District NSR Rule] Federally Enforceable Through Title V Permit
- 22. Permittee shall notify District at least 7 days prior to the date when unobstructed primary and secondary seal/gap testing will occur. [District Rule 1070] Federally Enforceable Through Title V Permit
- 23. Volatile organic compound (VOC) emission rate shall not exceed 22.2 lb day. [District NSR Rule] Federally Enforceable Through Title V Permit

Permit Unit Requirements for S-1413-7-6 (continued)

- 24. The permittee 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 for newly constructed, repair, or rebuilt internal floating roof tanks. If holes, tears, or openings in the primary seal, the secondary seal, the seal fabric or defects in the internal floating roof or its appurtenant parts, components, fittings, etc., are found, they shall be repaired prior to filling the tank. [District Rule 4623, 6.1.3.2.1] Federally Enforceable Through Title V Permit
- 25. The permittee 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 vapors. Any defects found are violations of this rule. [District Rule 4623, 6.1.3.2.2] Federally Enforceable Through Title V Permit
- 26. The permittee shall conduct actual gap measurements of the primary seal and/or secondary seal at least once every 60 months. [District Rule 4623, 6.1.3.2.3] Federally Enforceable Through Title V Permit
- 27. 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 Rule 4623. [District Rule 4623, 6.3.5] Federally Enforceable Through Title V Permit
- 28. Permittee shall maintain record of liquids stored, daily throughput, storage temperature, storage period, maximum RVP & TVP of liquid during respective storage period, and shall make such records readily available for District inspection upon request. [District NSR Rule] Federally Enforceable Through Title V Permit
- 29. 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. [District Rule 4623, 6.3.7] Federally Enforceable Through Title V Permit
- 30. All records required to be maintained by this permit shall be maintained for a period of at least five years and shall be made readily available for District inspection upon request. [District Rule 4623, 6.3] Federally Enforceable Through Title V Permit
- 31. This unit was constructed prior to 1973 and has not been modified (as defined in 40 CFR 60.14) or reconstructed (as defined in 40 CFR 60.15) since 1973. Therefore, the requirements of 40 CFR 60 are not applicable to this unit. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
- 32. Permittee shall conduct true vapor pressure (TVP) testing of the organic liquid stored in this tank at least once every 12 months and/or whenever there is a change in the source or type of organic liquid stored in the tank. The TVP of any organic liquid shall be determined by measuring the Reid Vapor Pressure (RVP) using ASTM D 323 (Test Method for Vapor Pressure for Petroleum Products), and converting the RVP to TVP at the tank's maximum organic liquid storage temperature. The conversion of RVP to TVP shall be done in accordance with the procedures in appendix B of District Rule 4623. Records of TVP testing shall be maintained. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate. Facility Name: SHELL PIPELINE COMPANY LP Location: BAKERSFIELD PUMP STATION, 1801 PETROL RD, BAKERSFIELD, CA 93308-9793 S-1413-74: API 22 2010 4:42PM - SALINASM

**PERMIT UNIT: S-1413-8-6** 

### SECTION: SW35 TOWNSHIP: 28S RANGE: 27E

#### **EQUIPMENT DESCRIPTION:**

EXPIRATION DATE: 04/30/2010

67,000 BBL (2,814,000 GALLONS) RIVETED FIXED ROOF CRUDE OIL STORAGE TANK T 670-S-101 WITH PAN INTERNAL FLOATING ROOF WITH ALTECH DOUBLE WIPER SEAL (BAKERSFIELD PUMP STATION)

### PERMIT UNIT REQUIREMENTS

- 1. The internal floating roof shall rest or float on the liquid surface (but not necessarily in complete contact with it) inside a storage vessel that has a fixed roof. The internal roof shall be floating on the liquid surface except during initial fill and when the storage vessel is completely emptied or subsequently emptied and 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 days prior to performing the work. [District Rule 4623, 5.3.1.3] Federally Enforceable Through Title V Permit
- 2. Gaps between the tank shell and the primary seal shall not exceed 2 1/2 inches. [District Rule 4623, 5.3.2.2.1] Federally Enforceable Through Title V Permit
- 3. The cumulative length of all primary seal gaps greater than 1 1/2 inches shall not exceed 10% of the circumference of the tank. [District Rule 4623, 5.3.2.2.1] Federally Enforceable Through Title V Permit
- 4. 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, 5.3.2.2.1] Federally Enforceable Through Title V Permit
- 5. No continuous gap in the primary seal greater than 1/8 inch wide shall exceed 10% of the tank circumference. [District Rule 4623, 5.3.2.2.1] Federally Enforceable Through Title V Permit
- 6. No gap between the tank shell and the secondary seal shall exceed 1/2 inch. [District Rule 4623, 5.3.2.2.2] Federally Enforceable Through Title V Permit
- 7. 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, 5.3.2.2.2] Federally Enforceable Through Title V Permit
- 8. 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, 5.3.2.2.4] Federally Enforceable Through Title V Permit
- 9. The secondary seal shall allow easy insertion of probes up to 2 1/2 inches in width in order to measure gaps in the primary seal. [District Rule 4623, 5.3.2.2.5] Federally Enforceable Through Title V Permit
- 10. The secondary seal shall extend from the roof to the tank shell and shall not be attached to the primary seal. [District Rule 4623, 5.3.2.2.6] Federally Enforceable Through Title V Permit
- 11. 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 leak-free condition except when the operating pressure exceeds the valve's set pressure. [District Rule 4623, 5.2] Federally Enforceable Through Fitle V Permit

PERMIT UNIT REPHIREMENTS CONTINUE ON NEXT PAGE

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

Facility Name: SHELL PIPELINE COMPANY LP Location: BAKERSFIELD PUMP STATION, 1801 PETROL RD, BAKERSFIELD, CA 93308-9793 Permit Unit Requirements for S-1413-8-6 (continued)

- 12. Stored petroleum liquid true vapor pressure shall not exceed 8.0 psia. [District NSR Rule] Federally Enforceable Through Title V Permit
- 13. 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
- 14. A leak-free condition is defined as a condition without a gas leak or a liquid leak. A liquid leak is defined as the dripping of organic liquid at a rate of more than 3 drops per minute. A gas leak is defined as a reading in excess of 10,000 ppmv, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21. A liquid leak or reading in excess of 10,000 ppmv above background is a violation of this permit and Rule 4623 and shall be reported as a deviation. [District Rule 4623] Federally Enforceable Through Title V Permit
- 15. 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. [District Rule 4623, 5.5.2.1.1] Federally Enforceable Through Title V Permit
- 16. Each opening in the internal floating roof except for leg sleeves, automatic bleeder vents, rim space vents, column wells, ladder wells, sample wells, and stub drains is to be equipped with a cover or lid which is to be maintained in a closed position at all times (i.e., no visible gap) except when the device is in actual use. The cover or lid shall be equipped with a gasket. Covers on each access hatch and automatic gauge float well shall be bolted except when they are in use. [District Rule 4623, 5.5.2.1.2] Federally Enforceable Through Title V Permit
- 17. Automatic bleeder vents shall be equipped with a gasket and shall be closed at all times when the roof is floating except when the roof is being floated off or is being landed on the roof leg supports. [District Rule 4623, 5.5.2.1.3] Federally Enforceable Through Title V Permit
- 18. Rim vents shall be equipped with a gasket and are to be set to open only when the internal floating roof is not floating or at the manufacturer's recommended setting. [District Rule 4623, 5.5.2.1.4] Federally Enforceable Through Title V Permit
- 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% of the opening. The fabric cover must be impermeable. [District Rule 4623, 5.5.2.1.5] Federally Enforceable Through Title V Permit
- 20. 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. [District Rule 4623, 5.5.2.1.6] Federally Enforceable Through Title V Permit
- 21. Daily tank liquid throughput shall not exceed 30,000 bbl. [District NSR Rule] Federally Enforceable Through Title V Permit
- 22. Permittee shall notify District at least 7 days prior to the date when unobstructed primary and secondary seal/gap testing will occur. [District Rule 1070] Federally Enforceable Through Title V Permit
- 23. Volatile organic compound (VOC) emission rate shall not exceed 22.2 lb day. [District NSR Rule] Federally Enforceable Through Title V Permit
- 24. The permittee 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 for newly constructed, repair, or rebuilt internal floating roof tanks. If holes, tears, or openings in the primary seal, the secondary seal, the seal fabric or defects in the internal floating roof or its appurtenant parts, components, fittings, etc., are found, they shall be repaired prior to filling the tank. [District Rule 4623, 6.1.3.2.1] Federally Enforceable Through Title V Permit

Permit Unit Requirements for S-1413-8-6 (continued)

- 25. The permittee 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 vapors. Any defects found are violations of this rule. [District Rule 4623, 6.1.3.2.2] Federally Enforceable Through Title V Permit
- 26. The permittee shall conduct actual gap measurements of the primary seal and/or secondary seal at least once every 60 months. [District Rule 4623, 6.1.3.2.3] Federally Enforceable Through Title V Permit
- 27. 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 Rule 4623. [District Rule 4623, 6.3.5] Federally Enforceable Through Title V Permit
- 28. Permittee shall maintain record of liquids stored, daily throughput, storage temperature, storage period, maximum RVP & TVP of liquid during respective storage period, and shall make such records readily available for District inspection upon request. [District NSR Rule] Federally Enforceable Through Title V Permit
- 29. 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. [District Rule 4623, 6.3.7] Federally Enforceable Through Title V Permit
- 30. All records required to be maintained by this permit shall be maintained for a period of at least five years and shall be made readily available for District inspection upon request. [District Rule 4623, 6.3] Federally Enforceable Through Title V Permit
- 31. This tank shall be equipped with a closure device between the tank shell and roof edge consisting of two seals mounted one above the other; the one below shall be referred to as the primary seal, and the one above shall be referred as the secondary seal. [District Rule 4623, 5.3.1.2] Federally Enforceable Through Title V Permit
- 32. This unit was constructed prior to 1973 and has not been modified (as defined in 40 CFR 60.14) or reconstructed (as defined in 40 CFR 60.15) since 1973. Therefore, the requirements of 40 CFR 60 are not applicable to this unit. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
- 33. Permittee shall conduct true vapor pressure (TVP) testing of the organic liquid stored in this tank at least once every 12 months and/or whenever there is a change in the source or type of organic liquid stored in the tank. The TVP of any organic liquid shall be determined by measuring the Reid Vapor Pressure (RVP) using ASTM D 323 (Test Method for Vapor Pressure for Petroleum Products), and converting the RVP to TVP at the tank's maximum organic liquid storage temperature. The conversion of RVP to TVP shall be done in accordance with the procedures in appendix B of District Rule 4623. Records of TVP testing shall be maintained. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

PERMIT UNIT: S-1413-9-7

#### SECTION: SW35 TOWNSHIP: 28S RANGE: 27E

#### **EQUIPMENT DESCRIPTION:**

67,000 BBL (2,814,000 GALLON) INTERNAL FLOATING ROOF CRUDE OIL STORAGE TANK # 103 WITH TOROID PRIMARY SEAL AND SECONDARY WIPER SEAL (BAKERSFIELD PUMP STATION)

### PERMIT UNIT REQUIREMENTS

- 1. The internal floating roof shall rest or float on the liquid surface (but not necessarily in complete contact with it) inside a storage vessel that has a fixed roof. The internal roof shall be floating on the liquid surface except during initial fill and when the storage vessel is completely emptied or subsequently emptied and 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 days prior to performing the work. [District Rule 4623, 5.3.1.3] Federally Enforceable Through Title V Permit
- 2. The primary resilient toroid seal shall be mounted on the perimeter of the roof such that it is in contact with the tank's liquid contents at all times while the roof is floating. [District Rule 4623, 5.3.2.3.1] Federally Enforceable Through Title V Permit
- 3. No gap between the tank shell and the primary seal shall exceed 1/2 inch. [District Rule 4623, 5.3.2.3.2] Federally Enforceable Through Title V Permit
- 4. The cumulative length of all primary seal gaps greater than 1/8 inch shall not exceed 5% of the tank circumference. [District Rule 4623, 5.3.2.3.2] Federally Enforceable Through Title V Permit
- 5. No continuous gap in the primary seal greater than 1/8 inch wide shall exceed 10% of the tank circumference. [District Rule 4623, 5.3.2.3.2] Federally Enforceable Through Title V Permit
- 6. No gap between the tank shell and the secondary seal shall exceed 1/2 inch. [District Rules 4623, 5.3.2.3.3] Federally Enforceable Through Title V Permit
- 7. 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, 5.3.2.3.3] Federally Enforceable Through Title V Permit
- 8. 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, 5.3.2.3.4] Federally Enforceable Through Title V Permit
- 9. The secondary seal shall allow easy insertion of probes up to 1/2 inch in width in order to measure gaps in the primary seal. [District Rule 4623, 5.3.2.3.5] Federally Enforceable Through Title V Permit
- 10. The secondary seal shall extend from the roof to the tank shell and shall not be attached to the primary seal. [District Rule 4623, 5.3.2.3.6] Federally Enforceable Through Title V Permit



Permit Unit Requirements for S-1413-9-7 (continued)

- 11. 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 leak-free condition except when the operating pressure exceeds the valve's set pressure. [District Rule 4623, 5.2] Federally Enforceable Through Title V Permit
- 12. Stored petroleum liquid true vapor pressure shall not exceed 8.0 psia. [District NSR Rule] Federally Enforceable Through Title V Permit
- 13. 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
- 14. A leak-free condition is defined as a condition without a gas leak or a liquid leak. A liquid leak is defined as the dripping of organic liquid at a rate of more than 3 drops per minute. A gas leak is defined as a reading in excess of 10,000 ppmv, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21. A liquid leak or reading in excess of 10,000 ppmv above background is a violation of this permit and Rule 4623 and shall be reported as a deviation. [District Rule 4623] Federally Enforceable Through Title V Permit
- 15. 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. [District Rule 4623, 5.5.2.1.1] Federally Enforceable Through Title V Permit
- 16. Each opening in the internal floating roof except for leg sleeves, automatic bleeder vents, rim space vents, column wells, ladder wells, sample wells, and stub drains is to be equipped with a cover or lid which is to be maintained in a closed position at all times (i.e., no visible gap) except when the device is in actual use. The cover or lid shall be equipped with a gasket. Covers on each access hatch and automatic gauge float well shall be bolted except when they are in use. [District Rule 4623, 5.5.2.1.2] Federally Enforceable Through Title V Permit
- 17. Automatic bleeder vents shall be equipped with a gasket and shall be closed at all times when the roof is floating except when the roof is being floated off or is being landed on the roof leg supports. [District Rule 4623, 5.5.2.1.3] Federally Enforceable Through Title V Permit
- 18. Rim vents shall be equipped with a gasket and are to be set to open only when the internal floating roof is not floating or at the manufacturer's recommended setting. [District Rule 4623, 5.5.2.1.4] Federally Enforceable Through Title V Permit
- 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% of the opening. The fabric cover must be impermeable. [District Rule 4623, 5.5.2.1.5] Federally Enforceable Through Title V Permit
- 20. 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. [District Rule 4623, 5.5.2.1.6] Federally Enforceable Through Title V Permit
- 21. Daily tank liquid throughput shall not exceed 40,000 bbl. [District NSR Rule] Federally Enforceable Through Title V Permit
- 22. Permittee shall notify District at least 7 days prior to the date when unobstructed primary and secondary seal/gap testing will occur. [District Rule 1070] Federally Enforceable Through Title V Permit
- 23. Volatile organic compound (VOC) emission rate shall not exceed 35.0 lb day. [District NSR Rule] Federally Enforceable Through Title V Permit

Permit Unit Requirements for S-1413-9-7 (continued)

- 24. The permittee 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 for newly constructed, repair, or rebuilt internal floating roof tanks. If holes, tears, or openings in the primary seal, the secondary seal, the seal fabric or defects in the internal floating roof or its appurtenant parts, components, fittings, etc., are found, they shall be repaired prior to filling the tank. [District Rule 4623, 6.1.3.2.1] Federally Enforceable Through Title V Permit
- 25. The permittee 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 vapors. Any defects found are violations of this rule. [District Rule 4623, 6.1.3.2.2] Federally Enforceable Through Title V Permit
- 26. The permittee shall conduct actual gap measurements of the primary seal and/or secondary seal at least once every 60 months. [District Rule 4623, 6.1.3.2.3] Federally Enforceable Through Title V Permit
- 27. 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 Rule 4623. [District Rule 4623, 6.3.5] Federally Enforceable Through Title V Permit
- 28. Permittee shall maintain record of liquids stored, daily throughput, storage temperature, storage period, maximum RVP & TVP of liquid during respective storage period, and shall make such records readily available for District inspection upon request. [District NSR Rule] Federally Enforceable Through Title V Permit
- 29. 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. [District Rule 4623, 6.3.7] Federally Enforceable Through Title V Permit
- 30. All records required to be maintained by this permit shall be maintained for a period of at least five years and shall be made readily available for District inspection upon request. [District Rule 4623, 6.3] Federally Enforceable Through Title V Permit
- 31. This unit was constructed prior to 1973 and has not been modified (as defined in 40 CFR 60.14) or reconstructed (as defined in 40 CFR 60.15) since 1973. Therefore, the requirements of 40 CFR 60 are not applicable to this unit. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
- 32. Permittee shall conduct true vapor pressure (TVP) testing of the organic liquid stored in this tank at least once every 12 months and/or whenever there is a change in the source or type of organic liquid stored in the tank. The TVP of any organic liquid shall be determined by measuring the Reid Vapor Pressure (RVP) using ASTM D 323 (Test Method for Vapor Pressure for Petroleum Products), and converting the RVP to TVP at the tank's maximum organic liquid storage temperature. The conversion of RVP to TVP shall be done in accordance with the procedures in appendix B of District Rule 4623. Records of TVP testing shall be maintained. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

PERMIT UNIT: S-1413-10-8

EXPIR

SECTION: SW35 TOWNSHIP: 28S RANGE: 27E

#### **EQUIPMENT DESCRIPTION:**

CRUDE OIL STORAGE AND TRANSFER OPERATION INCLUDING A 67,000 BBL (2,814,000 GALLON) RIVETED INTERNAL FLOATING ROOF CRUDE OIL STORAGE TANK #104 WITH MECHANICAL SHOE PRIMARY SEAL AND WIPER TYPE SECONDARY SEAL (BAKERSFIELD PUMP STATION)

### **PERMIT UNIT REQUIREMENTS**

- 1. The internal floating roof shall rest or float on the liquid surface (but not necessarily in complete contact with it) inside a storage vessel that has a fixed roof. The internal roof shall be floating on the liquid surface except during initial fill and when the storage vessel is completely emptied or subsequently emptied and 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 days prior to performing the work. [District Rule 4623] Federally Enforceable Through Title V Permit
- 2. Gaps between the tank shell and the primary seal shall not exceed 2 1/2 inches. [District Rule 4623] Federally Enforceable Through Title V Permit
- 3. The cumulative length of all primary seal gaps greater than 1 1/2 inches shall not exceed 10% of the circumference of the tank. [District Rule 4623] Federally Enforceable Through Title V Permit
- 4. 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] Federally Enforceable Through Title V Permit
- 5. No continuous gap in the primary seal greater than 1/8 inch wide shall exceed 10% of the tank circumference. [District Rule 4623] Federally Enforceable Through Title V Permit
- 6. No gap between the tank shell and the secondary seal shall exceed 1/2 inch. [District Rule 4623] Federally Enforceable Through Title V Permit
- 7. 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] Federally Enforceable Through Title V Permit
- 8. 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 18 inches above the stored liquid surface. [District Rule 4623] Federally Enforceable Through Title V Permit
- 9. 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 5 inches for a length of at least 18 inches in the vertical plane above the liquid. [District Rule 4623] Federally Enforceable Through Title V Permit
- 10. 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] Federally Enforceable Through Title V Permit
- 11. The secondary seal shall allow easy insertion of probes up to 2 1/2 inches in width in order to measure gaps in the primary seal. [District Rule 4623] Federally Enforceable Through Title V Permit

PERMIT UNIT REPUIREMENTS CONTINUE ON NEXT PAGE

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

Facility Name: SHELL PIPELINE COMPANY LP Location: BAKERSFIELD PUMP STATION, 1801 PETROL RD, BAKERSFIELD, CA 93308-9793 S1131-D6- API 22 2010 4 397M - SALINASM Permit Unit Requirements for S-1413-10-8 (continued)

- 12. The secondary seal shall extend from the roof to the tank shell and shall not be attached to the primary seal. [District Rule 4623] Federally Enforceable Through Title V Permit
- 13. 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 leak-free condition except when the operating pressure exceeds the valve's set pressure. [District Rule 4623, 5.2] Federally Enforceable Through Title V Permit
- 14. The true vapor pressure (TVP) of the organic liquid stored shall not exceed 8.0 psia. [District NSR Rule] Federally Enforceable Through Title V Permit
- 15. 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] Federally Enforceable Through Title V. Permit
- 16. A leak-free condition is defined as a condition without a gas leak or a liquid leak. A liquid leak is defined as the dripping of organic liquid at a rate of more than 3 drops per minute. A gas leak is defined as a reading in excess of 10,000 ppmv, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21. A liquid leak or reading in excess of 10,000 ppmv above background is a violation of this permit and Rule 4623 and shall be reported as a deviation. [District Rule 4623] Federally Enforceable Through Title V Permit
- 17. 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. [District Rule 4623] Federally Enforceable Through Title V Permit
- 18. Each opening in the internal floating roof except for leg sleeves, automatic bleeder vents, rim space vents, column wells, ladder wells, sample wells, and stub drains is to be equipped with a cover or lid which is to be maintained in a closed position at all times (i.e., no visible gap) except when the device is in actual use. The cover or lid shall be equipped with a gasket. Covers on each access hatch and automatic gauge float well shall be bolted except when they are in use. [District Rule 4623] Federally Enforceable Through Title V Permit
- 19. 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] Federally Enforceable Through Title V Permit
- 20. Rim vents shall be equipped with a gasket and are to be set to open only when the internal floating roof is not floating or at the manufacturer's recommended setting. [District Rule 4623]
- 21. 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% of the opening. The fabric cover must be impermeable. [District Rule 4623] Federally Enforceable Through Title V Permit
- 22. 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. [District Rule 4623] Federally Enforceable Through Title V Permit
- 23. Daily tank liquid throughput shall not exceed 40,000 bbl. [District NSR Rule] Federally Enforceable Through Title V Permit
- 24. Permittee shall notify District at least 7 days prior to the date when unobstructed primary and secondary seal/gap testing will occur. [District Rule 1070] Federally Enforceable Through Title V Permit
- 25. Volatile organic compound (VOC) emission rate shall not exceed 35.0 lb day. [District NSR Rule] Federally Enforceable Through Title V Permit

