San Joaquin Valley
AIR POLLUTION CONTROL DISTRICT

HEALTHY AIR LIVING™

APR 20 2017

Mr. Rob Hill
NuStar Terminals Ops Partnership LP
9280 W Stockton Blvd Suite 220
Elk Grove, CA 95758

**Re: Notice of Final Action - Title V Permit Renewal**
**District Facility # N-829**
**Project # N-1151646**

Dear Mr. Hill:

The District has issued the Final Renewed Title V Permit for NuStar Terminals Ops Partnership LP (see enclosure). The preliminary decision for this project was made on September 21, 2006. A summary of the comments and the District's response to each comment is included as an attachment to the engineering evaluation.

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

Thank you for your cooperation in this matter. If you have any questions, please contact Mr. Nick Peirce, Permit Services Manager, at (209) 557-6400.

Sincerely,

P. Arnaud Marjollet

Arnaud Marjollet
Director of Permit Services

Enclosures

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

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# SAN JOAQUIN VALLEY
# AIR POLLUTION CONTROL DISTRICT

**Proposed Title V Permit Renewal Evaluation**
**Nustar Terminals**
**N-829**

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# TITLE V PERMIT RENEWAL EVALUATION

**Bulk Terminal**

**Engineer:** James Harader
**Date:** January 1, 2017

**Facility Number:** N-829
**Facility Name:** NuStar Terminals Ops Partnership LP
**Mailing Address:** 9280 W Stockton Blvd Suite 220
Elk Grove, CA 95758-8077

**Contact Name:** Rob Hill
**Phone:** (916) 509-324

**Responsible Official:** Rob Hill
**Title:** General Manager of Pipeline and Terminal Operations

**Project # :** N-1151646
**Deemed Complete:**

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## I. PROPOSAL

NuStar Terminals was issued an Initial TV permit on 1/13/2000. 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.

In addition to renewing the Title V permits, Authorities to Construct N-829-5-4, N-'32-0, '-33-0, '-34-0, and '-35-0 will be converted into Permits to Operate and incorporated into the Title V permit. The initial requirements for each Authority to Construct, including offset requirements, have been satisfied.

Finally, the following modifications to the permits have been made at the facility's request.

| Source Name | Permit Number | Proposed Revisions | Reason for Revision |
|---|---|---|---|
| North Truck Rack | Current PTO N-820-1-6 | Revise language in condition #1 to state 'vapor combustion system' rather than 'vapor recovery system' | The control system does not recover vapors. Instead the system combusts vapors. Therefore, the language in this condition will be modifed to clarify the true nature of the control system. |
| | | Revise the first sentence of Condition #17 as follows:<br><br>Liquid drainage inspections shall be completed ~~before~~ between 12:00 AM and 10:00 AM the day of inspection. | This change to the condition language does not alter the requirement; rather, the modification to the language clarifies when the inspection must be performed. |
| South Truck Rack | Current PTO N-829-2-6 | Revise language in condition #1 to state 'vapor combustion system' rather than 'vapor recovery system' | The control system does not recover vapors. Instead the system combusts vapors. Therefore, the language in this condition will be modifed to clarify the true nature of the control system. |
| | | Revise the first sentence of Condition #17 as follows:<br><br>Liquid drainage inspections shall be completed ~~before~~ between 12:00 AM and 10:00 AM the day of inspection. | This change to the condition language does not alter the requirement; rather, the modification to the language clarifies when the inspection must be performed. |

**Continued on following page**

| Source Name | Permit Number | Proposed Revisions | Reason for Revision |
|---|---|---|---|
| Tank 1502 | ATC N-829-5-4 | Delete the word "HMT" from the equipment description. | The District hasn't historically only included a description of the seal in the equipment description. Therefore, the equipment description will be modified as requested. |
| | | Revise the rule citation in Conditions #29 and #37 to read "40 CFR 63.11087(c) rather than 40 CFR 60.11087(c) | The current rule reference is incorrect. The reference will be corrected in the final title V permit. |
| | | Revise Condition #52 to allow for the use of the CARB method as an alternative to using ASTM D323 for measuring RVP. | The condition language already allows for alternative test methods if approved by the District prior to their use; therefore, no change was made. |
| Tank 1501 | PTO N-829-6-6 | Delete the word "HMT" from the equipment description. | The District hasn't historically only included a description of the seal in the equipment description. Therefore, the equipment description will be modified as requested. |
| | | Revise the rule citation in Conditions #24 and #31 to read "40 CFR 63.11087(c) rather than 40 CFR 60.11087(c) | The current rule reference is incorrect. The reference will be corrected in the final title V permit. |
| | | Revise Condition #44 to allow for the use of the CARB method as an alternative to using ASTM D323 for measuring RVP. | The condition language already allows for alternative test methods if approved by the District prior to their use; therefore, no change was made. |
| Tank 1002 | PTO N-829-7-5 | Revise the equipment description as follows:<br><br>420,000 GALLON WELDED INTERNAL FLOATING ROOF TANK (#1002) WITH A PRIMARY ~~RESILIENT-TOROID~~ FOAM LOG SEAL, A SECONDARY WIPER SEAL, AND A SOLID GUIDEPOLE | This modification to the equipment description will more accurately describe the type of seal installed on the tank. |
| | | Revise the rule citation in Conditions #25 and #32 to read "40 CFR 63.11087(c) rather than 40 CFR 60.11087(c) | The current rule reference is incorrect. The reference will be corrected in the final title V permit. |
| | | Revise Condition #45 to allow for the use of the CARB method as an alternative to using ASTM D323 for measuring RVP. | The rule allows for alternative test methods if approved by the District, ARB, and EPA. A provision allowing alternative test methods will be included into this condition. |
| Tank 3301 | PTO N-829-16-6 | Revise the rule citation in Conditions #25 and #32 to read "40 CFR 63.11087(c) rather than 40 CFR 60.11087(c) | The current rule reference is incorrect. The reference will be corrected in the final title V permit. |
| | | Revise Condition #43 to allow for the use of the CARB method as an alternative to using ASTM D323 for measuring RVP. | The condition language already allows for alternative test methods if approved by the District prior to their use; therefore, no change was made. |

Continued on following page

| Source Name | Permit Number | Proposed Revisions | Reason for Revision |
|---|---|---|---|
| Tank 2401 | PTO N-829-17-6 | Revise the rule citation in Conditions #25 and #32 to read "40 CFR 63.11087(c) rather than 40 CFR 60.11087(c) | The current rule reference is incorrect. The reference will be corrected in the final title V permit. |
| | | Revise Condition #43 to allow for the use of the CARB method as an alternative to using ASTM D323 for measuring RVP. | The condition language already allows for alternative test methods if approved by the District prior to their use; therefore, no change was made. |
| Tank 2402 | PTO N-829-18-6 | Revise the rule citation in Conditions #28 and #35 to read "40 CFR 63.11087(c) rather than 40 CFR 60.11087(c) | The current rule reference is incorrect. The reference will be corrected in the final title V permit. |
| | | Revise Condition #48 to allow for the use of the CARB method as an alternative to using ASTM D323 for measuring RVP. | The condition language already allows for alternative test methods if approved by the District prior to their use; therefore, no change was made. |
| Vapor Combustion System | PTO N-829-20-8 | Revise the equipment description as follows:<br>VAPOR ~~RECOVERY~~ COMBUSTION SYSTEM CONSISTING OF A 300,000 GALLON VAPOR HOLDING TANK, A VAPOR PROCESSING AND CONVEYING SYSTEM, AND A 40 MMBTU/HR PROPANE FIRED JOHN ZINK ZCT-2-8-35-X-2/8-X VAPOR COMBUSTION~~OR~~ UNIT (VCU) | This change is to clarify that the control system is a vapor combustion system and not used for the recovery of vapors. |
| Tank 3302 | PTO N-829-21-4 | Revise the equipment description as follows:<br>1,328,124 GALLON WELDED INTERNAL FLOATING ROOF STORAGE TANK (#3302) WITH A MECHANICAL SHOE PRIMARY SEAL, A WIPER SECONDARY SEAL AND A SLOTTED GUIDEPOLE | This is a correction to a mistake made in the equipment description. |
| | | Revise Condition #4 as follows:<br>4. Gaps between the tank shell and primary seal shall not exceed 1 ½ inches. | This is a correction to the condition language to match the rule requirement. |
| | | Revise the rule citation in Conditions #25 and #32 to read "40 CFR 63.11087(c) rather than 40 CFR 60.11087(c) | The current rule reference is incorrect. The reference will be corrected in the final title V permit. |
| | | Revise Condition #45 to allow for the use of the CARB method as an alternative to using ASTM D323 for measuring RVP. | The condition language already allows for alternative test methods if approved by the District prior to their use; therefore, no change was made. |

Continued on following page

| Source Name | Permit Number | Proposed Revisions | Reason for Revision |
|---|---|---|---|
| Tank 3303 | PTO N-829-22-4 | Revise the rule citation in Conditions #18 and #25 to read "40 CFR 63.11087(c) rather than 40 CFR 60.11087(c) | The current rule reference is incorrect. The reference will be corrected in the final title V permit. |
| | | Revise Condition #45 to allow for the use of the CARB method as an alternative to using ASTM D323 for measuring RVP. | The condition language already allows for alternative test methods if approved by the District prior to their use; therefore, no change was made. |
| Tank 80001 | N-829-28-5 | Revise the rule citation in Conditions #25 and #32 to read "40 CFR 63.11087(c) rather than 40 CFR 60.11087(c) | The current rule reference is incorrect. The reference will be corrected in the final title V permit. |
| | | Revise Condition #48 to allow for the use of the CARB method as an alternative to using ASTM D323 for measuring RVP. | The condition language already allows for alternative test methods if approved by the District prior to their use; therefore, no change was made. |
| Tank 80002 | PTO N-829-29-5 | Revise the rule citation in Conditions #30 and #44 to read "40 CFR 63.11087(c) rather than 40 CFR 60.11087(c) | The current rule reference is incorrect. The reference will be corrected in the final title V permit. |
| | | Revise Condition #50 to allow for the use of the CARB method as an alternative to using ASTM D323 for measuring RVP. | The condition language already allows for alternative test methods if approved by the District prior to their use; therefore, no change was made. |
| Tank 80003 | PTO N-829-31-4 | Please revise conditions #4 and #5 to clarify that the requirements only apply to regulated products. | This tank is occassionally used to store diesel fuel. The storage of diesel fuel is exempt from District permits. The throughput limitations should only apply to regulated products. The condition has been clarified. |
| | | Revise the rule citation in Conditions #30 and #37 to read "40 CFR 63.11087(c) rather than 40 CFR 60.11087(c) | The current rule reference is incorrect. The reference will be corrected in the final title V permit. |
| | | Revise Condition #46 to allow for the use of the CARB method as an alternative to using ASTM D323 for measuring RVP. | The condition language already allows for alternative test methods if approved by the District prior to their use; therefore, no change was made. |

## II. FACILITY LOCATION

NuStar Terminals is located at 2941 Navy Drive in Stockton, CA.

## III. EQUIPMENT LISTING

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

## IV. GENERAL PERMIT TEMPLATE USAGE

The applicant is requesting to use the following model general permit Templates:

### A. Template SJV-UM-0-3 Facility Wide Umbrella

The applicant has requested to utilize template No. SJV-UM-0-3, Facility Wide Umbrella. Based on the information submitted in the Template Qualification Form, the applicant qualifies for the use of this template.

## V. SCOPE OF EPA AND PUBLIC REVIEW

Certain segments of the proposed Renewed 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 form model general permit templates and are not subject to further EPA or public review.

Conditions 1 through 40 of the requirements for proposed Permit to Operate N-829-0-4

**California Environmental Quality Act**

The purpose of the Title V permit renewal is to update the permit to ensure that any changes to regulations since the issuance of the initial Title V permit or most recent renewal of the Title V permit are incorporated as permit requirements. Per

the California Environmental Quality Act (CEQA) Statute §21080.24, and CEQA Guidelines §15281, the issuance, modification, amendment, or renewal of any permit by an air pollution control district or air quality management district pursuant to Title V is exempt from CEQA, unless the issuance, modification, amendment, or renewal authorizes a physical or operational change to a source or facility. There will be no physical or operational change to the source or facility nor will the Title V permit renewal authorize a physical or operational change to the source or facility. Therefore, this project, being a Title V permit renewal, is exempt from CEQA.

## VI. FEDERALLY ENFORCEABLE REQUIREMENTS

### A. Rules Updated

- District Rule 2020, Exemptions
  (amended December 20, 2007 ⇒ amended December 18, 2014)
- District Rule 2201, New and Modified Stationary Source Review Rule
  (amended December 18, 2008 ⇒ amended February 18, 2016)
- 40 CFR Part 82, Subpart B, Servising of Motor Vehicle Air Conditioners
  (amended June 18, 2008 ⇒ amended June 25, 2013)
- 40 CFR Part 82, Subpart F, Recycling and Emission Reduction
  (amended June 18, 2008 ⇒ amended April 10, 2015)
- 40 CFR Part 64, Compliance Assurance Monitoring

### B. Rules Removed

There are no applicable rules that were removed since the last Title V renewal.

### C. Rules Added

- District Rule 2410, Prevention of Significant Deterioration
  (Adopted June 16, 2011)

### D. Rules Not Updated

- District Rule 1080, Stack Monitoring (amended December 17, 1992)
- District Rule 1081, Source Sampling (amended December 17, 1992)

- District Rule 1100, Equipment Breakdown (amended December 17,1992)
- District Rule 2010, Permits Required (amended December 17, 1992)
- District Rule 2031, Transfer of Permits (amended December 17, 1992)
- District Rule 2040, Applications (amended December 17, 1992)
- District Rule 2070, Standards for Granting Applications (amended December 17, 1992)
- District Rule 2080, Conditional Approval (amended December 17, 1992)
- District Rule 4101, Visible Emissions (amended February 17, 2005)
- District Rule 4601, Architectural Coatings (amended December 17, 2009)
- District Rule 4623, Storage of Organic Liquids (amended May 19, 2005)
- District Rule 4624, Transfer of Organic Liquid (amended December 20, 2007)
- District Rule 8011, Fugitive Dust General Requirements (Amended August 19, 2004)
- District Rule 8021, Fugitive Dust Requirements for Control of Fine Particulate Matter (PM10) from Construction, Demolition, Excavation, and Extraction Activities (Amended August 19, 2004)
- District Rule 8031, Fugitive Dust Requirements for Control of Fine Particulate Matter (PM10) from Handling and Storage of Bulk Materials (Amended August 19, 2004)
- District Rule 8041, Fugitive Dust Requirements for Control of Fine Particulate Matter (PM10) from Carryout and Trackout (Amended August 19, 2004)
- District Rule 8051, Fugitive Dust Requirements for Control of Fine Particulate Matter (PM10) from Open Area (Amended August 19, 2004)
- District Rule 8061, Fugitive Dust Requirements for Control of Fine Particulate Matter (PM10) from Paved and Unpaved Roads (Amended August 19, 2004)

- District Rule 8071, Fugitive Dust Requirements for Control of Fine Particulate Matter (PM10) from Unpaved Vehicle/Equipment Areas (Amended September 16, 2004)

- 40 CFR Part 60, Subpart K, Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced after June 11, 1973, and Prior to May 19, 1978 (Amended October 17, 2000)

- 40 CFR Part 60, Subpart Ka, Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced after May 18, 1978, and Prior to July 23, 1984 (Amended December 14, 2000)

- 40 CFR Part 60, Subpart Kb, Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984 (Amended October 15, 2003)

- 40 CFR Part 60, Subpart XX, Standards of Performance for Bulk Gasoline Terminals (Amended December 19, 2003)

- 40 CFR Part 61, Subpart M, National Emission Standard for Asbestos (Amended July 20, 2004)

- 40 CFR Part 63, Subpart R, Gasoline Distribution Facilities (Bulk Gasoline Terminals and Pipeline Breakout Stations) (Amended December 22, 2008)

- 40 CFR Part 63, Subpart BBBBBB, Gasoline Distribution Bulk Terminals, Bulk Plants, and Pipeline Facilities (Amended January 24, 2011)

## VII. REQUIREMENTS NOT FEDERALLY ENFORCEABLE

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

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

### A. Rules Updated

None

### B. Rules Not Updated

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

## VIII. PERMIT REQUIREMENTS

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

### A. District Rule 2020 - Exemptions

District Rule 2020 lists equipment which are specifically exempt from obtaining permits and specifies recordkeeping requirements to verify such exemptions. The amendments to this rule do not have any affect on current permit requirements and will therefore not be addressed in this evaluation.

### B. District Rule 2201 - New and Modified Stationary Source Review Rule

District Rule 2201 has been amended since this facility's initial Title V permit was issued. However the requirements of this rule are only triggered at the time the source undergoes a modification.

This project includes the conversion of Authorities to Construct N-645-5-4, '32-0, '-33-0, '-34-0, and '-35-0. Further discussion of these units is shown below:

ATC N-829-5-4

This ATC was for the modification of a 630,000 gallon internal floating roof tank to replace the existing seal with a new HMT minishoe primary seal and a Vaporflex secondary seal. Conditions #4, #5, and #48 of the ATC enforce the Rule 2201 requirements and have been included on the proposed Title V permit as conditions #1, #2, and #45.

ATC N-829-32-0

This ATC was for the installation of a 1,953,000 gallon welded internal floating roof tank to store gasoline, diesel, ethanol, and/or methanol. ATC conditions #2 and #3 specify Rule 2201 offsetting requirements. These conditions were satisfied and have been removed from the proposed Title V permit. Conditions #6, #7, #8, #9, and #10 of the ATC enforce the Rule 2201 requirements and have been included on the proposed Title V permit as conditions #1, #2, #3, #4, and #5.

ATC N-829-33-0

This ATC was for the installation of a 3,365,000 gallon welded internal floating roof tank to store gasoline, diesel, ethanol, and/or methanol. ATC conditions #2 and #3 specify Rule 2201 offsetting requirements. These conditions were satisfied and have been removed from the proposed Title V permit. Conditions #6, #7, #8, #9, and #10 of the ATC enforce the Rule 2201 requirements and have been included on the proposed Title V permit as conditions #3, #4, #5, #6, and #7.

N-829-34-0

This ATC was for the installation of a 1,953,000 gallon welded internal floating roof tank to store diesel only. This unit is technically exempt from District Rule 2201 requirements per Section 6.6.5 of Rule 2020; however, the applicant has asked for the permit to be issued for the unit. No further disucssion of 2201 requirements is necessary for this unit.

N-829-35-0

This ATC was for the installation of a 1,260,000 gallon welded internal floating roof tank to store denatured ethanol. ATC conditions #42 and #43 specify Rule 2201 offsetting requirements. These conditions were satisfied and have been removed from the proposed Title V permit. Conditions #4, #5, #6, #7, #8, #9, #39, #40, and #41 of the ATC enforce the Rule 2201 requirements and have been included on the proposed Title V permit as conditions #1, #2, #3, #4, #5, #6, #36, #37, and #38.

**District Rule 2410 – Prevention of Significant Deterioration**

This source has never been subject to this rule, therefore there are no PSD permit applicable requirements to include in the Title V permit.

**C. District Rule 2520 – Federally Mandated Operating Permits**

No changes to this Rule have occurred since issuance of the previous TV permit; however, greenhouse gas emissions will be addressed under Rule 2520 during this renewal.

Greenhouse Gas Discussion

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

**D. 40 CFR Part 82, Subpart B - Servicing of Motor Vehicle Air Conditioners**

The requirements of this Subpart pertain to air conditioners, chillers and refrigerators located at a Title V source and to disposal of air conditioners or maintenance/recharging/disposal of motor vehicle air conditioners (MVAC).

Compliance with the requirements of this rule will be ensured with the listed permit conditions for the facility-wide permit in the table below:

| Permit Number | Permit Condition Number |
|---|---|
| N-829-0-4 | 28 |

**E. 40 CFR Part 82, Subpart F - Recycling and Emission Reduction**

The requirements of this subpart pertain to air conditioners, chillers and refrigerators located at a Title V source and to disposal of air conditioners or maintenance/recharging/disposal of motor vehicle air conditioners (MVAC).

Compliance with the requirements of this rule will be ensured with the listed permit conditions for the facility-wide permit in the table below: .

| Permit Number | Permit Condition Number |
|---|---|
| N-829-0-4 | 27 |

## G. 40 CFR Part 64-CAM

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

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

| Pollutant | Major Source Threshold (lb/year) |
|---|---|
| $NO_X$ | 20,000 |
| $SO_X$ | 140,000 |
| $PM_{10}$ | 140,000 |
| CO | 200,000 |
| VOC | 20,000 |

a. N-829-1-7 and 2-7: North and South Truck Loading Racks

These permits are for the north and south truck loading racks. The truck loading racks are served by the vapor combustion system listed in PTO N-829-20-9. These units were previously determined to be subject to CAM and were evaluated in detail in the previous Title V renewal (District Project N-1092711 and CAM was determined at that time. The CAM requirements will continue to be included on PTO N-829-20-9 as conditions #11 and #12.

b. N-829-5-5, '-21-5, '-28-6, and '-29-7: Organic Liquid Storage Tanks

These permits do not contain emission limits. Therefore, CAM is not applicable to these units.

c. N-829-6-8, '-7-6, '-16-7, '-17-7, '-18-8, -22-5, and '-31-5: Organic Liquid Storage Tanks

These tanks were evaluated in the previous TV Renewal and were determined to not be equipped with any add-on control equipment; therefore, CAM requirements are not applicable to these units.

d. N-829-20-8: Vapor Combustion System

This permit is for the add-on control equipment. No emission units area associated with this permit. Thus CAM is not applicable.

e. N-829-32-0, '-33-0, -'34-0, and '-35-0: Organic Liquid Storage Tanks

These are internal floating roof tanks with no add-on control technology. It has been previously determined that the internal floating roofs are not add-on controls (TV Renewal for Project N-1092711). Thus, CAM is not applicable.

## IX. PERMIT SHIELD

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

### A. Requirements Addressed by Model General Permit Templates

1. Model General Permit Template SJV-UM-0-3

By submitting Model General Permit Template SJV-UM-0-3 qualification form, the applicant has requested that a permit shield be granted for all the applicable requirements identified by the template. Therefore, the permit shields as granted in Model General Permit Template is included as conditions #39 and #40 of the facility-wide requirements (N-829-0-4).

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

The facility has not requested any permit shields, with the exception of those obtained via the model general permit template.

### C. Obsolete Permit Shields From Existing Permit Requirements

The permits do not contain any obsolete permit shields.

## X. PERMIT CONDITIONS

See Attachment A - Draft Renewed Title V Operating Permit.

## XI. ATTACHMENTS

A. Draft Renewed Title V Operating Permit
B. Previous Title V Operating Permit
C. Authorities to Construct
D. Detailed Facility List
E. Public Comments and District Response

# ATTACHMENT A

## Draft Renewed Title V Operating Permit

San Joaquin Valley
Air Pollution Control District

**FACILITY:** N-829-0-4

**EXPIRATION DATE:** 11/30/2020

DRAFT

# FACILITY-WIDE REQUIREMENTS

1. The owner or operator shall notify the District of any breakdown condition as soon as reasonably possible, but no later than one hour after its detection, unless the owner or operator demonstrates to the District's satisfaction that the longer reporting period was necessary. [District Rule 1100, 6.1; County Rules 110 (Fresno, Stanislaus, San Joaquin); 109 (Merced); 113 (Madera); and 111 (Kern, Tulare, Kings)] Federally Enforceable Through Title V Permit
2. The District shall be notified in writing within ten days following the correction of any breakdown condition. The breakdown notification shall include a description of the equipment malfunction or failure, the date and cause of the initial failure, the estimated emissions in excess of those allowed, and the methods utilized to restore normal operations. [District Rule 1100, 7.0; County Rules 110 (Fresno, Stanislaus, San Joaquin); 109 (Merced); 113 (Madera); and 111 (Kern, Tulare, Kings)] Federally Enforceable Through Title V Permit
3. The owner or operator of any stationary source operation that emits more than 25 tons per year of nitrogen oxides or reactive organic compounds, shall provide the District annually with a written statement in such form and at such time as the District prescribes, showing actual emissions of nitrogen oxides and reactive organic compounds from that source. [District Rule 1160, 5.0] Federally Enforceable Through Title V Permit
4. Any person building, altering or replacing any operation, article, machine, equipment, or other contrivance, the use of which may cause the issuance of air contaminants or the use of which may eliminate, reduce, or control the issuance of air contaminants, shall first obtain an Authority to Construct (ATC) from the District unless exempted by District Rule 2020 (12/20/07). [District Rule 2010, 3.0 and 4.0; and 2020] Federally Enforceable Through Title V Permit
5. The permittee must comply with all conditions of the permit including permit revisions originated by the District. All terms and conditions of a permit that are required pursuant to the Clean Air Act (CAA), including provisions to limit potential to emit, are enforceable by the EPA and Citizens under the CAA. Any permit noncompliance constitutes a violation of the CAA and the District Rules and Regulations, and is grounds for enforcement action, for permit termination, revocation, reopening and reissuance, or modification; or for denial of a permit renewal application. [District Rules 2070, 7.0; 2080; and 2520, 9.8.1 and 9.13.1] Federally Enforceable Through Title V Permit
6. A Permit to Operate or an Authority to Construct shall not be transferred unless a new application is filed with and approved by the District. [District Rule 2031] Federally Enforceable Through Title V Permit
7. Every application for a permit required under Rule 2010 (12/17/92) shall be filed in a manner and form prescribed by the District. [District Rule 2040] Federally Enforceable Through Title V Permit
8. The operator shall maintain records of required monitoring that include: 1) the date, place, and time of sampling or measurement; 2) the date(s) analyses were performed; 3) the company or entity that performed the analysis; 4) the analytical techniques or methods used; 5) the results of such analysis; and 6) the operating conditions at the time of sampling or measurement. [District Rule 2520, 9.4.1] Federally Enforceable Through Title V Permit
9. The operator shall retain records of all required monitoring data and support information for a period of at least 5 years from the date of the monitoring sample, measurement, or report. Support information includes copies of all reports required by the permit and, for continuous monitoring instrumentation, all calibration and maintenance records and all original strip-chart recordings. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

FACILITY-WIDE REQUIREMENTS CONTINUE ON NEXT PAGE



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

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

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

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

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

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

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

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

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

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

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

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

22. No air contaminants shall be discharged into the atmosphere for a period or periods aggregating more than 3 minutes in any one hour which is as dark or darker than Ringelmann #1 or equivalent to 20% opacity and greater, unless specifically exempted by District Rule 4101 (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

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FACILITY-WIDE REQUIREMENTS CONTINUE ON NEXT PAGE

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

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

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

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

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

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

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

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

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

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

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

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

35. 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

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FACILITY-WIDE REQUIREMENTS CONTINUE ON NEXT PAGE

36. 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

37. 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

38. 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

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

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

41. The reporting periods for the Report of Required Monitoring and the Compliance Certification Report begin January 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

42. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]

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# San Joaquin Valley
# Air Pollution Control District

**PERMIT UNIT:** N-829-1-7

EXPIRATION DATE: 11/30/2020

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**EQUIPMENT DESCRIPTION:**
FOUR LANE TRUCK LOADING RACK (NORTH) CONSISTING OF 7 GASOLINE LOADING ARMS AND 3 DIESEL LOADING ARMS

## PERMIT UNIT REQUIREMENTS

1. All vapors displaced during truck loading shall be vented to the vapor combustion system under Permit to Operate N-829-20. [District NSR Rule] Federally Enforceable Through Title V Permit
2. The combined quantity of gasoline loaded through permit units N-829-1 and N-829-2 shall not exceed 2,071,233 gallons during any one day. [District NSR Rule] Federally Enforceable Through Title V Permit
3. Gasoline shall be loaded only into vapor tight tank trucks. [40 CFR Part 60.502(e)] Federally Enforceable Through Title V Permit
4. The facility shall obtain the vapor tightness documentation specified in 40 CFR Part 60.505(b) for each gasoline tank truck that is to be loaded at the facility. [40 CFR Part 60.502(e)(1)] Federally Enforceable Through Title V Permit
5. The loading rack shall be equipped with bottom loading equipment and a vapor collection and control system such that VOC emissions shall not exceed 0.08 pounds per 1000 gallons of gasoline loaded. [District Rule 4624, 5.1 and 40 CFR 63.11088(a)] Federally Enforceable Through Title V Permit
6. The vapor collection system shall be operated in a manner to prevent any organic vapors collected at one loading rack from passing to another loading rack. [40 CFR 63.11088(a)] Federally Enforceable Through Title V Permit
7. The vapor collection and control system shall operate such that the pressure in the delivery tank being loaded does not exceed 18 inches water column pressure and 6 inches water column vacuum. [District Rule 4624, 5.4] Federally Enforceable Through Title V Permit
8. All delivery tanks which previously contained organic liquids, including gasoline, with a TVP greater than 1.5 psia at loading conditions shall be filled only at Class 1 loading facilities using bottom loading equipment with a vapor collection and control system operating such that VOC emissions do not exceed 0.08 lb/1000 gallons loaded and which operate so the delivery tank does not exceed 18 inches water column pressure nor 6 inches water column vacuum. [District Rules 4624, 5.5] Federally Enforceable Through Title V Permit
9. Loading and vapor collection and control equipment shall be designed, installed, maintained and operated such that there are no leaks or excess organic liquid drainage at disconnections. A leak shall be defined as the dripping of organic compounds at a rate of more than three drops per minute or the detection of organic compounds, in excess of 10,000 ppm as methane measured at a distance of one centimeter from the potential source in accordance with EPA Method 21. Excess liquid drainage shall be defined as exceeding 10 milliliters per average of 3 consecutive disconnects. [District Rule 4624, 3.13, 3.17 and 5.6] Federally Enforceable Through Title V Permit
10. Construction, reconstruction (as defined in District Rule 4001, amended April 14, 1999), or expansion of any top loading facility shall not be allowed. [District Rule 4624, 5.7] Federally Enforceable Through Title V Permit
11. The vapor collection system, the vapor destruction device and each transfer rack shall be tested for leaks at least once every calendar quarter with a portable hydrocarbon analyzer in accordance with EPA Method 21. [District Rule 4624, 5.9.1] Federally Enforceable Through Title V Permit

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PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

12. The equipment that are found leaking shall be repair or replaced within 72 hours after detecting the leakage. If the leaking component cannot be repaired or replaced within 72 hours, the component shall be taken out of service until such time the component is repaired or replaced. The repaired or replacement equipment shall be reinspected the first time the equipment is in operation after the repair or replacement. [District Rule 4624, 5.9.3] Federally Enforceable Through Title V Permit

13. Each calendar month, the vapor collection system, the vapor processing system and each loading rack handling gasoline shall be inspected during the loading of gasoline tank trucks for organic liquid and organic vapor leaks. For the purpose of this condition, detection methods incorporating sight, sound and smell are acceptable. Each detection of a leak shall be recorded and the source of the leak repaired within 15 days after it is detected. [District Rule 2520, 9.3.240 CFR Part 60.502(j) and 40 CFR Part 63.11089(a)] Federally Enforceable Through Title V Permit

14. A log book shall be used and shall be signed by the owner or operator at the completion of each inspection. A section of the log book shall contain a list, summary description, or diagram(s) showing the location of all equipment in gasoline service at the facility. [40 CFR Part 63.11089(b)] Federally Enforceable Through Title V Permit

15. Each detection of a liquid or vapor leak shall be recorded in the log book. When a leak is detected, an initial attempt at repair shall be made as soon as practicable, but no later than 5 calendar days after the leak is detected. Repair or replacement of leaking equipment shall be completed within 15 calendar days after detection of each leak. Delay of repair of leaking equipment will be allowed if the repair is not feasible within 15 days. The owner or operator shall provide in the semiannual report the reason(s) why the repair was not feasible and the date each repair was completed. [40 CFR Part 63.11089(d)] Federally Enforceable Through Title V Permit

16. Each calendar month, liquid drainage at disconnect of each loading arm shall be determined, and appropriate action shall be taken in case excess liquid drainage occurs from any loading arm. If no excess drainage conditions are found during five consecutive monthly inspections, the drainage inspection frequency may be changed from monthly to quarterly. However, if one or more excess drainage condition is found during a quarterly inspection, the inspection frequency shall return to monthly. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

17. Liquid drainage inspections shall be completed between 12:00 AM and 10:00 AM the day of inspection. Compliance shall be demonstrated by collecting all drainage at disconnect in a spouted container. The drainage shall be transferred to a graduated cylinder and the volume determined within one minute of collection. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

18. The owner or operator shall maintain a log book that contain the following information: 1.) dates of leak and drainage inspections, 2.) the nature of the leak (i.e. vapor or liquid including excess drainage) and the method of detection; 3.) findings, 4.) corrective action (date each leak or excess drainage condition repaired), 5.) repair methods applied in each attempt to repair the leak; 6.) repair delayed and the reason for the delay if the leak is not repaired within 15 calendar days after discovery of the leak; 6.) the expected date of successful repair of the leak if the leak is not repaired within 15 days; 7.) the date of successful repair of the leak; and 8.) inspector name and signature. [District Rule 4624, 6.1.3, 40 CFR Part 60.505 (c) and 40 CFR 63.11089(g)] Federally Enforceable Through Title V Permit

19. The owner or operator shall report the number of equipment leaks not repaired within 15 days after detection in a semi-annual report. [40 CFR 63.11089(g)] Federally Enforceable Through Title V Permit

20. During source testing the loading rack's vapor collection and control system (VCCS) shall be tested at every loading position to demonstrate the pressure in the delivery tanks being loaded complies with the requirements specified in this permit. Compliance shall be determined by calibrating and installing a liquid manometer, magnehelic device, or other instrument demonstrated to be equivalent, capable of measuring up to 500 mm water gauge pressure with a precision of 2.5 mm water gauge, on the terminal's VCCS at a pressure tap as close as possible to the connection with the product tank truck. The highest instantaneous pressure measurement as well as all pressure measurements at 5 minute intervals during delivery vessel loading must be recorded. [District Rule 2520, 9.3.2 and 40 CFR 60.503(d)] Federally Enforceable Through Title V Permit

21. Loading of a delivery vessel shall discontinue if its pressure relief valve opens. Corrective action shall be taken should this condition occur. [District Rule 2520, 9.1] Federally Enforceable Through Title V Permit

22. Source testing to determine compliance with the emission rate requirement of this permit shall be conducted at least once every 60 months. [District Rules 2201 and 4624, 6.3.2] Federally Enforceable Through Title V Permit

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PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

23. Source testing shall be conducted using methods and procedures approved by District. The District must be notified 30 days prior to any compliance source testing and a pretest plan outlining the test methods and procedures shall be submitted for the District approval no later than 15 days prior to each test. [District Rule 1081, 6.0 and 7.1] Federally Enforceable Through Title V Permit
24. Source testing shall be witnessed or authorized by District Personnel. [District Rule 1081, 7.2] Federally Enforceable Through Title V Permit
25. VOC emissions from the vapor collection and control system shall be determined using 40 CFR 60.503 "Test Methods and Procedures" and EPA Reference Methods 2A, 2B, 25A, 25B, and ARB Method 422, or ARB Test Procedure TP-203.1. [District Rule 4624, 6.3.2 and San Joaquin County Rule 412] Federally Enforceable Through Title V Permit
26. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081, 7.3] Federally Enforceable Through Title V Permit
27. A log of all breakdowns of the vapor recovery system indicating the times, dates and gallons processed during the breakdown periods shall be maintained on the premises at all times and shall be made available for District inspection upon request. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
28. A record of the daily quantity of gasoline loaded from the loading racks operating under Permits to Operate N-829-1 and N-829-2 shall be kept. [District Rules 2520, 9.3.2, 4624, 6.1.3] Federally Enforceable Through Title V Permit
29. A record of the cumulative annual quantity of gasoline loaded from the loading racks operating under Permits to Operate N-829-1 and N-829-2 shall be kept. The record shall be updated at least weekly. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
30. Documentation attesting to the vapor tightness of each truck loaded with gasoline shall be kept. The documentation file for each tank truck shall be updated at least once per year to reflect the current test results as determined by EPA method 27. [40 CFR Part 60.5059(a) and 40 CFR 63.11094(b)] Federally Enforceable Through Title V Permit
31. The semi-annual compliance report shall include each loading of a gasoline cargo tank for which vapor tightness documentation had not been previously obtained by the facility. [40 CFR 63.11088(f)] Federally Enforceable Through Title V Permit
32. The operator shall maintain all records of required monitoring data and support information for inspection for a period of five years, and shall be made available for District inspection upon request. [District Rule 2520, 9.4.2, 4624, 6.1.4] Federally Enforceable Through Title V Permit


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San Joaquin Valley
Air Pollution Control District

**PERMIT UNIT:** N-829-2-7

**EXPIRATION DATE:** 11/30/2020

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**EQUIPMENT DESCRIPTION:**
FOUR LANE TRUCK LOADING RACK (SOUTH) CONSISTING OF 4 GASOLINE LOADING ARMS AND 4 DIESEL LOADING ARMS

# PERMIT UNIT REQUIREMENTS

1. All vapors displaced during truck loading shall be vented to the vapor combustion system under Permit to Operate N-829-20. [District NSR Rule] Federally Enforceable Through Title V Permit
2. The combined quantity of gasoline loaded through permit units N-829-1 and N-829-2 shall not exceed 2,071,233 gallons during any one day. [District NSR Rule] Federally Enforceable Through Title V Permit
3. Gasoline shall be loaded only into vapor tight tank trucks. [40 CFR Part 60.502(e)] Federally Enforceable Through Title V Permit
4. The facility shall obtain the vapor tightness documentation specified in 40 CFR Part 60.505(b) for each gasoline tank truck that is to be loaded at the facility. [40 CFR Part 60.502(e)(1)] Federally Enforceable Through Title V Permit
5. The loading rack shall be equipped with bottom loading equipment and a vapor collection and control system such that VOC emissions shall not exceed 0.08 pounds per 1000 gallons of gasoline loaded. [District Rule 4624, 5.1 and 40 CFR 63.11088(a)] Federally Enforceable Through Title V Permit
6. The vapor collection system shall be operated in a manner to prevent any organic vapors collected at one loading rack from passing to another loading rack. [40 CFR 63.11088(a)] Federally Enforceable Through Title V Permit
7. The vapor collection and control system shall operate such that the pressure in the delivery tank being loaded does not exceed 18 inches water column pressure and 6 inches water column vacuum. [District Rule 4624, 5.4] Federally Enforceable Through Title V Permit
8. All delivery tanks which previously contained organic liquids, including gasoline, with a TVP greater than 1.5 psia at loading conditions shall be filled only at Class 1 loading facilities using bottom loading equipment with a vapor collection and control system operating such that VOC emissions do not exceed 0.08 lb/1000 gallons loaded and which operate so the delivery tank does not exceed 18 inches water column pressure nor 6 inches water column vacuum. [District Rules 4624, 5.5] Federally Enforceable Through Title V Permit
9. Loading and vapor collection and control equipment shall be designed, installed, maintained and operated such that there are no leaks or excess organic liquid drainage at disconnections. A leak shall be defined as the dripping of organic compounds at a rate of more than three drops per minute or the detection of organic compounds, in excess of 10,000 ppm as methane measured at a distance of one centimeter from the potential source in accordance with EPA Method 21. Excess liquid drainage shall be defined as exceeding 10 milliliters per average of 3 consecutive disconnects. [District Rule 4624, 3.13, 3.17 and 5.6] Federally Enforceable Through Title V Permit
10. Construction, reconstruction (as defined in District Rule 4001, amended April 14, 1999), or expansion of any top loading facility shall not be allowed. [District Rule 4624, 5.7] Federally Enforceable Through Title V Permit
11. The vapor collection system, the vapor destruction device and each transfer rack shall be tested for leaks at least once every calendar quarter with a portable hydrocarbon analyzer in accordance with EPA Method 21. [District Rule 4624, 5.9.1] Federally Enforceable Through Title V Permit

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PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

12. The equipment that are found leaking shall be repair or replaced within 72 hours after detecting the leakage. If the leaking component cannot be repaired or replaced within 72 hours, the component shall be taken out of service until such time the component is repaired or replaced. The repaired or replacement equipment shall be reinspected the first time the equipment is in operation after the repair or replacement. [District Rule 4624, 5.9.3] Federally Enforceable Through Title V Permit

13. Each calendar month, the vapor collection system, the vapor processing system and each loading rack handling gasoline shall be inspected during the loading of gasoline tank trucks for organic liquid and organic vapor leaks. For the purpose of this condition, detection methods incorporating sight, sound and smell are acceptable. Each detection of a leak shall be recorded and the source of the leak repaired within 15 days after it is detected. [District Rule 2520, 9.3.240 CFR Part 60.502(j) and 40 CFR Part 63.11089(a)] Federally Enforceable Through Title V Permit

14. A log book shall be used and shall be signed by the owner or operator at the completion of each inspection. A section of the log book shall contain a list, summary description, or diagram(s) showing the location of all equipment in gasoline service at the facility. [40 CFR Part 63.11089(b)] Federally Enforceable Through Title V Permit

15. Each detection of a liquid or vapor leak shall be recorded in the log book. When a leak is detected, an initial attempt at repair shall be made as soon as practicable, but no later than 5 calendar days after the leak is detected. Repair or replacement of leaking equipment shall be completed within 15 calendar days after detection of each leak. Delay of repair of leaking equipment will be allowed if the repair is not feasible within 15 days. The owner or operator shall provide in the semiannual report the reason(s) why the repair was not feasible and the date each repair was completed. [40 CFR Part 63.11089(d)] Federally Enforceable Through Title V Permit

16. Each calendar month, liquid drainage at disconnect of each loading arm shall be determined, and appropriate action shall be taken in case excess liquid drainage occurs from any loading arm. If no excess drainage conditions are found during five consecutive monthly inspections, the drainage inspection frequency may be changed from monthly to quarterly. However, if one or more excess drainage condition is found during a quarterly inspection, the inspection frequency shall return to monthly. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

17. Liquid drainage inspections shall be completed between 12:00 AM and 10:00 AM the day of inspection. Compliance shall be demonstrated by collecting all drainage at disconnect in a spouted container. The drainage shall be transferred to a graduated cylinder and the volume determined within one minute of collection. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

18. The owner or operator shall maintain a log book that contain the following information: 1.) dates of leak and drainage inspections, 2.) the nature of the leak (i.e. vapor or liquid including excess drainage) and the method of detection; 3.) findings, 4.) corrective action (date each leak or excess drainage condition repaired), 5.) repair methods applied in each attempt to repair the leak; 6.) repair delayed and the reason for the delay if the leak is not repaired within 15 calendar days after discovery of the leak; 6.) the expected date of successful repair of the leak if the leak is not repaired within 15 days; 7.) the date of successful repair of the leak; and 8.) inspector name and signature. [District Rule 4624, 6.1.3, 40 CFR Part 60.505 (c) and 40 CFR 63.11089(g)] Federally Enforceable Through Title V Permit

19. The owner or operator shall report the number of equipment leaks not repaired within 15 days after detection in a semi-annual report. [40 CFR 63.11089(g)] Federally Enforceable Through Title V Permit

20. During source testing the loading rack's vapor collection and control system (VCCS) shall be tested at every loading position to demonstrate the pressure in the delivery tanks being loaded complies with the requirements specified in this permit. Compliance shall be determined by calibrating and installing a liquid manometer, magnehelic device, or other instrument demonstrated to be equivalent, capable of measuring up to 500 mm water gauge pressure with a precision of 2.5 mm water gauge, on the terminal's VCCS at a pressure tap as close as possible to the connection with the product tank truck. The highest instantaneous pressure measurement as well as all pressure measurements at 5 minute intervals during delivery vessel loading must be recorded. [District Rule 2520, 9.3.2 and 40 CFR 60.503(d)] Federally Enforceable Through Title V Permit

21. Loading of a delivery vessel shall discontinue if its pressure relief valve opens. Corrective action shall be taken should this condition occur. [District Rule 2520, 9.1] Federally Enforceable Through Title V Permit

22. Source testing to determine compliance with the emission rate requirement of this permit shall be conducted at least once every 60 months. [District Rules 2201 and 4624, 6.2.2] Federally Enforceable Through Title V Permit

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23. Source testing shall be conducted using methods and procedures approved by District. The District must be notified 30 days prior to any compliance source testing and a pretest plan outlining the test methods and procedures shall be submitted for the District approval no later than 15 days prior to each test. [District Rule 1081, 6.0 and 7.1] Federally Enforceable Through Title V Permit
24. Source testing shall be witnessed or authorized by District Personnel. [District Rule 1081, 7.2] Federally Enforceable Through Title V Permit
25. VOC emissions from the vapor collection and control system shall be determined using 40 CFR 60.503 "Test Methods and Procedures" and EPA Reference Methods 2A, 2B, 25A, 25B, and ARB Method 422, or ARB Test Procedure TP-203.1. [District Rule 4624, 6.3.2 and San Joaquin County Rule 412] Federally Enforceable Through Title V Permit
26. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081, 7.3] Federally Enforceable Through Title V Permit
27. A log of all breakdowns of the vapor recovery system indicating the times, dates and gallons processed during the breakdown periods shall be maintained on the premises at all times and shall be made available for District inspection upon request. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
28. A record of the daily quantity of gasoline loaded from the loading racks operating under Permits to Operate N-829-1 and N-829-2 shall be kept. [District Rules 2520, 9.3.2, 4624, 6.1.3] Federally Enforceable Through Title V Permit
29. A record of the cumulative annual quantity of gasoline loaded from the loading racks operating under Permits to Operate N-829-1 and N-829-2 shall be kept. The record shall be updated at least weekly. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
30. Documentation attesting to the vapor tightness of each truck loaded with gasoline shall be kept. The documentation file for each tank truck shall be updated at least once per year to reflect the current test results as determined by EPA method 27. [40 CFR Part 60.5059(a) and 40 CFR 63.11094(b)] Federally Enforceable Through Title V Permit
31. The semi-annual compliance report shall include each loading of a gasoline cargo tank for which vapor tightness documentation had not been previously obtained by the facility. [40 CFR 63.11088(f)] Federally Enforceable Through Title V Permit
32. The operator shall maintain all records of required monitoring data and support information for inspection for a period of five years, and shall be made available for District inspection upon request. [District Rule 2520, 9.4.2, 4624, 6.1.4] Federally Enforceable Through Title V Permit



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# San Joaquin Valley
# Air Pollution Control District

**PERMIT UNIT:** N-829-5-5

**EXPIRATION DATE:** 11/30/2020

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**EQUIPMENT DESCRIPTION:**
630,000 GALLON WELDED INTERNAL FLOATING ROOF STORAGE TANK (#1502) WITH A MINISHOE PRIMARY SEAL AND A VAPORFLEX SECONDARY SEAL

## PERMIT UNIT REQUIREMENTS

1. The maximum throughput for this tank shall not exceed 15,000 barrels in any one day. [District Rule 2201]
2. The true vapor pressure (TVP) of the organic liquid stored in the tank shall be less than 11 psia at the actual storage temperature of the tank contents. [District Rules 2201 and 4623]
3. Gaps between the tank shell and the primary seal shall not exceed 1 1/2 inches. [District Rule 4623]
4. The cumulative length of all gaps between the tank shell and the primary seal greater than 1/2 inch shall not exceed 10% of the circumference of the tank. [District Rule 4623]
5. 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]
6. No continuous gap in the primary seal greater than 1/8 inch wide shall exceed 10% of the tank circumference. [District Rule 4623]
7. No gap between the tank shell and the secondary seal shall exceed 1/2 inch. [District Rule 4623]
8. 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]
9. 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]
10. The geometry of the metallic-shoe type seal shall be such that the maximum gap between the shoe and the tank shell shall be no greater than 3 inches for a length of at least 18 inches in the vertical plane above the liquid. [District Rule 4623]
11. 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]
12. The secondary seal shall allow easy insertion of probes of up to 1 1/2 inches in width in order to measure gaps in the primary seal. [District Rule 4623]
13. The secondary seal shall extend from the roof to the tank shell and shall not be attached to the primary seal. [District Rule 4623]
14. The internal floating roof shall float on the surface of the stored liquid at all times (i.e., off the roof leg supports) except during the initial fill until the roof is lifted off the leg supports and when the tank is completely emptied and subsequently refilled. When the roof is resting on the leg supports, the process of filling, emptying, or refilling shall be continuous and shall be accomplished as rapidly as possible. Whenever the permittee intends to land the roof on it's legs, the permittee shall notify the APCO in writing at least five calendar days prior to performing the work. The tank must be in compliance with this rule before it may land on its legs. [District Rule 4623, 40 CFR 60.112b(a)(1) and 40 CFR 63.11087(a)] Federally Enforceable Through Title V Permit

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15. All openings in the roof used for sampling and gauging shall provide a projection below the liquid surface to prevent belching of liquid and to prevent entrained or formed organic vapor from escaping from the liquid contents of the tank and shall be equipped with a cover, seal or lid. The cover seal or lid shall be in a closed position, with no visible gaps and be leak-free, except when the device or appurtenance is in use for sampling or gauging. [District Rule 4623 and 40 CFR 60.112b(a)(1)]
16. A leak-free condition is defined as a condition without a gas leak or a liquid leak. A gas leak is defined as a reading in excess of 10,000 parts per million by volume (ppmv), as methane, above background on a portable hydrocarbon detection instrument that is calibrated with methane in accordance with the procedures specified in EPA Method 21. Liquid leak is defined as the dripping of organic liquid at a rate of more than 3 drops per minute. A reading in excess to 10,000 ppmv, as methane, above background, or dripping of organic liquid at a rate of more than 3 drops per minute, 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, 40 CFR 60.112b(a)(1), and 40 CFR 63.11087(a)]
18. Each opening in the internal floating roof except for leg sleeves, automatic bleeder vents, rim space vents, column wells, ladder wells, sample wells, combination manway/vacuum breakers, and stub drains shall be equipped with a cover, or a lid shall be maintained in a closed position at all times (i.e. no visible gaps) except when the device is in use. The cover or lid shall be equipped with a gasket. Covers on each access hatch and automatic gauge float well shall be bolted in place except when they are in use. [District Rule 4623 and 40 CFR 60.112b(a)(1)]
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 leg roof supports. [District Rule 4623 and 40 CFR 60.112b(a)(1)]
20. Rim vents shall be equipped with a gasket and shall be set to open only when the internal floating roof is not floating or at the manufacturer's recommended setting. [District Rule 4623 and 40 CFR 60.112b(a)(1)]
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 and 40 CFR 60.112b(a)(1)]
22. Each penetration of the internal floating roof that allows for the 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 and 40 CFR 60.112b(a)(1)]
23. Each penetration of the internal floating roof that allows for the passage of a ladder shall have a gasketed sliding cover. [40 CFR 60.112b(a)(1)]
24. All slotted sampling or gauging 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
25. The gap between the pole wiper and the slotted guidepole shall not exceed 1/8 inch. [District Rule 4623] Federally Enforceable Through Title V Permit
26. The permittee shall notify the District in writing at least 30 days prior to conduct the visual inspection of the storage vessel, so the District can arrange an observer. [40 CFR 63.11087(c)] Federally Enforceable Through Title V Permit
27. For newly constructed, repaired, or rebuilt internal floating roof tanks, 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. If there are holes, tears, or other openings in the primary seal, the secondary seal, or the seal fabric or defects in the internal floating roof or its appurtenant parts, components, fittings, etc., the operator shall repair the defects before filling the tank. [District Rule 4623 and 40 CFR 63.11087(c)] Federally Enforceable Through Title V Permit

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PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

28. The owner or operator shall perform a monthly leak inspection of all equipment in gasoline service, as defined in section 63.11100. For this inspection, detection methods incorporating sight, sound, and smell are acceptable. [40 CFR Part 63.11089(a)] Federally Enforceable Through Title V Permit

29. For monthly leak inspection, a log book shall be used and shall be signed by the owner or operator at the completion of each inspection. A section of the log book shall contain a list, summary description, or diagram(s) showing the location of all equipment in gasoline service at the facility. [40 CFR Part 63.11089(b)] Federally Enforceable Through Title V Permit

30. Each detection of a liquid or vapor leak shall be recorded in the log book. When a leak is detected, an initial attempt at repair shall be made as soon as practicable, but no later than 5 calendar days after the leak is detected. Repair or replacement of leaking equipment shall be completed within 15 calendar days after detection of each leak. Delay of repair of leaking equipment will be allowed if the repair is not feasible within 15 days. The owner or operator shall provide in the semiannual report the reason(s) why the repair was not feasible and the date each repair was completed. [40 CFR Part 63.11089(d)] Federally Enforceable Through Title V Permit

31. The owner or operator shall maintain a log book that contain the following information for a leak during during monthly inspection: 1.) equipment type and identification number; 2.) the nature of the leak (i.e. vapor or liquid) and the method of detection (i.e. sight, sound, or smell); 3.) the date the leak was detected and the date of each attempt to repair the leak; 4.) repair methods applied in each attempt to repair the leak; 5.) repair delayed and the reason for the delay if the leak is not repaired within 15 calendar days after discovery of the leak; 6) the expected date of successful repair of the leak if the leak is not repaired within 15 days; and 7.) the date of successful repair of the leak. [40 CFR 63.11089(g)] Federally Enforceable Through Title V Permit

32. The permittee shall visually inspect, through the manholes, roof hatches, or other opening 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, 40 CFR 60.113b, and 40 CFR 63.11087(c)] Federally Enforceable Through Title V Permit

33. The permittee shall conduct actual gap measurements of the primary seal and/or secondary seal at least once every 60 months. [District Rule 4623]

34. If any failure (i.e. visible organic liquid on the internal floating roof, tank walls or anywhere, holes or tears in the seal fabric) is detected during 12 month visual inspection, the permittee shall repair the items or empty and remove the storage vessel from service within 45 days. If the detected failure cannot be repaired within 45 days and if the vessel cannot be emptied within 45 days, a 30-day extension may be requested from the APCO in the inspection report. Such a request must document that alternate storage capacity is unavailable and specify a schedule of actions the company will take that will assure theat the control equipment will be repaired or the vessel will be emptied as soon as possible. [40 CFR 60.113b and 40 CFR 63.11087(c)] Federally Enforceable Through Title V Permit

35. The permittee shall visually inspect the internal floating roof, the primary seal, the secondary seal, gaskets, slotted membranes and sleeve seals (if any) each time the vessel is emptied and degassed. If the internal floating roof has defects, the primary seal has holes, tears, or other openings in the seal or the seal fabric, or the secondary seal has holes, tears, or other openings in the seal or the seal fabric, or the gaskets no longer close off the liquid surfaces from the atmosphere, or the slotted membrane has more than 10 percent open area, the owner or operator shall repair the items as necessary so that none of the conditions specified in this paragraph exist before refilling the storage vessel. [40 CFR 60.113b and 40 CFR Part 63.11087(c)] Federally Enforceable Through Title V Permit

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36. The permittee shall notify the District in writing at least 30 days prior to the filling or refilling of each storage vessel for which an inspection is required by paragraphs (a)(1) and (a)(4) of 40 CFR 60.113b to afford the District the opportunity to have an observer present. If the inspection required by paragraph (a)(4) of 40 CFR 60.113b is not planned and the owner or operator could not have known about the inspection 30 days in advance or refilling the tank, the owner or operator shall notify the District at least 7 days prior to the refilling of the storage vessel. Notification shall be made by telephone immediately followed by written documentation demonstrating why the inspection was unplanned. Alternatively, this notification including the written documentation may be made in writing and sent by express mail so that it is received by the Administrator at least 7 days prior to the refilling. [40 CFR 60.113b]

37. The owner or operator shall report the number of equipment leaks not repaired within 15 days after detection in a semi-annual report. [40 CFR 63.11089(g)] Federally Enforceable Through Title V Permit

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

39. The operator shall determine the presence of gas leaks using portable hydrocarbon detection instrument in accordance with EPA Method 21. The instrument shall be calibrated before use each day of its use by the procedures specified in Method 21 using the following calibration gases: 1.) Zero air (less than 10 ppm of hydrocarbon in air); and 2.) A mixture of methane or n-hexane and air at a concentration of about, but less than, 10,000 ppm methane or n-hexane. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

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

41. The permittee shall conduct actual gap measurements of the primary seal and/or secondary seal at least once every 60 months. Other than the gap criteria specified by this permit, no holes, tears, or other openings are allowed that would permit the escape of hydrocarbon vapors. Any defects found shall constitute a violation of this rule. [District Rule 4623 and 40 CFR 63.11087(c)] Federally Enforceable Through Title V Permit

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

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

44. The operator shall keep a record of liquids stored in each container, period of storage, and the maximum true vapor pressure of the liquid during the respective storage period. [District Rule 40 CFR 60.116b] Federally Enforceable Through Title V Permit

45. Permittee shall keep a record of the daily quantity of organic liquid loaded into the tank, in barrels. [District Rule 2201]

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46. The permittee shall determine the maximum true vapor pressure of the stored organic liquid on a monthly basis, using the calculation methodology listed in Appendix B of District Rule 4623. The permittee shall keep a record of all reid vapor pressure measurements for the stored organic liquid and shall use the highest recorded reid vapor pressure of the month when determining the maximum true vapor pressure. The permittee shall keep a record of the actual storage temperature of the organic storage tank and shall use the highest temperature recorded of the month when determining the maximum true vapor pressure. [District Rule 4623and 40 CFR 60.116b] Federally Enforceable Through Title V Permit

47. The permittee shall submit the reports of the floating roof tank inspections to the APCO within five calendar days after the completion of the inspection only for those tanks that failed to meet the applicable requirements of Rule 4623, Sections 5.2 through 5.5. The inspection report for tanks that that have been determined to be in compliance with the requirements of Sections 5.2 through 5.5 need not be submitted to the APCO, but the inspection report shall be kept on-site and made available upon request by the APCO. The inspection report shall contain all necessary information to demonstrate compliance with the provisions of this rule, including the following: 1.) Date of inspection and names and titles of company personnel doing the inspection; 2.) Tank identification number and Permit to Operate number; 3.) Measurements of the gaps between the tank shell and primary and secondary seals; 4.) Leak-free status of the tank and floating roof deck fittings. Records of the leak-free status shall include the vapor concentration values measured in ppmv. 5.) Data, supported by calculations, demonstrating compliance with the requirements specified in Sections 5.3, 5.4, 5.5.2.3.3, 5.5.2.4.2, and 5.5.2.4.3 of Rule 4623. 6.) Any corrective actions or repairs performed on the tank in order to comply with Rule 4623 and the date(s) such actions were taken. [District Rule 4623 and 40 CFR 63.11087(e)] Federally Enforceable Through Title V Permit

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

49. The following test methods shall be used: ASTM Method D287 for determining API Gravity, ASTM Method D4057 sampling for API Gravity testing; ASTM D323 for determining RVP, and converting RVP to TVP at the tank's maximum organic liquid storage temperature; ARB Method 422 for determining exempt halogenated VOCs in gases; EPA Method 21 for measuring gas-leak concentration. Should the owner or operator wish to use test methods other than the ones mentioned in this condition, the methods must be approved by the District prior to its use. [District Rule 4623] Federally Enforceable Through Title V Permit

50. The operator shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rules 4623 and 2520] Federally Enforceable Through Title V Permit



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# San Joaquin Valley
# Air Pollution Control District

**PERMIT UNIT:** N-829-6-8

EXPIRATION DATE: 11/30/2020

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**EQUIPMENT DESCRIPTION:**
630,000 GALLON WELDED INTERNAL FLOATING ROOF STORAGE TANK (#1501) WITH A HMT FOAM LOG PRIMARY SEAL AND A HMT VAPOR FLEX SECONDARY SEAL AND A SLOTTED GUIDEPOLE

## PERMIT UNIT REQUIREMENTS

1. True vapor pressure of the organic liquid stored shall be less than 11 psia. [District Rule 4623, 5.1.1] Federally Enforceable Through Title V Permit
2. The internal floating roof shall float on the surface of the stored liquid at all times (i.e., off the roof leg supports) except during the initial fill until the roof is lifted off the leg supports and when the tank is completely emptied and subsequently refilled. When the roof is resting on the leg supports, the process of filling, emptying, or refilling shall be continuous and shall be accomplished as rapidly as possible. Whenever the permittee intends to land the roof on it's legs, the permittee shall notify the APCO in writing at least five calendar days prior to performing the work. The tank must be in compliance with this rule before it may land on its legs. [District Rule 4623, 5.3.1.3 and 5.4.3 and 40 CFR 63.11087(a)] Federally Enforceable Through Title V Permit
3. VOC emissions shall not exceed 5.6 pounds in any one day. [District Rule 2201] Federally Enforceable Through Title V Permit
4. The organic liquid throughput shall not exceed 30,240,000 gallons in any one calendar year. [District Rule 2201] Federally Enforceable Through Title V Permit
5. 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 and 5.4.1] Federally Enforceable Through Title V Permit
6. No gap between the tank shell and the primary seal shall exceed 1/2 inch. [District Rule 4623, 5.3.2.3.2 and 5.4.1] Federally Enforceable Through Title V Permit
7. 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 and 5.4.1] 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, 5.3.2.3.2 and 5.4.1] 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, 5.3.2.3.3 and 5.4.1] 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, 5.3.2.3.3 and 5.4.1] Federally Enforceable Through Title V Permit
11. 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 and 5.4.1] Federally Enforceable Through Title V Permit
12. 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 and 5.4.1] Federally Enforceable Through Title V Permit

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13. 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 and 5.4.1] Federally Enforceable Through Title V Permit

14. All slotted sampling or gauging 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

15. The gap between the pole wiper and the slotted guidepole shall not exceed 1/8 inch. [District Rule 4623, 5.5.2.4.3] Federally Enforceable Through Title V Permit

16. All openings in the roof used for sampling and gauging 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 for sampling or gauging. [District Rule 4623, 5.5.1] Federally Enforceable Through Title V Permit

17. A leak-free condition is defined as a condition without a gas leak or a liquid leak. A gas leak is defined as a reading in excess of 10,000 parts per million by volume (ppmv), as methane, above background on a portable hydrocarbon detection instrument that is calibrated with methane in accordance with the procedures specified in EPA Method 21. Liquid leak is defined as the dripping of organic liquid at a rate of more than 3 drops per minute. A reading in excess to 10,000 ppmv, as methane, above background, or dripping of organic liquid at a rate of more than 3 drops per minute, is a violation of this permit and Rule 4623 and shall be reported as a deviation. [District Rule 4623, 3.11, 3.17, 3.18 and 6.4.8] Federally Enforceable Through Title V Permit

18. 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 and 40 CFR 63.11087(a)] Federally Enforceable Through Title V Permit

19. Each opening in the internal floating roof except for leg sleeves, automatic bleeder vents, rim space vents, column wells, ladder wells, sample wells, combination manway/vacuum breakers, and stub drains 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

20. 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

21. 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

22. 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

23. 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

24. The permittee shall notify the District in writing at least 30 days prior to conduct the visual inspection of the storage vessel, so the District can arrange an observer. [40 CFR 60.11087(c)] Federally Enforceable Through Title V Permit

25. For newly constructed, repair, or rebuilt internal floating roof tanks, 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. 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, 6.1.4.1 and 40 CFR 63.11087(c)] Federally Enforceable Through Title V Permit

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PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

26. The owner or operator shall perform a monthly leak inspection of all equipment in gasoline service, as defined in section 63.11100. For this inspection, detection methods incorporating sight, sound, and smell are acceptable. [40 CFR Part 63.11089(a)] Federally Enforceable Through Title V Permit

27. For monthly leak inspection, a log book shall be used and shall be signed by the owner or operator at the completion of each inspection. A section of the log book shall contain a list, summary description, or diagram(s) showing the location of all equipment in gasoline service at the facility. [40 CFR Part 63.11089(b)] Federally Enforceable Through Title V Permit

28. Each detection of a liquid or vapor leak shall be recorded in the log book. When a leak is detected, an initial attempt at repair shall be made as soon as practicable, but no later than 5 calendar days after the leak is detected. Repair or replacement of leaking equipment shall be completed within 15 calendar days after detection of each leak. Delay of repair of leaking equipment will be allowed if the repair is not feasible within 15 days. The owner or operator shall provide in the semiannual report the reason(s) why the repair was not feasible and the date each repair was completed. [40 CFR Part 63.11089(d)] Federally Enforceable Through Title V Permit

29. The owner or operator shall maintain a log book that contain the following information for a leak during during monthly inspection: 1.) equipment type and identification number; 2.) the nature of the leak (i.e. vapor or liquid) and the method of detection (i.e. sight, sound, or smell); 3.) the date the leak was detected and the date of each attempt to repair the leak; 4.) repair methods applied in each attempt to repair the leak; 5.) repair delayed and the reason for the delay if the leak is not repaired within 15 calendar days after discovery of the leak; 6) the expected date of successful repair of the leak if the leak is not repaired within 15 days; and 7.) the date of successful repair of the leak. [40 CFR 63.11089(g)] Federally Enforceable Through Title V Permit

30. The permittee shall visually inspect, through the manholes, roof hatches, or other opening 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, 6.1.4.2 and 40 CFR 63.11087(c)] Federally Enforceable Through Title V Permit

31. If any failure (i.e. visible organic liquid on the internal floating roof, tank walls or anywhere, holes or tears in the seal fabric) is detected during 12 month visual inspection, the permittee shall repair the items or empty and remove the storage vessel from service within 45 days. If the detected failure cannot be repaired within 45 days and if the vessel cannot be emptied within 45 days, a 30-day extension may be requested from the APCO in the inspection report. Such a request must document that alternate storage capacity is unavailable and specify a schedule of actions the company will take that will assure theat the control equipment will be repaired or the vessel will be emptied as soon as possible. [40 CFR 60.11087(c)] Federally Enforceable Through Title V Permit

32. The permittee shall visually inspect the internal floating roof, the primary seal, the secondary seal, gaskets, slotted memberanes and sleeve seals (if any) each time the vessel is emptied and degassed. If the internal floating roof has defects, the primary seal has holes, tears, or other openings in the seal or the seal fabric, or the secondary seal has holes, tears, or other openings in the seal or the seal fabric, or the gaskets no longer close off the liquid surfaces from the atmosphere, or the slotted membrane has more than 10 percent open area, the owner or operator shall repair the items as necessary so that none of the conditions specified in this paragraph exist before refilling the storage vessel. [40 CFR Part 63.11087(c)] Federally Enforceable Through Title V Permit

33. The owner or operator shall report the number of equipment leaks not repaired within 15 days after detection in a semi-annual report. [40 CFR 63.11089(g)] Federally Enforceable Through Title V Permit

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PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

35. The operator shall determine the presence of gas leaks using portable hydrocarbon detection instrument in accordance with EPA Method 21. The instrument shall be calibrated before use each day of its use by the procedures specified in Method 21 using the following calibration gases: 1.) Zero air (less than 10 ppm of hydrocarbon in air); and 2.) A mixture of methane or n-hexane and air at a concentration of about, but less than, 10,000 ppm methane or n-hexane. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

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

37. The permittee shall conduct actual gap measurements of the primary seal and/or secondary seal at least once every 60 months. Other than the gap criteria specified by this permit, no holes, tears, or other openings are allowed that would permit the escape of hydrocarbon vapors. Any defects found shall constitute a violation of this rule. [District Rule 4623, 6.1.4.3 and 40 CFR 63.11087(c)] Federally Enforceable Through Title V Permit

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

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

40. The operator shall keep a record of liquids stored in each container, period of storage, and the maximum true vapor pressure of the liquid during the respective storage period. [40 CFR 60.113(a)] Federally Enforceable Through Title V Permit

41. The permittee shall determine the maximum true vapor pressure of the stored organic liquid on a monthly basis, using the calculation methodology listed in Appendix B of District Rule 4623. The permittee shall keep a record of all reid vapor pressure measurements for the stored organic liquid and shall use the highest recorded reid vapor pressure of the month when determining the maximum true vapor pressure. The permittee shall keep a record of the actual storage temperature of the organic storage tank and shall use the highest temperature recorded of the month when determining the maximum true vapor pressure. [District Rule 4623 and 40 CFR 60.113(b)] Federally Enforceable Through Title V Permit

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PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

42. The permittee shall submit the reports of the floating roof tank inspections to the APCO within five calendar days after the completion of the inspection only for those tanks that failed to meet the applicable requirements of Rule 4623, Sections 5.2 through 5.5. The inspection report for tanks that that have been determined to be in compliance with the requirements of Sections 5.2 through 5.5 need not be submitted to the APCO, but the inspection report shall be kept on-site and made available upon request by the APCO. The inspection report shall contain all necessary information to demonstrate compliance with the provisions of this rule, including the following: 1.) Date of inspection and names and titles of company personnel doing the inspection; 2.) Tank identification number and Permit to Operate number; 3.) Measurements of the gaps between the tank shell and primary and secondary seals; 4.) Leak-free status of the tank and floating roof deck fittings. Records of the leak-free status shall include the vapor concentration values measured in ppmv. 5.) Data, supported by calculations, demonstrating compliance with the requirements specified in Sections 5.3, 5.4, 5.5.2.3.3, 5.5.2.4.2, and 5.5.2.4.3 of Rule 4623. 6.) Any corrective actions or repairs performed on the tank in order to comply with Rule 4623 and the date(s) such actions were taken. [District Rule 4623, 6.3.5 and 40 CFR 63.11087(e)] Federally Enforceable Through Title V Permit

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

44. The following test methods shall be used: ASTM Method D287 for determining API Gravity, ASTM Method D4057 sampling for API Gravity testing; ASTM D323 for determining RVP, and converting RVP to TVP at the tank's maximum organic liquid storage temperature; ARB Method 422 for determining exempt halogenated VOCs in gases; EPA Method 21 for measuring gas-leak concentration. Should the owner or operator wish to use test methods other than the ones mentioned in this condition, the methods must be approved by the District prior to its use. [District Rule 4623, 6.4] Federally Enforceable Through Title V Permit

45. Records of the cumulative annual organic liquid throughput shall be maintained and updated monthly. [District Rule 2201] Federally Enforceable Through Title V Permit

46. The permittee shall maintain records sufficient to demonstrate compliance with the daily VOC emission limit. These records shall contain the calculated emission quantity as well as each process variable used in the respective calculations/modeling. [District Rule 2080] Federally Enforceable Through Title V Permit

47. 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

# San Joaquin Valley
# Air Pollution Control District

**PERMIT UNIT:** N-829-7-6

**EXPIRATION DATE:** 11/30/2020

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**EQUIPMENT DESCRIPTION:**
420,000 GALLON WELDED INTERNAL FLOATING ROOF TANK (#1002) WITH A PRIMARY FOAM LOG SEAL, A SECONDARY WIPER SEAL, AND A SOLID GUIDEPOLE

## PERMIT UNIT REQUIREMENTS

1. The tank shall be equipped with a cover consisting of either a pontoon-type or double-deck-type cover which rests upon the surface of the liquid being stored and is equipped with a closure device between the tank shell and roof edge consisting of a primary and a secondary seal. [District Rule 4623, 5.3.1 and 40 CFR 63.11087(a)] Federally Enforceable Through Title V Permit
2. 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 and 40 CFR 63.11087(a)] Federally Enforceable Through Title V Permit
3. VOC emissions from the storage tank shall not exceed 11.4 pounds in any given day. [District Rule 2201] Federally Enforceable Through Title V Permit
4. True vapor pressure of the organic liquid stored shall be less than 11 psia. [District Rule 4623, 5.1.1] Federally Enforceable Through Title V Permit
5. 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 and 5.4.1] Federally Enforceable Through Title V Permit
6. No gap between the tank shell and the primary seal shall exceed 1/2 inch. [District Rule 4623, 5.3.2.3.2 and 5.4.1] Federally Enforceable Through Title V Permit
7. 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 and 5.4.1] 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, 5.3.2.3.2 and 5.4.1] 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, 5.3.2.3.3 and 5.4.1] 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, 5.3.2.3.3 and 5.4.1] Federally Enforceable Through Title V Permit
11. 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 and 5.4.1] Federally Enforceable Through Title V Permit

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PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

12. 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 and 5.4.1] Federally Enforceable Through Title V Permit

13. 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 and 5.4.1] Federally Enforceable Through Title V Permit

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

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

16. The gap between the pole wiper and the solid guidepole shall not exceed 1/2 inch. [District Rule 4623, 5.5.2.3.3] Federally Enforceable Through Title V Permit

17. All openings in the roof used for sampling and gauging 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 for sampling or gauging. [District Rule 4623, 5.5.1] 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 gas leak is defined as a reading in excess of 10,000 parts per million by volume (ppmv), as methane, above background on a portable hydrocarbon detection instrument that is calibrated with methane in accordance with the procedures specified in EPA Method 21. Liquid leak is defined as the dripping of organic liquid at a rate of more than 3 drops per minute. A reading in excess to 10,000 ppmv, as methane, above background, or dripping of organic liquid at a rate of more than 3 drops per minute, is a violation of this permit and Rule 4623 and shall be reported as a deviation. [District Rule 4623, 3.11, 3.17, 3.18 and 6.4.8] Federally Enforceable Through Title V Permit

19. 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 and 40 CFR 63.11087(a)] Federally Enforceable Through Title V Permit

20. Each opening in the internal floating roof except for leg sleeves, automatic bleeder vents, rim space vents, column wells, ladder wells, sample wells, combination manway/vacuum breakers, and stub drains 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

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, 5.5.2.1.3] Federally Enforceable Through Title V Permit

22. 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

23. 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

24. 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

25. The permittee shall notify the District in writing at least 30 days prior to conduct the visual inspection of the storage vessel, so the District can arrange an observer. [40 CFR 63.11087(c)] Federally Enforceable Through Title V Permit

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PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

26. For newly constructed, repair, or rebuilt internal floating roof tanks, 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. 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, 6.1.4.1 and 40 CFR 63.11087(c)] Federally Enforceable Through Title V Permit

27. The owner or operator shall perform a monthly leak inspection of all equipment in gasoline service, as defined in section 63.11100. For this inspection, detection methods incorporating sight, sound, and smell are acceptable. [40 CFR Part 63.11089(a)] Federally Enforceable Through Title V Permit

28. For monthly leak inspection, a log book shall be used and shall be signed by the owner or operator at the completion of each inspection. A section of the log book shall contain a list, summary description, or diagram(s) showing the location of all equipment in gasoline service at the facility. [40 CFR Part 63.11089(b)] Federally Enforceable Through Title V Permit

29. Each detection of a liquid or vapor leak shall be recorded in the log book. When a leak is detected, an initial attempt at repair shall be made as soon as practicable, but no later than 5 calendar days after the leak is detected. Repair or replacement of leaking equipment shall be completed within 15 calendar days after detection of each leak. Delay of repair of leaking equipment will be allowed if the repair is not feasible within 15 days. The owner or operator shall provide in the semiannual report the reason(s) why the repair was not feasible and the date each repair was completed. [40 CFR Part 63.11089(d)] Federally Enforceable Through Title V Permit

30. The owner or operator shall maintain a log book that contain the following information for a leak during during monthly inspection: 1.) equipment type and identification number; 2.) the nature of the leak (i.e. vapor or liquid) and the method of detection (i.e. sight, sound, or smell); 3.) the date the leak was detected and the date of each attempt to repair the leak; 4.) repair methods applied in each attempt to repair the leak; 5.) repair delayed and the reason for the delay if the leak is not repaired within 15 calendar days after discovery of the leak; 6) the expected date of successful repair of the leak if the leak is not repaired within 15 days; and 7.) the date of successful repair of the leak. [40 CFR 63.11089(g)] Federally Enforceable Through Title V Permit

31. The permittee shall visually inspect, through the manholes, roof hatches, or other opening 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, 6.1.4.2 and 40 CFR 63.11087(c)] Federally Enforceable Through Title V Permit

32. If any failure (i.e. visible organic liquid on the internal floating roof, tank walls or anywhere, holes or tears in the seal fabric) is detected during 12 month visual inspection, the permittee shall repair the items or empty and remove the storage vessel from service within 45 days. If the detected failure cannot be repaired within 45 days and if the vessel cannot be emptied within 45 days, a 30-day extension may be requested from the APCO in the inspection report. Such a request must document that alternate storage capacity is unavailable and specify a schedule of actions the company will take that will assure theat the control equipment will be repaired or the vessel will be emptied as soon as possible. [40 CFR 63.11087(c)] Federally Enforceable Through Title V Permit

33. The permittee shall visually inspect the internal floating roof, the primary seal, the secondary seal, gaskets, slotted memberanes and sleeve seals (if any) each time the vessel is emptied and degassed. If the internal floating roof has defects, the primary seal has holes, tears, or other openings in the seal or the seal fabric, or the secondary seal has holes, tears, or other openings in the seal or the seal fabric, or the gaskets no longer close off the liquid surfaces from the atmosphere, or the slotted membrane has more than 10 percent open area, the owner or operator shall repair the items as necessary so that none of the conditions specified in this paragraph exist before refilling the storage vessel. [40 CFR Part 63.11087(c)] Federally Enforceable Through Title V Permit

34. The owner or operator shall report the number of equipment leaks not repaired within 15 days after detection in a semi-annual report. [40 CFR 63.11089(g)] Federally Enforceable Through Title V Permit

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PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

36. The operator shall determine the presence of gas leaks using portable hydrocarbon detection instrument in accordance with EPA Method 21. The instrument shall be calibrated before use each day of its use by the procedures specified in Method 21 using the following calibration gases: 1.) Zero air (less than 10 ppm of hydrocarbon in air); and 2.) A mixture of methane or n-hexane and air at a concentration of about, but less than, 10,000 ppm methane or n-hexane. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

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

38. The permittee shall conduct actual gap measurements of the primary seal and/or secondary seal at least once every 60 months. Other than the gap criteria specified by this permit, no holes, tears, or other openings are allowed that would permit the escape of hydrocarbon vapors. Any defects found shall constitute a violation of this rule. [District Rule 4623, 6.1.4.3 and 40 CFR 63.11087(c)] Federally Enforceable Through Title V Permit

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

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

41. The operator shall keep a record of liquids stored in each container, period of storage, and the maximum true vapor pressure of the liquid during the respective storage period. [40 CFR 60.113(a)] Federally Enforceable Through Title V Permit

42. The permittee shall determine the maximum true vapor pressure of the stored organic liquid on a monthly basis, using the calculation methodology listed in Appendix B of District Rule 4623. The permittee shall keep a record of all reid vapor pressure measurements for the stored organic liquid and shall use the highest recorded reid vapor pressure of the month when determining the maximum true vapor pressure. The permittee shall keep a record of the actual storage temperature of the organic storage tank and shall use the highest temperature recorded of the month when determining the maximum true vapor pressure. [District Rule 4623 and 40 CFR 60.113(a) and (b)] Federally Enforceable Through Title V Permit

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PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

43. The permittee shall submit the reports of the floating roof tank inspections to the APCO within five calendar days after the completion of the inspection only for those tanks that failed to meet the applicable requirements of Rule 4623, Sections 5.2 through 5.5. The inspection report for tanks that that have been determined to be in compliance with the requirements of Sections 5.2 through 5.5 need not be submitted to the APCO, but the inspection report shall be kept on-site and made available upon request by the APCO. The inspection report shall contain all necessary information to demonstrate compliance with the provisions of this rule, including the following: 1.) Date of inspection and names and titles of company personnel doing the inspection; 2.) Tank identification number and Permit to Operate number; 3.) Measurements of the gaps between the tank shell and primary and secondary seals; 4.) Leak-free status of the tank and floating roof deck fittings. Records of the leak-free status shall include the vapor concentration values measured in ppmv. 5.) Data, supported by calculations, demonstrating compliance with the requirements specified in Sections 5.3, 5.4, 5.5.2.3.3, 5.5.2.4.2, and 5.5.2.4.3 of Rule 4623. 6.) Any corrective actions or repairs performed on the tank in order to comply with Rule 4623 and the date(s) such actions were taken. [District Rule 4623, 6.3.5 and 40 CFR 63.11087(e)] Federally Enforceable Through Title V Permit

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

45. The following test methods shall be used: ASTM Method D287 for determining API Gravity, ASTM Method D4057 sampling for API Gravity testing; ASTM D323 for determining RVP, and converting RVP to TVP at the tank's maximum organic liquid storage temperature; ARB Method 422 for determining exempt halogenated VOCs in gases; EPA Method 21 for measuring gas-leak concentration. Should the owner or operator wish to use test methods other than the ones mentioned in this condition, the methods must be approved by the District prior to its use. [District Rule 4623, 6.4] Federally Enforceable Through Title V Permit

46. The permittee shall maintain records sufficient to demonstrate compliance with the daily VOC emission limit. These records shall contain the calculated emission quantity as well as each process variable used in the respective calculations/modeling. [District Rule 2080] Federally Enforceable Through Title V Permit

47. 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



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# San Joaquin Valley
# Air Pollution Control District

**PERMIT UNIT:** N-829-16-7

**EXPIRATION DATE:** 11/30/2020

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**EQUIPMENT DESCRIPTION:**
1,386,000 GALLON WELDED INTERNAL FLOATING ROOF STORAGE TANK (#3301) WITH A MECHANICAL SHOE PRIMARY SEAL AND A WIPER SECONDARY SEAL