Permit Unit Requirements for S-1413-10-8 (continued)

- 26. The permittee 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 for newly constructed, repair, or rebuilt internal floating roof tanks. If holes, tears, or openings in the primary seal, the secondary seal, the seal fabric or defects in the internal floating roof or its appurtenant parts, components, fittings, etc., are found, they shall be repaired prior to filling the tank. [District Rule 4623] Federally Enforceable Through Title V Permit
- 27. The permittee 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 vapors. Any defects found are violations of this rule. [District Rule 4623] Federally Enforceable Through Title V Permit
- 28. The permittee shall conduct actual gap measurements of the primary seal and/or secondary seal at least once every 60 months. [District Rule 4623] Federally Enforceable Through Title V Permit
- 29. 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 Rule 4623. [District Rule 4623] Federally Enforceable Through Title V Permit
- 30. Permittee shall maintain record of liquids stored, daily throughput, storage temperature, storage period, maximum RVP & TVP of liquid during respective storage period, and shall make such records readily available for District inspection upon request. [District NSR Rule] Federally Enforceable Through Title V Permit
- 31. 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. [District Rule 4623] Federally Enforceable Through Title V Permit
- 32. All records required to be maintained by this permit shall be maintained for a period of at least five years and shall be made readily available for District inspection upon request. [District Rule 4623] Federally Enforceable Through Title V Permit
- 33. This unit was constructed prior to 1973 and has not been modified (as defined in 40 CFR 60.14) or reconstructed (as defined in 40 CFR 60.15) since 1973. Therefore, the requirements of 40 CFR 60 are not applicable to this unit. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
- 34. Permittee shall conduct true vapor pressure (TVP) testing of the organic liquid stored in this tank at least once every 12 months and/or whenever there is a change in the source or type of organic liquid stored in the tank. The TVP of any organic liquid shall be determined by measuring the Reid Vapor Pressure (RVP) using ASTM D 323 (Test Method for Vapor Pressure for Petroleum Products), and converting the RVP to TVP at the tank's maximum organic liquid storage temperature. The conversion of RVP to TVP shall be done in accordance with the procedures in appendix B of District Rule 4623. Records of TVP testing shall be maintained. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate. Facility Name: SHELL PIPELINE COMPANY LP Location: BAKERSFIELD PUMP STATION, 1801 PETROL RD, BAKERSFIELD, CA 93308-9793 5-1413-108 : Apr 22 2010 4:43PM - SALINASM

PERMIT UNIT: S-1413-11-8

#### SECTION: SW35 TOWNSHIP: 28S RANGE: 27E

#### **EQUIPMENT DESCRIPTION:**

CRUDE OIL STORAGE AND TRANSFER OPERATION INCLUDING A 67,000 BARREL (2,814,000 GALLON) RIVETED INTERNAL FLOATING ROOF CRUDE OIL STORAGE TANK #107 (TK670S107) WITH MECHANICAL SHOE PRIMARY SEAL AND WIPER TYPE SECONDARY SEAL (BAKERSFIELD PUMP STATION)

### **PERMIT UNIT REQUIREMENTS**

- 1. The internal floating roof shall rest or float on the liquid surface (but not necessarily in complete contact with it) inside a storage vessel that has a fixed roof. The internal roof shall be floating on the liquid surface except during initial fill and when the storage vessel is completely emptied or subsequently emptied and 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 days prior to performing the work. [District Rule 4623] Federally Enforceable Through Title V Permit
- 2. Gaps between the tank shell and the primary seal shall not exceed 2 1/2 inches. [District Rule 4623] Federally Enforceable Through Title V Permit
- 3. The cumulative length of all primary seal gaps greater than 1 1/2 inches shall not exceed 10% of the circumference of the tank. [District Rule 4623] Federally Enforceable Through Title V Permit
- 4. 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] Federally Enforceable Through Title V Permit
- 5. No continuous gap in the primary seal greater than 1/8 inch wide shall exceed 10% of the tank circumference. [District Rule 4623] Federally Enforceable Through Title V Permit
- 6. No gap between the tank shell and the secondary seal shall exceed 1/2 inch. [District Rule 4623] Federally Enforceable Through Title V Permit
- 7. 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] Federally Enforceable Through Title V Permit
- 8. 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 18 inches above the stored liquid surface. [District Rule 4623] Federally Enforceable Through Title V Permit
- 9. 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 5 inches for a length of at least 18 inches in the vertical plane above the liquid. [District Rule 4623] Federally Enforceable Through Title V Permit
- 10. 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] Federally Enforceable Through Title V Permit
- 11. The secondary seal shall allow easy insertion of probes up to 2 1/2 inches in width in order to measure gaps in the primary seal. [District Rule 4623] Federally Enforceable Through Title V Permit

PERMIT UNIT REPUREMENTE ON NEXT PAGE

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

Facility Name: SHELL PIPELINE COMPANY LP Location: BAKERSFIELD PUMP STATION, 1801 PETROL RD, BAKERSFIELD, CA 93308-9793 Permit Unit Requirements for S-1413-11-8 (continued)

- 12. The secondary seal shall extend from the roof to the tank shell and shall not be attached to the primary seal. [District Rule 4623] Federally Enforceable Through Title V Permit
- 13. 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 leak-free condition except when the operating pressure exceeds the valve's set pressure. [District Rule 4623, 5.2] Federally Enforceable Through Title V Permit
- 14. The true vapor pressure (TVP) of the organic liquid stored shall not exceed 8.0 psia. [District NSR Rule] Federally Enforceable Through Title V Permit
- 15. 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] Federally Enforceable Through Title V Permit
- 16. A leak-free condition is defined as a condition without a gas leak or a liquid leak. A liquid leak is defined as the dripping of organic liquid at a rate of more than 3 drops per minute. A gas leak is defined as a reading in excess of 10,000 ppmv, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21. A liquid leak or reading in excess of 10,000 ppmv above background is a violation of this permit and Rule 4623 and shall be reported as a deviation. [District Rule 4623] Federally Enforceable Through Title V Permit
- 17. 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. [District Rule 4623] Federally Enforceable Through Title V Permit
- 18. Each opening in the internal floating roof except for leg sleeves, automatic bleeder vents, rim space vents, column wells, ladder wells, sample wells, and stub drains is to be equipped with a cover or lid which is to be maintained in a closed position at all times (i.e., no visible gap) except when the device is in actual use. The cover or lid shall be equipped with a gasket. Covers on each access hatch and automatic gauge float well shall be bolted except when they are in use. [District Rule 4623] Federally Enforceable Through Title V Permit
- 19. 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] Federally Enforceable Through Title V Permit
- 20. Rim vents shall be equipped with a gasket and are to be set to open only when the internal floating roof is not floating or at the manufacturer's recommended setting. [District Rule 4623] Federally Enforceable Through Title V Permit
- 21. 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% of the opening. The fabric cover must be impermeable. [District Rule 4623] Federally Enforceable Through Title V Permit
- 22. 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. [District Rule 4623] Federally Enforceable Through Title V Permit
- 23. Daily tank liquid throughput shall not exceed 40,000 bbl. [District NSR Rule] Federally Enforceable Through Title V Permit
- 24. Permittee shall notify District at least 7 days prior to the date when unobstructed primary and secondary seal/gap testing will occur. [District Rule 1070] Federally Enforceable Through Title V Permit
- 25. Volatile organic compound (VOC) emission rate shall not exceed 35.0 lb day. [District NSR Rule] Federally Enforceable Through Title V Permit

Permit Unit Requirements for S-1413-11-8 (continued)

- 26. The permittee 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 for newly constructed, repair, or rebuilt internal floating roof tanks. If holes, tears, or openings in the primary seal, the secondary seal, the seal fabric or defects in the internal floating roof or its appurtenant parts, components, fittings, etc., are found, they shall be repaired prior to filling the tank. [District Rule 4623] Federally Enforceable Through Title V Permit
- 27. The permittee 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 vapors. Any defects found are violations of this rule. [District Rule 4623] Federally Enforceable Through Title V Permit
- 28. The permittee shall conduct actual gap measurements of the primary seal and/or secondary seal at least once every 60 months. [District Rule 4623] Federally Enforceable Through Title V Permit
- 29. 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 Rule 4623. [District Rule 4623] Federally Enforceable Through Title V Permit
- 30. Permittee shall maintain record of liquids stored, daily throughput, storage temperature, storage period, maximum RVP & TVP of liquid during respective storage period, and shall make such records readily available for District inspection upon request. [District NSR Rule] Federally Enforceable Through Title V Permit
- 31. 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. [District Rule 4623] Federally Enforceable Through Title V Permit
- 32. All records required to be maintained by this permit shall be maintained for a period of at least five years and shall be made readily available for District inspection upon request. [District Rule 4623] Federally Enforceable Through Title V Permit
- 33. This unit was constructed prior to 1973 and has not been modified (as defined in 40 CFR 60.14) or reconstructed (as defined in 40 CFR 60.15) since 1973. Therefore, the requirements of 40 CFR 60 are not applicable to this unit. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
- 34. Permittee shall conduct true vapor pressure (TVP) testing of the organic liquid stored in this tank at least once every 12 months and/or whenever there is a change in the source or type of organic liquid stored in the tank. The TVP of any organic liquid shall be determined by measuring the Reid Vapor Pressure (RVP) using ASTM D 323 (Test Method for Vapor Pressure for Petroleum Products), and converting the RVP to TVP at the tank's maximum organic liquid storage temperature. The conversion of RVP to TVP shall be done in accordance with the procedures in appendix B of District Rule 4623. Records of TVP testing shall be maintained. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

PERMIT UNIT: S-1413-12-8

### SECTION: SW35 TOWNSHIP: 28S RANGE: 27E

#### **EQUIPMENT DESCRIPTION:**

EXPIRATION DATE: 04/30/2010

CRUDE OIL STORAGE AND TRANSFER OPERATION INCLUDING A 67,000 BBL (2,814,000 GALLON) RIVETED INTERNAL FLOATING ROOF CRUDE OIL STORAGE TANK #108 (TK670S108) WITH MECHANICAL SHOE PRIMARY SEAL AND WIPER TYPE SECONDARY SEAL (BAKERSFIELD PUMP STATION)

### PERMIT UNIT REQUIREMENTS

- 1. The internal floating roof shall rest or float on the liquid surface (but not necessarily in complete contact with it) inside a storage vessel that has a fixed roof. The internal roof shall be floating on the liquid surface except during initial fill and when the storage vessel is completely emptied or subsequently emptied and 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 days prior to performing the work. [District Rule 4623] Federally Enforceable Through Title V Permit
- 2. Gaps between the tank shell and the primary seal shall not exceed 2 1/2 inches. [District Rule 4623] Federally Enforceable Through Title V Permit
- 3. The cumulative length of all primary seal gaps greater than 1 1/2 inches shall not exceed 10% of the circumference of the tank. [District Rule 4623] Federally Enforceable Through Title V Permit
- 4. 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] Federally Enforceable Through Title V Permit
- 5. No continuous gap in the primary seal greater than 1/8 inch wide shall exceed 10% of the tank circumference. [District Rule 4623] Federally Enforceable Through Title V Permit
- 6. No gap between the tank shell and the secondary seal shall exceed 1/2 inch. [District Rule 4623] Federally Enforceable Through Title V Permit
- 7. 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] Federally Enforceable Through Title V Permit
- 8. 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 18 inches above the stored liquid surface. [District Rule 4623] Federally Enforceable Through Title V Permit
- 9. 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 5 inches for a length of at least 18 inches in the vertical plane above the liquid. [District Rule 4623] Federally Enforceable Through Title V Permit
- 10. 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] Federally Enforceable Through Title V Permit
- 11. The secondary seal shall allow easy insertion of probes up to 2 1/2 inches in width in order to measure gaps in the primary seal. [District Rule 4623] Federally Enforceable Through Title V Permit

PERMIT UNIT REPUTREMENT & CONTINUE ON NEXT PAGE

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

Facility Name: SHELL PIPELINE COMPANY LP Location: BAKERSFIELD PUMP STATION, 1801 PETROL RD, BAKERSFIELD, CA 93308-9793 S-1413-124: Apr 22 2010 4:43PM – SALINASM Permit Unit Requirements for S-1413-12-8 (continued)

- 12. The secondary seal shall extend from the roof to the tank shell and shall not be attached to the primary seal. [District Rule 4623] Federally Enforceable Through Title V Permit
- 13. 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 leak-free condition except when the operating pressure exceeds the valve's set pressure. [District Rule 4623, 5.2] Federally Enforceable Through Title V Permit
- 14. The true vapor pressure (TVP) of the organic liquid stored shall not exceed 8.0 psia. [District NSR Rule] Federally Enforceable Through Title V Permit
- 15. 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] Federally Enforceable Through Title V Permit
- 16. A leak-free condition is defined as a condition without a gas leak or a liquid leak. A liquid leak is defined as the dripping of organic liquid at a rate of more than 3 drops per minute. A gas leak is defined as a reading in excess of 10,000 ppmv, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21. A liquid leak or reading in excess of 10,000 ppmv above background is a violation of this permit and Rule 4623 and shall be reported as a deviation. [District Rule 4623] Federally Enforceable Through Title V Permit
- 17. 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. [District Rule 4623] Federally Enforceable Through Title V Permit
- 18. Each opening in the internal floating roof except for leg sleeves, automatic bleeder vents, rim space vents, column wells, ladder wells, sample wells, and stub drains is to be equipped with a cover or lid which is to be maintained in a closed position at all times (i.e., no visible gap) except when the device is in actual use. The cover or lid shall be equipped with a gasket. Covers on each access hatch and automatic gauge float well shall be bolted except when they are in use. [District Rule 4623] Federally Enforceable Through Title V Permit
- 19. 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] Federally Enforceable Through Title V Permit
- 20. Rim vents shall be equipped with a gasket and are to be set to open only when the internal floating roof is not floating or at the manufacturer's recommended setting. [District Rule 4623] Federally Enforceable Through Title V Permit
- 21. 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% of the opening. The fabric cover must be impermeable. [District Rule 4623] Federally Enforceable Through Title V Permit
- 22. 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. [District Rule 4623] Federally Enforceable Through Title V Permit
- 23. Daily tank liquid throughput shall not exceed 40,000 bbl. [District NSR Rule] Federally Enforceable Through Title V Permit
- 24. Permittee shall notify District at least 7 days prior to the date when unobstructed primary and secondary seal/gap testing will occur. [District Rule 1070] Federally Enforceable Through Title V Permit
- 25. Volatile organic compound (VOC) emission rate shall not exceed 36.7 lb day. [District NSR Rule] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE These terms and conditions are part of the Facility-wide Permit to Operate. Facility Name: SHELL PIPELINE COMPANY LP

Location: BAKERSFIELD PUMP STATION, 1801 PETROL BD BAKERSFIELD, CA 93308-9793

Permit Unit Requirements for S-1413-12-8 (continued)

- 26. The permittee 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 for newly constructed, repair, or rebuilt internal floating roof tanks. If holes, tears, or openings in the primary seal, the secondary seal, the seal fabric or defects in the internal floating roof or its appurtenant parts, components, fittings, etc., are found, they shall be repaired prior to filling the tank. [District Rule 4623] Federally Enforceable Through Title V Permit
- 27. The permittee 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 vapors. Any defects found are violations of this rule. [District Rule 4623] Federally Enforceable Through Title V Permit
- 28. The permittee shall conduct actual gap measurements of the primary seal and/or secondary seal at least once every 60 months. [District Rule 4623] Federally Enforceable Through Title V Permit
- 29. 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 Rule 4623. [District Rule 4623] Federally Enforceable Through Title V Permit
- 30. Permittee shall maintain record of liquids stored, daily throughput, storage temperature, storage period, maximum RVP & TVP of liquid during respective storage period, and shall make such records readily available for District inspection upon request. [District NSR Rule] Federally Enforceable Through Title V Permit
- 31. 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. [District Rule 4623] Federally Enforceable Through Title V Permit
- 32. All records required to be maintained by this permit shall be maintained for a period of at least five years and shall be made readily available for District inspection upon request. [District Rule 4623] Federally Enforceable Through Title V Permit
- 33. This unit was constructed prior to 1973 and has not been modified (as defined in 40 CFR 60.14) or reconstructed (as defined in 40 CFR 60.15) since 1973. Therefore, the requirements of 40 CFR 60 are not applicable to this unit. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
- 34. Permittee shall conduct true vapor pressure (TVP) testing of the organic liquid stored in this tank at least once every 12 months and/or whenever there is a change in the source or type of organic liquid stored in the tank. The TVP of any organic liquid shall be determined by measuring the Reid Vapor Pressure (RVP) using ASTM D 323 (Test Method for Vapor Pressure for Petroleum Products), and converting the RVP to TVP at the tank's maximum organic liquid storage temperature. The conversion of RVP to TVP shall be done in accordance with the procedures in appendix B of District Rule 4623. Records of TVP testing shall be maintained. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

PERMIT UNIT: S-1413-13-11

### SECTION: SW35 TOWNSHIP: 28S RANGE: 27E

#### **EQUIPMENT DESCRIPTION:**

Location:

EXPIRATION

20 MMBTU/HR BROACH NATURAL DRAFT HEATER WITH TWO NORTH AMERICAN MODEL 4211-12-LE-10 ULTRA LOW NOX BURNERS AND A FLUE GAS RECIRCULATION (FGR) SYSTEM

### PERMIT UNIT REQUIREMENTS

- 1. All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District Rule 2201] Federally Enforceable Through Title V Permit
- Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. No combustion contaminants exceeding 2. in concentration at the point of discharge 0.1 grain per cubic foot of gas calculated to 12% of carbon dioxide at dry standard conditions shall be discharged into the atmosphere. [District Rules 4201, 3.0 and 4301, 5.1] Federally Enforceable Through Title V Permit
- The unit shall only be fired on PUC-regulated natural gas. [District NSR Rule and County Rule 407 (Kern)] Federally 3. Enforceable Through Title V Permit
- Natural gas fuel consumption shall not exceed 415.2 MMBtu/day. [District Rule 2201] Federally Enforceable Through 4. **Title V Permit**
- During standard operation, emissions rates from the natural gas-fired unit shall not exceed any of the following limits: 5. 15 ppmv NOx @ 3% O2 or 0.018 lb-NOx/MMBtu, 0.00285 lb-SOx/MMBtu, 0.005 lb-PM10/MMBtu, 400 ppmv CO @ 3% O2 or 0.30 lb-CO/MMBtu, or 0.003 lb-VOC/MMBtu. [District Rules 2201, 4305, and 4306] Federally Enforceable Through Title V Permit
- During startup and shutdown, emissions from the natural gas-fired unit shall not exceed any of the following: 2.0 lb-6. NOx/hr, 0.06 lb-SOx/hr, 0.1 lb-PM10/hr, 6.0 lb-CO/hr, or 0.06 lb-VOC/hr. [District Rules 2201, 4305, and 4306] Federally Enforceable Through Title V Permit
- The total duration of startup time shall not exceed 2.0 hour per day. The total duration of shutdown time shall not 7. exceed 2.0 hour per day. [District Rules 2201, 4305, and 4306] Federally Enforceable Through Title V Permit
- 8. The emission control systems shall be in operation and emissions shall be minimized insofar as technologically feasible during startup and shutdown. [District Rules 2201, 4305, and 4306] Federally Enforceable Through Title V Permit
- 9. The permittee shall record the daily startup and shutdown duration times of the boiler. [District Rules 2201, 4305, and 4306] Federally Enforceable Through Title V Permit
- 10. The permittee shall monitor and record the stack concentration of NOx, CO, and O2 at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless monitoring has been performed within the last month. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit

Permit Unit Requirements for S-1413-13-11 (continued)

- 11. If either the NOx or CO concentrations corrected to 3% O2, as measured by the portable analyzer, exceed the allowable emissions concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 1 hour of operation after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 1 hour of operation after detection, the permittee shall notify the District within the following 1 hour and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
- 12. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
- 13. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 3% O2, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
- 14. All emissions measurements shall be made with the unit operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. No determination of compliance shall be established within two hours after a continuous period in which fuel flow to the unit is shut off for 30 minutes or longer, or within 30 minutes after a re-ignition as defined in Section 3.0 of District Rule 4306 (Amended 9/18/03). [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
- 15. Source testing to measure natural gas-combustion NOx and CO emissions from this unit shall be conducted at least once every twelve (12) months. After demonstrating compliance on two (2) consecutive annual source tests, the unit shall be tested not less than once every thirty-six (36) months. If the result of the 36-month source test demonstrates that the unit does not meet the applicable emission limits, the source testing frequency shall revert to at least once every twelve (12) months. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
- 16. The source test plan shall identify which basis (ppmv or lb/MMBtu) will be used to demonstrate compliance. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
- 17. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
- 18. NOx emissions for source test purposes shall be determined using EPA Method 7E or ARB Method 100 on a ppmv basis, or EPA Method 19 on a heat input basis. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
- 19. CO emissions for source test purposes shall be determined using EPA Method 10 or ARB Method 100. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
- 20. Stack gas oxygen (O2) shall be determined using EPA Method 3 or 3A or ARB Method 100. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
- 21. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit
- 22. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE These terms and conditions are part of the Facility-wide Permit to Operate. Federally Enforceable Through Title V Permit

Permit Unit Requirements for S-1413-13-11 (continued)

- 23. A non-resettable, totalizing mass or volumetric fuel flow meter to measure the amount of fuel combusted in the unit shall be installed, utilized and maintained. [40 CFR 60.48 (c)(g)] Federally Enforceable Through Title V Permit
- 24. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070, 4305, and 4306] Federally Enforceable Through Title V Permit
- 25. Source testing shall be District witnessed or authorized. [District Rule 1081] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate. Facility Name: SHELL PIPELINE COMPANY LP Location: BAKERSFIELD PUMP STATION, 1801 PETROL RD, BAKERSFIELD, CA 93308-9793 S-1413-13-11: Apr 28 2010 2:28PM - SALINASM

PERMIT UNIT: S-1413-14-2 SECTION: SW35 TOWNSHIP: 28S RANGE: 27E EQUIPMENT DESCRIPTION: 400 GALLON FIXED ROOF SOLVENT STORAGE TANK

EXPIR.

### PERMIT UNIT REQUIREMENTS

- 1. This tank shall only store, place, or hold solvent liquids with a true vapor pressure (TVP) of less than 0.2 psia under all storage conditions. [District Rule 4623, 2.0] Federally Enforceable Through Title V Permit
- 2. The permittee shall keep accurate records of each solvent stored in the tank, including its storage temperature and TVP. [District Rule 1070] Federally Enforceable Through Title V Permit
- 3. All records required to be maintained by this permit shall be maintained for a period of at least 5 years and shall be made readily available for District inspection upon request. [District Rule 1070] Federally Enforceable Through Title V Permit
- Permittee shall maintain on-site Manufacturer Safety Data Sheets (MSDS) or other documents supplied by the manufacturer to verify the TVP of liquid stored in this tank. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

These terms and conditions are pare of the Facility-wide Permit to Operate. Facility Name: SHELL PIPELINE COMPANY LP Location: BAKERSFIELD PUMP STATION.1801 PETROL RD, BAKERSFIELD, CA 93308-9793 S-1413-142: Apr 21 2010 2:47PM - SALINASM

# ATTACHMENT B

Existing Title V Operating Permit and Implemented ATC's

FACILITY: S-1413-0-1

#### **EXPIRATION DATE: 04/30/2010**

### 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

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

Facility-wide Requirements for S-1413-0-1 (continued)

- 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
- 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
- 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

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

Facility-wide Requirements for S-1413-0-1 (continued)

- 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 for S-1413-0-1 (continued)

- 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
- 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. On June 30, 2005, the initial Title V permit was issued. The reporting periods for the Report of Required Monitoring and the Compliance Certification Report are based upon this initial permit issuance date, unless alternative dates are approved by the District Compliance Division. These reports are due within 30 days after the end of the reporting period. [District Rule 2520] Federally Enforceable Through Title V Permit

#### PERMIT UNIT: S-1413-4-10

#### **EXPIRATION DATE: 04/30/2010**

#### SECTION: SW35 TOWNSHIP: 28S RANGE: 27E

#### **EQUIPMENT DESCRIPTION:**

CRUDE OIL STORAGE AND TRANSFER OPERATION CONSISTING OF A 67,000 BBL (2,814,000 GALLON) RIVETED EXTERNAL FLOATING ROOF CRUDE OIL STORAGE TANK #105 WITH A MECHANICAL SHOE PRIMARY SEAL, WIPER TYPE SECONDARY SEAL, AND SLOTTED GUIDEPOLE (BAKERSFIELD PUMP STATION)

### PERMIT UNIT REQUIREMENTS

- 1. 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
- 2. Tank throughput shall not exceed 67,000 bbl/day. [District Rule 2201] Federally Enforceable Through Title V Permit
- 3. Tank shall be equipped with Weather Guard mechanical shoe primary seal and wiper type secondary seal. [District NSR Rule and District Rule 4623, 5.3.2.4.1] Federally Enforceable Through Title V Permit
- 4. The operation shall include four centrifugal loading pumps, three centrifugal recirculation pumps, two heat exchangers, piping network, and an underground steel sump tank. [District NSR Rule] Federally Enforceable Through Title V Permit
- 5. This tank shall be equipped with a closure device between the tank shell and roof edge consisting of two seals mounted one above the other; the one below shall be referred to as the primary seal, and the one above shall be referred as the secondary seal. [District Rule 4623, 5.3.1.2] Federally Enforceable Through Title V Permit
- 6. 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 Rules 4623, 5.3.1.3] Federally Enforceable Through Title V Permit
- 7. Gaps between the tank shell and the primary seal shall not exceed 2 1/2 inches. [District Rule 4623, 5.3.2.2.1] Federally Enforceable Through Title V Permit
- 8. The cumulative length of all primary seal gaps greater than 1 1/2 inches shall not exceed 10% of the circumference of the tank. [District Rule 4623, 5.3.2.2.1] Federally Enforceable Through Title V Permit
- 9. 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, 5.3.2.2.1] Federally Enforceable Through Title V Permit
- 10. No continuous gap in the primary seal greater than 1/8 inch wide shall exceed 10% of the tank circumference. [District Rule 4623, 5.3.2.2.1] Federally Enforceable Through Title V Permit

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

Permit Unit Requirements for S-1413-4-10 (continued)

- 11. No gap between the tank shell and the secondary seal shall exceed 1/2 inch. [District Rule 4623, 5.3.2.2.2] 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, 5.3.2.2.2] 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, 5.3.2.2.3] 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 5 inches for a length of at least 18 inches in the vertical plane above the liquid. [District Rule 4623, 5.3.2.2.3] Federally Enforceable Through Title V Permit
- 15. True vapor pressure of crude oil stored, transferred, or heated shall not exceed 8.0 psia. [District NSR Rule] 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, 5.3.2.2.4] Federally Enforceable Through Title V Permit
- 17. The secondary seal shall allow easy insertion of probes up to 2 1/2 inches in width in order to measure gaps in the primary seal. [District Rule 4623, 5.3.2.2.5] 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, 5.3.2.2.6] 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. 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, 3.11, and 6.4.8] Federally Enforceable Through Title V Permit
- 21. 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
- 22. 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
- 23. 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] Federally Enforceable Through Title V Permit
- 24. 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 Rules 4623, 5.5.2.2.4] Federally Enforceable Through Title V Permit
- 25. 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

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Permit Unit Requirements for S-1413-4-10 (continued)

- 26. 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
- 27. All wells and similar fixed projections through the floating roof shall provide a projection below the liquid surface. [District Rule 4623, 5.5.2.4.1] Federally Enforceable Through Title V Permit
- 28. The slotted guidepole well on a 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
- 29. The gap between the pole wiper and the slotted guidepole shall be added to the gaps measured to determine compliance with the secondary seal requirement, and in no case shall exceed 1/8 inch. [District Rule 4623, 5.5.2.4.3]
- 30. Oil throughput of sump shall not exceed 5,200 gal/day. [District NSR Rule] Federally Enforceable Through Title V Permit
- 31. Permittee shall notify the District in writing upon each occasion when the crude oil received, stored, handled, transferred, or loaded into railcars is heated in the heat exchangers. [District NSR Rule] Federally Enforceable Through Title V Permit
- 32. Permittee shall notify District at least 7 days prior to the date when unobstructed primary and secondary seal/gap measurements will occur. [District Rule 1070] Federally Enforceable Through Title V Permit
- 33. Combustion contaminant emissions from fired equipment shall not increase due to increased throughput at heat exchangers. [District NSR Rule] Federally Enforceable Through Title V Permit
- 34. Fugitive volatile organic compound (VOC) emissions shall not exceed 17.7 lb/day (combined fugitive emissions from permits S-1413-4 and S-1413-6). [District Rule 2201] Federally Enforceable Through Title V Permit
- 35. The permittee of external floating roof tanks 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. 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
- 36. The permittee shall inspect all floating tanks at least once every 12 months to determine compliance with the requirements of this rule. 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] Federally Enforceable Through Title V Permit
- 37. The permittee shall inspect the primary and secondary seals for compliance with the requirements of this rule every time a tank is emptied or degassed. Actual gap measurements shall be performed when the liquid level is static but not more than 24 hours after the tank roof is re-floated. [District Rule 4623, 6.1.3.1.2] Federally Enforceable Through Title V Permit
- 38. 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 Rule 4623. [District Rule 4623, 6.3.5] Federally Enforceable Through Title V Permit
- Permittee shall maintain record of liquids stored, daily throughput, storage temperature, storage period, maximum RVP & TVP of liquid during respective storage period, and shall make such records readily available for District inspection upon request. [District NSR Rule] Federally Enforceable Through Title V Permit

Permit Unit Requirements for S-1413-4-10 (continued)

- 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] Federally Enforceable Through Title V Permit
- 41. All records required to be maintained by this permit shall be maintained for a period of at least five years and shall be made readily available for District inspection upon request. [District Rule 4623, 6.3] Federally Enforceable Through Title V Permit
- 42. This unit was constructed prior to 1973 and has not been modified (as defined in 40 CFR 60.14) or reconstructed (as defined in 40 CFR 60.15) since 1973. Therefore, the requirements of 40 CFR 60 are not applicable to this unit. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
- 43. Permittee shall conduct API gravity and True Vapor Pressure (TVP) testing of the organic liquid stored in this tank at actual storage temperature of the organic liquid in the tank within 30 days of tank filling and annually thereafter during summer (July September), and/or whenever there is a change in the source or type of organic liquid stored in this tank. [District Rule 2201] Federally Enforceable Through Title V Permit
- 44. 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 2201] Federally Enforceable Through Title V Permit
- 45. The API gravity of crude oil or petroleum distillate shall be determine by using ASTM Method D 287 e1 "Standard Test Method for API gravity of Crude Petroleum and Petroleum Products (Hydrometer Method)". Sampling for API gravity shall be performed in accordance with ASTM Method D 4057 "Standard Practices for Manual Sampling of Petroleum and Petroleum Products". [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
- 46. For crude oil with an API gravity of 26 degrees or less, the TVP shall be determined using the latest version of the Lawrence Berkeley National Laboratory "Test Method for Vapor Pressure of Reactive Organic Compounds in Heavy Crude Oil Using Gas Chromatograph", as approved by ARB and EPA. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
- 47. For any organic liquid, except crude oil with an API gravity of 26 degrees or less, the true vapor pressure (TVP) shall be determined by measuring Reid Vapor Pressure (RVP) with ASTM Method D 323 and converting the RVP to TVP at the tank's maximum organic liquid storage temperature. The conversion of RVP to TVP shall be done in accordance with the oil and gas section of "California Air Resources Boards (ARB) Technical Guidance Document to the Criteria and Guidelines Regulation for AB 2588", dated August 1989. As an alternative to using ASTM D 323, the TVP of crude oil with an API gravity range of greater than 26 degrees up to 30 degrees may be determined by using other equivalent test methods approved by APCO, ARB and EPA. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
- 48. Permittee shall submit the records of TVP and API gravity testing to the APCO within 45 days after the date of testing. The records shall include the tank identification number, Permit to Operate number, type of stored organic liquid, TVP and API gravity of the organic liquid, test methods used, and a copy of the test results. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
- 49. Operators of floating roof tanks shall submit a tank inspection plan to the APCO for approval. The plan shall include an inventory of the tanks subject to this rule and a tank inspection schedule. A copy of the operator's tank safety procedures shall be made available to the APCO upon request. The tank inventory shall include tank's identification number, PTO number, maximum tank capacity, dimensions of tank (height and diameter), organic liquid stored, type of primary and secondary seal, type of floating roof (internal or external floating roof), construction date of tank, and location of tank. Any revision to a previously approved tank inspection schedule shall be submitted to the APCO for approval prior to conducting an inspection. [District Rule 4623, 6.1.2] Federally Enforceable Through Title V Permit

#### **PERMIT UNIT: S-1413-6-5**

#### EXPIRATION DATE: 04/30/2010

#### SECTION: SW35 TOWNSHIP: 28S RANGE: 27E

#### **EQUIPMENT DESCRIPTION:**

CRUDE OIL STORAGE AND TRANSFER OPERATION INCLUDING A 67,000 BARREL (2,814,000 GALLON) RIVETED EXTERNAL FLOATING ROOF CRUDE OIL STORAGE TANK #106 WITH MECHANICAL SHOE PRIMARY SEAL AND WIPER TYPE SECONDARY SEAL (BAKERSFIELD PUMP STATION)

### PERMIT UNIT REQUIREMENTS

- 1. Tank shall be equipped with Weather Guard mechanical shoe primary seal and wiper type secondary seal. [District NSR Rule and District Rule 4623, 5.3.2.4.1] Federally Enforceable Through Title V Permit
- The operation shall include four centrifugal loading pumps, three centrifugal recirculation pumps, two heat exchangers, piping network, and an underground steel sump tank. [District NSR Rule] Federally Enforceable Through Title V Permit
- 3. This tank shall be equipped with a closure device between the tank shell and roof edge consisting of two seals mounted one above the other; the one below shall be referred to as the primary seal, and the one above shall be referred as the secondary seal. [District Rule 4623] Federally Enforceable Through Title V Permit
- 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] Federally Enforceable Through Title V Permit
- 5. Gaps between the tank shell and the primary seal shall not exceed 2 1/2 inches. [District Rule 4623] Federally Enforceable Through Title V Permit
- 6. The cumulative length of all primary seal gaps greater than 1 1/2 inches shall not exceed 10% of the circumference of the tank. [District Rule 4623] Federally Enforceable Through Title V Permit
- 7. 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] Federally Enforceable Through Title V Permit
- 8. No continuous gap in the primary seal greater than 1/8 inch wide shall exceed 10% of the tank circumference. [District Rule 4623] Federally Enforceable Through Title V Permit
- 9. No gap between the tank shell and the secondary seal shall exceed 1/2 inch. [District Rule 4623] Federally Enforceable Through Title V Permit
- 10. 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] Federally Enforceable Through Title V Permit
- 11. 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] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

Permit Unit Requirements for S-1413-6-5 (continued)

- 12. 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 5 inches for a length of at least 18 inches in the vertical plane above the liquid. [District Rule 4623] Federally Enforceable Through Title V Permit
- 13. The true vapor pressure (TVP) of crude oil stored, transferred, or heated shall not exceed 8.0 psia. [District NSR Rule] Federally Enforceable Through Title V Permit
- 14. 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] Federally Enforceable Through Title V Permit
- 15. The secondary seal shall allow easy insertion of probes up to 2 1/2 inches in width in order to measure gaps in the primary seal. [District Rule 4623] Federally Enforceable Through Title V Permit
- 16. The secondary seal shall extend from the roof to the tank shell and shall not be attached to the primary seal. [District Rule 4623] Federally Enforceable Through Title V Permit
- 17. 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] Federally Enforceable Through Title V Permit
- 18. A gas-tight condition is defined as a condition without a gas leak. A gas leak is defined as a reading in excess of 10,000 ppmv, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21. A reading in excess of 10,000 ppmv above background is a violation of this permit and Rule 4623 and shall be reported as a deviation. [District Rule 4623] Federally Enforceable Through Title V Permit
- 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] Federally Enforceable Through Title V Permit
- 20. 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] Federally Enforceable Through Title V Permit
- 21. 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] Federally Enforceable Through Title V Permit
- 22. 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] Federally Enforceable Through Title V Permit
- 23. 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] Federally Enforceable Through Title V Permit
- 24. 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] Federally Enforceable Through Title V Permit
- 25. All wells and similar fixed projections through the floating roof shall provide a projection below the liquid surface. [District Rule 4623] Federally Enforceable Through Title V Permit

Permit Unit Requirements for S-1413-6-5 (continued)

- 26. The slotted guidepole well on a 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] Federally Enforceable Through Title V Permit
- 27. The gap between the pole wiper and the slotted guidepole shall be added to the gaps measured to determine compliance with the secondary seal requirement, and in no case shall exceed 1/8 inch. [District Rule 4623] Federally Enforceable Through Title V Permit
- 28. Oil throughput of sump shall not exceed 5,200 gal/day. [District NSR Rule] Federally Enforceable Through Title V Permit
- 29. Upon commencement of 88,000 bbl/day throughput, the District shall be provided with the previous years of combustion data, and monthly after 88,000 bbl/day throughput, the District shall be provided with previous months combustion data. [District NSR Rule] Federally Enforceable Through Title V Permit
- 30. Permittee shall notify the District in writing upon each occasion when the crude oil received, stored, handled, transferred, or loaded into railcars is heated in the heat exchangers. [District NSR Rule] Federally Enforceable Through Title V Permit
- 31. Permittee shall notify District at least 7 days prior to the date when unobstructed primary and secondary seal/gap measurements will occur. [District Rule 1070] Federally Enforceable Through Title V Permit
- 32. Combustion contaminant emissions from fired equipment shall not increase due to increased throughput at heat exchangers. [District NSR Rule] Federally Enforceable Through Title V Permit
- 33. Volatile organic compound (VOC) emission rate shall not exceed 45.1 lb/day and 17.7 lb/day fugitive (combined fugitive emissions from permits S-1413-4 and -6). [District NSR Rule] Federally Enforceable Through Title V Permit
- 34. The permittee of external floating roof tanks 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] Federally Enforceable Through Title V Permit
- 35. The permittee shall inspect all floating tanks at least once every 12 months to determine compliance with the requirements of this rule. 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] Federally Enforceable Through Title V Permit
- 36. The permittee shall inspect the primary and secondary seals for compliance with the requirements of this rule every time a tank is emptied or degassed. Actual gap measurements shall be performed when the liquid level is static but not more than 24 hours after the tank roof is re-floated. [District Rule 4623] Federally Enforceable Through Title V Permit
- 37. 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 Rule 4623. [District Rule 4623] Federally Enforceable Through Title V Permit
- Permittee shall maintain record of liquids stored, daily throughput, storage temperature, storage period, maximum RVP & TVP of liquid during respective storage period, and shall make such records readily available for District inspection upon request. [District NSR Rule] Federally Enforceable Through Title V Permit

Permit Unit Requirements for S-1413-6-5 (continued)

- 39. Permittee shall maintain the records of the external floating roof landing activities that are performed pursuant to Rule 4623, Sections 5.3.1.3 and 5.4.3. The records shall include information on the 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] Federally Enforceable Through Title V Permit
- 40. Permittee shall maintain accurate records of the types and amount of fuel burned in the boilers since 1980 to document that no increase in combustion emissions due to Saco Railcar Crude Oil Loading occurs. [District NSR Rule] Federally Enforceable Through Title V Permit
- 41. All records required to be maintained by this permit shall be maintained for a period of at least five years and shall be made readily available for District inspection upon request. [District Rule 4623] Federally Enforceable Through Title V Permit
- 42. This unit was constructed prior to 1973 and has not been modified (as defined in 40 CFR 60.14) or reconstructed (as defined in 40 CFR 60.15) since 1973. Therefore, the requirements of 40 CFR 60 are not applicable to this unit. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
- 43. Permittee shall conduct true vapor pressure (TVP) testing of the organic liquid stored in this tank at least once every 12 months and/or whenever there is a change in the source or type of organic liquid stored in the tank. The TVP of any organic liquid shall be determined by measuring the Reid Vapor Pressure (RVP) using ASTM D 323 (Test Method for Vapor Pressure for Petroleum Products), and converting the RVP to TVP at the tank's maximum organic liquid storage temperature. The conversion of RVP to TVP shall be done in accordance with the procedures in appendix B of District Rule 4623. Records of TVP testing shall be maintained. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

#### **PERMIT UNIT: S-1413-7-5**

#### **EXPIRATION DATE:** 04/30/2010

#### SECTION: SW35 TOWNSHIP: 28S RANGE: 27E

#### **EQUIPMENT DESCRIPTION:**

67,000 BBL (2,814,000 GALLON) INTERNAL FLOATING ROOF CRUDE OIL STORAGE TANK T 670-S-102 WITH ALTECH ALCLAD ALUMINUM PONTOON INTERNAL FLOATING ROOF WITH PRIMARY LIQUID MOUNTED FOAM LOG SEAL AND SECONDARY WIPER SEAL (BAKERSFIELD PUMP STATION)

### PERMIT UNIT REQUIREMENTS

- 1. The internal floating roof shall rest or float on the liquid surface (but not necessarily in complete contact with it) inside a storage vessel that has a fixed roof. The internal roof shall be floating on the liquid surface except during initial fill and when the storage vessel is completely emptied or subsequently emptied and 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 days prior to performing the work. [District Rule 4623, 5.3.1.3] Federally Enforceable Through Title V Permit
- 2. The primary resilient toroid seal shall be mounted on the perimeter of the roof such that it is in contact with the tank's liquid contents at all times while the roof is floating. [District Rule 4623, 5.3.2.3.1] Federally Enforceable Through Title V Permit
- 3. No gap between the tank shell and the primary seal shall exceed 1/2 inch. [District Rule 4623, 5.3.2.3.2] Federally Enforceable Through Title V Permit
- 4. The cumulative length of all primary seal gaps greater than 1/8 inch shall not exceed 5% of the tank circumference. [District Rule 4623, 5.3.2.3.2] Federally Enforceable Through Title V Permit
- 5. No continuous gap in the primary seal greater than 1/8 inch wide shall exceed 10% of the tank circumference. [District Rule 4623, 5.3.2.3.2] Federally Enforceable Through Title V Permit
- 6. No gap between the tank shell and the secondary seal shall exceed 1/2 inch. [District Rules 4623, 5.3.2.3.3] Federally Enforceable Through Title V Permit
- 7. 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, 5.3.2.3.3] Federally Enforceable Through Title V Permit
- 8. 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, 5.3.2.3.4] Federally Enforceable Through Title V Permit
- 9. The secondary seal shall allow easy insertion of probes up to 1/2 inch in width in order to measure gaps in the primary seal. [District Rule 4623, 5.3.2.3.5] Federally Enforceable Through Title V Permit
- 10. The secondary seal shall extend from the roof to the tank shell and shall not be attached to the primary seal. [District Rule 4623, 5.3.2.3.6] Federally Enforceable Through Title V Permit

Permit Unit Requirements for S-1413-7-5 (continued)

- 11. 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, 5.2] Federally Enforceable Through Title V Permit
- 12. Stored petroleum liquid true vapor pressure shall not exceed 8.0 psia. [District NSR Rule] Federally Enforceable Through Title V Permit
- 13. 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
- 14. 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, 3.10] Federally Enforceable Through Title V Permit
- 15. 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. [District Rule 4623, 5.5.2.1.1] Federally Enforceable Through Title V Permit
- 16. Each opening in the internal floating roof except for leg sleeves, automatic bleeder vents, rim space vents, column wells, ladder wells, sample wells, and stub drains is to be equipped with a cover or lid which is to be maintained in a closed position at all times (i.e., no visible gap) except when the device is in actual use. The cover or lid shall be equipped with a gasket. Covers on each access hatch and automatic gauge float well shall be bolted except when they are in use. [District Rule 4623, 5.5.2.1.2] Federally Enforceable Through Title V Permit
- 17. Automatic bleeder vents shall be equipped with a gasket and shall be closed at all times when the roof is floating except when the roof is being floated off or is being landed on the roof leg supports. [District Rule 4623, 5.5.2.1.3] Federally Enforceable Through Title V Permit
- Rim vents shall be equipped with a gasket and are to be set to open only when the internal floating roof is not floating or at the manufacturer's recommended setting. [District Rule 4623, 5.5.2.1.4] Federally Enforceable Through Title V Permit
- 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% of the opening. The fabric cover must be impermeable. [District Rule 4623, 5.5.2.1.5] Federally Enforceable Through Title V Permit
- 20. 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. [District Rule 4623, 5.5.2.1.6] Federally Enforceable Through Title V Permit
- 21. Daily tank liquid throughput shall not exceed 30,000 bbl. [District NSR Rule] Federally Enforceable Through Title V Permit
- 22. Permittee shall notify District at least 7 days prior to the date when unobstructed primary and secondary seal/gap testing will occur. [District Rule 1070] Federally Enforceable Through Title V Permit
- 23. Volatile organic compound (VOC) emission rate shall not exceed 22.2 lb day. [District NSR Rule] Federally Enforceable Through Title V Permit

Permit Unit Requirements for S-1413-7-5 (continued)