## PERMIT UNIT REQUIREMENTS

1. True vapor pressure (TVP) of the organic liquid stored shall be less than 11 psia. [District Rule 4623, 5.1.1] Federally Enforceable Through Title V Permit
2. VOC emissions shall not exceed 14.9 pounds in any one day. [District Rule 2201] Federally Enforceable Through Title V Permit
3. The organic liquid throughput shall not exceed 33,264,000 gallons in any one calendar year. [District Rule 2201] Federally Enforceable Through Title V Permit
4. The tank shall be equipped with a fixed roof with an internal floating type cover equipped with a continuous closure device between the tank wall and the cover edge. [40 CFR 60.112a(2) and 40 CFR 63.11087(a)] Federally Enforceable Through Title V Permit
5. 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, 5.4.1 and 40 CFR 63.11087(a)] Federally Enforceable Through Title V Permit
6. Gaps between the tank shell and the primary seal shall not exceed 1 1/2 inches. [District Rule 4623, 5.3.2.1.1 and 5.4.1] Federally Enforceable Through Title V Permit
7. The cumulative length of all gaps between the tank shell and the primary seal greater than 1/2 inch shall not exceed 10% of the circumference of the tank. [District Rule 4623, 5.3.2.1.1 and 5.4.1] Federally Enforceable Through Title V Permit
8. The cumulative length of all primary seal gaps greater than 1/8 inch shall not exceed 30% of the circumference of the tank. [District Rule 4623, 5.3.2.1.1 and 5.4.1] Federally Enforceable Through Title V Permit
9. No continuous gap in the primary seal greater than 1/8 inch wide shall exceed 10% of the tank circumference. [District Rule 4623, 5.3.2.1.1 and 5.4.1] Federally Enforceable Through Title V Permit
10. No gap between the tank shell and the secondary seal shall exceed 1/2 inch. [District Rule 4623, 5.3.2.1.2 and 5.4.1] Federally Enforceable Through Title V Permit
11. The cumulative length of all gaps between the tank shell and the secondary seal, greater than 1/8 inch shall not exceed 5% of the tank circumference. [District Rule 4623, 5.3.2.1.2 and 5.4.1] Federally Enforceable Through Title V Permit
12. The metallic shoe-type seal shall be installed so that one end of the shoe extends into the stored liquid and the other end extends a minimum vertical distance of 18 inches above the stored liquid surface. [District Rule 4623, 5.3.2.1.3 and 5.4.1] Federally Enforceable Through Title V Permit

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PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

13. The geometry of the metallic-shoe type seal shall be such that the maximum gap between the shoe and the tank shell shall be no greater than 3 inches for a length of at least 18 inches in the vertical plane above the liquid. [District Rule 4623, 5.3.2.1.4 and 5.4.1] 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, 5.3.2.1.5 and 5.4.1] Federally Enforceable Through Title V Permit

15. The secondary seal shall allow easy insertion of probes of up to 1 1/2 inches in width in order to measure gaps in the primary seal. [District Rule 4623, 5.3.2.1.6 and 5.4.1] 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, 5.3.2.1.7 and 5.4.1] Federally Enforceable Through Title V Permit

17. All openings in the roof used for sampling and gauging 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 for sampling and gauging. [District Rule 4623, 5.5.2.1.2] 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 gas leak is defined as a reading in excess of 10,000 parts per million by volume (ppmv), as methane, above background on a portable hydrocarbon detection instrument that is calibrated with methane in accordance with the procedures specified in EPA Method 21. Liquid leak is defined as the dripping of organic liquid at a rate of more than 3 drops per minute. A reading in excess to 10,000 ppmv, as methane, above background, or dripping of organic liquid at a rate of more than 3 drops per minute, is a violation of this permit and Rule 4623 and shall be reported as a deviation. [District Rule 4623, 3.11, 3.17, 3.18 and 6.4.8] Federally Enforceable Through Title V Permit

19. 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 and 40 CFR 63.11087(a)] Federally Enforceable Through Title V Permit

20. Each opening in the internal floating roof except for leg sleeves, automatic bleeder vents, rim space vents, column wells, ladder wells, sample wells, combination manway/vacuum breakers, and stub drains 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

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, 5.5.2.1.3] Federally Enforceable Through Title V Permit

22. 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

23. 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

24. 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

25. The permittee shall notify the District in writing at least 30 days prior to conduct the visual inspection of the storage vessel, so the District can arrange an observer. [40 CFR 63.11087(c)] Federally Enforceable Through Title V Permit

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26. For newly constructed, repaired, or rebuilt internal floating roof tanks, 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. 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, 6.1.4.1 and 40 CFR 63.11087(c)] Federally Enforceable Through Title V Permit

27. The owner or operator shall perform a monthly leak inspection of all equipment in gasoline service, as defined in section 63.11100. For this inspection, detection methods incorporating sight, sound, and smell are acceptable. [40 CFR Part 63.11089(a)] Federally Enforceable Through Title V Permit

28. For monthly leak inspection, a log book shall be used and shall be signed by the owner or operator at the completion of each inspection. A section of the log book shall contain a list, summary description, or diagram(s) showing the location of all equipment in gasoline service at the facility. [40 CFR Part 63.11089(b)] Federally Enforceable Through Title V Permit

29. Each detection of a liquid or vapor leak shall be recorded in the log book. When a leak is detected, an initial attempt at repair shall be made as soon as practicable, but no later than 5 calendar days after the leak is detected. Repair or replacement of leaking equipment shall be completed within 15 calendar days after detection of each leak. Delay of repair of leaking equipment will be allowed if the repair is not feasible within 15 days. The owner or operator shall provide in the semiannual report the reason(s) why the repair was not feasible and the date each repair was completed. [40 CFR Part 63.11089(d)] Federally Enforceable Through Title V Permit

30. The owner or operator shall maintain a log book that contain the following information for a leak during during monthly inspection: 1.) equipment type and identification number; 2.) the nature of the leak (i.e. vapor or liquid) and the method of detection (i.e. sight, sound, or smell); 3.) the date the leak was detected and the date of each attempt to repair the leak; 4.) repair methods applied in each attempt to repair the leak; 5.) repair delayed and the reason for the delay if the leak is not repaired within 15 calendar days after discovery of the leak; 6) the expected date of successful repair of the leak if the leak is not repaired within 15 days; and 7.) the date of successful repair of the leak. [40 CFR 63.11089(g)] Federally Enforceable Through Title V Permit

31. The permittee shall visually inspect, through the manholes, roof hatches, or other opening 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, 6.1.4.2 and 40 CFR 63.11087(c)] Federally Enforceable Through Title V Permit

32. If any failure (i.e. visible organic liquid on the internal floating roof, tank walls or anywhere, holes or tears in the seal fabric) is detected during 12 month visual inspection, the permittee shall repair the items or empty and remove the storage vessel from service within 45 days. If the detected failure cannot be repaired within 45 days and if the vessel cannot be emptied within 45 days, a 30-day extension may be requested from the APCO in the inspection report. Such a request must document that alternate storage capacity is unavailable and specify a schedule of actions the company will take that will assure theat the control equipment will be repaired or the vessel will be emptied as soon as possible. [40 CFR 63.11087(c)] Federally Enforceable Through Title V Permit

33. The permittee shall visually inspect the internal floating roof, the primary seal, the secondary seal, gaskets, slotted memberanes and sleeve seals (if any) each time the vessel is emptied and degassed. If the internal floating roof has defects, the primary seal has holes, tears, or other openings in the seal or the seal fabric, or the secondary seal has holes, tears, or other openings in the seal or the seal fabric, or the gaskets no longer close off the liquid surfaces from the atmosphere, or the slotted membrane has more than 10 percent open area, the owner or operator shall repair the items as necessary so that none of the conditions specified in this paragraph exist before refilling the storage vessel. [40 CFR Part 63.11087(c)] Federally Enforceable Through Title V Permit

34. The owner or operator shall report the number of equipment leaks not repaired within 15 days after detection in a semi-annual report. [40 CFR 63.11089(g)] Federally Enforceable Through Title V Permit

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

36. The operator shall determine the presence of gas leaks using portable hydrocarbon detection instrument in accordance with EPA Method 21. The instrument shall be calibrated before use each day of its use by the procedures specified in Method 21 using the following calibration gases: 1.) Zero air (less than 10 ppm of hydrocarbon in air); and 2.) A mixture of methane or n-hexane and air at a concentration of about, but less than, 10,000 ppm methane or n-hexane. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

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

38. The permittee shall conduct actual gap measurements of the primary seal and/or secondary seal at least once every 60 months. Other than the gap criteria specified by this permit, no holes, tears, or other openings are allowed that would permit the escape of hydrocarbon vapors. Any defects found shall constitute a violation of this rule. [District Rule 4623, 6.1.4.3 and 40 CFR 63.11087(c)] Federally Enforceable Through Title V Permit

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

40. The permittee shall determine the maximum true vapor pressure of the stored organic liquid on a monthly basis, using the calculation methodology listed in Appendix B of District Rule 4623. The permittee shall keep a record of all reid vapor pressure measurements for the stored organic liquid and shall use the highest recorded reid vapor pressure of the month when determining the maximum true vapor pressure. The permittee shall keep a record of the actual storage temperature of the organic storage tank and shall use the highest temperature recorded of the month when determining the maximum true vapor pressure. [District Rule 4623] Federally Enforceable Through Title V Permit

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

42. The permittee shall submit the reports of the floating roof tank inspections to the APCO within five calendar days after the completion of the inspection only for those tanks that failed to meet the applicable requirements of Rule 4623, Sections 5.2 through 5.5. The inspection report for tanks that that have been determined to be in compliance with the requirements of Sections 5.2 through 5.5 need not be submitted to the APCO, but the inspection report shall be kept on-site and made available upon request by the APCO. The inspection report shall contain all necessary information to demonstrate compliance with the provisions of this rule, including the following: 1.) Date of inspection and names and titles of company personnel doing the inspection; 2.) Tank identification number and Permit to Operate number; 3.) Measurements of the gaps between the tank shell and primary and secondary seals; 4.) Leak-free status of the tank and floating roof deck fittings. Records of the leak-free status shall include the vapor concentration values measured in ppmv. 5.) Data, supported by calculations, demonstrating compliance with the requirements specified in Sections 5.3, 5.4, 5.5.2.3.3, 5.5.2.4.2, and 5.5.2.4.3 of Rule 4623. 6.) Any corrective actions or repairs performed on the tank in order to comply with Rule 4623 and the date(s) such actions were taken. [District Rule 4623, 6.3.5 and 40 CFR 63.11087(e)] Federally Enforceable Through Title V Permit

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PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

44. The following test methods shall be used: ASTM Method D287 for determining API Gravity, ASTM Method D4057 sampling for API Gravity testing; ASTM D323 for determining RVP, and converting RVP to TVP at the tank's maximum organic liquid storage temperature; ARB Method 422 for determining exempt halogenated VOCs in gases; EPA Method 21 for measuring gas-leak concentration. Should the owner or operator wish to use test methods other than the ones mentioned in this condition, the methods must be approved by the District prior to its use. [District Rule 4623,6.4] Federally Enforceable Through Title V Permit

45. Records of the cumulative annual organic liquid throughput shall be maintained and updated monthly. [District Rule 2201] Federally Enforceable Through Title V Permit

46. The permittee shall maintain records sufficient to demonstrate compliance with the daily VOC emission limit. These records shall contain the calculated emission quantity as well as each process variable used in the respective calculations/modeling. [District Rule 2080] Federally Enforceable Through Title V Permit

47. 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

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# San Joaquin Valley
# Air Pollution Control District

**PERMIT UNIT:** N-829-17-7

**EXPIRATION DATE:** 11/30/2020

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**EQUIPMENT DESCRIPTION:**
1,008,000 GALLON WELDED INTERNAL FLOATING ROOF STORAGE TANK (#2401) WITH A MECHANICAL SHOE PRIMARY SEAL AND A WIPER SECONDARY SEAL

## PERMIT UNIT REQUIREMENTS

1. True vapor pressure (TVP) of the organic liquid stored shall be less than 11 psia. [District Rule 4623, 5.1.1] Federally Enforceable Through Title V Permit
2. VOC emissions shall not exceed 13.4 pounds in any one day. [District Rule 2201] Federally Enforceable Through Title V Permit
3. The organic liquid throughput shall not exceed 24,192,000 gallons in any one calendar year. [District Rule 2201]
4. The tank shall be equipped with a fixed roof with an internal floating type cover equipped with a continuous closure device between the tank wall and the cover edge. [40 CFR 60.112a(2) and 40 CFR 63.11087(a)] Federally Enforceable Through Title V Permit
5. 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, 5.4.1 and 40 CFR 63.11087(a)] Federally Enforceable Through Title V Permit
6. Gaps between the tank shell and the primary seal shall not exceed 1 1/2 inches. [District Rule 4623, 5.3.2.1.1 and 5.4.1] Federally Enforceable Through Title V Permit
7. The cumulative length of all gaps between the tank shell and the primary seal greater than 1/2 inch shall not exceed 10% of the circumference of the tank. [District Rule 4623, 5.3.2.1.1 and 5.4.1] Federally Enforceable Through Title V Permit
8. The cumulative length of all primary seal gaps greater than 1/8 inch shall not exceed 30% of the circumference of the tank. [District Rule 4623, 5.3.2.1.1 and 5.4.1] Federally Enforceable Through Title V Permit
9. No continuous gap in the primary seal greater than 1/8 inch wide shall exceed 10% of the tank circumference. [District Rule 4623, 5.3.2.1.1 and 5.4.1] Federally Enforceable Through Title V Permit
10. No gap between the tank shell and the secondary seal shall exceed 1/2 inch. [District Rule 4623, 5.3.2.1.2 and 5.4.1] Federally Enforceable Through Title V Permit
11. The cumulative length of all gaps between the tank shell and the secondary seal, greater than 1/8 inch shall not exceed 5% of the tank circumference. [District Rule 4623, 5.3.2.1.2 and 5.4.1] Federally Enforceable Through Title V Permit
12. The metallic shoe-type seal shall be installed so that one end of the shoe extends into the stored liquid and the other end extends a minimum vertical distance of 18 inches above the stored liquid surface. [District Rule 4623, 5.3.2.1.3 and 5.4.1] Federally Enforceable Through Title V Permit

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PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

13. The geometry of the metallic-shoe type seal shall be such that the maximum gap between the shoe and the tank shell shall be no greater than 3 inches for a length of at least 18 inches in the vertical plane above the liquid. [District Rule 4623, 5.3.2.1.4 and 5.4.1] 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, 5.3.2.1.5 and 5.4.1] Federally Enforceable Through Title V Permit

15. The secondary seal shall allow easy insertion of probes of up to 1 1/2 inches in width in order to measure gaps in the primary seal. [District Rule 4623, 5.3.2.1.6 and 5.4.1] 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, 5.3.2.1.7 and 5.4.1] Federally Enforceable Through Title V Permit

17. All openings in the roof used for sampling and gauging 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 for sampling and gauging. [District Rule 4623, 5.5.2.1.2] 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 gas leak is defined as a reading in excess of 10,000 parts per million by volume (ppmv), as methane, above background on a portable hydrocarbon detection instrument that is calibrated with methane in accordance with the procedures specified in EPA Method 21. Liquid leak is defined as the dripping of organic liquid at a rate of more than 3 drops per minute. A reading in excess to 10,000 ppmv, as methane, above background, or dripping of organic liquid at a rate of more than 3 drops per minute, is a violation of this permit and Rule 4623 and shall be reported as a deviation. [District Rule 4623, 3.11, 3.17, 3.18 and 6.4.8] Federally Enforceable Through Title V Permit

19. 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 and 40 CFR 63.11087(a)] Federally Enforceable Through Title V Permit

20. Each opening in the internal floating roof except for leg sleeves, automatic bleeder vents, rim space vents, column wells, ladder wells, sample wells, combination manway/vacuum breakers, and stub drains 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

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, 5.5.2.1.3] Federally Enforceable Through Title V Permit

22. 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

23. 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

24. 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

25. The permittee shall notify the District in writing at least 30 days prior to conduct the visual inspection of the storage vessel, so the District can arrange an observer. [40 CFR 63.11087(c)] Federally Enforceable Through Title V Permit

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PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

26. For newly constructed, repaired, or rebuilt internal floating roof tanks, 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. 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, 6.1.4.1 and 40 CFR 63.11087(c)] Federally Enforceable Through Title V Permit

27. The owner or operator shall perform a monthly leak inspection of all equipment in gasoline service, as defined in section 63.11100. For this inspection, detection methods incorporating sight, sound, and smell are acceptable. [40 CFR Part 63.11089(a)] Federally Enforceable Through Title V Permit

28. For monthly leak inspection, a log book shall be used and shall be signed by the owner or operator at the completion of each inspection. A section of the log book shall contain a list, summary description, or diagram(s) showing the location of all equipment in gasoline service at the facility. [40 CFR Part 63.11089(b)] Federally Enforceable Through Title V Permit

29. Each detection of a liquid or vapor leak shall be recorded in the log book. When a leak is detected, an initial attempt at repair shall be made as soon as practicable, but no later than 5 calendar days after the leak is detected. Repair or replacement of leaking equipment shall be completed within 15 calendar days after detection of each leak. Delay of repair of leaking equipment will be allowed if the repair is not feasible within 15 days. The owner or operator shall provide in the semiannual report the reason(s) why the repair was not feasible and the date each repair was completed. [40 CFR Part 63.11089(d)] Federally Enforceable Through Title V Permit

30. The owner or operator shall maintain a log book that contain the following information for a leak during during monthly inspection: 1.) equipment type and identification number; 2.) the nature of the leak (i.e. vapor or liquid) and the method of detection (i.e. sight, sound, or smell); 3.) the date the leak was detected and the date of each attempt to repair the leak; 4.) repair methods applied in each attempt to repair the leak; 5.) repair delayed and the reason for the delay if the leak is not repaired within 15 calendar days after discovery of the leak; 6) the expected date of successful repair of the leak if the leak is not repaired within 15 days; and 7.) the date of successful repair of the leak. [40 CFR 63.11089(g)] Federally Enforceable Through Title V Permit

31. The permittee shall visually inspect, through the manholes, roof hatches, or other opening 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, 6.1.4.2 and 40 CFR 63.11087(c)] Federally Enforceable Through Title V Permit

32. If any failure (i.e. visible organic liquid on the internal floating roof, tank walls or anywhere, holes or tears in the seal fabric) is detected during 12 month visual inspection, the permittee shall repair the items or empty and remove the storage vessel from service within 45 days. If the detected failure cannot be repaired within 45 days and if the vessel cannot be emptied within 45 days, a 30-day extension may be requested from the APCO in the inspection report. Such a request must document that alternate storage capacity is unavailable and specify a schedule of actions the company will take that will assure theat the control equipment will be repaired or the vessel will be emptied as soon as possible. [40 CFR 63.11087(c)] Federally Enforceable Through Title V Permit

33. The permittee shall visually inspect the internal floating roof, the primary seal, the secondary seal, gaskets, slotted memberanes and sleeve seals (if any) each time the vessel is emptied and degassed. If the internal floating roof has defects, the primary seal has holes, tears, or other openings in the seal or the seal fabric, or the secondary seal has holes, tears, or other openings in the seal or the seal fabric, or the gaskets no longer close off the liquid surfaces from the atmosphere, or the slotted membrane has more than 10 percent open area, the owner or operator shall repair the items as necessary so that none of the conditions specified in this paragraph exist before refilling the storage vessel. [40 CFR Part 63.11087(c)] Federally Enforceable Through Title V Permit

34. The owner or operator shall report the number of equipment leaks not repaired within 15 days after detection in a semi-annual report. [40 CFR 63.11089(g)] Federally Enforceable Through Title V Permit

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

36. The operator shall determine the presence of gas leaks using portable hydrocarbon detection instrument in accordance with EPA Method 21. The instrument shall be calibrated before use each day of its use by the procedures specified in Method 21 using the following calibration gases: 1.) Zero air (less than 10 ppm of hydrocarbon in air); and 2.) A mixture of methane or n-hexane and air at a concentration of about, but less than, 10,000 ppm methane or n-hexane. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

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

38. The permittee shall conduct actual gap measurements of the primary seal and/or secondary seal at least once every 60 months. Other than the gap criteria specified by this permit, no holes, tears, or other openings are allowed that would permit the escape of hydrocarbon vapors. Any defects found shall constitute a violation of this rule. [District Rule 4623, 6.1.4.3 and 40 CFR 63.11087(c)] Federally Enforceable Through Title V Permit

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

40. The permittee shall determine the maximum true vapor pressure of the stored organic liquid on a monthly basis, using the calculation methodology listed in Appendix B of District Rule 4623. The permittee shall keep a record of all reid vapor pressure measurements for the stored organic liquid and shall use the highest recorded reid vapor pressure of the month when determining the maximum true vapor pressure. The permittee shall keep a record of the actual storage temperature of the organic storage tank and shall use the highest temperature recorded of the month when determining the maximum true vapor pressure. [District Rule 4623] Federally Enforceable Through Title V Permit

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

42. The permittee shall submit the reports of the floating roof tank inspections to the APCO within five calendar days after the completion of the inspection only for those tanks that failed to meet the applicable requirements of Rule 4623, Sections 5.2 through 5.5. The inspection report for tanks that that have been determined to be in compliance with the requirements of Sections 5.2 through 5.5 need not be submitted to the APCO, but the inspection report shall be kept on-site and made available upon request by the APCO. The inspection report shall contain all necessary information to demonstrate compliance with the provisions of this rule, including the following: 1.) Date of inspection and names and titles of company personnel doing the inspection; 2.) Tank identification number and Permit to Operate number; 3.) Measurements of the gaps between the tank shell and primary and secondary seals; 4.) Leak-free status of the tank and floating roof deck fittings. Records of the leak-free status shall include the vapor concentration values measured in ppmv. 5.) Data, supported by calculations, demonstrating compliance with the requirements specified in Sections 5.3, 5.4, 5.5.2.3.3, 5.5.2.4.2, and 5.5.2.4.3 of Rule 4623. 6.) Any corrective actions or repairs performed on the tank in order to comply with Rule 4623 and the date(s) such actions were taken. [District Rule 4623, 6.3.5 and 40 CFR 63.11087(c)] Federally Enforceable Through Title V Permit

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PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

44. The following test methods shall be used: ASTM Method D287 for determining API Gravity, ASTM Method D4057 sampling for API Gravity testing; ASTM D323 for determining RVP, and converting RVP to TVP at the tank's maximum organic liquid storage temperature; ARB Method 422 for determining exempt halogenated VOCs in gases; EPA Method 21 for measuring gas-leak concentration. Should the owner or operator wish to use test methods other than the ones mentioned in this condition, the methods must be approved by the District prior to its use. [District Rule 4623,6.4] Federally Enforceable Through Title V Permit

45. Records of the cumulative annual organic liquid throughput shall be maintained and updated monthly. [District Rule 2201] Federally Enforceable Through Title V Permit

46. The permittee shall maintain records sufficient to demonstrate compliance with the daily VOC emission limit. These records shall contain the calculated emission quantity as well as each process variable used in the respective calculations/modeling. [District Rule 2080] Federally Enforceable Through Title V Permit

47. 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

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# San Joaquin Valley
# Air Pollution Control District

**PERMIT UNIT:** N-829-18-8

**EXPIRATION DATE:** 11/30/2020

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**EQUIPMENT DESCRIPTION:**
1,008,000 GALLON WELDED INTERNAL FLOATING ROOF ORGANIC LIQUID STORAGE TANK (#2402) WITH A PRIMARY MECHANICAL SHOE SEAL, A SECONDARY WIPER SEAL, AND A SOLID GUIDEPOLE

## PERMIT UNIT REQUIREMENTS

1. True vapor pressure (TVP) of the organic liquid stored shall be less than 11 psia. [District Rule 4623, 5.1.1] Federally Enforceable Through Title V Permit
2. VOC emissions shall not exceed 13.4 pounds in any one day. [District Rule 2201] Federally Enforceable Through Title V Permit
3. The organic liquid throughput shall not exceed 24,192,000 gallons in any one calendar year. [District Rule 2201] Federally Enforceable Through Title V Permit
4. The tank shall be equipped with a fixed roof with an internal floating type cover equipped with a continuous closure device between the tank wall and the cover edge. [40 CFR 60.112a(2) and 40 CFR 63.11087(a)] Federally Enforceable Through Title V Permit
5. 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 and 5.4.3, 40 CFR 60.112a(2) and 40 CFR 63.11087(a)] Federally Enforceable Through Title V Permit
6. Gaps between the tank shell and the primary seal shall exceed 1 1/2 inches. [District Rule 4623, 5.3.2.1.1 and 5.4.1] Federally Enforceable Through Title V Permit
7. The cumulative length of all gaps between the tank shell and the primary seal greater than 1/2 inch shall not exceed 10% of the circumference of the tank. [District Rule 4623, 5.3.2.1.1 and 5.4.1] Federally Enforceable Through Title V Permit
8. The cumulative length of all primary seal gaps greater than 1/8 inch shall not exceed 30% of the circumference of the tank. [District Rule 4623, 5.3.2.1.1 and 5.4.1] Federally Enforceable Through Title V Permit
9. No continuous gap in the primary seal greater than 1/8 inch wide shall exceed 10% of the tank circumference. [District Rule 4623, 5.3.2.1.1 and 5.4.1] Federally Enforceable Through Title V Permit
10. No gap between the tank shell and the secondary seal shall exceed 1/2 inch. [District Rule 4623, 5.3.2.1.2 and 5.4.1] Federally Enforceable Through Title V Permit
11. The cumulative length of all gaps between the tank shell and the secondary seal, greater than 1/8 inch shall not exceed 5% of the tank circumference. [District Rule 4623, 5.3.2.1.2 and 5.4.1] Federally Enforceable Through Title V Permit
12. The metallic shoe-type seal shall be installed so that one end of the shoe extends into the stored liquid and the other end extends a minimum vertical distance of 18 inches above the stored liquid surface. [District Rule 4623, 5.3.2.1.3 and 5.4.1] Federally Enforceable Through Title V Permit

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PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

13. The geometry of the metallic-shoe type seal shall be such that the maximum gap between the shoe and the tank shell shall be no greater than 3 inches for a length of at least 18 inches in the vertical plane above the liquid. [District Rule 4623, 5.3.2.1.4 and 5.4.1] 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, 5.3.2.1.5 and 5.4.1] Federally Enforceable Through Title V Permit

15. The secondary seal shall allow easy insertion of probes of up to 1 1/2 inches in width in order to measure gaps in the primary seal. [District Rule 4623, 5.3.2.1.6 and 5.4.1] 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, 5.3.2.1.7 and 5.4.1] 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 for sampling or gauging. [District Rule 4623, 5.5.1] 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 gas leak is defined as a reading in excess of 10,000 parts per million by volume (ppmv), as methane, above background on a portable hydrocarbon detection instrument that is calibrated with methane in accordance with the procedures specified in EPA Method 21. Liquid leak is defined as the dripping of organic liquid at a rate of more than 3 drops per minute. A reading in excess to 10,000 ppmv, as methane, above background, or dripping of organic liquid at a rate of more than 3 drops per minute, is a violation of this permit and Rule 4623 and shall be reported as a deviation. [District Rule 4623, 3.11, 3.17, 3.18 and 6.4.8] Federally Enforceable Through Title V Permit

19. 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 and 40 CFR 63.11087(a)] Federally Enforceable Through Title V Permit

20. Each opening in the internal floating roof except for leg sleeves, automatic bleeder vents, rim space vents, column wells, ladder wells, sample wells, combination manway/vacuum breakers, and stub drains 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

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, 5.5.2.1.3] Federally Enforceable Through Title V Permit

22. 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

23. 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

24. 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

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

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PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

27. The gap between the pole wiper and the solid guidepole shall not exceed 1/2 inch. [District Rule 4623, 5.5.2.3.3] Federally Enforceable Through Title V Permit

28. The permittee shall notify the District in writing at least 30 days prior to conduct the visual inspection of the storage vessel, so the District can arrange an observer. [40 CFR 63.11087(c)] Federally Enforceable Through Title V Permit

29. For newly constructed, repaired, or rebuilt internal floating roof tanks, 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. 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, 6.1.4.1 and 40 CFR 63.11087(c)] Federally Enforceable Through Title V Permit

30. The owner or operator shall perform a monthly leak inspection of all equipment in gasoline service, as defined in section 63.11100. For this inspection, detection methods incorporating sight, sound, and smell are acceptable. [40 CFR Part 63.11089(a)] Federally Enforceable Through Title V Permit

31. For monthly leak inspection, a log book shall be used and shall be signed by the owner or operator at the completion of each inspection. A section of the log book shall contain a list, summary description, or diagram(s) showing the location of all equipment in gasoline service at the facility. [40 CFR Part 63.11089(b)] Federally Enforceable Through Title V Permit

32. Each detection of a liquid or vapor leak shall be recorded in the log book. When a leak is detected, an initial attempt at repair shall be made as soon as practicable, but no later than 5 calendar days after the leak is detected. Repair or replacement of leaking equipment shall be completed within 15 calendar days after detection of each leak. Delay of repair of leaking equipment will be allowed if the repair is not feasible within 15 days. The owner or operator shall provide in the semiannual report the reason(s) why the repair was not feasible and the date each repair was completed. [40 CFR Part 63.11089(d)] Federally Enforceable Through Title V Permit

33. The owner or operator shall maintain a log book that contain the following information for a leak during during monthly inspection: 1.) equipment type and identification number; 2.) the nature of the leak (i.e. vapor or liquid) and the method of detection (i.e. sight, sound, or smell); 3.) the date the leak was detected and the date of each attempt to repair the leak; 4.) repair methods applied in each attempt to repair the leak; 5.) repair delayed and the reason for the delay if the leak is not repaired within 15 calendar days after discovery of the leak; 6) the expected date of successful repair of the leak if the leak is not repaired within 15 days; and 7.) the date of successful repair of the leak. [40 CFR 63.11089(g)] Federally Enforceable Through Title V Permit

34. The permittee shall visually inspect, through the manholes, roof hatches, or other opening 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, 6.1.4.2 and 40 CFR 63.11087(c)] Federally Enforceable Through Title V Permit

35. If any failure (i.e. visible organic liquid on the internal floating roof, tank walls or anywhere, holes or tears in the seal fabric) is detected during 12 month visual inspection, the permittee shall repair the items or empty and remove the storage vessel from service within 45 days. If the detected failure cannot be repaired within 45 days and if the vessel cannot be emptied within 45 days, a 30-day extension may be requested from the APCO in the inspection report. Such a request must document that alternate storage capacity is unavailable and specify a schedule of actions the company will take that will assure theat the control equipment will be repaired or the vessel will be emptied as soon as possible. [40 CFR 63.11087(c)] Federally Enforceable Through Title V Permit

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PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

36. The permittee shall visually inspect the internal floating roof, the primary seal, the secondary seal, gaskets, slotted memberanes and sleeve seals (if any) each time the vessel is emptied and degassed. If the internal floating roof has defects, the primary seal has holes, tears, or other openings in the seal or the seal fabric, or the secondary seal has holes, tears, or other openings in the seal or the seal fabric, or the gaskets no longer close off the liquid surfaces from the atmosphere, or the slotted membrane has more than 10 percent open area, the owner or operator shall repair the items as necessary so that none of the conditions specified in this paragraph exist before refilling the storage vessel. [40 CFR Part 63.11087(c)] Federally Enforceable Through Title V Permit

37. The owner or operator shall report the number of equipment leaks not repaired within 15 days after detection in a semi-annual report. [40 CFR 63.11089(g)] Federally Enforceable Through Title V Permit

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

39. The operator shall determine the presence of gas leaks using portable hydrocarbon detection instrument in accordance with EPA Method 21. The instrument shall be calibrated before use each day of its use by the procedures specified in Method 21 using the following calibration gases: 1.) Zero air (less than 10 ppm of hydrocarbon in air); and 2.) A mixture of methane or n-hexane and air at a concentration of about, but less than, 10,000 ppm methane or n-hexane. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

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

41. The permittee shall conduct actual gap measurements of the primary seal and/or secondary seal at least once every 60 months. Other than the gap criteria specified by this permit, no holes, tears, or other openings are allowed that would permit the escape of hydrocarbon vapors. Any defects found shall constitute a violation of this permit. [District Rule 4623, 6.1.4.3 and 40 CFR 63.11087(c)] Federally Enforceable Through Title V Permit

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

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

44. The operator shall keep a record of liquids stored in each container, period of storage, and the maximum true vapor pressure of the liquid during the respective storage period. [40 CFR 60.115a(a)] Federally Enforceable Through Title V Permit

45. The permittee shall determine the maximum true vapor pressure of the stored organic liquid on a monthly basis, using the calculation methodology listed in Appendix B of District Rule 4623. The permittee shall keep a record of all reid vapor pressure measurements for the stored organic liquid and shall use the highest recorded reid vapor pressure of the month when determining the maximum true vapor pressure. The permittee shall keep a record of the actual storage temperature of the organic storage tank and shall use the highest temperature recorded of the month when determining the maximum true vapor pressure. [District Rule 4623 and 40 CFR 60.115a(b)] Federally Enforceable Through Title V Permit

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PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

46. The permittee shall submit the reports of the floating roof tank inspections to the APCO within five calendar days after the completion of the inspection only for those tanks that failed to meet the applicable requirements of Rule 4623, Sections 5.2 through 5.5. The inspection report for tanks that that have been determined to be in compliance with the requirements of Sections 5.2 through 5.5 need not be submitted to the APCO, but the inspection report shall be kept on-site and made available upon request by the APCO. The inspection report shall contain all necessary information to demonstrate compliance with the provisions of this rule, including the following: 1.) Date of inspection and names and titles of company personnel doing the inspection; 2.) Tank identification number and Permit to Operate number; 3.) Measurements of the gaps between the tank shell and primary and secondary seals; 4.) Leak-free status of the tank and floating roof deck fittings. Records of the leak-free status shall include the vapor concentration values measured in ppmv. 5.) Data, supported by calculations, demonstrating compliance with the requirements specified in Sections 5.3, 5.4, 5.5.2.3.3, 5.5.2.4.2, and 5.5.2.4.3 of Rule 4623. 6.) Any corrective actions or repairs performed on the tank in order to comply with Rule 4623 and the date(s) such actions were taken. [District Rule 4623, 6.3.5 and 40 CFR 63.11087(e)] Federally Enforceable Through Title V Permit

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

48. The following test methods shall be used: ASTM Method D287 for determining API Gravity, ASTM Method D4057 sampling for API Gravity testing; ASTM D323 for determining RVP, and converting RVP to TVP at the tank's maximum organic liquid storage temperature; ARB Method 422 for determining exempt halogenated VOCs in gases; EPA Method 21 for measuring gas-leak concentration. Should the owner or operator wish to use test methods other than the ones mentioned in this condition, the methods must be approved by the District prior to its use. [District Rule 4623, 6.4] Federally Enforceable Through Title V Permit

49. Records of the cumulative annual organic liquid throughput shall be maintained and updated monthly. [District Rule 2201] Federally Enforceable Through Title V Permit

50. The permittee shall maintain records sufficient to demonstrate compliance with the daily VOC emission limit. These records shall contain the calculated emission quantity as well as each process variable used in the respective calculations/modeling. [District Rule 2080] Federally Enforceable Through Title V Permit

51. 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


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# San Joaquin Valley
# Air Pollution Control District

**PERMIT UNIT:** N-829-20-9

**EXPIRATION DATE:** 11/30/2020

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**EQUIPMENT DESCRIPTION:**
VAPOR COMBUSTION SYSTEM CONSISTING OF A 300,000 GALLON VAPOR HOLDING TANK, A VAPOR PROCESSING AND CONVEYING SYSTEM, AND A 40 MMBTU/HR PROPANE FIRED JOHN ZINK ZCT-2-8-35-X-2/8-X VAPOR COMBUSTION UNIT (VCU)

## PERMIT UNIT REQUIREMENTS

1. The VOC destruction efficiency shall be at least 99% and all gasoline loading shall be conducted utilizing bottom loading and dry-break couplers. [District Rule 4102]
2. Gasoline shall be loaded only into vapor tight tank trucks. [40 CFR Part 60.502(e)] Federally Enforceable Through Title V Permit
3. The facility shall obtain the vapor tightness documentation specified in 40 CFR Part 60.505(b) for each gasoline tank truck that is to be loaded at the facility. [40 CFR Part 60.502(e)(1)] Federally Enforceable Through Title V Permit
4. VOC emissions from the vapor recovery system shall not exceed 0.08 pounds per thousand gallons of gasoline loaded. [District Rules 4624, 5.1.1, San Joaquin County Rule 412, and 40 CFR 63.11088(a)] Federally Enforceable Through Title V Permit
5. The vapor collection system shall be operated in a manner to prevent any organic vapors collected at one loading rack from passing to another loading rack. [40 CFR 63.11088(a)] Federally Enforceable Through Title V Permit
6. The vapor collection and control system shall operate such that the pressure in the delivery tank being loaded does not exceed 18 inches water column pressure and 6 inches water column vacuum. [District Rule 4624] Federally Enforceable Through Title V Permit
7. The combined quantity of gasoline loaded through permit units N-829-1 and N-829-2 shall not exceed 756,000,000 gallons during any one calendar year. This annual limit shall be lowered in the event that the CARB certifies the vapor recovery system can process VOC emissions with a daily gasoline throughput of less than 2,071,233 gallons. [District Rule 2201] Federally Enforceable Through Title V Permit
8. The combined quantity of gasoline loaded through permit units N-829-1 and N-829-2 shall not exceed 2,071,233 gallons during any one day. [District Rule 2201] Federally Enforceable Through Title V Permit
9. The vapor combustor's combustion chamber shall be configured to operate with logic controls set to shut the vapor combustor system down and close the block valve to receiving vapors if the operating temperature does not reach a minimum of 900 degrees Fahrenheit within 10 minutes. [District Rules 2201, 4102, and 40 CFR 63.11088(d)] Federally Enforceable Through Title V Permit
10. The vapor combustor shall be equipped for continuous monitoring and recording of combustion temperature. Temperature charts shall be made available to the District upon request. [District Rule 2201, 40 CFR Part 64 and 40 CFR 63.11088(d)] Federally Enforceable Through Title V Permit

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PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

11. Should the vapor combustor's operating temperature fall below 900 degrees Fahrenheit, the permittee shall investigate the cause and take corrective action to return the operating temperature to an acceptable level as soon as possible, but no longer than one hour after initial detection. If the operating temperature cannot be raised to an acceptable value within one hour after detection, the permittee shall notify the District within the following hour and conduct a certified source test within 60 days of initial detection. In lieu of conducting a source test, the permittee may stipulate a violation that is subject to enforcement action has occurred. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviation is a 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. [40 CFR Part 64] Federally Enforceable Through Title V Permit
12. Loading and vapor collection and control equipment shall be designed, installed, maintained, and operated such that there are no leaks. A leak is defined as the dripping of organic compounds at a rate of more than three drops per minute or the detection of organic compounds, in excess of 10,000 ppm as methane measured at a distance of one centimeter from potential source in accordance with EPA Method 21. [District Rule 4624 and San Joaquin County Rule 412] Federally Enforceable Through Title V Permit
13. The vapor collection system, the vapor destruction device and each transfer rack shall be tested for leaks at least once every calendar quarter with a portable hydrocarbon analyzer in accordance with EPA Method 21. [District Rule 4624] Federally Enforceable Through Title V Permit
14. The equipment that are found leaking shall be repair or replaced within 72 hours after detecting the leakage. If the leaking component cannot be repaired or replaced within 72 hours, the component shall be taken out of service until such time the component is repaired or replaced. The repaired or replacement equipment shall be reinspected the first time the equipment is in operation after the repair or replacement. [District Rule 4624] Federally Enforceable Through Title V Permit
15. Each calendar month, the vapor collection system, the vapor processing system and each loading rack handling gasoline shall be inspected during the loading of gasoline tank trucks for organic liquid and organic vapor leaks. For the purpose of this condition, detection methods incorporating sight, sound and smell are acceptable. Each detection of a leak shall be recorded and the source of the leak repaired within 15 days after it is detected. [40 CFR Part 60.502(j) and 40 CFR Part 63.11089(a)] Federally Enforceable Through Title V Permit
16. A log book shall be used and shall be signed by the owner or operator at the completion of each inspection. A section of the log book shall contain a list, summary description, or diagram(s) showing the location of all equipment in gasoline service at the facility. [40 CFR Part 63.11089(b)] Federally Enforceable Through Title V Permit
17. Each detection of a liquid or vapor leak shall be recorded in the log book. When a leak is detected, an initial attempt at repair shall be made as soon as practicable, but no later than 5 calendar days after the leak is detected. Repair or replacement of leaking equipment shall be completed within 15 calendar days after detection of each leak. Delay of repair of leaking equipment will be allowed if the repair is not feasible within 15 days. The owner or operator shall provide in the semiannual report the reason(s) why the repair was not feasible and the date each repair was completed. [40 CFR Part 63.11089(d)] Federally Enforceable Through Title V Permit
18. The owner or operator shall maintain a log book that contain the following information: 1.) dates of leak inspections, 2.) the nature of the leak (i.e. vapor or liquid) and the method of detection; 3.) findings, 4.) corrective action, 5.) repair methods applied in each attempt to repair the leak; 6.) repair delayed and the reason for the delay if the leak is not repaired within 15 calendar days after discovery of the leak; 7.) the expected date of successful repair of the leak if the leak is not repaired within 15 days; 8.) the date of successful repair of the leak; and 9.) inspector name and signature. [District Rule 4624, 40 CFR Part 60.505 (c) and 40 CFR 63.11089(g)] Federally Enforceable Through Title V Permit
19. The owner or operator shall report the number of equipment leaks not repaired within 15 days after detection in a semi-annual report. [40 CFR 63.11089(g)] Federally Enforceable Through Title V Permit

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PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

20. During source testing the loading rack's vapor collection and control system (VCCS) shall be tested at every loading position to demonstrate the pressure in the delivery tanks being loaded complies with the requirements specified in this permit. Compliance shall be determined by calibrating and installing a liquid manometer, magnehelic device, or other instrument demonstrated to be equivalent, capable of measuring up to 500 mm water gauge pressure with a precision of 2.5 mm water gauge, on the terminal's VCCS at a pressure tap as close as possible to the connection with the product tank truck. The highest instantaneous pressure measurement as well as all pressure measurements at 5 minute intervals during delivery vessel loading must be recorded. [District Rule 2520 and 40 CFR 60.503(d)] Federally Enforceable Through Title V Permit
21. Source testing to determine compliance with the emission rate and VOC destruction efficiency requirements of this permit shall be conducted at least once every 60 months. [District Rules 2201 and 4624] Federally Enforceable Through Title V Permit
22. Source testing shall be conducted using methods and procedures approved by District. The District must be notified 30 days prior to any compliance source testing and a pretest plan outlining the test methods and procedures shall be submitted for the District approval no later than 15 days prior to each test. [District Rule 1081] Federally Enforceable Through Title V Permit
23. Source testing shall be witnessed or authorized by District Personnel. [District Rule 1081] Federally Enforceable Through Title V Permit
24. VOC emissions from the vapor collection and control system shall be determined using 40 CFR 60.503 "Test Methods and Procedures" and EPA Reference Methods 2A, 2B, 25A, 25B, and ARB Method 422, or ARB Test Procedure TP-203.1. [District Rule 4624 and San Joaquin County Rule 412] Federally Enforceable Through Title V Permit
25. Source testing for VOC destruction efficiency shall be conducted utilizing EPA Method 18, EPA Method 25A or CARB Method 100. Alternative methods may be utilized provided they are previously approved by the District, in writing. [District Rules 2201 and 4102] Federally Enforceable Through Title V Permit
26. 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
27. A log of all breakdowns of the vapor recovery system indicating the times, dates and gallons processed during the breakdown periods shall be maintained on the premises at all times and shall be made available for District inspection upon request. [District Rule 2520] Federally Enforceable Through Title V Permit
28. A record of the daily quantity of gasoline loaded from the loading racks operating under Permits to Operate N-829-1 and N-829-2 shall be kept. [District Rules 2520, 4624] Federally Enforceable Through Title V Permit
29. A record of the cumulative annual quantity of gasoline loaded from the loading racks operating under Permits to Operate N-829-1 and N-829-2 shall be kept. The record shall be updated at least monthly. [District Rule 2520] Federally Enforceable Through Title V Permit
30. Documentation attesting to the vapor tightness of each truck loaded with gasoline shall be kept. The documentation file for each tank truck shall be updated at least once per year to reflect the current test results as determined by EPA method 27. [40 CFR Part 60.5059(a) and 40 CFR 63.11094(b)] Federally Enforceable Through Title V Permit
31. The semi-annual compliance report shall include each loading of a gasoline cargo tank for which vapor tightness documentation had not been previously obtained by the facility. [40 CFR 63.11088(f)] Federally Enforceable Through Title V Permit
32. All records shall be maintained and retained on-site for a period of at least 5 years and shall be made available for District inspection upon request. [District Rules 1070, 4624] Federally Enforceable Through Title V Permit

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San Joaquin Valley
Air Pollution Control District

**PERMIT UNIT:** N-829-21-5

**EXPIRATION DATE:** 11/30/2020

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**EQUIPMENT DESCRIPTION:**
1,328,124 GALLON WELDED INTERNAL FLOATING ROOF STORAGE TANK (#3302) WITH A MECHANICAL SHOE PRIMARY SEAL, A WIPER SECONDARY SEAL AND A SLOTTED GUIDEPOLE

# PERMIT UNIT REQUIREMENTS

1. True vapor pressure of the organic liquid stored shall be less than 11 psia. [District Rule 4623, 5.1.1] Federally Enforceable Through Title V Permit
2. The tank shall be equipped with a fixed roof with an internal floating type cover equipped with a continuous closure device between the tank wall and the cover edge. [40 CFR 60.112a(2) and 40 CFR 63.11087(a)] Federally Enforceable Through Title V Permit
3. 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 and 5.4.3, 40 CFR 60.112a(2) and 40 CFR 63.11087(a)] Federally Enforceable Through Title V Permit
4. Gaps between the tank shell and the primary seal shall not exceed 1 1/2 inches. [District Rule 4653, 5.3.2.1.1 and 5.4.1] Federally Enforceable Through Title V Permit
5. The cumulative length of all gaps between the tank shell and the primary seal greater than 1/2 inch shall not exceed 10% of the circumference of the tank. [District Rule 4623, 5.3.2.1.1 and 5.4.1] Federally Enforceable Through Title V Permit
6. The cumulative length of all primary seal gaps greater than 1/8 inch shall not exceed 30% of the circumference of the tank. [District Rule 4623, 5.3.2.1.1 and 5.4.1] Federally Enforceable Through Title V Permit
7. No continuous gap in the primary seal greater than 1/8 inch wide shall exceed 10% of the tank circumference. [District Rule 4623, 5.3.2.1.1 and 5.4.1] Federally Enforceable Through Title V Permit
8. No gap between the tank shell and the secondary seal shall exceed 1/2 inch. [District Rule 4623, 5.3.2.1.2 and 5.4.1] Federally Enforceable Through Title V Permit
9. The cumulative length of all gaps between the tank shell and the secondary seal, greater than 1/8 inch shall not exceed 5% of the tank circumference. [District Rule 4623, 5.3.2.1.2 and 5.4.1] Federally Enforceable Through Title V Permit
10. 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, 5.3.2.1.3 and 5.4.1] Federally Enforceable Through Title V Permit
11. The geometry of the metallic-shoe type seal shall be such that the maximum gap between the shoe and the tank shell shall be no greater than 3 inches for a length of at least 18 inches in the vertical plane above the liquid. [District Rule 4623, 5.3.2.1.4 and 5.4.1] Federally Enforceable Through Title V Permit

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

12. There shall be no holes, tears, or openings in the secondary seal or in the primary seal envelope that surrounds the annular vapor space enclosed by the roof edge, seal fabric, and secondary seal. [District Rule 4623, 5.3.2.1.5 and 5.4.1] Federally Enforceable Through Title V Permit

13. The secondary seal shall allow easy insertion of probes of up to 1 1/2 inches in width in order to measure gaps in the primary seal. [District Rule 4623, 5.3.2.1.6 and 5.4.1] Federally Enforceable Through Title V Permit

14. The secondary seal shall extend from the roof to the tank shell and shall not be attached to the primary seal. [District Rule 4623, 5.3.2.1.7 and 5.4.1] Federally Enforceable Through Title V Permit

15. All openings in the roof used for sampling and gauging 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 for sampling or gauging. [District Rule 4623, 5.5.1] 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 gas leak is defined as a reading in excess of 10,000 parts per million by volume (ppmv), as methane, above background on a portable hydrocarbon detection instrument that is calibrated with methane in accordance with the procedures specified in EPA Method 21. Liquid leak is defined as the dripping of organic liquid at a rate of more than 3 drops per minute. A reading in excess to 10,000 ppmv, as methane, above background, or dripping of organic liquid at a rate of more than 3 drops per minute, is a violation of this permit and Rule 4623 and shall be reported as a deviation. [District Rule 4623, 3.11, 3.17, 3.18 and 6.4.8] 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, 5.5.2.1.1 and 40 CFR 63.11087(a)] 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, combination manway/vacuum breakers, 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

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, 5.5.2.1.3] 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, 5.5.2.1.4] 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, 5.5.2.1.5] 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, 5.5.2.1.6] Federally Enforceable Through Title V Permit

23. All slotted sampling or gauging 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

24. 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 not exceed 1/8 inch. [District Rule 4623, 5.5.2.4.3] Federally Enforceable Through Title V Permit

25. The permittee shall notify the District in writing at least 30 days prior to conduct the visual inspection of the storage vessel, so the District can arrange an observer. [40 CFR 63.11087(c)] Federally Enforceable Through Title V Permit

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PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

26. For newly constructed, repaired, or rebuilt internal floating roof tanks, 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. 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, 6.1.4.1 and 40 CFR 63.11087(c)] Federally Enforceable Through Title V Permit

27. The owner or operator shall perform a monthly leak inspection of all equipment in gasoline service, as defined in section 63.11100. For this inspection, detection methods incorporating sight, sound, and smell are acceptable. [40 CFR Part 63.11089(a)] Federally Enforceable Through Title V Permit

28. For monthly leak inspection, a log book shall be used and shall be signed by the owner or operator at the completion of each inspection. A section of the log book shall contain a list, summary description, or diagram(s) showing the location of all equipment in gasoline service at the facility. [40 CFR Part 63.11089(b)] Federally Enforceable Through Title V Permit

29. Each detection of a liquid or vapor leak shall be recorded in the log book. When a leak is detected, an initial attempt at repair shall be made as soon as practicable, but no later than 5 calendar days after the leak is detected. Repair or replacement of leaking equipment shall be completed within 15 calendar days after detection of each leak. Delay of repair of leaking equipment will be allowed if the repair is not feasible within 15 days. The owner or operator shall provide in the semiannual report the reason(s) why the repair was not feasible and the date each repair was completed. [40 CFR Part 63.11089(d)] Federally Enforceable Through Title V Permit

30. The owner or operator shall maintain a log book that contain the following information for a leak during during monthly inspection: 1.) equipment type and identification number; 2.) the nature of the leak (i.e. vapor or liquid) and the method of detection (i.e. sight, sound, or smell); 3.) the date the leak was detected and the date of each attempt to repair the leak; 4.) repair methods applied in each attempt to repair the leak; 5.) repair delayed and the reason for the delay if the leak is not repaired within 15 calendar days after discovery of the leak; 6) the expected date of successful repair of the leak if the leak is not repaired within 15 days; and 7.) the date of successful repair of the leak. [40 CFR 63.11089(g)] Federally Enforceable Through Title V Permit

31. The permittee shall visually inspect, through the manholes, roof hatches, or other opening 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, 6.1.4.2 and 40 CFR 63.11087(c)] Federally Enforceable Through Title V Permit

32. If any failure (i.e. visible organic liquid on the internal floating roof, tank walls or anywhere, holes or tears in the seal fabric) is detected during 12 month visual inspection, the permittee shall repair the items or empty and remove the storage vessel from service within 45 days. If the detected failure cannot be repaired within 45 days and if the vessel cannot be emptied within 45 days, a 30-day extension may be requested from the APCO in the inspection report. Such a request must document that alternate storage capacity is unavailable and specify a schedule of actions the company will take that will assure theat the control equipment will be repaired or the vessel will be emptied as soon as possible. [40 CFR 63.11087(c)] Federally Enforceable Through Title V Permit

33. The permittee shall visually inspect the internal floating roof, the primary seal, the secondary seal, gaskets, slotted memberanes and sleeve seals (if any) each time the vessel is emptied and degassed. If the internal floating roof has defects, the primary seal has holes, tears, or other openings in the seal or the seal fabric, or the secondary seal has holes, tears, or other openings in the seal or the seal fabric, or the gaskets no longer close off the liquid surfaces from the atmosphere, or the slotted membrane has more than 10 percent open area, the owner or operator shall repair the items as necessary so that none of the conditions specified in this paragraph exist before refilling the storage vessel. [40 CFR Part 63.11087(c)] Federally Enforceable Through Title V Permit

34. The owner or operator shall report the number of equipment leaks not repaired within 15 days after detection in a semi-annual report. [40 CFR 63.11089(g)] Federally Enforceable Through Title V Permit

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PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

36. The operator shall determine the presence of gas leaks using portable hydrocarbon detection instrument in accordance with EPA Method 21. The instrument shall be calibrated before use each day of its use by the procedures specified in Method 21 using the following calibration gases: 1.) Zero air (less than 10 ppm of hydrocarbon in air); and 2.) A mixture of methane or n-hexane and air at a concentration of about, but less than, 10,000 ppm methane or n-hexane. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

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

38. The permittee shall conduct actual gap measurements of the primary seal and/or secondary seal at least once every 60 months. Other than the gap criteria specified by this permit, no holes, tears, or other openings are allowed that would permit the escape of hydrocarbon vapors. Any defects found shall constitute a violation of this permit. [District Rule 4623, 6.1.4.3 and 40 CFR 63.11087(c)] Federally Enforceable Through Title V Permit

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

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

41. The operator shall keep a record of liquids stored in each container, period of storage, and the maximum true vapor pressure of the liquid during the respective storage period. [40 CFR 60.115a(a)] Federally Enforceable Through Title V Permit

42. The permittee shall determine the maximum true vapor pressure of the stored organic liquid on a monthly basis, using the calculation methodology listed in Appendix B of District Rule 4623. The permittee shall keep a record of all reid vapor pressure measurements for the stored organic liquid and shall use the highest recorded reid vapor pressure of the month when determining the maximum true vapor pressure. The permittee shall keep a record of the actual storage temperature of the organic storage tank and shall use the highest temperature recorded of the month when determining the maximum true vapor pressure. [40 CFR 60.115a(b)] Federally Enforceable Through Title V Permit

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PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

43. The permittee shall submit the reports of the floating roof tank inspections to the APCO within five calendar days after the completion of the inspection only for those tanks that failed to meet the applicable requirements of Rule 4623, Sections 5.2 through 5.5. The inspection report for tanks that that have been determined to be in compliance with the requirements of Sections 5.2 through 5.5 need not be submitted to the APCO, but the inspection report shall be kept on-site and made available upon request by the APCO. The inspection report shall contain all necessary information to demonstrate compliance with the provisions of this rule, including the following: 1.) Date of inspection and names and titles of company personnel doing the inspection; 2.) Tank identification number and Permit to Operate number; 3.) Measurements of the gaps between the tank shell and primary and secondary seals; 4.) Leak-free status of the tank and floating roof deck fittings. Records of the leak-free status shall include the vapor concentration values measured in ppmv. 5.) Data, supported by calculations, demonstrating compliance with the requirements specified in Sections 5.3, 5.4, 5.5.2.3.3, 5.5.2.4.2, and 5.5.2.4.3 of Rule 4623. 6.) Any corrective actions or repairs performed on the tank in order to comply with Rule 4623 and the date(s) such actions were taken. [District Rule 4623, 6.3.5 and 40 CFR 63.11087(e)] Federally Enforceable Through Title V Permit

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

45. The following test methods shall be used: ASTM Method D287 for determining API Gravity, ASTM Method D4057 sampling for API Gravity testing; ASTM D323 for determining RVP, and converting RVP to TVP at the tank's maximum organic liquid storage temperature; ARB Method 422 for determining exempt halogenated VOCs in gases; EPA Method 21 for measuring gas-leak concentration. Should the owner or operator wish to use test methods other than the ones mentioned in this condition, the methods must be approved by the District prior to its use. [District Rule 4623, 6.4] Federally Enforceable Through Title V Permit

46. The operator shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rules 4623, 6.3 and 2520, 9.4.2] Federally Enforceable Through Title V Permit

47. There shall be no vapor space between the internal floating pan and the liquid surface. [District NSR Rule] Federally Enforceable Through Title V Permit

48. At least 95% of all hydrocarbon vapors generated during the storage and the working of the storage tank shall be prevented from entrainment into the atmosphere. [District NSR Rule] Federally Enforceable Through Title V Permit

49. The permittee shall maintain records sufficient to demonstrate compliance with the daily VOC emission limit. These records shall contain the calculated emission quantity as well as each process variable used in the respective calculations/modeling. [District Rule 2080] Federally Enforceable Through Title V Permit

50. The internal floating roof supports, manholes, automatic bleeder vents, rim vents, gauge wells, etc., shall be covered with foam seal in a manner which prevents any gap. [District NSR Rule] Federally Enforceable Through Title V Permit

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San Joaquin Valley
Air Pollution Control District

**PERMIT UNIT:** N-829-22-5

**EXPIRATION DATE:** 11/30/2020

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**EQUIPMENT DESCRIPTION:**
1,218,000 GALLON WELDED INTERNAL FLOATING ROOF STORAGE TANK (#3303) WITH A WIPER PRIMARY SEAL AND A SLOTTED GUIDEPOLE

# PERMIT UNIT REQUIREMENTS

1. True vapor pressure of the organic liquid stored shall be less than 11 psia. [District Rule 4623, 5.1.1] Federally Enforceable Through Title V Permit
2. The tank shall be equipped with a fixed roof with an internal floating type cover equipped with one of the following closure devices between the tank wall and the cover edge: 1) A foam- or liquid-filled seal mounted in contact with the liquid (liquid-mounted seal); 2) Two seals mounted one above the other so that each forms a continuous closure that completely covers the space between the wall of the storage vessel and the edge of the internal floating roof; or 3) A mechanical shoe seal. [40 CFR 60.112b(a)(1)(ii) and 40 CFR 63.11087(a)] Federally Enforceable Through Title V Permit
3. The internal floating roof shall float on the surface of the stored liquid at all times (i.e., off the roof leg supports) except during the initial fill until the roof is lifted off the leg supports and when the tank is completely emptied and subsequently refilled. When the roof is resting on the leg supports, the process of filling, emptying, or refilling shall be continuous and shall be accomplished as rapidly as possible. Whenever the permittee intends to land the roof on it's legs, the permittee shall notify the APCO in writing at least five calendar days prior to performing the work. The tank must be in compliance with this rule before it may land on its legs. [District Rule 4623, 5.3.1.3 and 5.4.3, 40 CFR 60.112b(a)(1)(i) and 40 CFR 63.11087(a)] Federally Enforceable Through Title V Permit
4. The tank shall be equipped with an Ultraflote, model Single Ultraseal, wiper primary seal. [District Rule 4623, 5.4.2 and 40 CFR 63.11087(a)] Federally Enforceable Through Title V Permit
5. No gap between the tank shell and the seal shell shall exceed 0.06 inch. [District Rule 4623, 3.37 and 5.4.2.1] Federally Enforceable Through Title V Permit
6. The cumulative length of all gaps exceeding 0.02 inch shall not be more than 5% of the circumference of the tank, excluding gaps less than 1.79 inches from vertical seams. [District Rule 4623, 3.37 and 5.4.2.1] Federally Enforceable Through Title V Permit
7. All openings in the roof used for sampling and gauging shall provide a projection below the liquid surface to prevent belching of liquid and to prevent entrained or formed organic vapor from escaping from the liquid contents of the tank and shall be equipped with a cover, seal or lid. The cover seal or lid shall be in a closed position, with no visible gaps and be leak-free, except when the device or appurtenance is in use for sampling or gauging. [District Rule 4623, 5.5.1] Federally Enforceable Through Title V Permit
8. A leak-free condition is defined as a condition without a gas leak or a liquid leak. A gas leak is defined as a reading in excess of 10,000 parts per million by volume (ppmv), as methane, above background on a portable hydrocarbon detection instrument that is calibrated with methane in accordance with the procedures specified in EPA Method 21. Liquid leak is defined as the dripping of organic liquid at a rate of more than 3 drops per minute. A reading in excess to 10,000 ppmv, as methane, above background, or dripping of organic liquid at a rate of more than 3 drops per minute, is a violation of this permit and Rule 4623 and shall be reported as a deviation. [District Rule 4623, 3.11, 3.17, 3.18 and 6.4.8] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE


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9. 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, 40 CFR 60.112b(a)(1)(iii) and 40 CFR 63.11087(a)] Federally Enforceable Through Title V Permit

10. Each opening in the internal floating roof except for leg sleeves, automatic bleeder vents, rim space vents, column wells, ladder wells, sample wells, combination manway/vacuum breakers, and stub drains shall be equipped with a cover, or a lid shall be maintained in a closed position at all times (i.e. no visible gaps) except when the device is in use. The cover or lid shall be equipped with a gasket. Covers on each access hatch and automatic gauge float well shall be bolted in place except when they are in use. [District Rule 4623, 5.5.2.1.2 and 40 CFR 60.112b(a)(1)(iv)] Federally Enforceable Through Title V Permit

11. Automatic bleeder vents shall be equipped with a gasket and shall be closed at all times when the roof is floating except when the roof is being floated off or is being landed on the leg roof supports. [District Rule 4623, 5.5.2.1.3 and 40 CFR 60.112b(a)(1)(v)] Federally Enforceable Through Title V Permit

12. Rim vents shall be equipped with a gasket and shall 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 and 40 CFR 60.112b(a)(1)(vi)] Federally Enforceable Through Title V Permit

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

14. Each penetration of the internal floating roof that allows for the 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 and 40 CFR 60.112b(a)(1)(viii)] Federally Enforceable Through Title V Permit

15. Each penetration of the internal floating roof that allows for passage of a ladder shall have a gasketed sliding cover. [40 CFR 60.112b(a)(1)(ix)] Federally Enforceable Through Title V Permit

16. All slotted sampling or gauging 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

17. The gap between the pole wiper and the slotted guidepole shall not exceed 1/8 inch. [District Rule 4623, 5.5.2.4.3] Federally Enforceable Through Title V Permit

18. The permittee shall notify the District in writing at least 30 days prior to conduct the visual inspection of the storage vessel, so the District can arrange an observer. [40 CFR 63.11087(c)] Federally Enforceable Through Title V Permit

19. For newly constructed, repaired, or rebuilt internal floating roof tanks, 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. 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, 6.1.4.1, 40 CFR 60.113b(a)(1) and 40 CFR 63.11087(c)] Federally Enforceable Through Title V Permit

20. The owner or operator shall perform a monthly leak inspection of all equipment in gasoline service, as defined in section 63.11100. For this inspection, detection methods incorporating sight, sound, and smell are acceptable. [40 CFR Part 63.11089(a)] Federally Enforceable Through Title V Permit

21. For monthly leak inspection, a log book shall be used and shall be signed by the owner or operator at the completion of each inspection. A section of the log book shall contain a list, summary description, or diagram(s) showing the location of all equipment in gasoline service at the facility. [40 CFR Part 63.11089(b)] Federally Enforceable Through Title V Permit

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22. Each detection of a liquid or vapor leak shall be recorded in the log book. When a leak is detected, an initial attempt at repair shall be made as soon as practicable, but no later than 5 calendar days after the leak is detected. Repair or replacement of leaking equipment shall be completed within 15 calendar days after detection of each leak. Delay of repair of leaking equipment will be allowed if the repair is not feasible within 15 days. The owner or operator shall provide in the semiannual report the reason(s) why the repair was not feasible and the date each repair was completed. [40 CFR Part 63.11089(d)] Federally Enforceable Through Title V Permit

23. The owner or operator shall maintain a log book that contain the following information for a leak during during monthly inspection: 1.) equipment type and identification number; 2.) the nature of the leak (i.e. vapor or liquid) and the method of detection (i.e. sight, sound, or smell); 3.) the date the leak was detected and the date of each attempt to repair the leak; 4.) repair methods applied in each attempt to repair the leak; 5.) repair delayed and the reason for the delay if the leak is not repaired within 15 calendar days after discovery of the leak; 6) the expected date of successful repair of the leak if the leak is not repaired within 15 days; and 7.) the date of successful repair of the leak. [40 CFR 63.11089(g)] Federally Enforceable Through Title V Permit

24. The permittee shall visually inspect, through the manholes, roof hatches, or other opening 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, 6.1.4.2, 40 CFR 60.113b(a)(2) and 40 CFR 63.11087(c)] Federally Enforceable Through Title V Permit

25. If any failure (i.e. visible organic liquid on the internal floating roof, tank walls or anywhere, holes or tears in the seal fabric) is detected during 12 month visual inspection, the permittee shall repair the items or empty and remove the storage vessel from service within 45 days. If the detected failure cannot be repaired within 45 days and if the vessel cannot be emptied within 45 days, a 30-day extension may be requested from the APCO in the inspection report. Such a request must document that alternate storage capacity is unavailable and specify a schedule of actions the company will take that will assure theat the control equipment will be repaired or the vessel will be emptied as soon as possible. [40 CFR 63.11087(c)] Federally Enforceable Through Title V Permit

26. The permittee shall visually inspect the internal floating roof, the primary seal, the secondary seal, gaskets, slotted memberanes and sleeve seals (if any) each time the vessel is emptied and degassed. If the internal floating roof has defects, the primary seal has holes, tears, or other openings in the seal or the seal fabric, or the secondary seal has holes, tears, or other openings in the seal or the seal fabric, or the gaskets no longer close off the liquid surfaces from the atmosphere, or the slotted membrane has more than 10 percent open area, the owner or operator shall repair the items as necessary so that none of the conditions specified in this paragraph exist before refilling the storage vessel. [40 CFR Part 63.11087(c)] Federally Enforceable Through Title V Permit

27. The permittee shall maintain records of all visual inspections required by this permit. Each record shall identify the storage vessel on which the inspection was performed, the date the vessel was inspected and the observed condition of each component of the control equipment (seals, internal floating roof, and fittings). [40 CFR 60.115b(a)(2)] Federally Enforceable Through Title V Permit

28. The owner or operator shall report the number of equipment leaks not repaired within 15 days after detection in a semi-annual report. [40 CFR 63.11089(g)] Federally Enforceable Through Title V Permit

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

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30. The operator shall determine the presence of gas leaks using portable hydrocarbon detection instrument in accordance with EPA Method 21. The instrument shall be calibrated before use each day of its use by the procedures specified in Method 21 using the following calibration gases: 1.) Zero air (less than 10 ppm of hydrocarbon in air); and 2.) A mixture of methane or n-hexane and air at a concentration of about, but less than, 10,000 ppm methane or n-hexane. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

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

32. The permittee shall conduct actual gap measurements of the primary seal and/or secondary seal at least once every 60 months. Other than the gap criteria specified by this permit, no holes, tears, or other openings are allowed that would permit the escape of hydrocarbon vapors. Any defects found shall constitute a violation of this permit. [District Rule 4623, 6.1.4.3 and 40 CFR 63.11087(c)] Federally Enforceable Through Title V Permit

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

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

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

36. The operator shall keep a record of the liquids stored in this container, the period of storage, and the maximum true vapor pressure (TVP) of that liquid during the respective storage period. [40 CFR 60.116b(c)] Federally Enforceable Through Title V Permit

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

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

39. The permittee shall determine the maximum true vapor pressure of the stored organic liquid on a monthly basis, using the calculation methodology listed in Appendix B of District Rule 4623. The permittee shall keep a record of all reid vapor pressure measurements for the stored organic liquid and shall use the highest recorded reid vapor pressure of the month when determining the maximum true vapor pressure. The permittee shall keep a record of the actual storage temperature of the organic storage tank and shall use the highest temperature recorded of the month when determining the maximum true vapor pressure. [District Rule 4623 and 40 CFR 60.116b(e)(2)(i)] Federally Enforceable Through Title V Permit

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

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

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

43. The permittee shall submit the reports of the floating roof tank inspections to the APCO within five calendar days after the completion of the inspection only for those tanks that failed to meet the applicable requirements of Rule 4623, Sections 5.2 through 5.5. The inspection report for tanks that that have been determined to be in compliance with the requirements of Sections 5.2 through 5.5 need not be submitted to the APCO, but the inspection report shall be kept on-site and made available upon request by the APCO. The inspection report shall contain all necessary information to demonstrate compliance with the provisions of this rule, including the following: 1.) Date of inspection and names and titles of company personnel doing the inspection; 2.) Tank identification number and Permit to Operate number; 3.) Measurements of the gaps between the tank shell and primary and secondary seals; 4.) Leak-free status of the tank and floating roof deck fittings. Records of the leak-free status shall include the vapor concentration values measured in ppmv. 5.) Data, supported by calculations, demonstrating compliance with the requirements specified in Sections 5.3, 5.4, 5.5.2.3.3, 5.5.2.4.2, and 5.5.2.4.3 of Rule 4623. 6.) Any corrective actions or repairs performed on the tank in order to comply with Rule 4623 and the date(s) such actions were taken. [District Rule 4623, 6.3.5, 40 CFR 60.115b(a)(3) and 40 CFR 63.11087(e)] Federally Enforceable Through Title V Permit

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

45. The following test methods shall be used: ASTM Method D287 for determining API Gravity, ASTM Method D4057 sampling for API Gravity testing; ASTM D323 for determining RVP, and converting RVP to TVP at the tank's maximum organic liquid storage temperature; ARB Method 422 for determining exempt halogenated VOCs in gases; EPA Method 21 for measuring gas-leak concentration. Should the owner or operator wish to use test methods other than the ones mentioned in this condition, the methods must be approved by the District prior to its use. [District Rule 4623, 6.4] Federally Enforceable Through Title V Permit

46. The operator shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rules 4623, 6.3 and 2520, 9.4.2] Federally Enforceable Through Title V Permit

47. At least 95% of all hydrocarbon vapors generated during the storage and the working of the storage tank shall be prevented from entrainment into the atmosphere. [District NSR Rule] Federally Enforceable Through Title V Permit

48. The internal floating roof supports, manholes, automatic bleeder vents, rim vents, gauge wells, etc., shall be covered with foam seal in a manner which prevents any gap. [District NSR Rule] Federally Enforceable Through Title V Permit

49. The internal floating roof shall be in direct contact with the liquid surface in a manner which prevents any vapor space below the internal roof. [District NSR Rule] Federally Enforceable Through Title V Permit

50. VOC emissions from tanks N-829-7, '-17, '-18, and '-22 shall not exceed 165 pounds per day. [District NSR Rule] Federally Enforceable Through Title V Permit

51. The permittee shall notify the District for an inspection prior to the filling of the tank with liquid in a manner which allows for unobstructed inspection of the seals from above and below the internal roof. [District NSR Rule] Federally Enforceable Through Title V Permit

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# San Joaquin Valley
# Air Pollution Control District

**PERMIT UNIT:** N-829-28-6

**EXPIRATION DATE:** 11/30/2020

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**EQUIPMENT DESCRIPTION:**
3,360,000 GALLON WELDED INTERNAL FLOATING ROOF STORAGE TANK (#80001) WITH A MECHANICAL SHOE PRIMARY SEAL, A WIPER SECONDARY SEAL AND A SLOTTED GUIDEPOLE

## PERMIT UNIT REQUIREMENTS

1. True vapor pressure of the organic liquid stored shall be less than 11 psia. [District Rule 4623, 5.1.1] Federally Enforceable Through Title V Permit
2. The tank shall be equipped with a floating roof consisting of a pan type that is installed before December 20, 2001, pontoon-type, or double-deck type cover, that rests on the surface of the liquid contents and is equipped with a closure device between the tank shell and roof edge consisting of a primary seal and a secondary seal. [District Rule 4623, 5.3.1.1 and 5.3.1.2, 40 CFR 60.112a(2) and 40 CFR 63.11087(a)] Federally Enforceable Through Title V Permit
3. The floating roof shall be floating on the surface of the stored liquid at all times (i.e., off the roof leg supports) except during the initial fill until the roof is lifted off the leg supports and when the tank is completely emptied and subsequently refilled. When the roof is resting on the leg supports the processes of filling or emptying and refilling the tank shall be continuous and shall be accomplished as rapidly as possible. Whenever the 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 the roof on its legs. [District Rule 4623, 5.3.1.3 and 5.4.3, 40 CFR 60.112a(2) and 40 CFR 63.11087(a)] Federally Enforceable Through Title V Permit
4. Gaps between the tank shell and the primary seal shall not exceed 1 1/2 inches. [District Rule 4623, 5.3.2.1.1 and 5.4.1] Federally Enforceable Through Title V Permit
5. The cumulative length of all gaps between the tank shell and the primary seal greater than 1/2 inch shall not exceed 10% of the circumference of the tank. [District Rule 4623, 5.3.2.1.1 and 5.4.1] Federally Enforceable Through Title V Permit
6. The cumulative length of all primary seal gaps greater than 1/8 inch shall not exceed 30% of the circumference of the tank. [District Rule 4623, 5.3.2.1.1 and 5.4.1] Federally Enforceable Through Title V Permit
7. No continuous gap in the primary seal greater than 1/8 inch wide shall exceed 10% of the tank circumference. [District Rule 4623, 5.3.2.1.1 and 5.4.1] Federally Enforceable Through Title V Permit
8. No gap between the tank shell and the secondary seal shall exceed 1/2 inch. [District Rule 4623, 5.3.2.1.2 and 5.4.1] Federally Enforceable Through Title V Permit
9. The cumulative length of all gaps between the tank shell and the secondary seal, greater than 1/8 inch shall not exceed 5% of the tank circumference. [District Rule 4623, 5.3.2.1.2 and 5.4.1] Federally Enforceable Through Title V Permit
10. 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, 5.3.2.1.3 and 5.4.1] Federally Enforceable Through Title V Permit
11. The geometry of the metallic-shoe type seal shall be such that the maximum gap between the shoe and the tank shell shall be no greater than 3 inches for a length of at least 18 inches in the vertical plane above the liquid. [District Rule 4623, 5.3.2.1.4 and 5.4.1] Federally Enforceable Through Title V Permit

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12. There shall be no holes, tears, or openings in the secondary seal or in the primary seal envelope that surrounds the annular vapor space enclosed by the roof edge, seal fabric, and secondary seal. [District Rule 4623, 5.3.2.1.5 and 5.4.1] Federally Enforceable Through Title V Permit

13. The secondary seal shall allow easy insertion of probes of up to 1 1/2 inches in width in order to measure gaps in the primary seal. [District Rule 4623, 5.3.2.1.6 and 5.4.1] Federally Enforceable Through Title V Permit

14. The secondary seal shall extend from the roof to the tank shell and shall not be attached to the primary seal. [District Rule 4623, 5.3.2.1.7 and 5.4.1] Federally Enforceable Through Title V Permit

15. All openings in the roof used for sampling and gauging 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 for sampling and gauging. [District Rule 4623, 5.5.2.1.2] 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 gas leak is defined as a reading in excess of 10,000 parts per million by volume (ppmv), as methane, above background on a portable hydrocarbon detection instrument that is calibrated with methane in accordance with the procedures specified in EPA Method 21. Liquid leak is defined as the dripping of organic liquid at a rate of more than 3 drops per minute. A reading in excess to 10,000 ppmv, as methane, above background, or dripping of organic liquid at a rate of more than 3 drops per minute, is a violation of this permit and Rule 4623 and shall be reported as a deviation. [District Rule 4623, 3.11, 3.17, 3.18 and 6.4.8] 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, 5.5.2.1.1 and 40 CFR 63.11087(a)] 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, combination manway/vacuum breakers, 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

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, 5.5.2.1.3] 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, 5.5.2.1.4] 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, 5.5.2.1.5] 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, 5.5.2.1.6] Federally Enforceable Through Title V Permit

23. All slotted sampling or gauging 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

24. 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 not exceed 1/8 inch. [District Rule 4623, 5.5.2.4.3] Federally Enforceable Through Title V Permit

25. The permittee shall notify the District in writing at least 30 days prior to conduct the visual inspection of the storage vessel, so the District can arrange an observer. [40 CFR 63.11087(c)] Federally Enforceable Through Title V Permit

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26. For newly constructed, repaired, or rebuilt internal floating roof tanks, 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. 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, 6.1.4.1 and 40 CFR 63.11087(c)] Federally Enforceable Through Title V Permit

27. The owner or operator shall perform a monthly leak inspection of all equipment in gasoline service, as defined in section 63.11100. For this inspection, detection methods incorporating sight, sound, and smell are acceptable. [40 CFR Part 63.11089(a)] Federally Enforceable Through Title V Permit

28. For monthly leak inspection, a log book shall be used and shall be signed by the owner or operator at the completion of each inspection. A section of the log book shall contain a list, summary description, or diagram(s) showing the location of all equipment in gasoline service at the facility. [40 CFR Part 63.11089(b)] Federally Enforceable Through Title V Permit

29. Each detection of a liquid or vapor leak shall be recorded in the log book. When a leak is detected, an initial attempt at repair shall be made as soon as practicable, but no later than 5 calendar days after the leak is detected. Repair or replacement of leaking equipment shall be completed within 15 calendar days after detection of each leak. Delay of repair of leaking equipment will be allowed if the repair is not feasible within 15 days. The owner or operator shall provide in the semiannual report the reason(s) why the repair was not feasible and the date each repair was completed. [40 CFR Part 63.11089(d)] Federally Enforceable Through Title V Permit

30. The owner or operator shall maintain a log book that contain the following information for a leak during during monthly inspection: 1.) equipment type and identification number; 2.) the nature of the leak (i.e. vapor or liquid) and the method of detection (i.e. sight, sound, or smell); 3.) the date the leak was detected and the date of each attempt to repair the leak; 4.) repair methods applied in each attempt to repair the leak; 5.) repair delayed and the reason for the delay if the leak is not repaired within 15 calendar days after discovery of the leak; 6) the expected date of successful repair of the leak if the leak is not repaired within 15 days; and 7.) the date of successful repair of the leak. [40 CFR 63.11089(g)] Federally Enforceable Through Title V Permit

31. The permittee shall visually inspect, through the manholes, roof hatches, or other opening 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, 6.1.4.2 and 40 CFR 63.11087(c)] Federally Enforceable Through Title V Permit

32. If any failure (i.e. visible organic liquid on the internal floating roof, tank walls or anywhere, holes or tears in the seal fabric) is detected during 12 month visual inspection, the permittee shall repair the items or empty and remove the storage vessel from service within 45 days. If the detected failure cannot be repaired within 45 days and if the vessel cannot be emptied within 45 days, a 30-day extension may be requested from the APCO in the inspection report. Such a request must document that alternate storage capacity is unavailable and specify a schedule of actions the company will take that will assure theat the control equipment will be repaired or the vessel will be emptied as soon as possible. [40 CFR 63.11087(c)] Federally Enforceable Through Title V Permit

33. The permittee shall visually inspect the internal floating roof, the primary seal, the secondary seal, gaskets, slotted memberanes and sleeve seals (if any) each time the vessel is emptied and degassed. If the internal floating roof has defects, the primary seal has holes, tears, or other openings in the seal or the seal fabric, or the secondary seal has holes, tears, or other openings in the seal or the seal fabric, or the gaskets no longer close off the liquid surfaces from the atmosphere, or the slotted membrane has more than 10 percent open area, the owner or operator shall repair the items as necessary so that none of the conditions specified in this paragraph exist before refilling the storage vessel. [40 CFR Part 63.11087(c)] Federally Enforceable Through Title V Permit

34. The owner or operator shall report the number of equipment leaks not repaired within 15 days after detection in a semi-annual report. [40 CFR 63.11089(g)] Federally Enforceable Through Title V Permit

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PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

36. The operator shall determine the presence of gas leaks using portable hydrocarbon detection instrument in accordance with EPA Method 21. The instrument shall be calibrated before use each day of its use by the procedures specified in Method 21 using the following calibration gases: 1.) Zero air (less than 10 ppm of hydrocarbon in air); and 2.) A mixture of methane or n-hexane and air at a concentration of about, but less than, 10,000 ppm methane or n-hexane. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

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

38. The permittee shall conduct actual gap measurements of the primary seal and/or secondary seal at least once every 60 months. Other than the gap criteria specified by this permit, no holes, tears, or other openings are allowed that would permit the escape of hydrocarbon vapors. Any defects found shall constitute a violation of this permit. [District Rule 4623, 6.1.4.3 and 40 CFR 63.11087(c)] Federally Enforceable Through Title V Permit

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

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

41. The operator shall keep a record of liquids stored in each container, period of storage, and the maximum true vapor pressure of the liquid during the respective storage period. [40 CFR 60.115a(a)] Federally Enforceable Through Title V Permit

42. The permittee shall determine the maximum true vapor pressure of the stored organic liquid on a monthly basis, using the calculation methodology listed in Appendix B of District Rule 4623. The permittee shall keep a record of all reid vapor pressure measurements for the stored organic liquid and shall use the highest recorded reid vapor pressure of the month when determining the maximum true vapor pressure. The permittee shall keep a record of the actual storage temperature of the organic storage tank and shall use the highest temperature recorded of the month when determining the maximum true vapor pressure. [District Rule 4623 and 40 CFR 60.115a(b)] Federally Enforceable Through Title V Permit

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PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