- 24. The permittee 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 for newly constructed, repair, or rebuilt internal floating roof tanks. If holes, tears, or openings in the primary seal, the secondary seal fabric or defects in the internal floating roof or its appurtenant parts, components, fittings, etc., are found, they shall be repaired prior to filling the tank. [District Rule 4623, 6.1.3.2.1] Federally Enforceable Through Title V Permit
- 25. The permittee 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 vapors. Any defects found are violations of this rule. [District Rule 4623, 6.1.3.2.2] Federally Enforceable Through Title V Permit
- 26. The permittee shall conduct actual gap measurements of the primary seal and/or secondary seal at least once every 60 months. [District Rule 4623, 6.1.3.2.3] Federally Enforceable Through Title V Permit
- 27. 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 Rule 4623. [District Rule 4623, 6.3.5] Federally Enforceable Through Title V Permit
- Permittee shall maintain record of liquids stored, daily throughput, storage temperature, storage period, maximum RVP & TVP of liquid during respective storage period, and shall make such records readily available for District inspection upon request. [District NSR Rule] Federally Enforceable Through Title V Permit
- 29. 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. [District Rule 4623, 6.3.7] Federally Enforceable Through Title V Permit
- 30. All records required to be maintained by this permit shall be maintained for a period of at least five years and shall be made readily available for District inspection upon request. [District Rule 4623, 6.3] Federally Enforceable Through Title V Permit
- 31. This unit was constructed prior to 1973 and has not been modified (as defined in 40 CFR 60.14) or reconstructed (as defined in 40 CFR 60.15) since 1973. Therefore, the requirements of 40 CFR 60 are not applicable to this unit. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
- 32. Permittee shall conduct true vapor pressure (TVP) testing of the organic liquid stored in this tank at least once every 12 months and/or whenever there is a change in the source or type of organic liquid stored in the tank. The TVP of any organic liquid shall be determined by measuring the Reid Vapor Pressure (RVP) using ASTM D 323 (Test Method for Vapor Pressure for Petroleum Products), and converting the RVP to TVP at the tank's maximum organic liquid storage temperature. The conversion of RVP to TVP shall be done in accordance with the procedures in appendix B of District Rule 4623. Records of TVP testing shall be maintained. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

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#### **PERMIT UNIT: S-1413-8-5**

#### **EXPIRATION DATE:** 04/30/2010

#### SECTION: SW35 TOWNSHIP: 28S RANGE: 27E

#### **EQUIPMENT DESCRIPTION:**

67,000 BBL (2,814,000 GALLONS) RIVETED FIXED ROOF CRUDE OIL STORAGE TANK T 670-S-101 WITH PAN INTERNAL FLOATING ROOF WITH ALTECH DOUBLE WIPER SEAL (BAKERSFIELD PUMP STATION)

### PERMIT UNIT REQUIREMENTS

- 1. The internal floating roof shall rest or float on the liquid surface (but not necessarily in complete contact with it) inside a storage vessel that has a fixed roof. The internal roof shall be floating on the liquid surface except during initial fill and when the storage vessel is completely emptied or subsequently emptied and 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 days prior to performing the work. [District Rule 4623, 5.3.1.3] Federally Enforceable Through Title V Permit
- 2. Gaps between the tank shell and the primary seal shall not exceed 2 1/2 inches. [District Rule 4623, 5.3.2.2.1] Federally Enforceable Through Title V Permit
- 3. The cumulative length of all primary seal gaps greater than 1 1/2 inches shall not exceed 10% of the circumference of the tank. [District Rule 4623, 5.3.2.2.1] Federally Enforceable Through Title V Permit
- 4. 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, 5.3.2.2.1] Federally Enforceable Through Title V Permit
- 5. No continuous gap in the primary seal greater than 1/8 inch wide shall exceed 10% of the tank circumference. [District Rule 4623, 5.3.2.2.1] Federally Enforceable Through Title V Permit
- 6. No gap between the tank shell and the secondary seal shall exceed 1/2 inch. [District Rule 4623, 5.3.2.2.2] Federally Enforceable Through Title V Permit
- 7. 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, 5.3.2.2.2] Federally Enforceable Through Title V Permit
- 8. 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, 5.3.2.2.4] Federally Enforceable Through Title V Permit
- 9. The secondary seal shall allow easy insertion of probes up to 2 1/2 inches in width in order to measure gaps in the primary seal. [District Rule 4623, 5.3.2.2.5] Federally Enforceable Through Title V Permit
- 10. The secondary seal shall extend from the roof to the tank shell and shall not be attached to the primary seal. [District Rule 4623, 5.3.2.2.6] Federally Enforceable Through Title V Permit
- 11. 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, 5.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE These terms and conditions are part of the Facility-wide Permit to Operate. Permit Unit Requirements for S-1413-8-5 (continued)

- 12. Stored petroleum liquid true vapor pressure shall not exceed 8.0 psia. [District NSR Rule] Federally Enforceable Through Title V Permit
- 13. 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
- 14. 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, 3.10] Federally Enforceable Through Title V Permit
- 15. 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. [District Rule 4623, 5.5.2.1.1] Federally Enforceable Through Title V Permit
- 16. Each opening in the internal floating roof except for leg sleeves, automatic bleeder vents, rim space vents, column wells, ladder wells, sample wells, and stub drains is to be equipped with a cover or lid which is to be maintained in a closed position at all times (i.e., no visible gap) except when the device is in actual use. The cover or lid shall be equipped with a gasket. Covers on each access hatch and automatic gauge float well shall be bolted except when they are in use. [District Rule 4623, 5.5.2.1.2] Federally Enforceable Through Title V Permit
- 17. Automatic bleeder vents shall be equipped with a gasket and shall be closed at all times when the roof is floating except when the roof is being floated off or is being landed on the roof leg supports. [District Rule 4623, 5.5.2.1.3] Federally Enforceable Through Title V Permit
- 18. Rim vents shall be equipped with a gasket and are to be set to open only when the internal floating roof is not floating or at the manufacturer's recommended setting. [District Rule 4623, 5.5.2.1.4] Federally Enforceable Through Title V Permit
- 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% of the opening. The fabric cover must be impermeable. [District Rule 4623, 5.5.2.1.5] Federally Enforceable Through Title V Permit
- 20. 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. [District Rule 4623, 5.5.2.1.6] Federally Enforceable Through Title V Permit
- 21. Daily tank liquid throughput shall not exceed 30,000 bbl. [District NSR Rule] Federally Enforceable Through Title V Permit
- 22. Permittee shall notify District at least 7 days prior to the date when unobstructed primary and secondary seal/gap testing will occur. [District Rule 1070] Federally Enforceable Through Title V Permit
- 23. Volatile organic compound (VOC) emission rate shall not exceed 22.2 lb day. [District NSR Rule] Federally Enforceable Through Title V Permit
- 24. The permittee 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 for newly constructed, repair, or rebuilt internal floating roof tanks. If holes, tears, or openings in the primary seal, the secondary seal, the seal fabric or defects in the internal floating roof or its appurtenant parts, components, fittings, etc., are found, they shall be repaired prior to filling the tank. [District Rule 4623, 6.1.3.2.1] Federally Enforceable Through Title V Permit

Permit Unit Requirements for S-1413-8-5 (continued)

- 25. The permittee 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 vapors. Any defects found are violations of this rule. [District Rule 4623, 6.1.3.2.2] Federally Enforceable Through Title V Permit
- 26. The permittee shall conduct actual gap measurements of the primary seal and/or secondary seal at least once every 60 months. [District Rule 4623, 6.1.3.2.3] Federally Enforceable Through Title V Permit
- 27. 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 Rule 4623. [District Rule 4623, 6.3.5] Federally Enforceable Through Title V Permit
- 28. Permittee shall maintain record of liquids stored, daily throughput, storage temperature, storage period, maximum RVP & TVP of liquid during respective storage period, and shall make such records readily available for District inspection upon request. [District NSR Rule] Federally Enforceable Through Title V Permit
- 29. 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. [District Rule 4623, 6.3.7] Federally Enforceable Through Title V Permit
- 30. All records required to be maintained by this permit shall be maintained for a period of at least five years and shall be made readily available for District inspection upon request. [District Rule 4623, 6.3] Federally Enforceable Through Title V Permit
- 31. This tank shall be equipped with a closure device between the tank shell and roof edge consisting of two seals mounted one above the other; the one below shall be referred to as the primary seal, and the one above shall be referred as the secondary seal. [District Rule 4623, 5.3.1.2] Federally Enforceable Through Title V Permit
- 32. This unit was constructed prior to 1973 and has not been modified (as defined in 40 CFR 60.14) or reconstructed (as defined in 40 CFR 60.15) since 1973. Therefore, the requirements of 40 CFR 60 are not applicable to this unit. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
- 33. Permittee shall conduct true vapor pressure (TVP) testing of the organic liquid stored in this tank at least once every 12 months and/or whenever there is a change in the source or type of organic liquid stored in the tank. The TVP of any organic liquid shall be determined by measuring the Reid Vapor Pressure (RVP) using ASTM D 323 (Test Method for Vapor Pressure for Petroleum Products), and converting the RVP to TVP at the tank's maximum organic liquid storage temperature. The conversion of RVP to TVP shall be done in accordance with the procedures in appendix B of District Rule 4623. Records of TVP testing shall be maintained. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

#### PERMIT UNIT: S-1413-9-5

#### **EXPIRATION DATE: 04/30/2010**

### SECTION: SW35 TOWNSHIP: 28S RANGE: 27E

#### **EQUIPMENT DESCRIPTION:**

67,000 BBL (2,814,000 GALLON) INTERNAL FLOATING ROOF CRUDE OIL STORAGE TANK # 103 WITH TOROID PRIMARY SEAL AND SECONDARY WIPER SEAL (BAKERSFIELD PUMP STATION)

### PERMIT UNIT REQUIREMENTS

- 1. The internal floating roof shall rest or float on the liquid surface (but not necessarily in complete contact with it) inside a storage vessel that has a fixed roof. The internal roof shall be floating on the liquid surface except during initial fill and when the storage vessel is completely emptied or subsequently emptied and 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 days prior to performing the work. [District Rule 4623, 5.3.1.3] Federally Enforceable Through Title V Permit
- The primary resilient toroid seal shall be mounted on the perimeter of the roof such that it is in contact with the tank's liquid contents at all times while the roof is floating. [District Rule 4623, 5.3.2.3.1] Federally Enforceable Through Title V Permit
- 3. No gap between the tank shell and the primary seal shall exceed 1/2 inch. [District Rule 4623, 5.3.2.3.2] Federally Enforceable Through Title V Permit
- 4. The cumulative length of all primary seal gaps greater than 1/8 inch shall not exceed 5% of the tank circumference. [District Rule 4623, 5.3.2.3.2] Federally Enforceable Through Title V Permit
- 5. No continuous gap in the primary seal greater than 1/8 inch wide shall exceed 10% of the tank circumference. [District Rule 4623, 5.3.2.3.2] Federally Enforceable Through Title V Permit
- 6. No gap between the tank shell and the secondary seal shall exceed 1/2 inch. [District Rules 4623, 5.3.2.3.3] Federally Enforceable Through Title V Permit
- 7. 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, 5.3.2.3.3] Federally Enforceable Through Title V Permit
- 8. 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, 5.3.2.3.4] Federally Enforceable Through Title V Permit
- 9. The secondary seal shall allow easy insertion of probes up to 1/2 inch in width in order to measure gaps in the primary seal. [District Rule 4623, 5.3.2.3.5] Federally Enforceable Through Title V Permit
- 10. The secondary seal shall extend from the roof to the tank shell and shall not be attached to the primary seal. [District Rule 4623, 5.3.2.3.6] Federally Enforceable Through Title V Permit

Permit Unit Requirements for S-1413-9-5 (continued)

- 11. 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, 5.2] Federally Enforceable Through Title V Permit
- 12. Stored petroleum liquid true vapor pressure shall not exceed 8.0 psia. [District NSR Rule] Federally Enforceable Through Title V Permit
- 13. 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
- 14. 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, 3.10] Federally Enforceable Through Title V Permit
- 15. 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. [District Rule 4623, 5.5.2.1.1] Federally Enforceable Through Title V Permit
- 16. Each opening in the internal floating roof except for leg sleeves, automatic bleeder vents, rim space vents, column wells, ladder wells, sample wells, and stub drains is to be equipped with a cover or lid which is to be maintained in a closed position at all times (i.e., no visible gap) except when the device is in actual use. The cover or lid shall be equipped with a gasket. Covers on each access hatch and automatic gauge float well shall be bolted except when they are in use. [District Rule 4623, 5.5.2.1.2] Federally Enforceable Through Title V Permit
- 17. Automatic bleeder vents shall be equipped with a gasket and shall be closed at all times when the roof is floating except when the roof is being floated off or is being landed on the roof leg supports. [District Rule 4623, 5.5.2.1.3] Federally Enforceable Through Title V Permit
- 18. Rim vents shall be equipped with a gasket and are to be set to open only when the internal floating roof is not floating or at the manufacturer's recommended setting. [District Rule 4623, 5.5.2.1.4] Federally Enforceable Through Title V Permit
- 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% of the opening. The fabric cover must be impermeable. [District Rule 4623, 5.5.2.1.5] Federally Enforceable Through Title V Permit
- 20. 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. [District Rule 4623, 5.5.2.1.6] Federally Enforceable Through Title V Permit
- 21. Daily tank liquid throughput shall not exceed 40,000 bbl. [District NSR Rule] Federally Enforceable Through Title V Permit
- 22. Permittee shall notify District at least 7 days prior to the date when unobstructed primary and secondary seal/gap testing will occur. [District Rule 1070] Federally Enforceable Through Title V Permit
- 23. Volatile organic compound (VOC) emission rate shall not exceed 35.0 lb day. [District NSR Rule] Federally Enforceable Through Title V Permit

#### Permit Unit Requirements for S-1413-9-5 (continued)

- 24. The permittee 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 for newly constructed, repair, or rebuilt internal floating roof tanks. If holes, tears, or openings in the primary seal, the secondary seal, the seal fabric or defects in the internal floating roof or its appurtenant parts, components, fittings, etc., are found, they shall be repaired prior to filling the tank. [District Rule 4623, 6.1.3.2.1] Federally Enforceable Through Title V Permit
- 25. The permittee 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 vapors. Any defects found are violations of this rule. [District Rule 4623, 6.1.3.2.2] Federally Enforceable Through Title V Permit
- 26. The permittee shall conduct actual gap measurements of the primary seal and/or secondary seal at least once every 60 months. [District Rule 4623, 6.1.3.2.3] Federally Enforceable Through Title V Permit
- 27. 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 Rule 4623. [District Rule 4623, 6.3.5] Federally Enforceable Through Title V Permit
- 28. Permittee shall maintain record of liquids stored, daily throughput, storage temperature, storage period, maximum RVP & TVP of liquid during respective storage period, and shall make such records readily available for District inspection upon request. [District NSR Rule] Federally Enforceable Through Title V Permit
- 29. 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. [District Rule 4623, 6.3.7] Federally Enforceable Through Title V Permit
- 30. All records required to be maintained by this permit shall be maintained for a period of at least five years and shall be made readily available for District inspection upon request. [District Rule 4623, 6.3] Federally Enforceable Through Title V Permit
- 31. This unit was constructed prior to 1973 and has not been modified (as defined in 40 CFR 60.14) or reconstructed (as defined in 40 CFR 60.15) since 1973. Therefore, the requirements of 40 CFR 60 are not applicable to this unit. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
- 32. Permittee shall conduct true vapor pressure (TVP) testing of the organic liquid stored in this tank at least once every 12 months and/or whenever there is a change in the source or type of organic liquid stored in the tank. The TVP of any organic liquid shall be determined by measuring the Reid Vapor Pressure (RVP) using ASTM D 323 (Test Method for Vapor Pressure for Petroleum Products), and converting the RVP to TVP at the tank's maximum organic liquid storage temperature. The conversion of RVP to TVP shall be done in accordance with the procedures in appendix B of District Rule 4623. Records of TVP testing shall be maintained. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

#### PERMIT UNIT: S-1413-10-7

#### EXPIRATION DATE: 04/30/2010

#### SECTION: SW35 TOWNSHIP: 28S RANGE: 27E

#### **EQUIPMENT DESCRIPTION:**

CRUDE OIL STORAGE AND TRANSFER OPERATION INCLUDING A 67,000 BBL (2,814,000 GALLON) RIVETED INTERNAL FLOATING ROOF CRUDE OIL STORAGE TANK #104 WITH MECHANICAL SHOE PRIMARY SEAL AND WIPER TYPE SECONDARY SEAL (BAKERSFIELD PUMP STATION)

### PERMIT UNIT REQUIREMENTS

- 1. The internal floating roof shall rest or float on the liquid surface (but not necessarily in complete contact with it) inside a storage vessel that has a fixed roof. The internal roof shall be floating on the liquid surface except during initial fill and when the storage vessel is completely emptied or subsequently emptied and 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 days prior to performing the work. [District Rule 4623] Federally Enforceable Through Title V Permit
- 2. Gaps between the tank shell and the primary seal shall not exceed 2 1/2 inches. [District Rule 4623] Federally Enforceable Through Title V Permit
- 3. The cumulative length of all primary seal gaps greater than 1 1/2 inches shall not exceed 10% of the circumference of the tank. [District Rule 4623] Federally Enforceable Through Title V Permit
- 4. 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] Federally Enforceable Through Title V Permit
- 5. No continuous gap in the primary seal greater than 1/8 inch wide shall exceed 10% of the tank circumference. [District ] Rule 4623] Federally Enforceable Through Title V Permit
- 6. No gap between the tank shell and the secondary seal shall exceed 1/2 inch. [District Rule 4623] Federally Enforceable Through Title V Permit
- 7. 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] Federally Enforceable Through Title V Permit
- 8. 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 18 inches above the stored liquid surface. [District Rule 4623] Federally Enforceable Through Title V Permit
- 9. 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 5 inches for a length of at least 18 inches in the vertical plane above the liquid. [District Rule 4623] Federally Enforceable Through Title V Permit
- 10. 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] Federally Enforceable Through Title V Permit
- 11. The secondary seal shall allow easy insertion of probes up to 2 1/2 inches in width in order to measure gaps in the primary seal. [District Rule 4623] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

Permit Unit Requirements for S-1413-10-7 (continued)

- 12. The secondary seal shall extend from the roof to the tank shell and shall not be attached to the primary seal. [District Rule 4623] Federally Enforceable Through Title V Permit
- 13. 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, 5.2] Federally Enforceable Through Title V Permit
- 14. The true vapor pressure (TVP) of the organic liquid stored shall not exceed 8.0 psia. [District NSR Rule] Federally Enforceable Through Title V Permit
- 15. 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] Federally Enforceable Through Title V Permit
- 16. A gas-tight condition is defined as a condition without a gas leak. A gas leak is defined as a reading in excess of 10,000 ppmv, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21. A reading in excess of 10,000 ppmv above background is a violation of this permit and Rule 4623 and shall be reported as a deviation. [District Rule 4623] Federally Enforceable Through Title V Permit
- 17. 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. [District Rule 4623] Federally Enforceable Through Title V Permit
- 18. Each opening in the internal floating roof except for leg sleeves, automatic bleeder vents, rim space vents, column wells, ladder wells, sample wells, and stub drains is to be equipped with a cover or lid which is to be maintained in a closed position at all times (i.e., no visible gap) except when the device is in actual use. The cover or lid shall be equipped with a gasket. Covers on each access hatch and automatic gauge float well shall be bolted except when they are in use. [District Rule 4623] Federally Enforceable Through Title V Permit
- 19. 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] Federally Enforceable Through Title V Permit
- 20. Rim vents shall be equipped with a gasket and are to be set to open only when the internal floating roof is not floating or at the manufacturer's recommended setting. [District Rule 4623]
- 21. 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% of the opening. The fabric cover must be impermeable. [District Rule 4623] Federally Enforceable Through Title V Permit
- 22. 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. [District Rule 4623] Federally Enforceable Through Title V Permit
- 23. Daily tank liquid throughput shall not exceed 40,000 bbl. [District NSR Rule] Federally Enforceable Through Title V Permit
- 24. Permittee shall notify District at least 7 days prior to the date when unobstructed primary and secondary seal/gap testing will occur. [District Rule 1070] Federally Enforceable Through Title V Permit
- 25. Volatile organic compound (VOC) emission rate shall not exceed 35.0 lb day. [District NSR Rule] Federally Enforceable Through Title V Permit

Permit Unit Requirements for S-1413-10-7 (continued)

- 26. The permittee 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 for newly constructed, repair, or rebuilt internal floating roof tanks. If holes, tears, or openings in the primary seal, the secondary seal, the seal fabric or defects in the internal floating roof or its appurtenant parts, components, fittings, etc., are found, they shall be repaired prior to filling the tank. [District Rule 4623] Federally Enforceable Through Title V Permit
- 27. The permittee 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 vapors. Any defects found are violations of this rule. [District Rule 4623] Federally Enforceable Through Title V Permit
- 28. The permittee shall conduct actual gap measurements of the primary seal and/or secondary seal at least once every 60 months. [District Rule 4623] Federally Enforceable Through Title V Permit
- 29. 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 Rule 4623. [District Rule 4623] Federally Enforceable Through Title V Permit
- Permittee shall maintain record of liquids stored, daily throughput, storage temperature, storage period, maximum RVP & TVP of liquid during respective storage period, and shall make such records readily available for District inspection upon request. [District NSR Rule] Federally Enforceable Through Title V Permit
- 31. 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. [District Rule 4623] Federally Enforceable Through Title V Permit
- 32. All records required to be maintained by this permit shall be maintained for a period of at least five years and shall be made readily available for District inspection upon request. [District Rule 4623] Federally Enforceable Through Title V Permit
- 33. This unit was constructed prior to 1973 and has not been modified (as defined in 40 CFR 60.14) or reconstructed (as defined in 40 CFR 60.15) since 1973. Therefore, the requirements of 40 CFR 60 are not applicable to this unit. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
- 34. Permittee shall conduct true vapor pressure (TVP) testing of the organic liquid stored in this tank at least once every 12 months and/or whenever there is a change in the source or type of organic liquid stored in the tank. The TVP of any organic liquid shall be determined by measuring the Reid Vapor Pressure (RVP) using ASTM D 323 (Test Method for Vapor Pressure for Petroleum Products), and converting the RVP to TVP at the tank's maximum organic liquid storage temperature. The conversion of RVP to TVP shall be done in accordance with the procedures in appendix B of District Rule 4623. Records of TVP testing shall be maintained. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

#### PERMIT UNIT: S-1413-11-7

#### EXPIRATION DATE: 04/30/2010

#### SECTION: SW35 TOWNSHIP: 28S RANGE: 27E

#### **EQUIPMENT DESCRIPTION:**

CRUDE OIL STORAGE AND TRANSFER OPERATION INCLUDING A 67,000 BARREL (2,814,000 GALLON) RIVETED INTERNAL FLOATING ROOF CRUDE OIL STORAGE TANK #107 (TK670S107) WITH MECHANICAL SHOE PRIMARY SEAL AND WIPER TYPE SECONDARY SEAL (BAKERSFIELD PUMP STATION)