43. The permittee shall submit the reports of the floating roof tank inspections to the APCO within five calendar days after the completion of the inspection only for those tanks that failed to meet the applicable requirements of Rule 4623, Sections 5.2 through 5.5. The inspection report for tanks that that have been determined to be in compliance with the requirements of Sections 5.2 through 5.5 need not be submitted to the APCO, but the inspection report shall be kept on-site and made available upon request by the APCO. The inspection report shall contain all necessary information to demonstrate compliance with the provisions of this rule, including the following: 1.) Date of inspection and names and titles of company personnel doing the inspection; 2.) Tank identification number and Permit to Operate number; 3.) Measurements of the gaps between the tank shell and primary and secondary seals; 4.) Leak-free status of the tank and floating roof deck fittings. Records of the leak-free status shall include the vapor concentration values measured in ppmv. 5.) Data, supported by calculations, demonstrating compliance with the requirements specified in Sections 5.3, 5.4, 5.5.2.3.3, 5.5.2.4.2, and 5.5.2.4.3 of Rule 4623. 6.) Any corrective actions or repairs performed on the tank in order to comply with Rule 4623 and the date(s) such actions were taken. [District Rule 4623, 6.3.5 and 40 CFR 63.11087(e)] Federally Enforceable Through Title V Permit

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

45. The following test methods shall be used: ASTM Method D287 for determining API Gravity, ASTM Method D4057 sampling for API Gravity testing; ASTM D323 for determining RVP, and converting RVP to TVP at the tank's maximum organic liquid storage temperature; ARB Method 422 for determining exempt halogenated VOCs in gases; EPA Method 21 for measuring gas-leak concentration. Should the owner or operator wish to use test methods other than the ones mentioned in this condition, the methods must be approved by the District prior to its use. [District Rule 4623, 6.4] Federally Enforceable Through Title V Permit

46. The operator shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rules 4623, 6.3 and 2520, 9.4.2] Federally Enforceable Through Title V Permit

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# San Joaquin Valley
# Air Pollution Control District

**PERMIT UNIT:** N-829-29-7

**EXPIRATION DATE:** 11/30/2020

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**EQUIPMENT DESCRIPTION:**
3,360,000 GALLON WELDED EXTERNAL FLOATING ROOF STORAGE TANK (#80002) WITH A MECHANICAL SHOE PRIMARY SEAL, A WIPER SECONDARY SEAL AND A SLOTTED GUIDEPOLE

## PERMIT UNIT REQUIREMENTS

1. True vapor pressure of the organic liquid stored shall be less than 11 psia. [District Rule 4623, 5.1.1] Federally Enforceable Through Title V Permit
2. The tank shall be equipped with a floating roof consisting of a pan type that was installed before December 20, 2001, pontoon-type or double-deck-type cover which rests upon the surface of the liquid being stored and is equipped with a closure device between the tank shell and roof edge consisting of a primary and a secondary seal. [District Rule 4623, 5.3.1.1 and 5.3.1.2, 40 CFR 60.112a(a)(1) and 40 CFR 63.11087(a)] Federally Enforceable Through Title V Permit
3. Roof shall be floating on the liquid (i.e., off the roof leg supports) at all times except during initial fill and when tank is completely emptied and subsequently refilled. The process of emptying and refilling when the roof is resting on the leg supports shall be continuous and shall be accomplished as rapidly as possible. Whenever the permittee intends to land the roof on it's legs, the permittee shall notify the APCO in writing at least five calendar days prior to performing the work. The tank must be in compliance with this rule before it may land on its legs. [District Rule 4623, 5.3.1.3, 40 CFR 60.112a(a)(1) and 40 CFR 63.11087(a)] Federally Enforceable Through Title V Permit
4. Primary seal (lower seal) shall be a metallic shoe seal, a liquid-mounted seal, or a vapor-mounted seal. [40 CFR 60.112a(a)(1)(i) and 40 CFR 63.11087(a)] Federally Enforceable Through Title V Permit
5. Accumulated area of gaps between tank wall and primary seal shall not exceed: 1) 10.0 in2 per foot of tank diameter and the width of any portion of any gap shall not exceed 1-1/2 inch, for a metallic shoe seal or a liquid-mounted seal; 2) 1.0 in2 per foot of tank diameter and the width of any portion of any gap shall not exceed 1/2 inch for a vapor mounted seal. [40 CFR 60.112a(a)(1)(i)(A) & (B), District Rule 4623, 5.3.2.1.1 and 40 CFR 63.11087(c)] Federally Enforceable Through Title V Permit
6. The cumulative length of all gaps between the tank shell and the primary seal: 1) Greater than one-half (1/2) inch shall not exceed 10 percent of the circumference of the tank; and 2) Greater than one-eighth (1/8) inch shall not exceed 30 percent of the circumference of the tank. [District Rule 4623, 5.3.2.1.1] Federally Enforceable Through Title V Permit
7. No continuous gap in the primary seal greater than 1/8 inch wide shall exceed 10% of the tank circumference. [District Rule 4623, 5.3.2.1.1] Federally Enforceable Through Title V Permit
8. If the secondary seal is used in combination with a metallic shoe or liquid-mounted primary seal, accumulated area of gaps between tank wall and the secondary seal shall not exceed 1.0 in2 per foot of tank diameter and the width of any portion of any gap shall not exceed 1/2 inch. [District Rule 4623, 5.3.2.1.2, 40 CFR 60.112a(a)(1)(i)(B) and 40 CFR 63.11087(c)] Federally Enforceable Through Title V Permit
9. The cumulative length of all gaps between the tank shell and the secondary seal, greater than 1/8 inch shall not exceed 5% of the tank circumference. [District Rule 4623, 5.3.2.1.2] Federally Enforceable Through Title V Permit
10. The metallic shoe-type seal shall be installed so that one end of the shoe extends into the stored liquid and the other end extends a minimum vertical distance of 24 inches above the stored liquid surface. [District Rule 4623, 5.3.2.1.3, 40 CFR 60.112a(a)(1)(i)(C) and 40 CFR Part 63.11087(c)] Federally Enforceable Through Title V Permit

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PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

12. There shall be no holes, tears, or openings in the secondary seal or in the primary seal envelope that surrounds the annular vapor space enclosed by the roof edge, seal fabric, and secondary seal. [District Rule 4623, 5.3.2.1.5, 40 CFR 60.112a(a)(1)(i)(D), and 40 CFR 60.112a(a)(1)(ii)(B)] Federally Enforceable Through Title V Permit

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

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

15. All openings in the roof used for sampling and gauging shall provide a projection below the liquid surface to prevent belching of liquid and to prevent entrained or formed organic vapor from escaping from the liquid contents of the tank and shall be equipped with a cover, seal or lid that shall be in a closed position at all times, with no visible gaps and be leak-free, except when the device or appurtenance is in use. [District Rule 4623, 5.5.1 and 40 CFR 60.112a(a)(1)(iii)] 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 gas leak is defined as a reading in excess of 10,000 parts per million by volume (ppmv), as methane, above background on a portable hydrocarbon detection instrument that is calibrated with methane in accordance with the procedures specified in EPA Method 21. Liquid leak is defined as the dripping of organic liquid at a rate of more than 3 drops per minute. A reading in excess to 10,000 ppmv, as methane, above background, or dripping of organic liquid at a rate of more than 3 drops per minute, is a violation of this permit and Rule 4623 and shall be reported as a deviation. [District Rule 4623, 3.11, 3.17, 3.18 and 6.4.8] Federally Enforceable Through Title V Permit

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

18. 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

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

20. Rim vents shall be equipped with a gasket and shall be set to open when the roof is being floated off the roof leg supports or at the manufacturer's recommended setting. [District Rule 4623, 5.5.2.2.4 and 40 CFR 60.112a(a)(1)(iii)] Federally Enforceable Through Title V Permit

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

22. 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

23. All slotted sampling and gauging 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

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

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PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

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

27. The operator shall perform gap measurements on primary and secondary seals within 60 days of the initial fill with petroleum liquid and at least once every year thereafter to determine compliance with the requirements of Rule 4623. The actual gap measurements of the floating roof primary and secondary seals shall be recorded. The inspection results shall be submitted to the APCO as specified in Section 6.3.5. [District Rule 4623, 6.1.3.1, 40 CFR 60.113a(a)(1)(i)(B) and 40 CFR 63.11087(c)] Federally Enforceable Through Title V Permit

28. If unit is out of service for a period of one year or more, subsequent refilling with volatile organic liquid (VOL) shall be considered initial fill in accordance with the conditions of this permit. [40 CFR 60.113a(a)(1)(i)(C) and 40 CFR 63.11087(c)] Federally Enforceable Through Title V Permit

29. The permittee shall inspect the primary and secondary seals for compliance with the requirements of Rule 4623 every time this tank is emptied or degassed. Actual gap measurements shall be performed when the liquid level is static but not more than 24 hours after the tank roof is re-floated. [District Rule 4623, 6.1.3.2] Federally Enforceable Through Title V Permit

30. If primary or secondary seal gap width/accumulated area and minimum vertical distance for one end of the mechanical shoe do not meet the requirements in this permit during 12 month inspection, the permittee shall repair the items or empty and remove the storage vessel from service within 45 days. If the detected failure cannot be repaired within 45 days and if the vessel cannot be emptied within 45 days, a 30-day extension may be requested from the APCO in the inspection report. Such a request must document that alternate storage capacity is unavailable and specify a schedule of actions the company will take that will assure that the control equipment will be repaired or the vessel will be emptied as soon as possible. [40 CFR 63.11087(c)] Federally Enforceable Through Title V Permit

31. The owner or operator shall visually inspect the external floating roof, the primary seal, secondary seal, and fittings each time the vessel is emptied and degassed. If the external floating roof has defects, the primary seal has holes, tears, or other openings in the seal or the seal fabric, or the secondary seal has holes, tears, or other openings in the seal or the seal fabric, the owner or operator shall repair the items as necessary so that none of the conditions specified mentioned in this condition exist before filling or refilling the storage vessel. [40 CFR 60.11087(c)] Federally Enforceable Through Title V Permit

32. The owner or operator shall perform a monthly leak inspection of all equipment in gasoline service, as defined in section 63.11100. For this inspection, detection methods incorporating sight, sound, and smell are acceptable. [40 CFR Part 63.11089(a)] Federally Enforceable Through Title V Permit

33. For monthly leak inspection, a log book shall be used and shall be signed by the owner or operator at the completion of each inspection. A section of the log book shall contain a list, summary description, or diagram(s) showing the location of all equipment in gasoline service at the facility. [40 CFR Part 63.11089(b)] Federally Enforceable Through Title V Permit

34. Each detection of a liquid or vapor leak shall be recorded in the log book. When a leak is detected, an initial attempt at repair shall be made as soon as practicable, but no later than 5 calendar days after the leak is detected. Repair or replacement of leaking equipment shall be completed within 15 calendar days after detection of each leak. Delay of repair of leaking equipment will be allowed if the repair is not feasible within 15 days. The owner or operator shall provide in the semiannual report the reason(s) why the repair was not feasible and the date each repair was completed. [40 CFR Part 63.11089(d)] Federally Enforceable Through Title V Permit

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PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

35. The owner or operator shall maintain a log book that contain the following information for a leak during during monthly inspection: 1.) equipment type and identification number; 2.) the nature of the leak (i.e. vapor or liquid) and the method of detection (i.e. sight, sound, or smell); 3.) the date the leak was detected and the date of each attempt to repair the leak; 4.) repair methods applied in each attempt to repair the leak; 5.) repair delayed and the reason for the delay if the leak is not repaired within 15 calendar days after discovery of the leak; 6) the expected date of successful repair of the leak if the leak is not repaired within 15 days; and 7.) the date of successful repair of the leak. [40 CFR 63.11089(g)] Federally Enforceable Through Title V Permit

36. The owner or operator shall report the number of equipment leaks not repaired within 15 days after detection in a semi-annual report. [40 CFR 63.11089(g)] Federally Enforceable Through Title V Permit

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

38. The operator shall determine the presence of gas leaks using portable hydrocarbon detection instrument in accordance with EPA Method 21. The instrument shall be calibrated before use each day of its use by the procedures specified in Method 21 using the following calibration gases: 1.) Zero air (less than 10 ppm of hydrocarbon in air); and 2.) A mixture of methane or n-hexane and air at a concentration of about, but less than, 10,000 ppm methane or n-hexane. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

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

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

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

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

43. Operator shall record the vessel on which the measurement was performed, date of the seal gap measurement, and raw data obtained in the measurement process in accordance with the conditions of this permit. [40 CFR 60.113a(a)(1)(i)(D) and 40 CFR 63.11087(e)] Federally Enforceable Through Title V Permit

44. The permittee shall notify the District in writing at least 30 days in advance of visual inspection or any gap measurement required by this permit, so the District can arrange an observer. [40 CFR 60.113a(a)(1)(iv) and 40 CFR 63.11087(c)] Federally Enforceable Through Title V Permit

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PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

45. If the accumulated area of gaps or gap width exceed limits, operator shall submit a report to the APCO within 30 days of the date of measurement. Report should include identification of the vessel, reason vessel did not meet the specifications, and a description of the actions necessary to bring the storage vessel into compliance. [40 CFR 60.113a(a)(1)(i)(E) and 40 CFR 63.11087(e)] Federally Enforceable Through Title V Permit

46. The operator shall keep a record of liquids stored in each container, period of storage, and the maximum true vapor pressure of the liquid during the respective storage period. [40 CFR 60.115a(a)] Federally Enforceable Through Title V Permit

47. The permittee shall determine the maximum true vapor pressure of the stored organic liquid on a monthly basis, using the calculation methodology listed in Appendix B of District Rule 4623. The permittee shall keep a record of all reid vapor pressure measurements for the stored organic liquid and shall use the highest recorded reid vapor pressure of the month when determining the maximum true vapor pressure. The permittee shall keep a record of the actual storage temperature of the organic storage tank and shall use the highest temperature recorded of the month when determining the maximum true vapor pressure. [Rule 4623 and 40 CFR 60.115a(b)] Federally Enforceable Through Title V Permit

48. The permittee shall submit the reports of the floating roof tank inspections to the APCO within five calendar days after the completion of the inspection only for those tanks that failed to meet the applicable requirements of Rule 4623, Sections 5.2 through 5.5. The inspection report for tanks that that have been determined to be in compliance with the requirements of Sections 5.2 through 5.5 need not be submitted to the APCO, but the inspection report shall be kept on-site and made available upon request by the APCO. The inspection report shall contain all necessary information to demonstrate compliance with the provisions of this rule, including the following: 1.) Date of inspection and names and titles of company personnel doing the inspection; 2.) Tank identification number and Permit to Operate number; 3.) Measurements of the gaps between the tank shell and primary and secondary seals; 4.) Leak-free status of the tank and floating roof deck fittings. Records of the leak-free status shall include the vapor concentration values measured in ppmv. 5.) Data, supported by calculations, demonstrating compliance with the requirements specified in Sections 5.3, 5.4, 5.5.2.3.3, 5.5.2.4.2, and 5.5.2.4.3 of Rule 4623. 6.) Any corrective actions or repairs performed on the tank in order to comply with Rule 4623 and the date(s) such actions were taken. [District Rule 4623, 6.3.5] Federally Enforceable Through Title V Permit

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

50. The following test methods shall be used: ASTM Method D287 for determining API Gravity, ASTM Method D4057 sampling for API Gravity testing; ASTM D323 for determining RVP, and converting RVP to TVP at the tank's maximum organic liquid storage temperature; ARB Method 422 for determining exempt halogenated VOCs in gases; EPA Method 21 for measuring gas-leak concentration. Should the owner or operator wish to use test methods other than the ones mentioned in this condition, the methods must be approved by the District prior to its use. [District Rule 4623, 6.4] Federally Enforceable Through Title V Permit

51. The operator shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rules 4623, 6.3 and 2520, 9.4.2] Federally Enforceable Through Title V Permit

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San Joaquin Valley
Air Pollution Control District

**PERMIT UNIT:** N-829-31-5

**EXPIRATION DATE:** 11/30/2020

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**EQUIPMENT DESCRIPTION:**
1,386,000 GALLON WELDED INTERNAL FLOATING ROOF TANK (33007) WITH A MINI SHOE PRIMARY SEAL, A VAPORFLEX SECONDARY SEAL, AND A SLOTTED GUIDEPOLE

# PERMIT UNIT REQUIREMENTS

1. Only denatured ethanol (97.5% or more by weight ethanol, 2.5% or less by weight gasoline) shall be stored in this tank. The permittee shall maintain sufficient records to demonstrate compliance with this condition. [District Rules 2201 and 4102] Federally Enforceable Through Title V Permit
2. True vapor pressure (TVP) of the organic liquid stored in the tank shall not exceed 2.8 psia. [District Rule 2201] Federally Enforceable Through Title V Permit
3. VOC emissions shall not exceed 7.1 pounds in any one day. [District Rule 2201] Federally Enforceable Through Title V Permit
4. The daily throughput of the organic liquid (not including diesel or other exempt liquids) shall not exceed 1,386,000 gallons. [District Rule 2201] Federally Enforceable Through Title V Permit
5. The monthly throughput of the organic liquid (not including diesel or other exempt liquids) shall not exceed 5,544,000 gallons. [District Rule 2201] Federally Enforceable Through Title V Permit
6. The permittee shall record TVP and the temperature of the organic liquid stored on monthly basis. [District Rule 2201] Federally Enforceable Through Title V Permit
7. The floating roof shall be floating on the surface of the stored liquid at all times (i.e., off the roof leg supports) except during the initial fill until the roof is lifted off the leg supports and when the tank is completely emptied and subsequently refilled. When the roof is resting on the leg supports the processes of filling or emptying and refilling the tank shall be continuous and shall be accomplished as rapidly as possible. Whenever the 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 the roof on its legs. [District Rule 4623, 5.4.3, 40 CFR 60.112b(a)(1)(i) and 40 CFR 63.11087(a)] Federally Enforceable Through Title V Permit
8. Gaps between the tank shell and the primary seal shall not exceed 1 1/2 inches. [District Rule 4623, 5.3.2.1.1 and 5.4.1] Federally Enforceable Through Title V Permit
9. The cumulative length of all gaps between the tank shell and the primary seal greater than 1/2 inch shall not exceed 10% of the circumference of the tank. [District Rule 4623, 5.3.2.1.1 and 5.4.1] Federally Enforceable Through Title V Permit
10. The cumulative length of all primary seal gaps greater than 1/8 inch shall not exceed 30% of the circumference of the tank. [District Rule 4623, 5.3.2.1.1 and 5.4.1] Federally Enforceable Through Title V Permit
11. No continuous gap in the primary seal greater than 1/8 inch wide shall exceed 10% of the tank circumference. [District Rule 4623, 5.3.2.1.1 and 5.4.1] Federally Enforceable Through Title V Permit
12. No gap between the tank shell and the secondary seal shall exceed 1/2 inch. [District Rule 4623, 5.3.2.1.2 and 5.4.1] Federally Enforceable Through Title V Permit

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13. The cumulative length of all gaps between the tank shell and the secondary seal, greater than 1/8 inch shall not exceed 5% of the tank circumference. [District Rule 4623, 5.3.2.1.2 and 5.4.1] Federally Enforceable Through Title V Permit

14. The metallic shoe-type seal shall be installed so that one end of the shoe extends into the stored liquid and the other end extends a minimum vertical distance of 18 inches above the stored liquid surface. [District Rule 4623, 5.3.2.1.3 and 5.4.1] Federally Enforceable Through Title V Permit

15. The geometry of the metallic-shoe type seal shall be such that the maximum gap between the shoe and the tank shell shall be no greater than 3 inches for a length of at least 18 inches in the vertical plane above the liquid. [District Rule 4623, 5.3.2.1.4 and 5.4.1] Federally Enforceable Through Title V Permit

16. There shall be no holes, tears, or openings in the secondary seal or in the primary seal envelope that surrounds the annular vapor space enclosed by the roof edge, seal fabric, and secondary seal. [District Rule 4623, 5.3.2.1.5 and 5.4.1] Federally Enforceable Through Title V Permit

17. The secondary seal shall allow easy insertion of probes of up to 1 1/2 inches in width in order to measure gaps in the primary seal. [District Rule 4623, 5.3.2.1.6 and 5.4.1] Federally Enforceable Through Title V Permit

18. The secondary seal shall extend from the roof to the tank shell and shall not be attached to the primary seal. [District Rule 4623, 5.3.2.1.7 and 5.4.1] Federally Enforceable Through Title V Permit

19. All openings in the roof used for sampling and gauging 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 for sampling and gauging. [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 gas leak is defined as a reading in excess of 10,000 parts per million by volume (ppmv), as methane, above background on a portable hydrocarbon detection instrument that is calibrated with methane in accordance with the procedures specified in EPA Method 21. Liquid leak is defined as the dripping of organic liquid at a rate of more than 3 drops per minute. A reading in excess to 10,000 ppmv, as methane, above background, or dripping of organic liquid at a rate of more than 3 drops per minute, is a violation of this permit and Rule 4623 and shall be reported as a deviation. [District Rule 4623, 3.11, 3.17, 3.18 and 6.4.8] Federally Enforceable Through Title V Permit

21. 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, 40 CFR 60.112b(a)(1)(iii) and 40 CFR 63.11087(a)] Federally Enforceable Through Title V Permit

22. Each opening in the internal floating roof except for leg sleeves, automatic bleeder vents, rim space vents, column wells, ladder wells, sample wells, combination manway/vacuum breakers, and stub drains shall be equipped with a cover, or a lid shall be maintained in a closed position at all times (i.e. no visible gaps) except when the device is in use. The cover or lid shall be equipped with a gasket. Covers on each access hatch and automatic gauge float well shall be bolted in place except when they are in use. [District Rule 4623, 5.5.2.1.2 and 40 CFR 60.112b(a)(1)(iv)] 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 leg roof supports. [District Rule 4623, 5.5.2.1.3 and 40 CFR 60.112b(a)(1)(v)] Federally Enforceable Through Title V Permit

24. Rim vents shall be equipped with a gasket and shall 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 and 40 CFR 60.112b(a)(1)(vi)]

25. Each penetration of the internal floating roof for the purpose of sampling shall be a sample well. The well shall have a slit fabric cover that covers at least 90 percent of the opening. The fabric cover must be impermeable. [District Rule 4623, 5.5.2.1.5 and 40 CFR 60.112b(a)(1)(vii)] Federally Enforceable Through Title V Permit

26. Each penetration of the internal floating roof that allows for the 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 and 40 CFR 60.112b(a)(1)(viii)] Federally Enforceable Through Title V Permit

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27. Each penetration of the internal floating roof that allows for the passage of a ladder shall have a gasketed sliding cover. [40 CFR 60.112b(a)(1)(ix)] Federally Enforceable Through Title V Permit

28. All slotted sampling or gauging 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

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 not exceed 1/8 inch. [District Rule 4623, 5.5.2.4.3] Federally Enforceable Through Title V Permit

30. The permittee shall notify the District in writing at least 30 days prior to conduct the visual inspection of the storage vessel, so the District can arrange an observer. [40 CFR 60.113b(a)(5) and 40 CFR 63.11087(c)] Federally Enforceable Through Title V Permit

31. For newly constructed, repaired, or rebuilt internal floating roof tanks, 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. 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, 6.1.4.1, 40 CFR 60.113b(a)(1) and 40 CFR 63.11087(c)] Federally Enforceable Through Title V Permit

32. The owner or operator shall perform a monthly leak inspection of all equipment in gasoline service, as defined in section 63.11100. For this inspection, detection methods incorporating sight, sound, and smell are acceptable. [40 CFR Part 63.11089(a)] Federally Enforceable Through Title V Permit

33. For monthly leak inspection, a log book shall be used and shall be signed by the owner or operator at the completion of each inspection. A section of the log book shall contain a list, summary description, or diagram(s) showing the location of all equipment in gasoline service at the facility. [40 CFR Part 63.11089(b)] Federally Enforceable Through Title V Permit

34. Each detection of a liquid or vapor leak shall be recorded in the log book. When a leak is detected, an initial attempt at repair shall be made as soon as practicable, but no later than 5 calendar days after the leak is detected. Repair or replacement of leaking equipment shall be completed within 15 calendar days after detection of each leak. Delay of repair of leaking equipment will be allowed if the repair is not feasible within 15 days. The owner or operator shall provide in the semiannual report the reason(s) why the repair was not feasible and the date each repair was completed. [40 CFR Part 63.11089(d)] Federally Enforceable Through Title V Permit

35. The owner or operator shall maintain a log book that contain the following information for a leak during during monthly inspection: 1.) equipment type and identification number; 2.) the nature of the leak (i.e. vapor or liquid) and the method of detection (i.e. sight, sound, or smell); 3.) the date the leak was detected and the date of each attempt to repair the leak; 4.) repair methods applied in each attempt to repair the leak; 5.) repair delayed and the reason for the delay if the leak is not repaired within 15 calendar days after discovery of the leak; 6) the expected date of successful repair of the leak if the leak is not repaired within 15 days; and 7.) the date of successful repair of the leak. [40 CFR 63.11089(g)] Federally Enforceable Through Title V Permit

36. The permittee shall visually inspect, through the manholes, roof hatches, or other opening 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, 6.1.4.2, 40 CFR 60.113b(a)(2) and 40 CFR 63.11087(c)] Federally Enforceable Through Title V Permit

37. If any failure (i.e. visible organic liquid on the internal floating roof, tank walls or anywhere, holes or tears in the seal fabric) is detected during 12 month visual inspection, the permittee shall repair the items or empty and remove the storage vessel from service within 45 days. If the detected failure cannot be repaired within 45 days and if the vessel cannot be emptied within 45 days, a 30-day extension may be requested from the APCO in the inspection report. Such a request must document that alternate storage capacity is unavailable and specify a schedule of actions the company will take that will assure theat the control equipment will be repaired or the vessel will be emptied as soon as possible. [40 CFR 60.113b(a)(2) and 40 CFR 63.11087(c)] Federally Enforceable Through Title V Permit

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38. The permittee shall visually inspect the internal floating roof, the primary seal, the secondary seal, gaskets, slotted memberanes and sleeve seals (if any) each time the vessel is emptied and degassed. If the internal floating roof has defects, the primary seal has holes, tears, or other openings in the seal or the seal fabric, or the secondary seal has holes, tears, or other openings in the seal or the seal fabric, or the gaskets no longer close off the liquid surfaces from the atmosphere, or the slotted membrane has more than 10 percent open area, the owner or operator shall repair the items as necessary so that none of the conditions specified in this paragraph exist before refilling the storage vessel. [40 CFR Part 63.11087(c)] Federally Enforceable Through Title V Permit

39. The owner or operator shall report the number of equipment leaks not repaired within 15 days after detection in a semi-annual report. [40 CFR 63.11089(g)] Federally Enforceable Through Title V Permit

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

41. The operator shall determine the presence of gas leaks using portable hydrocarbon detection instrument in accordance with EPA Method 21. The instrument shall be calibrated before use each day of its use by the procedures specified in Method 21 using the following calibration gases: 1.) Zero air (less than 10 ppm of hydrocarbon in air); and 2.) A mixture of methane or n-hexane and air at a concentration of about, but less than, 10,000 ppm methane or n-hexane. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

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

43. The permittee shall conduct actual gap measurements of the primary seal and/or secondary seal at least once every 60 months. Other than the gap criteria specified by this permit, no holes, tears, or other openings are allowed that would permit the escape of hydrocarbon vapors. Any defects found shall constitute a violation of this permit. [District Rule 4623 Section 6.1.4.3] Federally Enforceable Through Title V Permit

44. The permittee shall submit the reports of the floating roof tank inspections to the APCO within five calendar days after the completion of the inspection only for those tanks that failed to meet the applicable requirements of Rule 4623, Sections 5.2 through 5.5. The inspection report for tanks that that have been determined to be in compliance with the requirements of Sections 5.2 through 5.5 need not be submitted to the APCO, but the inspection report shall be kept on-site and made available upon request by the APCO. The inspection report shall contain all necessary information to demonstrate compliance with the provisions of this rule, including the following: 1.) Date of inspection and names and titles of company personnel doing the inspection; 2.) Tank identification number and Permit to Operate number; 3.) Measurements of the gaps between the tank shell and primary and secondary seals; 4.) Leak-free status of the tank and floating roof deck fittings. Records of the leak-free status shall include the vapor concentration values measured in ppmv. 5.) Data, supported by calculations, demonstrating compliance with the requirements specified in Sections 5.3, 5.4, 5.5.2.3.3, 5.5.2.4.2, and 5.5.2.4.3 of Rule 4623. 6.) Any corrective actions or repairs performed on the tank in order to comply with Rule 4623 and the date(s) such actions were taken. [District Rule 4623, 6.3.5 and 40 CFR 63.11087(e)] Federally Enforceable Through Title V Permit

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

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46. The following test methods shall be used: ASTM Method D287 for determining API Gravity, ASTM Method D4057 sampling for API Gravity testing; ASTM D323 for determining RVP, and converting RVP to TVP at the tank's maximum organic liquid storage temperature; ARB Method 422 for determining exempt halogenated VOCs in gases; EPA Method 21 for measuring gas-leak concentration. Should the owner or operator wish to use test methods other than the ones mentioned in this condition, the methods must be approved by the District prior to its use. [District Rule 4623, 6.4] Federally Enforceable Through Title V Permit

47. The permittee shall maintain records of daily, monthly, cumulative annual organic liquid throughput in gallons. The cumulative annual records shall be updated weekly. [District Rule 2201] Federally Enforceable Through Title V Permit

48. The permittee shall maintain records of TVP tests and the temperature of the organic liquid stored in the tank. [District Rule 2201] Federally Enforceable Through Title V Permit

49. The permittee shall determine the maximum true vapor pressure of the stored organic liquid on a monthly basis, using the calculation methodology listed in Appendix B of District Rule 4623. The permittee shall keep a record of all reid vapor pressure measurements for the stored organic liquid and shall use the highest recorded reid vapor pressure of the month when determining the maximum true vapor pressure. The permittee shall keep a record of the actual storage temperature of the organic storage tank and shall use the highest temperature recorded of the month when determining the maximum true vapor pressure. [District Rule 4623] Federally Enforceable Through Title V Permit

50. The permittee shall maintain records sufficient to demonstrate compliance with the daily VOC emission limit. These records shall contain the calculated emission quantity as well as each process variable used in the respective calculations/modeling. [District Rule 2080] Federally Enforceable Through Title V Permit

51. The permittee shall keep all records on-site for a period of at least five years. These records shall be made available for District inspection upon request. [District Rules 2201 and 4623, 6.3] Federally Enforceable Through Title V Permit

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# San Joaquin Valley
# Air Pollution Control District

**PERMIT UNIT:** N-829-32-1

**EXPIRATION DATE:** 11/30/2020

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**EQUIPMENT DESCRIPTION:**
MODIFICATION OF 1,953,000 GALLON WELDED INTERNAL FLOATING ROOF GASOLINE, DIESEL, ETHANOL, AND METHANOL STORAGE TANK (#4901) WITH A MECHANICAL SHOE PRIMARY SEAL, A WIPER SECONDARY SEAL AND A SLOTTED GUIDEPOLE:

## PERMIT UNIT REQUIREMENTS

1. This tank shall only store gasoline, diesel fuel, ethanol, and methanol with a TVP of less than or equal to 10 psia. [District Rule 2201] Federally Enforceable Through Title V Permit
2. This tank shall not have more than two (2) turnovers per month. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Annual throughput of fuel shall not exceed 46,922,400 gallons. [District Rule 2201] Federally Enforceable Through Title V Permit
4. Permittee shall maintain records of monthly and annual throughput of fuel in gallons. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Daily emissions shall not exceed 9.0 lbs VOC/day based on a monthly average. [District Rule 2201] Federally Enforceable Through Title V Permit
6. 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
7. Gaps between the tank shell and the primary seal shall not exceed 1 1/2 inches. [District Rule 4623] Federally Enforceable Through Title V Permit
8. The cumulative length of all gaps between the tank shell and the primary seal greater than 1/2 inch shall not exceed 10% of the circumference of the tank. [District Rule 4623] 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] 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] Federally Enforceable Through Title V Permit
11. No gap between the tank shell and the secondary seal shall exceed 1/2 inch. [District Rule 4623] 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] Federally Enforceable Through Title V Permit

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

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 11 inches above the stored liquid surface. [District Rule 4623] Federally Enforceable Through Title V Permit

14. The geometry of the metallic-shoe type seal shall be such that the maximum gap between the shoe and the tank shell shall be no greater than 3 inches for a length of at least 11 inches in the vertical plane above the liquid. [District Rule 4623] Federally Enforceable Through Title V Permit

15. There shall be no holes, tears, or openings in the secondary seal or in the primary seal envelope that surrounds the annular vapor space enclosed by the roof edge, seal fabric, and secondary seal. [District Rule 4623] Federally Enforceable Through Title V Permit

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

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

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

19. A leak-free condition is defined as a condition without a gas or liquid leak. A gas leak is defined as a reading in excess of 10,000 ppmv as methane, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21. A liquid leak is defined as a dripping rate of more than three (3) drops per minute. A reading in excess of 10,000 ppmv as methane above background or a liquid leak of greater than three (3) drops per minute 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

20. 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

21. 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

22. Automatic bleeder vents shall be equipped with a gasket and shall be closed at all times when the roof is floating except when the roof is being floated off or is being landed on the roof leg supports. [District Rule 4623] Federally Enforceable Through Title V Permit

23. 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

24. 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

25. 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

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PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

30. 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

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. The permittee shall determine the maximum true vapor pressure of the stored organic liquid on a monthly basis, using the calculation methodology listed in Appendix B of District Rule 4623. The permittee shall keep a record of all reid vapor pressure measurements for the stored organic liquid and shall use the highest recorded reid vapor pressure of the month when determining the maximum true vapor pressure. The permittee shall keep a record of the actual storage temperature of the organic storage tank and shall use the highest temperature recorded of the month when determining the maximum true vapor pressure. [District Rule 4623] Federally Enforceable Through Title V Permit

33. The permittee shall maintain records sufficient to demonstrate compliance with the daily VOC emission limit. These records shall contain the calculated emission quantity as well as each process variable used in the respective calculations/modeling. [District Rule 2080] Federally Enforceable Through Title V Permit

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

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# San Joaquin Valley
# Air Pollution Control District

**PERMIT UNIT:** N-829-33-1

**EXPIRATION DATE:** 11/30/2020

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**EQUIPMENT DESCRIPTION:**
MODIFICATION OF 3,365,000 GALLON WELDED INTERNAL FLOATING ROOF GASOLINE, DIESEL, ETHANOL, AND METHANOL STORAGE TANK (#8801) WITH A MECHANICAL SHOE PRIMARY SEAL, A WIPER SECONDARY SEAL AND A SLOTTED GUIDEPOLE:

## PERMIT UNIT REQUIREMENTS

1. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101] Federally Enforceable Through Title V Permit
2. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
3. This tank shall only store gasoline, diesel fuel, ethanol, and methanol with a TVP of less than or equal to 10 psia. [District Rule 2201] Federally Enforceable Through Title V Permit
4. This tank shall not have more than two (2) turnovers per month. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Annual throughput of fuel shall not exceed 83,160,000 gallons. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Permittee shall maintain records of monthly and annual throughput of fuel in gallons. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Daily emissions shall not exceed 13.3 lbs VOC/day based on a monthly average. [District Rule 2201] Federally Enforceable Through Title V Permit
8. 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
9. Gaps between the tank shell and the primary seal shall not exceed 1 1/2 inches. [District Rule 4623] Federally Enforceable Through Title V Permit
10. The cumulative length of all gaps between the tank shell and the primary seal greater than 1/2 inch shall not exceed 10% of the circumference of the tank. [District Rule 4623] Federally Enforceable Through Title V Permit
11. The cumulative length of all primary seal gaps greater than 1/8 inch shall not exceed 30% of the circumference of the tank. [District Rule 4623] Federally Enforceable Through Title V Permit
12. No continuous gap in the primary seal greater than 1/8 inch wide shall exceed 10% of the tank circumference. [District Rule 4623] Federally Enforceable Through Title V Permit
13. No gap between the tank shell and the secondary seal shall exceed 1/2 inch. [District Rule 4623] Federally Enforceable Through Title V Permit

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

15. The metallic shoe-type seal shall be installed so that one end of the shoe extends into the stored liquid and the other end extends a minimum vertical distance of 11 inches above the stored liquid surface. [District Rule 4623] Federally Enforceable Through Title V Permit

16. The geometry of the metallic-shoe type seal shall be such that the maximum gap between the shoe and the tank shell shall be no greater than 3 inches for a length of at least 11 inches in the vertical plane above the liquid. [District Rule 4623] Federally Enforceable Through Title V Permit

17. There shall be no holes, tears, or openings in the secondary seal or in the primary seal envelope that surrounds the annular vapor space enclosed by the roof edge, seal fabric, and secondary seal. [District Rule 4623] Federally Enforceable Through Title V Permit

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

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

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

21. A leak-free condition is defined as a condition without a gas or liquid leak. A gas leak is defined as a reading in excess of 10,000 ppmv as methane, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21. A liquid leak is defined as a dripping rate of more than three (3) drops per minute. A reading in excess of 10,000 ppmv as methane above background or a liquid leak of greater than three (3) drops per minute 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

22. 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

23. 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

24. Automatic bleeder vents shall be equipped with a gasket and shall be closed at all times when the roof is floating except when the roof is being floated off or is being landed on the roof leg supports. [District Rule 4623] Federally Enforceable Through Title V Permit

25. 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

26. 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

27. 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

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PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

28. 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

29. 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

30. 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

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

32. 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

33. 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

34. The permittee shall determine the maximum true vapor pressure of the stored organic liquid on a monthly basis, using the calculation methodology listed in Appendix B of District Rule 4623. The permittee shall keep a record of all reid vapor pressure measurements for the stored organic liquid and shall use the highest recorded reid vapor pressure of the month when determining the maximum true vapor pressure. The permittee shall keep a record of the actual storage temperature of the organic storage tank and shall use the highest temperature recorded of the month when determining the maximum true vapor pressure. [District Rule 4623] Federally Enforceable Through Title V Permit

35. The permittee shall maintain records sufficient to demonstrate compliance with the daily VOC emission limit. These records shall contain the calculated emission quantity as well as each process variable used in the respective calculations/modeling. [District Rule 2080] Federally Enforceable Through Title V Permit

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

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# San Joaquin Valley
# Air Pollution Control District

**PERMIT UNIT:** N-829-35-1

**EXPIRATION DATE:** 11/30/2020

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**EQUIPMENT DESCRIPTION:**
30,000 BBL (1,260,000 GALLON) WELDED INTERNAL FLOATING ROOF TANK (#30006) WITH A MECHANICAL SHOE PRIMARY SEAL, A WIPER SECONDARY SEAL, AND A SLOTTED GUIDEPOLE

## PERMIT UNIT REQUIREMENTS

1. Only denatured ethanol (97.5% or more by weight ethanol, 2.5% or less by weight gasoline) shall be stored in this tank. The permittee shall maintain sufficient records to demonstrate compliance with this condition. [District Rules 2201 and 4102]
2. True vapor pressure (TVP) of the organic liquid stored in the tank shall not exceed 2.8 psia. [District Rule 2201]
3. VOC emissions shall not exceed 6.1 pounds in any one day. [District Rule 2201]
4. The daily throughput of the organic liquid shall not exceed 25,000 barrels/day or 1,050,000 gallons/day (equivalent to 1 tank turnover/day). [District Rule 2201]
5. The monthly throughput of the organic liquid shall not exceed 1,000,000 barrels/month or 42,000,000 gallons/month (equivalent to 4 tank turnover/month). [District Rule 2201]
6. The permittee shall determine TVP and the temperature of the organic liquid stored on monthly basis. [District Rule 2201]
7. The floating roof shall be floating on the surface of the stored liquid at all times (i.e., off the roof leg supports) except during the initial fill until the roof is lifted off the leg supports and when the tank is completely emptied and subsequently refilled. When the roof is resting on the leg supports the processes of filling or emptying and refilling the tank shall be continuous and shall be accomplished as rapidly as possible. Whenever the 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 the roof on its legs. [District Rule 4623 Section 5.4.3, 40 CFR 60.112b(a)(1)(i)] Federally Enforceable Through Title V Permit
8. No gap between the tank shell and the primary seal shall exceed one and one-half (1-1/2) inches. [District Rule 4653 Sections 5.3.2.1.1 and 5.4.1] Federally Enforceable Through Title V Permit
9. The cumulative length of all gaps between the tank shell and the primary seal: 1) Greater than one-half (1/2) inch shall not exceed 10 percent of the circumference of the tank; and 2) Greater than one-eighth (1/8) inch shall not exceed 30 percent of the circumference of the tank. [District Rule 4623 Sections 5.3.2.1.1 and 5.4.1] Federally Enforceable Through Title V Permit
10. The primary seal shall have no continuous gap greater than one-eighth (1/8) inch shall exceed 10 percent of the tank circumference. [District Rule 4623 Sections 5.3.2.1.1 and 5.4.1] Federally Enforceable Through Title V Permit
11. No gap between the tank shell and the secondary seal shall exceed one-half (1/2) inch. [District Rule 4623 Sections 5.3.2.1.2 and 5.4.1] Federally Enforceable Through Title V Permit
12. The cumulative length of all gaps between the tank shell and the secondary seal, greater than one-eighth (1/8) inch shall not exceed 5 percent of the tank circumference. [District Rule 4623 Sections 5.3.2.1.2 and 5.4.1] Federally Enforceable Through Title V Permit

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PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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 18 inches above the stored liquid surface. [District Rule 4623 Section 5.4.1] Federally Enforceable Through Title V Permit

14. The geometry of the metallic-shoe type seal shall be such that the maximum gap between the shoe and the tank shell shall be no greater than 3 inches for a length of at least 18 inches in the vertical plane above the liquid. [District Rule 4623 Sections 5.3.2.1.4 and 5.4.1] Federally Enforceable Through Title V Permit

15. There shall be no holes, tears, or openings in the secondary seal or in the primary seal envelope that surrounds the annular vapor space enclosed by the roof edge, seal fabric, and secondary seal. [District Rule 4623 Sections 5.3.2.1.5 and 5.4.1] Federally Enforceable Through Title V Permit

16. The secondary seal shall allow easy insertion of probes of up to one and one-half (1-1/2) inches in width in order to measure gaps in the primary seal. [District Rule 4623 Sections 5.3.2.1.6 and 5.4.1] Federally Enforceable Through Title V Permit

17. The secondary seal shall extend from the roof to the tank shell and shall not be attached to the primary seal. [District Rule 4623 Sections 5.3.2.1.7 and 5.4.1] Federally Enforceable Through Title V Permit

18. All openings in the roof used for sampling and gauging shall provide a projection below the liquid surface to prevent belching of liquid and to prevent entrained or formed organic vapor from escaping from the liquid contents of the tank and shall be equipped with a cover, seal or lid. The cover seal or lid shall be in a closed position, with no visible gaps and be gas tight, except when the device or appurtenance is in use. [District Rule 4623 Section 5.5.1] Federally Enforceable Through Title V Permit

19. A gas-tight condition is defined as a condition without a gas leak. A gas leak is defined as a reading in excess of 10,000 ppmv, as methane, 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 Sections 3.11, 5.1.3, and 6.4.8] Federally Enforceable Through Title V Permit

20. 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 Section 5.5.2.1.1, 40 CFR 60.112b(a)(1)(iii)] Federally Enforceable Through Title V Permit

21. 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 shall be equipped with a cover, or a lid shall be maintained in a closed position at all times (i.e. no visible gaps) except when the device is in use. The cover or lid shall be equipped with a gasket. Covers on each access hatch and automatic gauge float well shall be bolted in place except when they are in use. [District Rule 4623 Section 5.5.2.1.2, 40 CFR 60.112b(a)(1)(iv)] Federally Enforceable Through Title V Permit

22. Automatic bleeder vents shall be equipped with a gasket and shall be closed at all times when the roof is floating except when the roof is being floated off or is being landed on the leg roof supports. [District Rule 4623 Section 5.5.2.1.3, 40 CFR 60.112b(a)(1)(v)] Federally Enforceable Through Title V Permit

23. Rim vents shall be equipped with a gasket and shall be set to open only when the internal floating roof is not floating or at the manufacturer's recommended setting. [District Rule 4623 Section 5.5.2.1.4, 40 CFR 60.112b(a)(1)(vi)] Federally Enforceable Through Title V Permit

24. Each penetration of the internal floating roof for the purpose of sampling shall be a sample well. The well shall have a slit fabric cover that covers at least 90 percent of the opening. The fabric cover must be impermeable. [District Rule 4623 Section 5.5.2.1.5, 40 CFR 60.112b(a)(1)(vii)] Federally Enforceable Through Title V Permit

25. Each penetration of the internal floating roof that allows for the 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 Section 5.5.2.1.6, 40 CFR 60.112b(a)(1)(viii)] Federally Enforceable Through Title V Permit

26. Each penetration of the internal floating roof that allows for the passage of a ladder shall have a gasketed sliding cover. [40 CFR 60.112b(a)(1)(ix)] Federally Enforceable Through Title V Permit

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PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

27. All slotted sampling or gauging wells, and similar fixed projections through the floating roof shall provide a projection below the liquid surface. [District Rule 4623 Section 5.5.2.4.1] Federally Enforceable Through Title V Permit

28. 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 not exceed one-eighth (1/8) inch. [District Rule 4623 Section 5.5.2.4.3] Federally Enforceable Through Title V Permit

29. 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. If there are holes, tears, or other openings in the primary seal, the secondary seal, or the seal fabric or defects in the internal floating roof or its appurtenant parts, components, fittings, etc., the operator shall repair the defects before filling the tank. [District Rule 4623 Section 6.1.4.1, 40 CFR 60.113b(a)(1)] Federally Enforceable Through Title V Permit

30. The permittee shall visually inspect, through the manholes, roof hatches, or other opening 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 Section 6.1.4.2, 40 CFR 60.113b(a)(2)] Federally Enforceable Through Title V Permit

31. If any failure (i.e. visible organic liquid on the internal floating roof, tank walls or anywhere, holes or tears in the seal fabric) is detected during 12 month visual inspection, the permittee shall repair the items or empty and remove the storage vessel from service within 45 days. If the detected failure cannot be repaired within 45 days and if the vessel cannot be emptied within 45 days, a 30-day extension may be requested from the APCO in the inspection report. Such a request must document that alternate storage capacity is unavailable and specify a schedule of actions the company will take that will assure theat the control equipment will be repaired or the vessel will be emptied as soon as possible. [40 CFR 60.113b(a)(2)] Federally Enforceable Through Title V Permit

32. The permittee shall conduct actual gap measurements of the primary seal and/or secondary seal at least once every 60 months. Other than the gap criteria specified by this permit, no holes, tears, or other openings are allowed that would permit the escape of hydrocarbon vapors. Any defects found shall constitute a violation of this rule. [District Rule 4623 Section 6.1.4.3] Federally Enforceable Through Title V Permit

33. The permittee shall submit the reports of the floating roof tank inspections to the APCO within five calendar days after the completion of the inspection only for those tanks that failed to meet the applicable requirements of Rule 4623, Sections 5.2 through 5.5. The inspection report for tanks that that have been determined to be in compliance with the requirements of Sections 5.2 through 5.5 need not be submitted to the APCO, but the inspection report shall be kept on-site and made available upon request by the APCO. The inspection report shall contain all necessary information to demonstrate compliance with the provisions of this rule, including the following: 1) Date of inspection and names and titles of company personnel doing the inspection. 2) Tank identification number and Permit to Operate number. 3) Measurements of the gaps between the tank shell and primary and secondary seals. 4) Gas-tight status of the tank and floating roof deck fittings. Records of the gas-tight status shall include the vapor concentration values measured in parts per million by volume (ppmv). 5) Data, supported by calculations, demonstrating compliance with the requirements specified in Sections 5.3.1.3 and 5.5.2.4.3 of Rule 4623. 6) Any corrective actions or repairs performed on the tank in order to comply with rule 4623 and the date(s) such actions were taken. [District Rule 4623 Section 6.3.5] Federally Enforceable Through Title V Permit

34. 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 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 Section 6.3.7] Federally Enforceable Through Title V Permit

35. The permittee shall notify the District in writing at least 30 days prior to conduct the visual inspection of the storage vessel, so the District can arrange an observer. [40 CFR 60.113b(a)(5)] Federally Enforceable Through Title V Permit

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PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

36. The permittee shall maintain records of daily, monthly, cumulative annual organic liquid throughput in gallons. The cumulative annual records shall be updated weekly. [District Rule 2201] Federally Enforceable Through Title V Permit

37. The permittee shall maintain records of TVP tests and the temperature of the organic liquid stored in the tank. [District Rule 2201] Federally Enforceable Through Title V Permit

38. The permittee shall maintain records sufficient to demonstrate compliance with the daily VOC emission limit. These records shall contain the calculated emission quantity as well as each process variable used in the respective calculations/modeling. [District Rule 2080] Federally Enforceable Through Title V Permit

39. The permittee shall keep all records on-site for a period of at least five years. These records shall be made available for District inspection upon request. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit


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# ATTACHMENT B

## Previous Title V Operating Permit

San Joaquin Valley
Air Pollution Control District

**FACILITY:** N-829-0-3 **EXPIRATION DATE:** 11/30/2015

# FACILITY-WIDE REQUIREMENTS

1. The owner or operator shall notify the District of any breakdown condition as soon as reasonably possible, but no later than one hour after its detection, unless the owner or operator demonstrates to the District's satisfaction that the longer reporting period was necessary. [District Rule 1100, 6.1; County Rules 110 (Fresno, Stanislaus, San Joaquin); 109 (Merced); 113 (Madera); and 111 (Kern, Tulare, Kings)] Federally Enforceable Through Title V Permit
2. The District shall be notified in writing within ten days following the correction of any breakdown condition. The breakdown notification shall include a description of the equipment malfunction or failure, the date and cause of the initial failure, the estimated emissions in excess of those allowed, and the methods utilized to restore normal operations. [District Rule 1100, 7.0; County Rules 110 (Fresno, Stanislaus, San Joaquin); 109 (Merced); 113 (Madera); and 111 (Kern, Tulare, Kings)] Federally Enforceable Through Title V Permit
3. The owner or operator of any stationary source operation that emits more than 25 tons per year of nitrogen oxides or reactive organic compounds, shall provide the District annually with a written statement in such form and at such time as the District prescribes, showing actual emissions of nitrogen oxides and reactive organic compounds from that source. [District Rule 1160, 5.0] Federally Enforceable Through Title V Permit
4. Any person building, altering or replacing any operation, article, machine, equipment, or other contrivance, the use of which may cause the issuance of air contaminants or the use of which may eliminate, reduce, or control the issuance of air contaminants, shall first obtain an Authority to Construct (ATC) from the District unless exempted by District Rule 2020 (12/20/07). [District Rule 2010, 3.0 and 4.0; and 2020] Federally Enforceable Through Title V Permit
5. The permittee must comply with all conditions of the permit including permit revisions originated by the District. All terms and conditions of a permit that are required pursuant to the Clean Air Act (CAA), including provisions to limit potential to emit, are enforceable by the EPA and Citizens under the CAA. Any permit noncompliance constitutes a violation of the CAA and the District Rules and Regulations, and is grounds for enforcement action, for permit termination, revocation, reopening and reissuance, or modification; or for denial of a permit renewal application. [District Rules 2070, 7.0; 2080; and 2520, 9.8.1 and 9.12.1] Federally Enforceable Through Title V Permit
6. A Permit to Operate or an Authority to Construct shall not be transferred unless a new application is filed with and approved by the District. [District Rule 2031] Federally Enforceable Through Title V Permit
7. Every application for a permit required under Rule 2010 (12/17/92) shall be filed in a manner and form prescribed by the District. [District Rule 2040] Federally Enforceable Through Title V Permit
8. The operator shall maintain records of required monitoring that include: 1) the date, place, and time of sampling or measurement; 2) the date(s) analyses were performed; 3) the company or entity that performed the analysis; 4) the analytical techniques or methods used; 5) the results of such analysis; and 6) the operating conditions at the time of sampling or measurement. [District Rule 2520, 9.4.1] Federally Enforceable Through Title V Permit
9. The operator shall retain records of all required monitoring data and support information for a period of at least 5 years from the date of the monitoring sample, measurement, or report. Support information includes copies of all reports required by the permit and, for continuous monitoring instrumentation, all calibration and maintenance records and all original strip-chart recordings. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

FACILITY-WIDE REQUIREMENTS CONTINUE ON NEXT PAGE

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

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

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

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

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

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

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

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

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

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

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

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

22. No air contaminants shall be discharged into the atmosphere for a period or periods aggregating more than 3 minutes in any one hour which is as dark or darker than Ringelmann #1 or equivalent to 20% opacity and greater, unless specifically exempted by District Rule 4101 (2/17/05). If the equipment or operation is subject to a more stringent visible emission standard as prescribed in a permit condition, the more stringent visible emission limit shall supersede this condition. [District Rule 4101, and County Rules 401 (in all eight counties in the San Joaquin Valley)] Federally Enforceable Through Title V Permit

FACILITY-WIDE REQUIREMENTS CONTINUE ON NEXT PAGE

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

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

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

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

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

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

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

30. Outdoor handling, storage and transport of any bulk material which emits dust shall comply with the requirements of District Rule 8031, unless specifically exempted under Section 4.0 of Rule 8031 (8/19/04) or Rule 8011 (8/19/04). [District Rule 8031 and 8011] Federally Enforceable Through Title V Permit

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

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

33. Any paved road or unpaved road shall comply with the requirements of District Rule 8061 unless specifically exempted under Section 4.0 of Rule 8061 (8/19/04) or Rule 8011 (8/19/04). [District Rule 8061 and Rule 8011] Federally Enforceable Through Title V Permit

34. 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 (9/16/04) or Rule 8011 (8/19/04). [District Rule 8071 and Rule 8011] Federally Enforceable Through Title V Permit

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

FACILITY-WIDE REQUIREMENTS CONTINUE ON NEXT PAGE

36. 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

37. 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

38. 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

39. 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

40. Compliance with permit conditions in the Title V permit shall be deemed in compliance with the following applicable requirements: SJVUAPCD Rules 1100, sections 6.1 and 7.0 (12/17/92); 2010, sections 3.0 and 4.0 (12/17/92); 2031 (12/17/92); 2040 (12/17/92); 2070, section 7.0 (12/17/92); 2080 (12/17/92); 4101 (2/17/05); 4601, sections 5.1, 5.4, 6.1 and 6.3 (12/17/09). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

41. The reporting periods for the Report of Required Monitoring and the Compliance Certification Report begin January 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

42. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]

# San Joaquin Valley
# Air Pollution Control District

**PERMIT UNIT:** N-829-1-6

**EXPIRATION DATE:** 11/30/2015

**EQUIPMENT DESCRIPTION:**
FOUR LANE TRUCK LOADING RACK (NORTH) CONSISTING OF 7 GASOLINE LOADING ARMS AND 3 DIESEL LOADING ARMS

## PERMIT UNIT REQUIREMENTS

1. All vapors displaced during truck loading shall be vented to the vapor recovery system under Permit to Operate N-829-20. [District NSR Rule] Federally Enforceable Through Title V Permit
2. The combined quantity of gasoline loaded through permit units N-829-1 and N-829-2 shall not exceed 2,071,233 gallons during any one day. [District NSR Rule] Federally Enforceable Through Title V Permit
3. Gasoline shall be loaded only into vapor tight tank trucks. [40 CFR Part 60.502(e)] Federally Enforceable Through Title V Permit
4. The facility shall obtain the vapor tightness documentation specified in 40 CFR Part 60.505(b) for each gasoline tank truck that is to be loaded at the facility. [40 CFR Part 60.502(e)(1)] Federally Enforceable Through Title V Permit
5. The loading rack shall be equipped with bottom loading equipment and a vapor collection and control system such that VOC emissions shall not exceed 0.08 pounds per 1000 gallons of gasoline loaded. [District Rule 4624, 5.1 and 40 CFR 63.11088(a)] Federally Enforceable Through Title V Permit
6. The vapor collection system shall be operated in a manner to prevent any organic vapors collected at one loading rack from passing to another loading rack. [40 CFR 63.11088(a)] Federally Enforceable Through Title V Permit
7. The vapor collection and control system shall operate such that the pressure in the delivery tank being loaded does not exceed 18 inches water column pressure and 6 inches water column vacuum. [District Rule 4624, 5.4] Federally Enforceable Through Title V Permit
8. All delivery tanks which previously contained organic liquids, including gasoline, with a TVP greater than 1.5 psia at loading conditions shall be filled only at Class 1 loading facilities using bottom loading equipment with a vapor collection and control system operating such that VOC emissions do not exceed 0.08 lb/1000 gallons loaded and which operate so the delivery tank does not exceed 18 inches water column pressure nor 6 inches water column vacuum. [District Rules 4624, 5.5] Federally Enforceable Through Title V Permit
9. Loading and vapor collection and control equipment shall be designed, installed, maintained and operated such that there are no leaks or excess organic liquid drainage at disconnections. A leak shall be defined as the dripping of organic compounds at a rate of more than three drops per minute or the detection of organic compounds, in excess of 10,000 ppm as methane measured at a distance of one centimeter from the potential source in accordance with EPA Method 21. Excess liquid drainage shall be defined as exceeding 10 milliliters per average of 3 consecutive disconnects. [District Rule 4624, 3.13, 3.17 and 5.6] Federally Enforceable Through Title V Permit
10. Construction, reconstruction (as defined in District Rule 4001, amended April 14, 1999), or expansion of any top loading facility shall not be allowed. [District Rule 4624, 5.7] Federally Enforceable Through Title V Permit
11. The vapor collection system, the vapor destruction device and each transfer rack shall be tested for leaks at least once every calendar quarter with a portable hydrocarbon analyzer in accordance with EPA Method 21. [District Rule 4624, 5.9.1] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

12. The equipment that are found leaking shall be repair or replaced within 72 hours after detecting the leakage. If the leaking component cannot be repaired or replaced within 72 hours, the component shall be taken out of service until such time the component is repaired or replaced. The repaired or replacement equipment shall be reinspected the first time the equipment is in operation after the repair or replacement. [District Rule 4624, 5.9.3] Federally Enforceable Through Title V Permit

13. Each calendar month, the vapor collection system, the vapor processing system and each loading rack handling gasoline shall be inspected during the loading of gasoline tank trucks for organic liquid and organic vapor leaks. For the purpose of this condition, detection methods incorporating sight, sound and smell are acceptable. Each detection of a leak shall be recorded and the source of the leak repaired within 15 days after it is detected. [District Rule 2520, 9.3.240 CFR Part 60.502(j) and 40 CFR Part 63.11089(a)] Federally Enforceable Through Title V Permit

14. A log book shall be used and shall be signed by the owner or operator at the completion of each inspection. A section of the log book shall contain a list, summary description, or diagram(s) showing the location of all equipment in gasoline service at the facility. [40 CFR Part 63.11089(b)] Federally Enforceable Through Title V Permit

15. Each detection of a liquid or vapor leak shall be recorded in the log book. When a leak is detected, an initial attempt at repair shall be made as soon as practicable, but no later than 5 calendar days after the leak is detected. Repair or replacement of leaking equipment shall be completed within 15 calendar days after detection of each leak. Delay of repair of leaking equipment will be allowed if the repair is not feasible within 15 days. The owner or operator shall provide in the semiannual report the reason(s) why the repair was not feasible and the date each repair was completed. [40 CFR Part 63.11089(d)] Federally Enforceable Through Title V Permit

16. Each calendar month, liquid drainage at disconnect of each loading arm shall be determined, and appropriate action shall be taken in case excess liquid drainage occurs from any loading arm. If no excess drainage conditions are found during five consecutive monthly inspections, the drainage inspection frequency may be changed from monthly to quarterly. However, if one or more excess drainage condition is found during a quarterly inspection, the inspection frequency shall return to monthly. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

17. Liquid drainage inspections shall be completed before 10:00 AM the day of inspection. Compliance shall be demonstrated by collecting all drainage at disconnect in a spouted container. The drainage shall be transferred to a graduated cylinder and the volume determined within one minute of collection. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

18. The owner or operator shall maintain a log book that contain the following information: 1.) dates of leak and drainage inspections, 2.) the nature of the leak (i.e. vapor or liquid including excess drainage) and the method of detection; 3.) findings, 4.) corrective action (date each leak or excess drainage condition repaired), 5.) repair methods applied in each attempt to repair the leak; 6.) repair delayed and the reason for the delay if the leak is not repaired within 15 calendar days after discovery of the leak; 6.) the expected date of successful repair of the leak if the leak is not repaired within 15 days; 7.) the date of successful repair of the leak; and 8.) inspector name and signature. [District Rule 4624, 6.1.3, 40 CFR Part 60.505 (c) and 40 CFR 63.11089(g)] Federally Enforceable Through Title V Permit

19. The owner or operator shall report the number of equipment leaks not repaired within 15 days after detection in a semi-annual report. [40 CFR 63.11089(g)] Federally Enforceable Through Title V Permit

20. During source testing the loading rack's vapor collection and control system (VCCS) shall be tested at every loading position to demonstrate the pressure in the delivery tanks being loaded complies with the requirements specified in this permit. Compliance shall be determined by calibrating and installing a liquid manometer, magnehelic device, or other instrument demonstrated to be equivalent, capable of measuring up to 500 mm water gauge pressure with a precision of 2.5 mm water gauge, on the terminal's VCCS at a pressure tap as close as possible to the connection with the product tank truck. The highest instantaneous pressure measurement as well as all pressure measurements at 5 minute intervals during delivery vessel loading must be recorded. [District Rule 2520, 9.3.2 and 40 CFR 60.503(d)] Federally Enforceable Through Title V Permit

21. Loading of a delivery vessel shall discontinue if its pressure relief valve opens. Corrective action shall be taken should this condition occur. [District Rule 2520, 9.1] Federally Enforceable Through Title V Permit

22. Source testing to determine compliance with the emission rate requirement of this permit shall be conducted at least once every 60 months. [District Rules 2201 and 4624, 6.2.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

23. Source testing shall be conducted using methods and procedures approved by District. The District must be notified 30 days prior to any compliance source testing and a pretest plan outlining the test methods and procedures shall be submitted for the District approval no later than 15 days prior to each test. [District Rule 1081, 6.0 and 7.1] Federally Enforceable Through Title V Permit

24. Source testing shall be witnessed or authorized by District Personnel. [District Rule 1081, 7.2] Federally Enforceable Through Title V Permit

25. VOC emissions from the vapor collection and control system shall be determined using 40 CFR 60.503 "Test Methods and Procedures" and EPA Reference Methods 2A, 2B, 25A, 25B, and ARB Method 422, or ARB Test Procedure TP-203.1. [District Rule 4624, 6.3.2 and San Joaquin County Rule 412] Federally Enforceable Through Title V Permit

26. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081, 7.3] Federally Enforceable Through Title V Permit

27. A log of all breakdowns of the vapor recovery system indicating the times, dates and gallons processed during the breakdown periods shall be maintained on the premises at all times and shall be made available for District inspection upon request. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

28. A record of the daily quantity of gasoline loaded from the loading racks operating under Permits to Operate N-829-1 and N-829-2 shall be kept. [District Rules 2520, 9.3.2, 4624, 6.1.3] Federally Enforceable Through Title V Permit

29. A record of the cumulative annual quantity of gasoline loaded from the loading racks operating under Permits to Operate N-829-1 and N-829-2 shall be kept. The record shall be updated at least weekly. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

30. Documentation attesting to the vapor tightness of each truck loaded with gasoline shall be kept. The documentation file for each tank truck shall be updated at least once per year to reflect the current test results as determined by EPA method 27. [40 CFR Part 60.5059(a) and 40 CFR 63.11094(b)] Federally Enforceable Through Title V Permit

31. The semi-annual compliance report shall include each loading of a gasoline cargo tank for which vapor tightness documentation had not been previously obtained by the facility. [40 CFR 63.11088(f)] Federally Enforceable Through Title V Permit

32. The operator shall maintain all records of required monitoring data and support information for inspection for a period of five years, and shall be made available for District inspection upon request. [District Rule 2520, 9.4.2, 4624, 6.1.4] Federally Enforceable Through Title V Permit

# San Joaquin Valley
# Air Pollution Control District

**PERMIT UNIT:** N-829-2-6 **EXPIRATION DATE:** 11/30/2015

**EQUIPMENT DESCRIPTION:**
FOUR LANE TRUCK LOADING RACK (SOUTH) CONSISTING OF 4 GASOLINE LOADING ARMS AND 4 DIESEL LOADING ARMS

## PERMIT UNIT REQUIREMENTS

1. All vapors displaced during truck loading shall be vented to the vapor recovery system under Permit to Operate N-829-20. [District NSR Rule] Federally Enforceable Through Title V Permit
2. The combined quantity of gasoline loaded through permit units N-829-1 and N-829-2 shall not exceed 2,071,233 gallons during any one day. [District NSR Rule] Federally Enforceable Through Title V Permit
3. Gasoline shall be loaded only into vapor tight tank trucks. [40 CFR Part 60.502(e)] Federally Enforceable Through Title V Permit
4. The facility shall obtain the vapor tightness documentation specified in 40 CFR Part 60.505(b) for each gasoline tank truck that is to be loaded at the facility. [40 CFR Part 60.502(e)(1)] Federally Enforceable Through Title V Permit
5. The loading rack shall be equipped with bottom loading equipment and a vapor collection and control system such that VOC emissions shall not exceed 0.08 pounds per 1000 gallons of gasoline loaded. [District Rule 4624, 5.1 and 40 CFR 63.11088(a)] Federally Enforceable Through Title V Permit
6. The vapor collection system shall be operated in a manner to prevent any organic vapors collected at one loading rack from passing to another loading rack. [40 CFR 63.11088(a)] Federally Enforceable Through Title V Permit
7. The vapor collection and control system shall operate such that the pressure in the delivery tank being loaded does not exceed 18 inches water column pressure and 6 inches water column vacuum. [District Rule 4624, 5.4] Federally Enforceable Through Title V Permit
8. All delivery tanks which previously contained organic liquids, including gasoline, with a TVP greater than 1.5 psia at loading conditions shall be filled only at Class 1 loading facilities using bottom loading equipment with a vapor collection and control system operating such that VOC emissions do not exceed 0.08 lb/1000 gallons loaded and which operate so the delivery tank does not exceed 18 inches water column pressure nor 6 inches water column vacuum. [District Rules 4624, 5.5] Federally Enforceable Through Title V Permit
9. Loading and vapor collection and control equipment shall be designed, installed, maintained and operated such that there are no leaks or excess organic liquid drainage at disconnections. A leak shall be defined as the dripping of organic compounds at a rate of more than three drops per minute or the detection of organic compounds, in excess of 10,000 ppm as methane measured at a distance of one centimeter from the potential source in accordance with EPA Method 21. Excess liquid drainage shall be defined as exceeding 10 milliliters per average of 3 consecutive disconnects. [District Rule 4624, 3.13, 3.17 and 5.6] Federally Enforceable Through Title V Permit
10. Construction, reconstruction (as defined in District Rule 4001, amended April 14, 1999), or expansion of any top loading facility shall not be allowed. [District Rule 4624, 5.7] Federally Enforceable Through Title V Permit
11. The vapor collection system, the vapor destruction device and each transfer rack shall be tested for leaks at least once every calendar quarter with a portable hydrocarbon analyzer in accordance with EPA Method 21. [District Rule 4624, 5.9.1] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

12. The equipment that are found leaking shall be repair or replaced within 72 hours after detecting the leakage. If the leaking component cannot be repaired or replaced within 72 hours, the component shall be taken out of service until such time the component is repaired or replaced. The repaired or replacement equipment shall be reinspected the first time the equipment is in operation after the repair or replacement. [District Rule 4624, 5.9.3] Federally Enforceable Through Title V Permit

13. Each calendar month, the vapor collection system, the vapor processing system and each loading rack handling gasoline shall be inspected during the loading of gasoline tank trucks for organic liquid and organic vapor leaks. For the purpose of this condition, detection methods incorporating sight, sound and smell are acceptable. Each detection of a leak shall be recorded and the source of the leak repaired within 15 days after it is detected. [District Rule 2520, 9.3.240 CFR Part 60.502(j) and 40 CFR Part 63.11089(a)] Federally Enforceable Through Title V Permit

14. A log book shall be used and shall be signed by the owner or operator at the completion of each inspection. A section of the log book shall contain a list, summary description, or diagram(s) showing the location of all equipment in gasoline service at the facility. [40 CFR Part 63.11089(b)] Federally Enforceable Through Title V Permit

15. Each detection of a liquid or vapor leak shall be recorded in the log book. When a leak is detected, an initial attempt at repair shall be made as soon as practicable, but no later than 5 calendar days after the leak is detected. Repair or replacement of leaking equipment shall be completed within 15 calendar days after detection of each leak. Delay of repair of leaking equipment will be allowed if the repair is not feasible within 15 days. The owner or operator shall provide in the semiannual report the reason(s) why the repair was not feasible and the date each repair was completed. [40 CFR Part 63.11089(d)] Federally Enforceable Through Title V Permit

16. Each calendar month, liquid drainage at disconnect of each loading arm shall be determined, and appropriate action shall be taken in case excess liquid drainage occurs from any loading arm. If no excess drainage conditions are found during five consecutive monthly inspections, the drainage inspection frequency may be changed from monthly to quarterly. However, if one or more excess drainage condition is found during a quarterly inspection, the inspection frequency shall return to monthly. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

17. Liquid drainage inspections shall be completed before 10:00 AM the day of inspection. Compliance shall be demonstrated by collecting all drainage at disconnect in a spouted container. The drainage shall be transferred to a graduated cylinder and the volume determined within one minute of collection. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

18. The owner or operator shall maintain a log book that contain the following information: 1.) dates of leak and drainage inspections, 2.) the nature of the leak (i.e. vapor or liquid including excess drainage) and the method of detection; 3.) findings, 4.) corrective action (date each leak or excess drainage condition repaired), 5.) repair methods applied in each attempt to repair the leak; 6.) repair delayed and the reason for the delay if the leak is not repaired within 15 calendar days after discovery of the leak; 6.) the expected date of successful repair of the leak if the leak is not repaired within 15 days; 7.) the date of successful repair of the leak; and 8.) inspector name and signature. [District Rule 4624, 6.1.3, 40 CFR Part 60.505 (c) and 40 CFR 63.11089(g)] Federally Enforceable Through Title V Permit

19. The owner or operator shall report the number of equipment leaks not repaired within 15 days after detection in a semi-annual report. [40 CFR 63.11089(g)] Federally Enforceable Through Title V Permit

20. During source testing the loading rack's vapor collection and control system (VCCS) shall be tested at every loading position to demonstrate the pressure in the delivery tanks being loaded complies with the requirements specified in this permit. Compliance shall be determined by calibrating and installing a liquid manometer, magnehelic device, or other instrument demonstrated to be equivalent, capable of measuring up to 500 mm water gauge pressure with a precision of 2.5 mm water gauge, on the terminal's VCCS at a pressure tap as close as possible to the connection with the product tank truck. The highest instantaneous pressure measurement as well as all pressure measurements at 5 minute intervals during delivery vessel loading must be recorded. [District Rule 2520, 9.3.2 and 40 CFR 60.503(d)] Federally Enforceable Through Title V Permit

21. Loading of a delivery vessel shall discontinue if its pressure relief valve opens. Corrective action shall be taken should this condition occur. [District Rule 2520, 9.1] Federally Enforceable Through Title V Permit

22. Source testing to determine compliance with the emission rate requirement of this permit shall be conducted at least once every 60 months. [District Rules 2201 and 4624, 6.2.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

23. Source testing shall be conducted using methods and procedures approved by District. The District must be notified 30 days prior to any compliance source testing and a pretest plan outlining the test methods and procedures shall be submitted for the District approval no later than 15 days prior to each test. [District Rule 1081, 6.0 and 7.1] Federally Enforceable Through Title V Permit

24. Source testing shall be witnessed or authorized by District Personnel. [District Rule 1081, 7.2] Federally Enforceable Through Title V Permit

25. VOC emissions from the vapor collection and control system shall be determined using 40 CFR 60.503 "Test Methods and Procedures" and EPA Reference Methods 2A, 2B, 25A, 25B, and ARB Method 422, or ARB Test Procedure TP-203.1. [District Rule 4624, 6.3.2 and San Joaquin County Rule 412] Federally Enforceable Through Title V Permit

26. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081, 7.3] Federally Enforceable Through Title V Permit

27. A log of all breakdowns of the vapor recovery system indicating the times, dates and gallons processed during the breakdown periods shall be maintained on the premises at all times and shall be made available for District inspection upon request. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

28. A record of the daily quantity of gasoline loaded from the loading racks operating under Permits to Operate N-829-1 and N-829-2 shall be kept. [District Rules 2520, 9.3.2, 4624, 6.1.3] Federally Enforceable Through Title V Permit

29. A record of the cumulative annual quantity of gasoline loaded from the loading racks operating under Permits to Operate N-829-1 and N-829-2 shall be kept. The record shall be updated at least weekly. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

30. Documentation attesting to the vapor tightness of each truck loaded with gasoline shall be kept. The documentation file for each tank truck shall be updated at least once per year to reflect the current test results as determined by EPA method 27. [40 CFR Part 60.5059(a) and 40 CFR 63.11094(b)] Federally Enforceable Through Title V Permit

31. The semi-annual compliance report shall include each loading of a gasoline cargo tank for which vapor tightness documentation had not been previously obtained by the facility. [40 CFR 63.11088(f)] Federally Enforceable Through Title V Permit

32. The operator shall maintain all records of required monitoring data and support information for inspection for a period of five years, and shall be made available for District inspection upon request. [District Rule 2520, 9.4.2, 4624, 6.1.4] Federally Enforceable Through Title V Permit

# San Joaquin Valley
# Air Pollution Control District

**PERMIT UNIT:** N-829-5-3 **EXPIRATION DATE:** 11/30/2015

**EQUIPMENT DESCRIPTION:**
630,000 GALLON WELDED INTERNAL FLOATING ROOF STORAGE TANK (#1502) WITH A WIPER PRIMARY SEAL AND A SLOTTED GUIDEPOLE

## PERMIT UNIT REQUIREMENTS

1. True vapor pressure of the organic liquid stored shall be less than 11 psia. [District Rule 4623, 5.1.1] Federally Enforceable Through Title V Permit
2. The internal floating roof shall float on the surface of the stored liquid at all times (i.e., off the roof leg supports) except during the initial fill until the roof is lifted off the leg supports and when the tank is completely emptied and subsequently refilled. When the roof is resting on the leg supports, the process of filling, emptying, or refilling shall be continuous and shall be accomplished as rapidly as possible. Whenever the permittee intends to land the roof on it's legs, the permittee shall notify the APCO in writing at least five calendar days prior to performing the work. The tank must be in compliance with this rule before it may land on its legs. [District Rule 4623, 5.3.1.3 and 5.4.3, 40 CFR 60.112(a)(1) and 40 CFR 63.11087(a)] Federally Enforceable Through Title V Permit
3. The tank shall be equipped with an Ultraflote, model Single Ultraseal, wiper primary seal. [District Rule 4623, 5.4.2 and 40 CFR 63.11087(a)] Federally Enforceable Through Title V Permit
4. No gap between the tank shell and the seal shell shall exceed 0.06 inch. [District Rule 4623, 3.37 and 5.4.2.1] Federally Enforceable Through Title V Permit
5. The cumulative length of all gaps exceeding 0.02 inch shall not be more than 5% of the circumference of the tank, excluding gaps less than 1.79 inches from vertical seams. [District Rule 4623, 3.37 and 5.4.2.1] Federally Enforceable Through Title V Permit
6. All openings in the roof used for sampling and gauging shall provide a projection below the liquid surface to prevent belching of liquid and to prevent entrained or formed organic vapor from escaping from the liquid contents of the tank and shall be equipped with a cover, seal or lid. The cover seal or lid shall be in a closed position, with no visible gaps and be leak-free, except when the device or appurtenance is in use for sampling or gauging. [District Rule 4623, 5.5.1] Federally Enforceable Through Title V Permit
7. A leak-free condition is defined as a condition without a gas leak or a liquid leak. A gas leak is defined as a reading in excess of 10,000 parts per million by volume (ppmv), as methane, above background on a portable hydrocarbon detection instrument that is calibrated with methane in accordance with the procedures specified in EPA Method 21. Liquid leak is defined as the dripping of organic liquid at a rate of more than 3 drops per minute. A reading in excess to 10,000 ppmv, as methane, above background, or dripping of organic liquid at a rate of more than 3 drops per minute, is a violation of this permit and Rule 4623 and shall be reported as a deviation. [District Rule 4623, 3.11, 3.17, 3.18 and 6.4.8] Federally Enforceable Through Title V Permit
8. 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 and 40 CFR 63.11087(a)] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

9. Each opening in the internal floating roof except for leg sleeves, automatic bleeder vents, rim space vents, column wells, ladder wells, sample wells, combination manway/vacuum breakers, and stub drains shall be equipped with a cover, or a lid shall be maintained in a closed position at all times (i.e. no visible gaps) except when the device is in use. The cover or lid shall be equipped with a gasket. Covers on each access hatch and automatic gauge float well shall be bolted in place except when they are in use. [District Rule 4623, 5.5.2.1.2] Federally Enforceable Through Title V Permit

10. Automatic bleeder vents shall be equipped with a gasket and shall be closed at all times when the roof is floating except when the roof is being floated off or is being landed on the leg roof supports. [District Rule 4623, 5.5.2.1.3] Federally Enforceable Through Title V Permit

11. Rim vents shall be equipped with a gasket and shall 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

12. 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

13. Each penetration of the internal floating roof that allows for the 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

14. All slotted sampling or gauging 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

15. The gap between the pole wiper and the slotted guidepole shall not exceed 1/8 inch. [District Rule 4623, 5.5.2.4.3] Federally Enforceable Through Title V Permit

16. The permittee shall notify the District in writing at least 30 days prior to conduct the visual inspection of the storage vessel, so the District can arrange an observer. [40 CFR 60.11087(c)] Federally Enforceable Through Title V Permit

17. For newly constructed, repaired, or rebuilt internal floating roof tanks, 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. If there are holes, tears, or other openings in the primary seal, the secondary seal, or the seal fabric or defects in the internal floating roof or its appurtenant parts, components, fittings, etc., the operator shall repair the defects before filling the tank. [District Rule 4623, 6.1.4.1 and 40 CFR 63.11087(c)] Federally Enforceable Through Title V Permit

18. The owner or operator shall perform a monthly leak inspection of all equipment in gasoline service, as defined in section 63.11100. For this inspection, detection methods incorporating sight, sound, and smell are acceptable. [40 CFR Part 63.11089(a)] Federally Enforceable Through Title V Permit

19. For monthly leak inspection, a log book shall be used and shall be signed by the owner or operator at the completion of each inspection. A section of the log book shall contain a list, summary description, or diagram(s) showing the location of all equipment in gasoline service at the facility. [40 CFR Part 63.11089(b)] Federally Enforceable Through Title V Permit

20. Each detection of a liquid or vapor leak shall be recorded in the log book. When a leak is detected, an initial attempt at repair shall be made as soon as practicable, but no later than 5 calendar days after the leak is detected. Repair or replacement of leaking equipment shall be completed within 15 calendar days after detection of each leak. Delay of repair of leaking equipment will be allowed if the repair is not feasible within 15 days. The owner or operator shall provide in the semiannual report the reason(s) why the repair was not feasible and the date each repair was completed. [40 CFR Part 63.11089(d)] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

21. The owner or operator shall maintain a log book that contain the following information for a leak during during monthly inspection: 1.) equipment type and identification number; 2.) the nature of the leak (i.e. vapor or liquid) and the method of detection (i.e. sight, sound, or smell); 3.) the date the leak was detected and the date of each attempt to repair the leak; 4.) repair methods applied in each attempt to repair the leak; 5.) repair delayed and the reason for the delay if the leak is not repaired within 15 calendar days after discovery of the leak; 6) the expected date of successful repair of the leak if the leak is not repaired within 15 days; and 7.) the date of successful repair of the leak. [40 CFR 63.11089(g)] Federally Enforceable Through Title V Permit

22. The permittee shall visually inspect, through the manholes, roof hatches, or other opening 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, 6.1.4.2 and 40 CFR 63.11087(c)] Federally Enforceable Through Title V Permit

23. If any failure (i.e. visible organic liquid on the internal floating roof, tank walls or anywhere, holes or tears in the seal fabric) is detected during 12 month visual inspection, the permittee shall repair the items or empty and remove the storage vessel from service within 45 days. If the detected failure cannot be repaired within 45 days and if the vessel cannot be emptied within 45 days, a 30-day extension may be requested from the APCO in the inspection report. Such a request must document that alternate storage capacity is unavailable and specify a schedule of actions the company will take that will assure theat the control equipment will be repaired or the vessel will be emptied as soon as possible. [40 CFR 60.11087(c)] Federally Enforceable Through Title V Permit

24. The permittee shall visually inspect the internal floating roof, the primary seal, the secondary seal, gaskets, slotted memberanes and sleeve seals (if any) each time the vessel is emptied and degassed. If the internal floating roof has defects, the primary seal has holes, tears, or other openings in the seal or the seal fabric, or the secondary seal has holes, tears, or other openings in the seal or the seal fabric, or the gaskets no longer close off the liquid surfaces from the atmosphere, or the slotted membrane has more than 10 percent open area, the owner or operator shall repair the items as necessary so that none of the conditions specified in this paragraph exist before refilling the storage vessel. [40 CFR Part 63.11087(c)] Federally Enforceable Through Title V Permit

25. The owner or operator shall report the number of equipment leaks not repaired within 15 days after detection in a semi-annual report. [40 CFR 63.11089(g)] Federally Enforceable Through Title V Permit

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

27. The operator shall determine the presence of gas leaks using portable hydrocarbon detection instrument in accordance with EPA Method 21. The instrument shall be calibrated before use each day of its use by the procedures specified in Method 21 using the following calibration gases: 1.) Zero air (less than 10 ppm of hydrocarbon in air); and 2.) A mixture of methane or n-hexane and air at a concentration of about, but less than, 10,000 ppm methane or n-hexane. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

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

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

29. The permittee shall conduct actual gap measurements of the primary seal and/or secondary seal at least once every 60 months. Other than the gap criteria specified by this permit, no holes, tears, or other openings are allowed that would permit the escape of hydrocarbon vapors. Any defects found shall constitute a violation of this rule. [District Rule 4623, 6.1.4.3 and 40 CFR 63.11087(c)] Federally Enforceable Through Title V Permit

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

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

32. The operator shall keep a record of liquids stored in each container, period of storage, and the maximum true vapor pressure of the liquid during the respective storage period. [District Rule 40 CFR 60.113(a)] Federally Enforceable Through Title V Permit

33. Maximum true vapor pressure may be determined from nomographs contained in API Bulletin 2517, by using the typical Reid vapor pressure and the maximum expected storage temperature of the stored product, unless the APCO specifically requests that the liquid be sampled, the actual storage temperature determined, and the Reid vapor pressure determined from the sample(s). [40 CFR 60.113(b)] Federally Enforceable Through Title V Permit

34. The permittee shall submit the reports of the floating roof tank inspections to the APCO within five calendar days after the completion of the inspection only for those tanks that failed to meet the applicable requirements of Rule 4623, Sections 5.2 through 5.5. The inspection report for tanks that that have been determined to be in compliance with the requirements of Sections 5.2 through 5.5 need not be submitted to the APCO, but the inspection report shall be kept on-site and made available upon request by the APCO. The inspection report shall contain all necessary information to demonstrate compliance with the provisions of this rule, including the following: 1.) Date of inspection and names and titles of company personnel doing the inspection; 2.) Tank identification number and Permit to Operate number; 3.) Measurements of the gaps between the tank shell and primary and secondary seals; 4.) Leak-free status of the tank and floating roof deck fittings. Records of the leak-free status shall include the vapor concentration values measured in ppmv. 5.) Data, supported by calculations, demonstrating compliance with the requirements specified in Sections 5.3, 5.4, 5.5.2.3.3, 5.5.2.4.2, and 5.5.2.4.3 of Rule 4623. 6.) Any corrective actions or repairs performed on the tank in order to comply with Rule 4623 and the date(s) such actions were taken. [District Rule 4623, 6.3.5 and 40 CFR 63.11087(e)] Federally Enforceable Through Title V Permit

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

36. The following test methods shall be used: ASTM Method D287 for determining API Gravity, ASTM Method D4057 sampling for API Gravity testing; ASTM D323 for determining RVP, and converting RVP to TVP at the tank's maximum organic liquid storage temperature; ARB Method 422 for determining exempt halogenated VOCs in gases; EPA Method 21 for measuring gas-leak concentration. Should the owner or operator wish to use test methods other than the ones mentioned in this condition, the methods must be approved by the District prior to its use. [District Rule 4623, 6.4] Federally Enforceable Through Title V Permit

37. The operator shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rules 4623, 6.3 and 2520, 9.4.2] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

**PERMIT UNIT:** N-829-6-6 **EXPIRATION DATE:** 11/30/2015

**EQUIPMENT DESCRIPTION:**
630,000 GALLON WELDED INTERNAL FLOATING ROOF STORAGE TANK (#1501) WITH A HMT FOAM LOG PRIMARY SEAL AND A HMT VAPOR FLEX SECONDARY SEAL AND A SLOTTED GUIDEPOLE

# PERMIT UNIT REQUIREMENTS

1. True vapor pressure of the organic liquid stored shall be less than 11 psia. [District Rule 4623, 5.1.1] Federally Enforceable Through Title V Permit
2. The internal floating roof shall float on the surface of the stored liquid at all times (i.e., off the roof leg supports) except during the initial fill until the roof is lifted off the leg supports and when the tank is completely emptied and subsequently refilled. When the roof is resting on the leg supports, the process of filling, emptying, or refilling shall be continuous and shall be accomplished as rapidly as possible. Whenever the permittee intends to land the roof on it's legs, the permittee shall notify the APCO in writing at least five calendar days prior to performing the work. The tank must be in compliance with this rule before it may land on its legs. [District Rule 4623, 5.3.1.3 and 5.4.3 and 40 CFR 63.11087(a)] Federally Enforceable Through Title V Permit
3. VOC emissions shall not exceed 5.6 pounds in any one day. [District Rule 2201] Federally Enforceable Through Title V Permit
4. The organic liquid throughput shall not exceed 30,240,000 gallons in any one calendar year. [District Rule 2201] Federally Enforceable Through Title V Permit
5. 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 and 5.4.1] Federally Enforceable Through Title V Permit
6. No gap between the tank shell and the primary seal shall exceed 1/2 inch. [District Rule 4623, 5.3.2.3.2 and 5.4.1] Federally Enforceable Through Title V Permit
7. 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 and 5.4.1] 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, 5.3.2.3.2 and 5.4.1] 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, 5.3.2.3.3 and 5.4.1] 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, 5.3.2.3.3 and 5.4.1] Federally Enforceable Through Title V Permit
11. 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 and 5.4.1] Federally Enforceable Through Title V Permit
12. 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 and 5.4.1] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

13. 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 and 5.4.1] Federally Enforceable Through Title V Permit

14. All slotted sampling or gauging 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

15. The gap between the pole wiper and the slotted guidepole shall not exceed 1/8 inch. [District Rule 4623, 5.5.2.4.3] Federally Enforceable Through Title V Permit

16. All openings in the roof used for sampling and gauging 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 for sampling or gauging. [District Rule 4623, 5.5.1] Federally Enforceable Through Title V Permit

17. A leak-free condition is defined as a condition without a gas leak or a liquid leak. A gas leak is defined as a reading in excess of 10,000 parts per million by volume (ppmv), as methane, above background on a portable hydrocarbon detection instrument that is calibrated with methane in accordance with the procedures specified in EPA Method 21. Liquid leak is defined as the dripping of organic liquid at a rate of more than 3 drops per minute. A reading in excess to 10,000 ppmv, as methane, above background, or dripping of organic liquid at a rate of more than 3 drops per minute, is a violation of this permit and Rule 4623 and shall be reported as a deviation. [District Rule 4623, 3.11, 3.17, 3.18 and 6.4.8] Federally Enforceable Through Title V Permit

18. 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 and 40 CFR 63.11087(a)] Federally Enforceable Through Title V Permit

19. Each opening in the internal floating roof except for leg sleeves, automatic bleeder vents, rim space vents, column wells, ladder wells, sample wells, combination manway/vacuum breakers, and stub drains 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

20. 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

21. 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

22. 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

23. 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

24. The permittee shall notify the District in writing at least 30 days prior to conduct the visual inspection of the storage vessel, so the District can arrange an observer. [40 CFR 60.11087(c)] Federally Enforceable Through Title V Permit

25. For newly constructed, repair, or rebuilt internal floating roof tanks, 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. 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, 6.1.4.1 and 40 CFR 63.11087(c)] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

26. The owner or operator shall perform a monthly leak inspection of all equipment in gasoline service, as defined in section 63.11100. For this inspection, detection methods incorporating sight, sound, and smell are acceptable. [40 CFR Part 63.11089(a)] Federally Enforceable Through Title V Permit

27. For monthly leak inspection, a log book shall be used and shall be signed by the owner or operator at the completion of each inspection. A section of the log book shall contain a list, summary description, or diagram(s) showing the location of all equipment in gasoline service at the facility. [40 CFR Part 63.11089(b)] Federally Enforceable Through Title V Permit

28. Each detection of a liquid or vapor leak shall be recorded in the log book. When a leak is detected, an initial attempt at repair shall be made as soon as practicable, but no later than 5 calendar days after the leak is detected. Repair or replacement of leaking equipment shall be completed within 15 calendar days after detection of each leak. Delay of repair of leaking equipment will be allowed if the repair is not feasible within 15 days. The owner or operator shall provide in the semiannual report the reason(s) why the repair was not feasible and the date each repair was completed. [40 CFR Part 63.11089(d)] Federally Enforceable Through Title V Permit

29. The owner or operator shall maintain a log book that contain the following information for a leak during during monthly inspection: 1.) equipment type and identification number; 2.) the nature of the leak (i.e. vapor or liquid) and the method of detection (i.e. sight, sound, or smell); 3.) the date the leak was detected and the date of each attempt to repair the leak; 4.) repair methods applied in each attempt to repair the leak; 5.) repair delayed and the reason for the delay if the leak is not repaired within 15 calendar days after discovery of the leak; 6) the expected date of successful repair of the leak if the leak is not repaired within 15 days; and 7.) the date of successful repair of the leak. [40 CFR 63.11089(g)] Federally Enforceable Through Title V Permit

30. The permittee shall visually inspect, through the manholes, roof hatches, or other opening 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, 6.1.4.2 and 40 CFR 63.11087(c)] Federally Enforceable Through Title V Permit

31. If any failure (i.e. visible organic liquid on the internal floating roof, tank walls or anywhere, holes or tears in the seal fabric) is detected during 12 month visual inspection, the permittee shall repair the items or empty and remove the storage vessel from service within 45 days. If the detected failure cannot be repaired within 45 days and if the vessel cannot be emptied within 45 days, a 30-day extension may be requested from the APCO in the inspection report. Such a request must document that alternate storage capacity is unavailable and specify a schedule of actions the company will take that will assure theat the control equipment will be repaired or the vessel will be emptied as soon as possible. [40 CFR 60.11087(c)] Federally Enforceable Through Title V Permit

32. The permittee shall visually inspect the internal floating roof, the primary seal, the secondary seal, gaskets, slotted memberanes and sleeve seals (if any) each time the vessel is emptied and degassed. If the internal floating roof has defects, the primary seal has holes, tears, or other openings in the seal or the seal fabric, or the secondary seal has holes, tears, or other openings in the seal or the seal fabric, or the gaskets no longer close off the liquid surfaces from the atmosphere, or the slotted membrane has more than 10 percent open area, the owner or operator shall repair the items as necessary so that none of the conditions specified in this paragraph exist before refilling the storage vessel. [40 CFR Part 63.11087(c)] Federally Enforceable Through Title V Permit

33. The owner or operator shall report the number of equipment leaks not repaired within 15 days after detection in a semi-annual report. [40 CFR 63.11089(g)] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

35. The operator shall determine the presence of gas leaks using portable hydrocarbon detection instrument in accordance with EPA Method 21. The instrument shall be calibrated before use each day of its use by the procedures specified in Method 21 using the following calibration gases: 1.) Zero air (less than 10 ppm of hydrocarbon in air); and 2.) A mixture of methane or n-hexane and air at a concentration of about, but less than, 10,000 ppm methane or n-hexane. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

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

37. The permittee shall conduct actual gap measurements of the primary seal and/or secondary seal at least once every 60 months. Other than the gap criteria specified by this permit, no holes, tears, or other openings are allowed that would permit the escape of hydrocarbon vapors. Any defects found shall constitute a violation of this rule. [District Rule 4623, 6.1.4.3 and 40 CFR 63.11087(c)] Federally Enforceable Through Title V Permit

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

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

40. The operator shall keep a record of liquids stored in each container, period of storage, and the maximum true vapor pressure of the liquid during the respective storage period. [40 CFR 60.113(a)] Federally Enforceable Through Title V Permit

41. Maximum true vapor pressure may be determined from nomographs contained in API Bulletin 2517, by using the typical Reid vapor pressure and the maximum expected storage temperature of the stored product, unless the APCO specifically requests that the liquid be sampled, the actual storage temperature determined, and the Reid vapor pressure determined from the sample(s). Operator shall maintain a record of the petroleum liquid stored and the maximum true vapor pressure of that liquid during the period of storage. [40 CFR 60.113(b)] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

42. The permittee shall submit the reports of the floating roof tank inspections to the APCO within five calendar days after the completion of the inspection only for those tanks that failed to meet the applicable requirements of Rule 4623, Sections 5.2 through 5.5. The inspection report for tanks that that have been determined to be in compliance with the requirements of Sections 5.2 through 5.5 need not be submitted to the APCO, but the inspection report shall be kept on-site and made available upon request by the APCO. The inspection report shall contain all necessary information to demonstrate compliance with the provisions of this rule, including the following: 1.) Date of inspection and names and titles of company personnel doing the inspection; 2.) Tank identification number and Permit to Operate number; 3.) Measurements of the gaps between the tank shell and primary and secondary seals; 4.) Leak-free status of the tank and floating roof deck fittings. Records of the leak-free status shall include the vapor concentration values measured in ppmv. 5.) Data, supported by calculations, demonstrating compliance with the requirements specified in Sections 5.3, 5.4, 5.5.2.3.3, 5.5.2.4.2, and 5.5.2.4.3 of Rule 4623. 6.) Any corrective actions or repairs performed on the tank in order to comply with Rule 4623 and the date(s) such actions were taken. [District Rule 4623, 6.3.5 and 40 CFR 63.11087(e)] Federally Enforceable Through Title V Permit

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

44. The following test methods shall be used: ASTM Method D287 for determining API Gravity, ASTM Method D4057 sampling for API Gravity testing; ASTM D323 for determining RVP, and converting RVP to TVP at the tank's maximum organic liquid storage temperature; ARB Method 422 for determining exempt halogenated VOCs in gases; EPA Method 21 for measuring gas-leak concentration. Should the owner or operator wish to use test methods other than the ones mentioned in this condition, the methods must be approved by the District prior to its use. [District Rule 4623, 6.4] Federally Enforceable Through Title V Permit

45. Records of the cumulative annual organic liquid throughput shall be maintained and updated monthly. [District Rule 2201] Federally Enforceable Through Title V Permit

46. 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

San Joaquin Valley
Air Pollution Control District

**PERMIT UNIT:** N-829-7-5 **EXPIRATION DATE:** 11/30/2015

**EQUIPMENT DESCRIPTION:**
420,000 GALLON WELDED INTERNAL FLOATING ROOF TANK (#1002) WITH A PRIMARY RESILIENT TOROID SEAL, A SECONDARY WIPER SEAL, AND A SOLID GUIDEPOLE

# PERMIT UNIT REQUIREMENTS

1. The tank shall be equipped with a cover consisting of either a pontoon-type or double-deck-type cover which rests upon the surface of the liquid being stored and is equipped with a closure device between the tank shell and roof edge consisting of a primary and a secondary seal. [District Rule 4623, 5.3.1 and 40 CFR 63.11087(a)] Federally Enforceable Through Title V Permit
2. 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 and 40 CFR 63.11087(a)] Federally Enforceable Through Title V Permit
3. VOC emissions from the storage tank shall not exceed 11.4 pounds in any given day. [District Rule 2201] Federally Enforceable Through Title V Permit
4. True vapor pressure of the organic liquid stored shall be less than 11 psia. [District Rule 4623, 5.1.1] Federally Enforceable Through Title V Permit
5. 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 and 5.4.1] Federally Enforceable Through Title V Permit
6. No gap between the tank shell and the primary seal shall exceed 1/2 inch. [District Rule 4623, 5.3.2.3.2 and 5.4.1] Federally Enforceable Through Title V Permit
7. 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 and 5.4.1] 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, 5.3.2.3.2 and 5.4.1] 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, 5.3.2.3.3 and 5.4.1] 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, 5.3.2.3.3 and 5.4.1] Federally Enforceable Through Title V Permit
11. 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 and 5.4.1] Federally Enforceable Through Title V Permit

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12. 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 and 5.4.1] Federally Enforceable Through Title V Permit

13. 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 and 5.4.1] Federally Enforceable Through Title V Permit

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

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

16. The gap between the pole wiper and the solid guidepole shall not exceed 1/2 inch. [District Rule 4623, 5.5.2.3.3] Federally Enforceable Through Title V Permit

17. All openings in the roof used for sampling and gauging 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 for sampling or gauging. [District Rule 4623, 5.5.1] 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 gas leak is defined as a reading in excess of 10,000 parts per million by volume (ppmv), as methane, above background on a portable hydrocarbon detection instrument that is calibrated with methane in accordance with the procedures specified in EPA Method 21. Liquid leak is defined as the dripping of organic liquid at a rate of more than 3 drops per minute. A reading in excess to 10,000 ppmv, as methane, above background, or dripping of organic liquid at a rate of more than 3 drops per minute, is a violation of this permit and Rule 4623 and shall be reported as a deviation. [District Rule 4623, 3.11, 3.17, 3.18 and 6.4.8] Federally Enforceable Through Title V Permit

19. 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 and 40 CFR 63.11087(a)] Federally Enforceable Through Title V Permit

20. Each opening in the internal floating roof except for leg sleeves, automatic bleeder vents, rim space vents, column wells, ladder wells, sample wells, combination manway/vacuum breakers, and stub drains 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

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, 5.5.2.1.3] Federally Enforceable Through Title V Permit

22. 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

23. 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

24. 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

25. The permittee shall notify the District in writing at least 30 days prior to conduct the visual inspection of the storage vessel, so the District can arrange an observer. [40 CFR 60.11087(c)] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

26. For newly constructed, repair, or rebuilt internal floating roof tanks, 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. 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, 6.1.4.1 and 40 CFR 63.11087(c)] Federally Enforceable Through Title V Permit

27. The owner or operator shall perform a monthly leak inspection of all equipment in gasoline service, as defined in section 63.11100. For this inspection, detection methods incorporating sight, sound, and smell are acceptable. [40 CFR Part 63.11089(a)] Federally Enforceable Through Title V Permit

28. For monthly leak inspection, a log book shall be used and shall be signed by the owner or operator at the completion of each inspection. A section of the log book shall contain a list, summary description, or diagram(s) showing the location of all equipment in gasoline service at the facility. [40 CFR Part 63.11089(b)] Federally Enforceable Through Title V Permit

29. Each detection of a liquid or vapor leak shall be recorded in the log book. When a leak is detected, an initial attempt at repair shall be made as soon as practicable, but no later than 5 calendar days after the leak is detected. Repair or replacement of leaking equipment shall be completed within 15 calendar days after detection of each leak. Delay of repair of leaking equipment will be allowed if the repair is not feasible within 15 days. The owner or operator shall provide in the semiannual report the reason(s) why the repair was not feasible and the date each repair was completed. [40 CFR Part 63.11089(d)] Federally Enforceable Through Title V Permit

30. The owner or operator shall maintain a log book that contain the following information for a leak during during monthly inspection: 1.) equipment type and identification number; 2.) the nature of the leak (i.e. vapor or liquid) and the method of detection (i.e. sight, sound, or smell); 3.) the date the leak was detected and the date of each attempt to repair the leak; 4.) repair methods applied in each attempt to repair the leak; 5.) repair delayed and the reason for the delay if the leak is not repaired within 15 calendar days after discovery of the leak; 6) the expected date of successful repair of the leak if the leak is not repaired within 15 days; and 7.) the date of successful repair of the leak. [40 CFR 63.11089(g)] Federally Enforceable Through Title V Permit

31. The permittee shall visually inspect, through the manholes, roof hatches, or other opening 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, 6.1.4.2 and 40 CFR 63.11087(c)] Federally Enforceable Through Title V Permit

32. If any failure (i.e. visible organic liquid on the internal floating roof, tank walls or anywhere, holes or tears in the seal fabric) is detected during 12 month visual inspection, the permittee shall repair the items or empty and remove the storage vessel from service within 45 days. If the detected failure cannot be repaired within 45 days and if the vessel cannot be emptied within 45 days, a 30-day extension may be requested from the APCO in the inspection report. Such a request must document that alternate storage capacity is unavailable and specify a schedule of actions the company will take that will assure theat the control equipment will be repaired or the vessel will be emptied as soon as possible. [40 CFR 60.11087(c)] Federally Enforceable Through Title V Permit

33. The permittee shall visually inspect the internal floating roof, the primary seal, the secondary seal, gaskets, slotted memberanes and sleeve seals (if any) each time the vessel is emptied and degassed. If the internal floating roof has defects, the primary seal has holes, tears, or other openings in the seal or the seal fabric, or the secondary seal has holes, tears, or other openings in the seal or the seal fabric, or the gaskets no longer close off the liquid surfaces from the atmosphere, or the slotted membrane has more than 10 percent open area, the owner or operator shall repair the items as necessary so that none of the conditions specified in this paragraph exist before refilling the storage vessel. [40 CFR Part 63.11087(c)] Federally Enforceable Through Title V Permit

34. The owner or operator shall report the number of equipment leaks not repaired within 15 days after detection in a semi-annual report. [40 CFR 63.11089(g)] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

36. The operator shall determine the presence of gas leaks using portable hydrocarbon detection instrument in accordance with EPA Method 21. The instrument shall be calibrated before use each day of its use by the procedures specified in Method 21 using the following calibration gases: 1.) Zero air (less than 10 ppm of hydrocarbon in air); and 2.) A mixture of methane or n-hexane and air at a concentration of about, but less than, 10,000 ppm methane or n-hexane. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

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

38. The permittee shall conduct actual gap measurements of the primary seal and/or secondary seal at least once every 60 months. Other than the gap criteria specified by this permit, no holes, tears, or other openings are allowed that would permit the escape of hydrocarbon vapors. Any defects found shall constitute a violation of this rule. [District Rule 4623, 6.1.4.3 and 40 CFR 63.11087(c)] Federally Enforceable Through Title V Permit

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

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

41. The operator shall keep a record of liquids stored in each container, period of storage, and the maximum true vapor pressure of the liquid during the respective storage period. [40 CFR 60.113(a)] Federally Enforceable Through Title V Permit

42. Maximum true vapor pressure may be determined from nomographs contained in API Bulletin 2517, by using the typical Reid vapor pressure and the maximum expected storage temperature of the stored product, unless the APCO specifically requests that the liquid be sampled, the actual storage temperature determined, and the Reid vapor pressure determined from the sample(s). Operator shall maintain a record of the petroleum liquid stored and the maximum true vapor pressure of that liquid during the period of storage. [40 CFR 60.113(a) and (b)] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

43. The permittee shall submit the reports of the floating roof tank inspections to the APCO within five calendar days after the completion of the inspection only for those tanks that failed to meet the applicable requirements of Rule 4623, Sections 5.2 through 5.5. The inspection report for tanks that that have been determined to be in compliance with the requirements of Sections 5.2 through 5.5 need not be submitted to the APCO, but the inspection report shall be kept on-site and made available upon request by the APCO. The inspection report shall contain all necessary information to demonstrate compliance with the provisions of this rule, including the following: 1.) Date of inspection and names and titles of company personnel doing the inspection; 2.) Tank identification number and Permit to Operate number; 3.) Measurements of the gaps between the tank shell and primary and secondary seals; 4.) Leak-free status of the tank and floating roof deck fittings. Records of the leak-free status shall include the vapor concentration values measured in ppmv. 5.) Data, supported by calculations, demonstrating compliance with the requirements specified in Sections 5.3, 5.4, 5.5.2.3.3, 5.5.2.4.2, and 5.5.2.4.3 of Rule 4623. 6.) Any corrective actions or repairs performed on the tank in order to comply with Rule 4623 and the date(s) such actions were taken. [District Rule 4623, 6.3.5 and 40 CFR 63.11087(e)] Federally Enforceable Through Title V Permit

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

45. The following test methods shall be used: ASTM Method D287 for determining API Gravity, ASTM Method D4057 sampling for API Gravity testing; ASTM D323 for determining RVP, and converting RVP to TVP at the tank's maximum organic liquid storage temperature; ARB Method 422 for determining exempt halogenated VOCs in gases; EPA Method 21 for measuring gas-leak concentration. Should the owner or operator wish to use test methods other than the ones mentioned in this condition, the methods must be approved by the District prior to its use. [District Rule 4623, 6.4] Federally Enforceable Through Title V Permit

46. 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

# San Joaquin Valley
# Air Pollution Control District

**PERMIT UNIT:** N-829-16-6 **EXPIRATION DATE:** 11/30/2015

**EQUIPMENT DESCRIPTION:**
1,386,000 GALLON WELDED INTERNAL FLOATING ROOF STORAGE TANK (#3301) WITH A MECHANICAL SHOE PRIMARY SEAL AND A WIPER SECONDARY SEAL

## PERMIT UNIT REQUIREMENTS

1. True vapor pressure (TVP) of the organic liquid stored shall be less than 11 psia. [District Rule 4623, 5.1.1] Federally Enforceable Through Title V Permit
2. VOC emissions shall not exceed 14.9 pounds in any one day. [District Rule 2201] Federally Enforceable Through Title V Permit
3. The organic liquid throughput shall not exceed 33,264,000 gallons in any one calendar year. [District Rule 2201] Federally Enforceable Through Title V Permit
4. The tank shall be equipped with a fixed roof with an internal floating type cover equipped with a continuous closure device between the tank wall and the cover edge. [40 CFR 60.112a(2) and 40 CFR 63.11087(a)] Federally Enforceable Through Title V Permit
5. 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, 5.4.1 and 40 CFR 63.11087(a)] Federally Enforceable Through Title V Permit
6. Gaps between the tank shell and the primary seal shall not exceed 1 1/2 inches. [District Rule 4623, 5.3.2.1.1 and 5.4.1] Federally Enforceable Through Title V Permit
7. The cumulative length of all gaps between the tank shell and the primary seal greater than 1/2 inch shall not exceed 10% of the circumference of the tank. [District Rule 4623, 5.3.2.1.1 and 5.4.1] Federally Enforceable Through Title V Permit
8. The cumulative length of all primary seal gaps greater than 1/8 inch shall not exceed 30% of the circumference of the tank. [District Rule 4623, 5.3.2.1.1 and 5.4.1] Federally Enforceable Through Title V Permit
9. No continuous gap in the primary seal greater than 1/8 inch wide shall exceed 10% of the tank circumference. [District Rule 4623, 5.3.2.1.1 and 5.4.1] Federally Enforceable Through Title V Permit
10. No gap between the tank shell and the secondary seal shall exceed 1/2 inch. [District Rule 4623, 5.3.2.1.2 and 5.4.1] Federally Enforceable Through Title V Permit
11. The cumulative length of all gaps between the tank shell and the secondary seal, greater than 1/8 inch shall not exceed 5% of the tank circumference. [District Rule 4623, 5.3.2.1.2 and 5.4.1] Federally Enforceable Through Title V Permit
12. The metallic shoe-type seal shall be installed so that one end of the shoe extends into the stored liquid and the other end extends a minimum vertical distance of 18 inches above the stored liquid surface. [District Rule 4623, 5.3.2.1.3 and 5.4.1] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

13. The geometry of the metallic-shoe type seal shall be such that the maximum gap between the shoe and the tank shell shall be no greater than 3 inches for a length of at least 18 inches in the vertical plane above the liquid. [District Rule 4623, 5.3.2.1.4 and 5.4.1] 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, 5.3.2.1.5 and 5.4.1] Federally Enforceable Through Title V Permit

15. The secondary seal shall allow easy insertion of probes of up to 1 1/2 inches in width in order to measure gaps in the primary seal. [District Rule 4623, 5.3.2.1.6 and 5.4.1] 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, 5.3.2.1.7 and 5.4.1] Federally Enforceable Through Title V Permit

17. All openings in the roof used for sampling and gauging 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 for sampling and gauging. [District Rule 4623, 5.5.2.1.2] 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 gas leak is defined as a reading in excess of 10,000 parts per million by volume (ppmv), as methane, above background on a portable hydrocarbon detection instrument that is calibrated with methane in accordance with the procedures specified in EPA Method 21. Liquid leak is defined as the dripping of organic liquid at a rate of more than 3 drops per minute. A reading in excess to 10,000 ppmv, as methane, above background, or dripping of organic liquid at a rate of more than 3 drops per minute, is a violation of this permit and Rule 4623 and shall be reported as a deviation. [District Rule 4623, 3.11, 3.17, 3.18 and 6.4.8] Federally Enforceable Through Title V Permit

19. 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 and 40 CFR 63.11087(a)] Federally Enforceable Through Title V Permit

20. Each opening in the internal floating roof except for leg sleeves, automatic bleeder vents, rim space vents, column wells, ladder wells, sample wells, combination manway/vacuum breakers, and stub drains 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

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, 5.5.2.1.3] Federally Enforceable Through Title V Permit

22. 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

23. 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

24. 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

25. The permittee shall notify the District in writing at least 30 days prior to conduct the visual inspection of the storage vessel, so the District can arrange an observer. [40 CFR 60.11087(c)] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

26. For newly constructed, repaired, or rebuilt internal floating roof tanks, 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. 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, 6.1.4.1 and 40 CFR 63.11087(c)] Federally Enforceable Through Title V Permit

27. The owner or operator shall perform a monthly leak inspection of all equipment in gasoline service, as defined in section 63.11100. For this inspection, detection methods incorporating sight, sound, and smell are acceptable. [40 CFR Part 63.11089(a)] Federally Enforceable Through Title V Permit

28. For monthly leak inspection, a log book shall be used and shall be signed by the owner or operator at the completion of each inspection. A section of the log book shall contain a list, summary description, or diagram(s) showing the location of all equipment in gasoline service at the facility. [40 CFR Part 63.11089(b)] Federally Enforceable Through Title V Permit

29. Each detection of a liquid or vapor leak shall be recorded in the log book. When a leak is detected, an initial attempt at repair shall be made as soon as practicable, but no later than 5 calendar days after the leak is detected. Repair or replacement of leaking equipment shall be completed within 15 calendar days after detection of each leak. Delay of repair of leaking equipment will be allowed if the repair is not feasible within 15 days. The owner or operator shall provide in the semiannual report the reason(s) why the repair was not feasible and the date each repair was completed. [40 CFR Part 63.11089(d)] Federally Enforceable Through Title V Permit

30. The owner or operator shall maintain a log book that contain the following information for a leak during during monthly inspection: 1.) equipment type and identification number; 2.) the nature of the leak (i.e. vapor or liquid) and the method of detection (i.e. sight, sound, or smell); 3.) the date the leak was detected and the date of each attempt to repair the leak; 4.) repair methods applied in each attempt to repair the leak; 5.) repair delayed and the reason for the delay if the leak is not repaired within 15 calendar days after discovery of the leak; 6) the expected date of successful repair of the leak if the leak is not repaired within 15 days; and 7.) the date of successful repair of the leak. [40 CFR 63.11089(g)] Federally Enforceable Through Title V Permit

31. The permittee shall visually inspect, through the manholes, roof hatches, or other opening 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, 6.1.4.2 and 40 CFR 63.11087(c)] Federally Enforceable Through Title V Permit

32. If any failure (i.e. visible organic liquid on the internal floating roof, tank walls or anywhere, holes or tears in the seal fabric) is detected during 12 month visual inspection, the permittee shall repair the items or empty and remove the storage vessel from service within 45 days. If the detected failure cannot be repaired within 45 days and if the vessel cannot be emptied within 45 days, a 30-day extension may be requested from the APCO in the inspection report. Such a request must document that alternate storage capacity is unavailable and specify a schedule of actions the company will take that will assure theat the control equipment will be repaired or the vessel will be emptied as soon as possible. [40 CFR 60.11087(c)] Federally Enforceable Through Title V Permit

33. The permittee shall visually inspect the internal floating roof, the primary seal, the secondary seal, gaskets, slotted memberanes and sleeve seals (if any) each time the vessel is emptied and degassed. If the internal floating roof has defects, the primary seal has holes, tears, or other openings in the seal or the seal fabric, or the secondary seal has holes, tears, or other openings in the seal or the seal fabric, or the gaskets no longer close off the liquid surfaces from the atmosphere, or the slotted membrane has more than 10 percent open area, the owner or operator shall repair the items as necessary so that none of the conditions specified in this paragraph exist before refilling the storage vessel. [40 CFR Part 63.11087(c)] Federally Enforceable Through Title V Permit

34. The owner or operator shall report the number of equipment leaks not repaired within 15 days after detection in a semi-annual report. [40 CFR 63.11089(g)] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

36. The operator shall determine the presence of gas leaks using portable hydrocarbon detection instrument in accordance with EPA Method 21. The instrument shall be calibrated before use each day of its use by the procedures specified in Method 21 using the following calibration gases: 1.) Zero air (less than 10 ppm of hydrocarbon in air); and 2.) A mixture of methane or n-hexane and air at a concentration of about, but less than, 10,000 ppm methane or n-hexane. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

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

38. The permittee shall conduct actual gap measurements of the primary seal and/or secondary seal at least once every 60 months. Other than the gap criteria specified by this permit, no holes, tears, or other openings are allowed that would permit the escape of hydrocarbon vapors. Any defects found shall constitute a violation of this rule. [District Rule 4623, 6.1.4.3 and 40 CFR 63.11087(c)] Federally Enforceable Through Title V Permit

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

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

41. The permittee shall submit the reports of the floating roof tank inspections to the APCO within five calendar days after the completion of the inspection only for those tanks that failed to meet the applicable requirements of Rule 4623, Sections 5.2 through 5.5. The inspection report for tanks that that have been determined to be in compliance with the requirements of Sections 5.2 through 5.5 need not be submitted to the APCO, but the inspection report shall be kept on-site and made available upon request by the APCO. The inspection report shall contain all necessary information to demonstrate compliance with the provisions of this rule, including the following: 1.) Date of inspection and names and titles of company personnel doing the inspection; 2.) Tank identification number and Permit to Operate number; 3.) Measurements of the gaps between the tank shell and primary and secondary seals; 4.) Leak-free status of the tank and floating roof deck fittings. Records of the leak-free status shall include the vapor concentration values measured in ppmv. 5.) Data, supported by calculations, demonstrating compliance with the requirements specified in Sections 5.3, 5.4, 5.5.2.3.3, 5.5.2.4.2, and 5.5.2.4.3 of Rule 4623. 6.) Any corrective actions or repairs performed on the tank in order to comply with Rule 4623 and the date(s) such actions were taken. [District Rule 4623, 6.3.5 and 40 CFR 63.11087(e)] Federally Enforceable Through Title V Permit

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

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

43. The following test methods shall be used: ASTM Method D287 for determining API Gravity, ASTM Method D4057 sampling for API Gravity testing; ASTM D323 for determining RVP, and converting RVP to TVP at the tank's maximum organic liquid storage temperature; ARB Method 422 for determining exempt halogenated VOCs in gases; EPA Method 21 for measuring gas-leak concentration. Should the owner or operator wish to use test methods other than the ones mentioned in this condition, the methods must be approved by the District prior to its use. [District Rule 4623,6.4] Federally Enforceable Through Title V Permit

44. Records of the cumulative annual organic liquid throughput shall be maintained and updated monthly. [District Rule 2201] Federally Enforceable Through Title V Permit

45. 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

# San Joaquin Valley
# Air Pollution Control District

**PERMIT UNIT:** N-829-17-6 **EXPIRATION DATE:** 11/30/2015

**EQUIPMENT DESCRIPTION:**
1,008,000 GALLON WELDED INTERNAL FLOATING ROOF STORAGE TANK (#2401) WITH A MECHANICAL SHOE PRIMARY SEAL AND A WIPER SECONDARY SEAL

## PERMIT UNIT REQUIREMENTS

1. True vapor pressure (TVP) of the organic liquid stored shall be less than 11 psia. [District Rule 4623, 5.1.1] Federally Enforceable Through Title V Permit
2. VOC emissions shall not exceed 13.4 pounds in any one day. [District Rule 2201] Federally Enforceable Through Title V Permit
3. The organic liquid throughput shall not exceed 24,192,000 gallons in any one calendar year. [District Rule 2201]
4. The tank shall be equipped with a fixed roof with an internal floating type cover equipped with a continuous closure device between the tank wall and the cover edge. [40 CFR 60.112a(2) and 40 CFR 63.11087(a)] Federally Enforceable Through Title V Permit
5. 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, 5.4.1 and 40 CFR 63.11087(a)] Federally Enforceable Through Title V Permit
6. Gaps between the tank shell and the primary seal shall not exceed 1 1/2 inches. [District Rule 4623, 5.3.2.1.1 and 5.4.1] Federally Enforceable Through Title V Permit
7. The cumulative length of all gaps between the tank shell and the primary seal greater than 1/2 inch shall not exceed 10% of the circumference of the tank. [District Rule 4623, 5.3.2.1.1 and 5.4.1] Federally Enforceable Through Title V Permit
8. The cumulative length of all primary seal gaps greater than 1/8 inch shall not exceed 30% of the circumference of the tank. [District Rule 4623, 5.3.2.1.1 and 5.4.1] Federally Enforceable Through Title V Permit
9. No continuous gap in the primary seal greater than 1/8 inch wide shall exceed 10% of the tank circumference. [District Rule 4623, 5.3.2.1.1 and 5.4.1] Federally Enforceable Through Title V Permit
10. No gap between the tank shell and the secondary seal shall exceed 1/2 inch. [District Rule 4623, 5.3.2.1.2 and 5.4.1] Federally Enforceable Through Title V Permit
11. The cumulative length of all gaps between the tank shell and the secondary seal, greater than 1/8 inch shall not exceed 5% of the tank circumference. [District Rule 4623, 5.3.2.1.2 and 5.4.1] Federally Enforceable Through Title V Permit
12. The metallic shoe-type seal shall be installed so that one end of the shoe extends into the stored liquid and the other end extends a minimum vertical distance of 18 inches above the stored liquid surface. [District Rule 4623, 5.3.2.1.3 and 5.4.1] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

13. The geometry of the metallic-shoe type seal shall be such that the maximum gap between the shoe and the tank shell shall be no greater than 3 inches for a length of at least 18 inches in the vertical plane above the liquid. [District Rule 4623, 5.3.2.1.4 and 5.4.1] 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, 5.3.2.1.5 and 5.4.1] Federally Enforceable Through Title V Permit

15. The secondary seal shall allow easy insertion of probes of up to 1 1/2 inches in width in order to measure gaps in the primary seal. [District Rule 4623, 5.3.2.1.6 and 5.4.1] 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, 5.3.2.1.7 and 5.4.1] Federally Enforceable Through Title V Permit

17. All openings in the roof used for sampling and gauging 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 for sampling and gauging. [District Rule 4623, 5.5.2.1.2] 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 gas leak is defined as a reading in excess of 10,000 parts per million by volume (ppmv), as methane, above background on a portable hydrocarbon detection instrument that is calibrated with methane in accordance with the procedures specified in EPA Method 21. Liquid leak is defined as the dripping of organic liquid at a rate of more than 3 drops per minute. A reading in excess to 10,000 ppmv, as methane, above background, or dripping of organic liquid at a rate of more than 3 drops per minute, is a violation of this permit and Rule 4623 and shall be reported as a deviation. [District Rule 4623, 3.11, 3.17, 3.18 and 6.4.8] Federally Enforceable Through Title V Permit

19. 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 and 40 CFR 63.11087(a)] Federally Enforceable Through Title V Permit

20. Each opening in the internal floating roof except for leg sleeves, automatic bleeder vents, rim space vents, column wells, ladder wells, sample wells, combination manway/vacuum breakers, and stub drains 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

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, 5.5.2.1.3] Federally Enforceable Through Title V Permit

22. 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

23. 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

24. 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

25. The permittee shall notify the District in writing at least 30 days prior to conduct the visual inspection of the storage vessel, so the District can arrange an observer. [40 CFR 60.11087(c)] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

26. For newly constructed, repaired, or rebuilt internal floating roof tanks, 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. 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, 6.1.4.1 and 40 CFR 63.11087(c)] Federally Enforceable Through Title V Permit

27. The owner or operator shall perform a monthly leak inspection of all equipment in gasoline service, as defined in section 63.11100. For this inspection, detection methods incorporating sight, sound, and smell are acceptable. [40 CFR Part 63.11089(a)] Federally Enforceable Through Title V Permit

28. For monthly leak inspection, a log book shall be used and shall be signed by the owner or operator at the completion of each inspection. A section of the log book shall contain a list, summary description, or diagram(s) showing the location of all equipment in gasoline service at the facility. [40 CFR Part 63.11089(b)] Federally Enforceable Through Title V Permit

29. Each detection of a liquid or vapor leak shall be recorded in the log book. When a leak is detected, an initial attempt at repair shall be made as soon as practicable, but no later than 5 calendar days after the leak is detected. Repair or replacement of leaking equipment shall be completed within 15 calendar days after detection of each leak. Delay of repair of leaking equipment will be allowed if the repair is not feasible within 15 days. The owner or operator shall provide in the semiannual report the reason(s) why the repair was not feasible and the date each repair was completed. [40 CFR Part 63.11089(d)] Federally Enforceable Through Title V Permit

30. The owner or operator shall maintain a log book that contain the following information for a leak during during monthly inspection: 1.) equipment type and identification number; 2.) the nature of the leak (i.e. vapor or liquid) and the method of detection (i.e. sight, sound, or smell); 3.) the date the leak was detected and the date of each attempt to repair the leak; 4.) repair methods applied in each attempt to repair the leak; 5.) repair delayed and the reason for the delay if the leak is not repaired within 15 calendar days after discovery of the leak; 6) the expected date of successful repair of the leak if the leak is not repaired within 15 days; and 7.) the date of successful repair of the leak. [40 CFR 63.11089(g)] Federally Enforceable Through Title V Permit

31. The permittee shall visually inspect, through the manholes, roof hatches, or other opening 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, 6.1.4.2 and 40 CFR 63.11087(c)] Federally Enforceable Through Title V Permit

32. If any failure (i.e. visible organic liquid on the internal floating roof, tank walls or anywhere, holes or tears in the seal fabric) is detected during 12 month visual inspection, the permittee shall repair the items or empty and remove the storage vessel from service within 45 days. If the detected failure cannot be repaired within 45 days and if the vessel cannot be emptied within 45 days, a 30-day extension may be requested from the APCO in the inspection report. Such a request must document that alternate storage capacity is unavailable and specify a schedule of actions the company will take that will assure theat the control equipment will be repaired or the vessel will be emptied as soon as possible. [40 CFR 60.11087(c)] Federally Enforceable Through Title V Permit

33. The permittee shall visually inspect the internal floating roof, the primary seal, the secondary seal, gaskets, slotted memberanes and sleeve seals (if any) each time the vessel is emptied and degassed. If the internal floating roof has defects, the primary seal has holes, tears, or other openings in the seal or the seal fabric, or the secondary seal has holes, tears, or other openings in the seal or the seal fabric, or the gaskets no longer close off the liquid surfaces from the atmosphere, or the slotted membrane has more than 10 percent open area, the owner or operator shall repair the items as necessary so that none of the conditions specified in this paragraph exist before refilling the storage vessel. [40 CFR Part 63.11087(c)] Federally Enforceable Through Title V Permit

34. The owner or operator shall report the number of equipment leaks not repaired within 15 days after detection in a semi-annual report. [40 CFR 63.11089(g)] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

36. The operator shall determine the presence of gas leaks using portable hydrocarbon detection instrument in accordance with EPA Method 21. The instrument shall be calibrated before use each day of its use by the procedures specified in Method 21 using the following calibration gases: 1.) Zero air (less than 10 ppm of hydrocarbon in air); and 2.) A mixture of methane or n-hexane and air at a concentration of about, but less than, 10,000 ppm methane or n-hexane. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

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

38. The permittee shall conduct actual gap measurements of the primary seal and/or secondary seal at least once every 60 months. Other than the gap criteria specified by this permit, no holes, tears, or other openings are allowed that would permit the escape of hydrocarbon vapors. Any defects found shall constitute a violation of this rule. [District Rule 4623, 6.1.4.3 and 40 CFR 63.11087(c)] Federally Enforceable Through Title V Permit

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

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

41. The permittee shall submit the reports of the floating roof tank inspections to the APCO within five calendar days after the completion of the inspection only for those tanks that failed to meet the applicable requirements of Rule 4623, Sections 5.2 through 5.5. The inspection report for tanks that that have been determined to be in compliance with the requirements of Sections 5.2 through 5.5 need not be submitted to the APCO, but the inspection report shall be kept on-site and made available upon request by the APCO. The inspection report shall contain all necessary information to demonstrate compliance with the provisions of this rule, including the following: 1.) Date of inspection and names and titles of company personnel doing the inspection; 2.) Tank identification number and Permit to Operate number; 3.) Measurements of the gaps between the tank shell and primary and secondary seals; 4.) Leak-free status of the tank and floating roof deck fittings. Records of the leak-free status shall include the vapor concentration values measured in ppmv. 5.) Data, supported by calculations, demonstrating compliance with the requirements specified in Sections 5.3, 5.4, 5.5.2.3.3, 5.5.2.4.2, and 5.5.2.4.3 of Rule 4623. 6.) Any corrective actions or repairs performed on the tank in order to comply with Rule 4623 and the date(s) such actions were taken. [District Rule 4623, 6.3.5 and 40 CFR 63.11087(e)] Federally Enforceable Through Title V Permit

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

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

43. The following test methods shall be used: ASTM Method D287 for determining API Gravity, ASTM Method D4057 sampling for API Gravity testing; ASTM D323 for determining RVP, and converting RVP to TVP at the tank's maximum organic liquid storage temperature; ARB Method 422 for determining exempt halogenated VOCs in gases; EPA Method 21 for measuring gas-leak concentration. Should the owner or operator wish to use test methods other than the ones mentioned in this condition, the methods must be approved by the District prior to its use. [District Rule 4623,6.4] Federally Enforceable Through Title V Permit

44. Records of the cumulative annual organic liquid throughput shall be maintained and updated monthly. [District Rule 2201] Federally Enforceable Through Title V Permit

45. 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

San Joaquin Valley
Air Pollution Control District

**PERMIT UNIT:** N-829-18-6 **EXPIRATION DATE:** 11/30/2015

**EQUIPMENT DESCRIPTION:**
1,008,000 GALLON WELDED INTERNAL FLOATING ROOF ORGANIC LIQUID STORAGE TANK (#2402) WITH A PRIMARY MECHANICAL SHOE SEAL, A SECONDARY WIPER SEAL, AND A SOLID GUIDEPOLE

# PERMIT UNIT REQUIREMENTS

1. True vapor pressure (TVP) of the organic liquid stored shall be less than 11 psia. [District Rule 4623, 5.1.1] Federally Enforceable Through Title V Permit
2. VOC emissions shall not exceed 13.4 pounds in any one day. [District Rule 2201] Federally Enforceable Through Title V Permit
3. The organic liquid throughput shall not exceed 24,192,000 gallons in any one calendar year. [District Rule 2201] Federally Enforceable Through Title V Permit
4. The tank shall be equipped with a fixed roof with an internal floating type cover equipped with a continuous closure device between the tank wall and the cover edge. [40 CFR 60.112a(2) and 40 CFR 63.11087(a)] Federally Enforceable Through Title V Permit
5. 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 and 5.4.3, 40 CFR 60.112a(2) and 40 CFR 63.11087(a)] Federally Enforceable Through Title V Permit
6. Gaps between the tank shell and the primary seal shall exceed 1 1/2 inches. [District Rule 4623, 5.3.2.1.1 and 5.4.1] Federally Enforceable Through Title V Permit
7. The cumulative length of all gaps between the tank shell and the primary seal greater than 1/2 inch shall not exceed 10% of the circumference of the tank. [District Rule 4623, 5.3.2.1.1 and 5.4.1] Federally Enforceable Through Title V Permit
8. The cumulative length of all primary seal gaps greater than 1/8 inch shall not exceed 30% of the circumference of the tank. [District Rule 4623, 5.3.2.1.1 and 5.4.1] Federally Enforceable Through Title V Permit
9. No continuous gap in the primary seal greater than 1/8 inch wide shall exceed 10% of the tank circumference. [District Rule 4623, 5.3.2.1.1 and 5.4.1] Federally Enforceable Through Title V Permit
10. No gap between the tank shell and the secondary seal shall exceed 1/2 inch. [District Rule 4623, 5.3.2.1.2 and 5.4.1] Federally Enforceable Through Title V Permit
11. The cumulative length of all gaps between the tank shell and the secondary seal, greater than 1/8 inch shall not exceed 5% of the tank circumference. [District Rule 4623, 5.3.2.1.2 and 5.4.1] Federally Enforceable Through Title V Permit
12. The metallic shoe-type seal shall be installed so that one end of the shoe extends into the stored liquid and the other end extends a minimum vertical distance of 18 inches above the stored liquid surface. [District Rule 4623, 5.3.2.1.3 and 5.4.1] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

13. The geometry of the metallic-shoe type seal shall be such that the maximum gap between the shoe and the tank shell shall be no greater than 3 inches for a length of at least 18 inches in the vertical plane above the liquid. [District Rule 4623, 5.3.2.1.4 and 5.4.1] 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, 5.3.2.1.5 and 5.4.1] Federally Enforceable Through Title V Permit

15. The secondary seal shall allow easy insertion of probes of up to 1 1/2 inches in width in order to measure gaps in the primary seal. [District Rule 4623, 5.3.2.1.6 and 5.4.1] 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, 5.3.2.1.7 and 5.4.1] 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 for sampling or gauging. [District Rule 4623, 5.5.1] 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 gas leak is defined as a reading in excess of 10,000 parts per million by volume (ppmv), as methane, above background on a portable hydrocarbon detection instrument that is calibrated with methane in accordance with the procedures specified in EPA Method 21. Liquid leak is defined as the dripping of organic liquid at a rate of more than 3 drops per minute. A reading in excess to 10,000 ppmv, as methane, above background, or dripping of organic liquid at a rate of more than 3 drops per minute, is a violation of this permit and Rule 4623 and shall be reported as a deviation. [District Rule 4623, 3.11, 3.17, 3.18 and 6.4.8] Federally Enforceable Through Title V Permit

19. 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 and 40 CFR 63.11087(a)] Federally Enforceable Through Title V Permit

20. Each opening in the internal floating roof except for leg sleeves, automatic bleeder vents, rim space vents, column wells, ladder wells, sample wells, combination manway/vacuum breakers, and stub drains 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

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, 5.5.2.1.3] Federally Enforceable Through Title V Permit

22. 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

23. 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

24. 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

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

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

27. The gap between the pole wiper and the solid guidepole shall not exceed 1/2 inch. [District Rule 4623, 5.5.2.3.3] Federally Enforceable Through Title V Permit

28. The permittee shall notify the District in writing at least 30 days prior to conduct the visual inspection of the storage vessel, so the District can arrange an observer. [40 CFR 60.11087(c)] Federally Enforceable Through Title V Permit

29. For newly constructed, repaired, or rebuilt internal floating roof tanks, 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. 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, 6.1.4.1 and 40 CFR 63.11087(c)] Federally Enforceable Through Title V Permit

30. The owner or operator shall perform a monthly leak inspection of all equipment in gasoline service, as defined in section 63.11100. For this inspection, detection methods incorporating sight, sound, and smell are acceptable. [40 CFR Part 63.11089(a)] Federally Enforceable Through Title V Permit

31. For monthly leak inspection, a log book shall be used and shall be signed by the owner or operator at the completion of each inspection. A section of the log book shall contain a list, summary description, or diagram(s) showing the location of all equipment in gasoline service at the facility. [40 CFR Part 63.11089(b)] Federally Enforceable Through Title V Permit

32. Each detection of a liquid or vapor leak shall be recorded in the log book. When a leak is detected, an initial attempt at repair shall be made as soon as practicable, but no later than 5 calendar days after the leak is detected. Repair or replacement of leaking equipment shall be completed within 15 calendar days after detection of each leak. Delay of repair of leaking equipment will be allowed if the repair is not feasible within 15 days. The owner or operator shall provide in the semiannual report the reason(s) why the repair was not feasible and the date each repair was completed. [40 CFR Part 63.11089(d)] Federally Enforceable Through Title V Permit

33. The owner or operator shall maintain a log book that contain the following information for a leak during during monthly inspection: 1.) equipment type and identification number; 2.) the nature of the leak (i.e. vapor or liquid) and the method of detection (i.e. sight, sound, or smell); 3.) the date the leak was detected and the date of each attempt to repair the leak; 4.) repair methods applied in each attempt to repair the leak; 5.) repair delayed and the reason for the delay if the leak is not repaired within 15 calendar days after discovery of the leak; 6) the expected date of successful repair of the leak if the leak is not repaired within 15 days; and 7.) the date of successful repair of the leak. [40 CFR 63.11089(g)] Federally Enforceable Through Title V Permit

34. The permittee shall visually inspect, through the manholes, roof hatches, or other opening 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, 6.1.4.2 and 40 CFR 63.11087(c)] Federally Enforceable Through Title V Permit

35. If any failure (i.e. visible organic liquid on the internal floating roof, tank walls or anywhere, holes or tears in the seal fabric) is detected during 12 month visual inspection, the permittee shall repair the items or empty and remove the storage vessel from service within 45 days. If the detected failure cannot be repaired within 45 days and if the vessel cannot be emptied within 45 days, a 30-day extension may be requested from the APCO in the inspection report. Such a request must document that alternate storage capacity is unavailable and specify a schedule of actions the company will take that will assure theat the control equipment will be repaired or the vessel will be emptied as soon as possible. [40 CFR 60.11087(c)] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

36. The permittee shall visually inspect the internal floating roof, the primary seal, the secondary seal, gaskets, slotted memberanes and sleeve seals (if any) each time the vessel is emptied and degassed. If the internal floating roof has defects, the primary seal has holes, tears, or other openings in the seal or the seal fabric, or the secondary seal has holes, tears, or other openings in the seal or the seal fabric, or the gaskets no longer close off the liquid surfaces from the atmosphere, or the slotted membrane has more than 10 percent open area, the owner or operator shall repair the items as necessary so that none of the conditions specified in this paragraph exist before refilling the storage vessel. [40 CFR Part 63.11087(c)] Federally Enforceable Through Title V Permit

37. The owner or operator shall report the number of equipment leaks not repaired within 15 days after detection in a semi-annual report. [40 CFR 63.11089(g)] Federally Enforceable Through Title V Permit

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

39. The operator shall determine the presence of gas leaks using portable hydrocarbon detection instrument in accordance with EPA Method 21. The instrument shall be calibrated before use each day of its use by the procedures specified in Method 21 using the following calibration gases: 1.) Zero air (less than 10 ppm of hydrocarbon in air); and 2.) A mixture of methane or n-hexane and air at a concentration of about, but less than, 10,000 ppm methane or n-hexane. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

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

41. The permittee shall conduct actual gap measurements of the primary seal and/or secondary seal at least once every 60 months. Other than the gap criteria specified by this permit, no holes, tears, or other openings are allowed that would permit the escape of hydrocarbon vapors. Any defects found shall constitute a violation of this permit. [District Rule 4623, 6.1.4.3 and 40 CFR 63.11087(c)] Federally Enforceable Through Title V Permit

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

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

44. The operator shall keep a record of liquids stored in each container, period of storage, and the maximum true vapor pressure of the liquid during the respective storage period. [40 CFR 60.115a(a)] Federally Enforceable Through Title V Permit

45. Maximum true vapor pressure may be determined from nomographs contained in API Bulletin 2517, by using the typical Reid vapor pressure and the maximum expected storage temperature of the stored product, unless the APCO specifically requests that the liquid be sampled, the actual storage temperature determined, and the Reid vapor pressure determined from the sample(s). [40 CFR 60.115a(b)] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

46. The permittee shall submit the reports of the floating roof tank inspections to the APCO within five calendar days after the completion of the inspection only for those tanks that failed to meet the applicable requirements of Rule 4623, Sections 5.2 through 5.5. The inspection report for tanks that that have been determined to be in compliance with the requirements of Sections 5.2 through 5.5 need not be submitted to the APCO, but the inspection report shall be kept on-site and made available upon request by the APCO. The inspection report shall contain all necessary information to demonstrate compliance with the provisions of this rule, including the following: 1.) Date of inspection and names and titles of company personnel doing the inspection; 2.) Tank identification number and Permit to Operate number; 3.) Measurements of the gaps between the tank shell and primary and secondary seals; 4.) Leak-free status of the tank and floating roof deck fittings. Records of the leak-free status shall include the vapor concentration values measured in ppmv. 5.) Data, supported by calculations, demonstrating compliance with the requirements specified in Sections 5.3, 5.4, 5.5.2.3.3, 5.5.2.4.2, and 5.5.2.4.3 of Rule 4623. 6.) Any corrective actions or repairs performed on the tank in order to comply with Rule 4623 and the date(s) such actions were taken. [District Rule 4623, 6.3.5 and 40 CFR 63.11087(e)] Federally Enforceable Through Title V Permit

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

48. The following test methods shall be used: ASTM Method D287 for determining API Gravity, ASTM Method D4057 sampling for API Gravity testing; ASTM D323 for determining RVP, and converting RVP to TVP at the tank's maximum organic liquid storage temperature; ARB Method 422 for determining exempt halogenated VOCs in gases; EPA Method 21 for measuring gas-leak concentration. Should the owner or operator wish to use test methods other than the ones mentioned in this condition, the methods must be approved by the District prior to its use. [District Rule 4623, 6.4] Federally Enforceable Through Title V Permit

49. Records of the cumulative annual organic liquid throughput shall be maintained and updated monthly. [District Rule 2201] Federally Enforceable Through Title V Permit

50. 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

# San Joaquin Valley
# Air Pollution Control District

**PERMIT UNIT:** N-829-20-8

**EXPIRATION DATE:** 11/30/2015

**EQUIPMENT DESCRIPTION:**
VAPOR RECOVERY SYSTEM CONSISTING OF A 300,000 GALLON VAPOR HOLDING TANK, A VAPOR PROCESSING AND CONVEYING SYSTEM, AND A 40 MMBTU/HR PROPANE FIRED JOHN ZINK ZCT-2-8-35-X-2/8-X VAPOR COMBUSTOR

## PERMIT UNIT REQUIREMENTS

1. The VOC destruction efficiency shall be at least 99% and all gasoline loading shall be conducted utilizing bottom loading and dry-break couplers. [District Rule 4102]
2. Gasoline shall be loaded only into vapor tight tank trucks. [40 CFR Part 60.502(e)] Federally Enforceable Through Title V Permit
3. The facility shall obtain the vapor tightness documentation specified in 40 CFR Part 60.505(b) for each gasoline tank truck that is to be loaded at the facility. [40 CFR Part 60.502(e)(1)] Federally Enforceable Through Title V Permit
4. VOC emissions from the vapor recovery system shall not exceed 0.08 pounds per thousand gallons of gasoline loaded. [District Rules 4624, 5.1.1, San Joaquin County Rule 412, and 40 CFR 63.11088(a)] Federally Enforceable Through Title V Permit
5. The vapor collection system shall be operated in a manner to prevent any organic vapors collected at one loading rack from passing to another loading rack. [40 CFR 63.11088(a)] Federally Enforceable Through Title V Permit
6. The vapor collection and control system shall operate such that the pressure in the delivery tank being loaded does not exceed 18 inches water column pressure and 6 inches water column vacuum. [District Rule 4624] Federally Enforceable Through Title V Permit
7. The combined quantity of gasoline loaded through permit units N-829-1 and N-829-2 shall not exceed 756,000,000 gallons during any one calendar year. This annual limit shall be lowered in the event that the CARB certifies the vapor recovery system can process VOC emissions with a daily gasoline throughput of less than 2,071,233 gallons. [District Rule 2201] Federally Enforceable Through Title V Permit
8. The combined quantity of gasoline loaded through permit units N-829-1 and N-829-2 shall not exceed 2,071,233 gallons during any one day. [District Rule 2201] Federally Enforceable Through Title V Permit
9. The vapor combustor's combustion chamber shall be configured to operate with logic controls set to shut the vapor combustor system down and close the block valve to receiving vapors if the operating temperature does not reach a minimum of 900 degrees Fahrenheit within 10 minutes. [District Rules 2201, 4102, and 40 CFR 63.11088(d)] Federally Enforceable Through Title V Permit
10. The vapor combustor shall be equipped for continuous monitoring and recording of combustion temperature. Temperature charts shall be made available to the District upon request. [District Rule 2201, 40 CFR Part 64 and 40 CFR 63.11088(d)] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

11. Should the vapor combustor's operating temperature fall below the minimum value necessary to maintain compliance with the permitted VOC destruction efficiency and VOC emission limit, the permittee shall investigate the cause and take corrective action to return the operating temperature to an acceptable level as soon as possible, but no longer than one hour after initial detection. If the operating temperature cannot be raised to an acceptable value within one hour after detection, the permittee shall notify the District within the following hour and conduct a certified source test within 60 days of initial detection. In lieu of conducting a source test, the permittee may stipulate a violation that is subject to enforcement action has occurred. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviation is a 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. [40 CFR Part 64] Federally Enforceable Through Title V Permit

12. Loading and vapor collection and control equipment shall be designed, installed, maintained, and operated such that there are no leaks. A leak is defined as the dripping of organic compounds at a rate of more than three drops per minute or the detection of organic compounds, in excess of 10,000 ppm as methane measured at a distance of one centimeter from potential source in accordance with EPA Method 21. [District Rule 4624 and San Joaquin County Rule 412] Federally Enforceable Through Title V Permit

13. The vapor collection system, the vapor destruction device and each transfer rack shall be tested for leaks at least once every calendar quarter with a portable hydrocarbon analyzer in accordance with EPA Method 21. [District Rule 4624] Federally Enforceable Through Title V Permit

14. The equipment that are found leaking shall be repair or replaced within 72 hours after detecting the leakage. If the leaking component cannot be repaired or replaced within 72 hours, the component shall be taken out of service until such time the component is repaired or replaced. The repaired or replacement equipment shall be reinspected the first time the equipment is in operation after the repair or replacement. [District Rule 4624] Federally Enforceable Through Title V Permit

15. Each calendar month, the vapor collection system, the vapor processing system and each loading rack handling gasoline shall be inspected during the loading of gasoline tank trucks for organic liquid and organic vapor leaks. For the purpose of this condition, detection methods incorporating sight, sound and smell are acceptable. Each detection of a leak shall be recorded and the source of the leak repaired within 15 days after it is detected. [40 CFR Part 60.502(j) and 40 CFR Part 63.11089(a)] Federally Enforceable Through Title V Permit

16. A log book shall be used and shall be signed by the owner or operator at the completion of each inspection. A section of the log book shall contain a list, summary description, or diagram(s) showing the location of all equipment in gasoline service at the facility. [40 CFR Part 63.11089(b)] Federally Enforceable Through Title V Permit

17. Each detection of a liquid or vapor leak shall be recorded in the log book. When a leak is detected, an initial attempt at repair shall be made as soon as practicable, but no later than 5 calendar days after the leak is detected. Repair or replacement of leaking equipment shall be completed within 15 calendar days after detection of each leak. Delay of repair of leaking equipment will be allowed if the repair is not feasible within 15 days. The owner or operator shall provide in the semiannual report the reason(s) why the repair was not feasible and the date each repair was completed. [40 CFR Part 63.11089(d)] Federally Enforceable Through Title V Permit

18. The owner or operator shall maintain a log book that contain the following information: 1.) dates of leak inspections, 2.) the nature of the leak (i.e. vapor or liquid) and the method of detection; 3.) findings, 4.) corrective action, 5.) repair methods applied in each attempt to repair the leak; 6.) repair delayed and the reason for the delay if the leak is not repaired within 15 calendar days after discovery of the leak; 7.) the expected date of successful repair of the leak if the leak is not repaired within 15 days; 8.) the date of successful repair of the leak; and 9.) inspector name and signature. [District Rule 4624, 40 CFR Part 60.505 (c) and 40 CFR 63.11089(g)] Federally Enforceable Through Title V Permit

19. The owner or operator shall report the number of equipment leaks not repaired within 15 days after detection in a semi-annual report. [40 CFR 63.11089(g)] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

20. During source testing the loading rack's vapor collection and control system (VCCS) shall be tested at every loading position to demonstrate the pressure in the delivery tanks being loaded complies with the requirements specified in this permit. Compliance shall be determined by calibrating and installing a liquid manometer, magnehelic device, or other instrument demonstrated to be equivalent, capable of measuring up to 500 mm water gauge pressure with a precision of 2.5 mm water gauge, on the terminal's VCCS at a pressure tap as close as possible to the connection with the product tank truck. The highest instantaneous pressure measurement as well as all pressure measurements at 5 minute intervals during delivery vessel loading must be recorded. [District Rule 2520 and 40 CFR 60.503(d)] Federally Enforceable Through Title V Permit
21. Source testing to determine compliance with the emission rate requirement of this permit shall be conducted at least once every 60 months. [District Rules 2201 and 4624] Federally Enforceable Through Title V Permit
22. Source testing shall be conducted using methods and procedures approved by District. The District must be notified 30 days prior to any compliance source testing and a pretest plan outlining the test methods and procedures shall be submitted for the District approval no later than 15 days prior to each test. [District Rule 1081] Federally Enforceable Through Title V Permit
23. Source testing shall be witnessed or authorized by District Personnel. [District Rule 1081] Federally Enforceable Through Title V Permit
24. VOC emissions from the vapor collection and control system shall be determined using 40 CFR 60.503 "Test Methods and Procedures" and EPA Reference Methods 2A, 2B, 25A, 25B, and ARB Method 422, or ARB Test Procedure TP-203.1. [District Rule 4624 and San Joaquin County Rule 412] Federally Enforceable Through Title V Permit
25. Source testing for VOC destruction efficiency shall be conducted utilizing EPA Method 18, EPA Method 25A or CARB Method 100. Alternative methods may be utilized provided they are previously approved by the District, in writing. [District Rules 2201 and 4102] Federally Enforceable Through Title V Permit
26. 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
27. A log of all breakdowns of the vapor recovery system indicating the times, dates and gallons processed during the breakdown periods shall be maintained on the premises at all times and shall be made available for District inspection upon request. [District Rule 2520] Federally Enforceable Through Title V Permit
28. A record of the daily quantity of gasoline loaded from the loading racks operating under Permits to Operate N-829-1 and N-829-2 shall be kept. [District Rules 2520, 4624] Federally Enforceable Through Title V Permit
29. A record of the cumulative annual quantity of gasoline loaded from the loading racks operating under Permits to Operate N-829-1 and N-829-2 shall be kept. The record shall be updated at least monthly. [District Rule 2520] Federally Enforceable Through Title V Permit
30. Documentation attesting to the vapor tightness of each truck loaded with gasoline shall be kept. The documentation file for each tank truck shall be updated at least once per year to reflect the current test results as determined by EPA method 27. [40 CFR Part 60.5059(a) and 40 CFR 63.11094(b)] Federally Enforceable Through Title V Permit
31. The semi-annual compliance report shall include each loading of a gasoline cargo tank for which vapor tightness documentation had not been previously obtained by the facility. [40 CFR 63.11088(f)] Federally Enforceable Through Title V Permit
32. All records shall be maintained and retained on-site for a period of at least 5 years and shall be made available for District inspection upon request. [District Rules 1070, 4624] Federally Enforceable Through Title V Permit

# San Joaquin Valley
# Air Pollution Control District

**PERMIT UNIT:** N-829-21-4 **EXPIRATION DATE:** 11/30/2015

**EQUIPMENT DESCRIPTION:**
1,328,124 GALLON WELDED INTERNAL FLOATING MECHANICAL SHOE PRIMARY SEAL, A WIPER SECONDARY SEAL AND A SLOTTED GUIDEPOLE

## PERMIT UNIT REQUIREMENTS

1. True vapor pressure of the organic liquid stored shall be less than 11 psia. [District Rule 4623, 5.1.1] Federally Enforceable Through Title V Permit
2. The tank shall be equipped with a fixed roof with an internal floating type cover equipped with a continuous closure device between the tank wall and the cover edge. [40 CFR 60.112a(2) and 40 CFR 63.11087(a)] Federally Enforceable Through Title V Permit
3. 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 and 5.4.3, 40 CFR 60.112a(2) and 40 CFR 63.11087(a)] Federally Enforceable Through Title V Permit
4. Gaps between the tank shell and the primary seal shall exceed 1 1/2 inches. [District Rule 4653, 5.3.2.1.1 and 5.4.1] Federally Enforceable Through Title V Permit
5. The cumulative length of all gaps between the tank shell and the primary seal greater than 1/2 inch shall not exceed 10% of the circumference of the tank. [District Rule 4623, 5.3.2.1.1 and 5.4.1] Federally Enforceable Through Title V Permit
6. The cumulative length of all primary seal gaps greater than 1/8 inch shall not exceed 30% of the circumference of the tank. [District Rule 4623, 5.3.2.1.1 and 5.4.1] Federally Enforceable Through Title V Permit
7. No continuous gap in the primary seal greater than 1/8 inch wide shall exceed 10% of the tank circumference. [District Rule 4623, 5.3.2.1.1 and 5.4.1] Federally Enforceable Through Title V Permit
8. No gap between the tank shell and the secondary seal shall exceed 1/2 inch. [District Rule 4623, 5.3.2.1.2 and 5.4.1] Federally Enforceable Through Title V Permit
9. The cumulative length of all gaps between the tank shell and the secondary seal, greater than 1/8 inch shall not exceed 5% of the tank circumference. [District Rule 4623, 5.3.2.1.2 and 5.4.1] Federally Enforceable Through Title V Permit
10. 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, 5.3.2.1.3 and 5.4.1] Federally Enforceable Through Title V Permit
11. The geometry of the metallic-shoe type seal shall be such that the maximum gap between the shoe and the tank shell shall be no greater than 3 inches for a length of at least 18 inches in the vertical plane above the liquid. [District Rule 4623, 5.3.2.1.4 and 5.4.1] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

12. There shall be no holes, tears, or openings in the secondary seal or in the primary seal envelope that surrounds the annular vapor space enclosed by the roof edge, seal fabric, and secondary seal. [District Rule 4623, 5.3.2.1.5 and 5.4.1] Federally Enforceable Through Title V Permit

13. The secondary seal shall allow easy insertion of probes of up to 1 1/2 inches in width in order to measure gaps in the primary seal. [District Rule 4623, 5.3.2.1.6 and 5.4.1] Federally Enforceable Through Title V Permit

14. The secondary seal shall extend from the roof to the tank shell and shall not be attached to the primary seal. [District Rule 4623, 5.3.2.1.7 and 5.4.1] Federally Enforceable Through Title V Permit

15. All openings in the roof used for sampling and gauging 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 for sampling or gauging. [District Rule 4623, 5.5.1] 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 gas leak is defined as a reading in excess of 10,000 parts per million by volume (ppmv), as methane, above background on a portable hydrocarbon detection instrument that is calibrated with methane in accordance with the procedures specified in EPA Method 21. Liquid leak is defined as the dripping of organic liquid at a rate of more than 3 drops per minute. A reading in excess to 10,000 ppmv, as methane, above background, or dripping of organic liquid at a rate of more than 3 drops per minute, is a violation of this permit and Rule 4623 and shall be reported as a deviation. [District Rule 4623, 3.11, 3.17, 3.18 and 6.4.8] 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, 5.5.2.1.1 and 40 CFR 63.11087(a)] 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, combination manway/vacuum breakers, 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

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, 5.5.2.1.3] 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, 5.5.2.1.4] 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, 5.5.2.1.5] 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, 5.5.2.1.6] Federally Enforceable Through Title V Permit

23. All slotted sampling or gauging 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

24. 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 not exceed 1/8 inch. [District Rule 4623, 5.5.2.4.3] Federally Enforceable Through Title V Permit

25. The permittee shall notify the District in writing at least 30 days prior to conduct the visual inspection of the storage vessel, so the District can arrange an observer. [40 CFR 60.11087(c)] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

26. For newly constructed, repaired, or rebuilt internal floating roof tanks, 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. 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, 6.1.4.1 and 40 CFR 63.11087(c)] Federally Enforceable Through Title V Permit

27. The owner or operator shall perform a monthly leak inspection of all equipment in gasoline service, as defined in section 63.11100. For this inspection, detection methods incorporating sight, sound, and smell are acceptable. [40 CFR Part 63.11089(a)] Federally Enforceable Through Title V Permit

28. For monthly leak inspection, a log book shall be used and shall be signed by the owner or operator at the completion of each inspection. A section of the log book shall contain a list, summary description, or diagram(s) showing the location of all equipment in gasoline service at the facility. [40 CFR Part 63.11089(b)] Federally Enforceable Through Title V Permit

29. Each detection of a liquid or vapor leak shall be recorded in the log book. When a leak is detected, an initial attempt at repair shall be made as soon as practicable, but no later than 5 calendar days after the leak is detected. Repair or replacement of leaking equipment shall be completed within 15 calendar days after detection of each leak. Delay of repair of leaking equipment will be allowed if the repair is not feasible within 15 days. The owner or operator shall provide in the semiannual report the reason(s) why the repair was not feasible and the date each repair was completed. [40 CFR Part 63.11089(d)] Federally Enforceable Through Title V Permit

30. The owner or operator shall maintain a log book that contain the following information for a leak during during monthly inspection: 1.) equipment type and identification number; 2.) the nature of the leak (i.e. vapor or liquid) and the method of detection (i.e. sight, sound, or smell); 3.) the date the leak was detected and the date of each attempt to repair the leak; 4.) repair methods applied in each attempt to repair the leak; 5.) repair delayed and the reason for the delay if the leak is not repaired within 15 calendar days after discovery of the leak; 6) the expected date of successful repair of the leak if the leak is not repaired within 15 days; and 7.) the date of successful repair of the leak. [40 CFR 63.11089(g)] Federally Enforceable Through Title V Permit

31. The permittee shall visually inspect, through the manholes, roof hatches, or other opening 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, 6.1.4.2 and 40 CFR 63.11087(c)] Federally Enforceable Through Title V Permit

32. If any failure (i.e. visible organic liquid on the internal floating roof, tank walls or anywhere, holes or tears in the seal fabric) is detected during 12 month visual inspection, the permittee shall repair the items or empty and remove the storage vessel from service within 45 days. If the detected failure cannot be repaired within 45 days and if the vessel cannot be emptied within 45 days, a 30-day extension may be requested from the APCO in the inspection report. Such a request must document that alternate storage capacity is unavailable and specify a schedule of actions the company will take that will assure theat the control equipment will be repaired or the vessel will be emptied as soon as possible. [40 CFR 60.11087(c)] Federally Enforceable Through Title V Permit

33. The permittee shall visually inspect the internal floating roof, the primary seal, the secondary seal, gaskets, slotted memberanes and sleeve seals (if any) each time the vessel is emptied and degassed. If the internal floating roof has defects, the primary seal has holes, tears, or other openings in the seal or the seal fabric, or the secondary seal has holes, tears, or other openings in the seal or the seal fabric, or the gaskets no longer close off the liquid surfaces from the atmosphere, or the slotted membrane has more than 10 percent open area, the owner or operator shall repair the items as necessary so that none of the conditions specified in this paragraph exist before refilling the storage vessel. [40 CFR Part 63.11087(c)] Federally Enforceable Through Title V Permit

34. The owner or operator shall report the number of equipment leaks not repaired within 15 days after detection in a semi-annual report. [40 CFR 63.11089(g)] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

36. The operator shall determine the presence of gas leaks using portable hydrocarbon detection instrument in accordance with EPA Method 21. The instrument shall be calibrated before use each day of its use by the procedures specified in Method 21 using the following calibration gases: 1.) Zero air (less than 10 ppm of hydrocarbon in air); and 2.) A mixture of methane or n-hexane and air at a concentration of about, but less than, 10,000 ppm methane or n-hexane. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

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

38. The permittee shall conduct actual gap measurements of the primary seal and/or secondary seal at least once every 60 months. Other than the gap criteria specified by this permit, no holes, tears, or other openings are allowed that would permit the escape of hydrocarbon vapors. Any defects found shall constitute a violation of this permit. [District Rule 4623, 6.1.4.3 and 40 CFR 63.11087(c)] Federally Enforceable Through Title V Permit

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

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

41. The operator shall keep a record of liquids stored in each container, period of storage, and the maximum true vapor pressure of the liquid during the respective storage period. [40 CFR 60.115a(a)] Federally Enforceable Through Title V Permit

42. Maximum true vapor pressure may be determined from nomographs contained in API Bulletin 2517, by using the typical Reid vapor pressure and the maximum expected storage temperature of the stored product, unless the APCO specifically requests that the liquid be sampled, the actual storage temperature determined, and the Reid vapor pressure determined from the sample(s). [40 CFR 60.115a(b)] Federally Enforceable Through Title V Permit

43. The permittee shall submit the reports of the floating roof tank inspections to the APCO within five calendar days after the completion of the inspection only for those tanks that failed to meet the applicable requirements of Rule 4623, Sections 5.2 through 5.5. The inspection report for tanks that that have been determined to be in compliance with the requirements of Sections 5.2 through 5.5 need not be submitted to the APCO, but the inspection report shall be kept on-site and made available upon request by the APCO. The inspection report shall contain all necessary information to demonstrate compliance with the provisions of this rule, including the following: 1.) Date of inspection and names and titles of company personnel doing the inspection; 2.) Tank identification number and Permit to Operate number; 3.) Measurements of the gaps between the tank shell and primary and secondary seals; 4.) Leak-free status of the tank and floating roof deck fittings. Records of the leak-free status shall include the vapor concentration values measured in ppmv. 5.) Data, supported by calculations, demonstrating compliance with the requirements specified in Sections 5.3, 5.4, 5.5.2.3.3, 5.5.2.4.2, and 5.5.2.4.3 of Rule 4623. 6.) Any corrective actions or repairs performed on the tank in order to comply with Rule 4623 and the date(s) such actions were taken. [District Rule 4623, 6.3.5 and 40 CFR 63.11087(c)] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

45. The following test methods shall be used: ASTM Method D287 for determining API Gravity, ASTM Method D4057 sampling for API Gravity testing; ASTM D323 for determining RVP, and converting RVP to TVP at the tank's maximum organic liquid storage temperature; ARB Method 422 for determining exempt halogenated VOCs in gases; EPA Method 21 for measuring gas-leak concentration. Should the owner or operator wish to use test methods other than the ones mentioned in this condition, the methods must be approved by the District prior to its use. [District Rule 4623, 6.4] Federally Enforceable Through Title V Permit

46. The operator shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rules 4623, 6.3 and 2520, 9.4.2] Federally Enforceable Through Title V Permit

47. There shall be no vapor space between the internal floating pan and the liquid surface. [District NSR Rule] Federally Enforceable Through Title V Permit

48. At least 95% of all hydrocarbon vapors generated during the storage and the working of the storage tank shall be prevented from entrainment into the atmosphere. [District NSR Rule] Federally Enforceable Through Title V Permit

49. The internal floating roof supports, manholes, automatic bleeder vents, rim vents, gauge wells, etc., shall be covered with foam seal in a manner which prevents any gap. [District NSR Rule] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

**PERMIT UNIT:** N-829-22-4 **EXPIRATION DATE:** 11/30/2015

**EQUIPMENT DESCRIPTION:**
1,218,000 GALLON WELDED INTERNAL FLOATING ROOF STORAGE TANK (#3303) WITH A WIPER PRIMARY SEAL AND A SLOTTED GUIDEPOLE

# PERMIT UNIT REQUIREMENTS

1. True vapor pressure of the organic liquid stored shall be less than 11 psia. [District Rule 4623, 5.1.1] Federally Enforceable Through Title V Permit
2. The tank shall be equipped with a fixed roof with an internal floating type cover equipped with one of the following closure devices between the tank wall and the cover edge: 1) A foam- or liquid-filled seal mounted in contact with the liquid (liquid-mounted seal); 2) Two seals mounted one above the other so that each forms a continuous closure that completely covers the space between the wall of the storage vessel and the edge of the internal floating roof; or 3) A mechanical shoe seal. [40 CFR 60.112b(a)(1)(ii) and 40 CFR 63.11087(a)] Federally Enforceable Through Title V Permit
3. The internal floating roof shall float on the surface of the stored liquid at all times (i.e., off the roof leg supports) except during the initial fill until the roof is lifted off the leg supports and when the tank is completely emptied and subsequently refilled. When the roof is resting on the leg supports, the process of filling, emptying, or refilling shall be continuous and shall be accomplished as rapidly as possible. Whenever the permittee intends to land the roof on it's legs, the permittee shall notify the APCO in writing at least five calendar days prior to performing the work. The tank must be in compliance with this rule before it may land on its legs. [District Rule 4623, 5.3.1.3 and 5.4.3, 40 CFR 60.112b(a)(1)(i) and 40 CFR 63.11087(a)] Federally Enforceable Through Title V Permit
4. The tank shall be equipped with an Ultraflote, model Single Ultraseal, wiper primary seal. [District Rule 4623, 5.4.2 and 40 CFR 63.11087(a)] Federally Enforceable Through Title V Permit
5. No gap between the tank shell and the seal shell shall exceed 0.06 inch. [District Rule 4623, 3.37 and 5.4.2.1] Federally Enforceable Through Title V Permit
6. The cumulative length of all gaps exceeding 0.02 inch shall not be more than 5% of the circumference of the tank, excluding gaps less than 1.79 inches from vertical seams. [District Rule 4623, 3.37 and 5.4.2.1] Federally Enforceable Through Title V Permit
7. All openings in the roof used for sampling and gauging shall provide a projection below the liquid surface to prevent belching of liquid and to prevent entrained or formed organic vapor from escaping from the liquid contents of the tank and shall be equipped with a cover, seal or lid. The cover seal or lid shall be in a closed position, with no visible gaps and be leak-free, except when the device or appurtenance is in use for sampling or gauging. [District Rule 4623, 5.5.1] Federally Enforceable Through Title V Permit
8. A leak-free condition is defined as a condition without a gas leak or a liquid leak. A gas leak is defined as a reading in excess of 10,000 parts per million by volume (ppmv), as methane, above background on a portable hydrocarbon detection instrument that is calibrated with methane in accordance with the procedures specified in EPA Method 21. Liquid leak is defined as the dripping of organic liquid at a rate of more than 3 drops per minute. A reading in excess to 10,000 ppmv, as methane, above background, or dripping of organic liquid at a rate of more than 3 drops per minute, is a violation of this permit and Rule 4623 and shall be reported as a deviation. [District Rule 4623, 3.11, 3.17, 3.18 and 6.4.8] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