### PERMIT UNIT REQUIREMENTS

- 1. The internal floating roof shall rest or float on the liquid surface (but not necessarily in complete contact with it) inside a storage vessel that has a fixed roof. The internal roof shall be floating on the liquid surface except during initial fill and when the storage vessel is completely emptied or subsequently emptied and 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 days prior to performing the work. [District Rule 4623] Federally Enforceable Through Title V Permit
- 2. Gaps between the tank shell and the primary seal shall not exceed 2 1/2 inches. [District Rule 4623] Federally Enforceable Through Title V Permit
- 3. The cumulative length of all primary seal gaps greater than 1 1/2 inches shall not exceed 10% of the circumference of the tank. [District Rule 4623] Federally Enforceable Through Title V Permit
- 4. 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] Federally Enforceable Through Title V Permit
- 5. No continuous gap in the primary seal greater than 1/8 inch wide shall exceed 10% of the tank circumference. [District Rule 4623] Federally Enforceable Through Title V Permit
- 6. No gap between the tank shell and the secondary seal shall exceed 1/2 inch. [District Rule 4623] Federally Enforceable Through Title V Permit
- 7. 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] Federally Enforceable Through Title V Permit
- 8. 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 18 inches above the stored liquid surface. [District Rule 4623] Federally Enforceable Through Title V Permit
- 9. 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 5 inches for a length of at least 18 inches in the vertical plane above the liquid. [District Rule 4623] Federally Enforceable Through Title V Permit
- 10. 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] Federally Enforceable Through Title V Permit
- 11. The secondary seal shall allow easy insertion of probes up to 2 1/2 inches in width in order to measure gaps in the primary seal. [District Rule 4623] Federally Enforceable Through Title V Permit

Permit Unit Requirements for S-1413-11-7 (continued)

- 12. The secondary seal shall extend from the roof to the tank shell and shall not be attached to the primary seal. [District Rule 4623] Federally Enforceable Through Title V Permit
- 13. 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, 5.2] Federally Enforceable Through Title V Permit
- 14. The true vapor pressure (TVP) of the organic liquid stored shall not exceed 8.0 psia. [District NSR Rule] Federally Enforceable Through Title V Permit
- 15. 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] Federally Enforceable Through Title V Permit
- 16. A gas-tight condition is defined as a condition without a gas leak. A gas leak is defined as a reading in excess of 10,000 ppmv, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21. A reading in excess of 10,000 ppmv above background is a violation of this permit and Rule 4623 and shall be reported as a deviation. [District Rule 4623] Federally Enforceable Through Title V Permit
- 17. 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. [District Rule 4623] Federally Enforceable Through Title V Permit
- 18. Each opening in the internal floating roof except for leg sleeves, automatic bleeder vents, rim space vents, column wells, ladder wells, sample wells, and stub drains is to be equipped with a cover or lid which is to be maintained in a closed position at all times (i.e., no visible gap) except when the device is in actual use. The cover or lid shall be equipped with a gasket. Covers on each access hatch and automatic gauge float well shall be bolted except when they are in use. [District Rule 4623] Federally Enforceable Through Title V Permit
- 19. 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] Federally Enforceable Through Title V Permit
- 20. Rim vents shall be equipped with a gasket and are to be set to open only when the internal floating roof is not floating or at the manufacturer's recommended setting. [District Rule 4623] Federally Enforceable Through Title V Permit
- 21. 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% of the opening. The fabric cover must be impermeable. [District Rule 4623] Federally Enforceable Through Title V Permit
- 22. 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. [District Rule 4623] Federally Enforceable Through Title V Permit
- 23. Daily tank liquid throughput shall not exceed 40,000 bbl. [District NSR Rule] Federally Enforceable Through Title V Permit
- 24. Permittee shall notify District at least 7 days prior to the date when unobstructed primary and secondary seal/gap testing will occur. [District Rule 1070] Federally Enforceable Through Title V Permit
- 25. Volatile organic compound (VOC) emission rate shall not exceed 35.0 lb day. [District NSR Rule] Federally Enforceable Through Title V Permit

Permit Unit Requirements for S-1413-11-7 (continued)

- 26. The permittee 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 for newly constructed, repair, or rebuilt internal floating roof tanks. If holes, tears, or openings in the primary seal, the secondary seal, the seal fabric or defects in the internal floating roof or its appurtenant parts, components, fittings, etc., are found, they shall be repaired prior to filling the tank. [District Rule 4623] Federally Enforceable Through Title V Permit
- 27. The permittee 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 vapors. Any defects found are violations of this rule. [District Rule 4623] Federally Enforceable Through Title V Permit
- 28. The permittee shall conduct actual gap measurements of the primary seal and/or secondary seal at least once every 60 months. [District Rule 4623] Federally Enforceable Through Title V Permit
- 29. 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 Rule 4623. [District Rule 4623] Federally Enforceable Through Title V Permit
- 30. Permittee shall maintain record of liquids stored, daily throughput, storage temperature, storage period, maximum RVP & TVP of liquid during respective storage period, and shall make such records readily available for District inspection upon request. [District NSR Rule] Federally Enforceable Through Title V Permit
- 31. 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. [District Rule 4623] Federally Enforceable Through Title V Permit
- 32. All records required to be maintained by this permit shall be maintained for a period of at least five years and shall be made readily available for District inspection upon request. [District Rule 4623] Federally Enforceable Through Title V Permit
- 33. This unit was constructed prior to 1973 and has not been modified (as defined in 40 CFR 60.14) or reconstructed (as defined in 40 CFR 60.15) since 1973. Therefore, the requirements of 40 CFR 60 are not applicable to this unit. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
- 34. Permittee shall conduct true vapor pressure (TVP) testing of the organic liquid stored in this tank at least once every 12 months and/or whenever there is a change in the source or type of organic liquid stored in the tank. The TVP of any organic liquid shall be determined by measuring the Reid Vapor Pressure (RVP) using ASTM D 323 (Test Method for Vapor Pressure for Petroleum Products), and converting the RVP to TVP at the tank's maximum organic liquid storage temperature. The conversion of RVP to TVP shall be done in accordance with the procedures in appendix B of District Rule 4623. Records of TVP testing shall be maintained. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

#### PERMIT UNIT: S-1413-12-7

#### EXPIRATION DATE: 04/30/2010

#### SECTION: SW35 TOWNSHIP: 28S RANGE: 27E

#### **EQUIPMENT DESCRIPTION:**

CRUDE OIL STORAGE AND TRANSFER OPERATION INCLUDING A 67,000 BBL (2,814,000 GALLON) RIVETED INTERNAL FLOATING ROOF CRUDE OIL STORAGE TANK #108 (TK670S108) WITH MECHANICAL SHOE PRIMARY SEAL AND WIPER TYPE SECONDARY SEAL (BAKERSFIELD PUMP STATION)

### PERMIT UNIT REQUIREMENTS

- 1. The internal floating roof shall rest or float on the liquid surface (but not necessarily in complete contact with it) inside a storage vessel that has a fixed roof. The internal roof shall be floating on the liquid surface except during initial fill and when the storage vessel is completely emptied or subsequently emptied and 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 days prior to performing the work. [District Rule 4623] Federally Enforceable Through Title V Permit
- 2. Gaps between the tank shell and the primary seal shall not exceed 2 1/2 inches. [District Rule 4623] Federally Enforceable Through Title V Permit
- 3. The cumulative length of all primary seal gaps greater than 1 1/2 inches shall not exceed 10% of the circumference of the tank. [District Rule 4623] Federally Enforceable Through Title V Permit
- 4. 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] Federally Enforceable Through Title V Permit
- 5. No continuous gap in the primary seal greater than 1/8 inch wide shall exceed 10% of the tank circumference. [District Rule 4623] Federally Enforceable Through Title V Permit
- 6. No gap between the tank shell and the secondary seal shall exceed 1/2 inch. [District Rule 4623] Federally Enforceable Through Title V Permit
- 7. 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] Federally Enforceable Through Title V Permit
- 8. 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 18 inches above the stored liquid surface. [District Rule 4623] Federally Enforceable Through Title V Permit
- 9. 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 5 inches for a length of at least 18 inches in the vertical plane above the liquid. [District Rule 4623] Federally Enforceable Through Title V Permit
- 10. 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] Federally Enforceable Through Title V Permit
- 11. The secondary seal shall allow easy insertion of probes up to 2 1/2 inches in width in order to measure gaps in the primary seal. [District Rule 4623] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE These terms and conditions are part of the Facility-wide Permit to Operate. Permit Unit Requirements for S-1413-12-7 (continued)

- 12. The secondary seal shall extend from the roof to the tank shell and shall not be attached to the primary seal. [District Rule 4623] Federally Enforceable Through Title V Permit
- 13. 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, 5.2] Federally Enforceable Through Title V Permit
- 14. The true vapor pressure (TVP) of the organic liquid stored shall not exceed 8.0 psia. [District NSR Rule] Federally Enforceable Through Title V Permit
- 15. 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] Federally Enforceable Through Title V Permit
- 16. A gas-tight condition is defined as a condition without a gas leak. A gas leak is defined as a reading in excess of 10,000 ppmv, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21. A reading in excess of 10,000 ppmv above background is a violation of this permit and Rule 4623 and shall be reported as a deviation. [District Rule 4623] Federally Enforceable Through Title V Permit
- 17. 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. [District Rule 4623] Federally Enforceable Through Title V Permit
- 18. Each opening in the internal floating roof except for leg sleeves, automatic bleeder vents, rim space vents, column wells, ladder wells, sample wells, and stub drains is to be equipped with a cover or lid which is to be maintained in a closed position at all times (i.e., no visible gap) except when the device is in actual use. The cover or lid shall be equipped with a gasket. Covers on each access hatch and automatic gauge float well shall be bolted except when they are in use. [District Rule 4623] Federally Enforceable Through Title V Permit
- 19. 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] Federally Enforceable Through Title V Permit
- 20. Rim vents shall be equipped with a gasket and are to be set to open only when the internal floating roof is not floating or at the manufacturer's recommended setting. [District Rule 4623] Federally Enforceable Through Title V Permit
- 21. 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% of the opening. The fabric cover must be impermeable. [District Rule 4623] Federally Enforceable Through Title V Permit
- 22. 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. [District Rule 4623] Federally Enforceable Through Title V Permit
- 23. Daily tank liquid throughput shall not exceed 40,000 bbl. [District NSR Rule] Federally Enforceable Through Title V Permit
- 24. Permittee shall notify District at least 7 days prior to the date when unobstructed primary and secondary seal/gap testing will occur. [District Rule 1070] Federally Enforceable Through Title V Permit
- 25. Volatile organic compound (VOC) emission rate shall not exceed 36.7 lb day. [District NSR Rule] Federally Enforceable Through Title V Permit

Permit Unit Requirements for S-1413-12-7 (continued)

- 26. The permittee 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 for newly constructed, repair, or rebuilt internal floating roof tanks. If holes, tears, or openings in the primary seal, the secondary seal fabric or defects in the internal floating roof or its appurtenant parts, components, fittings, etc., are found, they shall be repaired prior to filling the tank. [District Rule 4623] Federally Enforceable Through Title V Permit
- 27. The permittee 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 vapors. Any defects found are violations of this rule. [District Rule 4623] Federally Enforceable Through Title V Permit
- 28. The permittee shall conduct actual gap measurements of the primary seal and/or secondary seal at least once every 60 months. [District Rule 4623] Federally Enforceable Through Title V Permit
- 29. 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 Rule 4623. [District Rule 4623] Federally Enforceable Through Title V Permit
- 30. Permittee shall maintain record of liquids stored, daily throughput, storage temperature, storage period, maximum RVP & TVP of liquid during respective storage period, and shall make such records readily available for District inspection upon request. [District NSR Rule] Federally Enforceable Through Title V Permit
- 31. 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. [District Rule 4623] Federally Enforceable Through Title V Permit
- 32. All records required to be maintained by this permit shall be maintained for a period of at least five years and shall be made readily available for District inspection upon request. [District Rule 4623] Federally Enforceable Through Title V Permit
- 33. This unit was constructed prior to 1973 and has not been modified (as defined in 40 CFR 60.14) or reconstructed (as defined in 40 CFR 60.15) since 1973. Therefore, the requirements of 40 CFR 60 are not applicable to this unit. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
- 34. Permittee shall conduct true vapor pressure (TVP) testing of the organic liquid stored in this tank at least once every 12 months and/or whenever there is a change in the source or type of organic liquid stored in the tank. The TVP of any organic liquid shall be determined by measuring the Reid Vapor Pressure (RVP) using ASTM D 323 (Test Method for Vapor Pressure for Petroleum Products), and converting the RVP to TVP at the tank's maximum organic liquid storage temperature. The conversion of RVP to TVP shall be done in accordance with the procedures in appendix B of District Rule 4623. Records of TVP testing shall be maintained. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

#### PERMIT UNIT: S-1413-13-10

#### EXPIRATION DATE: 04/30/2010

### SECTION: SW35 TOWNSHIP: 28S RANGE: 27E

#### **EQUIPMENT DESCRIPTION:**

20 MMBTU/HR BROACH NATURAL DRAFT HEATER WITH TWO NORTH AMERICAN MODEL 4211-12-LE-10 ULTRA LOW NOX BURNERS AND A FLUE GAS RECIRCULATION (FGR) SYSTEM

### PERMIT UNIT REQUIREMENTS

- 1. All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District Rule 2201] Federally Enforceable Through Title V Permit
- 2. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. No combustion contaminants exceeding in concentration at the point of discharge 0.1 grain per cubic foot of gas calculated to 12% of carbon dioxide at dry standard conditions shall be discharged into the atmosphere. [District Rules 4201, 3.0 and 4301, 5.1] Federally Enforceable Through Title V Permit
- 3. The unit shall only be fired on PUC-regulated natural gas. [District NSR Rule and County Rule 407 (Kern)] Federally Enforceable Through Title V Permit
- 4. Natural gas fuel consumption shall not exceed 415.2 MMBtu/day. [District Rule 2201] Federally Enforceable Through Title V Permit
- During standard operation, emissions rates from the natural gas-fired unit shall not exceed any of the following limits: 15 ppmv NOx @ 3% O2 or 0.018 lb-NOx/MMBtu, 0.00285 lb-SOx/MMBtu, 0.005 lb-PM10/MMBtu, 400 ppmv CO @ 3% O2 or 0.30 lb-CO/MMBtu, or 0.003 lb-VOC/MMBtu. [District Rules 2201, 4305, and 4306] Federally Enforceable Through Title V Permit
- During startup and shutdown, emissions from the natural gas-fired unit shall not exceed any of the following: 2.0 lb-NOx/hr, 0.06 lb-SOx/hr, 0.1 lb-PM10/hr, 6.0 lb-CO/hr, or 0.06 lb-VOC/hr. [District Rules 2201, 4305, and 4306] Federally Enforceable Through Title V Permit
- 7. The total duration of startup time shall not exceed 2.0 hour per day. The total duration of shutdown time shall not exceed 2.0 hour per day. [District Rules 2201, 4305, and 4306] Federally Enforceable Through Title V Permit
- The emission control systems shall be in operation and emissions shall be minimized insofar as technologically feasible during startup and shutdown. [District Rules 2201, 4305, and 4306] Federally Enforceable Through Title V Permit
- 9. The permittee shall record the daily startup and shutdown duration times of the boiler. [District Rules 2201, 4305, and 4306] Federally Enforceable Through Title V Permit
- 10. The permittee shall monitor and record the stack concentration of NOx, CO, and O2 at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall not be required if the unit is not in operation, i.e. the unit need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the unit unless monitoring has been performed within the last month. [District Rules 4305 and 4306] Federally Enforceable Through Title V Permit

#### Permit Unit Requirements for S-1413-13-10 (continued)

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

Permit Unit Requirements for S-1413-13-10 (continued)

- 23. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 1070, 4305, and 4306] Federally Enforceable Through Title V Permit
- 24. Source testing shall be District witnessed or authorized. [District Rule 1081] Federally Enforceable Through Title V Permit

PERMIT UNIT: S-1413-14-1 SECTION: SW35 TOWNSHIP: 28S RANGE: 27E **EQUIPMENT DESCRIPTION:** 400 GALLON FIXED ROOF SOLVENT STORAGE TANK

### PERMIT UNIT REQUIREMENTS

- 1. This tank shall only store, place, or hold solvent liquids with a true vapor pressure (TVP) of less than 0.2 psia under all storage conditions. [District Rule 4623, 2.0] Federally Enforceable Through Title V Permit
- The permittee shall keep accurate records of each solvent stored in the tank, including its storage temperature and 2. TVP. [District Rule 1070] Federally Enforceable Through Title V Permit
- All records required to be maintained by this permit shall be maintained for a period of at least 5 years and shall be 3. made readily available for District inspection upon request. [District Rule 1070] Federally Enforceable Through Title V Permit
- Permittee shall maintain on-site Manufacturer Safety Data Sheets (MSDS) or other documents supplied by the 4. manufacturer to verify the TVP of liquid stored in this tank. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

**EXPIRATION DATE: 04/30/2010** 

# ATTACHMENT C

**Detailed Facility List** 

7

SJVUAPCD SOUTHERN

**Detailed Facility Report** For Facility=1413 and excluding Deleted Permits

4/22/10 5:05 pm

SOUTHERN		Sorted by Facility Name and Permit Number							
SHELL PIPELINE COMPANY LP BAKERSFIELD PUMP STATION 1801 PETROL RD BAKERSFIELD, CA 93308-9793			FAC# S 1413 STATUS: A TELEPHONE:				TYPE: <b>TitleV</b> EXPIRE ON: 04/30/2010 TOXIC ID: <b>50227</b> AREA: 102 / INSP. DATE: 04/11		
PERMIT NUMBER	FEE DESCRIPTION	FEE RULE	QTY	FEE AMOUNT	FEE TOTAL	PERMIT STATUS	EQUIPMENT DESCRIPTION		
S-1413-4-10	2,814,000 Gallons	3020-05 G	1	382.00	382.00	A	CRUDE OIL STORAGE AND TRANSFER OPERATION CONSISTING OF A 67,000 BBL (2,814,000 GALLON) RIVETED EXTERNAL FLOATING ROOF CRUDE OIL STORAGE TANK #105 WITH A MECHANICAL SHOE PRIMARY SEAL, WIPER TYPE SECONDARY SEAL, AND SLOTTED GUIDEPOLE (BAKERSFIELD PUMP STATION)		
S-1413-6-5	2,814,000 gallons	3020-05 G	1	382.00	382.00	A	CRUDE OIL STORAGE AND TRANSFER OPERATION INCLUDING A 67,000 BARREL (2,814,000 GALLON) RIVETED EXTERNAL FLOATING ROOF CRUDE OIL STORAGE TANK #106 WITH MECHANICAL SHOE PRIMARY SEAL AND WIPER TYPE SECONDARY SEAL (BAKERSFIELD PUMP STATION)		
S-1413-7-5	2,814,000 Gallons	3020-05 G	1	382.00	382.00	A	67,000 BBL (2,814,000 GALLON) INTERNAL FLOATING ROOF CRUDE OIL STORAGE TANK T 670-S-102 WITH ALTECH ALCLAD ALUMINUM PONTOON INTERNAL FLOATING ROOF WITH PRIMARY LIQUID MOUNTED FOAM LOG SEAL AND SECONDARY WIPER SEAL (BAKERSFIELD PUMP STATION)		
S-1413-8-5	2,814,000 Gallons	3020-05 G	1	382.00	382.00	A	67,000 BBL (2,814,000 GALLONS) RIVETED FIXED ROOF CRUDE OIL STORAGE TANK T 670-S-101 WITH PAN INTERNAL FLOATING ROOF WITH ALTECH DOUBLE WIPER SEAL (BAKERSFIELD PUMP STATION)		
S-1413-9-5	2,814,000 Gallons	3020-05 G	1	382.00	382.00	A	67,000 BBL (2,814,000 GALLON) INTERNAL FLOATING ROOF CRUDE OIL STORAGE TANK # 103 WITH TOROID PRIMARY SEAL AND SECONDARY WIPER SEAL (BAKERSFIELD PUMP STATION)		
S-1413-10-7	2,814,000 gallons	3020-05 G	1	382.00	382.00	A	CRUDE OIL STORAGE AND TRANSFER OPERATION INCLUDING A 67,000 BBL (2,814,000 GALLON) RIVETED INTERNAL FLOATING ROOF CRUDE OIL STORAGE TANK #104 WITH MECHANICAL SHOE PRIMARY SEAL AND WIPER TYPE SECONDARY SEAL (BAKERSFIELD PUMP STATION)		
S-1413-11-7	2,814,000	3020-05 G	1	382.00	382.00	A	CRUDE OIL STORAGE AND TRANSFER OPERATION INCLUDING A 67,000 BARREL (2,814,000 GALLON) RIVETED INTERNAL FLOATING ROOF CRUDE OIL STORAGE TANK #107 (TK670S107) WITH MECHANICAL SHOE PRIMARY SEAL AND WIPER TYPE SECONDARY SEAL (BAKERSFIELD PUMP STATION)		
S-1413-12-7	2,814,000 gallons	3020-05 G	1	382.00	382.00	A .	CRUDE OIL STORAGE AND TRANSFER OPERATION INCLUDING A 67,000 BBL (2,814,000 GALLON) RIVETED INTERNAL FLOATING ROOF CRUDE OIL STORAGE TANK #108 (TK670S108) WITH MECHANICAL SHOE PRIMARY SEAL AND WIPER TYPE SECONDARY SEAL (BAKERSFIELD PUMP STATION)		
S-1413-13-10	20,000 KBtu/hr	3020-02 H	1	1,030.00	1,030.00	A	20 MMBTU/HR BROACH NATURAL DRAFT HEATER WITH TWO NORTH AMERICAN MODEL 4211-12-LE-10 ULTRA LOW NOX BURNERS AND A FLUE GAS RECIRCULATION (FGR) SYSTEM		
S-1413-14-1	400 gallons	3020-05 A	1	75.00	75.00	A	400 GALLON FIXED ROOF SOLVENT STORAGE TANK		

SJVUAPCD Detailed Fac	ility Report
SOUTHERN For Facility=1413 and exc	luding Deleted Permits
Sorted by Facility Name	and Permit Number
FEE	FEE PERMIT
PERMIT NUMBER FEE DESCRIPTION FEE RULE QTY AMOUNT	TOTAL STATUS EQUIPMENT DESCRIPTION

4/22/10 5:05 pm

Number of Facilities Reported: 1

## ATTACHMENT D

**Template Qualification Form** 

### **Title V General Permit Template Qualification Form** <u>for</u> Facility-wide Umbrella General Permit Template

District facility ID # \_ S-1413

To use this template, remove this sheet and attach to application. The conditions outlined in this template will be placed on your Title V permit.