9. 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, 40 CFR 60.112b(a)(1)(iii) and 40 CFR 63.11087(a)] Federally Enforceable Through Title V Permit

10. Each opening in the internal floating roof except for leg sleeves, automatic bleeder vents, rim space vents, column wells, ladder wells, sample wells, combination manway/vacuum breakers, and stub drains shall be equipped with a cover, or a lid shall be maintained in a closed position at all times (i.e. no visible gaps) except when the device is in use. The cover or lid shall be equipped with a gasket. Covers on each access hatch and automatic gauge float well shall be bolted in place except when they are in use. [District Rule 4623, 5.5.2.1.2 and 40 CFR 60.112b(a)(1)(iv)] Federally Enforceable Through Title V Permit

11. Automatic bleeder vents shall be equipped with a gasket and shall be closed at all times when the roof is floating except when the roof is being floated off or is being landed on the leg roof supports. [District Rule 4623, 5.5.2.1.3 and 40 CFR 60.112b(a)(1)(v)] Federally Enforceable Through Title V Permit

12. Rim vents shall be equipped with a gasket and shall 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 and 40 CFR 60.112b(a)(1)(vi)] Federally Enforceable Through Title V Permit

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

14. Each penetration of the internal floating roof that allows for the 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 and 40 CFR 60.112b(a)(1)(viii)] Federally Enforceable Through Title V Permit

15. Each penetration of the internal floating roof that allows for passage of a ladder shall have a gasketed sliding cover. [40 CFR 60.112b(a)(1)(ix)] Federally Enforceable Through Title V Permit

16. All slotted sampling or gauging 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

17. The gap between the pole wiper and the slotted guidepole shall not exceed 1/8 inch. [District Rule 4623, 5.5.2.4.3] Federally Enforceable Through Title V Permit

18. The permittee shall notify the District in writing at least 30 days prior to conduct the visual inspection of the storage vessel, so the District can arrange an observer. [40 CFR 60.11087(c)] Federally Enforceable Through Title V Permit

19. For newly constructed, repaired, or rebuilt internal floating roof tanks, 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. 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, 6.1.4.1, 40 CFR 60.113b(a)(1) and 40 CFR 63.11087(c)] Federally Enforceable Through Title V Permit

20. The owner or operator shall perform a monthly leak inspection of all equipment in gasoline service, as defined in section 63.11100. For this inspection, detection methods incorporating sight, sound, and smell are acceptable. [40 CFR Part 63.11089(a)] Federally Enforceable Through Title V Permit

21. For monthly leak inspection, a log book shall be used and shall be signed by the owner or operator at the completion of each inspection. A section of the log book shall contain a list, summary description, or diagram(s) showing the location of all equipment in gasoline service at the facility. [40 CFR Part 63.11089(b)] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

22. Each detection of a liquid or vapor leak shall be recorded in the log book. When a leak is detected, an initial attempt at repair shall be made as soon as practicable, but no later than 5 calendar days after the leak is detected. Repair or replacement of leaking equipment shall be completed within 15 calendar days after detection of each leak. Delay of repair of leaking equipment will be allowed if the repair is not feasible within 15 days. The owner or operator shall provide in the semiannual report the reason(s) why the repair was not feasible and the date each repair was completed. [40 CFR Part 63.11089(d)] Federally Enforceable Through Title V Permit

23. The owner or operator shall maintain a log book that contain the following information for a leak during during monthly inspection: 1.) equipment type and identification number; 2.) the nature of the leak (i.e. vapor or liquid) and the method of detection (i.e. sight, sound, or smell); 3.) the date the leak was detected and the date of each attempt to repair the leak; 4.) repair methods applied in each attempt to repair the leak; 5.) repair delayed and the reason for the delay if the leak is not repaired within 15 calendar days after discovery of the leak; 6) the expected date of successful repair of the leak if the leak is not repaired within 15 days; and 7.) the date of successful repair of the leak. [40 CFR 63.11089(g)] Federally Enforceable Through Title V Permit

24. The permittee shall visually inspect, through the manholes, roof hatches, or other opening 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, 6.1.4.2, 40 CFR 60.113b(a)(2) and 40 CFR 63.11087(c)] Federally Enforceable Through Title V Permit

25. If any failure (i.e. visible organic liquid on the internal floating roof, tank walls or anywhere, holes or tears in the seal fabric) is detected during 12 month visual inspection, the permittee shall repair the items or empty and remove the storage vessel from service within 45 days. If the detected failure cannot be repaired within 45 days and if the vessel cannot be emptied within 45 days, a 30-day extension may be requested from the APCO in the inspection report. Such a request must document that alternate storage capacity is unavailable and specify a schedule of actions the company will take that will assure theat the control equipment will be repaired or the vessel will be emptied as soon as possible. [40 CFR 60.11087(c)] Federally Enforceable Through Title V Permit

26. The permittee shall visually inspect the internal floating roof, the primary seal, the secondary seal, gaskets, slotted membranes and sleeve seals (if any) each time the vessel is emptied and degassed. If the internal floating roof has defects, the primary seal has holes, tears, or other openings in the seal or the seal fabric, or the secondary seal has holes, tears, or other openings in the seal or the seal fabric, or the gaskets no longer close off the liquid surfaces from the atmosphere, or the slotted membrane has more than 10 percent open area, the owner or operator shall repair the items as necessary so that none of the conditions specified in this paragraph exist before refilling the storage vessel. [40 CFR Part 63.11087(c)] Federally Enforceable Through Title V Permit

27. The permittee shall maintain records of all visual inspections required by this permit. Each record shall identify the storage vessel on which the inspection was performed, the date the vessel was inspected and the observed condition of each component of the control equipment (seals, internal floating roof, and fittings). [40 CFR 60.115b(a)(2)] Federally Enforceable Through Title V Permit

28. The owner or operator shall report the number of equipment leaks not repaired within 15 days after detection in a semi-annual report. [40 CFR 63.11089(g)] Federally Enforceable Through Title V Permit

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

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

30. The operator shall determine the presence of gas leaks using portable hydrocarbon detection instrument in accordance with EPA Method 21. The instrument shall be calibrated before use each day of its use by the procedures specified in Method 21 using the following calibration gases: 1.) Zero air (less than 10 ppm of hydrocarbon in air); and 2.) A mixture of methane or n-hexane and air at a concentration of about, but less than, 10,000 ppm methane or n-hexane. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

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

32. The permittee shall conduct actual gap measurements of the primary seal and/or secondary seal at least once every 60 months. Other than the gap criteria specified by this permit, no holes, tears, or other openings are allowed that would permit the escape of hydrocarbon vapors. Any defects found shall constitute a violation of this permit. [District Rule 4623, 6.1.4.3 and 40 CFR 63.11087(c)] Federally Enforceable Through Title V Permit

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

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

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

36. The operator shall keep a record of the liquids stored in this container, the period of storage, and the maximum true vapor pressure (TVP) of that liquid during the respective storage period. [40 CFR 60.116b(c)] Federally Enforceable Through Title V Permit

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

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

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

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

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

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

43. The permittee shall submit the reports of the floating roof tank inspections to the APCO within five calendar days after the completion of the inspection only for those tanks that failed to meet the applicable requirements of Rule 4623, Sections 5.2 through 5.5. The inspection report for tanks that that have been determined to be in compliance with the requirements of Sections 5.2 through 5.5 need not be submitted to the APCO, but the inspection report shall be kept on-site and made available upon request by the APCO. The inspection report shall contain all necessary information to demonstrate compliance with the provisions of this rule, including the following: 1.) Date of inspection and names and titles of company personnel doing the inspection; 2.) Tank identification number and Permit to Operate number; 3.) Measurements of the gaps between the tank shell and primary and secondary seals; 4.) Leak-free status of the tank and floating roof deck fittings. Records of the leak-free status shall include the vapor concentration values measured in ppmv. 5.) Data, supported by calculations, demonstrating compliance with the requirements specified in Sections 5.3, 5.4, 5.5.2.3.3, 5.5.2.4.2, and 5.5.2.4.3 of Rule 4623. 6.) Any corrective actions or repairs performed on the tank in order to comply with Rule 4623 and the date(s) such actions were taken. [District Rule 4623, 6.3.5, 40 CFR 60.115b(a)(3) and 40 CFR 63.11087(e)] Federally Enforceable Through Title V Permit

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

45. The following test methods shall be used: ASTM Method D287 for determining API Gravity, ASTM Method D4057 sampling for API Gravity testing; ASTM D323 for determining RVP, and converting RVP to TVP at the tank's maximum organic liquid storage temperature; ARB Method 422 for determining exempt halogenated VOCs in gases; EPA Method 21 for measuring gas-leak concentration. Should the owner or operator wish to use test methods other than the ones mentioned in this condition, the methods must be approved by the District prior to its use. [District Rule 4623, 6.4] Federally Enforceable Through Title V Permit

46. The operator shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rules 4623, 6.3 and 2520, 9.4.2] Federally Enforceable Through Title V Permit

47. At least 95% of all hydrocarbon vapors generated during the storage and the working of the storage tank shall be prevented from entrainment into the atmosphere. [District NSR Rule] Federally Enforceable Through Title V Permit

48. The internal floating roof supports, manholes, automatic bleeder vents, rim vents, gauge wells, etc., shall be covered with foam seal in a manner which prevents any gap. [District NSR Rule] Federally Enforceable Through Title V Permit

49. The internal floating roof shall be in direct contact with the liquid surface in a manner which prevents any vapor space below the internal roof. [District NSR Rule] Federally Enforceable Through Title V Permit

50. VOC emissions from tanks N-829-7, '-17, '-18, and '-22 shall not exceed 165 pounds per day. [District NSR Rule] Federally Enforceable Through Title V Permit

51. The permittee shall notify the District for an inspection prior to the filling of the tank with liquid in a manner which allows for unobstructed inspection of the seals from above and below the internal roof. [District NSR Rule] Federally Enforceable Through Title V Permit

# San Joaquin Valley
# Air Pollution Control District

**PERMIT UNIT:** N-829-28-5 **EXPIRATION DATE:** 11/30/2015

**EQUIPMENT DESCRIPTION:**
3,360,000 GALLON WELDED INTERNAL FLOATING ROOF STORAGE TANK (#80001) WITH A MECHANICAL SHOE PRIMARY SEAL, A WIPER SECONDARY SEAL AND A SLOTTED GUIDEPOLE

## PERMIT UNIT REQUIREMENTS

1. True vapor pressure of the organic liquid stored shall be less than 11 psia. [District Rule 4623, 5.1.1] Federally Enforceable Through Title V Permit
2. The tank shall be equipped with a floating roof consisting of a pan type that is installed before December 20, 2001, pontoon-type, or double-deck type cover, that rests on the surface of the liquid contents and is equipped with a closure device between the tank shell and roof edge consisting of a primary seal and a secondary seal. [District Rule 4623, 5.3.1.1 and 5.3.1.2, 40 CFR 60.112a(2) and 40 CFR 63.11087(a)] Federally Enforceable Through Title V Permit
3. The floating roof shall be floating on the surface of the stored liquid at all times (i.e., off the roof leg supports) except during the initial fill until the roof is lifted off the leg supports and when the tank is completely emptied and subsequently refilled. When the roof is resting on the leg supports the processes of filling or emptying and refilling the tank shall be continuous and shall be accomplished as rapidly as possible. Whenever the 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 the roof on its legs. [District Rule 4623, 5.3.1.3 and 5.4.3, 40 CFR 60.112a(2) and 40 CFR 63.11087(a)] Federally Enforceable Through Title V Permit
4. Gaps between the tank shell and the primary seal shall not exceed 1 1/2 inches. [District Rule 4623, 5.3.2.1.1 and 5.4.1] Federally Enforceable Through Title V Permit
5. The cumulative length of all gaps between the tank shell and the primary seal greater than 1/2 inch shall not exceed 10% of the circumference of the tank. [District Rule 4623, 5.3.2.1.1 and 5.4.1] Federally Enforceable Through Title V Permit
6. The cumulative length of all primary seal gaps greater than 1/8 inch shall not exceed 30% of the circumference of the tank. [District Rule 4623, 5.3.2.1.1 and 5.4.1] Federally Enforceable Through Title V Permit
7. No continuous gap in the primary seal greater than 1/8 inch wide shall exceed 10% of the tank circumference. [District Rule 4623, 5.3.2.1.1 and 5.4.1] Federally Enforceable Through Title V Permit
8. No gap between the tank shell and the secondary seal shall exceed 1/2 inch. [District Rule 4623, 5.3.2.1.2 and 5.4.1] Federally Enforceable Through Title V Permit
9. The cumulative length of all gaps between the tank shell and the secondary seal, greater than 1/8 inch shall not exceed 5% of the tank circumference. [District Rule 4623, 5.3.2.1.2 and 5.4.1] Federally Enforceable Through Title V Permit
10. 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, 5.3.2.1.3 and 5.4.1] Federally Enforceable Through Title V Permit
11. The geometry of the metallic-shoe type seal shall be such that the maximum gap between the shoe and the tank shell shall be no greater than 3 inches for a length of at least 18 inches in the vertical plane above the liquid. [District Rule 4623, 5.3.2.1.4 and 5.4.1] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

12. There shall be no holes, tears, or openings in the secondary seal or in the primary seal envelope that surrounds the annular vapor space enclosed by the roof edge, seal fabric, and secondary seal. [District Rule 4623, 5.3.2.1.5 and 5.4.1] Federally Enforceable Through Title V Permit
13. The secondary seal shall allow easy insertion of probes of up to 1 1/2 inches in width in order to measure gaps in the primary seal. [District Rule 4623, 5.3.2.1.6 and 5.4.1] Federally Enforceable Through Title V Permit
14. The secondary seal shall extend from the roof to the tank shell and shall not be attached to the primary seal. [District Rule 4623, 5.3.2.1.7 and 5.4.1] Federally Enforceable Through Title V Permit
15. All openings in the roof used for sampling and gauging 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 for sampling and gauging. [District Rule 4623, 5.5.2.1.2] 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 gas leak is defined as a reading in excess of 10,000 parts per million by volume (ppmv), as methane, above background on a portable hydrocarbon detection instrument that is calibrated with methane in accordance with the procedures specified in EPA Method 21. Liquid leak is defined as the dripping of organic liquid at a rate of more than 3 drops per minute. A reading in excess to 10,000 ppmv, as methane, above background, or dripping of organic liquid at a rate of more than 3 drops per minute, is a violation of this permit and Rule 4623 and shall be reported as a deviation. [District Rule 4623, 3.11, 3.17, 3.18 and 6.4.8] 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, 5.5.2.1.1 and 40 CFR 63.11087(a)] 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, combination manway/vacuum breakers, 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
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, 5.5.2.1.3] 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, 5.5.2.1.4] 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, 5.5.2.1.5] 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, 5.5.2.1.6] Federally Enforceable Through Title V Permit
23. All slotted sampling or gauging 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
24. 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 not exceed 1/8 inch. [District Rule 4623, 5.5.2.4.3] Federally Enforceable Through Title V Permit
25. The permittee shall notify the District in writing at least 30 days prior to conduct the visual inspection of the storage vessel, so the District can arrange an observer. [40 CFR 60.11087(c)] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

26. For newly constructed, repaired, or rebuilt internal floating roof tanks, 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. 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, 6.1.4.1 and 40 CFR 63.11087(c)] Federally Enforceable Through Title V Permit

27. The owner or operator shall perform a monthly leak inspection of all equipment in gasoline service, as defined in section 63.11100. For this inspection, detection methods incorporating sight, sound, and smell are acceptable. [40 CFR Part 63.11089(a)] Federally Enforceable Through Title V Permit

28. For monthly leak inspection, a log book shall be used and shall be signed by the owner or operator at the completion of each inspection. A section of the log book shall contain a list, summary description, or diagram(s) showing the location of all equipment in gasoline service at the facility. [40 CFR Part 63.11089(b)] Federally Enforceable Through Title V Permit

29. Each detection of a liquid or vapor leak shall be recorded in the log book. When a leak is detected, an initial attempt at repair shall be made as soon as practicable, but no later than 5 calendar days after the leak is detected. Repair or replacement of leaking equipment shall be completed within 15 calendar days after detection of each leak. Delay of repair of leaking equipment will be allowed if the repair is not feasible within 15 days. The owner or operator shall provide in the semiannual report the reason(s) why the repair was not feasible and the date each repair was completed. [40 CFR Part 63.11089(d)] Federally Enforceable Through Title V Permit

30. The owner or operator shall maintain a log book that contain the following information for a leak during during monthly inspection: 1.) equipment type and identification number; 2.) the nature of the leak (i.e. vapor or liquid) and the method of detection (i.e. sight, sound, or smell); 3.) the date the leak was detected and the date of each attempt to repair the leak; 4.) repair methods applied in each attempt to repair the leak; 5.) repair delayed and the reason for the delay if the leak is not repaired within 15 calendar days after discovery of the leak; 6) the expected date of successful repair of the leak if the leak is not repaired within 15 days; and 7.) the date of successful repair of the leak. [40 CFR 63.11089(g)] Federally Enforceable Through Title V Permit

31. The permittee shall visually inspect, through the manholes, roof hatches, or other opening 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, 6.1.4.2 and 40 CFR 63.11087(c)] Federally Enforceable Through Title V Permit

32. If any failure (i.e. visible organic liquid on the internal floating roof, tank walls or anywhere, holes or tears in the seal fabric) is detected during 12 month visual inspection, the permittee shall repair the items or empty and remove the storage vessel from service within 45 days. If the detected failure cannot be repaired within 45 days and if the vessel cannot be emptied within 45 days, a 30-day extension may be requested from the APCO in the inspection report. Such a request must document that alternate storage capacity is unavailable and specify a schedule of actions the company will take that will assure theat the control equipment will be repaired or the vessel will be emptied as soon as possible. [40 CFR 60.11087(c)] Federally Enforceable Through Title V Permit

33. The permittee shall visually inspect the internal floating roof, the primary seal, the secondary seal, gaskets, slotted memberanes and sleeve seals (if any) each time the vessel is emptied and degassed. If the internal floating roof has defects, the primary seal has holes, tears, or other openings in the seal or the seal fabric, or the secondary seal has holes, tears, or other openings in the seal or the seal fabric, or the gaskets no longer close off the liquid surfaces from the atmosphere, or the slotted membrane has more than 10 percent open area, the owner or operator shall repair the items as necessary so that none of the conditions specified in this paragraph exist before refilling the storage vessel. [40 CFR Part 63.11087(c)] Federally Enforceable Through Title V Permit

34. The owner or operator shall report the number of equipment leaks not repaired within 15 days after detection in a semi-annual report. [40 CFR 63.11089(g)] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

36. The operator shall determine the presence of gas leaks using portable hydrocarbon detection instrument in accordance with EPA Method 21. The instrument shall be calibrated before use each day of its use by the procedures specified in Method 21 using the following calibration gases: 1.) Zero air (less than 10 ppm of hydrocarbon in air); and 2.) A mixture of methane or n-hexane and air at a concentration of about, but less than, 10,000 ppm methane or n-hexane. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

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

38. The permittee shall conduct actual gap measurements of the primary seal and/or secondary seal at least once every 60 months. Other than the gap criteria specified by this permit, no holes, tears, or other openings are allowed that would permit the escape of hydrocarbon vapors. Any defects found shall constitute a violation of this permit. [District Rule 4623, 6.1.4.3 and 40 CFR 63.11087(c)] Federally Enforceable Through Title V Permit

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

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

41. The operator shall keep a record of liquids stored in each container, period of storage, and the maximum true vapor pressure of the liquid during the respective storage period. [40 CFR 60.115a(a)] Federally Enforceable Through Title V Permit

42. Maximum true vapor pressure may be determined from nomographs contained in API Bulletin 2517, by using the typical Reid vapor pressure and the maximum expected storage temperature of the stored product, unless the APCO specifically requests that the liquid be sampled, the actual storage temperature determined, and the Reid vapor pressure determined from the sample(s). [40 CFR 60.115a(b)] Federally Enforceable Through Title V Permit

43. The permittee shall submit the reports of the floating roof tank inspections to the APCO within five calendar days after the completion of the inspection only for those tanks that failed to meet the applicable requirements of Rule 4623, Sections 5.2 through 5.5. The inspection report for tanks that that have been determined to be in compliance with the requirements of Sections 5.2 through 5.5 need not be submitted to the APCO, but the inspection report shall be kept on-site and made available upon request by the APCO. The inspection report shall contain all necessary information to demonstrate compliance with the provisions of this rule, including the following: 1.) Date of inspection and names and titles of company personnel doing the inspection; 2.) Tank identification number and Permit to Operate number; 3.) Measurements of the gaps between the tank shell and primary and secondary seals; 4.) Leak-free status of the tank and floating roof deck fittings. Records of the leak-free status shall include the vapor concentration values measured in ppmv. 5.) Data, supported by calculations, demonstrating compliance with the requirements specified in Sections 5.3, 5.4, 5.5.2.3.3, 5.5.2.4.2, and 5.5.2.4.3 of Rule 4623. 6.) Any corrective actions or repairs performed on the tank in order to comply with Rule 4623 and the date(s) such actions were taken. [District Rule 4623, 6.3.5 and 40 CFR 63.11087(e)] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

45. The following test methods shall be used: ASTM Method D287 for determining API Gravity, ASTM Method D4057 sampling for API Gravity testing; ASTM D323 for determining RVP, and converting RVP to TVP at the tank's maximum organic liquid storage temperature; ARB Method 422 for determining exempt halogenated VOCs in gases; EPA Method 21 for measuring gas-leak concentration. Should the owner or operator wish to use test methods other than the ones mentioned in this condition, the methods must be approved by the District prior to its use. [District Rule 4623, 6.4] Federally Enforceable Through Title V Permit

46. The operator shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rules 4623, 6.3 and 2520, 9.4.2] Federally Enforceable Through Title V Permit

# San Joaquin Valley
# Air Pollution Control District

**PERMIT UNIT:** N-829-29-5 **EXPIRATION DATE:** 11/30/2015

**EQUIPMENT DESCRIPTION:**
3,360,000 GALLON WELDED EXTERNAL FLOATING ROOF STORAGE TANK (#80002) WITH A MECHANICAL SHOE PRIMARY SEAL, A WIPER SECONDARY SEAL AND A SLOTTED GUIDEPOLE

## PERMIT UNIT REQUIREMENTS

1. True vapor pressure of the organic liquid stored shall be less than 11 psia. [District Rule 4623, 5.1.1] Federally Enforceable Through Title V Permit
2. The tank shall be equipped with a floating roof consisting of a pan type that was installed before December 20, 2001, pontoon-type or double-deck-type cover which rests upon the surface of the liquid being stored and is equipped with a closure device between the tank shell and roof edge consisting of a primary and a secondary seal. [District Rule 4623, 5.3.1.1 and 5.3.1.2, 40 CFR 60.112a(a)(1) and 40 CFR 63.11087(a)] Federally Enforceable Through Title V Permit
3. Roof shall be floating on the liquid (i.e., off the roof leg supports) at all times except during initial fill and when tank is completely emptied and subsequently refilled. The process of emptying and refilling when the roof is resting on the leg supports shall be continuous and shall be accomplished as rapidly as possible. Whenever the permittee intends to land the roof on it's legs, the permittee shall notify the APCO in writing at least five calendar days prior to performing the work. The tank must be in compliance with this rule before it may land on its legs. [District Rule 4623, 5.3.1.3, 40 CFR 60.112a(a)(1) and 40 CFR 63.11087(a)] Federally Enforceable Through Title V Permit
4. Primary seal (lower seal) shall be a metallic shoe seal, a liquid-mounted seal, or a vapor-mounted seal. [40 CFR 60.112a(a)(1)(i) and 40 CFR 63.11087(a)] Federally Enforceable Through Title V Permit
5. Accumulated area of gaps between tank wall and primary seal shall not exceed: 1) 10.0 in2 per foot of tank diameter and the width of any portion of any gap shall not exceed 1-1/2 inch, for a metallic shoe seal or a liquid-mounted seal; 2) 1.0 in2 per foot of tank diameter and the width of any portion of any gap shall not exceed 1/2 inch for a vapor mounted seal. [40 CFR 60.112a(a)(1)(i)(A) & (B), District Rule 4623, 5.3.2.1.1 and 40 CFR 63.11087(c)] Federally Enforceable Through Title V Permit
6. The cumulative length of all gaps between the tank shell and the primary seal: 1) Greater than one-half (1/2) inch shall not exceed 10 percent of the circumference of the tank; and 2) Greater than one-eighth (1/8) inch shall not exceed 30 percent of the circumference of the tank. [District Rule 4623, 5.3.2.1.1] Federally Enforceable Through Title V Permit
7. No continuous gap in the primary seal greater than 1/8 inch wide shall exceed 10% of the tank circumference. [District Rule 4623, 5.3.2.1.1] Federally Enforceable Through Title V Permit
8. If the secondary seal is used in combination with a metallic shoe or liquid-mounted primary seal, accumulated area of gaps between tank wall and the secondary seal shall not exceed 1.0 in2 per foot of tank diameter and the width of any portion of any gap shall not exceed 1/2 inch. [District Rule 4623, 5.3.2.1.2, 40 CFR 60.112a(a)(1)(i)(B) and 40 CFR 63.11087(c)] Federally Enforceable Through Title V Permit
9. The cumulative length of all gaps between the tank shell and the secondary seal, greater than 1/8 inch shall not exceed 5% of the tank circumference. [District Rule 4623, 5.3.2.1.2] Federally Enforceable Through Title V Permit
10. The metallic shoe-type seal shall be installed so that one end of the shoe extends into the stored liquid and the other end extends a minimum vertical distance of 24 inches above the stored liquid surface. [District Rule 4623, 5.3.2.1.3, 40 CFR 60.112a(a)(1)(i)(C) and 40 CFR Part 63.11087(c)] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

12. There shall be no holes, tears, or openings in the secondary seal or in the primary seal envelope that surrounds the annular vapor space enclosed by the roof edge, seal fabric, and secondary seal. [District Rule 4623, 5.3.2.1.5, 40 CFR 60.112a(a)(1)(i)(D), and 40 CFR 60.112a(a)(1)(ii)(B)] Federally Enforceable Through Title V Permit

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

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

15. All openings in the roof used for sampling and gauging shall provide a projection below the liquid surface to prevent belching of liquid and to prevent entrained or formed organic vapor from escaping from the liquid contents of the tank and shall be equipped with a cover, seal or lid that shall be in a closed position at all times, with no visible gaps and be leak-free, except when the device or appurtenance is in use. [District Rule 4623, 5.5.1 and 40 CFR 60.112a(a)(1)(iii)] 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 gas leak is defined as a reading in excess of 10,000 parts per million by volume (ppmv), as methane, above background on a portable hydrocarbon detection instrument that is calibrated with methane in accordance with the procedures specified in EPA Method 21. Liquid leak is defined as the dripping of organic liquid at a rate of more than 3 drops per minute. A reading in excess to 10,000 ppmv, as methane, above background, or dripping of organic liquid at a rate of more than 3 drops per minute, is a violation of this permit and Rule 4623 and shall be reported as a deviation. [District Rule 4623, 3.11, 3.17, 3.18 and 6.4.8] Federally Enforceable Through Title V Permit

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

18. 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

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

20. Rim vents shall be equipped with a gasket and shall be set to open when the roof is being floated off the roof leg supports or at the manufacturer's recommended setting. [District Rule 4623, 5.5.2.2.4 and 40 CFR 60.112a(a)(1)(iii)] Federally Enforceable Through Title V Permit

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

22. 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

23. All slotted sampling and gauging 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

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

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

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

27. The operator shall perform gap measurements on primary and secondary seals within 60 days of the initial fill with petroleum liquid and at least once every year thereafter to determine compliance with the requirements of Rule 4623. The actual gap measurements of the floating roof primary and secondary seals shall be recorded. The inspection results shall be submitted to the APCO as specified in Section 6.3.5. [District Rule 4623, 6.1.3.1, 40 CFR 60.113a(a)(1)(i)(B) and 40 CFR 63.11087(c)] Federally Enforceable Through Title V Permit

28. If unit is out of service for a period of one year or more, subsequent refilling with volatile organic liquid (VOL) shall be considered initial fill in accordance with the conditions of this permit. [40 CFR 60.113a(a)(1)(i)(C) and 40 CFR 63.11087(c)] Federally Enforceable Through Title V Permit

29. The permittee shall inspect the primary and secondary seals for compliance with the requirements of Rule 4623 every time this tank is emptied or degassed. Actual gap measurements shall be performed when the liquid level is static but not more than 24 hours after the tank roof is re-floated. [District Rule 4623, 6.1.3.2] Federally Enforceable Through Title V Permit

30. If primary or secondary seal gap width/accumulated area and minimum vertical distance for one end of the mechanical shoe do not meet the requirements in this permit during 12 month inspection, the permittee shall repair the items or empty and remove the storage vessel from service within 45 days. If the detected failure cannot be repaired within 45 days and if the vessel cannot be emptied within 45 days, a 30-day extension may be requested from the APCO in the inspection report. Such a request must document that alternate storage capacity is unavailable and specify a schedule of actions the company will take that will assure that the control equipment will be repaired or the vessel will be emptied as soon as possible. [40 CFR 60.11087(c)] Federally Enforceable Through Title V Permit

31. The owner or operator shall visually inspect the external floating roof, the primary seal, secondary seal, and fittings each time the vessel is emptied and degassed. If the external floating roof has defects, the primary seal has holes, tears, or other openings in the seal or the seal fabric, or the secondary seal has holes, tears, or other openings in the seal or the seal fabric, the owner or operator shall repair the items as necessary so that none of the conditions specified mentioned in this condition exist before filling or refilling the storage vessel. [40 CFR 60.11087(c)] Federally Enforceable Through Title V Permit

32. The owner or operator shall perform a monthly leak inspection of all equipment in gasoline service, as defined in section 63.11100. For this inspection, detection methods incorporating sight, sound, and smell are acceptable. [40 CFR Part 63.11089(a)] Federally Enforceable Through Title V Permit

33. For monthly leak inspection, a log book shall be used and shall be signed by the owner or operator at the completion of each inspection. A section of the log book shall contain a list, summary description, or diagram(s) showing the location of all equipment in gasoline service at the facility. [40 CFR Part 63.11089(b)] Federally Enforceable Through Title V Permit

34. Each detection of a liquid or vapor leak shall be recorded in the log book. When a leak is detected, an initial attempt at repair shall be made as soon as practicable, but no later than 5 calendar days after the leak is detected. Repair or replacement of leaking equipment shall be completed within 15 calendar days after detection of each leak. Delay of repair of leaking equipment will be allowed if the repair is not feasible within 15 days. The owner or operator shall provide in the semiannual report the reason(s) why the repair was not feasible and the date each repair was completed. [40 CFR Part 63.11089(d)] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

35. The owner or operator shall maintain a log book that contain the following information for a leak during during monthly inspection: 1.) equipment type and identification number; 2.) the nature of the leak (i.e. vapor or liquid) and the method of detection (i.e. sight, sound, or smell); 3.) the date the leak was detected and the date of each attempt to repair the leak; 4.) repair methods applied in each attempt to repair the leak; 5.) repair delayed and the reason for the delay if the leak is not repaired within 15 calendar days after discovery of the leak; 6) the expected date of successful repair of the leak if the leak is not repaired within 15 days; and 7.) the date of successful repair of the leak. [40 CFR 63.11089(g)] Federally Enforceable Through Title V Permit

36. The owner or operator shall report the number of equipment leaks not repaired within 15 days after detection in a semi-annual report. [40 CFR 63.11089(g)] Federally Enforceable Through Title V Permit

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

38. The operator shall determine the presence of gas leaks using portable hydrocarbon detection instrument in accordance with EPA Method 21. The instrument shall be calibrated before use each day of its use by the procedures specified in Method 21 using the following calibration gases: 1.) Zero air (less than 10 ppm of hydrocarbon in air); and 2.) A mixture of methane or n-hexane and air at a concentration of about, but less than, 10,000 ppm methane or n-hexane. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

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

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

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

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

43. Operator shall record the vessel on which the measurement was performed, date of the seal gap measurement, and raw data obtained in the measurement process in accordance with the conditions of this permit. [40 CFR 60.113a(a)(1)(i)(D) and 40 CFR 63.11087(e)] Federally Enforceable Through Title V Permit

44. The permittee shall notify the District in writing at least 30 days in advance of visual inspection or any gap measurement required by this permit, so the District can arrange an observer. [40 CFR 60.113a(a)(1)(iv) and 40 CFR 60.11087(c)] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

45. If the accumulated area of gaps or gap width exceed limits, operator shall submit a report to the APCO within 30 days of the date of measurement. Report should include identification of the vessel, reason vessel did not meet the specifications, and a description of the actions necessary to bring the storage vessel into compliance. [40 CFR 60.113a(a)(1)(i)(E) and 40 CFR 63.11087(e)] Federally Enforceable Through Title V Permit

46. The operator shall keep a record of liquids stored in each container, period of storage, and the maximum true vapor pressure of the liquid during the respective storage period. [40 CFR 60.115a(a)] Federally Enforceable Through Title V Permit

47. Maximum true vapor pressure may be determined from nomographs contained in API Bulletin 2517, by using the typical Reid vapor pressure and the maximum expected storage temperature of the stored product, unless the APCO specifically requests that the liquid be sampled, the actual storage temperature determined, and the Reid vapor pressure determined from the sample(s). [40 CFR 60.115a(b)] Federally Enforceable Through Title V Permit

48. The permittee shall submit the reports of the floating roof tank inspections to the APCO within five calendar days after the completion of the inspection only for those tanks that failed to meet the applicable requirements of Rule 4623, Sections 5.2 through 5.5. The inspection report for tanks that that have been determined to be in compliance with the requirements of Sections 5.2 through 5.5 need not be submitted to the APCO, but the inspection report shall be kept on-site and made available upon request by the APCO. The inspection report shall contain all necessary information to demonstrate compliance with the provisions of this rule, including the following: 1.) Date of inspection and names and titles of company personnel doing the inspection; 2.) Tank identification number and Permit to Operate number; 3.) Measurements of the gaps between the tank shell and primary and secondary seals; 4.) Leak-free status of the tank and floating roof deck fittings. Records of the leak-free status shall include the vapor concentration values measured in ppmv. 5.) Data, supported by calculations, demonstrating compliance with the requirements specified in Sections 5.3, 5.4, 5.5.2.3.3, 5.5.2.4.2, and 5.5.2.4.3 of Rule 4623. 6.) Any corrective actions or repairs performed on the tank in order to comply with Rule 4623 and the date(s) such actions were taken. [District Rule 4623, 6.3.5] Federally Enforceable Through Title V Permit

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

50. The following test methods shall be used: ASTM Method D287 for determining API Gravity, ASTM Method D4057 sampling for API Gravity testing; ASTM D323 for determining RVP, and converting RVP to TVP at the tank's maximum organic liquid storage temperature; ARB Method 422 for determining exempt halogenated VOCs in gases; EPA Method 21 for measuring gas-leak concentration. Should the owner or operator wish to use test methods other than the ones mentioned in this condition, the methods must be approved by the District prior to its use. [District Rule 4623, 6.4] Federally Enforceable Through Title V Permit

51. The operator shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rules 4623, 6.3 and 2520, 9.4.2] Federally Enforceable Through Title V Permit

# San Joaquin Valley
# Air Pollution Control District

**PERMIT UNIT:** N-829-31-4 **EXPIRATION DATE:** 11/30/2015

**EQUIPMENT DESCRIPTION:**
1,386,000 GALLON WELDED INTERNAL FLOATING ROOF TANK (33007) WITH A MINI SHOE PRIMARY SEAL, A VAPORFLEX SECONDARY SEAL, AND A SLOTTED GUIDEPOLE

## PERMIT UNIT REQUIREMENTS

1. Only denatured ethanol (97.5% or more by weight ethanol, 2.5% or less by weight gasoline) shall be stored in this tank. The permittee shall maintain sufficient records to demonstrate compliance with this condition. [District Rules 2201 and 4102] Federally Enforceable Through Title V Permit
2. True vapor pressure (TVP) of the organic liquid stored in the tank shall not exceed 2.8 psia. [District Rule 2201] Federally Enforceable Through Title V Permit
3. VOC emissions shall not exceed 7.1 pounds in any one day. [District Rule 2201] Federally Enforceable Through Title V Permit
4. The daily throughput of the organic liquid shall not exceed 1,386,000 gallons. [District Rule 2201] Federally Enforceable Through Title V Permit
5. The monthly throughput of the organic liquid shall not exceed 5,544,000 gallons. [District Rule 2201] Federally Enforceable Through Title V Permit
6. The permittee shall record TVP and the temperature of the organic liquid stored on monthly basis. [District Rule 2201] Federally Enforceable Through Title V Permit
7. The floating roof shall be floating on the surface of the stored liquid at all times (i.e., off the roof leg supports) except during the initial fill until the roof is lifted off the leg supports and when the tank is completely emptied and subsequently refilled. When the roof is resting on the leg supports the processes of filling or emptying and refilling the tank shall be continuous and shall be accomplished as rapidly as possible. Whenever the 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 the roof on its legs. [District Rule 4623, 5.4.3, 40 CFR 60.112b(a)(1)(i) and 40 CFR 63.11087(a)] Federally Enforceable Through Title V Permit
8. Gaps between the tank shell and the primary seal shall not exceed 1 1/2 inches. [District Rule 4623, 5.3.2.1.1 and 5.4.1] Federally Enforceable Through Title V Permit
9. The cumulative length of all gaps between the tank shell and the primary seal greater than 1/2 inch shall not exceed 10% of the circumference of the tank. [District Rule 4623, 5.3.2.1.1 and 5.4.1] Federally Enforceable Through Title V Permit
10. The cumulative length of all primary seal gaps greater than 1/8 inch shall not exceed 30% of the circumference of the tank. [District Rule 4623, 5.3.2.1.1 and 5.4.1] Federally Enforceable Through Title V Permit
11. No continuous gap in the primary seal greater than 1/8 inch wide shall exceed 10% of the tank circumference. [District Rule 4623, 5.3.2.1.1 and 5.4.1] Federally Enforceable Through Title V Permit
12. No gap between the tank shell and the secondary seal shall exceed 1/2 inch. [District Rule 4623, 5.3.2.1.2 and 5.4.1] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

13. The cumulative length of all gaps between the tank shell and the secondary seal, greater than 1/8 inch shall not exceed 5% of the tank circumference. [District Rule 4623, 5.3.2.1.2 and 5.4.1] Federally Enforceable Through Title V Permit

14. The metallic shoe-type seal shall be installed so that one end of the shoe extends into the stored liquid and the other end extends a minimum vertical distance of 18 inches above the stored liquid surface. [District Rule 4623, 5.3.2.1.3 and 5.4.1] Federally Enforceable Through Title V Permit

15. The geometry of the metallic-shoe type seal shall be such that the maximum gap between the shoe and the tank shell shall be no greater than 3 inches for a length of at least 18 inches in the vertical plane above the liquid. [District Rule 4623, 5.3.2.1.4 and 5.4.1] Federally Enforceable Through Title V Permit

16. There shall be no holes, tears, or openings in the secondary seal or in the primary seal envelope that surrounds the annular vapor space enclosed by the roof edge, seal fabric, and secondary seal. [District Rule 4623, 5.3.2.1.5 and 5.4.1] Federally Enforceable Through Title V Permit

17. The secondary seal shall allow easy insertion of probes of up to 1 1/2 inches in width in order to measure gaps in the primary seal. [District Rule 4623, 5.3.2.1.6 and 5.4.1] Federally Enforceable Through Title V Permit

18. The secondary seal shall extend from the roof to the tank shell and shall not be attached to the primary seal. [District Rule 4623, 5.3.2.1.7 and 5.4.1] Federally Enforceable Through Title V Permit

19. All openings in the roof used for sampling and gauging 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 for sampling and gauging. [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 gas leak is defined as a reading in excess of 10,000 parts per million by volume (ppmv), as methane, above background on a portable hydrocarbon detection instrument that is calibrated with methane in accordance with the procedures specified in EPA Method 21. Liquid leak is defined as the dripping of organic liquid at a rate of more than 3 drops per minute. A reading in excess to 10,000 ppmv, as methane, above background, or dripping of organic liquid at a rate of more than 3 drops per minute, is a violation of this permit and Rule 4623 and shall be reported as a deviation. [District Rule 4623, 3.11, 3.17, 3.18 and 6.4.8] Federally Enforceable Through Title V Permit

21. 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, 40 CFR 60.112b(a)(1)(iii) and 40 CFR 63.11087(a)] Federally Enforceable Through Title V Permit

22. Each opening in the internal floating roof except for leg sleeves, automatic bleeder vents, rim space vents, column wells, ladder wells, sample wells, combination manway/vacuum breakers, and stub drains shall be equipped with a cover, or a lid shall be maintained in a closed position at all times (i.e. no visible gaps) except when the device is in use. The cover or lid shall be equipped with a gasket. Covers on each access hatch and automatic gauge float well shall be bolted in place except when they are in use. [District Rule 4623, 5.5.2.1.2 and 40 CFR 60.112b(a)(1)(iv)] 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 leg roof supports. [District Rule 4623, 5.5.2.1.3 and 40 CFR 60.112b(a)(1)(v)] Federally Enforceable Through Title V Permit

24. Rim vents shall be equipped with a gasket and shall 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 and 40 CFR 60.112b(a)(1)(vi)]

25. Each penetration of the internal floating roof for the purpose of sampling shall be a sample well. The well shall have a slit fabric cover that covers at least 90 percent of the opening. The fabric cover must be impermeable. [District Rule 4623, 5.5.2.1.5 and 40 CFR 60.112b(a)(1)(vii)] Federally Enforceable Through Title V Permit

26. Each penetration of the internal floating roof that allows for the 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 and 40 CFR 60.112b(a)(1)(viii)] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

27. Each penetration of the internal floating roof that allows for the passage of a ladder shall have a gasketed sliding cover. [40 CFR 60.112b(a)(1)(ix)] Federally Enforceable Through Title V Permit

28. All slotted sampling or gauging 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

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 not exceed 1/8 inch. [District Rule 4623, 5.5.2.4.3] Federally Enforceable Through Title V Permit

30. The permittee shall notify the District in writing at least 30 days prior to conduct the visual inspection of the storage vessel, so the District can arrange an observer. [40 CFR 60.113b(a)(5) and 40 CFR 60.11087(c)] Federally Enforceable Through Title V Permit

31. For newly constructed, repaired, or rebuilt internal floating roof tanks, 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. 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, 6.1.4.1, 40 CFR 60.113b(a)(1) and 40 CFR 63.11087(c)] Federally Enforceable Through Title V Permit

32. The owner or operator shall perform a monthly leak inspection of all equipment in gasoline service, as defined in section 63.11100. For this inspection, detection methods incorporating sight, sound, and smell are acceptable. [40 CFR Part 63.11089(a)] Federally Enforceable Through Title V Permit

33. For monthly leak inspection, a log book shall be used and shall be signed by the owner or operator at the completion of each inspection. A section of the log book shall contain a list, summary description, or diagram(s) showing the location of all equipment in gasoline service at the facility. [40 CFR Part 63.11089(b)] Federally Enforceable Through Title V Permit

34. Each detection of a liquid or vapor leak shall be recorded in the log book. When a leak is detected, an initial attempt at repair shall be made as soon as practicable, but no later than 5 calendar days after the leak is detected. Repair or replacement of leaking equipment shall be completed within 15 calendar days after detection of each leak. Delay of repair of leaking equipment will be allowed if the repair is not feasible within 15 days. The owner or operator shall provide in the semiannual report the reason(s) why the repair was not feasible and the date each repair was completed. [40 CFR Part 63.11089(d)] Federally Enforceable Through Title V Permit

35. The owner or operator shall maintain a log book that contain the following information for a leak during during monthly inspection: 1.) equipment type and identification number; 2.) the nature of the leak (i.e. vapor or liquid) and the method of detection (i.e. sight, sound, or smell); 3.) the date the leak was detected and the date of each attempt to repair the leak; 4.) repair methods applied in each attempt to repair the leak; 5.) repair delayed and the reason for the delay if the leak is not repaired within 15 calendar days after discovery of the leak; 6) the expected date of successful repair of the leak if the leak is not repaired within 15 days; and 7.) the date of successful repair of the leak. [40 CFR 63.11089(g)] Federally Enforceable Through Title V Permit

36. The permittee shall visually inspect, through the manholes, roof hatches, or other opening 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, 6.1.4.2, 40 CFR 60.113b(a)(2) and 40 CFR 63.11087(c)] Federally Enforceable Through Title V Permit

37. If any failure (i.e. visible organic liquid on the internal floating roof, tank walls or anywhere, holes or tears in the seal fabric) is detected during 12 month visual inspection, the permittee shall repair the items or empty and remove the storage vessel from service within 45 days. If the detected failure cannot be repaired within 45 days and if the vessel cannot be emptied within 45 days, a 30-day extension may be requested from the APCO in the inspection report. Such a request must document that alternate storage capacity is unavailable and specify a schedule of actions the company will take that will assure theat the control equipment will be repaired or the vessel will be emptied as soon as possible. [40 CFR 60.113b(a)(2) and 40 CFR 60.11087(c)] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

38. The permittee shall visually inspect the internal floating roof, the primary seal, the secondary seal, gaskets, slotted membranes and sleeve seals (if any) each time the vessel is emptied and degassed. If the internal floating roof has defects, the primary seal has holes, tears, or other openings in the seal or the seal fabric, or the secondary seal has holes, tears, or other openings in the seal or the seal fabric, or the gaskets no longer close off the liquid surfaces from the atmosphere, or the slotted membrane has more than 10 percent open area, the owner or operator shall repair the items as necessary so that none of the conditions specified in this paragraph exist before refilling the storage vessel. [40 CFR Part 63.11087(c)] Federally Enforceable Through Title V Permit

39. The owner or operator shall report the number of equipment leaks not repaired within 15 days after detection in a semi-annual report. [40 CFR 63.11089(g)] Federally Enforceable Through Title V Permit

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

41. The operator shall determine the presence of gas leaks using portable hydrocarbon detection instrument in accordance with EPA Method 21. The instrument shall be calibrated before use each day of its use by the procedures specified in Method 21 using the following calibration gases: 1.) Zero air (less than 10 ppm of hydrocarbon in air); and 2.) A mixture of methane or n-hexane and air at a concentration of about, but less than, 10,000 ppm methane or n-hexane. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

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

43. The permittee shall conduct actual gap measurements of the primary seal and/or secondary seal at least once every 60 months. Other than the gap criteria specified by this permit, no holes, tears, or other openings are allowed that would permit the escape of hydrocarbon vapors. Any defects found shall constitute a violation of this permit. [District Rule 4623 Section 6.1.4.3] Federally Enforceable Through Title V Permit

44. The permittee shall submit the reports of the floating roof tank inspections to the APCO within five calendar days after the completion of the inspection only for those tanks that failed to meet the applicable requirements of Rule 4623, Sections 5.2 through 5.5. The inspection report for tanks that that have been determined to be in compliance with the requirements of Sections 5.2 through 5.5 need not be submitted to the APCO, but the inspection report shall be kept on-site and made available upon request by the APCO. The inspection report shall contain all necessary information to demonstrate compliance with the provisions of this rule, including the following: 1.) Date of inspection and names and titles of company personnel doing the inspection; 2.) Tank identification number and Permit to Operate number; 3.) Measurements of the gaps between the tank shell and primary and secondary seals; 4.) Leak-free status of the tank and floating roof deck fittings. Records of the leak-free status shall include the vapor concentration values measured in ppmv. 5.) Data, supported by calculations, demonstrating compliance with the requirements specified in Sections 5.3, 5.4, 5.5.2.3.3, 5.5.2.4.2, and 5.5.2.4.3 of Rule 4623. 6.) Any corrective actions or repairs performed on the tank in order to comply with Rule 4623 and the date(s) such actions were taken. [District Rule 4623, 6.3.5 and 40 CFR 63.11087(c)] Federally Enforceable Through Title V Permit

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

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

46. The following test methods shall be used: ASTM Method D287 for determining API Gravity, ASTM Method D4057 sampling for API Gravity testing; ASTM D323 for determining RVP, and converting RVP to TVP at the tank's maximum organic liquid storage temperature; ARB Method 422 for determining exempt halogenated VOCs in gases; EPA Method 21 for measuring gas-leak concentration. Should the owner or operator wish to use test methods other than the ones mentioned in this condition, the methods must be approved by the District prior to its use. [District Rule 4623, 6.4] Federally Enforceable Through Title V Permit

47. The permittee shall maintain records of daily, monthly, cumulative annual organic liquid throughput in gallons. The cumulative annual records shall be updated weekly. [District Rule 2201] Federally Enforceable Through Title V Permit

48. The permittee shall maintain records of TVP tests and the temperature of the organic liquid stored in the tank. [District Rule 2201] Federally Enforceable Through Title V Permit

49. The permittee shall keep all records on-site for a period of at least five years. These records shall be made available for District inspection upon request. [District Rules 2201 and 4623, 6.3] Federally Enforceable Through Title V Permit

# ATTACHMENT C

## Authorities to Construct

San Joaquin Valley
AIR POLLUTION CONTROL DISTRICT

HEALTHY AIR LIVING™

# AUTHORITY TO CONSTRUCT

**PERMIT NO:** N-829-5-4

**ISSUANCE DATE:** 02/04/2014

**LEGAL OWNER OR OPERATOR:** NUSTAR TERMINALS OPS PARTNERSHIP LP
**MAILING ADDRESS:** 2366 MARITIME DR - STE 275
ELK GROVE, CA 95758

**LOCATION:** 2941 NAVY DRIVE
STOCKTON, CA 95206

**EQUIPMENT DESCRIPTION:**
MODIFICATION OF 630,000 GALLON WELDED INTERNAL FLOATING ROOF STORAGE TANK (#1502) WITH A WIPER PRIMARY SEAL AND A SLOTTED GUIDEPOLE; TO REPLACE THE EXISTING SEAL WITH NEW HMT MINISHOE PRIMARY SEAL AND A VAPORFLEX SECONDARY SEAL

## CONDITIONS

1. The facility shall submit an application to modify the Title V permit in accordance with the timeframes and procedures of District Rule 2520. [District Rule 2520] Federally Enforceable Through Title V Permit
2. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101]
3. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
4. The maximum throughput for this tank shall not exceed 15,000 barrels in any one day. [District Rule 2201]
5. The true vapor pressure (TVP) of the organic liquid stored in the tank shall be less than 11 psia at the actual storage temperature of the tank contents. [District Rules 2201 and 4623]
6. Gaps between the tank shell and the primary seal shall not exceed 1 1/2 inches. [District Rule 4623]
7. The cumulative length of all gaps between the tank shell and the primary seal greater than 1/2 inch shall not exceed 10% of the circumference of the tank. [District Rule 4623]
8. The cumulative length of all primary seal gaps greater than 1/8 inch shall not exceed 30% of the circumference of the tank. [District Rule 4623]
9. No continuous gap in the primary seal greater than 1/8 inch wide shall exceed 10% of the tank circumference. [District Rule 4623]

CONDITIONS CONTINUE ON NEXT PAGE

YOU MUST NOTIFY THE DISTRICT COMPLIANCE DIVISION AT (209) 557-6400 WHEN CONSTRUCTION IS COMPLETED AND PRIOR TO OPERATING THE EQUIPMENT OR MODIFICATIONS AUTHORIZED BY THIS AUTHORITY TO CONSTRUCT. This is NOT a PERMIT TO OPERATE. Approval or denial of a PERMIT TO OPERATE will be made after an inspection to verify that the equipment has been constructed in accordance with the approved plans, specifications and conditions of this Authority to Construct, and to determine if the equipment can be operated in compliance with all Rules and Regulations of the San Joaquin Valley Unified Air Pollution Control District. Unless construction has commenced pursuant to Rule 2050, this Authority to Construct shall expire and application shall be cancelled two years from the date of issuance. The applicant is responsible for complying with all laws, ordinances and regulations of all other governmental agencies which may pertain to the above equipment.

Seyed Sadredin, Executive Director / APCO

DAVID WARNER, Director of Permit Services

Conditions for N-829-5-4 (continued)

10. No gap between the tank shell and the secondary seal shall exceed 1/2 inch. [District Rule 4623]
11. 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]
12. The metallic shoe-type seal shall be installed so that one end of the shoe extends into the stored liquid and the other end extends a minimum vertical distance of 18 inches above the stored liquid surface. [District Rule 4623]
13. The geometry of the metallic-shoe type seal shall be such that the maximum gap between the shoe and the tank shell shall be no greater than 3 inches for a length of at least 18 inches in the vertical plane above the liquid. [District Rule 4623]
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]
15. The secondary seal shall allow easy insertion of probes of up to 1 1/2 inches in width in order to measure gaps in the primary seal. [District Rule 4623]
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]
17. The internal floating roof shall float on the surface of the stored liquid at all times (i.e., off the roof leg supports) except during the initial fill until the roof is lifted off the leg supports and when the tank is completely emptied and subsequently refilled. When the roof is resting on the leg supports, the process of filling, emptying, or refilling shall be continuous and shall be accomplished as rapidly as possible. Whenever the permittee intends to land the roof on it's legs, the permittee shall notify the APCO in writing at least five calendar days prior to performing the work. The tank must be in compliance with this rule before it may land on its legs. [District Rule 4623, 40 CFR 60.112b(a)(1) and 40 CFR 63.11087(a)] Federally Enforceable Through Title V Permit
18. All openings in the roof used for sampling and gauging shall provide a projection below the liquid surface to prevent belching of liquid and to prevent entrained or formed organic vapor from escaping from the liquid contents of the tank and shall be equipped with a cover, seal or lid. The cover seal or lid shall be in a closed position, with no visible gaps and be leak-free, except when the device or appurtenance is in use for sampling or gauging. [District Rule 4623 and 40 CFR 60.112b(a)(1)]
19. A leak-free condition is defined as a condition without a gas leak or a liquid leak. A gas leak is defined as a reading in excess of 10,000 parts per million by volume (ppmv), as methane, above background on a portable hydrocarbon detection instrument that is calibrated with methane in accordance with the procedures specified in EPA Method 21. Liquid leak is defined as the dripping of organic liquid at a rate of more than 3 drops per minute. A reading in excess to 10,000 ppmv, as methane, above background, or dripping of organic liquid at a rate of more than 3 drops per minute, 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
20. 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, 40 CFR 60.112b(a)(1), and 40 CFR 63.11087(a)]
21. Each opening in the internal floating roof except for leg sleeves, automatic bleeder vents, rim space vents, column wells, ladder wells, sample wells, combination manway/vacuum breakers, and stub drains shall be equipped with a cover, or a lid shall be maintained in a closed position at all times (i.e. no visible gaps) except when the device is in use. The cover or lid shall be equipped with a gasket. Covers on each access hatch and automatic gauge float well shall be bolted in place except when they are in use. [District Rule 4623 and 40 CFR 60.112b(a)(1)]
22. Automatic bleeder vents shall be equipped with a gasket and shall be closed at all times when the roof is floating except when the roof is being floated off or is being landed on the leg roof supports. [District Rule 4623 and 40 CFR 60.112b(a)(1)]
23. Rim vents shall be equipped with a gasket and shall be set to open only when the internal floating roof is not floating or at the manufacturer's recommended setting. [District Rule 4623 and 40 CFR 60.112b(a)(1)]

CONDITIONS CONTINUE ON NEXT PAGE

Conditions for N-829-5-4 (continued)

24. 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 and 40 CFR 60.112b(a)(1)]

25. Each penetration of the internal floating roof that allows for the 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 and 40 CFR 60.112b(a)(1)]

26. Each penetration of the internal floating roof that allows for the passage of a ladder shall have a gasketed sliding cover. [40 CFR 60.112b(a)(1)]

27. All slotted sampling or gauging 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

28. The gap between the pole wiper and the slotted guidepole shall not exceed 1/8 inch. [District Rule 4623] Federally Enforceable Through Title V Permit

29. The permittee shall notify the District in writing at least 30 days prior to conduct the visual inspection of the storage vessel, so the District can arrange an observer. [40 CFR 60.11087(c)] Federally Enforceable Through Title V Permit

30. For newly constructed, repaired, or rebuilt internal floating roof tanks, 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. If there are holes, tears, or other openings in the primary seal, the secondary seal, or the seal fabric or defects in the internal floating roof or its appurtenant parts, components, fittings, etc., the operator shall repair the defects before filling the tank. [District Rule 4623 and 40 CFR 63.11087(c)] Federally Enforceable Through Title V Permit

31. The owner or operator shall perform a monthly leak inspection of all equipment in gasoline service, as defined in section 63.11100. For this inspection, detection methods incorporating sight, sound, and smell are acceptable. [40 CFR Part 63.11089(a)] Federally Enforceable Through Title V Permit

32. For monthly leak inspection, a log book shall be used and shall be signed by the owner or operator at the completion of each inspection. A section of the log book shall contain a list, summary description, or diagram(s) showing the location of all equipment in gasoline service at the facility. [40 CFR Part 63.11089(b)] Federally Enforceable Through Title V Permit

33. Each detection of a liquid or vapor leak shall be recorded in the log book. When a leak is detected, an initial attempt at repair shall be made as soon as practicable, but no later than 5 calendar days after the leak is detected. Repair or replacement of leaking equipment shall be completed within 15 calendar days after detection of each leak. Delay of repair of leaking equipment will be allowed if the repair is not feasible within 15 days. The owner or operator shall provide in the semiannual report the reason(s) why the repair was not feasible and the date each repair was completed. [40 CFR Part 63.11089(d)] Federally Enforceable Through Title V Permit

34. The owner or operator shall maintain a log book that contain the following information for a leak during during monthly inspection: 1.) equipment type and identification number; 2.) the nature of the leak (i.e. vapor or liquid) and the method of detection (i.e. sight, sound, or smell); 3.) the date the leak was detected and the date of each attempt to repair the leak; 4.) repair methods applied in each attempt to repair the leak; 5.) repair delayed and the reason for the delay if the leak is not repaired within 15 calendar days after discovery of the leak; 6) the expected date of successful repair of the leak if the leak is not repaired within 15 days; and 7.) the date of successful repair of the leak. [40 CFR 63.11089(g)] Federally Enforceable Through Title V Permit

35. The permittee shall visually inspect, through the manholes, roof hatches, or other opening 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, 40 CFR 60.113b, and 40 CFR 63.11087(c)] Federally Enforceable Through Title V Permit

36. The permittee shall conduct actual gap measurements of the primary seal and/or secondary seal at least once every 60 months. [District Rule 4623]

CONDITIONS CONTINUE ON NEXT PAGE

37. If any failure (i.e. visible organic liquid on the internal floating roof, tank walls or anywhere, holes or tears in the seal fabric) is detected during 12 month visual inspection, the permittee shall repair the items or empty and remove the storage vessel from service within 45 days. If the detected failure cannot be repaired within 45 days and if the vessel cannot be emptied within 45 days, a 30-day extension may be requested from the APCO in the inspection report. Such a request must document that alternate storage capacity is unavailable and specify a schedule of actions the company will take that will assure theat the control equipment will be repaired or the vessel will be emptied as soon as possible. [40 CFR 60.113b and 40 CFR 60.11087(c)] Federally Enforceable Through Title V Permit

38. The permittee shall visually inspect the internal floating roof, the primary seal, the secondary seal, gaskets, slotted membranes and sleeve seals (if any) each time the vessel is emptied and degassed. If the internal floating roof has defects, the primary seal has holes, tears, or other openings in the seal or the seal fabric, or the secondary seal has holes, tears, or other openings in the seal or the seal fabric, or the gaskets no longer close off the liquid surfaces from the atmosphere, or the slotted membrane has more than 10 percent open area, the owner or operator shall repair the items as necessary so that none of the conditions specified in this paragraph exist before refilling the storage vessel. [40 CFR 60.113b and 40 CFR Part 63.11087(c)] Federally Enforceable Through Title V Permit

39. The permittee shall notify the District in writing at least 30 days prior to the filling or refilling of each storage vessel for which an inspection is required by paragraphs (a)(1) and (a)(4) of 40 CFR 60.113b to afford the District the opportunity to have an observer present. If the inspection required by paragraph (a)(4) of 40 CFR 60.113b is not planned and the owner or operator could not have known about the inspection 30 days in advance or refilling the tank, the owner or operator shall notify the District at least 7 days prior to the refilling of the storage vessel. Notification shall be made by telephone immediately followed by written documentation demonstrating why the inspection was unplanned. Alternatively, this notification including the written documentation may be made in writing and sent by express mail so that it is received by the Administrator at least 7 days prior to the refilling. [40 CFR 60.113b]

40. The owner or operator shall report the number of equipment leaks not repaired within 15 days after detection in a semi-annual report. [40 CFR 63.11089(g)] Federally Enforceable Through Title V Permit

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

42. The operator shall determine the presence of gas leaks using portable hydrocarbon detection instrument in accordance with EPA Method 21. The instrument shall be calibrated before use each day of its use by the procedures specified in Method 21 using the following calibration gases: 1.) Zero air (less than 10 ppm of hydrocarbon in air); and 2.) A mixture of methane or n-hexane and air at a concentration of about, but less than, 10,000 ppm methane or n-hexane. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

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

44. The permittee shall conduct actual gap measurements of the primary seal and/or secondary seal at least once every 60 months. Other than the gap criteria specified by this permit, no holes, tears, or other openings are allowed that would permit the escape of hydrocarbon vapors. Any defects found shall constitute a violation of this rule. [District Rule 4623 and 40 CFR 63.11087(c)] Federally Enforceable Through Title V Permit

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

CONDITIONS CONTINUE ON NEXT PAGE

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

47. The operator shall keep a record of liquids stored in each container, period of storage, and the maximum true vapor pressure of the liquid during the respective storage period. [District Rule 40 CFR 60.116b] Federally Enforceable Through Title V Permit

48. Permittee shall keep a record of the daily quantity of organic liquid loaded into the tank, in barrels. [District Rule 2201]

49. Maximum true vapor pressure may be determined from nomographs contained in API Bulletin 2517, by using the typical Reid vapor pressure and the maximum expected storage temperature of the stored product, unless the APCO specifically requests that the liquid be sampled, the actual storage temperature determined, and the Reid vapor pressure determined from the sample(s). [40 CFR 60.116b] Federally Enforceable Through Title V Permit

50. The permittee shall submit the reports of the floating roof tank inspections to the APCO within five calendar days after the completion of the inspection only for those tanks that failed to meet the applicable requirements of Rule 4623, Sections 5.2 through 5.5. The inspection report for tanks that that have been determined to be in compliance with the requirements of Sections 5.2 through 5.5 need not be submitted to the APCO, but the inspection report shall be kept on-site and made available upon request by the APCO. The inspection report shall contain all necessary information to demonstrate compliance with the provisions of this rule, including the following: 1.) Date of inspection and names and titles of company personnel doing the inspection; 2.) Tank identification number and Permit to Operate number; 3.) Measurements of the gaps between the tank shell and primary and secondary seals; 4.) Leak-free status of the tank and floating roof deck fittings. Records of the leak-free status shall include the vapor concentration values measured in ppmv. 5.) Data, supported by calculations, demonstrating compliance with the requirements specified in Sections 5.3, 5.4, 5.5.2.3.3, 5.5.2.4.2, and 5.5.2.4.3 of Rule 4623. 6.) Any corrective actions or repairs performed on the tank in order to comply with Rule 4623 and the date(s) such actions were taken. [District Rule 4623 and 40 CFR 63.11087(e)] Federally Enforceable Through Title V Permit

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

52. The following test methods shall be used: ASTM Method D287 for determining API Gravity, ASTM Method D4057 sampling for API Gravity testing; ASTM D323 for determining RVP, and converting RVP to TVP at the tank's maximum organic liquid storage temperature; ARB Method 422 for determining exempt halogenated VOCs in gases; EPA Method 21 for measuring gas-leak concentration. Should the owner or operator wish to use test methods other than the ones mentioned in this condition, the methods must be approved by the District prior to its use. [District Rule 4623] Federally Enforceable Through Title V Permit

53. The operator shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rules 4623 and 2520] Federally Enforceable Through Title V Permit

San Joaquin Valley
AIR POLLUTION CONTROL DISTRICT

# AUTHORITY TO CONSTRUCT

**PERMIT NO:** N-829-32-0

**ISSUANCE DATE:** 01/08/2007

**LEGAL OWNER OR OPERATOR:** ST SERVICES, LLC
**MAILING ADDRESS:** C/O VALERO, LP
2565 NW HARBORSIDE DRIVE
VANCOUVER, WA 98660

**LOCATION:** 2941 NAVY DRIVE
STOCKTON, CA 95206

**EQUIPMENT DESCRIPTION:**
1,953,000 GALLON WELDED INTERNAL FLOATING ROOF GASOLINE, DIESEL, ETHANOL, AND METHANOL STORAGE TANK (#4901) WITH A MECHANICAL SHOE PRIMARY SEAL, A WIPER SECONDARY SEAL AND A SLOTTED GUIDEPOLE

## CONDITIONS

1. The facility shall submit an application to modify the Title V permit in accordance with the timeframes and procedures of District Rule 2520. [District Rule 2520] Federally Enforceable Through Title V Permit
2. Prior to operating equipment under this Authority to Construct, permittee shall surrender VOC emission reduction credits for the following quantity of emissions: 1st quarter - 636 lb, 2nd quarter - 636 lb, 3rd quarter - 636 lb, and fourth quarter - 636 lb. Offsets shall be provided at the applicable offset ratio specified in Table 4-2 of Rule 2201 (as amended 9/21/06). [District Rule 2201] Federally Enforceable Through Title V Permit
3. ERC Certificate Number N-543-1 (or a certificate split from this certificate) shall be used to supply the required offsets, unless a revised offsetting proposal is received and approved by the District, upon which this Authority to Construct shall be reissued, administratively specifying the new offsetting proposal. Original public noticing requirements, if any, shall be duplicated prior to reissuance of this Authority to Construct. [District Rule 2201] Federally Enforceable Through Title V Permit
4. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101] Federally Enforceable Through Title V Permit
5. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
6. This tank shall only store gasoline, diesel fuel, ethanol, and methanol with a TVP of less than or equal to 10 psia. [District Rule 2201] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

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Seyed Sadredin, Executive Director / APCO

for DAVID WARNER, Director of Permit Services



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7. This tank shall not have more than two (2) turnovers per month. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Annual throughput of fuel shall not exceed 46,922,400 gallons. [District Rule 2201] Federally Enforceable Through Title V Permit
9. Permittee shall maintain records of monthly and annual throughput of fuel in gallons. [District Rule 2201] Federally Enforceable Through Title V Permit
10. Daily emissions shall not exceed 9.0 lbs VOC/day based on a monthly average. [District Rule 2201] Federally Enforceable Through Title V Permit
11. 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
12. Gaps between the tank shell and the primary seal shall not exceed 1 1/2 inches. [District Rule 4623] Federally Enforceable Through Title V Permit
13. The cumulative length of all gaps between the tank shell and the primary seal greater than 1/2 inch shall not exceed 10% of the circumference of the tank. [District Rule 4623] Federally Enforceable Through Title V Permit
14. The cumulative length of all primary seal gaps greater than 1/8 inch shall not exceed 30% of the circumference of the tank. [District Rule 4623] Federally Enforceable Through Title V Permit
15. 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
16. No gap between the tank shell and the secondary seal shall exceed 1/2 inch. [District Rule 4623] Federally Enforceable Through Title V Permit
17. 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
18. 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 11 inches above the stored liquid surface. [District Rule 4623] Federally Enforceable Through Title V Permit
19. The geometry of the metallic-shoe type seal shall be such that the maximum gap between the shoe and the tank shell shall be no greater than 3 inches for a length of at least 11 inches in the vertical plane above the liquid. [District Rule 4623] Federally Enforceable Through Title V Permit
20. 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
21. The secondary seal shall allow easy insertion of probes of up to 1 1/2 inches in width in order to measure gaps in the primary seal. [District Rule 4623] Federally Enforceable Through Title V Permit
22. 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
23. All openings in the roof used for sampling and gauging, except pressure-vacuum valves which shall be set to within 10% of the maximum allowable working pressure of the roof, shall provide a projection below the liquid surface to prevent belching of liquid and to prevent entrained or formed organic vapor from escaping from the liquid contents of the tank and shall be equipped with a cover, seal or lid that shall be in a closed position at all times, with no visible gaps and be gas tight, except when the device or appurtenance is in use. [District Rule 4623] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

24. A leak-free condition is defined as a condition without a gas or liquid leak. A gas leak is defined as a reading in excess of 10,000 ppmv as methane, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21. A liquid leak is defined as a dripping rate of more than three (3) drops per minute. A reading in excess of 10,000 ppmv as methane above background or a liquid leak of greater than three (3) drops per minute 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

25. 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

26. 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

27. Automatic bleeder vents shall be equipped with a gasket and shall be closed at all times when the roof is floating except when the roof is being floated off or is being landed on the roof leg supports. [District Rule 4623] Federally Enforceable Through Title V Permit

28. 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

29. 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

30. 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

31. 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

32. 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

33. 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

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

CONDITIONS CONTINUE ON NEXT PAGE

35. 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

36. 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

37. 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

San Joaquin Valley
AIR POLLUTION CONTROL DISTRICT

# AUTHORITY TO CONSTRUCT

**PERMIT NO:** N-829-33-0

**ISSUANCE DATE:** 01/08/2007

**LEGAL OWNER OR OPERATOR:** ST SERVICES, LLC
**MAILING ADDRESS:** C/O VALERO, LP
2565 NW HARBORSIDE DRIVE
VANCOUVER, WA 98660

**LOCATION:** 2941 NAVY DRIVE
STOCKTON, CA 95206

**EQUIPMENT DESCRIPTION:**
3,365,000 GALLON WELDED INTERNAL FLOATING ROOF GASOLINE, DIESEL, ETHANOL, AND METHANOL STORAGE TANK (#6801) WITH A MECHANICAL SHOE PRIMARY SEAL, A WIPER SECONDARY SEAL AND A SLOTTED GUIDEPOLE

## CONDITIONS

1. The facility shall submit an application to modify the Title V permit in accordance with the timeframes and procedures of District Rule 2520. [District Rule 2520] Federally Enforceable Through Title V Permit
2. Prior to operating equipment under this Authority to Construct, permittee shall surrender VOC emission reduction credits for the following quantity of emissions: 1st quarter - 939 lb, 2nd quarter - 939 lb, 3rd quarter - 939 lb, and fourth quarter - 939 lb. Offsets shall be provided at the applicable offset ratio specified in Table 4-2 of Rule 2201 (as amended 9/21/06). [District Rule 2201] Federally Enforceable Through Title V Permit
3. ERC Certificate Number N-543-1 (or a certificate split from this certificate) shall be used to supply the required offsets, unless a revised offsetting proposal is received and approved by the District, upon which this Authority to Construct shall be reissued, administratively specifying the new offsetting proposal. Original public noticing requirements, if any, shall be duplicated prior to reissuance of this Authority to Construct. [District Rule 2201] Federally Enforceable Through Title V Permit
4. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101] Federally Enforceable Through Title V Permit
5. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
6. This tank shall only store gasoline, diesel fuel, ethanol, and methanol with a TVP of less than or equal to 10 psia. [District Rule 2201] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

YOU MUST NOTIFY THE DISTRICT COMPLIANCE DIVISION AT (209) 557-6400 WHEN CONSTRUCTION IS COMPLETED AND PRIOR TO OPERATING THE EQUIPMENT OR MODIFICATIONS AUTHORIZED BY THIS AUTHORITY TO CONSTRUCT. This is NOT a PERMIT TO OPERATE. Approval or denial of a PERMIT TO OPERATE will be made after an inspection to verify that the equipment has been constructed in accordance with the approved plans, specifications and conditions of this Authority to Construct, and to determine if the equipment can be operated in compliance with all Rules and Regulations of the San Joaquin Valley Unified Air Pollution Control District. Unless construction has commenced pursuant to Rule 2050, this Authority to Construct shall expire and application shall be cancelled two years from the date of issuance. The applicant is responsible for complying with all laws, ordinances and regulations of all other governmental agencies which may pertain to the above equipment.

Seyed Sadredin, Executive Director / APCO

P. Durand Majoller

DAVID WARNER, Director of Permit Services


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7. This tank shall not have more than two (2) turnovers per month. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Annual throughput of fuel shall not exceed 83,160,000 gallons. [District Rule 2201] Federally Enforceable Through Title V Permit
9. Permittee shall maintain records of monthly and annual throughput of fuel in gallons. [District Rule 2201] Federally Enforceable Through Title V Permit
10. Daily emissions shall not exceed 13.3 lbs VOC/day based on a monthly average. [District Rule 2201] Federally Enforceable Through Title V Permit
11. 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
12. Gaps between the tank shell and the primary seal shall not exceed 1 1/2 inches. [District Rule 4623] Federally Enforceable Through Title V Permit
13. The cumulative length of all gaps between the tank shell and the primary seal greater than 1/2 inch shall not exceed 10% of the circumference of the tank. [District Rule 4623] Federally Enforceable Through Title V Permit
14. The cumulative length of all primary seal gaps greater than 1/8 inch shall not exceed 30% of the circumference of the tank. [District Rule 4623] Federally Enforceable Through Title V Permit
15. 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
16. No gap between the tank shell and the secondary seal shall exceed 1/2 inch. [District Rule 4623] Federally Enforceable Through Title V Permit
17. 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
18. 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 11 inches above the stored liquid surface. [District Rule 4623] Federally Enforceable Through Title V Permit
19. The geometry of the metallic-shoe type seal shall be such that the maximum gap between the shoe and the tank shell shall be no greater than 3 inches for a length of at least 11 inches in the vertical plane above the liquid. [District Rule 4623] Federally Enforceable Through Title V Permit
20. 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
21. The secondary seal shall allow easy insertion of probes of up to 1 1/2 inches in width in order to measure gaps in the primary seal. [District Rule 4623] Federally Enforceable Through Title V Permit
22. 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
23. All openings in the roof used for sampling and gauging, except pressure-vacuum valves which shall be set to within 10% of the maximum allowable working pressure of the roof, shall provide a projection below the liquid surface to prevent belching of liquid and to prevent entrained or formed organic vapor from escaping from the liquid contents of the tank and shall be equipped with a cover, seal or lid that shall be in a closed position at all times, with no visible gaps and be gas tight, except when the device or appurtenance is in use. [District Rule 4623] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

24. A leak-free condition is defined as a condition without a gas or liquid leak. A gas leak is defined as a reading in excess of 10,000 ppmv as methane, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21. A liquid leak is defined as a dripping rate of more than three (3) drops per minute. A reading in excess of 10,000 ppmv as methane above background or a liquid leak of greater than three (3) drops per minute 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

25. 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

26. 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

27. Automatic bleeder vents shall be equipped with a gasket and shall be closed at all times when the roof is floating except when the roof is being floated off or is being landed on the roof leg supports. [District Rule 4623] Federally Enforceable Through Title V Permit

28. 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

29. 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

30. 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

31. 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

32. 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

33. 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

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

CONDITIONS CONTINUE ON NEXT PAGE

35. 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

36. 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

37. 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

San Joaquin Valley
AIR POLLUTION CONTROL DISTRICT

# AUTHORITY TO CONSTRUCT

**PERMIT NO:** N-829-34-0

**ISSUANCE DATE:** 01/08/2007

**LEGAL OWNER OR OPERATOR:** ST SERVICES, LLC
**MAILING ADDRESS:** C/O VALERO, LP
2565 NW HARBORSIDE DRIVE
VANCOUVER, WA 98660

**LOCATION:** 2941 NAVY DRIVE
STOCKTON, CA 95206

**EQUIPMENT DESCRIPTION:**
1,953,000 GALLON WELDED INTERNAL FLOATING ROOF DIESEL STORAGE TANK (#4902) WITH A MECHANICAL SHOE PRIMARY SEAL, A WIPER SECONDARY SEAL AND A SLOTTED GUIDEPOLE (PERMIT EXEMPT PER SECTION 6.6.5 OF RULE 2020)

## CONDITIONS

1. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101]
2. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
3. This tank shall only store diesel fuel with a TVP of less than or equal to 0.5 psia. [District Rules 1080 and 2020]

YOU MUST NOTIFY THE DISTRICT COMPLIANCE DIVISION AT (209) 557-6400 WHEN CONSTRUCTION IS COMPLETED AND PRIOR TO OPERATING THE EQUIPMENT OR MODIFICATIONS AUTHORIZED BY THIS AUTHORITY TO CONSTRUCT. This is NOT a PERMIT TO OPERATE. Approval or denial of a PERMIT TO OPERATE will be made after an inspection to verify that the equipment has been constructed in accordance with the approved plans, specifications and conditions of this Authority to Construct, and to determine if the equipment can be operated in compliance with all Rules and Regulations of the San Joaquin Valley Unified Air Pollution Control District. Unless construction has commenced pursuant to Rule 2050, this Authority to Construct shall expire and application shall be cancelled two years from the date of issuance. The applicant is responsible for complying with all laws, ordinances and regulations of all other governmental agencies which may pertain to the above equipment.

Seyed Sadredin, Executive Director / APCO

P. Arnaud Marjollet

DAVID WARNER, Director of Permit Services

N-829-34-0: Jan 8 2007 4:39PM - LEE : [illegible]



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San Joaquin Valley
AIR POLLUTION CONTROL DISTRICT

MAR 3 0 2010

Mike Poirier
NuStar Terminals Operations Partnership, L.P.
2368 Maritime Drive, Suite 275
Elk Grove, CA 95758

**RE: Notice of Issuance of Authority to Construct**
**Project Number: N-1091343**

Dear Mr. Poirier:

The Air Pollution Control Officer has issued the Authority to Construct to NuStar Terminals Operations Partnership, L.P. to store denatured ethanol in tank #30006 and to replace the existing roof on the tank.

Enclosed are the Authority to Construct and invoice for the engineering evaluation fees pursuant to District Rule 3010. Please remit the amount owed, along with a copy of the attached invoice, before the due date.

Thank you for your cooperation in this matter. If you have any questions, please contact Saijad Ahmad at (559) 230-5903.

Sincerely,

David Warner
Director of Permit Services

for Jim Swaney, P.E.
Permit Services Manager

DW:sa

Enclosures

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

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San Joaquin Valley
AIR POLLUTION CONTROL DISTRICT

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# AUTHORITY TO CONSTRUCT

**PERMIT NO:** N-829-35-0 **ISSUANCE DATE:** 03/29/2010

**LEGAL OWNER OR OPERATOR:** NUSTAR TERMINALS OPS PARTNERSHIP LP
**MAILING ADDRESS:** 2366 MARITIME DR - STE 275
ELK GROVE, CA 95758

**LOCATION:** 2941 NAVY DRIVE
STOCKTON, CA 95206

**EQUIPMENT DESCRIPTION:**
30,000 BBL (1,260,000 GALLON) WELDED INTERNAL FLOATING ROOF TANK (#30006) WITH A MECHANICAL SHOE PRIMARY SEAL, A WIPER SECONDARY SEAL, AND A SLOTTED GUIDEPOLE

## CONDITIONS

1. The facility shall submit an application to modify the Title V permit in accordance with the timeframes and procedures of District Rule 2520. [District Rule 2520] Federally Enforceable Through Title V Permit
2. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
3. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101]
4. Only denatured ethanol (97.5% or more by weight ethanol, 2.5% or less by weight gasoline) shall be stored in this tank. The permittee shall maintain sufficient records to demonstrate compliance with this condition. [District Rules 2201 and 4102]
5. True vapor pressure (TVP) of the organic liquid stored in the tank shall not exceed 2.8 psia. [District Rule 2201]
6. VOC emissions shall not exceed 6.1 pounds in any one day. [District Rule 2201]
7. The daily throughput of the organic liquid shall not exceed 25,000 barrels/day or 1,050,000 gallons/day (equivalent to 1 tank turnover/day). [District Rule 2201]
8. The monthly throughput of the organic liquid shall not exceed 1,000,000 barrels/month or 42,000,000 gallons/month (equivalent to 4 tank turnover/month). [District Rule 2201]
9. The permittee shall determine TVP and the temperature of the organic liquid stored on monthly basis. [District Rule 2201]

CONDITIONS CONTINUE ON NEXT PAGE

**YOU MUST NOTIFY THE DISTRICT COMPLIANCE DIVISION AT (209) 557-6400 WHEN CONSTRUCTION IS COMPLETED AND PRIOR TO OPERATING THE EQUIPMENT OR MODIFICATIONS AUTHORIZED BY THIS AUTHORITY TO CONSTRUCT. This is NOT a PERMIT TO OPERATE.** Approval or denial of a PERMIT TO OPERATE will be made after an inspection to verify that the equipment has been constructed in accordance with the approved plans, specifications and conditions of this Authority to Construct, and to determine if the equipment can be operated in compliance with all Rules and Regulations of the San Joaquin Valley Unified Air Pollution Control District. Unless construction has commenced pursuant to Rule 2050, this Authority to Construct shall expire and application shall be cancelled two years from the date of issuance. The applicant is responsible for complying with all laws, ordinances and regulations of all other governmental agencies which may pertain to the above equipment.

Seyed Sadredin, Executive Director / APCO

for
DAVID WARNER, Director of Permit Services

10. The floating roof shall be floating on the surface of the stored liquid at all times (i.e., off the roof leg supports) except during the initial fill until the roof is lifted off the leg supports and when the tank is completely emptied and subsequently refilled. When the roof is resting on the leg supports the processes of filling or emptying and refilling the tank shall be continuous and shall be accomplished as rapidly as possible. Whenever the 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 the roof on its legs. [District Rule 4623 Section 5.4.3, 40 CFR 60.112b(a)(1)(i)] Federally Enforceable Through Title V Permit
11. No gap between the tank shell and the primary seal shall exceed one and one-half (1-1/2) inches. [District Rule 4653 Sections 5.3.2.1.1 and 5.4.1] Federally Enforceable Through Title V Permit
12. The cumulative length of all gaps between the tank shell and the primary seal: 1) Greater than one-half (1/2) inch shall not exceed 10 percent of the circumference of the tank; and 2) Greater than one-eighth (1/8) inch shall not exceed 30 percent of the circumference of the tank. [District Rule 4623 Sections 5.3.2.1.1 and 5.4.1] Federally Enforceable Through Title V Permit
13. The primary seal shall have no continuous gap greater than one-eighth (1/8) inch shall exceed 10 percent of the tank circumference. [District Rule 4623 Sections 5.3.2.1.1 and 5.4.1] Federally Enforceable Through Title V Permit
14. No gap between the tank shell and the secondary seal shall exceed one-half (1/2) inch. [District Rule 4623 Sections 5.3.2.1.2 and 5.4.1] Federally Enforceable Through Title V Permit
15. The cumulative length of all gaps between the tank shell and the secondary seal, greater than one-eighth (1/8) inch shall not exceed 5 percent of the tank circumference. [District Rule 4623 Sections 5.3.2.1.2 and 5.4.1] Federally Enforceable Through Title V Permit
16. The metallic shoe-type seal shall be installed so that one end of the shoe extends into the stored liquid and the other end extends a minimum vertical distance of 18 inches above the stored liquid surface. [District Rule 4623 Section 5.4.1] Federally Enforceable Through Title V Permit
17. The geometry of the metallic-shoe type seal shall be such that the maximum gap between the shoe and the tank shell shall be no greater than 3 inches for a length of at least 18 inches in the vertical plane above the liquid. [District Rule 4623 Sections 5.3.2.1.4 and 5.4.1] Federally Enforceable Through Title V Permit
18. There shall be no holes, tears, or openings in the secondary seal or in the primary seal envelope that surrounds the annular vapor space enclosed by the roof edge, seal fabric, and secondary seal. [District Rule 4623 Sections 5.3.2.1.5 and 5.4.1] Federally Enforceable Through Title V Permit
19. The secondary seal shall allow easy insertion of probes of up to one and one-half (1-1/2) inches in width in order to measure gaps in the primary seal. [District Rule 4623 Sections 5.3.2.1.6 and 5.4.1] Federally Enforceable Through Title V Permit
20. The secondary seal shall extend from the roof to the tank shell and shall not be attached to the primary seal. [District Rule 4623 Sections 5.3.2.1.7 and 5.4.1] Federally Enforceable Through Title V Permit
21. All openings in the roof used for sampling and gauging shall provide a projection below the liquid surface to prevent belching of liquid and to prevent entrained or formed organic vapor from escaping from the liquid contents of the tank and shall be equipped with a cover, seal or lid. The cover seal or lid shall be in a closed position, with no visible gaps and be gas tight, except when the device or appurtenance is in use. [District Rule 4623 Section 5.5.1] Federally Enforceable Through Title V Permit
22. 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, as methane, 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 Sections 3.11, 5.1.3, and 6.4.8] Federally Enforceable Through Title V Permit
23. 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 Section 5.5.2.1.1, 40 CFR 60.112b(a)(1)(iii)] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

24. 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 shall be equipped with a cover, or a lid shall be maintained in a closed position at all times (i.e. no visible gaps) except when the device is in use. The cover or lid shall be equipped with a gasket. Covers on each access hatch and automatic gauge float well shall be bolted in place except when they are in use. [District Rule 4623 Section 5.5.2.1.2, 40 CFR 60.112b(a)(1)(iv)] Federally Enforceable Through Title V Permit

25. Automatic bleeder vents shall be equipped with a gasket and shall be closed at all times when the roof is floating except when the roof is being floated off or is being landed on the leg roof supports. [District Rule 4623 Section 5.5.2.1.3, 40 CFR 60.112b(a)(1)(v)] Federally Enforceable Through Title V Permit

26. Rim vents shall be equipped with a gasket and shall be set to open only when the internal floating roof is not floating or at the manufacturer's recommended setting. [District Rule 4623 Section 5.5.2.1.4, 40 CFR 60.112b(a)(1)(vi)] Federally Enforceable Through Title V Permit

27. Each penetration of the internal floating roof for the purpose of sampling shall be a sample well. The well shall have a slit fabric cover that covers at least 90 percent of the opening. The fabric cover must be impermeable. [District Rule 4623 Section 5.5.2.1.5, 40 CFR 60.112b(a)(1)(vii)] Federally Enforceable Through Title V Permit

28. Each penetration of the internal floating roof that allows for the 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 Section 5.5.2.1.6, 40 CFR 60.112b(a)(1)(viii)] Federally Enforceable Through Title V Permit

29. Each penetration of the internal floating roof that allows for the passage of a ladder shall have a gasketed sliding cover. [40 CFR 60.112b(a)(1)(ix)] Federally Enforceable Through Title V Permit

30. All slotted sampling or gauging wells, and similar fixed projections through the floating roof shall provide a projection below the liquid surface. [District Rule 4623 Section 5.5.2.4.1] Federally Enforceable Through Title V Permit

31. 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 not exceed one-eighth (1/8) inch. [District Rule 4623 Section 5.5.2.4.3] Federally Enforceable Through Title V Permit

32. 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. If there are holes, tears, or other openings in the primary seal, the secondary seal, or the seal fabric or defects in the internal floating roof or its appurtenant parts, components, fittings, etc., the operator shall repair the defects before filling the tank. [District Rule 4623 Section 6.1.4.1, 40 CFR 60.113b(a)(1)] Federally Enforceable Through Title V Permit

33. The permittee shall visually inspect, through the manholes, roof hatches, or other opening 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 Section 6.1.4.2, 40 CFR 60.113b(a)(2)] Federally Enforceable Through Title V Permit

34. If any failure (i.e. visible organic liquid on the internal floating roof, tank walls or anywhere, holes or tears in the seal fabric) is detected during 12 month visual inspection, the permittee shall repair the items or empty and remove the storage vessel from service within 45 days. If the detected failure cannot be repaired within 45 days and if the vessel cannot be emptied within 45 days, a 30-day extension may be requested from the APCO in the inspection report. Such a request must document that alternate storage capacity is unavailable and specify a schedule of actions the company will take that will assure that the control equipment will be repaired or the vessel will be emptied as soon as possible. [40 CFR 60.113b(a)(2)] Federally Enforceable Through Title V Permit

35. The permittee shall conduct actual gap measurements of the primary seal and/or secondary seal at least once every 60 months. Other than the gap criteria specified by this permit, no holes, tears, or other openings are allowed that would permit the escape of hydrocarbon vapors. Any defects found shall constitute a violation of this rule. [District Rule 4623 Section 6.1.4.3] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

36. The permittee shall submit the reports of the floating roof tank inspections to the APCO within five calendar days after the completion of the inspection only for those tanks that failed to meet the applicable requirements of Rule 4623, Sections 5.2 through 5.5. The inspection report for tanks that that have been determined to be in compliance with the requirements of Sections 5.2 through 5.5 need not be submitted to the APCO, but the inspection report shall be kept on-site and made available upon request by the APCO. The inspection report shall contain all necessary information to demonstrate compliance with the provisions of this rule, including the following: 1) Date of inspection and names and titles of company personnel doing the inspection. 2) Tank identification number and Permit to Operate number. 3) Measurements of the gaps between the tank shell and primary and secondary seals. 4) Gas-tight status of the tank and floating roof deck fittings. Records of the gas-tight status shall include the vapor concentration values measured in parts per million by volume (ppmv). 5) Data, supported by calculations, demonstrating compliance with the requirements specified in Sections 5.3.1.3 and 5.5.2.4.3 of Rule 4623. 6) Any corrective actions or repairs performed on the tank in order to comply with rule 4623 and the date(s) such actions were taken. [District Rule 4623 Section 6.3.5] Federally Enforceable Through Title V Permit

37. 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 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 Section 6.3.7] Federally Enforceable Through Title V Permit

38. The permittee shall notify the District in writing at least 30 days prior to conduct the visual inspection of the storage vessel, so the District can arrange an observer. [40 CFR 60.113b(a)(5)] Federally Enforceable Through Title V Permit

39. The permittee shall maintain records of daily, monthly, cumulative annual organic liquid throughput in gallons. The cumulative annual records shall be updated weekly. [District Rule 2201] Federally Enforceable Through Title V Permit

40. The permittee shall maintain records of TVP tests and the temperature of the organic liquid stored in the tank. [District Rule 2201] Federally Enforceable Through Title V Permit

41. The permittee shall keep all records on-site for a period of at least five years. These records shall be made available for District inspection upon request. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit

42. Prior to operating under this Authority to Construct permit, the permittee shall offset the following quantities of VOC: 1st quarter - 438 lb, 2nd quarter - 438 lb, 3rd quarter - 438 lb, and 4th quarter - 438 lb. Offsets shall be provided at the applicable offset ratio specified in Table 4-2 of Rule 2201 (as amended 9/21/06). [District Rule 2201]

43. ERC Certificate Number S-3299-1 (or a certificate split from this certificate) shall be used to supply the required VOC offsets, unless a revised offsetting proposal is received and approved by the District. Following the revisions, this Authority to Construct permit shall be reissued, administratively specifying the new offsetting proposal. Original public noticing requirements, if any, shall be duplicated prior to re-issuance of this Authority to Construct permit. [District Rule 2201]

# ATTACHMENT D

## Detailed Facility List

# Detailed Facility Report

For Facility=829

Sorted by Facility Name and Permit Number



NUSTAR TERMINALS OPS PARTNERSHIP LP
2941 NAVY DRIVE
STOCKTON, CA 95206

FAC#: N 829
STATUS: A
TELEPHONE: 9167969914

TYPE: TitleV
TOXIC ID: 21101

EXPIRE ON: 11/30/2015
AREA: 9 /
INSP. DATE: 08/17

| PERMIT NUMBER | FEE DESCRIPTION | FEE RULE | QTY | FEE AMOUNT | FEE TOTAL | PERMIT STATUS | EQUIPMENT DESCRIPTION |
|---|---|---|---|---|---|---|---|
| N-829-1-6 | 40 hp | 3020-01 B | 1 | 129.00 | 129.00 | A | FOUR LANE TRUCK LOADING RACK (NORTH) CONSISTING OF 7 GASOLINE LOADING ARMS AND 3 DIESEL LOADING ARMS |
| N-829-2-6 | 40 hp | 3020-01 B | 1 | 129.00 | 129.00 | A | FOUR LANE TRUCK LOADING RACK (SOUTH) CONSISTING OF 4 GASOLINE LOADING ARMS AND 4 DIESEL LOADING ARMS |
| N-829-3-1 | 40 HP | 3020-01 B | 1 | 129.00 | 129.00 | D | TWO LANE TRUCK LOADING RACK #3 CONSISTING OF 4 DIESEL LOADING ARMS. ***** PERMIT DELETED ON 5/30/2002 PER FACILITY'S REQUEST - NRP ***** |
| N-829-4-1 | 20 HP | 3020-01 A | 1 | 97.00 | 97.00 | D | TWO LANE TRUCK LOADING RACK #4 CONSISTING OF 4 GASOLINE LOADING ARMS. ***** DELETED ON 5/30/2002 PER FACILITY'S REQUEST - NRP ***** |
| N-829-5-3 | 630,000 gallons | 3020-05 F | 1 | 330.00 | 330.00 | A | 630,000 GALLON WELDED INTERNAL FLOATING ROOF STORAGE TANK (#1502) WITH A WIPER PRIMARY SEAL AND A SLOTTED GUIDEPOLE |
| N-829-6-6 | 630,000 gallons | 3020-05 F | 1 | 330.00 | 330.00 | A | 630,000 GALLON WELDED INTERNAL FLOATING ROOF STORAGE TANK (#1501) WITH A HMT FOAM LOG PRIMARY SEAL AND A HMT VAPOR FLEX SECONDARY SEAL AND A SLOTTED GUIDEPOLE |
| N-829-7-5 | 420,000 gallons | 3020-05 E | 1 | 270.00 | 270.00 | A | 420,000 GALLON WELDED INTERNAL FLOATING ROOF TANK (#1002) WITH A PRIMARY RESILIENT TOROID SEAL, A SECONDARY WIPER SEAL, AND A SOLID GUIDEPOLE |
| N-829-8-0 | 40 HP | 3020-01 B | 1 | 129.00 | 129.00 | D | LOADING RACK: REGULAR #2 |
| N-829-9-0 | 40 HP | 3020-01 B | 1 | 129.00 | 129.00 | D | LOADING RACK: NO LEAD #2 |
| N-829-10-0 | 40 HP | 3020-01 B | 1 | 129.00 | 129.00 | D | LOADING RACK: NO LEAD #3 |
| N-829-11-0 | 40 HP | 3020-01 B | 1 | 129.00 | 129.00 | D | LOADING RACK: DIESEL #1 |
| N-829-12-0 | 40 HP | 3020-01 B | 1 | 129.00 | 129.00 | D | LOADING RACK: DIESEL #2 |
| N-829-13-2 | 420,000 GALLONS | 3020-05 E | 1 | 270.00 | 270.00 | D | 420,000 GALLON WELDED INTERNAL FLOATING ROOF STORAGE TANK (#1001) WITH A PRIMARY WIPER SEAL AND A SOLID GUIDEPOLE |
| N-829-14-2 | 420,000 GALLONS | 3020-05 E | 1 | 270.00 | 270.00 | D | 420,000 GALLON WELDED INTERNAL FLOATING ROOF STORAGE TANK (#1004) WITH A PRIMARY WIPER SEAL AND A SOLID GUIDEPOLE |
| N-829-15-3 | 420,000 GALLONS | 3020-05 E | 1 | 270.00 | 270.00 | D | 420,000 GALLON WELDED INTERNAL FLOATING ROOF STORAGE TANK (#1003) WITH A WIPER PRIMARY SEAL AND A SOLID GUIDEPOLE |
| N-829-16-6 | 1,386,000 gallons | 3020-05 G | 1 | 419.00 | 419.00 | A | 1,386,000 GALLON WELDED INTERNAL FLOATING ROOF STORAGE TANK (#3301) WITH A MECHANICAL SHOE PRIMARY SEAL AND A WIPER SECONDARY SEAL |

# Detailed Facility Report

For Facility=829

Sorted by Facility Name and Permit Number



| PERMIT NUMBER | FEE DESCRIPTION | FEE RULE | QTY | FEE AMOUNT | FEE TOTAL | PERMIT STATUS | EQUIPMENT DESCRIPTION |
|---|---|---|---|---|---|---|---|
| N-829-17-6 | 1,008,000 gallons | 3020-05 G | 1 | 419.00 | 419.00 | A | 1,008,000 GALLON WELDED INTERNAL FLOATING ROOF STORAGE TANK (#2401) WITH A MECHANICAL SHOE PRIMARY SEAL AND A WIPER SECONDARY SEAL |
| N-829-18-6 | 1,008,000 gallons | 3020-05 G | 1 | 419.00 | 419.00 | A | 1,008,000 GALLON WELDED INTERNAL FLOATING ROOF ORGANIC LIQUID STORAGE TANK (#2402) WITH A PRIMARY MECHANICAL SHOE SEAL, A SECONDARY WIPER SEAL, AND A SOLID GUIDEPOLE |
| N-829-19-0 | 300,000 GALLONS | 3020-05 E | 1 | 270.00 | 270.00 | D | VAPOR HOLDING TANK #701: 300,000 GALLONS |
| N-829-20-8 | 40 MMBtu/hr | 3020-02 H | 1 | 1,126.00 | 1,126.00 | A | VAPOR RECOVERY SYSTEM CONSISTING OF A 300,000 GALLON VAPOR HOLDING TANK, A VAPOR PROCESSING AND CONVEYING SYSTEM, AND A 40 MMBTU/HR PROPANE FIRED JOHN ZINK ZCT-2-8-35-X-2/8-X VAPOR COMBUSTOR |
| N-829-21-4 | 1,328,124 gallons | 3020-05 G | 1 | 419.00 | 419.00 | A | 1,328,124 GALLON WELDED INTERNAL FLOATING MECHANICAL SHOE PRIMARY SEAL, A WIPER SECONDARY SEAL AND A SLOTTED GUIDEPOLE |
| N-829-22-4 | 1,218,000 gallon | 3020-05 G | 1 | 419.00 | 419.00 | A | 1,218,000 GALLON WELDED INTERNAL FLOATING ROOF STORAGE TANK (#3303) WITH A WIPER PRIMARY SEAL AND A SLOTTED GUIDEPOLE |
| N-829-23-0 | 8000 GALLONS | 3020-05 B | 1 | 103.00 | 103.00 | D | ONE (1) 8000 GALLON ADDITIVE INJECTION TANK EQUIPPED WITH OPW PHASE I VAPOR RECOVERY SYSTEM. **** DELETED PER 2020 SECTION 6.6 ON 10/23/98 **** |
| N-829-25-0 | 8,000 GALLON STORAGE TANK | 3020-05 B | 1 | 103.00 | 103.00 | D | ONE (1) 8000 GALLON FIXED ROOF ABOVE GROUND GASOLINE ADDITIVE STORAGE TANK (A) AND INJECTION SYSTEM. **** DELETED PER RULE 2020 SECTION 6.6 ON 10/23/98 *** |
| N-829-26-0 | 8000 GALLONS | 3020-05 B | 1 | 103.00 | 103.00 | D | ONE (1) 8000 GALLON FIXED ROOF ABOVE GROUND GASOLINE ADDITIVE STORAGE TANK (B) AND INJECTION SYSTEM. **** DELETED PER RULE 2020 SECTION 6.6 ON 10/23/98 *** |
| N-829-28-5 | 3,360,000 gallons | 3020-05 G | 1 | 419.00 | 419.00 | A | 3,360,000 GALLON WELDED INTERNAL FLOATING ROOF STORAGE TANK (#80001) WITH A MECHANICAL SHOE PRIMARY SEAL, A WIPER SECONDARY SEAL AND A SLOTTED GUIDEPOLE |
| N-829-29-5 | 3,360,000 gallons | 3020-05 G | 1 | 419.00 | 419.00 | A | 3,360,000 GALLON WELDED EXTERNAL FLOATING ROOF STORAGE TANK (#80002) WITH A MECHANICAL SHOE PRIMARY SEAL, A WIPER SECONDARY SEAL AND A SLOTTED GUIDEPOLE |
| N-829-30-0 | 42,200 kBtu | 3020-02 H | 1 | 1,126.00 | 1,126.00 | D | VAPOR RECOVERY UNIT: JOHN ZINK THERMAL OXIDIZER UNIT. THE VAPOR RECOVERY UNIT SERVES ALL FUEL LOADING RACKS. THIS UNIT IS A TEMPORARY REPLACEMENT EMISSION UNIT FOR N-829-20.***DELETED PER CONDITION 6 ON PTO BY FT ON 7-1-03*** |
| N-829-31-4 | 1,386,000 gallons | 3020-05 G | 1 | 419.00 | 419.00 | A | 1,386,000 GALLON WELDED INTERNAL FLOATING ROOF TANK (39007) WITH A MINI SHOE PRIMARY SEAL, A VAPORFLEX SECONDARY SEAL, AND A SLOTTED GUIDEPOLE |

Number of Facilities Reported: 1

# ATTACHMENT E

## Public Comments and District Response

**Comment #1: The permit renewal is a project under CEQA, requiring the Air District to Conduct Environmental Review.**

Public agencies must conduct CEQA analysis for "discretionary projects proposed to be carried out or approved by public agencies." A "project" is "an activity which may cause a direct physical change in the environment, or a reasonably foreseeable indirect physical change in the environment" and, for private projects, involves the issuance of a permit or other entitlement by a public agency.

The Permit Renewal is a "project" under CEQA. The Permit Renewal involves the issuance of a discretionary entitlement – a permit – from the Air District. In addition, the Permit Renewal may cause physical changes in the environment, including potentially significant air quality, public health and hazards impacts. Yet, the Air District conducted zero CEQA review for the Permit Renewal.

NuStar requested that the equipment description for the Terminal's two truck loading racks be revised to eliminate the existing restrictions to gasoline and diesel. The Air District obliged, eliminating any restriction on the regulated products that may be unloaded at the racks. Substantial evidence shows that this change would allow a significant increase in volatile organic compound ("VOC") and hazardous air pollutant ("HAP") emissions.

**District Response:**

The proposed project consists of a Title V permit renewal and is considered a ministerial administrative action. In addition to renewing the Title V permit, the proposed project will also convert Authorities to Construct (ATCs) N-829-4-4, N-'32-0, '-33-0, '-34-0, and '-35-0 into Permits to Operate (PTOs) and incorporate these into the Title V permit. The applicant has since revised their proposal to exclude changes to the loading rack equipment descriptions. The revised proposed Title V permit renewal does not eliminate any product restrictions. Furthermore, the applicant is not requesting to process any additional products at this facility.

The purpose of the Title V permit renewal is to update the permit to ensure that any changes to regulations since the issuance of the initial Title V permit or most recent renewal of the Title V permit are incorporated as permit requirements. Per the California Environmental Quality Act (CEQA) Statute §21080.24, and CEQA Guidelines §15281, the issuance, modification, amendment, or renewal of any permit by an air pollution control district or air quality management district pursuant to Title V is exempt from CEQA, unless the issuance, modification, amendment, or renewal authorizes a physical or operational change to a source or facility. There will be no physical or operational change to the source or facility nor will the Title V permit renewal authorize a physical or operational change to the source or facility. Therefore, this project, being a Title V permit renewal, is exempt from CEQA.

**Comment #2: The Permit Renewal's Elimination of Product Restrictions Invalidates Permit Conditions**

As an initial matter, Dr. Fox explains that "[t]he vapors from loading are collected in a tank, which when full, is vented to the vapor combustion system. Thus, one must consider the impact of eliminating product descriptors at the loading racks on downstream equipment that controls the resulting emissions." Further, many conditions in the loading rack PTOs and for downstream equipment, such as the vapor combustor, only apply to gasoline and diesel. Thus, if any other product is loaded, such as a light fracked crude oil, these conditions would not apply. By eliminating product restrictions, controls on emissions from the loading racks and the combustor that controls emissions would also be eliminated.

Eliminating product restrictions also undermines many assumptions that the Air District relied on when issuing the PTOs. For example, the emissions from the vapor combustor that controls emissions from the loading rack result in a cancer risk that exceeds the threshold, requiring toxics best available control technology ("T-BACT"). The Air District's application review for the Permit Renewal states that "[t]o ensure that human health risks will not exceed District allowable levels; the following permit conditions must be included for: Unit #20-6-1. The waste gas sent to the flare for combustion shall be gasoline and ethanol vapors only." The PTO for the vapor combustor does not include this statement. Further, the Permit Renewal's elimination of product restrictions on the loading racks, which send their vapors to the vapor combustor for control, are in violation of this requirement, because it would allow vapors from any product to be sent to the combustor. Other products that may be loaded, such as Bakken crude oil, contain much higher concentrations of HAPs than gasoline vapors. Thus, according to Dr. Fox, "the cancer risk level likely will exceed the significance threshold of 10E-6, resulting in a significant cancer impact."

Similarly, Air District Rule 4801 limits sulfur compounds. The Air District's review of the PTO for the new vapor combustor assumed compliance with Rule 4801 because "[t]he items combusted will consist of gasoline and a small amount of supplemental natural gas. Neither of these products contains significant sulfur. Compliance with this rule is expected." However, other products that could be loaded, such as light fracked crude oils, contain significant amounts of sulfurcompounds. Thus, there is no evidence that the Permit Renewal would comply with Rule 4801.

restrictions. Furthermore, the facility is not requesting new authority to process any new or additional products.

Furthermore, the applicant has revised their proposal to exclude any changes to the equipment description of the loading rack in the Title V renewal project. Additionally, the applicant is not proposing to eliminate any product restrictions in the Title V renewal. Since there is no elimination of product restrictions, no permit conditions are invalidated by the revised proposed Title V renewal.

**Comment #4: Many Permit Conditions Are Not Enforceable**

**A. N-829-0-4 Facility-Wide Requirements**

1. Condition #22 limits opacity from all sources to 20 percent, but facility-wide requirements and specific conditions for individual sources fail to require any opacity testing. As a result, the 20 percent opacity limits is not practically enforceable.

**District Response:**

The District-US EPA Region IX-California Air Resources Board Periodic Monitoring Workgroup published the "Periodic Monitoring Recommendations for Generally Accepted Applicable Requirements in SIP" on June 16, 1999. This document provides guidance for the appropriate periodic monitoring requirements for demonstrating compliance with opacity requirements at TV facilities. A copy of this document is available at on the California Air Resources Board website at:
https://www.arb.ca.gov/fcaa/tv/tvinfo/guidmrr.htm

As stated in the document, periodic monitoring for compliance with a 20% opacity limit is not recommended for units firing on a gaseous fuel, except for flares. The vapor combustion unit is fired on gaseous fuel and is not a flare; therefore, periodic monitoring for opacity is not recommended for the vapor combustion unit. Additionally, visible emissions are not expected from organic liquid storage tanks.

Furthermore, permit condition #22 enforces the requirements of District Rule 4101, "Visible Emissions", for which compliance in the proposed TV renewal was based on model general permit templates that have been previously subject to EPA and public review. As stated in the body of the proposed Title V Renewal, terms and conditions from the model general permit templates are not subject to further EPA and public review.

**Comment #1: The permit renewal is a project under CEQA, requiring the Air District to Conduct Environmental Review.**

Public agencies must conduct CEQA analysis for "discretionary projects proposed to be carried out or approved by public agencies." A "project" is "an activity which may cause a direct physical change in the environment, or a reasonably foreseeable indirect physical change in the environment" and, for private projects, involves the issuance of a permit or other entitlement by a public agency.

The Permit Renewal is a "project" under CEQA. The Permit Renewal involves the issuance of a discretionary entitlement – a permit – from the Air District. In addition, the Permit Renewal may cause physical changes in the environment, including potentially significant air quality, public health and hazards impacts. Yet, the Air District conducted zero CEQA review for the Permit Renewal.

NuStar requested that the equipment description for the Terminal's two truck loading racks be revised to eliminate the existing restrictions to gasoline and diesel. The Air District obliged, eliminating any restriction on the regulated products that may be unloaded at the racks. Substantial evidence shows that this change would allow a significant increase in volatile organic compound ("VOC") and hazardous air pollutant ("HAP") emissions.

**District Response:**

The proposed project consists of a Title V permit renewal and is considered a ministerial administrative action. In addition to renewing the Title V permit, the proposed project will also convert Authorities to Construct (ATCs) N-829-4-4, N-'32-0, '-33-0, '-34-0, and '-35-0 into Permits to Operate (PTOs) and incorporate these into the Title V permit. The applicant has since revised their proposal to exclude changes to the loading rack equipment descriptions. The revised proposed Title V permit renewal does not eliminate any product restrictions. Furthermore, the applicant is not requesting to process any additional products at this facility.

The purpose of the Title V permit renewal is to update the permit to ensure that any changes to regulations since the issuance of the initial Title V permit or most recent renewal of the Title V permit are incorporated as permit requirements. Per the California Environmental Quality Act (CEQA) Statute §21080.24, and CEQA Guidelines §15281, the issuance, modification, amendment, or renewal of any permit by an air pollution control district or air quality management district pursuant to Title V is exempt from CEQA, unless the issuance, modification, amendment, or renewal authorizes a physical or operational change to a source or facility. There will be no physical or operational change to the source or facility nor will the Title V permit renewal authorize a physical or operational change to the source or facility. Therefore, this project, being a Title V permit renewal, is exempt from CEQA.

**Comment #2: The Permit Renewal's Elimination of Product Restrictions Invalidates Permit Conditions**

As an initial matter, Dr. Fox explains that "[t]he vapors from loading are collected in a tank, which when full, is vented to the vapor combustion system. Thus, one must consider the impact of eliminating product descriptors at the loading racks on downstream equipment that controls the resulting emissions." Further, many conditions in the loading rack PTOs and for downstream equipment, such as the vapor combustor, only apply to gasoline and diesel. Thus, if any other product is loaded, such as a light fracked crude oil, these conditions would not apply. By eliminating product restrictions, controls on emissions from the loading racks and the combustor that controls emissions would also be eliminated.

Eliminating product restrictions also undermines many assumptions that the Air District relied on when issuing the PTOs. For example, the emissions from the vapor combustor that controls emissions from the loading rack result in a cancer risk that exceeds the threshold, requiring toxics best available control technology ("T-BACT"). The Air District's application review for the Permit Renewal states that "[t]o ensure that human health risks will not exceed District allowable levels; the following permit conditions must be included for: Unit #20-6-1. The waste gas sent to the flare for combustion shall be gasoline and ethanol vapors only." The PTO for the vapor combustor does not include this statement. Further, the Permit Renewal's elimination of product restrictions on the loading racks, which send their vapors to the vapor combustor for control, are in violation of this requirement, because it would allow vapors from any product to be sent to the combustor. Other products that may be loaded, such as Bakken crude oil, contain much higher concentrations of HAPs than gasoline vapors. Thus, according to Dr. Fox, "the cancer risk level likely will exceed the significance threshold of 10E-6, resulting in a significant cancer impact."

Similarly, Air District Rule 4801 limits sulfur compounds. The Air District's review of the PTO for the new vapor combustor assumed compliance with Rule 4801 because "[t]he items combusted will consist of gasoline and a small amount of supplemental natural gas. Neither of these products contains significant sulfur. Compliance with this rule is expected." However, other products that could be loaded, such as light fracked crude oils, contain significant amounts of sulfurcompounds. Thus, there is no evidence that the Permit Renewal would comply with Rule 4801.

**District Response:**

The originally proposed change to the equipment description was merely for clarification purposes, and was not intended to allow a change in method of operation or operational restrictions. Furthermore, the facility is not requesting new authority to process any new or additional products.

Furthermore, the applicant has revised their proposal to exclude any changes to the equipment description of the loading rack in the Title V renewal project. Additionally, the applicant is not proposing to eliminate any product restrictions in the Title V renewal. Thus, there will be no physical or operational change to the source or facility nor will the Title V permit renewal authorize a physical or operational change to the source or facility and permit conditions will not be invalidated.

**Comment #3: Substantial Evidence Shows that the Permit Renewal's Elimination of Product Restrictions May Significantly Increase the Severity of Accidents and Emissions of VOCs and HAPs**

Dr. Fox explains that gasoline and diesel have well established vapor pressure and HAP concentrations. The emissions from the loading racks and their associated control equipment are based on this information. For example, VOC emissions have historically been calculated in all of the PTOs included in the Permit Renewal assuming gasoline with a maximum true vapor pressure ("TVP") of 7.45 psia at 63.8°F. Vapor pressure is a measure of the volatility of a liquid and, thus, a direct measure of the emissions of VOCs and HAPs.

Other products that could be loaded at these racks, absent a specific product restriction, include various light fracked shale crude oils, such as Bakken crude oil. Refineries in the Bay Area have proposed to import Bakken crude oil. For example, Valero, the former owner of the Terminal, proposed a rail spur to import Bakken crude to its Benicia refinery, which was recently denied by the City of Benicia. The Terminal could supply some of the light fracked shale crude oil demand, if product restrictions on the loading racks are eliminated. Dr. Fox explains that Bakken crude oil is typically imported to the west coast on unit trains. The Terminal is capable of receiving up to a full unit train. The Terminal includes ten storage tanks with a total capacity of 341,622 barrels with permitted TVP limits of less than 11 psia. Bakken crude oil could be stored in these tanks, loaded at the racks into tanker trucks and transported to Bay Area refineries.

According to Dr. Fox, importing light sweet crude oils at the Terminal would increase VOC and HAP emissions from the loading racks, storage tanks, vapor combustor and supporting pumps, compressors, valves and connectors. The Air District fails to consider these increased emissions for the Permit Renewal.

Dr. Fox explains that the amount of VOC and HAP emissions from crude oils is determined by their volatility and the concentration of HAPs within the crude oil. Bakken crudes have "uniquely elevated volatility, which has led to many spectacular accidents, such as those that occurred at Lac-Megantic and Mosier, Oregon. According to Dr. Fox,

> Vapor pressure is an indirect measure of the evaporation rate of volatile compounds in crude oil, with higher vapor pressures indicating greater losses from evaporation. Bakken crude oils have much higher vapor pressure and HAP concentrations than gasoline, the most volatile material currently permitted to be stored and loaded at the Terminal.

Further, Bakken and other light crude oils usually contain large amounts of natural gas liquids (known as "light ends" or "condensate"), including methane, propane, butane, ethane and pentane. These light ends increase a crude's vapor pressure, lowering its flash point and initial boiling point, "all of which result in increased environmental risks." "These are the components most likely to volatize, burn or explode in a rail or tank accident." Specifically, "[t]he high concentration of light ends makes these crudes highly flammable, more likely to form fire balls and boiling liquid expanding vapor explosions (BLEVES) in accidents, thus significantly increasing the risk and consequences of on-site accidents involving the storage and loading of these crudes."

Dr. Fox provides calculations showing that the Permit Renewal's proposed elimination of product restrictions at the loading racks would result in a net increase in VOC emissions of 55 tons/year, which far exceeds the Air District's CEQA significance threshold of 10 tons/year. This is a significant air quality impact requiring CEQA review before the Air District can approve the Permit Renewal. Moreover, Dr. Fox also explains that replacing gasoline and other products currently stored in the Terminal tanks with Bakken crude oil would significantly increase VOC emissions from these tanks. Thus, the total VOC emissions increase from the Permit Renewal would be greater than 55 tons/year.

Substantial evidence shows that the Project may result in significant airquality, public health and hazards impacts. Thus, the Air District must withdraw the Permit Renewal until it prepares an initial study and either a mitigated negative declaration or environmental impact report, as appropriate, pursuant to CEQA.

**District Response:**

The originally proposed change to the equipment description was merely for clarification purposes, and was not intended to allow a change in method of operation or operational restrictions. Furthermore, the facility is not requesting new authority to process any new or additional products.

Furthermore, the applicant has revised their proposal to exclude any changes to the equipment description of the loading rack in the Title V renewal project. Additionally, the applicant is not proposing to eliminate any product restrictions in the Title V renewal. Since there is no elimination of product restrictions, no permit conditions are invalidated by the revised proposed Title V renewal.

**Comment #4: Many Permit Conditions Are Not Enforceable**

**A. N-829-0-4 Facility-Wide Requirements**

1. Condition #22 limits opacity from all sources to 20 percent, but facility-wide requirements and specific conditions for individual sources fail to require any opacity testing. As a result, the 20 percent opacity limits is not practically enforceable.

**District Response:**

The District-US EPA Region IX-California Air Resources Board Periodic Monitoring Workgroup published the "Periodic Monitoring Recommendations for Generally Accepted Applicable Requirements in SIP" on June 16, 1999. This document provides guidance for the appropriate periodic monitoring requirements for demonstrating compliance with opacity requirements at TV facilities. A copy of this document is available at on the California Air Resources Board website at:
https://www.arb.ca.gov/fcaa/tv/tvinfo/guidmrr.htm

As stated in the document, periodic monitoring for compliance with a 20% opacity limit is not recommended for units firing on a gaseous fuel, except for flares. The vapor combustion unit is fired on gaseous fuel and is not a flare; therefore, periodic monitoring for opacity is not recommended for the vapor combustion unit. Additionally, visible emissions are not expected from organic liquid storage tanks.

Furthermore, permit condition #22 enforces the requirements of District Rule 4101, "Visible Emissions", for which compliance in the proposed TV renewal was based on model general permit templates that have been previously subject to EPA and public review. As stated in the body of the proposed Title V Renewal, terms and conditions from the model general permit templates are not subject to further EPA and public review.

Thus, no additional conditions are necessary to enforce the general opacity limit requirements.

**B. N-829-1-7 Four-lane Truck Loading Rack (North)**
**C. N-829-2-7 Four-lane Truck Loading Rack (South)**

1. Conditions #2, 3, 4, 5, 8, 13, 14, 28, 29, 30, and 31 apply only to gasoline and must be revised to match the proposed elimination of product restrictions. The permit renewal also must be revised to include limits, monitoring and recordkeeping for the products that may be loaded at the rack, such as propane, ethanol, condensate and light crude oil.

**District Response:**

The originally proposed change to the equipment description was merely for clarification purposes, and was not intended to allow a change in method of operation or operational restrictions. Furthermore, the facility is not requesting new authority to process any new or additional products.

Furthermore, the applicant has revised their proposal to exclude any changes to the equipment description of the loading rack in the Title V renewal project. Additionally, the applicant is not proposing to eliminate any product restrictions in the Title V renewal. Since there is no elimination of product restrictions, no permit conditions are invalidated by the revised proposed Title V renewal.

2. Conditions #5 and 8 limit VOC emissions to 0.08 lb/1000 gallons loaded from the vapor collection and control system. The VOC limit is practically unenforceable because there is no requirement for VOC monitoring at any time except during one 3-hour source test snapshot (required by Condition #22).

**District Response:**

The VOC monitoring requirements are included on the permit for the Vapor Combustor (Draft PTO N-829-20-9), which incinerates VOC emissions from loading racks #1 and #2 as permit conditions #20 and #21. These conditions require the operator to continuously monitor the operating temperature of the vapor combustion unit. The operating temperature for the vapor combustion unit serves as a surrogate parameter for VOC emissions. Additionally, this monitoring scheme is consistent with the method described in Appendix A.1a of EPA's Compliance Assurance Monitoring (CAM) Technical Guidance Document (8/98) for units served by a thermal incinerator for VOC control. Therefore, this VOC limit is practically enforceable.

3. Condition #13 allows the use of "sight, sound and smell" to detect leaks. Instrument leak detection was eliminated based on the fact that gasoline and diesel have distinct odors. However, other products that could be loaded may not have distinct odors, rendering this condition unenforceable.

**District Response:**

The originally proposed change to the equipment description was merely for clarification purposes, and was not intended to allow a change in method of operation or operational restrictions. Furthermore, the facility is not requesting new authority to process any new or additional products.

Furthermore, the applicant has revised their proposal to exclude any changes to the equipment description of the loading rack in the Title V renewal project. Additionally, the applicant is not proposing to eliminate any product restrictions in the Title V renewal. Since there is no elimination of product restrictions, no permit conditions are invalidated by the revised proposed Title V renewal.

**D. N-829-5-5 630,000 Gallon Welded Internal Floating Roof Storage Tank (#1502)**

1. Condition #1 limits throughput to 15,000 bbl per day, but fails to require any monitoring, recording or reporting of throughput. As a result, the throughput limit is unenforceable.

**District Response:**

Permit condition #45 of the Draft Renewed Title V Permit requires the permittee to keep a record of the daily quantity of organic liquid loaded into the tank, in barrels. Permit condition #50 of the Draft Renewed Title V Permit requires all records to be kept for a period of five years.

2. Condition #2 limits the TVP to less than 11 psia at actual storage temperature, but Condition #42 only requires TVP testing on change of service. As a result, Condition #2 is unenforceable at all other times.

**District Response:**

The True Vapor Pressure (TVP) may be calculated from the Reid Vapor Pressure (RVP) of the product stored, and the actual storage temperature of the tank contents. Depending on the liquid stored in the tank, NuStar Terminals determines the RVP upon receipt of the liquid and/or via monthly testing of the RVP of the tank contents. NuStar continuously monitors the temperature of the tank contents. NuStar then calculates the maximum true vapor pressure using the equations listed in Appendix B of District Rule 4623. The permit has been revised to clarify the method that NuStar uses to demonstrate continuous compliance with the TVP limit. Permit condition #46 of the revised proposed TV PTO enforces this requirement.

3. Condition #28 requires monthly leak inspection of all equipment in "gasoline service" and Condition #29 requires records of equipment in gasoline service. However, the Permit Renewal does not restrict the tank contents. Therefore, high vapor pressure products could be stored in this tank without required monthly leak inspections or recordkeeping.

**District Response:**

Permit conditions #28 and #29 solely enforce the requirements of 40 CFR 63.11089(a) and 40 CFR 63.11089(b), which read as follows:

> *40 CFR 63.11089(a): Each owner or operator of a bulk gasoline terminal, bulk plant, pipeline breakout station, or pipeline pumping station subject to the provisions of this subpart shall perform a monthly leak inspection of all equipment in gasoline service, as defined in §63.11100. For this inspection, detection methods incorporating sight, sound, and smell are acceptable.*
>
> *40 CFR 63.11089(b): A log book shall be used and shall be signed by the owner or operator at the completion of each inspection. A section of the log book shall contain a list, summary description, or diagram(s) showing the location of all equipment in gasoline service at the facility.*

40 CFR 63.11100 defines gasoline service as follows:

> *In gasoline service means that a piece of equipment is used in a system that transfers gasoline or gasoline vapors.*

The monthly leak test requirements of 40 CFR 63 Subpart BBBBBB only applies to equipment in gasoline service and permit conditions #28 and #29 adequately enforce those requirements.

4. Condition #44 requires recordkeeping of stored liquids, including the "maximum true vapor pressure" during each storage period. However, the proposed conditions only require TVP testing on change of service, which is insufficient to determine the maximum TVP.

**District Response:**

The True Vapor Pressure (TVP) may be calculated from the Reid Vapor Pressure (RVP) of the product stored, and the actual storage temperature of the tank contents. Depending on the liquid stored in the tank, NuStar Terminals determines the RVP upon receipt of the liquid and/or via monthly testing of the RVP of the tank contents. NuStar continuously monitors the temperature of the tank contents. NuStar then calculates the maximum true vapor pressure using the equations listed in Appendix B of District Rule 4623. The permit has been revised to clarify the method that NuStar uses to demonstrate continuous compliance with the TVP limit. Permit condition #46 of the revised proposed TV PTO enforces this requirement.

**E. N-829-6-8 630,000 Gallon Welded Internal Floating Roof Storage Tank (#1501)**

1. Condition #1 limits the TVP to less than 11 psia. Condition #40 requires the operator to keep a record of the "maximum true vapor pressure" of each liquid during its storage. However, Condition #38 only requires TVP testing on the change of service. Thus conditions #1 and #40 are not enforceable.

**District Response**

The True Vapor Pressure (TVP) may be calculated from the Reid Vapor Pressure (RVP) of the product stored, and the actual storage temperature of the tank contents. Depending on the liquid stored in the tank, NuStar Terminals determines the RVP upon receipt of the liquid and/or via monthly testing of the RVP of the tank contents. NuStar continuously monitors the temperature of the tank contents. NuStar then calculates the maximum true vapor pressure using the equations listed in Appendix B of District Rule 4623. The permit has been revised to clarify the method that NuStar uses to demonstrate continuous compliance with the TVP limit. Permit condition #41 of the revised proposed TV PTO enforces this requirement.

2. Condition #3 limits VOC emissions to 5.6 lb/day, but the permit does not require any tank VOC monitoring, specify any method to calculate VOC emissions, require periodic monitoring of parameters required to calculate tank VOC emissions (e.g., vapor pressure, temperature, vapor molecular weight) or require recordkeeping or reporting of tank VOC emissions. Thus condition #3 is unenforceable.

**District Response**

The proposed Title V PTO has been revised to add condition #46 to enforce the daily emission limit, which reads as follows:

Permit condition #46: *The permittee shall maintain records sufficient to demonstrate compliance with the daily VOC emission limit. These records shall contain the calculated emission quantity as well as each process variable used in the respective calculations/modeling. [District Rule 2080]*

3. Condition #26 requires monthly leak inspection of all equipment in "gasoline service" and Condition #27 requires records of equipment in gasoline service. However, the Permit Renewal does not limit the tank contents. Therefore, high vapor pressure products could be stored in this tank without required monthly leak inspections or recordkeeping.

**District Response:**

Permit conditions #26 and #27 solely enforce the requirements of 40 CFR 63.11089(a) and 40 CFR 63.11089(b), which read as follows:

> *40 CFR 63.11089(a): Each owner or operator of a bulk gasoline terminal, bulk plant, pipeline breakout station, or pipeline pumping station subject to the provisions of this subpart shall perform a monthly leak inspection of all equipment in gasoline service, as defined in §63.11100. For this inspection, detection methods incorporating sight, sound, and smell are acceptable.*
>
> *40 CFR 63.11089(b): A log book shall be used and shall be signed by the owner or operator at the completion of each inspection. A section of the log book shall contain a list, summary description, or diagram(s) showing the location of all equipment in gasoline service at the facility.*

40 CFR 63.11100 defines gasoline service as follows:

> *In gasoline service means that a piece of equipment is used in a system that transfers gasoline or gasoline vapors.*

The monthly leak test requirements of 40 CFR 63 Subpart BBBBBB only applies to equipment in gasoline service and permit conditions #26 and #27 adequately enforce those requirements.

**F. N-829-7-6 420,000 Gallon Welded Internal Floating Roof Storage Tank (#1002)**

1. Condition #3 limits VOC emissions to 11.4 lb/day, but the permit does not require any tank VOC monitoring, specify any method to calculate tank VOC emissions, require periodic monitoring of parameters required to calculate tank VOC emissions (e.g., vapor pressure, temperature, vapor molecular weight) or require recordkeeping and reporting of tank VOC emissions. Thus Condition #3 is unenforceable.

**District Response**

The proposed Title V PTO has been revised to add condition #46 to enforce the daily emission limit, which reads as follows:

Permit condition #46: *The permittee shall maintain records sufficient to demonstrate compliance with the daily VOC emission limit. These records shall contain the calculated emission quantity as well as each process variable used in the respective calculations/modeling. [District Rule 2080]*

2. Condition #4 limits the TVP to less than 11 psia. Condition #41 requires the operator to keep a record of the "maximum true vapor pressure" of each liquid during its storage. However, Condition #39 only requires TVP testing on change of source or type of liquid stored. Thus, Conditions #4 and #39 are not enforceable.

**District Response**

The True Vapor Pressure (TVP) may be calculated from the Reid Vapor Pressure (RVP) of the product stored, and the actual storage temperature of the tank contents. Depending on the liquid stored in the tank, NuStar Terminals determines the RVP upon receipt of the liquid and/or via monthly testing of the RVP of the tank contents. NuStar continuously monitors the temperature of the tank contents. NuStar then calculates the maximum true vapor pressure using the equations listed in Appendix B of District Rule 4623. The permit has been revised to clarify the method that NuStar uses to demonstrate continuous compliance with the TVP limit. Permit condition #42 of the revised proposed TV PTO enforces this requirement.

3. Condition #27 requires monthly leak inspection of all equipment in "gasoline service" and Condition #28 requires records of equipment in gasoline service. However, the Permit Renewal does not limit the tank contents. Therefore, high vapor pressure products could be stored in this tank without required monthly lead inspections or recordkeeping.

**District Response:**

Permit conditions #27 and #28 solely enforce the requirements of 40 CFR 63.11089(a) and 40 CFR 63.11089(b), which read as follows:

> *40 CFR 63.11089(a): Each owner or operator of a bulk gasoline terminal, bulk plant, pipeline breakout station, or pipeline pumping station subject to the provisions of this subpart shall perform a monthly leak inspection of all equipment in gasoline service, as defined in §63.11100. For this inspection, detection methods incorporating sight, sound, and smell are acceptable.*
>
> *40 CFR 63.11089(b): A log book shall be used and shall be signed by the owner or operator at the completion of each inspection. A section of the log book shall contain a list, summary description, or diagram(s) showing the location of all equipment in gasoline service at the facility.*

40 CFR 63.11100 defines gasoline service as follows:

> *In gasoline service means that a piece of equipment is used in a system that transfers gasoline or gasoline vapors.*

Clearly, the monthly leak test requirements of 40 CFR 63 Subpart BBBBBB only applies to equipment in gasoline service and permit conditions #27 and #28 adequately enforce those requirements.

## G. N-829-16-7 386,000 Gallon Welded Internal Floating Roof Storage Tank (#3301)

1. Condition #1 limits the TVP to less than 11 psia, but Condition #39 only requires TVP testing on change of source of liquid stored in the tank. This is inadequate to ensure the TVP is less than 11 psia at all times. Thus, Condition #1 is unenforceable.

**District Response**

The True Vapor Pressure (TVP) may be calculated from the Reid Vapor Pressure (RVP) of the product stored, and the actual storage temperature of the tank contents. Depending on the liquid stored in the tank, NuStar Terminals determines the RVP upon receipt of the liquid and/or via monthly testing of the RVP of the tank contents. NuStar continuously monitors the temperature of the tank contents. NuStar then calculates the maximum true vapor pressure using the equations listed in Appendix B of District Rule 4623. The permit has been revised to clarify the method that NuStar uses to demonstrate continuous compliance with the TVP limit. Permit condition #40 of the revised proposed TV PTO enforces this requirement.

2. Condition #2 limits VOC emissions to 14.9 lb/day, but the permit does not require any tank VOC monitoring, specify any method to calculate tank VOC emissions, require periodic monitoring of parameters required to calculate tank VOC emissions(e.g., vapor pressure, temperature, vapor molecular weight) or require recordkeeping and reporting of tank VOC emissions. Thus, Condition #2 is unenforceable.

**District Response**

The proposed Title V PTO has been revised to add condition #46 to enforce the daily emission limit, which reads as follows:

Permit condition #46: *The permittee shall maintain records sufficient to demonstrate compliance with the daily VOC emission limit. These records shall contain the calculated emission quantity as well as each process variable used in the respective calculations/modeling. [District Rule 2080]*

3. Condition #27 requires monthly leak inspection of all equipment in "gasoline service" and Condition #28 requires records of equipment in gasoline service. However, the Permit Renewal does not limit the tank contents. Therefore, high vapor pressure products could be stored in this tank without required monthly leak inspections or recordkeeping.

**District Response:**

Permit conditions #27 and #28 solely enforce the requirements of 40 CFR 63.11089(a) and 40 CFR 63.11089(b), which read as follows:

*40 CFR 63.11089(a): Each owner or operator of a bulk gasoline terminal, bulk plant, pipeline breakout station, or pipeline pumping station subject to the provisions of this subpart shall perform a monthly leak inspection of all equipment in gasoline service, as defined in §63.11100. For this inspection, detection methods incorporating sight, sound, and smell are acceptable.*

*40 CFR 63.11089(b): A log book shall be used and shall be signed by the owner or operator at the completion of each inspection. A section of the log book shall contain a list, summary description, or diagram(s) showing the location of all equipment in gasoline service at the facility.*

40 CFR 63.11100 defines gasoline service as follows:

*In gasoline service means that a piece of equipment is used in a system that transfers gasoline or gasoline vapors.*

Clearly, the monthly leak test requirements of 40 CFR 63 Subpart BBBBBB only applies to equipment in gasoline service and permit conditions #27 and #28 adequately enforce those requirements.

**H. N-829-17-7 1,008,000 Gallon Welded Internal Floating Roof Storage Tank (#2401)**

1. Condition #1 limits the TVP to less than 11 psia, but Condition #39 only requires TVP testing on change of source of liquid stored in the tank. This is inadequate to ensure the TVP is less than 11 psia at all times. Thus, Condition #1 is unenforceable.

**District Response**

The True Vapor Pressure (TVP) may be calculated from the Reid Vapor Pressure (RVP) of the product stored, and the actual storage temperature of the tank contents. Depending on the liquid stored in the tank, NuStar Terminals determines the RVP upon receipt of the liquid and/or via monthly testing of the RVP of the tank contents. NuStar continuously monitors the temperature of the tank contents. NuStar then calculates the maximum true vapor pressure using the equations listed in Appendix B of District Rule 4623. The permit has been revised to clarify the method that NuStar uses to demonstrate continuous compliance with the TVP limit. Permit condition #40 of the revised proposed TV PTO enforces this requirement.

2. Condition #2 limits VOC emissions to 13.4 lb/day, but the permit does not require any tank VOC monitoring, specify any method to calculate tank VOC emissions, require periodic monitoring of parameters required to calculate tank VOC emissions (e.g., vapor pressure, temperature, vapor molecular weight) or require recordkeeping and reporting of tank VOC emissions. Thus, Condition #2 is unenforceable.

**District Response**

The proposed Title V PTO has been revised to add permit condition #46 to enforce the daily emission limit, which reads as follows:

Permit condition #46: *The permittee shall maintain records sufficient to demonstrate compliance with the daily VOC emission limit. These records shall contain the calculated emission quantity as well as each process variable used in the respective calculations/modeling. [District Rule 2080]*

3. Condition #27 requires monthly leak inspection of all equipment in "gasoline service" and Condition #28 requires records of equipment in gasoline service. However, the Permit Renewal does not limit the tank contents. Therefore, high vapor pressure products could be stored in this tank without required monthly leak inspections or recordkeeping.

**District Response:**

Permit conditions #27 and #28 solely enforce the requirements of 40 CFR 63.11089(a) and 40 CFR 63.11089(b), which read as follows:

> *40 CFR 63.11089(a): Each owner or operator of a bulk gasoline terminal, bulk plant, pipeline breakout station, or pipeline pumping station subject to the provisions of this subpart shall perform a monthly leak inspection of all equipment in gasoline service, as defined in §63.11100. For this inspection, detection methods incorporating sight, sound, and smell are acceptable.*
>
> *40 CFR 63.11089(b): A log book shall be used and shall be signed by the owner or operator at the completion of each inspection. A section of the log book shall contain a list, summary description, or diagram(s) showing the location of all equipment in gasoline service at the facility.*

40 CFR 63.11100 defines gasoline service as follows:

> *In gasoline service means that a piece of equipment is used in a system that transfers gasoline or gasoline vapors.*

Clearly, the monthly leak test requirements of 40 CFR 63 Subpart BBBBBB only applies to equipment in gasoline service and permit conditions #27 and #28 adequately enforce those requirements.

## I. N-829-18-8 1,008,000 Gallon Welded Internal Floating Roof Storage Tank (#2402)

1. Condition #1 limits the TVP to less than 11 psia, but Condition #42 only requires TVP testing on change of source of liquid stored in the tank. This is inadequate to ensure the TVP is less than 11 psia at all times. Thus, Condition #1 is unenforceable.

**District Response:**

The True Vapor Pressure (TVP) may be calculated from the Reid Vapor Pressure (RVP) of the product stored, and the actual storage temperature of the tank contents. Depending on the liquid stored in the tank, NuStar Terminals determines the RVP upon receipt of the liquid and/or via monthly testing of the RVP of the tank contents. NuStar continuously monitors the temperature of the tank contents. NuStar then calculates the maximum true vapor pressure using the equations listed in Appendix B of District Rule 4623. The permit has been revised to clarify the method that NuStar uses to demonstrate continuous compliance with the TVP limit. Permit condition #45 of the revised proposed TV PTO enforces this requirement.

2. Condition #2 limits VOC emissions to 13.4 lb/day, but the permit does not require any tank VOC monitoring, specify any method to calculate tank VOC emissions, require periodic monitoring of parameters required to calculate tank VOC emissions(e.g., vapor pressure, temperature, vapor molecular weight) or require recordkeeping and reporting of tank VOC emissions. Thus, Condition #2 is unenforceable.

**District Response**

The proposed Title V PTO has been revised to add permit condition #50 to enforce the daily emission limit, which reads as follows:

Permit condition #50: *The permittee shall maintain records sufficient to demonstrate compliance with the daily VOC emission limit. These records shall contain the calculated emission quantity as well as each process variable used in the respective calculations/modeling. [District Rule 2080]*

3. Condition #30 requires monthly leak inspection of all equipment in "gasoline service" and Condition #31 requires records of equipment in gasoline service. However, the Permit Renewal does not limit the tank contents. Therefore, high vapor pressure products could be stored in this tank without required monthly leak inspections or recordkeeping.

**District Response:**

Permit conditions #30 and #31 solely enforce the requirements of 40 CFR 63.11089(a) and 40 CFR 63.11089(b), which read as follows:

> *40 CFR 63.11089(a): Each owner or operator of a bulk gasoline terminal, bulk plant, pipeline breakout station, or pipeline pumping station subject to the provisions of this subpart shall perform a monthly leak inspection of all equipment in gasoline service, as defined in §63.11100. For this inspection, detection methods incorporating sight, sound, and smell are acceptable.*
>
> *40 CFR 63.11089(b): A log book shall be used and shall be signed by the owner or operator at the completion of each inspection. A section of the log book shall contain a list, summary description, or diagram(s) showing the location of all equipment in gasoline service at the facility.*

40 CFR 63.11100 defines gasoline service as follows:

> *In gasoline service means that a piece of equipment is used in a system that transfers gasoline or gasoline vapors.*

The monthly leak test requirements of 40 CFR 63 Subpart BBBBBB only applies to equipment in gasoline service and permit conditions #27 and #31 adequately enforce those requirements.

## J. N-829-20-9 Vapor Combustion System (for both truck loading racks)

1. Conditions 1, 2, 4, 7, 15, 28, 29, and 30 limit emissions from the loading racks, but only apply to gasoline. If another product were unloaded at the racks (as would be allowed under the Permit Renewal), these conditions would be inapplicable.

**District Response**

The originally proposed change to the equipment description was merely for clarification purposes, and was not intended to allow a change in method of operation or operational restrictions. Furthermore, the facility is not requesting new authority to process any new or additional products.

Furthermore, the applicant has revised their proposal to exclude any changes to the equipment description of the loading rack in the Title V renewal project. Additionally, the applicant is not proposing to eliminate any product restrictions in the Title V renewal.

Therefore, additional limits, monitoring, and recordkeeping are not required to address any elimination of product restrictions. The cited conditions remain applicable.

2. Condition #1 requires a 99% VOC destruction efficiency to satisfy T-BACT. However, the permit renewal fails to require any testing to verify that this control efficiency is achieved. Thus, Condition #1 is unenforceable.

**District Response**

During previously required source tests for the vapor combustor, NuStar demonstrated compliance with both the lb/1000 gal emission rate and the 99% destruction efficiency requirement. Permit condition #21 of the proposed TV PTO has been revised to specify that VOC destruction efficiency testing is required every five years, which is the same frequency the current permit requires for demonstrating compliance with the mass emission limit.

3. Condition #4 sets a VOC emission rate of 0.08 lb/1000 gal of gasoline, but the Permit Renewal fails to set any limit on VOC emissions during loading of any other product. Thus, Condition #4 is unenforceable for any product other than gasoline.

**District Response**

The originally proposed change to the equipment description was merely for clarification purposes, and was not intended to allow a change in method of operation or operational restrictions. Furthermore, the facility is not requesting new authority to process any new or additional products.

Furthermore, the applicant has revised their proposal to exclude any changes to the equipment description of the loading rack in the Title V renewal project. Additionally, the applicant is not proposing to eliminate any product restrictions in the Title V renewal.

Therefore, permit condition #4 remains enforceable.

4. Condition #11 requires corrective action when the vapor combustor's operating temperature falls below "the minimum value necessary to maintain compliance with the permitted VOC destruction efficiency and VOC emission limit." However, the Permit Renewal fails to identify the "corrective action temperature" and fails to require testing to determine it. Thus, Condition #11 is unenforceable.

**District Response**

The original permitting action for the John Zinc Vapor Combustor required the minimum temperature value to be established during initial source testing. The temperature set point during initial source testing was 900 degrees Fahrenheit and compliance was demonstrated with the emission limit and destruction efficiency requirements at that temperature. Permit condition #11 of the Draft Title V PTO has been revised to include the 900 degree minimum operating temperature.

5. Condition #21 requires a source test every 60 months to verify compliance with the VOC limit per section 6.2.2 of Air District Rule 4624. However, section 6.2.1 requires an initial source test in addition to testing every 60 months. Since the combustor is a new unit, an initial source test is required. The Permit Renewal fails to require an initial source test. Moreover, a 3-hour source test conducted every five years is inadequate to ensure continuous compliance with the VOC limit.

**District Response:**

The vapor combustor is not a new unit, and neither is the loading rack. The current John Zinc thermal oxidizer was installed in 2009 and replaced a Hirt thermal oxidizer. Initial testing was performed on July 9, 2009. Therefore, the initial source test requirement has already been satisfied and it is no longer necessary to include an initial source test requirement on the permit. Continuous compliance, between tests, is demonstrated by continuous monitoring of the thermal oxidizer combustion chamber temperature, as required by the permit.

6. The Permit Renewal fails to include source testing to demonstrate compliance with the Air District's limits for NOx, CO, SOx and PM10.

**District Response:**

The existing and proposed TV permits do not include any emission limits for NOx, CO, SOx, and PM10 from the vapor combustor and there are no applicable local, state, or federal regulations that require source testing NOx, CO, SOx and PM10 from the vapor combustor.

**K. N-829-21-5 1,328,124 Gallon Welded Internal Floating Roof Storage Tank (#3302)**

1. Condition #1 limits the TVP to less than 11 psia. Condition #41 requires the operator to keep a record of the "maximum true vapor pressure" of each liquid during its storage. But condition #39 only requires TVP testing on change of source of liquid stored in the tank. Since monitoring to determine compliance is not required, Conditions #1 and #41 are unenforceable.

**District Response:**

The True Vapor Pressure (TVP) may be calculated from the Reid Vapor Pressure (RVP) of the product stored, and the actual storage temperature of the tank contents. Depending on the liquid stored in the tank, NuStar Terminals determines the RVP upon receipt of the liquid and/or via monthly testing of the RVP of the tank contents. NuStar continuously monitors the temperature of the tank contents. NuStar then calculates the maximum true vapor pressure using the equations listed in Appendix B of District Rule 4623. The permit has been revised to clarify the method that NuStar uses to demonstrate continuous compliance with the TVP limit. Permit condition #42 of the revised proposed TV PTO enforces this requirement.

2. Condition #27 requires monthly leak inspection of all equipment in "gasoline service" and Condition #28 requires records of equipment in gasoline service. However, the Permit Renewal does not restrict the tank contents. Therefore, high vapor pressure products could be stored in this tank without required monthly leak inspections or recordkeeping.

**District Response:**

Permit conditions #27 and #28 solely enforce the requirements of 40 CFR 63.11089(a) and 40 CFR 63.11089(b), which read as follows:

*40 CFR 63.11089(a): Each owner or operator of a bulk gasoline terminal, bulk plant, pipeline breakout station, or pipeline pumping station subject to the provisions of this subpart shall perform a monthly leak inspection of all equipment in gasoline service, as defined in §63.11100. For this inspection, detection methods incorporating sight, sound, and smell are acceptable.*

*40 CFR 63.11089(b): A log book shall be used and shall be signed by the owner or operator at the completion of each inspection. A section of the log book shall contain a list, summary description, or diagram(s) showing the location of all equipment in gasoline service at the facility.*

40 CFR 63.11100 defines gasoline service as follows:

*In gasoline service means that a piece of equipment is used in a system that transfers gasoline or gasoline vapors.*

Clearly, the monthly leak test requirements of 40 CFR 63 Subpart BBBBBB only applies to equipment in gasoline service and permit conditions #27 and #28 adequately enforce those requirements.

3. Condition #47 requires that "[a]t least 95% of all hydrocarbon vapors generated during the storage and the working of the storage tank shall be prevented from entrainment into the atmosphere." The Permit Renewal fails to require any monitoring, reporting, or calculations to demonstrate compliance with this condition, raising the possibility that New Source Review may have been, or could be, triggered, but not discovered.

**District Response:**

The 95% control requirement is a Best Available Control Technology (BACT) requirement, for which the District considers that a properly installed and maintained primary metal shoe seal and secondary wiper seal will achieve a minimum of 95% control of hydrocarbon vapors from a floating roof organic liquid storage tank. The proposed TV PTO includes requirements to ensure the proper installation and maintenance of the primary metal shoe seal and secondary wiper seal. Therefore, compliance with this requirement is expected and no further requirements are necessary to ensure compliance.

L. **N-829-22-5 1,218,000 Gallon Welded Internal Floating Roof Storage Tank (#3303)**

1. Condition #1 limits the TVP to less than 11 psia. Condition #36 requires the operator to keep a record of the "maximum true vapor pressure" of each liquid during its storage. But condition #33 only required TVP testing on change of source of liquid stored in the tank. Since monitoring to determine compliance is not required, Conditions #1 and #36 are unenforceable.

**District Response:**

The True Vapor Pressure (TVP) may be calculated from the Reid Vapor Pressure (RVP) of the product stored, and the actual storage temperature of the tank contents. Depending on the liquid stored in the tank, NuStar Terminals determines the RVP upon receipt of the liquid and/or via monthly testing of the RVP of the tank contents. NuStar continuously monitors the temperature of the tank contents. NuStar then calculates the maximum true vapor pressure using the equations listed in Appendix B of District Rule 4623. The permit has been revised to clarify the method that NuStar uses to demonstrate continuous compliance with the TVP limit. Permit condition #39 of the revised proposed TV PTO enforces this requirement.

2. Condition #20 requires monthly leak inspection of all equipment in "gasoline service" and Condition #21 requires records of equipment in gasoline service. However, the Permit Renewal does not restrict the tank contents. Therefore, high vapor pressure products could be stored in this tank without required monthly leak inspections or recordkeeping.

**District Response:**

Permit conditions #27 and #28 solely enforce the requirements of 40 CFR 63.11089(a) and 40 CFR 63.11089(b), which read as follows:

> *40 CFR 63.11089(a): Each owner or operator of a bulk gasoline terminal, bulk plant, pipeline breakout station, or pipeline pumping station subject to the provisions of this subpart shall perform a monthly leak inspection of all equipment in gasoline service, as defined in §63.11100. For this inspection, detection methods incorporating sight, sound, and smell are acceptable.*
>
> *40 CFR 63.11089(b): A log book shall be used and shall be signed by the owner or operator at the completion of each inspection. A section of the log book shall contain a list, summary description, or diagram(s) showing the location of all equipment in gasoline service at the facility.*

40 CFR 63.11100 defines gasoline service as follows:

> *In gasoline service means that a piece of equipment is used in a system that transfers gasoline or gasoline vapors.*

Clearly, the monthly leak test requirements of 40 CFR 63 Subpart BBBBBB only applies to equipment in gasoline service and permit conditions #27 and #28 adequately enforce those requirements.

3. Condition #47 requires that "[a]t least 95% of all hydrocarbon vapors generated during the storage and the working of the storage tank shall be prevented from entrainment into the atmosphere." The Permit Renewal fails to require any monitoring, reporting, or calculations to demonstrate compliance with this condition, raising the possibility that New Source Review may have been, or could be, triggered, but not discovered.

**District Response:**

The 95% control requirement is a Best Available Control Technology (BACT) requirement, for which the District considers that a properly installed and maintained primary metal shoe seal and secondary wiper seal will achieve a minimum of 95% control of hydrocarbon vapors from a floating roof organic liquid storage tank. The proposed TV PTO includes requirements to ensure the proper installation and maintenance of the primary metal shoe seal and secondary wiper seal. Therefore, compliance with this requirement is expected and no further requirements are necessary to ensure compliance.

## M. N-829-28-6 3,360,000 Gallon Internal Floating Roof Storage Tank (#80001)

1. Condition #1 limits the TVP to less than 11 psia. Condition #41 requires the operator to keep a record of the "maximum true vapor pressure" of each liquid during its storage. But condition #33 only required TVP testing on change of source of liquid stored in the tank. Since monitoring to determine compliance is not required, Conditions #1 and #41 are unenforceable.

**District Response:**

The True Vapor Pressure (TVP) may be calculated from the Reid Vapor Pressure (RVP) of the product stored, and the actual storage temperature of the tank contents. Depending on the liquid stored in the tank, NuStar Terminals determines the RVP upon receipt of the liquid and/or via monthly testing of the RVP of the tank contents. NuStar continuously monitors the temperature of the tank contents. NuStar then calculates the maximum true vapor pressure using the equations listed in Appendix B of District Rule 4623. The permit has been revised to clarify the method that NuStar uses to demonstrate continuous compliance with the TVP limit. Permit condition #42 of the revised proposed TV PTO enforces this requirement.

2. Condition #27 requires monthly leak inspection of all equipment in "gasoline service" and Condition #28 requires records of equipment in gasoline service. However, the Permit Renewal does not restrict the tank contents. Therefore, high vapor pressure products could be stored in this tank without required monthly leak inspections or recordkeeping.

**District Response:**

Permit conditions #27 and #28 solely enforce the requirements of 40 CFR 63.11089(a) and 40 CFR 63.11089(b), which read as follows:

> *40 CFR 63.11089(a): Each owner or operator of a bulk gasoline terminal, bulk plant, pipeline breakout station, or pipeline pumping station subject to the provisions of this subpart shall perform a monthly leak inspection of all equipment in gasoline service, as defined in §63.11100. For this inspection, detection methods incorporating sight, sound, and smell are acceptable.*
>
> *40 CFR 63.11089(b): A log book shall be used and shall be signed by the owner or operator at the completion of each inspection. A section of the log book shall contain a list, summary description, or diagram(s) showing the location of all equipment in gasoline service at the facility.*

40 CFR 63.11100 defines gasoline service as follows:

> *In gasoline service means that a piece of equipment is used in a system that transfers gasoline or gasoline vapors.*

Clearly, the monthly leak test requirements of 40 CFR 63 Subpart BBBBBB only applies to equipment in gasoline service and permit conditions #32 and #33 adequately enforce those requirements.

## N. N-829-29-7 3,360,000 Gallon External Floating Roof Storage Tank (#80002)

1. Condition #1 limits the TVP to less than 11 psia. Condition #41 requires the operator to keep a record of the "maximum true vapor pressure" of each liquid during its storage. But condition #33 only required TVP testing on change of source of liquid stored in the tank. Since monitoring to determine compliance is not required, Conditions #1 and #41 are unenforceable.

**District Response:**

The True Vapor Pressure (TVP) may be calculated from the Reid Vapor Pressure (RVP) of the product stored, and the actual storage temperature of the tank contents. Depending on the liquid stored in the tank, NuStar Terminals determines the RVP upon receipt of the liquid and/or via monthly testing of the RVP of the tank contents. NuStar continuously monitors the temperature of the tank contents. NuStar then calculates the maximum true vapor pressure using the equations listed in Appendix B of District Rule 4623. The permit has been revised to clarify the method that NuStar uses to demonstrate continuous compliance with the TVO limit. Permit condition #47 of the revised proposed TV PTO enforces this requirement.

2. Condition #32 requires monthly leak inspection of all equipment in "gasoline service" and Condition #33 requires records of equipment in gasoline service. However, the Permit Renewal does not restrict the tank contents. Therefore, high vapor pressure products could be stored in this tank without required monthly leak inspections or recordkeeping.

**District Response:**

Permit conditions #32 and #33 solely enforce the requirements of 40 CFR 63.11089(a) and 40 CFR 63.11089(b), which read as follows:

> *40 CFR 63.11089(a): Each owner or operator of a bulk gasoline terminal, bulk plant, pipeline breakout station, or pipeline pumping station subject to the provisions of this subpart shall perform a monthly leak inspection of all equipment in gasoline service, as defined in §63.11100. For this inspection, detection methods incorporating sight, sound, and smell are acceptable.*
>
> *40 CFR 63.11089(b): A log book shall be used and shall be signed by the owner or operator at the completion of each inspection. A section of the log book shall contain a list, summary description, or diagram(s) showing the location of all equipment in gasoline service at the facility.*

40 CFR 63.11100 defines gasoline service as follows:

> *In gasoline service means that a piece of equipment is used in a system that transfers gasoline or gasoline vapors.*

Clearly, the monthly leak test requirements of 40 CFR 63 Subpart BBBBBB only applies to equipment in gasoline service and permit conditions #32 and #33 adequately enforce those requirements.

**O. N-829-31-5 1,386,000 Gallon Internal Floating Roof Storage Tank (#33007)**

1. Condition #1 limits the tank to storing only denatured ethanol comprised of 97.5% or more by weight ethanol and 2.5% by weight gasoline. However, the Permit Renewal contains no conditions requiring confirmation of the makeup of the denatured ethanol. Thus, Condition #1 is unenforceable.

**District Response:**

The ethanol and gasoline content are provided to NuStar by the supplier of the denatured ethanol and NuStar does not denature ethanol at the facility. Permit condition #1 includes a requirement for the permittee to keep sufficient records to demonstrate compliance with this requirement.

2. Condition #2 limits the TVP to less than 2.8 psia. Condition #6 requires that TVP and temperature be recorded on a monthly basis and Condition #48 requires records of TVP test and temperature of liquid stored in the tank. However, the Permit Renewal fails to require that TVP and temperature be measured and provides no requirement for how the recorded values should be determined. Thus, Conditions #2, #6, and 48 are unenforceable.

**District Response:**

The True Vapor Pressure (TVP) may be calculated from the Reid Vapor Pressure (RVP) of the product stored, and the actual storage temperature of the tank contents. Depending on the liquid stored in the tank, NuStar Terminals determines the RVP upon receipt of the liquid and/or via monthly testing of the RVP of the tank contents. NuStar continuously monitors the temperature of the tank contents. NuStar then calculates the maximum true vapor pressure using the equations listed in Appendix B of District Rule 4623. The permit has been revised to clarify the method that NuStar uses to demonstrate continuous compliance with the TVP limit. Permit conditions #49 of the revised proposed TV PTO N-829-31-5 enforce this requirement.

3. Condition #3 limits VOC emissions to 7.1 lb/day. However, the Permit Renewal fails to: require any tank VOC monitoring, specify any method to calculate VOC emissions, require periodic monitoring of parameters required to calculate VOC emissions(e.g., vapor pressure, temperature, vapor molecular weight), or require recordkeeping or reporting of VOC emissions. Thus, Condition #3 is unenforceable.

**District Response**

The proposed Title V PTO has been revised to add condition #50 to enforce the daily emission limit.

Permit condition #50: *The permittee shall maintain records sufficient to demonstrate compliance with the daily VOC emission limit. These records shall contain the calculated emission quantity as well as each process variable used in the respective calculations/modeling. [District Rule 2080]*

4. Condition #32 requires monthly leak inspection of all equipment in "gasoline service" and Condition #32 requires records of equipment in gasoline service. However, the Permit Renewal limits storage in this tank to ethanol. Thus, leak inspections are actually not required for this tank.

**District Response:**

Permit conditions #32 and #33 solely enforce the requirements of 40 CFR 63.11089(a) and 40 CFR 63.11089(b), which read as follows:

> *40 CFR 63.11089(a): Each owner or operator of a bulk gasoline terminal, bulk plant, pipeline breakout station, or pipeline pumping station subject to the provisions of this subpart shall perform a monthly leak inspection of all equipment in gasoline service, as defined in §63.11100. For this inspection, detection methods incorporating sight, sound, and smell are acceptable.*
>
> *40 CFR 63.11089(b): A log book shall be used and shall be signed by the owner or operator at the completion of each inspection. A section of the log book shall contain a list, summary description, or diagram(s) showing the location of all equipment in gasoline service at the facility.*

40 CFR 63.11100 defines gasoline service as follows:

> *In gasoline service means that a piece of equipment is used in a system that transfers gasoline or gasoline vapors.*

Clearly, the monthly leak test requirements of 40 CFR 63 Subpart BBBBBB only applies to equipment in gasoline service and permit conditions #32 and #33 adequately enforce those requirements.

**P. N-829-32-1 1,953,000 Gallon Internal Floating Roof Storage Tank (#4901)**

1. Condition #1 limits the TVP to less than or equal to10 psia. However, the Permit Renewal fails to require any TVP or other vapor pressure monitoring or reporting to show compliance with this limit. Thus, Condition #1 is unenforceable.

**District Response:**

The True Vapor Pressure (TVP) may be calculated from the Reid Vapor Pressure (RVP) of the product stored, and the actual storage temperature of the tank contents. Depending on the liquid stored in the tank, NuStar Terminals determines the RVP upon receipt of the liquid and/or via monthly testing of the RVP of the tank contents. NuStar continuously monitors the temperature of the tank contents. NuStar then calculates the maximum true vapor pressure using the equations listed in Appendix B of District Rule 4623. The permit has been revised to clarify the method that NuStar uses to demonstrate continuous compliance with the TVP limit. Permit conditions #32 of the revised proposed TV PTO enforce this requirement.

2. Condition #5 limits VOC emissions to 9.0 lb/day based on a monthly average; however, the Permit Renewal fails to: require any tank VOC monitoring, specify any method to calculate VOC emissions, explain how a monthly average would be calculated, or require any monitoring of parameters required to calculate VOC emissions (e.g. temperature, vapor molecular weight, vapor pressure). Thus, Condition #4 is unenforceable.

**District Response**

The proposed Title V PTO has been revised to add permit condition #33, to enforce the daily emission limit.

Permit condition #33: *The permittee shall maintain records sufficient to demonstrate compliance with the daily VOC emission limit. These records shall contain the calculated emission quantity as well as each process variable used in the respective calculations/modeling. [District Rule 2080]*

**Q. N-829-33-1 3,365,000 Gallon Welded Internal Floating Roof Storage Tank (#8801)**

1. Condition #3 limits the TVP to less than or equal to10 psia. However, the Permit Renewal fails to require any TVP or other vapor pressure monitoring or reporting to show compliance with this limit. Thus, Condition #1 is unenforceable.

**District Response:**

The True Vapor Pressure (TVP) may be calculated from the Reid Vapor Pressure (RVP) of the product stored, and the actual storage temperature of the tank contents. Depending on the liquid stored in the tank, NuStar Terminals determines the RVP upon receipt of the liquid and/or via monthly testing of the RVP of the tank contents. NuStar continuously monitors the temperature of the tank contents. NuStar then calculates the maximum true vapor pressure using the equations listed in Appendix B of District Rule 4623. The permit has been revised to clarify the method that NuStar uses to demonstrate continuous compliance with the TVP limit. Permit condition #34 of the revised proposed TV PTO enforces this requirement.

2. Condition #7 limits VOC emissions to 13.3 lb/day based on a monthly average; however, the Permit Renewal fails to: require any tank VOC monitoring, specify any method to calculate VOC emissions, explain how a monthly average would be calculated, or require any monitoring of parameters required to calculate VOC emissions (e.g. temperature, vapor molecular weight, vapor pressure). Thus, Condition #6 is unenforceable.

**District Response**

The proposed Title V PTO has been revised to add condition #35 to enforce the daily emission limit, which reads as follows:

Permit condition #35: *The permittee shall maintain records sufficient to demonstrate compliance with the daily VOC emission limit. These records shall contain the calculated emission quantity as well as each process variable used in the respective calculations/modeling. [District Rule 2080]*

**R. N-829-34-1 1,953,000 Gallon Welded Internal Floating Roof Storage Tank (#4902)**

1. There is only one condition, which limits the tank to storing diesel with a TVP of less than or equal to 0.5 psia. This condition is unenforceable because the Permit Renewal fails to require any TVP monitoring, recording, or reporting.

**District Response:**

District Rule 2020 (Exemptions) Section 6.6.5 states that the storage of organic material with an initial boiling point of 302 °F or greater as measured by test method ASTM D-86 is exempt from the requirements to obtain a Permit. As stated in Appendix A of District Rule 4623, diesel fuel has an initial boiling point of 330 °F; therefore, organic liquid storage tanks that only store diesel are categorically exempt from permit requirements pursuant to District Rule 2020 Section 6.6.5. Therefore, this tank is exempt from permitting and the Permit to Operate has been cancelled. In order to maintain the exemption, the applicant is required to keep records on-site confirming that only diesel fuel is stored in this tank.

**S. N-829-35-1 1,260,000 Gallon Welded Internal Floating Roof Storage Tank (#30006)**

1. Condition 3 limits VOC emissions to 6.1 lb/day. However, the Permit Renewal fails to: require any tank VOC monitoring, specify any method to calculate VOC emissions, or require any monitoring of parameters required to calculate VOC emissions (e.g., temperature, vapor molecular weight, vapor pressure). Thus, Condition #3 is unenforceable.

**District Response**

The proposed Title V PTO has been revised to add permit condition #38 to enforce the daily emission limit, which reads as follows:

Permit condition #38: *The permittee shall maintain records sufficient to demonstrate compliance with the daily VOC emission limit. These records shall contain the calculated emission quantity as well as each process variable used in the respective calculations/modeling. [District Rule 2080]*

## T. General Enforceability Issues

1. Tank VOC Emissions: Several tanks included in the Permit Renewal have unenforceable daily VOC emission limits, or fail to include any VOC emission limits at all. The Permit Renewal must be revised to specify a method to calculate or measure all VOC emissions from tanks. Dr. Fox provides acceptable methods to calculate tank VOC emissions. Dr. Fox explains that the calculations must include roof landing losses, tank cleaning losses, and non-routine losses (in addition to rim seal losses, withdrawal losses, deck fitting losses and deck seam losses).

**District Response**

The proposed TV PTO's have been revised to include a requirement to keep records sufficient to show compliance with the daily emission limit.

Please be aware that District Rule 2020 Section 7.3 exempts repairs or maintenance not involving structural changes to any emissions unit for which a permit has been granted (California Health and Safety Code, Section 42310(a)(5)(A). The type of organic liquid stored in each tank at this facility does not change often; therefore, the roofs will not be landed regularly in order to clean the tank to allow a new type of material to be stored. Rather, the tank roofs will be landed very infrequently for maintenance of the tank and during unforeseen operational emergencies. Therefore, the District considers roof landing and tank cleaning losses are considered to be repair and maintenance activities, which qualify for the District Rule 2020 Section 7.3 exemption. As a result, emissions from these exempt activities are excluded in District New Source Review determinations.

Also, please be aware that the District uses EPA Tanks 4.0d software to quantify emissions from organic liquid storage tanks located within the District. This software is widely accepted by a large number of air districts in the state of California. No questions have been raised with the use of this software to quantify emissions by industry, the California Air Resources Board, or the US EPA. Therefore, the District continues to allow the use of this software to determine emissions from organic liquid storage tanks.