Any facility may use this facility-wide template as part of its Title V application.

Based on information and belief formed after reasonable inquiry: 1) the information on this form is true and correct and 2) the facility certifies compliance with this template's permit conditions.

Signature of Responsible Official

12/10/08 Date

Michael W. Bringham Name of Responsible Official (Please Print)

## ATTACHMENT E

## Current District Rule SIP Comparisons

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## Comparative Analysis of the Current SIP Version (amended August 19, 2004) of District Rule 8011 with the Previous SIP Version (adopted November 15, 2001)

Comparison of Requirements	Adopted 11/15/01	Amended 8/19/04
2.0 APPLICABILITY		
The provisions of this rule are applicable to specified outdoor fugitive dust sources. The definitions, exemptions, requirements, administrative requirements, recordkeeping requirements, and test methods set forth in this rule are applicable to all Rules under Regulation VIII (Fugitive PM10 Prohibitions) of the Rules and Regulations of the San Joaquin Valley Unified Air Pollution Control District. The provisions of this rule shall be effective on and after May 15, 2002.	X	
The provisions of this rule are applicable to specified outdoor fugitive dust sources. The definitions, exemptions, requirements, administrative requirements, recordkeeping requirements, and test methods set forth in this rule are applicable to all Rules under Regulation VIII (Fugitive PM10 Prohibitions) of the Rules and Regulations of the San Joaquin Valley Unified Air Pollution Control District. The provisions of this rule adopted on November 15, 2001 shall remain in effect until October 1, 2004 at which time the amendments adopted on August 19, 2004 shall take effect.		X
3.0 DEFINITIONS		•
Event material: wind, storm, or water erosion and runoff resulting in the accumulation of mud, soil, or other material onto a public paved road surface travel lane or shoulder.		Added
Gravel Pad: a layer of washed gravel, rock, or crushed rock which is at least one inch or larger in diameter and six inches deep, which is at least one inch or larger in diameter and six inches deep; located at the point of intersection of a paved public roadway and a work site exit, and maintained to dislodge mud, dirt, and/or debris from the tires of motor vehicles and/or haul trucks, prior to exiting the work site.	X	
Gravel Pad: a layer of washed gravel, rock, or crushed rock located at the point of intersection of a paved public roadway and an unpaved work site exit, and maintained to dislodge mud, dirt, and/or debris from the tires of motor vehicles and/or haul trucks, prior to exiting the work site.		X
Modified Road: any road that is widened or improved so as to increase traffic capacity or that has been reconstructed. This term does not include road maintenance, repair, chip seal, or surface overlay work.	X	· · · · · · · · · · · · · · · · · · ·

Comparison of Requirements	Adopted 11/15/01	Amended 8/19/04
Modified Road: any road that is widened or improved so as to increase traffic capacity or that has been reconstructed. This term does not include road maintenance, repair, chip seal, pavement or roadbed rehabilitation that does not affect roadway geometrics, or surface overlay work.		X
Paved Road: any road that is covered by concrete, asphaltic concrete, asphalt, or other materials which provides structural support for vehicles.	X	
Paved Road/Area: any road/area that is covered by concrete, asphaltic concrete, asphalt, or other materials which provides structural support for vehicles.		x
Rural: areas not classified as urban constitute "rural."		Added
Stabilized Unpaved Road: any unpaved road, or unpaved vehicle/equipment traffic area surface which meets the definition of stabilized surface as determined by the test methods in Appendix B, Section 3 of this rule, and where VDE is limited to 20% opacity.	X	
Stabilized Unpaved Road/Unpaved shoulder: any unpaved road, unpaved shoulder, or unpaved vehicle/equipment traffic area surface which meets the definition of stabilized surface as determined by the test methods in Appendix B, Section 3 of this rule, and where VDE is limited to 20% opacity.		X
Temporary Unpaved Road: any unpaved road surface which is created to support a temporary or periodic activity, and the use of such road surface is limited to vehicle access for a period of not more than six months during any consecutive three-year period. Temporary unpaved roads must also comply with the definition of section 3.59.		Added
Unpaved Access/Haul Road: any road or path that is not covered by one of the materials described in the paved road definition that is associated with any construction, demolition, excavation, extraction, and other earthmoving activity and used by vehicles, equipment, haul trucks, or any conveyances to travel within a site, to move materials from one part of a site to another part within the same site, or to provide temporary access to a site.		Added
Vehicle Trips Per Day: The 24-hour total (midnight to midnight) count of all vehicles traveling over a survey point on a road segment or unpaved vehicle/equipment traffic area. The survey point must represent the most heavily traveled portion of the road segment or unpaved vehicle/equipment traffic area. Trips made by "implements of husbandry" as defined in California Vehicle Code Division 16, Sections 36000 through 36017 shall not be included in the "vehicle trips per day" count.	Χ	

Comparison of Requirements	Adopted 11/15/01	Amended 8/19/04
Vehicle Daily Trips (VDT): The 24-hour total (midnight to midnight) count of all vehicles traveling over a survey point on a road segment or unpaved vehicle/equipment traffic area. The survey point must represent the most heavily traveled portion of the road segment or unpaved vehicle/equipment traffic area.		X
Wind Barrier: a fence or structure constructed, or row of trees planted, to reduce the amount of entrained fugitive dust.	X	
Wind Barrier: a fence or structure constructed, or row of trees planted, to reduce the shearing effects caused by wind thereby reducing or eliminating the amount of entrained fugitive dust.		x
Wind Generated Fugitive Dust: visible emissions from any disturbed surface area which are generated by wind action alone.		Added
Workday: a day on which work is performed as distinguished from a day off. For the purposes of this Regulation, a workday may be any period of hours or shift within a 24-hour period.		Added
7.0 Fugitive PM10 Management Plan for Unpaved Roads and	Unpaved Vehicle/Equ	ipment Traffic Areas
As a compliance alternative for Rule 8061 section 5.2 and Rule 8071 section 5.1, an operator may implement a Fugitive PM10 Management Plan (FPMP) that is designed to achieve 50% control efficiency and has been approved by the APCO. The FPMP shall be implemented on all days that traffic exceeds, or is expected to exceed, 75 vehicle trips per day. The owner/operator remains subject to all requirements of the applicable rules of Regulation VIII that are not addressed by the FPMP. It should be noted that the FPMP is not a compliance option for any requirement for a stabilized surface as defined in Rule 8011. The requirements for FPMPs for agricultural sources are specified in Rule 8081 (Agricultural Sources) section 7.0.	Χ	
As a compliance alternative for Rule 8061 section 5.2 and Rule 8071 section 5.1, an operator may implement a Fugitive PM10 Management Plan (FPMP) that is designed to achieve 50% control efficiency and has been approved by the APCO. The FPMP shall be implemented on all days that traffic exceeds, or is expected to exceed, the number of annual average daily vehicle trips or vehicle trips per day as specified in Rules 8061, 8071, and 8081. The owner/operator remains subject to all requirements of the applicable rules of Regulation VIII that are not addressed by the FPMP. It should be noted that the FPMP is not a compliance option for any requirement for a stabilized surface as defined in Rule 8011. The requirements for FPMPs for agricultural sources are specified in Rule 8081 (Agricultural Sources) section 7.0.		X
The months (and weeks, if known) of the year that vehicle traffic is expected to exceed 75 vehicle trips per day, and the types of vehicles (e.g., passenger vehicles, trucks, mobile equipment) expected on each road or traffic area. As stated above, the FPMP shall be implemented on all days that traffic exceeds, or	X	

The months (and weeks, if known) of the year that vehicle traffic x s expected to reach or exceed the number of vehicle trips as specified in Rules 8061, 8071, and 8081, and the types of vehicles (e.g., passenger vehicles, trucks, mobile equipment) expected on each road or traffic area. As stated above, the FPMP shall be implemented on all days that traffic exceeds, or s expected to exceed, the number of vehicle trips as specified	is expected to reach or exceed the number of vehicle trips as specified in Rules 8061, 8071, and 8081, and the types of vehicles (e.g., passenger vehicles, trucks, mobile equipment) expected on each road or traffic area. As stated above, the FPMP shall be implemented on all days that traffic exceeds, or
s expected to reach or exceed the number of vehicle trips as specified in Rules 8061, 8071, and 8081, and the types of vehicles (e.g., passenger vehicles, trucks, mobile equipment) expected on each road or traffic area. As stated above, the FPMP shall be implemented on all days that traffic exceeds, or s expected to exceed, the number of vehicle trips as specified	is expected to reach or exceed the number of vehicle trips as specified in Rules 8061, 8071, and 8081, and the types of vehicles (e.g., passenger vehicles, trucks, mobile equipment) expected on each road or traffic area. As stated above, the FPMP shall be implemented on all days that traffic exceeds, or
	in Rules 8061, 8071, and 8081.

### Comparative Analysis of the Current SIP Version (amended August 19, 2004) of District Rule 8021 with the Previous SIP Version (adopted November 15, 2001)

Comparison of Requirements	Adopted 11/15/01	Amended 8/19/04
2.0 APPLICABILITY		
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. The provisions of this rule shall be effective on and after May 15, 2002.	X	
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. The provisions of this rule adopted on November 15, 2001 shall remain in effect until October 1, 2004 at which time the amendments adopted on August 19, 2004 shall take effect.		X
4.0 Exemptions		
Mowing, disking, or cutting of weeds and dried vegetation related to fire prevention required by a Federal, State or local agency on a site less than one-half (½) acre. Activities performed in conjunction with mowing and cutting are not exempt from complying with the provisions of other applicable rules under Regulation VIII.	X	
Disking of weeds and dried vegetation related to fire prevention required by a Federal, State or local agency on a site less than one-half (½) acre. Activities performed in conjunction with disking are not exempt from complying with the provisions of other applicable rules under Regulation VIII.		X
The spreading of landfill daily cover necessary to cover.	X	
The spreading of landfill daily cover necessary to cover garbage/rubbish in order to preserve public health and safety and to comply with the requirements of the California Integrated Waste Management Board during wind conditions which would generate fugitive dust.		Х
.0 Requirements		

Comparison of Requirements	Adopted 11/15/01	Amended 8/19/04
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.	X	
No person shall perform any construction, demolition, excavation, extraction, or other earthmoving activities unless the appropriate requirements in sections 5.1 through 5.5 are sufficiently implemented to limit VDE to 20% opacity and comply with the conditions for a stabilized surface area when applicable. In addition to the requirements of this rule, a person shall comply with all other applicable requirements of Regulation VIII.		x
A person shall implement the requirements specified in Table 8021-1 when using wrecking balls or other wrecking equipment to raze or demolish buildings.	X	
A person shall implement the requirements specified below when using wrecking balls or other wrecking equipment to raze or demolish buildings.		X
Apply sufficient water to building exterior surfaces, unpaved surface areas where equipment will operate, and razed building materials to limit VDE to 20% opacity throughout the duration of razing and demolition activities.		Added
Apply sufficient dust suppressants to unpaved surface areas within 100 feet where materials from razing or demolition activities will fall in order to limit VDE to 20% opacity.		Added
Apply sufficient dust suppressants to unpaved surface areas where wrecking or hauling equipment will be operated in order to limit VDE to 20% opacity.		Added
Handling, storage, and transport of bulk materials on-site or off- site resulting from the demolition or razing of buildings shall comply with the requirements specified in Rule 8031 (Bulk Materials).		Added
Apply water within 1 hour of demolition to unpaved surfaces within 100 feet of the demolished structure.		Added
Prevention and removal of carryout or trackout on paved public access roads from demolition operations shall be performed in accordance with Rule 8041 (Carryout and Trackout).		Added

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Comparison of Requirements	Adopted 11/15/01	Amended 8/19/04
Table 8021-1 CONTROL MEASURES FOR DEMOLITION ACTIVITIES	Deleted	
A. DURING ACTIVE DEMOLITION OPERATIONS:		
<ul> <li>A1 Apply sufficient water to building exterior surfaces and razed building materials to limit VDE to 20% opacity throughout the duration of razing and demolition activities; and</li> <li>A2 Apply sufficient dust suppressants to unpaved surface areas where materials from razing or demolition activities will fall, or where wrecking or hauling equipment will be operated, in order to limit VDE to 20% opacity; and</li> <li>A3 Handling, storage, and transport of bulk materials on-site or off-site resulting from the demolition or razing of buildings shall comply with the requirements specified in Rule 8031 (Bulk Materials); and</li> <li>A4 Prevention and removal of carryout or trackout on paved public access roads from demolition operations shall be performed in accordance with Rule 8041 (Carryout and Trackout). Apply sufficient water to building exterior surfaces and razed building materials to limit VDE to 20% opacity throughout the duration of razing and demolition</li> </ul>		
activities; and Table 8021-2 – CONTROL MEASURE OPTIONS FOR CONSTRUCTION, EXCAVATION, EXTRACTION, AND OTHER EARTHMOVING ACTIVITIES	X	
Table 8021-1 – CONTROL MEASURE OPTIONS FOR CONSTRUCTION, EXCAVATION, EXTRACTION, AND OTHER EARTHMOVING ACTIVITIES		x
<ul> <li>5.3 Speed Limitations and Posting of Speed Limit Signs on Uncontrolled Unpaved Access/Haul Roads on Construction Sites</li> <li>5.3.1 An owner/operator shall limit the speed of vehicles traveling on uncontrolled unpaved access/haul roads within construction sites to a maximum of 15 miles per hour.</li> <li>5.3.1 An owner/operator shall post speed limit signs that meet State and Federal Department of Transportation standards at each construction site's uncontrolled unpaved access/haul road entrance. At a minimum, speed limit signs shall also be posted at least every 500 feet and shall be readable in both directions of travel along uncontrolled unpaved access/haul roads.</li> </ul>		Added
5.4 Wind Generated Fugitive Dust Requirements 5.4.1 Cease outdoor construction, excavation, extraction, and other earthmoving activities that disturb the soil whenever VDE exceeds 20% opacity. Indoor activities such as electrical, plumbing, dry wall installation, painting, and any other activity that does not cause any disturbances to the soil are not subject to this requirement.		Added

Comparison of Requirements	Adopted 11/15/01	Amended 8/19/04
5.4.1 Continue operation of water trucks/devices when outdoor construction excavation, extraction, and other earthmoving activities cease, unless unsafe to do so.		
6.3.1 An owner/operator shall submit a Dust Control Plan to the APCO at least 30 days prior to the start of any construction	Х	
activity on any site that will include 40 acres or more of		
disturbed surface area, or will include moving, more than 2,500		
cubic yards per day of bulk materials on at least three days. An		
owner/operator shall provide written notification to the APCO within 10 days prior to the commencement of earthmoving		
activities via fax or mail. The requirement to submit a dust		
control plan shall apply to all such activities conducted for		
commercial, industrial, or institutional purposes or conducted by		
any governmental entity.		
6.3.1 An owner/operator shall submit a Dust Control Plan to the		X
APCO prior to the start of any construction activity on any site		
that will include 10 acres or more of disturbed surface area for		
residential developments, or 5 acres or more of disturbed surface area for non-residential development, or will include		
moving, depositing, or relocating more than 2,500 cubic yards		
per day of bulk materials on at least three days. Construction		
activities shall not commence until the APCO has approved or		
conditionally approved the Dust Control Plan. An		
owner/operator shall provide written notification to the APCO	·	
within 10 days prior to the commencement of earthmoving		
activities via fax or mail. The requirement to submit a dust control plan shall apply to all such activities conducted for		
residential and non-residential (e.g., commercial, industrial, or		
institutional) purposes or conducted by any governmental entity.		
6.3.4 A Dust Control Plan shall contain all the information	X	
described in Section 6.3.6 of this rule. The APCO shall approve,		
disapprove, or conditionally approve the Dust Control Plan.		
6.3.4 A Dust Control Plan shall contain all the information described in Section 6.3.6 of this rule. The APCO shall		Х
approve, disapprove, or conditionally approve the Dust Control		
Plan within 30 days of plan submittal. A Dust Control Plan is		
deemed automatically approved if, after 30 days following		
receipt by the District, the District does not provide any		
comments to the owner/operator regarding the Dust Control		
Plan.		
6.3.6.1 Name(s), address(es), and phone number(s) of person(s) and owner(s)/operator(s) responsible for the	X	
preparation, submittal, and implementation of the Dust Control		
Plan and responsible for the dust generating operation and dust		
generating application.		
6.3.6.1 Name(s), address(es), and phone number(s) of		X
person(s) and owner(s)/operator(s) responsible for the		
preparation, submittal, and implementation of the Dust Control		
Plan and responsible for the dust generating operation and the		
application of dust control measures. 6.3.6.8 At least one key individual representing the		
owner/operator or any person who prepares a Dust Control		Added
Plan must complete a Dust Control Training Class conducted by		
the District. The District will conduct Dust Control Training		

Comparison of Requirements	Adopted 11/15/01	Amended 8/19/04
Classes on an as needed basis.		
<ul> <li>6.4 District Notification of Earthmoving Activities on Smaller Construction Sites</li> <li>6.4.1 On residential development construction sites ranging from 1.0 to less than 10.0 acres in area, an owner/operator shall provide written notification to the District at least 48 hours prior to his/her intent to commence any earthmoving activities.</li> <li>6.4.2 On non-residential development construction sites ranging from 1.0 to less than 5.0 acres in area, an owner/operator shall provide written notification to the District at least 48 hours prior to his/her intent to commence any earthmoving activities.</li> </ul>		Added

#### Comparative Analysis of the Current SIP Version (amended August 19, 2004) of District Rule 8031 with the Previous SIP Version (adopted November 15, 2001)

Comparison of Requirements	Adopted 11/15/01	Amended 8/19/04
2.0 APPLICABILITY		1
This rule applies to the outdoor handling, storage, and transport of any bulk material. The provisions of this rule shall be effective on and after May 15, 2002.	Х	
This rule applies to the outdoor handling, storage, and transport of any bulk material. The provisions of this rule adopted on November 15, 2001 shall remain in effect until October 1, 2004 at which time the amendments adopted on August 19, 2004 shall take effect.		x
4.0 Exemptions		·
4.4 Outdoor storage and handling of any bulk material at a single site where the total material stored is less than 100 cubic yards.	X	
4.4 Outdoor storage of any bulk material at a single site where no material is actively being added or removed at the end of the workday or overnight and where the total material stored is less than 100 cubic yards.		X
5.0 Requirements		
A2 Construct and maintain wind barriers sufficient to limit VDE to 20% opacity and with less than 50% porosity. If utilizing fences or wind barriers, control measure A1 shall also be implemented		Added
A4 Construct and maintain wind barriers sufficient to limit VDE to 20% opacity. If utilizing fences or wind barriers, control measure A1 shall also be implemented.	X	
B3 Construct and maintain wind barriers sufficient to limit VDE to 20% opacity and with less than 50% porosity. If utilizing fences or wind barriers, apply water or chemical/organic stabilizers/suppressants to limit VDE to 20% opacity or;		X
B4 Utilize a 3-sided structure with a height at least equal to the height of the storage pile and with less than 50% porosity.		Added

#### Comparative Analysis of the Current SIP Version (amended August 19, 2004) of District Rule 8041 with the Previous SIP Version (adopted November 15, 2001)

Comparison of Requirements	Adopted 11/15/01	Amended 8/19/04
2.0 APPLICABILITY		
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. The provisions of this rule shall be effective on and after May 15, 2002.	X	
This rule applies to all sites that are subject to any of the following rules where carryout or trackout has occurred or may occur on paved public roads or the paved shoulders of a paved public road: Rules 8021 (Construction, Demolition, Excavation, Extraction, and other Earthmoving Activities), 8031 (Bulk Materials), 8061 (Paved and Unpaved Roads), and 8071 (Unpaved Vehicle and Equipment Traffic Areas) The provisions of this rule adopted on November 15, 2001 shall remain in effect until October 1, 2004 at which time the amendments adopted on August 19, 2004 shall take effect.		X
5.0 Requirements		L
5.1 Owners/operators of sites not identified in Sections 5.2 through 5.5 of sites not identified in Sections 5.2 through 5.5 shall remove all visible carryout and trackout at the end of each workday.	x	
5.1 Owners/operators of sites not identified in Sections 5.2 through 5.5 shall remove all visible carryout and trackout at the end of each workday.		х
5.2 Within urban area, if carryout and trackout extends less than 50 feet from the nearest exit point of a site, the owner/operator shall remove all visible carryout and trackout at the end of each workday.Within urban areas, if carryout and trackout extends less than 50 feet from the nearest exit point of a site, the owner/operator shall remove all visible carryout and trackout at the end of each workday.	Deleted	
5.3 An owner/operator of any site with 150 or more vehicle trips per day shall prevent carryout and trackout as specified in Section 5.8.	X	
5.2 An owner/operator of any site with 150 or more vehicle trips per day, or 20 or more vehicle trips per day by vehicles with three or more axles shall take the actions for carryout and trackout as specified in Section 5.8.		x

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Comparison of Requirements	Adopted 11/15/01	Amended 8/19/04
5.4 An owner/operator subject to the requirements of a Dust Control Plan as specified in Rule 8021 (Construction, Demolition, Excavation, Extraction, and other Earthmoving Activities) shall prevent carryout and trackout as specified in Section 5.8.	X	
5.3 An owner/operator subject to the requirements of a Dust Control Plan as specified in Rule 8021 (Construction, Demolition, Excavation, Extraction, and other Earthmoving Activities) shall take the actions for carryout and trackout as specified in Section 5.8.		X
5.5 Within urban areas or, an owner/operator shall prevent or immediately remove carryout and trackout when it extends more than 50 feet from the nearest exit point of a site.	X	
5.4 Within urban areas or, an owner/operator shall prevent carryout and trackout, or immediately remove carryout and trackout when it extends 50 feet or more from the nearest unpaved surface exit point of a site.		x
5.5 Within rural areas, construction projects 10 acres or more in size, an owner/operator shall prevent carryout and trackout, or immediately remove carryout and trackout when it extends 50 feet or more from the nearest unpaved surface exit point of a site.		Added
5.7.3 Operating a PM10-efficient street sweeper that has a pick- up efficiency of at least 80 percent as determined by using the Street Sweeper Compliance Testing Method described in South Coast Air Quality Management District Rule 1186 (PM10 Emissions from Paved and Unpaved Roads, and Livestock Operations).	X	
5.7.3 Operating a PM10-efficient street sweeper that has a pick- up efficiency of at least 80 percent as defined in Rule 8011 (General Requirements).		X
5.7.4 Flushing with water, if curbs or gutters are not present and where the use of water will not result as a source of trackout material or result in adverse impacts on storm water drainage systems or violate any National Pollutant Discharge Elimination System permit program.		Added
5.8 Prevention of carryout and trackout shall be 5.8.1	X	
Installing and maintaining a trackout control device at all access points to paved public roads; or		
5.8.1.3 Maintaining sufficient length of paved interior roads to allow mud and dirt to drop off of vehicles before exiting the site; or		
5.8.1.4Removing deposits of mud and dirt accumulated on paved interior roads with sufficient frequency to prevent carryout and trackout onto paved public roads.		