**Comment #5: The Air District must require BACT for storage tanks and the Vapor Combustor**

Section 4.12 of Air District Rule 2201 requires BACT for modified emission units if the Adjusted Increase in Permitted Emissions (AIPE) exceeds 2 lb/day for any pollutant. The Permit Renewal's removal of product restrictions for the loading racks will result in an increase in the potential to emit at some of the tanks that feed the loading racks and at the vapor combustor that controls VOC emissions from the loading racks.

1. Ten of the tanks included in the Permit Renewal have no product restrictions and vapor pressure limits less than 11 psia. Of these ten tanks, five have no limit on VOC emissions. According to Dr. Fox, these tanks could store Bakken crude oils, which would result in a VOC AIPE greater than 2 lb/day. Thus, the Air District must require BACT for tanks with a potential to emit that exceeds 2 lb/day from the removal of product restrictions at the loading racks. Dr. Fox explains that BACT for these storage tanks is a welded cable-suspended internal floating roof tank with a geodesic dome.

**District Response**

The Title V renewal is an administrative procedure that does not allow any expansion of the facility operations or any emission increases. The originally proposed change to the equipment description was merely for clarification purposes, and was not intended to allow a change in method of operation or relaxation of operational restrictions. Finally, the facility is not requesting to process any additional products.

The applicant has revised their proposal to exclude any changes to clarify the equipment description of the loading rack in the Title V renewal project. Additionally, the applicant is not proposing to eliminate any product restrictions in the Title V renewal. Therefore, Best Available Control Technology is not applicable and additional emission limits, monitoring requirements, and recordkeeping are not required.

2. According to Dr. Fox, the proposed elimination of product restrictions at the loading racks would increase VOC emissions from the combustor more than 2 lb/day. Thus, the Air District must require BACT for the vapor combustor. Dr. Fox provides that BACT for the combustor is 0.06 lb-VOC per 1000 gallons loaded.

**District Response:**

As discussed earlier, the originally proposed change to the equipment description was merely for clarification purposes, and was not intended to allow a change in method of operation or operational restrictions. Furthermore, the facility is not requesting new authority to process any new or additional products.

Furthermore, the applicant has revised their proposal to exclude any changes to the equipment description of the loading rack in the Title V renewal project. Additionally, the applicant is not proposing to eliminate any product restrictions in the Title V renewal. Since there is no elimination of product restrictions, no permit conditions are invalidated by the revised proposed Title V renewal.

**Comment #6: The Air District must require offsets**

Dr. Fox explains that the proposed elimination of product restrictions for the loading racks results in exceeding the offset threshold in section 4.7.1 of District Rule 2201. The quantity of offsets is the difference between the post-project stationary source potential to emit and the baseline emissions of all new and modified units. The Air District must determine the additional offsets required for eliminating product restrictions at the loading racks, and require offsets before issuing the Permit Renewal.

**District Response:**

The originally proposed change to the equipment description was merely for clarification purposes, and was not intended to allow a change in method of operation or operational restrictions.

Nevertheless, the applicant has revised their proposal to exclude any changes to the equipment description of the loading rack in the TV renewal project. Additionally, the applicant is not proposing to eliminate any product restrictions in the TV renewal.

**Comment #7: The Permit Renewal fails to include all emission units**

The terminal is served by truck, rail, and pipeline. Yet, the Permit Renewal and NuStar's application for the Permit Renewal completely fail to include emissions from pipeline and rail access. The Permit Renewal and application also fail to include the Terminals total tank capacity (one million barrels). As a result, the Permit Renewal fails to analyze all of the emissions sources, as required by the Clean Air Act, the Air District's rules, and CEQA.

**District Response**

NuStar Terminals has submitted an application to permit the existing truck/rail receiving operation, which will be processed under a separate permitting action. With regards to the delivery of organic materials from pipeline access, no emissions are expected since the organic liquid delivery pipeline is fully enclosed and sealed. Finally, NuStar Terminal's total tank capacity of one million barrels includes the capacity from tanks that have been determined to be exempt from District permits, such as diesel tanks which are exempt pursuant to District Rule 2020 Section 6.6.4. The District's compliance department has confirmed that all non-exempt tanks are operating under District permits.

As stated in the District Response to Comment #1, per the California Environmental Quality Act (CEQA) Statute §21080.24, and CEQA Guidelines §15281, the issuance, modification, amendment, or renewal of any permit by an air pollution control district or air quality management district pursuant to Title V is exempt from CEQA, unless the issuance, modification, amendment, or renewal authorizes a physical or operational change to a source or facility. There will be no physical or operational change to the source or facility nor will the Title V permit renewal authorize a physical or operational change to the source or facility. Therefore, this Title V permit renewal is a ministerial action that is exempt from CEQA.

San Joaquin Valley
AIR POLLUTION CONTROL DISTRICT

HEALTHY AIR LIVING

# Permit to Operate

**FACILITY:** N-829

**EXPIRATION DATE:** 11/30/2020

**LEGAL OWNER OR OPERATOR:** NUSTAR TERMINALS OPS PARTNERSHIP LP
**MAILING ADDRESS:** 9280 WEST STOCKTON BLVD SUITE 220
ELK GROVE, CA 95758-8077

**FACILITY LOCATION:** 2941 NAVY DRIVE
STOCKTON, CA 95206

**FACILITY DESCRIPTION:** BULK FUEL STORAGE TERMINAL

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

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

Seyed Sadredin
Executive Director / APCO

Arnaud Marjollet
Director of Permit Services

Apr 11 2017 2:10PM -- HARADERJ

**FACILITY:** N-829-0-4 **EXPIRATION DATE:** 11/30/2020

# FACILITY-WIDE REQUIREMENTS

1. The owner or operator shall notify the District of any breakdown condition as soon as reasonably possible, but no later than one hour after its detection, unless the owner or operator demonstrates to the District's satisfaction that the longer reporting period was necessary. [District Rule 1100, 6.1; County Rules 110 (Fresno, Stanislaus, San Joaquin); 109 (Merced); 113 (Madera); and 111 (Kern, Tulare, Kings)] Federally Enforceable Through Title V Permit
2. The District shall be notified in writing within ten days following the correction of any breakdown condition. The breakdown notification shall include a description of the equipment malfunction or failure, the date and cause of the initial failure, the estimated emissions in excess of those allowed, and the methods utilized to restore normal operations. [District Rule 1100, 7.0; County Rules 110 (Fresno, Stanislaus, San Joaquin); 109 (Merced); 113 (Madera); and 111 (Kern, Tulare, Kings)] Federally Enforceable Through Title V Permit
3. The owner or operator of any stationary source operation that emits more than 25 tons per year of nitrogen oxides or reactive organic compounds, shall provide the District annually with a written statement in such form and at such time as the District prescribes, showing actual emissions of nitrogen oxides and reactive organic compounds from that source. [District Rule 1160, 5.0] Federally Enforceable Through Title V Permit
4. Any person building, altering or replacing any operation, article, machine, equipment, or other contrivance, the use of which may cause the issuance of air contaminants or the use of which may eliminate, reduce, or control the issuance of air contaminants, shall first obtain an Authority to Construct (ATC) from the District unless exempted by District Rule 2020 (12/20/07). [District Rule 2010, 3.0 and 4.0; and 2020] Federally Enforceable Through Title V Permit
5. The permittee must comply with all conditions of the permit including permit revisions originated by the District. All terms and conditions of a permit that are required pursuant to the Clean Air Act (CAA), including provisions to limit potential to emit, are enforceable by the EPA and Citizens under the CAA. Any permit noncompliance constitutes a violation of the CAA and the District Rules and Regulations, and is grounds for enforcement action, for permit termination, revocation, reopening and reissuance, or modification; or for denial of a permit renewal application. [District Rules 2070, 7.0; 2080; and 2520, 9.8.1 and 9.13.1] Federally Enforceable Through Title V Permit
6. A Permit to Operate or an Authority to Construct shall not be transferred unless a new application is filed with and approved by the District. [District Rule 2031] Federally Enforceable Through Title V Permit
7. Every application for a permit required under Rule 2010 (12/17/92) shall be filed in a manner and form prescribed by the District. [District Rule 2040] Federally Enforceable Through Title V Permit
8. The operator shall maintain records of required monitoring that include: 1) the date, place, and time of sampling or measurement; 2) the date(s) analyses were performed; 3) the company or entity that performed the analysis; 4) the analytical techniques or methods used; 5) the results of such analysis; and 6) the operating conditions at the time of sampling or measurement. [District Rule 2520, 9.4.1] Federally Enforceable Through Title V Permit
9. The operator shall retain records of all required monitoring data and support information for a period of at least 5 years from the date of the monitoring sample, measurement, or report. Support information includes copies of all reports required by the permit and, for continuous monitoring instrumentation, all calibration and maintenance records and all original strip-chart recordings. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

FACILITY-WIDE REQUIREMENTS CONTINUE ON NEXT PAGE

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

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

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

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

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

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

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

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

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

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

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

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

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

FACILITY-WIDE REQUIREMENTS CONTINUE ON NEXT PAGE

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

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

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

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

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

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

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

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

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

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

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

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

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

FACILITY-WIDE REQUIREMENTS CONTINUE ON NEXT PAGE

36. 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

37. 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

38. 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

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

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

41. The reporting periods for the Report of Required Monitoring and the Compliance Certification Report begin January 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

42. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]

# San Joaquin Valley
# Air Pollution Control District

**PERMIT UNIT:** N-829-1-7 **EXPIRATION DATE:** 11/30/2020

**EQUIPMENT DESCRIPTION:**
FOUR LANE TRUCK LOADING RACK (NORTH) CONSISTING OF 7 GASOLINE LOADING ARMS AND 3 DIESEL LOADING ARMS

## PERMIT UNIT REQUIREMENTS

1. All vapors displaced during truck loading shall be vented to the vapor combustion system under Permit to Operate N-829-20. [District NSR Rule] Federally Enforceable Through Title V Permit
2. The combined quantity of gasoline loaded through permit units N-829-1 and N-829-2 shall not exceed 2,071,233 gallons during any one day. [District NSR Rule] Federally Enforceable Through Title V Permit
3. Gasoline shall be loaded only into vapor tight tank trucks. [40 CFR Part 60.502(e)] Federally Enforceable Through Title V Permit
4. The facility shall obtain the vapor tightness documentation specified in 40 CFR Part 60.505(b) for each gasoline tank truck that is to be loaded at the facility. [40 CFR Part 60.502(e)(1)] Federally Enforceable Through Title V Permit
5. The loading rack shall be equipped with bottom loading equipment and a vapor collection and control system such that VOC emissions shall not exceed 0.08 pounds per 1000 gallons of gasoline loaded. [District Rule 4624, 5.1 and 40 CFR 63.11088(a)] Federally Enforceable Through Title V Permit
6. The vapor collection system shall be operated in a manner to prevent any organic vapors collected at one loading rack from passing to another loading rack. [40 CFR 63.11088(a)] Federally Enforceable Through Title V Permit
7. The vapor collection and control system shall operate such that the pressure in the delivery tank being loaded does not exceed 18 inches water column pressure and 6 inches water column vacuum. [District Rule 4624, 5.4] Federally Enforceable Through Title V Permit
8. All delivery tanks which previously contained organic liquids, including gasoline, with a TVP greater than 1.5 psia at loading conditions shall be filled only at Class 1 loading facilities using bottom loading equipment with a vapor collection and control system operating such that VOC emissions do not exceed 0.08 lb/1000 gallons loaded and which operate so the delivery tank does not exceed 18 inches water column pressure nor 6 inches water column vacuum. [District Rules 4624, 5.5] Federally Enforceable Through Title V Permit
9. Loading and vapor collection and control equipment shall be designed, installed, maintained and operated such that there are no leaks or excess organic liquid drainage at disconnections. A leak shall be defined as the dripping of organic compounds at a rate of more than three drops per minute or the detection of organic compounds, in excess of 10,000 ppm as methane measured at a distance of one centimeter from the potential source in accordance with EPA Method 21. Excess liquid drainage shall be defined as exceeding 10 milliliters per average of 3 consecutive disconnects. [District Rule 4624, 3.13, 3.17 and 5.6] Federally Enforceable Through Title V Permit
10. Construction, reconstruction (as defined in District Rule 4001, amended April 14, 1999), or expansion of any top loading facility shall not be allowed. [District Rule 4624, 5.7] Federally Enforceable Through Title V Permit
11. The vapor collection system, the vapor destruction device and each transfer rack shall be tested for leaks at least once every calendar quarter with a portable hydrocarbon analyzer in accordance with EPA Method 21. [District Rule 4624, 5.9.1] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

12. The equipment that are found leaking shall be repair or replaced within 72 hours after detecting the leakage. If the leaking component cannot be repaired or replaced within 72 hours, the component shall be taken out of service until such time the component is repaired or replaced. The repaired or replacement equipment shall be reinspected the first time the equipment is in operation after the repair or replacement. [District Rule 4624, 5.9.3] Federally Enforceable Through Title V Permit

13. Each calendar month, the vapor collection system, the vapor processing system and each loading rack handling gasoline shall be inspected during the loading of gasoline tank trucks for organic liquid and organic vapor leaks. For the purpose of this condition, detection methods incorporating sight, sound and smell are acceptable. Each detection of a leak shall be recorded and the source of the leak repaired within 15 days after it is detected. [District Rule 2520, 9.3.240 CFR Part 60.502(j) and 40 CFR Part 63.11089(a)] Federally Enforceable Through Title V Permit

14. A log book shall be used and shall be signed by the owner or operator at the completion of each inspection. A section of the log book shall contain a list, summary description, or diagram(s) showing the location of all equipment in gasoline service at the facility. [40 CFR Part 63.11089(b)] Federally Enforceable Through Title V Permit

15. Each detection of a liquid or vapor leak shall be recorded in the log book. When a leak is detected, an initial attempt at repair shall be made as soon as practicable, but no later than 5 calendar days after the leak is detected. Repair or replacement of leaking equipment shall be completed within 15 calendar days after detection of each leak. Delay of repair of leaking equipment will be allowed if the repair is not feasible within 15 days. The owner or operator shall provide in the semiannual report the reason(s) why the repair was not feasible and the date each repair was completed. [40 CFR Part 63.11089(d)] Federally Enforceable Through Title V Permit

16. Each calendar month, liquid drainage at disconnect of each loading arm shall be determined, and appropriate action shall be taken in case excess liquid drainage occurs from any loading arm. If no excess drainage conditions are found during five consecutive monthly inspections, the drainage inspection frequency may be changed from monthly to quarterly. However, if one or more excess drainage condition is found during a quarterly inspection, the inspection frequency shall return to monthly. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

17. Liquid drainage inspections shall be completed between 12:00 AM and 10:00 AM the day of inspection. Compliance shall be demonstrated by collecting all drainage at disconnect in a spouted container. The drainage shall be transferred to a graduated cylinder and the volume determined within one minute of collection. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

18. The owner or operator shall maintain a log book that contain the following information: 1.) dates of leak and drainage inspections, 2.) the nature of the leak (i.e. vapor or liquid including excess drainage) and the method of detection; 3.) findings, 4.) corrective action (date each leak or excess drainage condition repaired), 5.) repair methods applied in each attempt to repair the leak; 6.) repair delayed and the reason for the delay if the leak is not repaired within 15 calendar days after discovery of the leak; 6.) the expected date of successful repair of the leak if the leak is not repaired within 15 days; 7.) the date of successful repair of the leak; and 8.) inspector name and signature. [District Rule 4624, 6.1.3, 40 CFR Part 60.505 (c) and 40 CFR 63.11089(g)] Federally Enforceable Through Title V Permit

19. The owner or operator shall report the number of equipment leaks not repaired within 15 days after detection in a semi-annual report. [40 CFR 63.11089(g)] Federally Enforceable Through Title V Permit

20. During source testing the loading rack's vapor collection and control system (VCCS) shall be tested at every loading position to demonstrate the pressure in the delivery tanks being loaded complies with the requirements specified in this permit. Compliance shall be determined by calibrating and installing a liquid manometer, magnehelic device, or other instrument demonstrated to be equivalent, capable of measuring up to 500 mm water gauge pressure with a precision of 2.5 mm water gauge, on the terminal's VCCS at a pressure tap as close as possible to the connection with the product tank truck. The highest instantaneous pressure measurement as well as all pressure measurements at 5 minute intervals during delivery vessel loading must be recorded. [District Rule 2520, 9.3.2 and 40 CFR 60.503(d)] Federally Enforceable Through Title V Permit

21. Loading of a delivery vessel shall discontinue if its pressure relief valve opens. Corrective action shall be taken should this condition occur. [District Rule 2520, 9.1] Federally Enforceable Through Title V Permit

22. Source testing to determine compliance with the emission rate requirement of this permit shall be conducted at least once every 60 months. [District Rules 2201 and 4624. 6.2.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

23. Source testing shall be conducted using methods and procedures approved by District. The District must be notified 30 days prior to any compliance source testing and a pretest plan outlining the test methods and procedures shall be submitted for the District approval no later than 15 days prior to each test. [District Rule 1081, 6.0 and 7.1] Federally Enforceable Through Title V Permit

24. Source testing shall be witnessed or authorized by District Personnel. [District Rule 1081, 7.2] Federally Enforceable Through Title V Permit

25. VOC emissions from the vapor collection and control system shall be determined using 40 CFR 60.503 "Test Methods and Procedures" and EPA Reference Methods 2A, 2B, 25A, 25B, and ARB Method 422, or ARB Test Procedure TP-203.1. [District Rule 4624, 6.3.2 and San Joaquin County Rule 412] Federally Enforceable Through Title V Permit

26. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081, 7.3] Federally Enforceable Through Title V Permit

27. A log of all breakdowns of the vapor recovery system indicating the times, dates and gallons processed during the breakdown periods shall be maintained on the premises at all times and shall be made available for District inspection upon request. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

28. A record of the daily quantity of gasoline loaded from the loading racks operating under Permits to Operate N-829-1 and N-829-2 shall be kept. [District Rules 2520, 9.3.2, 4624, 6.1.3] Federally Enforceable Through Title V Permit

29. A record of the cumulative annual quantity of gasoline loaded from the loading racks operating under Permits to Operate N-829-1 and N-829-2 shall be kept. The record shall be updated at least weekly. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

30. Documentation attesting to the vapor tightness of each truck loaded with gasoline shall be kept. The documentation file for each tank truck shall be updated at least once per year to reflect the current test results as determined by EPA method 27. [40 CFR Part 60.5059(a) and 40 CFR 63.11094(b)] Federally Enforceable Through Title V Permit

31. The semi-annual compliance report shall include each loading of a gasoline cargo tank for which vapor tightness documentation had not been previously obtained by the facility. [40 CFR 63.11088(f)] Federally Enforceable Through Title V Permit

32. The operator shall maintain all records of required monitoring data and support information for inspection for a period of five years, and shall be made available for District inspection upon request. [District Rule 2520, 9.4.2, 4624, 6.1.4] Federally Enforceable Through Title V Permit

# San Joaquin Valley
# Air Pollution Control District

**PERMIT UNIT:** N-829-2-7 **EXPIRATION DATE:** 11/30/2020

**EQUIPMENT DESCRIPTION:**
FOUR LANE TRUCK LOADING RACK (SOUTH) CONSISTING OF 4 GASOLINE LOADING ARMS AND 4 DIESEL LOADING ARMS

## PERMIT UNIT REQUIREMENTS

1. All vapors displaced during truck loading shall be vented to the vapor combustion system under Permit to Operate N-829-20. [District NSR Rule] Federally Enforceable Through Title V Permit
2. The combined quantity of gasoline loaded through permit units N-829-1 and N-829-2 shall not exceed 2,071,233 gallons during any one day. [District NSR Rule] Federally Enforceable Through Title V Permit
3. Gasoline shall be loaded only into vapor tight tank trucks. [40 CFR Part 60.502(e)] Federally Enforceable Through Title V Permit
4. The facility shall obtain the vapor tightness documentation specified in 40 CFR Part 60.505(b) for each gasoline tank truck that is to be loaded at the facility. [40 CFR Part 60.502(e)(1)] Federally Enforceable Through Title V Permit
5. The loading rack shall be equipped with bottom loading equipment and a vapor collection and control system such that VOC emissions shall not exceed 0.08 pounds per 1000 gallons of gasoline loaded. [District Rule 4624, 5.1 and 40 CFR 63.11088(a)] Federally Enforceable Through Title V Permit
6. The vapor collection system shall be operated in a manner to prevent any organic vapors collected at one loading rack from passing to another loading rack. [40 CFR 63.11088(a)] Federally Enforceable Through Title V Permit
7. The vapor collection and control system shall operate such that the pressure in the delivery tank being loaded does not exceed 18 inches water column pressure and 6 inches water column vacuum. [District Rule 4624, 5.4] Federally Enforceable Through Title V Permit
8. All delivery tanks which previously contained organic liquids, including gasoline, with a TVP greater than 1.5 psia at loading conditions shall be filled only at Class 1 loading facilities using bottom loading equipment with a vapor collection and control system operating such that VOC emissions do not exceed 0.08 lb/1000 gallons loaded and which operate so the delivery tank does not exceed 18 inches water column pressure nor 6 inches water column vacuum. [District Rules 4624, 5.5] Federally Enforceable Through Title V Permit
9. Loading and vapor collection and control equipment shall be designed, installed, maintained and operated such that there are no leaks or excess organic liquid drainage at disconnections. A leak shall be defined as the dripping of organic compounds at a rate of more than three drops per minute or the detection of organic compounds, in excess of 10,000 ppm as methane measured at a distance of one centimeter from the potential source in accordance with EPA Method 21. Excess liquid drainage shall be defined as exceeding 10 milliliters per average of 3 consecutive disconnects. [District Rule 4624, 3.13, 3.17 and 5.6] Federally Enforceable Through Title V Permit
10. Construction, reconstruction (as defined in District Rule 4001, amended April 14, 1999), or expansion of any top loading facility shall not be allowed. [District Rule 4624, 5.7] Federally Enforceable Through Title V Permit
11. The vapor collection system, the vapor destruction device and each transfer rack shall be tested for leaks at least once every calendar quarter with a portable hydrocarbon analyzer in accordance with EPA Method 21. [District Rule 4624, 5.9.1] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

12. The equipment that are found leaking shall be repair or replaced within 72 hours after detecting the leakage. If the leaking component cannot be repaired or replaced within 72 hours, the component shall be taken out of service until such time the component is repaired or replaced. The repaired or replacement equipment shall be reinspected the first time the equipment is in operation after the repair or replacement. [District Rule 4624, 5.9.3] Federally Enforceable Through Title V Permit

13. Each calendar month, the vapor collection system, the vapor processing system and each loading rack handling gasoline shall be inspected during the loading of gasoline tank trucks for organic liquid and organic vapor leaks. For the purpose of this condition, detection methods incorporating sight, sound and smell are acceptable. Each detection of a leak shall be recorded and the source of the leak repaired within 15 days after it is detected. [District Rule 2520, 9.3.240 CFR Part 60.502(j) and 40 CFR Part 63.11089(a)] Federally Enforceable Through Title V Permit

14. A log book shall be used and shall be signed by the owner or operator at the completion of each inspection. A section of the log book shall contain a list, summary description, or diagram(s) showing the location of all equipment in gasoline service at the facility. [40 CFR Part 63.11089(b)] Federally Enforceable Through Title V Permit

15. Each detection of a liquid or vapor leak shall be recorded in the log book. When a leak is detected, an initial attempt at repair shall be made as soon as practicable, but no later than 5 calendar days after the leak is detected. Repair or replacement of leaking equipment shall be completed within 15 calendar days after detection of each leak. Delay of repair of leaking equipment will be allowed if the repair is not feasible within 15 days. The owner or operator shall provide in the semiannual report the reason(s) why the repair was not feasible and the date each repair was completed. [40 CFR Part 63.11089(d)] Federally Enforceable Through Title V Permit

16. Each calendar month, liquid drainage at disconnect of each loading arm shall be determined, and appropriate action shall be taken in case excess liquid drainage occurs from any loading arm. If no excess drainage conditions are found during five consecutive monthly inspections, the drainage inspection frequency may be changed from monthly to quarterly. However, if one or more excess drainage condition is found during a quarterly inspection, the inspection frequency shall return to monthly. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

17. Liquid drainage inspections shall be completed between 12:00 AM and 10:00 AM the day of inspection. Compliance shall be demonstrated by collecting all drainage at disconnect in a spouted container. The drainage shall be transferred to a graduated cylinder and the volume determined within one minute of collection. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

18. The owner or operator shall maintain a log book that contain the following information: 1.) dates of leak and drainage inspections, 2.) the nature of the leak (i.e. vapor or liquid including excess drainage) and the method of detection; 3.) findings, 4.) corrective action (date each leak or excess drainage condition repaired), 5.) repair methods applied in each attempt to repair the leak; 6.) repair delayed and the reason for the delay if the leak is not repaired within 15 calendar days after discovery of the leak; 6.) the expected date of successful repair of the leak if the leak is not repaired within 15 days; 7.) the date of successful repair of the leak; and 8.) inspector name and signature. [District Rule 4624, 6.1.3, 40 CFR Part 60.505 (c) and 40 CFR 63.11089(g)] Federally Enforceable Through Title V Permit

19. The owner or operator shall report the number of equipment leaks not repaired within 15 days after detection in a semi-annual report. [40 CFR 63.11089(g)] Federally Enforceable Through Title V Permit

20. During source testing the loading rack's vapor collection and control system (VCCS) shall be tested at every loading position to demonstrate the pressure in the delivery tanks being loaded complies with the requirements specified in this permit. Compliance shall be determined by calibrating and installing a liquid manometer, magnehelic device, or other instrument demonstrated to be equivalent, capable of measuring up to 500 mm water gauge pressure with a precision of 2.5 mm water gauge, on the terminal's VCCS at a pressure tap as close as possible to the connection with the product tank truck. The highest instantaneous pressure measurement as well as all pressure measurements at 5 minute intervals during delivery vessel loading must be recorded. [District Rule 2520, 9.3.2 and 40 CFR 60.503(d)] Federally Enforceable Through Title V Permit

21. Loading of a delivery vessel shall discontinue if its pressure relief valve opens. Corrective action shall be taken should this condition occur. [District Rule 2520, 9.1] Federally Enforceable Through Title V Permit

22. Source testing to determine compliance with the emission rate requirement of this permit shall be conducted at least once every 60 months. [District Rules 2201 and 4624. 6.2.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

23. Source testing shall be conducted using methods and procedures approved by District. The District must be notified 30 days prior to any compliance source testing and a pretest plan outlining the test methods and procedures shall be submitted for the District approval no later than 15 days prior to each test. [District Rule 1081, 6.0 and 7.1] Federally Enforceable Through Title V Permit

24. Source testing shall be witnessed or authorized by District Personnel. [District Rule 1081, 7.2] Federally Enforceable Through Title V Permit

25. VOC emissions from the vapor collection and control system shall be determined using 40 CFR 60.503 "Test Methods and Procedures" and EPA Reference Methods 2A, 2B, 25A, 25B, and ARB Method 422, or ARB Test Procedure TP-203.1. [District Rule 4624, 6.3.2 and San Joaquin County Rule 412] Federally Enforceable Through Title V Permit

26. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081, 7.3] Federally Enforceable Through Title V Permit

27. A log of all breakdowns of the vapor recovery system indicating the times, dates and gallons processed during the breakdown periods shall be maintained on the premises at all times and shall be made available for District inspection upon request. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

28. A record of the daily quantity of gasoline loaded from the loading racks operating under Permits to Operate N-829-1 and N-829-2 shall be kept. [District Rules 2520, 9.3.2, 4624, 6.1.3] Federally Enforceable Through Title V Permit

29. A record of the cumulative annual quantity of gasoline loaded from the loading racks operating under Permits to Operate N-829-1 and N-829-2 shall be kept. The record shall be updated at least weekly. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

30. Documentation attesting to the vapor tightness of each truck loaded with gasoline shall be kept. The documentation file for each tank truck shall be updated at least once per year to reflect the current test results as determined by EPA method 27. [40 CFR Part 60.5059(a) and 40 CFR 63.11094(b)] Federally Enforceable Through Title V Permit

31. The semi-annual compliance report shall include each loading of a gasoline cargo tank for which vapor tightness documentation had not been previously obtained by the facility. [40 CFR 63.11088(f)] Federally Enforceable Through Title V Permit

32. The operator shall maintain all records of required monitoring data and support information for inspection for a period of five years, and shall be made available for District inspection upon request. [District Rule 2520, 9.4.2, 4624, 6.1.4] Federally Enforceable Through Title V Permit

# San Joaquin Valley
# Air Pollution Control District

**PERMIT UNIT:** N-829-5-5 **EXPIRATION DATE:** 11/30/2020

**EQUIPMENT DESCRIPTION:**
630,000 GALLON WELDED INTERNAL FLOATING ROOF STORAGE TANK (#1502) WITH A MINISHOE PRIMARY SEAL AND A VAPORFLEX SECONDARY SEAL

## PERMIT UNIT REQUIREMENTS

1. The maximum throughput for this tank shall not exceed 15,000 barrels in any one day. [District Rule 2201]
2. The true vapor pressure (TVP) of the organic liquid stored in the tank shall be less than 11 psia at the actual storage temperature of the tank contents. [District Rules 2201 and 4623]
3. Gaps between the tank shell and the primary seal shall not exceed 1 1/2 inches. [District Rule 4623]
4. The cumulative length of all gaps between the tank shell and the primary seal greater than 1/2 inch shall not exceed 10% of the circumference of the tank. [District Rule 4623]
5. 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]
6. No continuous gap in the primary seal greater than 1/8 inch wide shall exceed 10% of the tank circumference. [District Rule 4623]
7. No gap between the tank shell and the secondary seal shall exceed 1/2 inch. [District Rule 4623]
8. 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]
9. 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]
10. The geometry of the metallic-shoe type seal shall be such that the maximum gap between the shoe and the tank shell shall be no greater than 3 inches for a length of at least 18 inches in the vertical plane above the liquid. [District Rule 4623]
11. 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]
12. The secondary seal shall allow easy insertion of probes of up to 1 1/2 inches in width in order to measure gaps in the primary seal. [District Rule 4623]
13. The secondary seal shall extend from the roof to the tank shell and shall not be attached to the primary seal. [District Rule 4623]
14. The internal floating roof shall float on the surface of the stored liquid at all times (i.e., off the roof leg supports) except during the initial fill until the roof is lifted off the leg supports and when the tank is completely emptied and subsequently refilled. When the roof is resting on the leg supports, the process of filling, emptying, or refilling shall be continuous and shall be accomplished as rapidly as possible. Whenever the permittee intends to land the roof on it's legs, the permittee shall notify the APCO in writing at least five calendar days prior to performing the work. The tank must be in compliance with this rule before it may land on its legs. [District Rule 4623, 40 CFR 60.112b(a)(1) and 40 CFR 63.11087(a)] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

15. All openings in the roof used for sampling and gauging shall provide a projection below the liquid surface to prevent belching of liquid and to prevent entrained or formed organic vapor from escaping from the liquid contents of the tank and shall be equipped with a cover, seal or lid. The cover seal or lid shall be in a closed position, with no visible gaps and be leak-free, except when the device or appurtenance is in use for sampling or gauging. [District Rule 4623 and 40 CFR 60.112b(a)(1)]

16. A leak-free condition is defined as a condition without a gas leak or a liquid leak. A gas leak is defined as a reading in excess of 10,000 parts per million by volume (ppmv), as methane, above background on a portable hydrocarbon detection instrument that is calibrated with methane in accordance with the procedures specified in EPA Method 21. Liquid leak is defined as the dripping of organic liquid at a rate of more than 3 drops per minute. A reading in excess to 10,000 ppmv, as methane, above background, or dripping of organic liquid at a rate of more than 3 drops per minute, 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, 40 CFR 60.112b(a)(1), and 40 CFR 63.11087(a)]

18. Each opening in the internal floating roof except for leg sleeves, automatic bleeder vents, rim space vents, column wells, ladder wells, sample wells, combination manway/vacuum breakers, and stub drains shall be equipped with a cover, or a lid shall be maintained in a closed position at all times (i.e. no visible gaps) except when the device is in use. The cover or lid shall be equipped with a gasket. Covers on each access hatch and automatic gauge float well shall be bolted in place except when they are in use. [District Rule 4623 and 40 CFR 60.112b(a)(1)]

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 leg roof supports. [District Rule 4623 and 40 CFR 60.112b(a)(1)]

20. Rim vents shall be equipped with a gasket and shall be set to open only when the internal floating roof is not floating or at the manufacturer's recommended setting. [District Rule 4623 and 40 CFR 60.112b(a)(1)]

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 and 40 CFR 60.112b(a)(1)]

22. Each penetration of the internal floating roof that allows for the 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 and 40 CFR 60.112b(a)(1)]

23. Each penetration of the internal floating roof that allows for the passage of a ladder shall have a gasketed sliding cover. [40 CFR 60.112b(a)(1)]

24. All slotted sampling or gauging 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

25. The gap between the pole wiper and the slotted guidepole shall not exceed 1/8 inch. [District Rule 4623] Federally Enforceable Through Title V Permit

26. The permittee shall notify the District in writing at least 30 days prior to conduct the visual inspection of the storage vessel, so the District can arrange an observer. [40 CFR 63.11087(c)] Federally Enforceable Through Title V Permit

27. For newly constructed, repaired, or rebuilt internal floating roof tanks, 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. If there are holes, tears, or other openings in the primary seal, the secondary seal, or the seal fabric or defects in the internal floating roof or its appurtenant parts, components, fittings, etc., the operator shall repair the defects before filling the tank. [District Rule 4623 and 40 CFR 63.11087(c)] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

28. The owner or operator shall perform a monthly leak inspection of all equipment in gasoline service, as defined in section 63.11100. For this inspection, detection methods incorporating sight, sound, and smell are acceptable. [40 CFR Part 63.11089(a)] Federally Enforceable Through Title V Permit

29. For monthly leak inspection, a log book shall be used and shall be signed by the owner or operator at the completion of each inspection. A section of the log book shall contain a list, summary description, or diagram(s) showing the location of all equipment in gasoline service at the facility. [40 CFR Part 63.11089(b)] Federally Enforceable Through Title V Permit

30. Each detection of a liquid or vapor leak shall be recorded in the log book. When a leak is detected, an initial attempt at repair shall be made as soon as practicable, but no later than 5 calendar days after the leak is detected. Repair or replacement of leaking equipment shall be completed within 15 calendar days after detection of each leak. Delay of repair of leaking equipment will be allowed if the repair is not feasible within 15 days. The owner or operator shall provide in the semiannual report the reason(s) why the repair was not feasible and the date each repair was completed. [40 CFR Part 63.11089(d)] Federally Enforceable Through Title V Permit

31. The owner or operator shall maintain a log book that contain the following information for a leak during during monthly inspection: 1.) equipment type and identification number; 2.) the nature of the leak (i.e. vapor or liquid) and the method of detection (i.e. sight, sound, or smell); 3.) the date the leak was detected and the date of each attempt to repair the leak; 4.) repair methods applied in each attempt to repair the leak; 5.) repair delayed and the reason for the delay if the leak is not repaired within 15 calendar days after discovery of the leak; 6) the expected date of successful repair of the leak if the leak is not repaired within 15 days; and 7.) the date of successful repair of the leak. [40 CFR 63.11089(g)] Federally Enforceable Through Title V Permit

32. The permittee shall visually inspect, through the manholes, roof hatches, or other opening 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, 40 CFR 60.113b, and 40 CFR 63.11087(c)] Federally Enforceable Through Title V Permit

33. The permittee shall conduct actual gap measurements of the primary seal and/or secondary seal at least once every 60 months. [District Rule 4623]

34. If any failure (i.e. visible organic liquid on the internal floating roof, tank walls or anywhere, holes or tears in the seal fabric) is detected during 12 month visual inspection, the permittee shall repair the items or empty and remove the storage vessel from service within 45 days. If the detected failure cannot be repaired within 45 days and if the vessel cannot be emptied within 45 days, a 30-day extension may be requested from the APCO in the inspection report. Such a request must document that alternate storage capacity is unavailable and specify a schedule of actions the company will take that will assure theat the control equipment will be repaired or the vessel will be emptied as soon as possible. [40 CFR 60.113b and 40 CFR 63.11087(c)] Federally Enforceable Through Title V Permit

35. The permittee shall visually inspect the internal floating roof, the primary seal, the secondary seal, gaskets, slotted membranes and sleeve seals (if any) each time the vessel is emptied and degassed. If the internal floating roof has defects, the primary seal has holes, tears, or other openings in the seal or the seal fabric, or the secondary seal has holes, tears, or other openings in the seal or the seal fabric, or the gaskets no longer close off the liquid surfaces from the atmosphere, or the slotted membrane has more than 10 percent open area, the owner or operator shall repair the items as necessary so that none of the conditions specified in this paragraph exist before refilling the storage vessel. [40 CFR 60.113b and 40 CFR Part 63.11087(c)] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

36. The permittee shall notify the District in writing at least 30 days prior to the filling or refilling of each storage vessel for which an inspection is required by paragraphs (a)(1) and (a)(4) of 40 CFR 60.113b to afford the District the opportunity to have an observer present. If the inspection required by paragraph (a)(4) of 40 CFR 60.113b is not planned and the owner or operator could not have known about the inspection 30 days in advance or refilling the tank, the owner or operator shall notify the District at least 7 days prior to the refilling of the storage vessel. Notification shall be made by telephone immediately followed by written documentation demonstrating why the inspection was unplanned. Alternatively, this notification including the written documentation may be made in writing and sent by express mail so that it is received by the Administrator at least 7 days prior to the refilling. [40 CFR 60.113b]

37. The owner or operator shall report the number of equipment leaks not repaired within 15 days after detection in a semi-annual report. [40 CFR 63.11089(g)] Federally Enforceable Through Title V Permit

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

39. The operator shall determine the presence of gas leaks using portable hydrocarbon detection instrument in accordance with EPA Method 21. The instrument shall be calibrated before use each day of its use by the procedures specified in Method 21 using the following calibration gases: 1.) Zero air (less than 10 ppm of hydrocarbon in air); and 2.) A mixture of methane or n-hexane and air at a concentration of about, but less than, 10,000 ppm methane or n-hexane. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

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

41. The permittee shall conduct actual gap measurements of the primary seal and/or secondary seal at least once every 60 months. Other than the gap criteria specified by this permit, no holes, tears, or other openings are allowed that would permit the escape of hydrocarbon vapors. Any defects found shall constitute a violation of this rule. [District Rule 4623 and 40 CFR 63.11087(c)] Federally Enforceable Through Title V Permit

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

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

44. The operator shall keep a record of liquids stored in each container, period of storage, and the maximum true vapor pressure of the liquid during the respective storage period. [District Rule 40 CFR 60.116b] Federally Enforceable Through Title V Permit

45. Permittee shall keep a record of the daily quantity of organic liquid loaded into the tank, in barrels. [District Rule 2201]

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

46. The permittee shall determine the maximum true vapor pressure of the stored organic liquid on a monthly basis, using the calculation methodology listed in Appendix B of District Rule 4623. The permittee shall keep a record of all reid vapor pressure measurements for the stored organic liquid and shall use the highest recorded reid vapor pressure of the month when determining the maximum true vapor pressure. The permittee shall keep a record of the actual storage temperature of the organic storage tank and shall use the highest temperature recorded of the month when determining the maximum true vapor pressure. [District Rule 4623and 40 CFR 60.116b] Federally Enforceable Through Title V Permit

47. The permittee shall submit the reports of the floating roof tank inspections to the APCO within five calendar days after the completion of the inspection only for those tanks that failed to meet the applicable requirements of Rule 4623, Sections 5.2 through 5.5. The inspection report for tanks that that have been determined to be in compliance with the requirements of Sections 5.2 through 5.5 need not be submitted to the APCO, but the inspection report shall be kept on-site and made available upon request by the APCO. The inspection report shall contain all necessary information to demonstrate compliance with the provisions of this rule, including the following: 1.) Date of inspection and names and titles of company personnel doing the inspection; 2.) Tank identification number and Permit to Operate number; 3.) Measurements of the gaps between the tank shell and primary and secondary seals; 4.) Leak-free status of the tank and floating roof deck fittings. Records of the leak-free status shall include the vapor concentration values measured in ppmv. 5.) Data, supported by calculations, demonstrating compliance with the requirements specified in Sections 5.3, 5.4, 5.5.2.3.3, 5.5.2.4.2, and 5.5.2.4.3 of Rule 4623. 6.) Any corrective actions or repairs performed on the tank in order to comply with Rule 4623 and the date(s) such actions were taken. [District Rule 4623 and 40 CFR 63.11087(e)] Federally Enforceable Through Title V Permit

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

49. The following test methods shall be used: ASTM Method D287 for determining API Gravity, ASTM Method D4057 sampling for API Gravity testing; ASTM D323 for determining RVP, and converting RVP to TVP at the tank's maximum organic liquid storage temperature; ARB Method 422 for determining exempt halogenated VOCs in gases; EPA Method 21 for measuring gas-leak concentration. Should the owner or operator wish to use test methods other than the ones mentioned in this condition, the methods must be approved by the District prior to its use. [District Rule 4623] Federally Enforceable Through Title V Permit

50. The operator shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rules 4623 and 2520] Federally Enforceable Through Title V Permit

# San Joaquin Valley
# Air Pollution Control District

**PERMIT UNIT:** N-829-6-8 **EXPIRATION DATE:** 11/30/2020

**EQUIPMENT DESCRIPTION:**
630,000 GALLON WELDED INTERNAL FLOATING ROOF STORAGE TANK (#1501) WITH A HMT FOAM LOG PRIMARY SEAL AND A HMT VAPOR FLEX SECONDARY SEAL AND A SLOTTED GUIDEPOLE

## PERMIT UNIT REQUIREMENTS

1. True vapor pressure of the organic liquid stored shall be less than 11 psia. [District Rule 4623, 5.1.1] Federally Enforceable Through Title V Permit
2. The internal floating roof shall float on the surface of the stored liquid at all times (i.e., off the roof leg supports) except during the initial fill until the roof is lifted off the leg supports and when the tank is completely emptied and subsequently refilled. When the roof is resting on the leg supports, the process of filling, emptying, or refilling shall be continuous and shall be accomplished as rapidly as possible. Whenever the permittee intends to land the roof on it's legs, the permittee shall notify the APCO in writing at least five calendar days prior to performing the work. The tank must be in compliance with this rule before it may land on its legs. [District Rule 4623, 5.3.1.3 and 5.4.3 and 40 CFR 63.11087(a)] Federally Enforceable Through Title V Permit
3. VOC emissions shall not exceed 5.6 pounds in any one day. [District Rule 2201] Federally Enforceable Through Title V Permit
4. The organic liquid throughput shall not exceed 30,240,000 gallons in any one calendar year. [District Rule 2201] Federally Enforceable Through Title V Permit
5. 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 and 5.4.1] Federally Enforceable Through Title V Permit
6. No gap between the tank shell and the primary seal shall exceed 1/2 inch. [District Rule 4623, 5.3.2.3.2 and 5.4.1] Federally Enforceable Through Title V Permit
7. 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 and 5.4.1] 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, 5.3.2.3.2 and 5.4.1] 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, 5.3.2.3.3 and 5.4.1] 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, 5.3.2.3.3 and 5.4.1] Federally Enforceable Through Title V Permit
11. 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 and 5.4.1] Federally Enforceable Through Title V Permit
12. 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 and 5.4.1] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

13. 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 and 5.4.1] Federally Enforceable Through Title V Permit

14. All slotted sampling or gauging 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

15. The gap between the pole wiper and the slotted guidepole shall not exceed 1/8 inch. [District Rule 4623, 5.5.2.4.3] Federally Enforceable Through Title V Permit

16. All openings in the roof used for sampling and gauging 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 for sampling or gauging. [District Rule 4623, 5.5.1] Federally Enforceable Through Title V Permit

17. A leak-free condition is defined as a condition without a gas leak or a liquid leak. A gas leak is defined as a reading in excess of 10,000 parts per million by volume (ppmv), as methane, above background on a portable hydrocarbon detection instrument that is calibrated with methane in accordance with the procedures specified in EPA Method 21. Liquid leak is defined as the dripping of organic liquid at a rate of more than 3 drops per minute. A reading in excess to 10,000 ppmv, as methane, above background, or dripping of organic liquid at a rate of more than 3 drops per minute, is a violation of this permit and Rule 4623 and shall be reported as a deviation. [District Rule 4623, 3.11, 3.17, 3.18 and 6.4.8] Federally Enforceable Through Title V Permit

18. 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 and 40 CFR 63.11087(a)] Federally Enforceable Through Title V Permit

19. Each opening in the internal floating roof except for leg sleeves, automatic bleeder vents, rim space vents, column wells, ladder wells, sample wells, combination manway/vacuum breakers, and stub drains 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

20. 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

21. 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

22. 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

23. 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

24. The permittee shall notify the District in writing at least 30 days prior to conduct the visual inspection of the storage vessel, so the District can arrange an observer. [40 CFR 60.11087(c)] Federally Enforceable Through Title V Permit

25. For newly constructed, repair, or rebuilt internal floating roof tanks, 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. 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, 6.1.4.1 and 40 CFR 63.11087(c)] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

26. The owner or operator shall perform a monthly leak inspection of all equipment in gasoline service, as defined in section 63.11100. For this inspection, detection methods incorporating sight, sound, and smell are acceptable. [40 CFR Part 63.11089(a)] Federally Enforceable Through Title V Permit

27. For monthly leak inspection, a log book shall be used and shall be signed by the owner or operator at the completion of each inspection. A section of the log book shall contain a list, summary description, or diagram(s) showing the location of all equipment in gasoline service at the facility. [40 CFR Part 63.11089(b)] Federally Enforceable Through Title V Permit

28. Each detection of a liquid or vapor leak shall be recorded in the log book. When a leak is detected, an initial attempt at repair shall be made as soon as practicable, but no later than 5 calendar days after the leak is detected. Repair or replacement of leaking equipment shall be completed within 15 calendar days after detection of each leak. Delay of repair of leaking equipment will be allowed if the repair is not feasible within 15 days. The owner or operator shall provide in the semiannual report the reason(s) why the repair was not feasible and the date each repair was completed. [40 CFR Part 63.11089(d)] Federally Enforceable Through Title V Permit

29. The owner or operator shall maintain a log book that contain the following information for a leak during during monthly inspection: 1.) equipment type and identification number; 2.) the nature of the leak (i.e. vapor or liquid) and the method of detection (i.e. sight, sound, or smell); 3.) the date the leak was detected and the date of each attempt to repair the leak; 4.) repair methods applied in each attempt to repair the leak; 5.) repair delayed and the reason for the delay if the leak is not repaired within 15 calendar days after discovery of the leak; 6) the expected date of successful repair of the leak if the leak is not repaired within 15 days; and 7.) the date of successful repair of the leak. [40 CFR 63.11089(g)] Federally Enforceable Through Title V Permit

30. The permittee shall visually inspect, through the manholes, roof hatches, or other opening 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, 6.1.4.2 and 40 CFR 63.11087(c)] Federally Enforceable Through Title V Permit

31. If any failure (i.e. visible organic liquid on the internal floating roof, tank walls or anywhere, holes or tears in the seal fabric) is detected during 12 month visual inspection, the permittee shall repair the items or empty and remove the storage vessel from service within 45 days. If the detected failure cannot be repaired within 45 days and if the vessel cannot be emptied within 45 days, a 30-day extension may be requested from the APCO in the inspection report. Such a request must document that alternate storage capacity is unavailable and specify a schedule of actions the company will take that will assure theat the control equipment will be repaired or the vessel will be emptied as soon as possible. [40 CFR 60.11087(c)] Federally Enforceable Through Title V Permit

32. The permittee shall visually inspect the internal floating roof, the primary seal, the secondary seal, gaskets, slotted memberanes and sleeve seals (if any) each time the vessel is emptied and degassed. If the internal floating roof has defects, the primary seal has holes, tears, or other openings in the seal or the seal fabric, or the secondary seal has holes, tears, or other openings in the seal or the seal fabric, or the gaskets no longer close off the liquid surfaces from the atmosphere, or the slotted membrane has more than 10 percent open area, the owner or operator shall repair the items as necessary so that none of the conditions specified in this paragraph exist before refilling the storage vessel. [40 CFR Part 63.11087(c)] Federally Enforceable Through Title V Permit

33. The owner or operator shall report the number of equipment leaks not repaired within 15 days after detection in a semi-annual report. [40 CFR 63.11089(g)] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

35. The operator shall determine the presence of gas leaks using portable hydrocarbon detection instrument in accordance with EPA Method 21. The instrument shall be calibrated before use each day of its use by the procedures specified in Method 21 using the following calibration gases: 1.) Zero air (less than 10 ppm of hydrocarbon in air); and 2.) A mixture of methane or n-hexane and air at a concentration of about, but less than, 10,000 ppm methane or n-hexane. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

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

37. The permittee shall conduct actual gap measurements of the primary seal and/or secondary seal at least once every 60 months. Other than the gap criteria specified by this permit, no holes, tears, or other openings are allowed that would permit the escape of hydrocarbon vapors. Any defects found shall constitute a violation of this rule. [District Rule 4623, 6.1.4.3 and 40 CFR 63.11087(c)] Federally Enforceable Through Title V Permit

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

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

40. The operator shall keep a record of liquids stored in each container, period of storage, and the maximum true vapor pressure of the liquid during the respective storage period. [40 CFR 60.113(a)] Federally Enforceable Through Title V Permit

41. The permittee shall determine the maximum true vapor pressure of the stored organic liquid on a monthly basis, using the calculation methodology listed in Appendix B of District Rule 4623. The permittee shall keep a record of all reid vapor pressure measurements for the stored organic liquid and shall use the highest recorded reid vapor pressure of the month when determining the maximum true vapor pressure. The permittee shall keep a record of the actual storage temperature of the organic storage tank and shall use the highest temperature recorded of the month when determining the maximum true vapor pressure. [District Rule 4623 and 40 CFR 60.113(b)] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

42. The permittee shall submit the reports of the floating roof tank inspections to the APCO within five calendar days after the completion of the inspection only for those tanks that failed to meet the applicable requirements of Rule 4623, Sections 5.2 through 5.5. The inspection report for tanks that that have been determined to be in compliance with the requirements of Sections 5.2 through 5.5 need not be submitted to the APCO, but the inspection report shall be kept on-site and made available upon request by the APCO. The inspection report shall contain all necessary information to demonstrate compliance with the provisions of this rule, including the following: 1.) Date of inspection and names and titles of company personnel doing the inspection; 2.) Tank identification number and Permit to Operate number; 3.) Measurements of the gaps between the tank shell and primary and secondary seals; 4.) Leak-free status of the tank and floating roof deck fittings. Records of the leak-free status shall include the vapor concentration values measured in ppmv. 5.) Data, supported by calculations, demonstrating compliance with the requirements specified in Sections 5.3, 5.4, 5.5.2.3.3, 5.5.2.4.2, and 5.5.2.4.3 of Rule 4623. 6.) Any corrective actions or repairs performed on the tank in order to comply with Rule 4623 and the date(s) such actions were taken. [District Rule 4623, 6.3.5 and 40 CFR 63.11087(e)] Federally Enforceable Through Title V Permit

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

44. The following test methods shall be used: ASTM Method D287 for determining API Gravity, ASTM Method D4057 sampling for API Gravity testing; ASTM D323 for determining RVP, and converting RVP to TVP at the tank's maximum organic liquid storage temperature; ARB Method 422 for determining exempt halogenated VOCs in gases; EPA Method 21 for measuring gas-leak concentration. Should the owner or operator wish to use test methods other than the ones mentioned in this condition, the methods must be approved by the District prior to its use. [District Rule 4623, 6.4] Federally Enforceable Through Title V Permit

45. Records of the cumulative annual organic liquid throughput shall be maintained and updated monthly. [District Rule 2201] Federally Enforceable Through Title V Permit

46. The permittee shall maintain records sufficient to demonstrate compliance with the daily VOC emission limit. These records shall contain the calculated emission quantity as well as each process variable used in the respective calculations/modeling. [District Rule 2080] Federally Enforceable Through Title V Permit

47. 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

# San Joaquin Valley
# Air Pollution Control District

**PERMIT UNIT:** N-829-7-6 **EXPIRATION DATE:** 11/30/2020

**EQUIPMENT DESCRIPTION:**
420,000 GALLON WELDED INTERNAL FLOATING ROOF TANK (#1002) WITH A PRIMARY FOAM LOG SEAL, A SECONDARY WIPER SEAL, AND A SOLID GUIDEPOLE

## PERMIT UNIT REQUIREMENTS

1. The tank shall be equipped with a cover consisting of either a pontoon-type or double-deck-type cover which rests upon the surface of the liquid being stored and is equipped with a closure device between the tank shell and roof edge consisting of a primary and a secondary seal. [District Rule 4623, 5.3.1 and 40 CFR 63.11087(a)] Federally Enforceable Through Title V Permit
2. 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 and 40 CFR 63.11087(a)] Federally Enforceable Through Title V Permit
3. VOC emissions from the storage tank shall not exceed 11.4 pounds in any given day. [District Rule 2201] Federally Enforceable Through Title V Permit
4. True vapor pressure of the organic liquid stored shall be less than 11 psia. [District Rule 4623, 5.1.1] Federally Enforceable Through Title V Permit
5. 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 and 5.4.1] Federally Enforceable Through Title V Permit
6. No gap between the tank shell and the primary seal shall exceed 1/2 inch. [District Rule 4623, 5.3.2.3.2 and 5.4.1] Federally Enforceable Through Title V Permit
7. 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 and 5.4.1] 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, 5.3.2.3.2 and 5.4.1] 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, 5.3.2.3.3 and 5.4.1] 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, 5.3.2.3.3 and 5.4.1] Federally Enforceable Through Title V Permit
11. 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 and 5.4.1] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

12. 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 and 5.4.1] Federally Enforceable Through Title V Permit

13. 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 and 5.4.1] Federally Enforceable Through Title V Permit

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

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

16. The gap between the pole wiper and the solid guidepole shall not exceed 1/2 inch. [District Rule 4623, 5.5.2.3.3] Federally Enforceable Through Title V Permit

17. All openings in the roof used for sampling and gauging 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 for sampling or gauging. [District Rule 4623, 5.5.1] 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 gas leak is defined as a reading in excess of 10,000 parts per million by volume (ppmv), as methane, above background on a portable hydrocarbon detection instrument that is calibrated with methane in accordance with the procedures specified in EPA Method 21. Liquid leak is defined as the dripping of organic liquid at a rate of more than 3 drops per minute. A reading in excess to 10,000 ppmv, as methane, above background, or dripping of organic liquid at a rate of more than 3 drops per minute, is a violation of this permit and Rule 4623 and shall be reported as a deviation. [District Rule 4623, 3.11, 3.17, 3.18 and 6.4.8] Federally Enforceable Through Title V Permit

19. 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 and 40 CFR 63.11087(a)] Federally Enforceable Through Title V Permit

20. Each opening in the internal floating roof except for leg sleeves, automatic bleeder vents, rim space vents, column wells, ladder wells, sample wells, combination manway/vacuum breakers, and stub drains 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

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, 5.5.2.1.3] Federally Enforceable Through Title V Permit

22. 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

23. 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

24. 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

25. The permittee shall notify the District in writing at least 30 days prior to conduct the visual inspection of the storage vessel, so the District can arrange an observer. [40 CFR 63.11087(c)] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

26. For newly constructed, repair, or rebuilt internal floating roof tanks, 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. 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, 6.1.4.1 and 40 CFR 63.11087(c)] Federally Enforceable Through Title V Permit

27. The owner or operator shall perform a monthly leak inspection of all equipment in gasoline service, as defined in section 63.11100. For this inspection, detection methods incorporating sight, sound, and smell are acceptable. [40 CFR Part 63.11089(a)] Federally Enforceable Through Title V Permit

28. For monthly leak inspection, a log book shall be used and shall be signed by the owner or operator at the completion of each inspection. A section of the log book shall contain a list, summary description, or diagram(s) showing the location of all equipment in gasoline service at the facility. [40 CFR Part 63.11089(b)] Federally Enforceable Through Title V Permit

29. Each detection of a liquid or vapor leak shall be recorded in the log book. When a leak is detected, an initial attempt at repair shall be made as soon as practicable, but no later than 5 calendar days after the leak is detected. Repair or replacement of leaking equipment shall be completed within 15 calendar days after detection of each leak. Delay of repair of leaking equipment will be allowed if the repair is not feasible within 15 days. The owner or operator shall provide in the semiannual report the reason(s) why the repair was not feasible and the date each repair was completed. [40 CFR Part 63.11089(d)] Federally Enforceable Through Title V Permit

30. The owner or operator shall maintain a log book that contain the following information for a leak during during monthly inspection: 1.) equipment type and identification number; 2.) the nature of the leak (i.e. vapor or liquid) and the method of detection (i.e. sight, sound, or smell); 3.) the date the leak was detected and the date of each attempt to repair the leak; 4.) repair methods applied in each attempt to repair the leak; 5.) repair delayed and the reason for the delay if the leak is not repaired within 15 calendar days after discovery of the leak; 6) the expected date of successful repair of the leak if the leak is not repaired within 15 days; and 7.) the date of successful repair of the leak. [40 CFR 63.11089(g)] Federally Enforceable Through Title V Permit

31. The permittee shall visually inspect, through the manholes, roof hatches, or other opening 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, 6.1.4.2 and 40 CFR 63.11087(c)] Federally Enforceable Through Title V Permit

32. If any failure (i.e. visible organic liquid on the internal floating roof, tank walls or anywhere, holes or tears in the seal fabric) is detected during 12 month visual inspection, the permittee shall repair the items or empty and remove the storage vessel from service within 45 days. If the detected failure cannot be repaired within 45 days and if the vessel cannot be emptied within 45 days, a 30-day extension may be requested from the APCO in the inspection report. Such a request must document that alternate storage capacity is unavailable and specify a schedule of actions the company will take that will assure theat the control equipment will be repaired or the vessel will be emptied as soon as possible. [40 CFR 63.11087(c)] Federally Enforceable Through Title V Permit

33. The permittee shall visually inspect the internal floating roof, the primary seal, the secondary seal, gaskets, slotted memberanes and sleeve seals (if any) each time the vessel is emptied and degassed. If the internal floating roof has defects, the primary seal has holes, tears, or other openings in the seal or the seal fabric, or the secondary seal has holes, tears, or other openings in the seal or the seal fabric, or the gaskets no longer close off the liquid surfaces from the atmosphere, or the slotted membrane has more than 10 percent open area, the owner or operator shall repair the items as necessary so that none of the conditions specified in this paragraph exist before refilling the storage vessel. [40 CFR Part 63.11087(c)] Federally Enforceable Through Title V Permit

34. The owner or operator shall report the number of equipment leaks not repaired within 15 days after detection in a semi-annual report. [40 CFR 63.11089(g)] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

36. The operator shall determine the presence of gas leaks using portable hydrocarbon detection instrument in accordance with EPA Method 21. The instrument shall be calibrated before use each day of its use by the procedures specified in Method 21 using the following calibration gases: 1.) Zero air (less than 10 ppm of hydrocarbon in air); and 2.) A mixture of methane or n-hexane and air at a concentration of about, but less than, 10,000 ppm methane or n-hexane. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

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

38. The permittee shall conduct actual gap measurements of the primary seal and/or secondary seal at least once every 60 months. Other than the gap criteria specified by this permit, no holes, tears, or other openings are allowed that would permit the escape of hydrocarbon vapors. Any defects found shall constitute a violation of this rule. [District Rule 4623, 6.1.4.3 and 40 CFR 63.11087(c)] Federally Enforceable Through Title V Permit

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

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

41. The operator shall keep a record of liquids stored in each container, period of storage, and the maximum true vapor pressure of the liquid during the respective storage period. [40 CFR 60.113(a)] Federally Enforceable Through Title V Permit

42. The permittee shall determine the maximum true vapor pressure of the stored organic liquid on a monthly basis, using the calculation methodology listed in Appendix B of District Rule 4623. The permittee shall keep a record of all reid vapor pressure measurements for the stored organic liquid and shall use the highest recorded reid vapor pressure of the month when determining the maximum true vapor pressure. The permittee shall keep a record of the actual storage temperature of the organic storage tank and shall use the highest temperature recorded of the month when determining the maximum true vapor pressure. [District Rule 4623 and 40 CFR 60.113(a) and (b)] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

43. The permittee shall submit the reports of the floating roof tank inspections to the APCO within five calendar days after the completion of the inspection only for those tanks that failed to meet the applicable requirements of Rule 4623, Sections 5.2 through 5.5. The inspection report for tanks that that have been determined to be in compliance with the requirements of Sections 5.2 through 5.5 need not be submitted to the APCO, but the inspection report shall be kept on-site and made available upon request by the APCO. The inspection report shall contain all necessary information to demonstrate compliance with the provisions of this rule, including the following: 1.) Date of inspection and names and titles of company personnel doing the inspection; 2.) Tank identification number and Permit to Operate number; 3.) Measurements of the gaps between the tank shell and primary and secondary seals; 4.) Leak-free status of the tank and floating roof deck fittings. Records of the leak-free status shall include the vapor concentration values measured in ppmv. 5.) Data, supported by calculations, demonstrating compliance with the requirements specified in Sections 5.3, 5.4, 5.5.2.3.3, 5.5.2.4.2, and 5.5.2.4.3 of Rule 4623. 6.) Any corrective actions or repairs performed on the tank in order to comply with Rule 4623 and the date(s) such actions were taken. [District Rule 4623, 6.3.5 and 40 CFR 63.11087(e)] Federally Enforceable Through Title V Permit

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

45. The following test methods shall be used: ASTM Method D287 for determining API Gravity, ASTM Method D4057 sampling for API Gravity testing; ASTM D323 for determining RVP, and converting RVP to TVP at the tank's maximum organic liquid storage temperature; ARB Method 422 for determining exempt halogenated VOCs in gases; EPA Method 21 for measuring gas-leak concentration. Should the owner or operator wish to use test methods other than the ones mentioned in this condition, the methods must be approved by the District prior to its use. [District Rule 4623, 6.4] Federally Enforceable Through Title V Permit

46. The permittee shall maintain records sufficient to demonstrate compliance with the daily VOC emission limit. These records shall contain the calculated emission quantity as well as each process variable used in the respective calculations/modeling. [District Rule 2080] Federally Enforceable Through Title V Permit

47. 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

San Joaquin Valley
Air Pollution Control District

**PERMIT UNIT:** N-829-16-7 **EXPIRATION DATE:** 11/30/2020

**EQUIPMENT DESCRIPTION:**
1,386,000 GALLON WELDED INTERNAL FLOATING ROOF STORAGE TANK (#3301) WITH A MECHANICAL SHOE PRIMARY SEAL AND A WIPER SECONDARY SEAL

# PERMIT UNIT REQUIREMENTS

1. True vapor pressure (TVP) of the organic liquid stored shall be less than 11 psia. [District Rule 4623, 5.1.1] Federally Enforceable Through Title V Permit
2. VOC emissions shall not exceed 14.9 pounds in any one day. [District Rule 2201] Federally Enforceable Through Title V Permit
3. The organic liquid throughput shall not exceed 33,264,000 gallons in any one calendar year. [District Rule 2201] Federally Enforceable Through Title V Permit
4. The tank shall be equipped with a fixed roof with an internal floating type cover equipped with a continuous closure device between the tank wall and the cover edge. [40 CFR 60.112a(2) and 40 CFR 63.11087(a)] Federally Enforceable Through Title V Permit
5. 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, 5.4.1 and 40 CFR 63.11087(a)] Federally Enforceable Through Title V Permit
6. Gaps between the tank shell and the primary seal shall not exceed 1 1/2 inches. [District Rule 4623, 5.3.2.1.1 and 5.4.1] Federally Enforceable Through Title V Permit
7. The cumulative length of all gaps between the tank shell and the primary seal greater than 1/2 inch shall not exceed 10% of the circumference of the tank. [District Rule 4623, 5.3.2.1.1 and 5.4.1] Federally Enforceable Through Title V Permit
8. The cumulative length of all primary seal gaps greater than 1/8 inch shall not exceed 30% of the circumference of the tank. [District Rule 4623, 5.3.2.1.1 and 5.4.1] Federally Enforceable Through Title V Permit
9. No continuous gap in the primary seal greater than 1/8 inch wide shall exceed 10% of the tank circumference. [District Rule 4623, 5.3.2.1.1 and 5.4.1] Federally Enforceable Through Title V Permit
10. No gap between the tank shell and the secondary seal shall exceed 1/2 inch. [District Rule 4623, 5.3.2.1.2 and 5.4.1] Federally Enforceable Through Title V Permit
11. The cumulative length of all gaps between the tank shell and the secondary seal, greater than 1/8 inch shall not exceed 5% of the tank circumference. [District Rule 4623, 5.3.2.1.2 and 5.4.1] Federally Enforceable Through Title V Permit
12. The metallic shoe-type seal shall be installed so that one end of the shoe extends into the stored liquid and the other end extends a minimum vertical distance of 18 inches above the stored liquid surface. [District Rule 4623, 5.3.2.1.3 and 5.4.1] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

13. The geometry of the metallic-shoe type seal shall be such that the maximum gap between the shoe and the tank shell shall be no greater than 3 inches for a length of at least 18 inches in the vertical plane above the liquid. [District Rule 4623, 5.3.2.1.4 and 5.4.1] 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, 5.3.2.1.5 and 5.4.1] Federally Enforceable Through Title V Permit

15. The secondary seal shall allow easy insertion of probes of up to 1 1/2 inches in width in order to measure gaps in the primary seal. [District Rule 4623, 5.3.2.1.6 and 5.4.1] 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, 5.3.2.1.7 and 5.4.1] Federally Enforceable Through Title V Permit

17. All openings in the roof used for sampling and gauging 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 for sampling and gauging. [District Rule 4623, 5.5.2.1.2] 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 gas leak is defined as a reading in excess of 10,000 parts per million by volume (ppmv), as methane, above background on a portable hydrocarbon detection instrument that is calibrated with methane in accordance with the procedures specified in EPA Method 21. Liquid leak is defined as the dripping of organic liquid at a rate of more than 3 drops per minute. A reading in excess to 10,000 ppmv, as methane, above background, or dripping of organic liquid at a rate of more than 3 drops per minute, is a violation of this permit and Rule 4623 and shall be reported as a deviation. [District Rule 4623, 3.11, 3.17, 3.18 and 6.4.8] Federally Enforceable Through Title V Permit

19. 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 and 40 CFR 63.11087(a)] Federally Enforceable Through Title V Permit

20. Each opening in the internal floating roof except for leg sleeves, automatic bleeder vents, rim space vents, column wells, ladder wells, sample wells, combination manway/vacuum breakers, and stub drains 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

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, 5.5.2.1.3] Federally Enforceable Through Title V Permit

22. 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

23. 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

24. 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

25. The permittee shall notify the District in writing at least 30 days prior to conduct the visual inspection of the storage vessel, so the District can arrange an observer. [40 CFR 63.11087(c)] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

26. For newly constructed, repaired, or rebuilt internal floating roof tanks, 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. 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, 6.1.4.1 and 40 CFR 63.11087(c)] Federally Enforceable Through Title V Permit

27. The owner or operator shall perform a monthly leak inspection of all equipment in gasoline service, as defined in section 63.11100. For this inspection, detection methods incorporating sight, sound, and smell are acceptable. [40 CFR Part 63.11089(a)] Federally Enforceable Through Title V Permit

28. For monthly leak inspection, a log book shall be used and shall be signed by the owner or operator at the completion of each inspection. A section of the log book shall contain a list, summary description, or diagram(s) showing the location of all equipment in gasoline service at the facility. [40 CFR Part 63.11089(b)] Federally Enforceable Through Title V Permit

29. Each detection of a liquid or vapor leak shall be recorded in the log book. When a leak is detected, an initial attempt at repair shall be made as soon as practicable, but no later than 5 calendar days after the leak is detected. Repair or replacement of leaking equipment shall be completed within 15 calendar days after detection of each leak. Delay of repair of leaking equipment will be allowed if the repair is not feasible within 15 days. The owner or operator shall provide in the semiannual report the reason(s) why the repair was not feasible and the date each repair was completed. [40 CFR Part 63.11089(d)] Federally Enforceable Through Title V Permit

30. The owner or operator shall maintain a log book that contain the following information for a leak during during monthly inspection: 1.) equipment type and identification number; 2.) the nature of the leak (i.e. vapor or liquid) and the method of detection (i.e. sight, sound, or smell); 3.) the date the leak was detected and the date of each attempt to repair the leak; 4.) repair methods applied in each attempt to repair the leak; 5.) repair delayed and the reason for the delay if the leak is not repaired within 15 calendar days after discovery of the leak; 6) the expected date of successful repair of the leak if the leak is not repaired within 15 days; and 7.) the date of successful repair of the leak. [40 CFR 63.11089(g)] Federally Enforceable Through Title V Permit

31. The permittee shall visually inspect, through the manholes, roof hatches, or other opening 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, 6.1.4.2 and 40 CFR 63.11087(c)] Federally Enforceable Through Title V Permit

32. If any failure (i.e. visible organic liquid on the internal floating roof, tank walls or anywhere, holes or tears in the seal fabric) is detected during 12 month visual inspection, the permittee shall repair the items or empty and remove the storage vessel from service within 45 days. If the detected failure cannot be repaired within 45 days and if the vessel cannot be emptied within 45 days, a 30-day extension may be requested from the APCO in the inspection report. Such a request must document that alternate storage capacity is unavailable and specify a schedule of actions the company will take that will assure theat the control equipment will be repaired or the vessel will be emptied as soon as possible. [40 CFR 63.11087(c)] Federally Enforceable Through Title V Permit

33. The permittee shall visually inspect the internal floating roof, the primary seal, the secondary seal, gaskets, slotted memberanes and sleeve seals (if any) each time the vessel is emptied and degassed. If the internal floating roof has defects, the primary seal has holes, tears, or other openings in the seal or the seal fabric, or the secondary seal has holes, tears, or other openings in the seal or the seal fabric, or the gaskets no longer close off the liquid surfaces from the atmosphere, or the slotted membrane has more than 10 percent open area, the owner or operator shall repair the items as necessary so that none of the conditions specified in this paragraph exist before refilling the storage vessel. [40 CFR Part 63.11087(c)] Federally Enforceable Through Title V Permit

34. The owner or operator shall report the number of equipment leaks not repaired within 15 days after detection in a semi-annual report. [40 CFR 63.11089(g)] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

36. The operator shall determine the presence of gas leaks using portable hydrocarbon detection instrument in accordance with EPA Method 21. The instrument shall be calibrated before use each day of its use by the procedures specified in Method 21 using the following calibration gases: 1.) Zero air (less than 10 ppm of hydrocarbon in air); and 2.) A mixture of methane or n-hexane and air at a concentration of about, but less than, 10,000 ppm methane or n-hexane. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

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

38. The permittee shall conduct actual gap measurements of the primary seal and/or secondary seal at least once every 60 months. Other than the gap criteria specified by this permit, no holes, tears, or other openings are allowed that would permit the escape of hydrocarbon vapors. Any defects found shall constitute a violation of this rule. [District Rule 4623, 6.1.4.3 and 40 CFR 63.11087(c)] Federally Enforceable Through Title V Permit

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

40. The permittee shall determine the maximum true vapor pressure of the stored organic liquid on a monthly basis, using the calculation methodology listed in Appendix B of District Rule 4623. The permittee shall keep a record of all reid vapor pressure measurements for the stored organic liquid and shall use the highest recorded reid vapor pressure of the month when determining the maximum true vapor pressure. The permittee shall keep a record of the actual storage temperature of the organic storage tank and shall use the highest temperature recorded of the month when determining the maximum true vapor pressure. [District Rule 4623] Federally Enforceable Through Title V Permit

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

42. The permittee shall submit the reports of the floating roof tank inspections to the APCO within five calendar days after the completion of the inspection only for those tanks that failed to meet the applicable requirements of Rule 4623, Sections 5.2 through 5.5. The inspection report for tanks that that have been determined to be in compliance with the requirements of Sections 5.2 through 5.5 need not be submitted to the APCO, but the inspection report shall be kept on-site and made available upon request by the APCO. The inspection report shall contain all necessary information to demonstrate compliance with the provisions of this rule, including the following: 1.) Date of inspection and names and titles of company personnel doing the inspection; 2.) Tank identification number and Permit to Operate number; 3.) Measurements of the gaps between the tank shell and primary and secondary seals; 4.) Leak-free status of the tank and floating roof deck fittings. Records of the leak-free status shall include the vapor concentration values measured in ppmv. 5.) Data, supported by calculations, demonstrating compliance with the requirements specified in Sections 5.3, 5.4, 5.5.2.3.3, 5.5.2.4.2, and 5.5.2.4.3 of Rule 4623. 6.) Any corrective actions or repairs performed on the tank in order to comply with Rule 4623 and the date(s) such actions were taken. [District Rule 4623, 6.3.5 and 40 CFR 63.11087(c)] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

44. The following test methods shall be used: ASTM Method D287 for determining API Gravity, ASTM Method D4057 sampling for API Gravity testing; ASTM D323 for determining RVP, and converting RVP to TVP at the tank's maximum organic liquid storage temperature; ARB Method 422 for determining exempt halogenated VOCs in gases; EPA Method 21 for measuring gas-leak concentration. Should the owner or operator wish to use test methods other than the ones mentioned in this condition, the methods must be approved by the District prior to its use. [District Rule 4623,6.4] Federally Enforceable Through Title V Permit

45. Records of the cumulative annual organic liquid throughput shall be maintained and updated monthly. [District Rule 2201] Federally Enforceable Through Title V Permit

46. The permittee shall maintain records sufficient to demonstrate compliance with the daily VOC emission limit. These records shall contain the calculated emission quantity as well as each process variable used in the respective calculations/modeling. [District Rule 2080] Federally Enforceable Through Title V Permit

47. 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

# San Joaquin Valley
# Air Pollution Control District

**PERMIT UNIT:** N-829-17-7 **EXPIRATION DATE:** 11/30/2020

**EQUIPMENT DESCRIPTION:**
1,008,000 GALLON WELDED INTERNAL FLOATING ROOF STORAGE TANK (#2401) WITH A MECHANICAL SHOE PRIMARY SEAL AND A WIPER SECONDARY SEAL

## PERMIT UNIT REQUIREMENTS

1. True vapor pressure (TVP) of the organic liquid stored shall be less than 11 psia. [District Rule 4623, 5.1.1] Federally Enforceable Through Title V Permit
2. VOC emissions shall not exceed 13.4 pounds in any one day. [District Rule 2201] Federally Enforceable Through Title V Permit
3. The organic liquid throughput shall not exceed 24,192,000 gallons in any one calendar year. [District Rule 2201]
4. The tank shall be equipped with a fixed roof with an internal floating type cover equipped with a continuous closure device between the tank wall and the cover edge. [40 CFR 60.112a(2) and 40 CFR 63.11087(a)] Federally Enforceable Through Title V Permit
5. 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, 5.4.1 and 40 CFR 63.11087(a)] Federally Enforceable Through Title V Permit
6. Gaps between the tank shell and the primary seal shall not exceed 1 1/2 inches. [District Rule 4623, 5.3.2.1.1 and 5.4.1] Federally Enforceable Through Title V Permit
7. The cumulative length of all gaps between the tank shell and the primary seal greater than 1/2 inch shall not exceed 10% of the circumference of the tank. [District Rule 4623, 5.3.2.1.1 and 5.4.1] Federally Enforceable Through Title V Permit
8. The cumulative length of all primary seal gaps greater than 1/8 inch shall not exceed 30% of the circumference of the tank. [District Rule 4623, 5.3.2.1.1 and 5.4.1] Federally Enforceable Through Title V Permit
9. No continuous gap in the primary seal greater than 1/8 inch wide shall exceed 10% of the tank circumference. [District Rule 4623, 5.3.2.1.1 and 5.4.1] Federally Enforceable Through Title V Permit
10. No gap between the tank shell and the secondary seal shall exceed 1/2 inch. [District Rule 4623, 5.3.2.1.2 and 5.4.1] Federally Enforceable Through Title V Permit
11. The cumulative length of all gaps between the tank shell and the secondary seal, greater than 1/8 inch shall not exceed 5% of the tank circumference. [District Rule 4623, 5.3.2.1.2 and 5.4.1] Federally Enforceable Through Title V Permit
12. The metallic shoe-type seal shall be installed so that one end of the shoe extends into the stored liquid and the other end extends a minimum vertical distance of 18 inches above the stored liquid surface. [District Rule 4623, 5.3.2.1.3 and 5.4.1] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

13. The geometry of the metallic-shoe type seal shall be such that the maximum gap between the shoe and the tank shell shall be no greater than 3 inches for a length of at least 18 inches in the vertical plane above the liquid. [District Rule 4623, 5.3.2.1.4 and 5.4.1] 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, 5.3.2.1.5 and 5.4.1] Federally Enforceable Through Title V Permit

15. The secondary seal shall allow easy insertion of probes of up to 1 1/2 inches in width in order to measure gaps in the primary seal. [District Rule 4623, 5.3.2.1.6 and 5.4.1] 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, 5.3.2.1.7 and 5.4.1] Federally Enforceable Through Title V Permit

17. All openings in the roof used for sampling and gauging 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 for sampling and gauging. [District Rule 4623, 5.5.2.1.2] 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 gas leak is defined as a reading in excess of 10,000 parts per million by volume (ppmv), as methane, above background on a portable hydrocarbon detection instrument that is calibrated with methane in accordance with the procedures specified in EPA Method 21. Liquid leak is defined as the dripping of organic liquid at a rate of more than 3 drops per minute. A reading in excess to 10,000 ppmv, as methane, above background, or dripping of organic liquid at a rate of more than 3 drops per minute, is a violation of this permit and Rule 4623 and shall be reported as a deviation. [District Rule 4623, 3.11, 3.17, 3.18 and 6.4.8] Federally Enforceable Through Title V Permit

19. 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 and 40 CFR 63.11087(a)] Federally Enforceable Through Title V Permit

20. Each opening in the internal floating roof except for leg sleeves, automatic bleeder vents, rim space vents, column wells, ladder wells, sample wells, combination manway/vacuum breakers, and stub drains 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

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, 5.5.2.1.3] Federally Enforceable Through Title V Permit

22. 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

23. 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

24. 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

25. The permittee shall notify the District in writing at least 30 days prior to conduct the visual inspection of the storage vessel, so the District can arrange an observer. [40 CFR 63.11087(c)] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

26. For newly constructed, repaired, or rebuilt internal floating roof tanks, 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. 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, 6.1.4.1 and 40 CFR 63.11087(c)] Federally Enforceable Through Title V Permit

27. The owner or operator shall perform a monthly leak inspection of all equipment in gasoline service, as defined in section 63.11100. For this inspection, detection methods incorporating sight, sound, and smell are acceptable. [40 CFR Part 63.11089(a)] Federally Enforceable Through Title V Permit

28. For monthly leak inspection, a log book shall be used and shall be signed by the owner or operator at the completion of each inspection. A section of the log book shall contain a list, summary description, or diagram(s) showing the location of all equipment in gasoline service at the facility. [40 CFR Part 63.11089(b)] Federally Enforceable Through Title V Permit

29. Each detection of a liquid or vapor leak shall be recorded in the log book. When a leak is detected, an initial attempt at repair shall be made as soon as practicable, but no later than 5 calendar days after the leak is detected. Repair or replacement of leaking equipment shall be completed within 15 calendar days after detection of each leak. Delay of repair of leaking equipment will be allowed if the repair is not feasible within 15 days. The owner or operator shall provide in the semiannual report the reason(s) why the repair was not feasible and the date each repair was completed. [40 CFR Part 63.11089(d)] Federally Enforceable Through Title V Permit

30. The owner or operator shall maintain a log book that contain the following information for a leak during during monthly inspection: 1.) equipment type and identification number; 2.) the nature of the leak (i.e. vapor or liquid) and the method of detection (i.e. sight, sound, or smell); 3.) the date the leak was detected and the date of each attempt to repair the leak; 4.) repair methods applied in each attempt to repair the leak; 5.) repair delayed and the reason for the delay if the leak is not repaired within 15 calendar days after discovery of the leak; 6) the expected date of successful repair of the leak if the leak is not repaired within 15 days; and 7.) the date of successful repair of the leak. [40 CFR 63.11089(g)] Federally Enforceable Through Title V Permit

31. The permittee shall visually inspect, through the manholes, roof hatches, or other opening 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, 6.1.4.2 and 40 CFR 63.11087(c)] Federally Enforceable Through Title V Permit

32. If any failure (i.e. visible organic liquid on the internal floating roof, tank walls or anywhere, holes or tears in the seal fabric) is detected during 12 month visual inspection, the permittee shall repair the items or empty and remove the storage vessel from service within 45 days. If the detected failure cannot be repaired within 45 days and if the vessel cannot be emptied within 45 days, a 30-day extension may be requested from the APCO in the inspection report. Such a request must document that alternate storage capacity is unavailable and specify a schedule of actions the company will take that will assure theat the control equipment will be repaired or the vessel will be emptied as soon as possible. [40 CFR 63.11087(c)] Federally Enforceable Through Title V Permit