Comparison of Requirements	Adopted 11/15/01	Amended 8/19/04
5.8 Carryout and trackout shall be prevented and mitigated as specified in sections 5.8.1 and 5.8.2:		Х
5.8.1 Prevented by:		
5.8.1.1 Installing and maintaining a trackout control device meeting the specifications contained in Section 5.9 at all access points to paved public roads; or		
5.8.1.2 Utilizing a carryout and trackout prevention procedure which has been demonstrated to the satisfaction of the APCO and US EPA as achieving an equivalent or greater level of control than specified in Section 5.8.1.1.		
5.8.2 Mitigated by:		
In the event that measures specified in Section 5.8.1 are insufficient to prevent carryout and trackout, removal of any carryout and trackout must be accomplished within one-half hour of the generation of such carryout and trackout.		
5.9 Specifications for Section 5.8.1 shall meet the following conditions or combination of conditions:		Added
5.9.1 For use of grizzlies or other similar devices designed to removed dirt/mud from tires, the devices shall extend from the intersection with the public paved road surface for a distance of at least 25 feet, and cover the full width of the unpaved exit surface for at least 25 feet.		
5.9.2 For use of gravel pads, coverage with gravel shall be at least one inch or larger in diameter and at least 3 inches deep, shall extend from the intersection with the public paved road surface for a distance of at least 50 feet, and cover the full width of the unpaved exit surface for at least 50 feet. Any gravel deposited onto a public paved road travel lane or shoulder must be removed at the end of the workday or immediately following the last vehicle using the gravel pad, or at least once every 24 hours, whichever occurs first.		
5.9.3 For use of paving, paved surfaces shall extend from the intersection with the public paved road surface for a distance of at least 100 feet, and cover the full width of the unpaved access road for that distance to allow mud and dirt to drop off of vehicles before exiting the site. Mud and dirt deposits accumulating on paved interior roads shall be removed with sufficient frequency, but not less frequently than once per workday, to prevent carryout and trackout onto paved public roads		

#### Comparative Analysis of the Current SIP Version (amended August 19, 2004) of District Rule 8051 with the Previous SIP Version (adopted November 15, 2001)

Comparison of Requirements	Adopted 11/15/01	Amended 8/19/04
2.0 APPLICABILITY		
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. The provisions of this rule shall be effective on and after May 15, 2002.	×	
This rule applies to any open area having 0.5 acres or more within urban areas, or 3.0 acres or more within rural areas; and contains at least 1000 square feet of disturbed surface area. The provisions of this rule adopted on November 15, 2001 shall remain in effect until October 1, 2004 at which time the amendments adopted on August 19, 2004 shall take effect.		X
4.0 Exemptions		
4.1. Any weed abatement activity utilizing mowing and/or cutting, and which leaves at least three inches of stubble immediately after such mowing/cutting has occurred.		x
5.0 Requirements		
A. OPEN AREAS:	x	
Implement, apply, maintain, and reapply if necessary, at least one or a combination of the following control measures to comply at all times with the conditions for a stabilized surface and limit VDE to 20% opacity as defined in Rule 8011:		
A1 Apply and maintain water or dust suppressant(s) to all unvegetated areas sufficient to limit VDE to 20% opacity; or		
A2 Establish vegetation on all previously disturbed areas sufficient to limit VDE to 20% opacity; or		
A3 Pave, apply and maintain gravel, or apply and maintain chemical/organic stabilizers/suppressants sufficient to limit VDE to 20% opacity.		
A. OPEN AREAS:		X
Implement, apply, maintain, and reapply if necessary, at least one or a combination of the following control measures to comply at all times with the conditions for a stabilized surface and limit VDE to 20% opacity as defined in Rule 8011:		
A1 Apply and maintain water or dust suppressant(s) to all unvegetated areas; or		
A2 Establish vegetation on all previously disturbed areas; or		
A3 Pave, apply and maintain gravel, or apply and maintain chemical/organic stabilizers/suppressants.		

### Comparative Analysis of the Current SIP Version (amended August 19, 2004) of District Rule 8061 with the Previous SIP Version (adopted November 15, 2001)

Adopted 11/15/01	Amended 8/19/04
	<u> </u>
x	
	X
X	
	x
	x

Comparison	of Requirements	Adopted 11/15/01	Amended 8/19/04
5.1 New/Modified Paved Road		X	
	g jurisdiction over, or ownership of,	~	
public or private paved roads s			
	d paved roads in conformance with		
	ate Highway and Transportation		
	for width of shoulders and median		
shoulders as specified below:			
	odifications to existing paved roads		
	hicle trips of 500 vehicles or more		
shall be constructed with paved	d shoulders that meet following		
widths:	Minimum Doved as Stabilized		
Annual Average Daily Vehicle Trips (AADT)	Minimum Paved or Stabilized Shoulder Width in Feet		
500-3000	4 r		
Greater than 3000	8		
	nd contiguous with the travel lane		
or paved shoulder of a road ma			
	dth standard in Section 5.1.1.1.		
	entry lanes, and auxiliary exit lanes		
	o and contiguous with the roadway,		
	oulder width standard in Section		
5.1.1.1.			
5.1.1.4 New paved road constr			
	quired to comply with California		
	QA) and National Environmental		
Policy Act (NEPA) determination cultural, archaeological, historic			
addressed in such documents,			
	becified in Section 5.1 of this rule.		
	bad which has projected annual		
average daily vehicle trips of 50			
modified with medians, the me			
	mum width of four feet adjacent to		
the traffic lanes unless:			
5.1.1.5.1 The medians of roads	having speed limits set at or		
below 45 miles per hour are co			
	Iscaped and maintained with grass		
	er to comply with the definition of		
stabilized surface in Rule 8011			
5.1.2 In lieu of complying with t			
requirements of Section 5.1.1,			
	al/organic suppressants/stabilizers		
as defined in Rule 8011 to the			
	ection 5.1.1. The material shall be		
	hit VDE to 20% opacity and fulfill		
conditions for a stabilized surfa	ce as specified in Rule 8011.		

Comparison	of Requirements	Adopted 11/15/01	Amended 8/19/04
of, public or private paved road constructed, all new or modified with the American Association Transportation Officials (AASH shoulders and for median should 5.1.1.2 of this rule as specified 5.1.1.1.1 New paved roads or roads with projected annual as	ing jurisdiction over, or ownership ds shall construct, or require to be ed paved roads in conformance of State Highway and ITO) guidelines for width of ulders as specified in section below: modifications to existing paved verage daily vehicle trips of 500		X
meet following widths: Annual Average Daily Vehicle Trips (AADT) 500-3000 Greater than 3000 5.1.1.1.2 A curbing adjacent to lane or paved shoulder of a ro meeting the paved shoulder w 5.1.1.1.3 Intersections, auxiliant lanes may be constructed adja roadway, in lieu of meeting the Section 5.1.1.1.1 5.1.1.1.4 Where the requirement are shown to conflict with the r Environmental Quality Act (CE Policy Act (NEPA) with respect environmental, cultural, archaec considerations addressed in set is exempt from the paved should in Section 5.1.1.1.1 of this rule 5.1.1.2 Whenever any paved r average daily vehicle trips of 5 modified with medians, the medians, the medians, the medians, the medians of roads below 45 miles per hour are co 5.1.1.2.2 The medians are land	QA) and National Environmental to determinations regarding cological, historical, or other uch documents, an owner/operator or documents, an owner/operator and which has projected annual 00 or more is constructed, or dians shall be constructed in 0 guidelines for width of median rs having a minimum width of four s unless: a having speed limits set at or onstructed with curbing; or discaped and maintained with and cover or chemical/organic dust apply with the definition of		

Comparison of Requirements	Adopted 11/15/01	Amended 8/19/04
5.1.2 PM10-Efficient Street Sweepers: Each city, county, or state agency with primary responsibility for any existing paved road within an urban area shall take the following actions: 5.1.2.1 Effective July 1, 2005, all purchases of street sweeper equipment by such agency or their contractor(s) shall be only PM10-efficient street sweepers. 5.1.2.2 The utilization of PM10-efficient street sweepers by an agency or its contractor(s) shall be prioritized for use on routine street sweeper route(s) with paved curbs which have been determined by an agency to have the greatest actual or potential for dirt and silt loadings. 5.1.2.3 Any agency which conducts or contracts for routine street sweeping activities or services shall purchase, or require their contractor(s) to purchase and place into service, at least one PM10-efficient street sweepers not later than July 1, 2008. 5.1.2.4 Any street sweeping routes with paved curbs covered by PM10-efficient street sweepers pursuant to Section 5.1.2.2 shall conduct routine street sweeping operations over such routes at a frequency of not less than once per month. 5.1.2.5 All PM10-efficient street sweepers shall be operated and maintained according to manufacturer specifications. 5.1.2.6 If the provisions of Sections 5.1.2.1 or 5.1.2.3 cannot be met due to budgetary constraints, the agency may submit a	Adopted 11/15/01	Amended 8/19/04 Added
statement of financial hardship to, and approved by, the APCO and US EPA. 5.1.3 Post-Event Clean-Up Each city, county, or state agency with primary responsibility for any existing paved road shall take the following actions upon discovery by the city, county or state agency of accumulations of mud/dirt [event material] of at least 1 inch thickness over an area of at least 50 square feet on road surface travel lanes as a result of wind/storm/water erosion and runoff: 5.1.3.1 Within 24 hours of discovery by the city, county or state agency of such condition, remove the mud/dirt from the travel anes or restrict vehicles from traveling over said mud/dirt until such time as the material can be removed from the travel lanes. 5.1.3.2 Follow dust minimizing practices during the removal of such mud/dirt from the travel lanes. 5.1.3.3 In the event unsafe travel conditions would result from estricting vehicle traffic pursuant to Section 5.1.3.1, and emoval of such material is not possible within 72 hours due to veekend or holiday conditions, the provisions of Section 5.1.3.1 can be extended upon notification to and approval by the APCO. 5.1.3.4 As soon a practicable, removal of mud/dirt from paved shoulders should also occur through the use of dust minimizing		Added

Comparison of Requirements	Adopted 11/15/01	Amended 8/19/04
<ul> <li>5.2 Unpaved Road Segment</li> <li>5.2.1.On each day that 75 or more vehicle trips will occur on an unpaved road segment, the owner/operator shall limit VDE to 20% opacity from the unpaved road segment by application and/or maintenance of at least one of the following control measures, or shall implement an APCO-approved Fugitive PM10 Management Plan as specified in Rule 8011 (General Requirements):</li> <li>5.2.1.1 Watering;</li> <li>5.2.1.2 Uniform layer of washed gravel;</li> <li>5.2.1.3 Chemical/organic dust suppressant;</li> <li>5.2.1.4 Vegetative materials;</li> <li>5.2.1.6 Any other method that effectively limits VDE to 20% opacity.</li> <li>5.2.2 On each day that 100 or more vehicle trips will occur on an unpaved road segment, the owner/operator shall limit VDE to 20% opacity and comply with the requirements of a stabilized unpaved road surface by the application and/or maintenance of at least one of the following control measures, or shall implement an APCO-approved Fugitive PM10 Management Plan as specified in Rule 8011 (General Requirements):</li> <li>5.2.2.1 Watering;</li> <li>5.2.2.2 Chemical/organic stabilizers/suppressants in accordance with the manufacturer's specifications;</li> <li>5.2.2.4 Paving;</li> <li>5.2.2.5 Any other method that results in a stabilized unpaved</li> </ul>	X	
road surface.5.2 Unpaved Road Segment5.2.1. On any unpaved road segment with 26 or more AADT, the owner/operator shall limit VDE to 20% opacity and comply with the requirements of a stabilized unpaved road by application and/or re-application/maintenance of at least one of the following control measures, or shall implement an APCO-approved Fugitive PM10 Management Plan as specified in Rule 8011 (General Requirements): 5.2.1.1 Watering; 5.2.1.2 Uniform layer of washed gravel; 5.2.1.3 Chemical/organic dust stabilizers/suppressants in accordance with the manufacturer's specifications; 5.2.1.4 Roadmix; 5.2.1.5 Paving; 5.2.1.6 Any other method that can be demonstrated to the satisfaction of the APCO that effectively limits VDE to 20% opacity and meets the conditions of a stabilized unpaved road.		X

Comparison of Requirements	Adopted 11/15/01	Amended 8/19/04
<ul> <li>5.2.2 Within an urban area, the construction of any new unpaved road is prohibited unless the road meets the definition of a temporary unpaved road as specified in section 3.60 of Rule 8011.</li> <li>5.2.3 Requirements for Existing Unpaved Public Roads in Urban and Rural Areas:</li> <li>5.2.3.1 Each city, county, or state agency with primary responsibility for any existing unpaved road within urban and rural areas shall take the following actions:</li> <li>5.2.3.1.1 By January 1, 2005 provide the District with a list of all unpaved roads under its jurisdiction in any urban area(s), including data on length of, and AADT on, each unpaved road segment.</li> <li>5.2.3.1.2 By July 1, 2005 provide the District with a list of all unpaved roads under its jurisdiction in any rural area, including data on length of, and AADT on, each unpaved road segment.</li> <li>5.2.3.1.3 By January 1, 2010, pave an average of 20% annually of all unpaved roads identified in Section 5.2.3.1.1 up to a maximum of 5 cumulative miles within any one urban area, with priority given to roads with the highest AADT levels. In meeting this requirement, each jurisdiction must show incremental progress.</li> <li>5.2.3.1.4 By April 1 of each year, 2006 through 2010, submit to the District the total number of unpaved road miles which were paved during the previous calendar year, and the percentage of cumulative miles paved relative to the list provided pursuant to Section 5.2.3.1.1.</li> <li>5.2.3.1.5 If the provisions of Section 5.2.3.1.3 cannot be met due to budgetary constraints, the agency may submit a statement of financial hardship to, and approved by, the APCO and US EPA.</li> </ul>		Added

Comparison of Requirements	Adopted 11/15/01	Amended 8/19/04
<ul> <li>5.2.4 Requirements for Existing Paved Public Roads with Unpaved Shoulders in Urban and Rural Areas:</li> <li>5.2.4.1 Each city, county, or state agency with primary responsibility for any existing paved public road with unpaved shoulders in urban and rural areas shall take the following actions:</li> <li>5.2.4.1.1 By January 1, 2005 provide the District with a list of all paved public roads with unpaved shoulders in any urban and rural area, including data on length of, and AADT on, each segment of paved public road with unpaved shoulders.</li> <li>5.2.4.1.2 In Urban areas, by January 1, 2010, pave or stabilize 4-foot shoulders on 50% of existing paved public roads with the highest AADT in urban areas identified in Section 5.2.4.1.1. In meeting this requirement, each jurisdiction must show incremental progress.</li> <li>5.2.4.1.3 In Rural areas, by January 1, 2010, pave or stabilize 4- foot shoulders on 25% of existing paved public roads with the highest AADT in rural areas identified in Section 5.2.4.1.1. In meeting this requirement, each jurisdiction must show incremental progress.</li> <li>5.2.4.1.4 If the provisions of Sections 5.2.4.1.2 or 5.2.4.1.3 cannot be met due to budgetary constraints, the agency may submit a statement of financial hardship to, and approved by, the APCO and US EPA.</li> <li>5.2.5 Requirements for Establishing and Posting Maximum Speed Limits on Unpaved Roads</li> <li>Each owner/operator shall establish a maximum speed limit of 25 mph on each unpaved road with 26 AADT or more and shall post speed limit signs, one in each direction, per mile of road segment in urban areas, and per two miles of road segment in rural areas. This provision shall become effective one year from the date of adoption of this rule amendment.</li> </ul>		Added
6.0 Administrative Requirements		
6.2 Recordkeeping and Reporting In addition to complying with the recordkeeping requirements specified in Rule 8011, city, county and state agencies responsible for the maintenance and operation of public paved and unpaved roads, shall prepare and submit a written report to the District documenting compliance with the provisions of this rule. This report shall be prepared for the years 2001 and 2002, and no less frequently than each two (2) year period thereafter. The reports shall be transmitted to the District no later than 90 days after the end of the calendar year and shall include:	X	

Comparison of Requirements	Adopted 11/15/01	Amended 8/19/04
6.2 Recordkeeping and Reporting In addition to complying with the recordkeeping requirements specified in Rule 8011 and Sections 5.2.3 and 5.2.4 of this rule, city, county and state agencies responsible for the maintenance and operation of public paved and unpaved roads, shall prepare and submit a written report to the District documenting compliance with the provisions of this rule. This report shall be prepared for the years 2003 and 2004, and no less frequently than each two (2) year period thereafter. The reports shall be transmitted to the District no later than 90 days after the end of the calendar year and shall include:		X
6.2.3 For all road under the agency's jurisdiction, a summary of actions taken to reduce PM10 emissions from roads during the reporting period. Where possible, the total miles of roads for which these procedures were enforced and the estimated traffic volume on the affected roads shall be provided.	X	
6.2.3 For all roads under the agency's jurisdiction, a summary of actions taken to reduce PM10 emissions from roads during the reporting period. The total miles of roads for which these procedures were enforced and the estimated traffic volume on the affected roads shall be provided.		x

#### Comparative Analysis of the Current SIP Version (amended September 16, 2004) of District Rule 8071 with the Previous SIP Version (adopted November 15, 2001)

.Comparison of Requirements	Adopted 11/15/01	Amended 9/16/04
2.0 APPLICABILITY		<u> </u>
This rule applies to any unpaved vehicle/equipment traffic area of 1.0 acre or larger. The provisions of this rule shall be effective on and after May 15, 2002.	X	
This rule applies to any unpaved vehicle/equipment traffic area. The provisions of this rule adopted on November 15, 2001 shall remain in effect until October 1, 2004 at which time the amendments adopted on September 16, 2004 shall take effect.		X
4.0 Exemptions		
4.1 Unpaved vehicle and equipment traffic areas on any day on which less than 75 vehicle trips occur.	X	
4.1 Unpaved vehicle and equipment traffic areas with less than 50 Average Annual Daily Trips (AADT).		x
5.0 Requirements		
5.1 In addition to the requirements of this rule, a person shall comply with all other applicable requirements of Regulation VIII to limit Visible Dust Emissions (VDE) to 20% opacity.	X	
5.1 In addition to the requirements of this rule, a person shall comply with all other applicable requirements of Regulation VIII to limit Visible Dust Emissions (VDE) to 20% opacity and comply with the requirements of a stabilized unpaved road. If vehicle activity originates from and remains exclusively within an unpaved vehicle/equipment traffic area, section 5.2 may be implemented to limit VDE to 20% opacity.		<b>X</b>
<ul> <li>5.1.1 On each day that 75 or more vehicle trips will occur on an unpaved vehicle/equipment traffic area, the owner/operator shall limit VDE to 20% opacity from the unpaved vehicle/equipment traffic area by application and/or maintenance of at least one of the following control measures, or shall implement an APCO-approved Fugitive PM10 Management Plan as specified in Rule 8011 (General Requirements):</li> <li>5.1.1.1 Watering;</li> <li>5.1.1.2 Uniform layer of washed gravel;</li> <li>5.1.1.3 Chemical/organic dust suppressants;</li> <li>5.1.1.4 Vegetative materials;</li> <li>5.1.1.5 Paving;</li> <li>5.1.1.6 Any other method(s) that can be demonstrated to the satisfaction of the APCO that effectively limits VDE to 20% opacity.</li> </ul>	X	

Comparison of Requirements	Adopted 11/15/01	Amended 9/16/04
<ul> <li>5.1.1 Where 50 or more Average Annual Daily Trips (AADT) will occur on an unpaved vehicle/equipment traffic area, the owner/operator shall limit VDE to 20% opacity and comply with the requirements of a stabilized unpaved road by application and/or re-application/maintenance of at least one of the following control measures, or shall implement an APCO-approved Fugitive PM10 Management Plan as specified in Rule 8011 (General Requirements):</li> <li>5.1.1.1 Watering;</li> <li>5.1.1.2 Uniform layer of washed gravel;</li> <li>5.1.1.3 Chemical/organic dust stabilizers/suppressants in accordance with the manufacturer's specifications;</li> <li>5.1.1.4 Vegetative materials;</li> </ul>		x
<ul> <li>5.1.1.5 Paving;</li> <li>5.1.1.6 Roadmix;</li> <li>5.1.1.7 Any other method(s) that can be demonstrated to the satisfaction of the APCO that effectively limits VDE to 20%</li> </ul>		
opacity and meets the conditions of a stabilized unpaved road. 5.1.2 On each day that 100 or more vehicle trips will occur on an unpaved vehicle/equipment traffic area, the owner/operator shall limit VDE to 20% opacity and comply with the requirements of a stabilized unpaved road by the application and/or maintenance of at least one of the following control measures, or shall implement an APCO-approved Fugitive PM10 Management Plan as specified in Rule 8011 (General Requirements): 5.1.2.1 Watering; 5.1.2.2 Chemical/organic stabilizers/suppressants in accordance with the manufacturer's specifications; 5.1.2.3 Roadmix; 5.1.2.4 Paving. 5.1.2.5 Any other method that results in a stabilized unpaved road surface.	Deleted	
5.1.2 For unpaved vehicle/equipment traffic areas with 150 VDT, or 150 VDT that are utilized intermittently for a period of 30 days or less during the calendar year, the owner/operator shall implement the control options specified in 5.1.1.1 through 5.1.1.7, or shall implement an APCO-approved Fugitive PM10 Management Plan as specified in Rule 8011 (General Requirements) during the period that the unpaved vehicle/equipment traffic area is utilized.		Added
5.1.3 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 limit VDE to 20% opacity and comply with the requirements of a stabilized unpaved road by the application and/or re-application/maintenance of at least one of the control measures specified sections 5.1.1.1 through 5.1.1.6, or shall implement an APCO-approved Fugitive PM10 Management Plan as specified in Rule 8011 (General Requirements).		Added

Comparison of Requirements	Adopted 11/15/01	Amended 9/16/04
5.1.4 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 of the unpaved area to be traveled/parked upon must notify the District at least 48 hours in advance when such a special event will occur. During the duration of the special event vehicle travel/parking, the owner/operator shall limit VDE to 20% opacity and comply with the requirements of a stabilized unpaved road by the application and/or re- application/maintenance of water or chemical/organic dust stabilizers/suppressants in accordance with the manufacturer's specifications.		Added
5.2 In addition to the requirements of this rule, a person shall comply with all other applicable requirements of Regulation VIII to limit Visible Dust Emissions (VDE) to 20% opacity. 5.2.1 On each day that 50 or more VDT, or 25 or more VDT with 3 or more axles, originates from within and remains exclusively within an unpaved vehicle/equipment traffic area, the powner/operator may apply/reapply water to limit VDE to 20% opacity.		Added
5.2 An owner/operator shall restrict access and periodically stabilize a disturbed surface area whenever a site remains inactive for seven consecutive calendar days to comply with the conditions for a stabilized surface as defined in Rule 8011.	X	
5.3 An owner/operator shall restrict access and periodically stabilize a disturbed surface area whenever a site becomes nactive to comply with the conditions for a stabilized surface as defined in Rule 8011.	·	X

## ATTACHMENT F

District Rule 4601 SIP Comparison

# 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	<ul> <li>The provisions of this rule shall not apply to:</li> <li>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.</li> <li>4.2 Any architectural coating that is sold in a containers with a volume of one liter (1.057 quarts) or less.</li> <li>4.3 Any aerosol coating product.</li> </ul>	<ul> <li>4.1 The provisions of this rule shall not apply to:</li> <li>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.</li> <li>4.1.2 Any aerosol coating product.</li> <li>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.</li> </ul>	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 tables are included as Attachment X.		e of Standards 2. These
	<ul> <li>5.1 VOC Content Limits: Except as provided in Sections 5.2, 5.3, 5.8 and 8.0, no person shall;</li> <li>5.1.1 manufacture, blend, or repackage for sale within the District;</li> <li>5.1.2 supply, sell, or offer for sale within the district;</li> <li>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.</li> </ul>	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 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.	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 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.
	<ul> <li>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:</li> <li>5.2.1 Lacquer coatings (including lacquer sanding sealers)</li> <li>5.2.2 Metallic pigmented coatings</li> <li>5.2.3 Shellacs</li> <li>5.2.5 Pretreatment wash primers</li> <li>5.2.6 Industrial maintenance coatings</li> <li>5.2.7 Low-solids coatings</li> </ul>	<ul> <li>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 2.</li> <li>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.</li> <li>5.2.2 Effective on and after January 1, 2011, with the exception of the</li> </ul>	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
	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	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 5.2.3.5 Pretreatment wash primers 5.2.3.6 Industrial maintenance coatings 5.2.3.7 Low-solids coatings 5.2.3.8 Wood preservatives 5.2.3.9 High temperature coatings 5.2.3.11 Antenna 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	
	<ul> <li>5.3 Sell-Through of Coatings:</li> <li>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.</li> <li>5.3.2 A coating included in an approved Averaging Program that does not comply with the specified limit in the</li> </ul>	5.2.3.18 Wood Coatings 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.

Requirement Category	SIP Version of Rule 4601 (10/31/01)	Non-SIP Version of Rule 4601 (12/17/09)	Conclusion
	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.		
	<ul> <li>5.4 Painting Practices: All architectural 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.</li> </ul>	5.4 Painting Practices: All architectural 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.	No change in the 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.	<ul> <li>5.7 Coatings Not Listed in the Table of Standards 1 or the Table of Standards</li> <li>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</li> <li>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.</li> </ul>	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		This section has been removed. The operation is required to meet the lacquer VOC limit regardless of

Requirement Category	SIP Version of Rule 4601 (10/31/01)	Non-SIP Version of Rule 4601 (12/17/09)	Conclusion
	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.	· · · ·	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, 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.		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.
		<ul> <li>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.</li> </ul>	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 X for Table)	Table of Standards 1 (Effective through 12/31/10) (See Attachment X 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 ir 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 X 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	6.1 Labeling Requirements: Each manufacturer of any architectural coating subject to this rule	6.1 Labeling Requirements: Each manufacturer of any architectural coating	The non-SIP approved rule contain sections

Requirement Category	SIP Version of Rule 4601 (10/31/01)	Non-SIP Version of Rule 4601 (12/17/09)	Conclusion
	6.1.1 through 6.1.9 on the coating container (or label) in which the coating is sold or distributed.	information listed in Sections 6.1.1 through 6.1.14 on the coating container (or label) in	additional requirements not found in the SIP
	<b>3</b>	which the coating is sold or distributed.	version. Therefore, non
	6.1.1 Date Code: The date the coating was		SIP version of rule is as
	manufactured, or a date code	6.1.1 Date Code: The date the coating was	stringent as SIP version.
	representing the date, shall be indicated on the label, lid or bottom of the	manufactured, or a date code representing the date, shall be	ſ
	container. If the manufacturer uses a	indicated on the label, lid or bottom of	
	date code for any coating, the	the container. If the manufacturer	
	manufacturer shall file an explanation of	uses a date code for any coating, the	
	each code with the Executive Officer of	manufacturer shall file an explanation	
	the ARB.	of each code with the Executive	
	6.1.2 Thinning Recommendations: A statement of the manufacturer's	Officer of the ARB. 6.1.2 Thinning Recommendations: A	
	recommendation regarding thinning of	statement of the manufacturer's	
	the coating shall be indicated on the label	recommendation regarding thinning	
	or lid of the container. This requirement	of the coating shall be indicated on	
	does not apply to the thinning of	the label or lid of the container. This	
	architectural coatings with water. If	requirement does not apply to the	
	thinning of the coating prior to use is not	thinning of architectural coatings with	
	necessary, the recommendation must specify that the coating is to be applied	water. If thinning of the coating prior to use is not necessary, the	
	without thinning.	recommendation must specify that	
	6.1.3 VOC Content: Each container of any	the coating is to be applied without	
	coating subject to this rule shall display	thinning.	
	either the maximum or actual VOC	6.1.3 VOC Content: Each container of any	
	content of the coating, as supplied,	coating subject to this rule shall	
	including the maximum thinning as recommended by the manufacturer. VOC	display one of the following values, in grams of VOC per liter of coating:	
	content shall be displayed in grams of	6.1.3.1 Maximum VOC Content, as	
	VOC per liter of coating. VOC content	determined from all potential	
•	displayed shall be calculated using	product formulations; or	
	product formulation data, or shall be	6.1.3.2 VOC Content, as	
	determined using the test methods in .	determined from actual	
	Section 6.3.1. The equations in Sections 3.25 or 3.26,	formulation data; or 6.1.3.3 VOC Content, as	
	as appropriate, shall be used to calculate	determined using the test	
	VOC content.	methods in Section 6.3.2.	
	6.1.4 Industrial Maintenance Coatings: In	If the manufacturer does not	
	addition to the information specified in	recommend thinning, the container	
	Sections 6.1.1, 6.1.2 and 6.1.3, each	must display the VOC Content, as supplied. If the manufacturer	
	manufacturer of any industrial maintenance coating subject to this rule	supplied. If the manufacturer recommends thinning, the container.	
	shall display on the label or lid of the	must display the VOC Content,	
	container in which the coating is sold or	including the maximum amount of	
	distributed one or more of the following	thinning solvent recommended by the	
	descriptions listed in Section 6.1.4.1	manufacturer. If the coating is a	
	through 6.1.4.3. 6.1.4.1 "For industrial use only"	multicomponent product, the container must display the VOC	
	6.1.4.2 "For professional use only"	content as mixed or catalyzed. If the	
	6.1.4.3 "Not for residential use" or "Not	coating contains silanes, siloxanes, or	
	intended for residential use"	other ingredients that generate	
	6.1.5 Clear Brushing Lacquers: Effective	ethanol or other VOCs during the	
	January 1, 2003, the labels of all clear	curing process, the VOC content	
	brushing lacquers shall prominently display the statements "For brush	must include the VOCs emitted during curing.	
	application only," and "This product must	6.1.4 Faux Finishing Coatings: Effective	
	not be thinned or sprayed."	January 1, 2011, the labels of all	
	6.1.6 Rust Preventative Coatings: Effective	clear topcoat Faux Finishing coatings	
	January 1, 2003, the labels of all rust	shall prominently display the	
	preventative coatings shall prominently	statement "This product can only be	
	display the statement "For Metal Substrates Only"	sold or used as part of a Faux Finishing coating system".	
	6.1.7 Specialty Primers, Sealers and	6.1.5 Industrial Maintenance Coatings:	
	Undercoaters: Effective January 1, 2003,	Each manufacturer of any industrial	
	the labels of all specialty primers, sealers	maintenance coating subject to this	
	and undercoaters shall prominently	rule shall display on the label or lid of	

Requirement	SIP Version of Rule 4601 (10/31/01)	Non-SIP Version of Rule 4601 (12/17/09)	Conclusion
Requirement Category	SIP Version of Rule 4601 (10/31/01) 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. 6.1.7.4 For water-damaged substrates. 6.1.7.4 For water-damaged 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".	<ul> <li>(12/17/09)</li> <li>the container in which the coating is sold or distributed one or more of the following descriptions listed in Section 6.1.5.1 through 6.1.5.3.</li> <li>6.1.5.1 "For industrial use only"</li> <li>6.1.5.2 "For professional use only"</li> <li>6.1.5.3 "Not for residential use" or "Not intended for residential use"</li> <li>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.)</li> <li>6.1.7 Rust Preventative Coatings: The labels of all rust preventative coatings shall prominently display the statement "For Metal Substrates Only".</li> <li>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 Sections 6.1.8.1 through 6.1.8.3. 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.</li> <li>6.1.8.1 For fire-damaged substrates.</li> <li>6.1.8.2 For smoke-damaged substrates.</li> <li>6.1.8.3 For water-damaged substrates.</li> <li>6.1.8.4 For excessively chalky substrates.</li> <li>6.1.8.5 For blocking stains.</li> <li>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.)</li> </ul>	Conclusion

Requirement Category	SIP Version of Rule 4601 (10/31/01)	Non-SIP Version of Rule 4601 (12/17/09)	Conclusion
		<ul> <li>6.1.13 Wood Coatings: Effective January <ol> <li>2011, the labels of all Wood</li> <li>Coatings shall prominently display the statement "For Wood Substrates</li> <li>Only."</li> </ol> </li> <li>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. <ol> <li>6.1.14.1 "For industrial use only"</li> <li>6.1.14.2 "For professional use only"</li> <li>6.1.14.3 "Not for residential use" or "Not intended for residential use"</li> </ol> </li> </ul>	
	6.2 Reporting Requirements	6.2 Reporting Requirements	Until December 31, 2010
	<ul> <li>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.</li> <li>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.</li> <li>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 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.</li> <li>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 calendar year.</li> <li>6.2.4.1 the product brand name and a copy of the product label</li></ul>	<ul> <li>The reporting requirements specified in Sections 6.2.1 through 6.2.6 shall apply until December 31, 2010.</li> <li>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.</li> <li>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.</li> <li>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 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.</li> <li>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 specify that contains perchloroethylene or methylene chloride, the manufacturer shall, on or before April 1 of each calendar year specify the manufac</li></ul>	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	SIP Version of Rule 4601	Non-SIP Version of Rule 4601	Canalusian
-	(10/31/01)	(12/17/09)	Conclusion
Category	<ul> <li>(10/31/01)</li> <li>6.2.4.2 the product category listed in the Table of Standards to which the coating belongs;</li> <li>6.2.4.3 the total sales in California during the calendar year to the nearest gallon;</li> <li>6.2.4.4 the volume percent, to the nearest 0.10 percent, of perchloroethylene and methylene chloride in the coating.</li> <li>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.</li> <li>6.2.6 Bituminous Coatings: Each manufacturer of 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.</li> </ul>	<ul> <li>(12/17/09)</li> <li>annual report to the Executive Officer of the ARB the following information for products sold in the State during the preceding year:</li> <li>6.2.4.1 the product brand name and a copy of the product label with legible usage instructions;</li> <li>6.2.4.2 the product category listed in the Table of Standards 2 to which the coating belongs;</li> <li>6.2.4.3 the total sales in California during the calendar year to the nearest gallon;</li> <li>6.2.4.4 the volume percent, to the nearest gallon;</li> <li>6.2.4.4 the volume percent, of perchloroethylene and methylene chloride in the coating.</li> <li>6.2.5.7 Recycled Coatings: Manufacturers of recycled coatings: Manufacturer of recycled coatings: 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 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 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 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 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 primers sold in the State during the preceding calendar year,</li></ul>	Conclusion

Requirement Category	SIP Version of Rule 4601 (10/31/01)	Non-SIP Version of Rule 4601 (12/17/09)	Conclusion
		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.	
		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.	

Requirement Category	SIP Version of Rule 4601 (10/31/01)	Non-SIP Version of Rule 4601 (12/17/09)	Conclusion
Requirement Category	<ul> <li>(10/31/01)</li> <li>6.3 Test Methods</li> <li>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.</li> <li>6.3.2 Alternative Test Methods: Other test methods demonstrated to provide results that are acceptable for purposes of determining compliance with Section 6.3.1, after review and approved in writing by the staffs of the</li> </ul>	<ul> <li>(12/17/09)</li> <li>6.3 Test Methods</li> <li>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.</li> <li>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 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.</li> <li>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</li> </ul>	Conclusion 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.
	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 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,	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	
	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	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	
	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	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	

Requirement Category	SIP Version of Rule 4601 (10/31/01)	Non-SIP Version of Rule 4601 (12/17/09)	Conclusion
	resistance rating of a fire-resistive	test results will govern, except when	
	coating shall be determined by ASTM	an alternative method is approved as	
	Designation E 119-98, "Standard Test Matheds for Eiro Tests of Building	specified in Section 6.3.3. The District Air Pollution Control Officer (APCO)	
	Methods for Fire Tests of Building Construction Materials"(see Section 3,	may require the manufacturer to	
	Fire-Resistive Coating).	conduct an EPA Method 24 analysis.	
	6.3.6 Gloss Determination: The gloss of a	6.3.3 Alternative Test Methods: Other test	
	coating shall be determined by ASTM	methods demonstrated to provide	
	Designation D 523-89 (1999),	results that are acceptable for	
	"Standard Test Method for Specular	purposes of determining compliance	
	Gloss" (see Section 3, Flat Coating,	with Section 6.3.2 4, after review and	
	Nonflat Coating, Nonflat-High Gloss	approved in writing by the staffs of	
	Coating and Quick-Dry Enamel).	the District, ARB and EPA, may also	
	6.3.7 Metal Content of Coatings: The	be used.	
	metallic content of a coating shall be	6.3.4 Methacrylate Traffic Marking	
	determined by SCAQMD Method 318- 95, Determination of Weight Percent	Coatings: Analysis of methacrylate multicomponent coatings used as	
	Elemental Metal in Coatings by X-Ray	traffic marking coatings shall be	
	Diffraction, SCAQMD Laboratory	conducted according to a modification	
	Methods of Analysis for Enforcement	of EPA Method 24 (40 CFR 59,	
	Samples (see Section 3, Metallic	subpart D, Appendix A). This method	
	Pigmented Coating).	has not been approved for	
	6.3.8 Acid Content of Coatings: The acid	methacrylate multicomponent	
	content of a coating shall be	coatings used for other purposes than	
	determined by ASTM Designation D	as traffic marking coatings or for other	
	1613-96, "Standard Test Method for	classes of multicomponent coatings.	
	Acidity in Volatile Solvents and	6.3.5 Flame Spread Index: The flame	
	Chemical Intermediates Used in Paint,	spread index of a fire-retardant	
	Varnish, Lacquer and related products"(see Section 3, Pre-	coating shall be determined by ASTM E84-07, "Standard Test Method for	
	Treatment Wash Primer).	Surface Burning Characteristics of	
	6.3.9 Drying Times: The set-to-touch, dry-	Building Materials" (see Section 3.0,	
	hard, dry-to-touch and dry-to-recoat	Fire-Retardant Coating).	
	times of a coating shall be determined	6.3.6 Fire Resistance Rating: The fire	
	by ASTM Designation D 1640-95,	resistance-rating of a fire-resistive	
	"Standard Test Methods for Drying,	coating shall be determined by ASTM	
	Curing, or Film Formation of Organic	E119-07, "Standard Test Methods for	
	Coatings at Room Temperature" (see	Fire Tests of Building Construction	
	Section 3, Quick-Dry Enamel and	Materials" (see Section 3.0, Fire-	
	Quick-Dry Primer, Sealer and	Resistive Coating). 6.3.7 Gloss Determination: The gloss of a	
	Undercoater) The tack-free time of a quickdry enamel coating shall be	coating shall be determined by ASTM	
	determined by the Mechanical Test	D523-89 (1999), "Standard Test	
	Method of ASTM Designation D 1640-	Method for Specular Gloss" (see	
	95.	Section 3.0, Flat Coating, Nonflat	
	6.3.10 Surface Chalkiness: The chalkiness	Coating, Nonflat-High Gloss Coating	
	of a surface shall be determined using	and Quick-Dry Enamel).	
	ASTM Designation D4214-98	6.3.8 Metal Content of Coatings: The	
	"Standard Test Methods for Evaluating	metallic content of a coating shall be	
	the Degree of Chalking of Exterior	determined by SCAQMD Method	
	Paint Films"(see Section 3, Specialty Primer, Sealer and Undercoater).	318-95, Determination of Weight Percent Elemental Metal in Coatings	
,	6.3.11 Exempt Compounds—Siloxanes:	by X-Ray Diffraction, SCAQMD	
	Exempt compounds that are cyclic,	Laboratory Methods of Analysis for	
	branched, or linear completely	Enforcement Samples (see Section	
	methylated siloxanes, shall be	3.0, Metallic Pigmented Coating,	
	analyzed as exempt compounds for	Aluminum Roof Coating and Faux	
	compliance with Section 6 by	Finish.	
	BAAQMD Method 43, "Determination	6.3.9 Acid Content of Coatings: The acid	
	of Volatile Methylsiloxanes in Solvent-	content of a coating shall be	
	Based Coatings, Inks, and Related	determined by ASTM D1613-06,	
	Materials," BAAQMD Manual of	"Standard Test Method for Acidity in	
	Procedures, Volume III, adopted	Volatile Solvents and Chemical	
	11/6/96 (see Section 3, Volatile	Intermediates Used in Paint, Varnish, Lacquer and related products" (see	
	Organic Compound, and Section 6.3.1).	Section 3.0, Pre-Treatment Wash	
	6.3.12 Exempt Compounds—	Primer).	

Requirement	SIP Version of Rule 4601	Non-SIP Version of Rule 4601	Conclusion
Category	(10/31/01)	(12/17/09)	
	<ul> <li>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," <i>BAAQMD Manual of Procedures</i>, Volume III, adopted 12/20/95 (see Section 3, Volatile Organic Compound, and Section 6.3.1).</li> <li>63.13 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," <i>SCAQMD Laboratory Methods</i> of <i>Analysis for Enforcement Samples</i> (see Section 3, Volatile Organic Compound, and Section 6.3.1).</li> <li>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 <i>Code of Federal Regulations</i> (CFR) part 60, "Determination of Volatile Matter Content, Water Content, Density, Volume Solids and Weight Solids of Surface Coatings" (See Section 6.3.1).</li> <li>6.3.15 Alternative VOC Content of coatings: The VOC content of methacrylate multicomponent coatings used as traffic Marking Coatings: The VOC content of methacrylate Traffic Marking Coatings the VOC content of methacrylate Traffic Marking Coatings Stall be analyzed by the procedures in 40 CFR part 59, subpart D, appendix A, "Determination of Volatile Matter Content of Methacrylate Multicomponent Coatings'</li></ul>	<ul> <li>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.)</li> <li>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.)</li> <li>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," <i>BAAQMD Manual of Procedures</i>, Volume III, adopted 11/6/96 (see Section 3.0, Volatile Organic Compound, and Section 6.3.2).</li> <li>6.3.13 Exempt Compounds—Parachlorobenzotrifluoride, shall be analyzed as an exempt compound for compliance with Section 6 by BAAQMD Method 41, "Determination of Volatile Organic Compound for compliance with Section 6.3.2).</li> <li>6.3.14 Exempt Compounds in Solvent Based Coatings and Related Materials Containing Parachlorobenzotrifluoride, Shall be analyzed as an exempt compound for compound, and Section 6.3.2).</li> <li>6.3.14 Exempt Compounds: The content of compound, and Section 3.0, Volatile Organic Compound, in Solvent Based Coatings and Related Materials Containing Parachlorobenzotrifluoride, BAAQMD Method 24 shall be analyzed by SCAQMD Method 24 shall be analyzed by SCAQMD Method 24 shall be determined by EPA Method 24 as it exists in appendix A of 40 Code of</li> </ul>	

Requirement Category	SIP Version of Rule 4601 (10/31/01)	Non-SIP Version of Rule 4601 (12/17/09)	Conclusion
		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	· .
		<ul> <li>Traffic Marking Coatings<sup>®</sup> (September 11, 1998).</li> <li>6.3.18 Hydrostatic Pressure for Basement Specialty Coatings: The hydrostatic pressure resistance for 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</li> </ul>	
		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".	
		<ul> <li>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".</li> <li>6.3.22 Tub and Tile Refinish Coating</li> </ul>	
		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	

Requirement Category	SIP Version of Rule 4601 (10/31/01)	Non-SIP Version of Rule 4601 (12/17/09)	Conclusion
		<ul> <li>for Evaluating Degree of Blistering of Paints".</li> <li>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".</li> <li>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".</li> <li>6.3.25 Reactive Penetrating Sealer Water Repellency: Reactive penetrating sealer water repellency shall be analyzed by ASTM C67-07, "Standard Test Methods for Sampling and Testing Brick and Structural Clay Tile"; or ASTM C97-02, "Standard Test Methods for Sampling and Testing Societ Mater Vapor Transmission: Reactive penetrating Sealer water vapor transmission shall be analyzed ASTM E96/E96M-05, "Standard Test Method for Sampling and Testing Societ Mater Vapor Transmission: Reactive penetrating Sealer water vapor transmission of Materials".</li> <li>6.3.27 Reactive Penetrating Sealer Water Vapor Transmission of Materials".</li> <li>6.3.27 Reactive Penetrating Sealer Shall be analyzed by National Cooperative Highway Research Report 244 (1981), "Concrete Sealers for the Protection of Bridge Structures".</li> <li>6.3.28 Stone Consolidants: Stone consolidants shall be tested using ASTM E2167-01, "Standard Guide for</li> </ul>	
7.0 Compliance Schedule	Persons subject to this rule shall be in compliance with this rule by October 31, 2001.	Selection and Use of Stone Consolidants". Persons subject to this rule shall be in compliance with this rule by the dates	No change in the requirements, therefore,
Schedule		specified within the rule.	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		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
	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 averaging will no longer be allowed.	· · ·	
	Per Section 8.1, averaging is no longer applicable. Therefore, Section 8.2 through 8.14 are not listed.		

District Rule 4601 was amended (12/17/2009). 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.