33. The permittee shall visually inspect the internal floating roof, the primary seal, the secondary seal, gaskets, slotted memberanes and sleeve seals (if any) each time the vessel is emptied and degassed. If the internal floating roof has defects, the primary seal has holes, tears, or other openings in the seal or the seal fabric, or the secondary seal has holes, tears, or other openings in the seal or the seal fabric, or the gaskets no longer close off the liquid surfaces from the atmosphere, or the slotted membrane has more than 10 percent open area, the owner or operator shall repair the items as necessary so that none of the conditions specified in this paragraph exist before refilling the storage vessel. [40 CFR Part 63.11087(c)] Federally Enforceable Through Title V Permit

34. The owner or operator shall report the number of equipment leaks not repaired within 15 days after detection in a semi-annual report. [40 CFR 63.11089(g)] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

36. The operator shall determine the presence of gas leaks using portable hydrocarbon detection instrument in accordance with EPA Method 21. The instrument shall be calibrated before use each day of its use by the procedures specified in Method 21 using the following calibration gases: 1.) Zero air (less than 10 ppm of hydrocarbon in air); and 2.) A mixture of methane or n-hexane and air at a concentration of about, but less than, 10,000 ppm methane or n-hexane. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

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

38. The permittee shall conduct actual gap measurements of the primary seal and/or secondary seal at least once every 60 months. Other than the gap criteria specified by this permit, no holes, tears, or other openings are allowed that would permit the escape of hydrocarbon vapors. Any defects found shall constitute a violation of this rule. [District Rule 4623, 6.1.4.3 and 40 CFR 63.11087(c)] Federally Enforceable Through Title V Permit

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

40. The permittee shall determine the maximum true vapor pressure of the stored organic liquid on a monthly basis, using the calculation methodology listed in Appendix B of District Rule 4623. The permittee shall keep a record of all reid vapor pressure measurements for the stored organic liquid and shall use the highest recorded reid vapor pressure of the month when determining the maximum true vapor pressure. The permittee shall keep a record of the actual storage temperature of the organic storage tank and shall use the highest temperature recorded of the month when determining the maximum true vapor pressure. [District Rule 4623] Federally Enforceable Through Title V Permit

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

42. The permittee shall submit the reports of the floating roof tank inspections to the APCO within five calendar days after the completion of the inspection only for those tanks that failed to meet the applicable requirements of Rule 4623, Sections 5.2 through 5.5. The inspection report for tanks that that have been determined to be in compliance with the requirements of Sections 5.2 through 5.5 need not be submitted to the APCO, but the inspection report shall be kept on-site and made available upon request by the APCO. The inspection report shall contain all necessary information to demonstrate compliance with the provisions of this rule, including the following: 1.) Date of inspection and names and titles of company personnel doing the inspection; 2.) Tank identification number and Permit to Operate number; 3.) Measurements of the gaps between the tank shell and primary and secondary seals; 4.) Leak-free status of the tank and floating roof deck fittings. Records of the leak-free status shall include the vapor concentration values measured in ppmv. 5.) Data, supported by calculations, demonstrating compliance with the requirements specified in Sections 5.3, 5.4, 5.5.2.3.3, 5.5.2.4.2, and 5.5.2.4.3 of Rule 4623. 6.) Any corrective actions or repairs performed on the tank in order to comply with Rule 4623 and the date(s) such actions were taken. [District Rule 4623, 6.3.5 and 40 CFR 63.11087(e)] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

44. The following test methods shall be used: ASTM Method D287 for determining API Gravity, ASTM Method D4057 sampling for API Gravity testing; ASTM D323 for determining RVP, and converting RVP to TVP at the tank's maximum organic liquid storage temperature; ARB Method 422 for determining exempt halogenated VOCs in gases; EPA Method 21 for measuring gas-leak concentration. Should the owner or operator wish to use test methods other than the ones mentioned in this condition, the methods must be approved by the District prior to its use. [District Rule 4623,6.4] Federally Enforceable Through Title V Permit

45. Records of the cumulative annual organic liquid throughput shall be maintained and updated monthly. [District Rule 2201] Federally Enforceable Through Title V Permit

46. The permittee shall maintain records sufficient to demonstrate compliance with the daily VOC emission limit. These records shall contain the calculated emission quantity as well as each process variable used in the respective calculations/modeling. [District Rule 2080] Federally Enforceable Through Title V Permit

47. 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

# San Joaquin Valley
# Air Pollution Control District

**PERMIT UNIT:** N-829-18-8 **EXPIRATION DATE:** 11/30/2020

**EQUIPMENT DESCRIPTION:**
1,008,000 GALLON WELDED INTERNAL FLOATING ROOF ORGANIC LIQUID STORAGE TANK (#2402) WITH A PRIMARY MECHANICAL SHOE SEAL, A SECONDARY WIPER SEAL, AND A SOLID GUIDEPOLE

## PERMIT UNIT REQUIREMENTS

1. True vapor pressure (TVP) of the organic liquid stored shall be less than 11 psia. [District Rule 4623, 5.1.1] Federally Enforceable Through Title V Permit
2. VOC emissions shall not exceed 13.4 pounds in any one day. [District Rule 2201] Federally Enforceable Through Title V Permit
3. The organic liquid throughput shall not exceed 24,192,000 gallons in any one calendar year. [District Rule 2201] Federally Enforceable Through Title V Permit
4. The tank shall be equipped with a fixed roof with an internal floating type cover equipped with a continuous closure device between the tank wall and the cover edge. [40 CFR 60.112a(2) and 40 CFR 63.11087(a)] Federally Enforceable Through Title V Permit
5. 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 and 5.4.3, 40 CFR 60.112a(2) and 40 CFR 63.11087(a)] Federally Enforceable Through Title V Permit
6. Gaps between the tank shell and the primary seal shall exceed 1 1/2 inches. [District Rule 4623, 5.3.2.1.1 and 5.4.1] Federally Enforceable Through Title V Permit
7. The cumulative length of all gaps between the tank shell and the primary seal greater than 1/2 inch shall not exceed 10% of the circumference of the tank. [District Rule 4623, 5.3.2.1.1 and 5.4.1] Federally Enforceable Through Title V Permit
8. The cumulative length of all primary seal gaps greater than 1/8 inch shall not exceed 30% of the circumference of the tank. [District Rule 4623, 5.3.2.1.1 and 5.4.1] Federally Enforceable Through Title V Permit
9. No continuous gap in the primary seal greater than 1/8 inch wide shall exceed 10% of the tank circumference. [District Rule 4623, 5.3.2.1.1 and 5.4.1] Federally Enforceable Through Title V Permit
10. No gap between the tank shell and the secondary seal shall exceed 1/2 inch. [District Rule 4623, 5.3.2.1.2 and 5.4.1] Federally Enforceable Through Title V Permit
11. The cumulative length of all gaps between the tank shell and the secondary seal, greater than 1/8 inch shall not exceed 5% of the tank circumference. [District Rule 4623, 5.3.2.1.2 and 5.4.1] Federally Enforceable Through Title V Permit
12. The metallic shoe-type seal shall be installed so that one end of the shoe extends into the stored liquid and the other end extends a minimum vertical distance of 18 inches above the stored liquid surface. [District Rule 4623, 5.3.2.1.3 and 5.4.1] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

13. The geometry of the metallic-shoe type seal shall be such that the maximum gap between the shoe and the tank shell shall be no greater than 3 inches for a length of at least 18 inches in the vertical plane above the liquid. [District Rule 4623, 5.3.2.1.4 and 5.4.1] 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, 5.3.2.1.5 and 5.4.1] Federally Enforceable Through Title V Permit

15. The secondary seal shall allow easy insertion of probes of up to 1 1/2 inches in width in order to measure gaps in the primary seal. [District Rule 4623, 5.3.2.1.6 and 5.4.1] 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, 5.3.2.1.7 and 5.4.1] 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 for sampling or gauging. [District Rule 4623, 5.5.1] 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 gas leak is defined as a reading in excess of 10,000 parts per million by volume (ppmv), as methane, above background on a portable hydrocarbon detection instrument that is calibrated with methane in accordance with the procedures specified in EPA Method 21. Liquid leak is defined as the dripping of organic liquid at a rate of more than 3 drops per minute. A reading in excess to 10,000 ppmv, as methane, above background, or dripping of organic liquid at a rate of more than 3 drops per minute, is a violation of this permit and Rule 4623 and shall be reported as a deviation. [District Rule 4623, 3.11, 3.17, 3.18 and 6.4.8] Federally Enforceable Through Title V Permit

19. 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 and 40 CFR 63.11087(a)] Federally Enforceable Through Title V Permit

20. Each opening in the internal floating roof except for leg sleeves, automatic bleeder vents, rim space vents, column wells, ladder wells, sample wells, combination manway/vacuum breakers, and stub drains 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

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, 5.5.2.1.3] Federally Enforceable Through Title V Permit

22. 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

23. 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

24. 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

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

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

27. The gap between the pole wiper and the solid guidepole shall not exceed 1/2 inch. [District Rule 4623, 5.5.2.3.3] Federally Enforceable Through Title V Permit

28. The permittee shall notify the District in writing at least 30 days prior to conduct the visual inspection of the storage vessel, so the District can arrange an observer. [40 CFR 63.11087(c)] Federally Enforceable Through Title V Permit

29. For newly constructed, repaired, or rebuilt internal floating roof tanks, 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. 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, 6.1.4.1 and 40 CFR 63.11087(c)] Federally Enforceable Through Title V Permit

30. The owner or operator shall perform a monthly leak inspection of all equipment in gasoline service, as defined in section 63.11100. For this inspection, detection methods incorporating sight, sound, and smell are acceptable. [40 CFR Part 63.11089(a)] Federally Enforceable Through Title V Permit

31. For monthly leak inspection, a log book shall be used and shall be signed by the owner or operator at the completion of each inspection. A section of the log book shall contain a list, summary description, or diagram(s) showing the location of all equipment in gasoline service at the facility. [40 CFR Part 63.11089(b)] Federally Enforceable Through Title V Permit

32. Each detection of a liquid or vapor leak shall be recorded in the log book. When a leak is detected, an initial attempt at repair shall be made as soon as practicable, but no later than 5 calendar days after the leak is detected. Repair or replacement of leaking equipment shall be completed within 15 calendar days after detection of each leak. Delay of repair of leaking equipment will be allowed if the repair is not feasible within 15 days. The owner or operator shall provide in the semiannual report the reason(s) why the repair was not feasible and the date each repair was completed. [40 CFR Part 63.11089(d)] Federally Enforceable Through Title V Permit

33. The owner or operator shall maintain a log book that contain the following information for a leak during during monthly inspection: 1.) equipment type and identification number; 2.) the nature of the leak (i.e. vapor or liquid) and the method of detection (i.e. sight, sound, or smell); 3.) the date the leak was detected and the date of each attempt to repair the leak; 4.) repair methods applied in each attempt to repair the leak; 5.) repair delayed and the reason for the delay if the leak is not repaired within 15 calendar days after discovery of the leak; 6) the expected date of successful repair of the leak if the leak is not repaired within 15 days; and 7.) the date of successful repair of the leak. [40 CFR 63.11089(g)] Federally Enforceable Through Title V Permit

34. The permittee shall visually inspect, through the manholes, roof hatches, or other opening 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, 6.1.4.2 and 40 CFR 63.11087(c)] Federally Enforceable Through Title V Permit

35. If any failure (i.e. visible organic liquid on the internal floating roof, tank walls or anywhere, holes or tears in the seal fabric) is detected during 12 month visual inspection, the permittee shall repair the items or empty and remove the storage vessel from service within 45 days. If the detected failure cannot be repaired within 45 days and if the vessel cannot be emptied within 45 days, a 30-day extension may be requested from the APCO in the inspection report. Such a request must document that alternate storage capacity is unavailable and specify a schedule of actions the company will take that will assure theat the control equipment will be repaired or the vessel will be emptied as soon as possible. [40 CFR 63.11087(c)] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

36. The permittee shall visually inspect the internal floating roof, the primary seal, the secondary seal, gaskets, slotted memberanes and sleeve seals (if any) each time the vessel is emptied and degassed. If the internal floating roof has defects, the primary seal has holes, tears, or other openings in the seal or the seal fabric, or the secondary seal has holes, tears, or other openings in the seal or the seal fabric, or the gaskets no longer close off the liquid surfaces from the atmosphere, or the slotted membrane has more than 10 percent open area, the owner or operator shall repair the items as necessary so that none of the conditions specified in this paragraph exist before refilling the storage vessel. [40 CFR Part 63.11087(c)] Federally Enforceable Through Title V Permit

37. The owner or operator shall report the number of equipment leaks not repaired within 15 days after detection in a semi-annual report. [40 CFR 63.11089(g)] Federally Enforceable Through Title V Permit

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

39. The operator shall determine the presence of gas leaks using portable hydrocarbon detection instrument in accordance with EPA Method 21. The instrument shall be calibrated before use each day of its use by the procedures specified in Method 21 using the following calibration gases: 1.) Zero air (less than 10 ppm of hydrocarbon in air); and 2.) A mixture of methane or n-hexane and air at a concentration of about, but less than, 10,000 ppm methane or n-hexane. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

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

41. The permittee shall conduct actual gap measurements of the primary seal and/or secondary seal at least once every 60 months. Other than the gap criteria specified by this permit, no holes, tears, or other openings are allowed that would permit the escape of hydrocarbon vapors. Any defects found shall constitute a violation of this permit. [District Rule 4623, 6.1.4.3 and 40 CFR 63.11087(c)] Federally Enforceable Through Title V Permit

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

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

44. The operator shall keep a record of liquids stored in each container, period of storage, and the maximum true vapor pressure of the liquid during the respective storage period. [40 CFR 60.115a(a)] Federally Enforceable Through Title V Permit

45. The permittee shall determine the maximum true vapor pressure of the stored organic liquid on a monthly basis, using the calculation methodology listed in Appendix B of District Rule 4623. The permittee shall keep a record of all reid vapor pressure measurements for the stored organic liquid and shall use the highest recorded reid vapor pressure of the month when determining the maximum true vapor pressure. The permittee shall keep a record of the actual storage temperature of the organic storage tank and shall use the highest temperature recorded of the month when determining the maximum true vapor pressure. [District Rule 4623 and 40 CFR 60.115a(b)] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

46. The permittee shall submit the reports of the floating roof tank inspections to the APCO within five calendar days after the completion of the inspection only for those tanks that failed to meet the applicable requirements of Rule 4623, Sections 5.2 through 5.5. The inspection report for tanks that that have been determined to be in compliance with the requirements of Sections 5.2 through 5.5 need not be submitted to the APCO, but the inspection report shall be kept on-site and made available upon request by the APCO. The inspection report shall contain all necessary information to demonstrate compliance with the provisions of this rule, including the following: 1.) Date of inspection and names and titles of company personnel doing the inspection; 2.) Tank identification number and Permit to Operate number; 3.) Measurements of the gaps between the tank shell and primary and secondary seals; 4.) Leak-free status of the tank and floating roof deck fittings. Records of the leak-free status shall include the vapor concentration values measured in ppmv. 5.) Data, supported by calculations, demonstrating compliance with the requirements specified in Sections 5.3, 5.4, 5.5.2.3.3, 5.5.2.4.2, and 5.5.2.4.3 of Rule 4623. 6.) Any corrective actions or repairs performed on the tank in order to comply with Rule 4623 and the date(s) such actions were taken. [District Rule 4623, 6.3.5 and 40 CFR 63.11087(e)] Federally Enforceable Through Title V Permit

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

48. The following test methods shall be used: ASTM Method D287 for determining API Gravity, ASTM Method D4057 sampling for API Gravity testing; ASTM D323 for determining RVP, and converting RVP to TVP at the tank's maximum organic liquid storage temperature; ARB Method 422 for determining exempt halogenated VOCs in gases; EPA Method 21 for measuring gas-leak concentration. Should the owner or operator wish to use test methods other than the ones mentioned in this condition, the methods must be approved by the District prior to its use. [District Rule 4623, 6.4] Federally Enforceable Through Title V Permit

49. Records of the cumulative annual organic liquid throughput shall be maintained and updated monthly. [District Rule 2201] Federally Enforceable Through Title V Permit

50. The permittee shall maintain records sufficient to demonstrate compliance with the daily VOC emission limit. These records shall contain the calculated emission quantity as well as each process variable used in the respective calculations/modeling. [District Rule 2080] Federally Enforceable Through Title V Permit

51. 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

# San Joaquin Valley
# Air Pollution Control District

**PERMIT UNIT:** N-829-20-9 **EXPIRATION DATE:** 11/30/2020

**EQUIPMENT DESCRIPTION:**
VAPOR COMBUSTION SYSTEM CONSISTING OF A 300,000 GALLON VAPOR HOLDING TANK, A VAPOR PROCESSING AND CONVEYING SYSTEM, AND A 40 MMBTU/HR PROPANE FIRED JOHN ZINK ZCT-2-8-35-X-2/8-X VAPOR COMBUSTION UNIT (VCU)

## PERMIT UNIT REQUIREMENTS

1. The VOC destruction efficiency shall be at least 99% and all gasoline loading shall be conducted utilizing bottom loading and dry-break couplers. [District Rule 4102]
2. Gasoline shall be loaded only into vapor tight tank trucks. [40 CFR Part 60.502(e)] Federally Enforceable Through Title V Permit
3. The facility shall obtain the vapor tightness documentation specified in 40 CFR Part 60.505(b) for each gasoline tank truck that is to be loaded at the facility. [40 CFR Part 60.502(e)(1)] Federally Enforceable Through Title V Permit
4. VOC emissions from the vapor recovery system shall not exceed 0.08 pounds per thousand gallons of gasoline loaded. [District Rules 4624, 5.1.1, San Joaquin County Rule 412, and 40 CFR 63.11088(a)] Federally Enforceable Through Title V Permit
5. The vapor collection system shall be operated in a manner to prevent any organic vapors collected at one loading rack from passing to another loading rack. [40 CFR 63.11088(a)] Federally Enforceable Through Title V Permit
6. The vapor collection and control system shall operate such that the pressure in the delivery tank being loaded does not exceed 18 inches water column pressure and 6 inches water column vacuum. [District Rule 4624] Federally Enforceable Through Title V Permit
7. The combined quantity of gasoline loaded through permit units N-829-1 and N-829-2 shall not exceed 756,000,000 gallons during any one calendar year. This annual limit shall be lowered in the event that the CARB certifies the vapor recovery system can process VOC emissions with a daily gasoline throughput of less than 2,071,233 gallons. [District Rule 2201] Federally Enforceable Through Title V Permit
8. The combined quantity of gasoline loaded through permit units N-829-1 and N-829-2 shall not exceed 2,071,233 gallons during any one day. [District Rule 2201] Federally Enforceable Through Title V Permit
9. The vapor combustor's combustion chamber shall be configured to operate with logic controls set to shut the vapor combustor system down and close the block valve to receiving vapors if the operating temperature does not reach a minimum of 900 degrees Fahrenheit within 10 minutes. [District Rules 2201, 4102, and 40 CFR 63.11088(d)] Federally Enforceable Through Title V Permit
10. The vapor combustor shall be equipped for continuous monitoring and recording of combustion temperature. Temperature charts shall be made available to the District upon request. [District Rule 2201, 40 CFR Part 64 and 40 CFR 63.11088(d)] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

11. Should the vapor combustor's operating temperature fall below 900 degrees Fahrenheit, the permittee shall investigate the cause and take corrective action to return the operating temperature to an acceptable level as soon as possible, but no longer than one hour after initial detection. If the operating temperature cannot be raised to an acceptable value within one hour after detection, the permittee shall notify the District within the following hour and conduct a certified source test within 60 days of initial detection. In lieu of conducting a source test, the permittee may stipulate a violation that is subject to enforcement action has occurred. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviation is a 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. [40 CFR Part 64] Federally Enforceable Through Title V Permit

12. Loading and vapor collection and control equipment shall be designed, installed, maintained, and operated such that there are no leaks. A leak is defined as the dripping of organic compounds at a rate of more than three drops per minute or the detection of organic compounds, in excess of 10,000 ppm as methane measured at a distance of one centimeter from potential source in accordance with EPA Method 21. [District Rule 4624 and San Joaquin County Rule 412] Federally Enforceable Through Title V Permit

13. The vapor collection system, the vapor destruction device and each transfer rack shall be tested for leaks at least once every calendar quarter with a portable hydrocarbon analyzer in accordance with EPA Method 21. [District Rule 4624] Federally Enforceable Through Title V Permit

14. The equipment that are found leaking shall be repair or replaced within 72 hours after detecting the leakage. If the leaking component cannot be repaired or replaced within 72 hours, the component shall be taken out of service until such time the component is repaired or replaced. The repaired or replacement equipment shall be reinspected the first time the equipment is in operation after the repair or replacement. [District Rule 4624] Federally Enforceable Through Title V Permit

15. Each calendar month, the vapor collection system, the vapor processing system and each loading rack handling gasoline shall be inspected during the loading of gasoline tank trucks for organic liquid and organic vapor leaks. For the purpose of this condition, detection methods incorporating sight, sound and smell are acceptable. Each detection of a leak shall be recorded and the source of the leak repaired within 15 days after it is detected. [40 CFR Part 60.502(j) and 40 CFR Part 63.11089(a)] Federally Enforceable Through Title V Permit

16. A log book shall be used and shall be signed by the owner or operator at the completion of each inspection. A section of the log book shall contain a list, summary description, or diagram(s) showing the location of all equipment in gasoline service at the facility. [40 CFR Part 63.11089(b)] Federally Enforceable Through Title V Permit

17. Each detection of a liquid or vapor leak shall be recorded in the log book. When a leak is detected, an initial attempt at repair shall be made as soon as practicable, but no later than 5 calendar days after the leak is detected. Repair or replacement of leaking equipment shall be completed within 15 calendar days after detection of each leak. Delay of repair of leaking equipment will be allowed if the repair is not feasible within 15 days. The owner or operator shall provide in the semiannual report the reason(s) why the repair was not feasible and the date each repair was completed. [40 CFR Part 63.11089(d)] Federally Enforceable Through Title V Permit

18. The owner or operator shall maintain a log book that contain the following information: 1.) dates of leak inspections, 2.) the nature of the leak (i.e. vapor or liquid) and the method of detection; 3.) findings, 4.) corrective action, 5.) repair methods applied in each attempt to repair the leak; 6.) repair delayed and the reason for the delay if the leak is not repaired within 15 calendar days after discovery of the leak; 7.) the expected date of successful repair of the leak if the leak is not repaired within 15 days; 8.) the date of successful repair of the leak; and 9.) inspector name and signature. [District Rule 4624, 40 CFR Part 60.505 (c) and 40 CFR 63.11089(g)] Federally Enforceable Through Title V Permit

19. The owner or operator shall report the number of equipment leaks not repaired within 15 days after detection in a semi-annual report. [40 CFR 63.11089(g)] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

20. During source testing the loading rack's vapor collection and control system (VCCS) shall be tested at every loading position to demonstrate the pressure in the delivery tanks being loaded complies with the requirements specified in this permit. Compliance shall be determined by calibrating and installing a liquid manometer, magnehelic device, or other instrument demonstrated to be equivalent, capable of measuring up to 500 mm water gauge pressure with a precision of 2.5 mm water gauge, on the terminal's VCCS at a pressure tap as close as possible to the connection with the product tank truck. The highest instantaneous pressure measurement as well as all pressure measurements at 5 minute intervals during delivery vessel loading must be recorded. [District Rule 2520 and 40 CFR 60.503(d)] Federally Enforceable Through Title V Permit
21. Source testing to determine compliance with the emission rate and VOC destruction efficiency requirements of this permit shall be conducted at least once every 60 months. [District Rules 2201 and 4624] Federally Enforceable Through Title V Permit
22. Source testing shall be conducted using methods and procedures approved by District. The District must be notified 30 days prior to any compliance source testing and a pretest plan outlining the test methods and procedures shall be submitted for the District approval no later than 15 days prior to each test. [District Rule 1081] Federally Enforceable Through Title V Permit
23. Source testing shall be witnessed or authorized by District Personnel. [District Rule 1081] Federally Enforceable Through Title V Permit
24. VOC emissions from the vapor collection and control system shall be determined using 40 CFR 60.503 "Test Methods and Procedures" and EPA Reference Methods 2A, 2B, 25A, 25B, and ARB Method 422, or ARB Test Procedure TP-203.1. [District Rule 4624 and San Joaquin County Rule 412] Federally Enforceable Through Title V Permit
25. Source testing for VOC destruction efficiency shall be conducted utilizing EPA Method 18, EPA Method 25A or CARB Method 100. Alternative methods may be utilized provided they are previously approved by the District, in writing. [District Rules 2201 and 4102] Federally Enforceable Through Title V Permit
26. 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
27. A log of all breakdowns of the vapor recovery system indicating the times, dates and gallons processed during the breakdown periods shall be maintained on the premises at all times and shall be made available for District inspection upon request. [District Rule 2520] Federally Enforceable Through Title V Permit
28. A record of the daily quantity of gasoline loaded from the loading racks operating under Permits to Operate N-829-1 and N-829-2 shall be kept. [District Rules 2520, 4624] Federally Enforceable Through Title V Permit
29. A record of the cumulative annual quantity of gasoline loaded from the loading racks operating under Permits to Operate N-829-1 and N-829-2 shall be kept. The record shall be updated at least monthly. [District Rule 2520] Federally Enforceable Through Title V Permit
30. Documentation attesting to the vapor tightness of each truck loaded with gasoline shall be kept. The documentation file for each tank truck shall be updated at least once per year to reflect the current test results as determined by EPA method 27. [40 CFR Part 60.5059(a) and 40 CFR 63.11094(b)] Federally Enforceable Through Title V Permit
31. The semi-annual compliance report shall include each loading of a gasoline cargo tank for which vapor tightness documentation had not been previously obtained by the facility. [40 CFR 63.11088(f)] Federally Enforceable Through Title V Permit
32. All records shall be maintained and retained on-site for a period of at least 5 years and shall be made available for District inspection upon request. [District Rules 1070, 4624] Federally Enforceable Through Title V Permit

# San Joaquin Valley
# Air Pollution Control District

**PERMIT UNIT:** N-829-21-5 **EXPIRATION DATE:** 11/30/2020

**EQUIPMENT DESCRIPTION:**
1,328,124 GALLON WELDED INTERNAL FLOATING ROOF STORAGE TANK (#3302) WITH A MECHANICAL SHOE PRIMARY SEAL, A WIPER SECONDARY SEAL AND A SLOTTED GUIDEPOLE

## PERMIT UNIT REQUIREMENTS

1. True vapor pressure of the organic liquid stored shall be less than 11 psia. [District Rule 4623, 5.1.1] Federally Enforceable Through Title V Permit
2. The tank shall be equipped with a fixed roof with an internal floating type cover equipped with a continuous closure device between the tank wall and the cover edge. [40 CFR 60.112a(2) and 40 CFR 63.11087(a)] Federally Enforceable Through Title V Permit
3. 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 and 5.4.3, 40 CFR 60.112a(2) and 40 CFR 63.11087(a)] Federally Enforceable Through Title V Permit
4. Gaps between the tank shell and the primary seal shall not exceed 1 1/2 inches. [District Rule 4653, 5.3.2.1.1 and 5.4.1] Federally Enforceable Through Title V Permit
5. The cumulative length of all gaps between the tank shell and the primary seal greater than 1/2 inch shall not exceed 10% of the circumference of the tank. [District Rule 4623, 5.3.2.1.1 and 5.4.1] Federally Enforceable Through Title V Permit
6. The cumulative length of all primary seal gaps greater than 1/8 inch shall not exceed 30% of the circumference of the tank. [District Rule 4623, 5.3.2.1.1 and 5.4.1] Federally Enforceable Through Title V Permit
7. No continuous gap in the primary seal greater than 1/8 inch wide shall exceed 10% of the tank circumference. [District Rule 4623, 5.3.2.1.1 and 5.4.1] Federally Enforceable Through Title V Permit
8. No gap between the tank shell and the secondary seal shall exceed 1/2 inch. [District Rule 4623, 5.3.2.1.2 and 5.4.1] Federally Enforceable Through Title V Permit
9. The cumulative length of all gaps between the tank shell and the secondary seal, greater than 1/8 inch shall not exceed 5% of the tank circumference. [District Rule 4623, 5.3.2.1.2 and 5.4.1] Federally Enforceable Through Title V Permit
10. 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, 5.3.2.1.3 and 5.4.1] Federally Enforceable Through Title V Permit
11. The geometry of the metallic-shoe type seal shall be such that the maximum gap between the shoe and the tank shell shall be no greater than 3 inches for a length of at least 18 inches in the vertical plane above the liquid. [District Rule 4623, 5.3.2.1.4 and 5.4.1] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

12. There shall be no holes, tears, or openings in the secondary seal or in the primary seal envelope that surrounds the annular vapor space enclosed by the roof edge, seal fabric, and secondary seal. [District Rule 4623, 5.3.2.1.5 and 5.4.1] Federally Enforceable Through Title V Permit

13. The secondary seal shall allow easy insertion of probes of up to 1 1/2 inches in width in order to measure gaps in the primary seal. [District Rule 4623, 5.3.2.1.6 and 5.4.1] Federally Enforceable Through Title V Permit

14. The secondary seal shall extend from the roof to the tank shell and shall not be attached to the primary seal. [District Rule 4623, 5.3.2.1.7 and 5.4.1] Federally Enforceable Through Title V Permit

15. All openings in the roof used for sampling and gauging 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 for sampling or gauging. [District Rule 4623, 5.5.1] 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 gas leak is defined as a reading in excess of 10,000 parts per million by volume (ppmv), as methane, above background on a portable hydrocarbon detection instrument that is calibrated with methane in accordance with the procedures specified in EPA Method 21. Liquid leak is defined as the dripping of organic liquid at a rate of more than 3 drops per minute. A reading in excess to 10,000 ppmv, as methane, above background, or dripping of organic liquid at a rate of more than 3 drops per minute, is a violation of this permit and Rule 4623 and shall be reported as a deviation. [District Rule 4623, 3.11, 3.17, 3.18 and 6.4.8] 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, 5.5.2.1.1 and 40 CFR 63.11087(a)] 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, combination manway/vacuum breakers, 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

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, 5.5.2.1.3] 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, 5.5.2.1.4] 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, 5.5.2.1.5] 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, 5.5.2.1.6] Federally Enforceable Through Title V Permit

23. All slotted sampling or gauging 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

24. 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 not exceed 1/8 inch. [District Rule 4623, 5.5.2.4.3] Federally Enforceable Through Title V Permit

25. The permittee shall notify the District in writing at least 30 days prior to conduct the visual inspection of the storage vessel, so the District can arrange an observer. [40 CFR 63.11087(c)] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

26. For newly constructed, repaired, or rebuilt internal floating roof tanks, 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. 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, 6.1.4.1 and 40 CFR 63.11087(c)] Federally Enforceable Through Title V Permit

27. The owner or operator shall perform a monthly leak inspection of all equipment in gasoline service, as defined in section 63.11100. For this inspection, detection methods incorporating sight, sound, and smell are acceptable. [40 CFR Part 63.11089(a)] Federally Enforceable Through Title V Permit

28. For monthly leak inspection, a log book shall be used and shall be signed by the owner or operator at the completion of each inspection. A section of the log book shall contain a list, summary description, or diagram(s) showing the location of all equipment in gasoline service at the facility. [40 CFR Part 63.11089(b)] Federally Enforceable Through Title V Permit

29. Each detection of a liquid or vapor leak shall be recorded in the log book. When a leak is detected, an initial attempt at repair shall be made as soon as practicable, but no later than 5 calendar days after the leak is detected. Repair or replacement of leaking equipment shall be completed within 15 calendar days after detection of each leak. Delay of repair of leaking equipment will be allowed if the repair is not feasible within 15 days. The owner or operator shall provide in the semiannual report the reason(s) why the repair was not feasible and the date each repair was completed. [40 CFR Part 63.11089(d)] Federally Enforceable Through Title V Permit

30. The owner or operator shall maintain a log book that contain the following information for a leak during during monthly inspection: 1.) equipment type and identification number; 2.) the nature of the leak (i.e. vapor or liquid) and the method of detection (i.e. sight, sound, or smell); 3.) the date the leak was detected and the date of each attempt to repair the leak; 4.) repair methods applied in each attempt to repair the leak; 5.) repair delayed and the reason for the delay if the leak is not repaired within 15 calendar days after discovery of the leak; 6) the expected date of successful repair of the leak if the leak is not repaired within 15 days; and 7.) the date of successful repair of the leak. [40 CFR 63.11089(g)] Federally Enforceable Through Title V Permit

31. The permittee shall visually inspect, through the manholes, roof hatches, or other opening 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, 6.1.4.2 and 40 CFR 63.11087(c)] Federally Enforceable Through Title V Permit

32. If any failure (i.e. visible organic liquid on the internal floating roof, tank walls or anywhere, holes or tears in the seal fabric) is detected during 12 month visual inspection, the permittee shall repair the items or empty and remove the storage vessel from service within 45 days. If the detected failure cannot be repaired within 45 days and if the vessel cannot be emptied within 45 days, a 30-day extension may be requested from the APCO in the inspection report. Such a request must document that alternate storage capacity is unavailable and specify a schedule of actions the company will take that will assure theat the control equipment will be repaired or the vessel will be emptied as soon as possible. [40 CFR 63.11087(c)] Federally Enforceable Through Title V Permit

33. The permittee shall visually inspect the internal floating roof, the primary seal, the secondary seal, gaskets, slotted memberanes and sleeve seals (if any) each time the vessel is emptied and degassed. If the internal floating roof has defects, the primary seal has holes, tears, or other openings in the seal or the seal fabric, or the secondary seal has holes, tears, or other openings in the seal or the seal fabric, or the gaskets no longer close off the liquid surfaces from the atmosphere, or the slotted membrane has more than 10 percent open area, the owner or operator shall repair the items as necessary so that none of the conditions specified in this paragraph exist before refilling the storage vessel. [40 CFR Part 63.11087(c)] Federally Enforceable Through Title V Permit

34. The owner or operator shall report the number of equipment leaks not repaired within 15 days after detection in a semi-annual report. [40 CFR 63.11089(g)] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

36. The operator shall determine the presence of gas leaks using portable hydrocarbon detection instrument in accordance with EPA Method 21. The instrument shall be calibrated before use each day of its use by the procedures specified in Method 21 using the following calibration gases: 1.) Zero air (less than 10 ppm of hydrocarbon in air); and 2.) A mixture of methane or n-hexane and air at a concentration of about, but less than, 10,000 ppm methane or n-hexane. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

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

38. The permittee shall conduct actual gap measurements of the primary seal and/or secondary seal at least once every 60 months. Other than the gap criteria specified by this permit, no holes, tears, or other openings are allowed that would permit the escape of hydrocarbon vapors. Any defects found shall constitute a violation of this permit. [District Rule 4623, 6.1.4.3 and 40 CFR 63.11087(c)] Federally Enforceable Through Title V Permit

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

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

41. The operator shall keep a record of liquids stored in each container, period of storage, and the maximum true vapor pressure of the liquid during the respective storage period. [40 CFR 60.115a(a)] Federally Enforceable Through Title V Permit

42. The permittee shall determine the maximum true vapor pressure of the stored organic liquid on a monthly basis, using the calculation methodology listed in Appendix B of District Rule 4623. The permittee shall keep a record of all reid vapor pressure measurements for the stored organic liquid and shall use the highest recorded reid vapor pressure of the month when determining the maximum true vapor pressure. The permittee shall keep a record of the actual storage temperature of the organic storage tank and shall use the highest temperature recorded of the month when determining the maximum true vapor pressure. [40 CFR 60.115a(b)] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

43. The permittee shall submit the reports of the floating roof tank inspections to the APCO within five calendar days after the completion of the inspection only for those tanks that failed to meet the applicable requirements of Rule 4623, Sections 5.2 through 5.5. The inspection report for tanks that that have been determined to be in compliance with the requirements of Sections 5.2 through 5.5 need not be submitted to the APCO, but the inspection report shall be kept on-site and made available upon request by the APCO. The inspection report shall contain all necessary information to demonstrate compliance with the provisions of this rule, including the following: 1.) Date of inspection and names and titles of company personnel doing the inspection; 2.) Tank identification number and Permit to Operate number; 3.) Measurements of the gaps between the tank shell and primary and secondary seals; 4.) Leak-free status of the tank and floating roof deck fittings. Records of the leak-free status shall include the vapor concentration values measured in ppmv. 5.) Data, supported by calculations, demonstrating compliance with the requirements specified in Sections 5.3, 5.4, 5.5.2.3.3, 5.5.2.4.2, and 5.5.2.4.3 of Rule 4623. 6.) Any corrective actions or repairs performed on the tank in order to comply with Rule 4623 and the date(s) such actions were taken. [District Rule 4623, 6.3.5 and 40 CFR 63.11087(e)] Federally Enforceable Through Title V Permit

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

45. The following test methods shall be used: ASTM Method D287 for determining API Gravity, ASTM Method D4057 sampling for API Gravity testing; ASTM D323 for determining RVP, and converting RVP to TVP at the tank's maximum organic liquid storage temperature; ARB Method 422 for determining exempt halogenated VOCs in gases; EPA Method 21 for measuring gas-leak concentration. Should the owner or operator wish to use test methods other than the ones mentioned in this condition, the methods must be approved by the District prior to its use. [District Rule 4623, 6.4] Federally Enforceable Through Title V Permit

46. The operator shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rules 4623, 6.3 and 2520, 9.4.2] Federally Enforceable Through Title V Permit

47. There shall be no vapor space between the internal floating pan and the liquid surface. [District NSR Rule] Federally Enforceable Through Title V Permit

48. At least 95% of all hydrocarbon vapors generated during the storage and the working of the storage tank shall be prevented from entrainment into the atmosphere. [District NSR Rule] Federally Enforceable Through Title V Permit

49. The permittee shall maintain records sufficient to demonstrate compliance with the daily VOC emission limit. These records shall contain the calculated emission quantity as well as each process variable used in the respective calculations/modeling. [District Rule 2080] Federally Enforceable Through Title V Permit

50. The internal floating roof supports, manholes, automatic bleeder vents, rim vents, gauge wells, etc., shall be covered with foam seal in a manner which prevents any gap. [District NSR Rule] Federally Enforceable Through Title V Permit

# San Joaquin Valley
# Air Pollution Control District

**PERMIT UNIT:** N-829-22-5 **EXPIRATION DATE:** 11/30/2020

**EQUIPMENT DESCRIPTION:**
1,218,000 GALLON WELDED INTERNAL FLOATING ROOF STORAGE TANK (#3303) WITH A WIPER PRIMARY SEAL AND A SLOTTED GUIDEPOLE

## PERMIT UNIT REQUIREMENTS

1. True vapor pressure of the organic liquid stored shall be less than 11 psia. [District Rule 4623, 5.1.1] Federally Enforceable Through Title V Permit
2. The tank shall be equipped with a fixed roof with an internal floating type cover equipped with one of the following closure devices between the tank wall and the cover edge: 1) A foam- or liquid-filled seal mounted in contact with the liquid (liquid-mounted seal); 2) Two seals mounted one above the other so that each forms a continuous closure that completely covers the space between the wall of the storage vessel and the edge of the internal floating roof; or 3) A mechanical shoe seal. [40 CFR 60.112b(a)(1)(ii) and 40 CFR 63.11087(a)] Federally Enforceable Through Title V Permit
3. The internal floating roof shall float on the surface of the stored liquid at all times (i.e., off the roof leg supports) except during the initial fill until the roof is lifted off the leg supports and when the tank is completely emptied and subsequently refilled. When the roof is resting on the leg supports, the process of filling, emptying, or refilling shall be continuous and shall be accomplished as rapidly as possible. Whenever the permittee intends to land the roof on it's legs, the permittee shall notify the APCO in writing at least five calendar days prior to performing the work. The tank must be in compliance with this rule before it may land on its legs. [District Rule 4623, 5.3.1.3 and 5.4.3, 40 CFR 60.112b(a)(1)(i) and 40 CFR 63.11087(a)] Federally Enforceable Through Title V Permit
4. The tank shall be equipped with an Ultraflote, model Single Ultraseal, wiper primary seal. [District Rule 4623, 5.4.2 and 40 CFR 63.11087(a)] Federally Enforceable Through Title V Permit
5. No gap between the tank shell and the seal shell shall exceed 0.06 inch. [District Rule 4623, 3.37 and 5.4.2.1] Federally Enforceable Through Title V Permit
6. The cumulative length of all gaps exceeding 0.02 inch shall not be more than 5% of the circumference of the tank, excluding gaps less than 1.79 inches from vertical seams. [District Rule 4623, 3.37 and 5.4.2.1] Federally Enforceable Through Title V Permit
7. All openings in the roof used for sampling and gauging shall provide a projection below the liquid surface to prevent belching of liquid and to prevent entrained or formed organic vapor from escaping from the liquid contents of the tank and shall be equipped with a cover, seal or lid. The cover seal or lid shall be in a closed position, with no visible gaps and be leak-free, except when the device or appurtenance is in use for sampling or gauging. [District Rule 4623, 5.5.1] Federally Enforceable Through Title V Permit
8. A leak-free condition is defined as a condition without a gas leak or a liquid leak. A gas leak is defined as a reading in excess of 10,000 parts per million by volume (ppmv), as methane, above background on a portable hydrocarbon detection instrument that is calibrated with methane in accordance with the procedures specified in EPA Method 21. Liquid leak is defined as the dripping of organic liquid at a rate of more than 3 drops per minute. A reading in excess to 10,000 ppmv, as methane, above background, or dripping of organic liquid at a rate of more than 3 drops per minute, is a violation of this permit and Rule 4623 and shall be reported as a deviation. [District Rule 4623, 3.11, 3.17, 3.18 and 6.4.8] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

9. 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, 40 CFR 60.112b(a)(1)(iii) and 40 CFR 63.11087(a)] Federally Enforceable Through Title V Permit

10. Each opening in the internal floating roof except for leg sleeves, automatic bleeder vents, rim space vents, column wells, ladder wells, sample wells, combination manway/vacuum breakers, and stub drains shall be equipped with a cover, or a lid shall be maintained in a closed position at all times (i.e. no visible gaps) except when the device is in use. The cover or lid shall be equipped with a gasket. Covers on each access hatch and automatic gauge float well shall be bolted in place except when they are in use. [District Rule 4623, 5.5.2.1.2 and 40 CFR 60.112b(a)(1)(iv)] Federally Enforceable Through Title V Permit

11. Automatic bleeder vents shall be equipped with a gasket and shall be closed at all times when the roof is floating except when the roof is being floated off or is being landed on the leg roof supports. [District Rule 4623, 5.5.2.1.3 and 40 CFR 60.112b(a)(1)(v)] Federally Enforceable Through Title V Permit

12. Rim vents shall be equipped with a gasket and shall 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 and 40 CFR 60.112b(a)(1)(vi)] Federally Enforceable Through Title V Permit

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

14. Each penetration of the internal floating roof that allows for the 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 and 40 CFR 60.112b(a)(1)(viii)] Federally Enforceable Through Title V Permit

15. Each penetration of the internal floating roof that allows for passage of a ladder shall have a gasketed sliding cover. [40 CFR 60.112b(a)(1)(ix)] Federally Enforceable Through Title V Permit

16. All slotted sampling or gauging 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

17. The gap between the pole wiper and the slotted guidepole shall not exceed 1/8 inch. [District Rule 4623, 5.5.2.4.3] Federally Enforceable Through Title V Permit

18. The permittee shall notify the District in writing at least 30 days prior to conduct the visual inspection of the storage vessel, so the District can arrange an observer. [40 CFR 63.11087(c)] Federally Enforceable Through Title V Permit

19. For newly constructed, repaired, or rebuilt internal floating roof tanks, 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. 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, 6.1.4.1, 40 CFR 60.113b(a)(1) and 40 CFR 63.11087(c)] Federally Enforceable Through Title V Permit

20. The owner or operator shall perform a monthly leak inspection of all equipment in gasoline service, as defined in section 63.11100. For this inspection, detection methods incorporating sight, sound, and smell are acceptable. [40 CFR Part 63.11089(a)] Federally Enforceable Through Title V Permit

21. For monthly leak inspection, a log book shall be used and shall be signed by the owner or operator at the completion of each inspection. A section of the log book shall contain a list, summary description, or diagram(s) showing the location of all equipment in gasoline service at the facility. [40 CFR Part 63.11089(b)] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

22. Each detection of a liquid or vapor leak shall be recorded in the log book. When a leak is detected, an initial attempt at repair shall be made as soon as practicable, but no later than 5 calendar days after the leak is detected. Repair or replacement of leaking equipment shall be completed within 15 calendar days after detection of each leak. Delay of repair of leaking equipment will be allowed if the repair is not feasible within 15 days. The owner or operator shall provide in the semiannual report the reason(s) why the repair was not feasible and the date each repair was completed. [40 CFR Part 63.11089(d)] Federally Enforceable Through Title V Permit

23. The owner or operator shall maintain a log book that contain the following information for a leak during during monthly inspection: 1.) equipment type and identification number; 2.) the nature of the leak (i.e. vapor or liquid) and the method of detection (i.e. sight, sound, or smell); 3.) the date the leak was detected and the date of each attempt to repair the leak; 4.) repair methods applied in each attempt to repair the leak; 5.) repair delayed and the reason for the delay if the leak is not repaired within 15 calendar days after discovery of the leak; 6) the expected date of successful repair of the leak if the leak is not repaired within 15 days; and 7.) the date of successful repair of the leak. [40 CFR 63.11089(g)] Federally Enforceable Through Title V Permit

24. The permittee shall visually inspect, through the manholes, roof hatches, or other opening 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, 6.1.4.2, 40 CFR 60.113b(a)(2) and 40 CFR 63.11087(c)] Federally Enforceable Through Title V Permit

25. If any failure (i.e. visible organic liquid on the internal floating roof, tank walls or anywhere, holes or tears in the seal fabric) is detected during 12 month visual inspection, the permittee shall repair the items or empty and remove the storage vessel from service within 45 days. If the detected failure cannot be repaired within 45 days and if the vessel cannot be emptied within 45 days, a 30-day extension may be requested from the APCO in the inspection report. Such a request must document that alternate storage capacity is unavailable and specify a schedule of actions the company will take that will assure theat the control equipment will be repaired or the vessel will be emptied as soon as possible. [40 CFR 63.11087(c)] Federally Enforceable Through Title V Permit

26. The permittee shall visually inspect the internal floating roof, the primary seal, the secondary seal, gaskets, slotted memberanes and sleeve seals (if any) each time the vessel is emptied and degassed. If the internal floating roof has defects, the primary seal has holes, tears, or other openings in the seal or the seal fabric, or the secondary seal has holes, tears, or other openings in the seal or the seal fabric, or the gaskets no longer close off the liquid surfaces from the atmosphere, or the slotted membrane has more than 10 percent open area, the owner or operator shall repair the items as necessary so that none of the conditions specified in this paragraph exist before refilling the storage vessel. [40 CFR Part 63.11087(c)] Federally Enforceable Through Title V Permit

27. The permittee shall maintain records of all visual inspections required by this permit. Each record shall identify the storage vessel on which the inspection was performed, the date the vessel was inspected and the observed condition of each component of the control equipment (seals, internal floating roof, and fittings). [40 CFR 60.115b(a)(2)] Federally Enforceable Through Title V Permit

28. The owner or operator shall report the number of equipment leaks not repaired within 15 days after detection in a semi-annual report. [40 CFR 63.11089(g)] Federally Enforceable Through Title V Permit

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

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

30. The operator shall determine the presence of gas leaks using portable hydrocarbon detection instrument in accordance with EPA Method 21. The instrument shall be calibrated before use each day of its use by the procedures specified in Method 21 using the following calibration gases: 1.) Zero air (less than 10 ppm of hydrocarbon in air); and 2.) A mixture of methane or n-hexane and air at a concentration of about, but less than, 10,000 ppm methane or n-hexane. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

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

32. The permittee shall conduct actual gap measurements of the primary seal and/or secondary seal at least once every 60 months. Other than the gap criteria specified by this permit, no holes, tears, or other openings are allowed that would permit the escape of hydrocarbon vapors. Any defects found shall constitute a violation of this permit. [District Rule 4623, 6.1.4.3 and 40 CFR 63.11087(c)] Federally Enforceable Through Title V Permit

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

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

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

36. The operator shall keep a record of the liquids stored in this container, the period of storage, and the maximum true vapor pressure (TVP) of that liquid during the respective storage period. [40 CFR 60.116b(c)] Federally Enforceable Through Title V Permit

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

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

39. The permittee shall determine the maximum true vapor pressure of the stored organic liquid on a monthly basis, using the calculation methodology listed in Appendix B of District Rule 4623. The permittee shall keep a record of all reid vapor pressure measurements for the stored organic liquid and shall use the highest recorded reid vapor pressure of the month when determining the maximum true vapor pressure. The permittee shall keep a record of the actual storage temperature of the organic storage tank and shall use the highest temperature recorded of the month when determining the maximum true vapor pressure. [District Rule 4623 and 40 CFR 60.116b(e)(2)(i)] Federally Enforceable Through Title V Permit

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

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

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

43. The permittee shall submit the reports of the floating roof tank inspections to the APCO within five calendar days after the completion of the inspection only for those tanks that failed to meet the applicable requirements of Rule 4623, Sections 5.2 through 5.5. The inspection report for tanks that that have been determined to be in compliance with the requirements of Sections 5.2 through 5.5 need not be submitted to the APCO, but the inspection report shall be kept on-site and made available upon request by the APCO. The inspection report shall contain all necessary information to demonstrate compliance with the provisions of this rule, including the following: 1.) Date of inspection and names and titles of company personnel doing the inspection; 2.) Tank identification number and Permit to Operate number; 3.) Measurements of the gaps between the tank shell and primary and secondary seals; 4.) Leak-free status of the tank and floating roof deck fittings. Records of the leak-free status shall include the vapor concentration values measured in ppmv. 5.) Data, supported by calculations, demonstrating compliance with the requirements specified in Sections 5.3, 5.4, 5.5.2.3.3, 5.5.2.4.2, and 5.5.2.4.3 of Rule 4623. 6.) Any corrective actions or repairs performed on the tank in order to comply with Rule 4623 and the date(s) such actions were taken. [District Rule 4623, 6.3.5, 40 CFR 60.115b(a)(3) and 40 CFR 63.11087(e)] Federally Enforceable Through Title V Permit

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

45. The following test methods shall be used: ASTM Method D287 for determining API Gravity, ASTM Method D4057 sampling for API Gravity testing; ASTM D323 for determining RVP, and converting RVP to TVP at the tank's maximum organic liquid storage temperature; ARB Method 422 for determining exempt halogenated VOCs in gases; EPA Method 21 for measuring gas-leak concentration. Should the owner or operator wish to use test methods other than the ones mentioned in this condition, the methods must be approved by the District prior to its use. [District Rule 4623, 6.4] Federally Enforceable Through Title V Permit

46. The operator shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rules 4623, 6.3 and 2520, 9.4.2] Federally Enforceable Through Title V Permit

47. At least 95% of all hydrocarbon vapors generated during the storage and the working of the storage tank shall be prevented from entrainment into the atmosphere. [District NSR Rule] Federally Enforceable Through Title V Permit

48. The internal floating roof supports, manholes, automatic bleeder vents, rim vents, gauge wells, etc., shall be covered with foam seal in a manner which prevents any gap. [District NSR Rule] Federally Enforceable Through Title V Permit

49. The internal floating roof shall be in direct contact with the liquid surface in a manner which prevents any vapor space below the internal roof. [District NSR Rule] Federally Enforceable Through Title V Permit

50. VOC emissions from tanks N-829-7, '-17, '-18, and '-22 shall not exceed 165 pounds per day. [District NSR Rule] Federally Enforceable Through Title V Permit

51. The permittee shall notify the District for an inspection prior to the filling of the tank with liquid in a manner which allows for unobstructed inspection of the seals from above and below the internal roof. [District NSR Rule] Federally Enforceable Through Title V Permit

# San Joaquin Valley
# Air Pollution Control District

**PERMIT UNIT:** N-829-28-6 **EXPIRATION DATE:** 11/30/2020

**EQUIPMENT DESCRIPTION:**
3,360,000 GALLON WELDED INTERNAL FLOATING ROOF STORAGE TANK (#80001) WITH A MECHANICAL SHOE PRIMARY SEAL, A WIPER SECONDARY SEAL AND A SLOTTED GUIDEPOLE

## PERMIT UNIT REQUIREMENTS

1. True vapor pressure of the organic liquid stored shall be less than 11 psia. [District Rule 4623, 5.1.1] Federally Enforceable Through Title V Permit
2. The tank shall be equipped with a floating roof consisting of a pan type that is installed before December 20, 2001, pontoon-type, or double-deck type cover, that rests on the surface of the liquid contents and is equipped with a closure device between the tank shell and roof edge consisting of a primary seal and a secondary seal. [District Rule 4623, 5.3.1.1 and 5.3.1.2, 40 CFR 60.112a(2) and 40 CFR 63.11087(a)] Federally Enforceable Through Title V Permit
3. The floating roof shall be floating on the surface of the stored liquid at all times (i.e., off the roof leg supports) except during the initial fill until the roof is lifted off the leg supports and when the tank is completely emptied and subsequently refilled. When the roof is resting on the leg supports the processes of filling or emptying and refilling the tank shall be continuous and shall be accomplished as rapidly as possible. Whenever the 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 the roof on its legs. [District Rule 4623, 5.3.1.3 and 5.4.3, 40 CFR 60.112a(2) and 40 CFR 63.11087(a)] Federally Enforceable Through Title V Permit
4. Gaps between the tank shell and the primary seal shall not exceed 1 1/2 inches. [District Rule 4623, 5.3.2.1.1 and 5.4.1] Federally Enforceable Through Title V Permit
5. The cumulative length of all gaps between the tank shell and the primary seal greater than 1/2 inch shall not exceed 10% of the circumference of the tank. [District Rule 4623, 5.3.2.1.1 and 5.4.1] Federally Enforceable Through Title V Permit
6. The cumulative length of all primary seal gaps greater than 1/8 inch shall not exceed 30% of the circumference of the tank. [District Rule 4623, 5.3.2.1.1 and 5.4.1] Federally Enforceable Through Title V Permit
7. No continuous gap in the primary seal greater than 1/8 inch wide shall exceed 10% of the tank circumference. [District Rule 4623, 5.3.2.1.1 and 5.4.1] Federally Enforceable Through Title V Permit
8. No gap between the tank shell and the secondary seal shall exceed 1/2 inch. [District Rule 4623, 5.3.2.1.2 and 5.4.1] Federally Enforceable Through Title V Permit
9. The cumulative length of all gaps between the tank shell and the secondary seal, greater than 1/8 inch shall not exceed 5% of the tank circumference. [District Rule 4623, 5.3.2.1.2 and 5.4.1] Federally Enforceable Through Title V Permit
10. 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, 5.3.2.1.3 and 5.4.1] Federally Enforceable Through Title V Permit
11. The geometry of the metallic-shoe type seal shall be such that the maximum gap between the shoe and the tank shell shall be no greater than 3 inches for a length of at least 18 inches in the vertical plane above the liquid. [District Rule 4623, 5.3.2.1.4 and 5.4.1] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

12. There shall be no holes, tears, or openings in the secondary seal or in the primary seal envelope that surrounds the annular vapor space enclosed by the roof edge, seal fabric, and secondary seal. [District Rule 4623, 5.3.2.1.5 and 5.4.1] Federally Enforceable Through Title V Permit

13. The secondary seal shall allow easy insertion of probes of up to 1 1/2 inches in width in order to measure gaps in the primary seal. [District Rule 4623, 5.3.2.1.6 and 5.4.1] Federally Enforceable Through Title V Permit

14. The secondary seal shall extend from the roof to the tank shell and shall not be attached to the primary seal. [District Rule 4623, 5.3.2.1.7 and 5.4.1] Federally Enforceable Through Title V Permit

15. All openings in the roof used for sampling and gauging 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 for sampling and gauging. [District Rule 4623, 5.5.2.1.2] 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 gas leak is defined as a reading in excess of 10,000 parts per million by volume (ppmv), as methane, above background on a portable hydrocarbon detection instrument that is calibrated with methane in accordance with the procedures specified in EPA Method 21. Liquid leak is defined as the dripping of organic liquid at a rate of more than 3 drops per minute. A reading in excess to 10,000 ppmv, as methane, above background, or dripping of organic liquid at a rate of more than 3 drops per minute, is a violation of this permit and Rule 4623 and shall be reported as a deviation. [District Rule 4623, 3.11, 3.17, 3.18 and 6.4.8] 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, 5.5.2.1.1 and 40 CFR 63.11087(a)] 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, combination manway/vacuum breakers, 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

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, 5.5.2.1.3] 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, 5.5.2.1.4] 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, 5.5.2.1.5] 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, 5.5.2.1.6] Federally Enforceable Through Title V Permit

23. All slotted sampling or gauging 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

24. 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 not exceed 1/8 inch. [District Rule 4623, 5.5.2.4.3] Federally Enforceable Through Title V Permit

25. The permittee shall notify the District in writing at least 30 days prior to conduct the visual inspection of the storage vessel, so the District can arrange an observer. [40 CFR 63.11087(c)] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

26. For newly constructed, repaired, or rebuilt internal floating roof tanks, 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. 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, 6.1.4.1 and 40 CFR 63.11087(c)] Federally Enforceable Through Title V Permit

27. The owner or operator shall perform a monthly leak inspection of all equipment in gasoline service, as defined in section 63.11100. For this inspection, detection methods incorporating sight, sound, and smell are acceptable. [40 CFR Part 63.11089(a)] Federally Enforceable Through Title V Permit

28. For monthly leak inspection, a log book shall be used and shall be signed by the owner or operator at the completion of each inspection. A section of the log book shall contain a list, summary description, or diagram(s) showing the location of all equipment in gasoline service at the facility. [40 CFR Part 63.11089(b)] Federally Enforceable Through Title V Permit

29. Each detection of a liquid or vapor leak shall be recorded in the log book. When a leak is detected, an initial attempt at repair shall be made as soon as practicable, but no later than 5 calendar days after the leak is detected. Repair or replacement of leaking equipment shall be completed within 15 calendar days after detection of each leak. Delay of repair of leaking equipment will be allowed if the repair is not feasible within 15 days. The owner or operator shall provide in the semiannual report the reason(s) why the repair was not feasible and the date each repair was completed. [40 CFR Part 63.11089(d)] Federally Enforceable Through Title V Permit

30. The owner or operator shall maintain a log book that contain the following information for a leak during during monthly inspection: 1.) equipment type and identification number; 2.) the nature of the leak (i.e. vapor or liquid) and the method of detection (i.e. sight, sound, or smell); 3.) the date the leak was detected and the date of each attempt to repair the leak; 4.) repair methods applied in each attempt to repair the leak; 5.) repair delayed and the reason for the delay if the leak is not repaired within 15 calendar days after discovery of the leak; 6) the expected date of successful repair of the leak if the leak is not repaired within 15 days; and 7.) the date of successful repair of the leak. [40 CFR 63.11089(g)] Federally Enforceable Through Title V Permit

31. The permittee shall visually inspect, through the manholes, roof hatches, or other opening 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, 6.1.4.2 and 40 CFR 63.11087(c)] Federally Enforceable Through Title V Permit

32. If any failure (i.e. visible organic liquid on the internal floating roof, tank walls or anywhere, holes or tears in the seal fabric) is detected during 12 month visual inspection, the permittee shall repair the items or empty and remove the storage vessel from service within 45 days. If the detected failure cannot be repaired within 45 days and if the vessel cannot be emptied within 45 days, a 30-day extension may be requested from the APCO in the inspection report. Such a request must document that alternate storage capacity is unavailable and specify a schedule of actions the company will take that will assure theat the control equipment will be repaired or the vessel will be emptied as soon as possible. [40 CFR 63.11087(c)] Federally Enforceable Through Title V Permit

33. The permittee shall visually inspect the internal floating roof, the primary seal, the secondary seal, gaskets, slotted memberanes and sleeve seals (if any) each time the vessel is emptied and degassed. If the internal floating roof has defects, the primary seal has holes, tears, or other openings in the seal or the seal fabric, or the secondary seal has holes, tears, or other openings in the seal or the seal fabric, or the gaskets no longer close off the liquid surfaces from the atmosphere, or the slotted membrane has more than 10 percent open area, the owner or operator shall repair the items as necessary so that none of the conditions specified in this paragraph exist before refilling the storage vessel. [40 CFR Part 63.11087(c)] Federally Enforceable Through Title V Permit

34. The owner or operator shall report the number of equipment leaks not repaired within 15 days after detection in a semi-annual report. [40 CFR 63.11089(g)] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

36. The operator shall determine the presence of gas leaks using portable hydrocarbon detection instrument in accordance with EPA Method 21. The instrument shall be calibrated before use each day of its use by the procedures specified in Method 21 using the following calibration gases: 1.) Zero air (less than 10 ppm of hydrocarbon in air); and 2.) A mixture of methane or n-hexane and air at a concentration of about, but less than, 10,000 ppm methane or n-hexane. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

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

38. The permittee shall conduct actual gap measurements of the primary seal and/or secondary seal at least once every 60 months. Other than the gap criteria specified by this permit, no holes, tears, or other openings are allowed that would permit the escape of hydrocarbon vapors. Any defects found shall constitute a violation of this permit. [District Rule 4623, 6.1.4.3 and 40 CFR 63.11087(c)] Federally Enforceable Through Title V Permit

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

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

41. The operator shall keep a record of liquids stored in each container, period of storage, and the maximum true vapor pressure of the liquid during the respective storage period. [40 CFR 60.115a(a)] Federally Enforceable Through Title V Permit

42. The permittee shall determine the maximum true vapor pressure of the stored organic liquid on a monthly basis, using the calculation methodology listed in Appendix B of District Rule 4623. The permittee shall keep a record of all reid vapor pressure measurements for the stored organic liquid and shall use the highest recorded reid vapor pressure of the month when determining the maximum true vapor pressure. The permittee shall keep a record of the actual storage temperature of the organic storage tank and shall use the highest temperature recorded of the month when determining the maximum true vapor pressure. [District Rule 4623 and 40 CFR 60.115a(b)] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

43. The permittee shall submit the reports of the floating roof tank inspections to the APCO within five calendar days after the completion of the inspection only for those tanks that failed to meet the applicable requirements of Rule 4623, Sections 5.2 through 5.5. The inspection report for tanks that that have been determined to be in compliance with the requirements of Sections 5.2 through 5.5 need not be submitted to the APCO, but the inspection report shall be kept on-site and made available upon request by the APCO. The inspection report shall contain all necessary information to demonstrate compliance with the provisions of this rule, including the following: 1.) Date of inspection and names and titles of company personnel doing the inspection; 2.) Tank identification number and Permit to Operate number; 3.) Measurements of the gaps between the tank shell and primary and secondary seals; 4.) Leak-free status of the tank and floating roof deck fittings. Records of the leak-free status shall include the vapor concentration values measured in ppmv. 5.) Data, supported by calculations, demonstrating compliance with the requirements specified in Sections 5.3, 5.4, 5.5.2.3.3, 5.5.2.4.2, and 5.5.2.4.3 of Rule 4623. 6.) Any corrective actions or repairs performed on the tank in order to comply with Rule 4623 and the date(s) such actions were taken. [District Rule 4623, 6.3.5 and 40 CFR 63.11087(e)] Federally Enforceable Through Title V Permit

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

45. The following test methods shall be used: ASTM Method D287 for determining API Gravity, ASTM Method D4057 sampling for API Gravity testing; ASTM D323 for determining RVP, and converting RVP to TVP at the tank's maximum organic liquid storage temperature; ARB Method 422 for determining exempt halogenated VOCs in gases; EPA Method 21 for measuring gas-leak concentration. Should the owner or operator wish to use test methods other than the ones mentioned in this condition, the methods must be approved by the District prior to its use. [District Rule 4623, 6.4] Federally Enforceable Through Title V Permit

46. The operator shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rules 4623, 6.3 and 2520, 9.4.2] Federally Enforceable Through Title V Permit

# San Joaquin Valley
# Air Pollution Control District

**PERMIT UNIT:** N-829-29-7 **EXPIRATION DATE:** 11/30/2020

**EQUIPMENT DESCRIPTION:**
3,360,000 GALLON WELDED EXTERNAL FLOATING ROOF STORAGE TANK (#80002) WITH A MECHANICAL SHOE PRIMARY SEAL, A WIPER SECONDARY SEAL AND A SLOTTED GUIDEPOLE

## PERMIT UNIT REQUIREMENTS

1. True vapor pressure of the organic liquid stored shall be less than 11 psia. [District Rule 4623, 5.1.1] Federally Enforceable Through Title V Permit
2. The tank shall be equipped with a floating roof consisting of a pan type that was installed before December 20, 2001, pontoon-type or double-deck-type cover which rests upon the surface of the liquid being stored and is equipped with a closure device between the tank shell and roof edge consisting of a primary and a secondary seal. [District Rule 4623, 5.3.1.1 and 5.3.1.2, 40 CFR 60.112a(a)(1) and 40 CFR 63.11087(a)] Federally Enforceable Through Title V Permit
3. Roof shall be floating on the liquid (i.e., off the roof leg supports) at all times except during initial fill and when tank is completely emptied and subsequently refilled. The process of emptying and refilling when the roof is resting on the leg supports shall be continuous and shall be accomplished as rapidly as possible. Whenever the permittee intends to land the roof on it's legs, the permittee shall notify the APCO in writing at least five calendar days prior to performing the work. The tank must be in compliance with this rule before it may land on its legs. [District Rule 4623, 5.3.1.3, 40 CFR 60.112a(a)(1) and 40 CFR 63.11087(a)] Federally Enforceable Through Title V Permit
4. Primary seal (lower seal) shall be a metallic shoe seal, a liquid-mounted seal, or a vapor-mounted seal. [40 CFR 60.112a(a)(1)(i) and 40 CFR 63.11087(a)] Federally Enforceable Through Title V Permit
5. Accumulated area of gaps between tank wall and primary seal shall not exceed: 1) 10.0 in2 per foot of tank diameter and the width of any portion of any gap shall not exceed 1-1/2 inch, for a metallic shoe seal or a liquid-mounted seal; 2) 1.0 in2 per foot of tank diameter and the width of any portion of any gap shall not exceed 1/2 inch for a vapor mounted seal. [40 CFR 60.112a(a)(1)(i)(A) & (B), District Rule 4623, 5.3.2.1.1 and 40 CFR 63.11087(c)] Federally Enforceable Through Title V Permit
6. The cumulative length of all gaps between the tank shell and the primary seal: 1) Greater than one-half (1/2) inch shall not exceed 10 percent of the circumference of the tank; and 2) Greater than one-eighth (1/8) inch shall not exceed 30 percent of the circumference of the tank. [District Rule 4623, 5.3.2.1.1] Federally Enforceable Through Title V Permit
7. No continuous gap in the primary seal greater than 1/8 inch wide shall exceed 10% of the tank circumference. [District Rule 4623, 5.3.2.1.1] Federally Enforceable Through Title V Permit
8. If the secondary seal is used in combination with a metallic shoe or liquid-mounted primary seal, accumulated area of gaps between tank wall and the secondary seal shall not exceed 1.0 in2 per foot of tank diameter and the width of any portion of any gap shall not exceed 1/2 inch. [District Rule 4623, 5.3.2.1.2, 40 CFR 60.112a(a)(1)(i)(B) and 40 CFR 63.11087(c)] Federally Enforceable Through Title V Permit
9. The cumulative length of all gaps between the tank shell and the secondary seal, greater than 1/8 inch shall not exceed 5% of the tank circumference. [District Rule 4623, 5.3.2.1.2] Federally Enforceable Through Title V Permit
10. The metallic shoe-type seal shall be installed so that one end of the shoe extends into the stored liquid and the other end extends a minimum vertical distance of 24 inches above the stored liquid surface. [District Rule 4623, 5.3.2.1.3, 40 CFR 60.112a(a)(1)(i)(C) and 40 CFR Part 63.11087(c)] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

12. There shall be no holes, tears, or openings in the secondary seal or in the primary seal envelope that surrounds the annular vapor space enclosed by the roof edge, seal fabric, and secondary seal. [District Rule 4623, 5.3.2.1.5, 40 CFR 60.112a(a)(1)(i)(D), and 40 CFR 60.112a(a)(1)(ii)(B)] Federally Enforceable Through Title V Permit

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

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

15. All openings in the roof used for sampling and gauging shall provide a projection below the liquid surface to prevent belching of liquid and to prevent entrained or formed organic vapor from escaping from the liquid contents of the tank and shall be equipped with a cover, seal or lid that shall be in a closed position at all times, with no visible gaps and be leak-free, except when the device or appurtenance is in use. [District Rule 4623, 5.5.1 and 40 CFR 60.112a(a)(1)(iii)] 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 gas leak is defined as a reading in excess of 10,000 parts per million by volume (ppmv), as methane, above background on a portable hydrocarbon detection instrument that is calibrated with methane in accordance with the procedures specified in EPA Method 21. Liquid leak is defined as the dripping of organic liquid at a rate of more than 3 drops per minute. A reading in excess to 10,000 ppmv, as methane, above background, or dripping of organic liquid at a rate of more than 3 drops per minute, is a violation of this permit and Rule 4623 and shall be reported as a deviation. [District Rule 4623, 3.11, 3.17, 3.18 and 6.4.8] Federally Enforceable Through Title V Permit

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

18. 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

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

20. Rim vents shall be equipped with a gasket and shall be set to open when the roof is being floated off the roof leg supports or at the manufacturer's recommended setting. [District Rule 4623, 5.5.2.2.4 and 40 CFR 60.112a(a)(1)(iii)] Federally Enforceable Through Title V Permit

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

22. 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

23. All slotted sampling and gauging 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

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

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

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

27. The operator shall perform gap measurements on primary and secondary seals within 60 days of the initial fill with petroleum liquid and at least once every year thereafter to determine compliance with the requirements of Rule 4623. The actual gap measurements of the floating roof primary and secondary seals shall be recorded. The inspection results shall be submitted to the APCO as specified in Section 6.3.5. [District Rule 4623, 6.1.3.1, 40 CFR 60.113a(a)(1)(i)(B) and 40 CFR 63.11087(c)] Federally Enforceable Through Title V Permit

28. If unit is out of service for a period of one year or more, subsequent refilling with volatile organic liquid (VOL) shall be considered initial fill in accordance with the conditions of this permit. [40 CFR 60.113a(a)(1)(i)(C) and 40 CFR 63.11087(c)] Federally Enforceable Through Title V Permit

29. The permittee shall inspect the primary and secondary seals for compliance with the requirements of Rule 4623 every time this tank is emptied or degassed. Actual gap measurements shall be performed when the liquid level is static but not more than 24 hours after the tank roof is re-floated. [District Rule 4623, 6.1.3.2] Federally Enforceable Through Title V Permit

30. If primary or secondary seal gap width/accumulated area and minimum vertical distance for one end of the mechanical shoe do not meet the requirements in this permit during 12 month inspection, the permittee shall repair the items or empty and remove the storage vessel from service within 45 days. If the detected failure cannot be repaired within 45 days and if the vessel cannot be emptied within 45 days, a 30-day extension may be requested from the APCO in the inspection report. Such a request must document that alternate storage capacity is unavailable and specify a schedule of actions the company will take that will assure that the control equipment will be repaired or the vessel will be emptied as soon as possible. [40 CFR 63.11087(c)] Federally Enforceable Through Title V Permit

31. The owner or operator shall visually inspect the external floating roof, the primary seal, secondary seal, and fittings each time the vessel is emptied and degassed. If the external floating roof has defects, the primary seal has holes, tears, or other openings in the seal or the seal fabric, or the secondary seal has holes, tears, or other openings in the seal or the seal fabric, the owner or operator shall repair the items as necessary so that none of the conditions specified mentioned in this condition exist before filling or refilling the storage vessel. [40 CFR 60.11087(c)] Federally Enforceable Through Title V Permit

32. The owner or operator shall perform a monthly leak inspection of all equipment in gasoline service, as defined in section 63.11100. For this inspection, detection methods incorporating sight, sound, and smell are acceptable. [40 CFR Part 63.11089(a)] Federally Enforceable Through Title V Permit

33. For monthly leak inspection, a log book shall be used and shall be signed by the owner or operator at the completion of each inspection. A section of the log book shall contain a list, summary description, or diagram(s) showing the location of all equipment in gasoline service at the facility. [40 CFR Part 63.11089(b)] Federally Enforceable Through Title V Permit

34. Each detection of a liquid or vapor leak shall be recorded in the log book. When a leak is detected, an initial attempt at repair shall be made as soon as practicable, but no later than 5 calendar days after the leak is detected. Repair or replacement of leaking equipment shall be completed within 15 calendar days after detection of each leak. Delay of repair of leaking equipment will be allowed if the repair is not feasible within 15 days. The owner or operator shall provide in the semiannual report the reason(s) why the repair was not feasible and the date each repair was completed. [40 CFR Part 63.11089(d)] Federally Enforceable Through Title V Permit

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35. The owner or operator shall maintain a log book that contain the following information for a leak during during monthly inspection: 1.) equipment type and identification number; 2.) the nature of the leak (i.e. vapor or liquid) and the method of detection (i.e. sight, sound, or smell); 3.) the date the leak was detected and the date of each attempt to repair the leak; 4.) repair methods applied in each attempt to repair the leak; 5.) repair delayed and the reason for the delay if the leak is not repaired within 15 calendar days after discovery of the leak; 6) the expected date of successful repair of the leak if the leak is not repaired within 15 days; and 7.) the date of successful repair of the leak. [40 CFR 63.11089(g)] Federally Enforceable Through Title V Permit

36. The owner or operator shall report the number of equipment leaks not repaired within 15 days after detection in a semi-annual report. [40 CFR 63.11089(g)] Federally Enforceable Through Title V Permit

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

38. The operator shall determine the presence of gas leaks using portable hydrocarbon detection instrument in accordance with EPA Method 21. The instrument shall be calibrated before use each day of its use by the procedures specified in Method 21 using the following calibration gases: 1.) Zero air (less than 10 ppm of hydrocarbon in air); and 2.) A mixture of methane or n-hexane and air at a concentration of about, but less than, 10,000 ppm methane or n-hexane. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

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

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

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

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

43. Operator shall record the vessel on which the measurement was performed, date of the seal gap measurement, and raw data obtained in the measurement process in accordance with the conditions of this permit. [40 CFR 60.113a(a)(1)(i)(D) and 40 CFR 63.11087(e)] Federally Enforceable Through Title V Permit

44. The permittee shall notify the District in writing at least 30 days in advance of visual inspection or any gap measurement required by this permit, so the District can arrange an observer. [40 CFR 60.113a(a)(1)(iv) and 40 CFR 63.11087(c)] Federally Enforceable Through Title V Permit

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45. If the accumulated area of gaps or gap width exceed limits, operator shall submit a report to the APCO within 30 days of the date of measurement. Report should include identification of the vessel, reason vessel did not meet the specifications, and a description of the actions necessary to bring the storage vessel into compliance. [40 CFR 60.113a(a)(1)(i)(E) and 40 CFR 63.11087(e)] Federally Enforceable Through Title V Permit

46. The operator shall keep a record of liquids stored in each container, period of storage, and the maximum true vapor pressure of the liquid during the respective storage period. [40 CFR 60.115a(a)] Federally Enforceable Through Title V Permit

47. The permittee shall determine the maximum true vapor pressure of the stored organic liquid on a monthly basis, using the calculation methodology listed in Appendix B of District Rule 4623. The permittee shall keep a record of all reid vapor pressure measurements for the stored organic liquid and shall use the highest recorded reid vapor pressure of the month when determining the maximum true vapor pressure. The permittee shall keep a record of the actual storage temperature of the organic storage tank and shall use the highest temperature recorded of the month when determining the maximum true vapor pressure. [Rule 4623 and 40 CFR 60.115a(b)] Federally Enforceable Through Title V Permit

48. The permittee shall submit the reports of the floating roof tank inspections to the APCO within five calendar days after the completion of the inspection only for those tanks that failed to meet the applicable requirements of Rule 4623, Sections 5.2 through 5.5. The inspection report for tanks that that have been determined to be in compliance with the requirements of Sections 5.2 through 5.5 need not be submitted to the APCO, but the inspection report shall be kept on-site and made available upon request by the APCO. The inspection report shall contain all necessary information to demonstrate compliance with the provisions of this rule, including the following: 1.) Date of inspection and names and titles of company personnel doing the inspection; 2.) Tank identification number and Permit to Operate number; 3.) Measurements of the gaps between the tank shell and primary and secondary seals; 4.) Leak-free status of the tank and floating roof deck fittings. Records of the leak-free status shall include the vapor concentration values measured in ppmv. 5.) Data, supported by calculations, demonstrating compliance with the requirements specified in Sections 5.3, 5.4, 5.5.2.3.3, 5.5.2.4.2, and 5.5.2.4.3 of Rule 4623. 6.) Any corrective actions or repairs performed on the tank in order to comply with Rule 4623 and the date(s) such actions were taken. [District Rule 4623, 6.3.5] Federally Enforceable Through Title V Permit

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

50. The following test methods shall be used: ASTM Method D287 for determining API Gravity, ASTM Method D4057 sampling for API Gravity testing; ASTM D323 for determining RVP, and converting RVP to TVP at the tank's maximum organic liquid storage temperature; ARB Method 422 for determining exempt halogenated VOCs in gases; EPA Method 21 for measuring gas-leak concentration. Should the owner or operator wish to use test methods other than the ones mentioned in this condition, the methods must be approved by the District prior to its use. [District Rule 4623, 6.4] Federally Enforceable Through Title V Permit

51. The operator shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rules 4623, 6.3 and 2520, 9.4.2] Federally Enforceable Through Title V Permit

# San Joaquin Valley
# Air Pollution Control District

**PERMIT UNIT:** N-829-31-5 **EXPIRATION DATE:** 11/30/2020

**EQUIPMENT DESCRIPTION:**
1,386,000 GALLON WELDED INTERNAL FLOATING ROOF TANK (33007) WITH A MINI SHOE PRIMARY SEAL, A VAPORFLEX SECONDARY SEAL, AND A SLOTTED GUIDEPOLE

## PERMIT UNIT REQUIREMENTS

1. Only denatured ethanol (97.5% or more by weight ethanol, 2.5% or less by weight gasoline) shall be stored in this tank. The permittee shall maintain sufficient records to demonstrate compliance with this condition. [District Rules 2201 and 4102] Federally Enforceable Through Title V Permit
2. True vapor pressure (TVP) of the organic liquid stored in the tank shall not exceed 2.8 psia. [District Rule 2201] Federally Enforceable Through Title V Permit
3. VOC emissions shall not exceed 7.1 pounds in any one day. [District Rule 2201] Federally Enforceable Through Title V Permit
4. The daily throughput of the organic liquid (not including diesel or other exempt liquids) shall not exceed 1,386,000 gallons. [District Rule 2201] Federally Enforceable Through Title V Permit
5. The monthly throughput of the organic liquid (not including diesel or other exempt liquids) shall not exceed 5,544,000 gallons. [District Rule 2201] Federally Enforceable Through Title V Permit
6. The permittee shall record TVP and the temperature of the organic liquid stored on monthly basis. [District Rule 2201] Federally Enforceable Through Title V Permit
7. The floating roof shall be floating on the surface of the stored liquid at all times (i.e., off the roof leg supports) except during the initial fill until the roof is lifted off the leg supports and when the tank is completely emptied and subsequently refilled. When the roof is resting on the leg supports the processes of filling or emptying and refilling the tank shall be continuous and shall be accomplished as rapidly as possible. Whenever the 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 the roof on its legs. [District Rule 4623, 5.4.3, 40 CFR 60.112b(a)(1)(i) and 40 CFR 63.11087(a)] Federally Enforceable Through Title V Permit
8. Gaps between the tank shell and the primary seal shall not exceed 1 1/2 inches. [District Rule 4623, 5.3.2.1.1 and 5.4.1] Federally Enforceable Through Title V Permit
9. The cumulative length of all gaps between the tank shell and the primary seal greater than 1/2 inch shall not exceed 10% of the circumference of the tank. [District Rule 4623, 5.3.2.1.1 and 5.4.1] Federally Enforceable Through Title V Permit
10. The cumulative length of all primary seal gaps greater than 1/8 inch shall not exceed 30% of the circumference of the tank. [District Rule 4623, 5.3.2.1.1 and 5.4.1] Federally Enforceable Through Title V Permit
11. No continuous gap in the primary seal greater than 1/8 inch wide shall exceed 10% of the tank circumference. [District Rule 4623, 5.3.2.1.1 and 5.4.1] Federally Enforceable Through Title V Permit
12. No gap between the tank shell and the secondary seal shall exceed 1/2 inch. [District Rule 4623, 5.3.2.1.2 and 5.4.1] Federally Enforceable Through Title V Permit

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13. The cumulative length of all gaps between the tank shell and the secondary seal, greater than 1/8 inch shall not exceed 5% of the tank circumference. [District Rule 4623, 5.3.2.1.2 and 5.4.1] Federally Enforceable Through Title V Permit

14. The metallic shoe-type seal shall be installed so that one end of the shoe extends into the stored liquid and the other end extends a minimum vertical distance of 18 inches above the stored liquid surface. [District Rule 4623, 5.3.2.1.3 and 5.4.1] Federally Enforceable Through Title V Permit

15. The geometry of the metallic-shoe type seal shall be such that the maximum gap between the shoe and the tank shell shall be no greater than 3 inches for a length of at least 18 inches in the vertical plane above the liquid. [District Rule 4623, 5.3.2.1.4 and 5.4.1] Federally Enforceable Through Title V Permit

16. There shall be no holes, tears, or openings in the secondary seal or in the primary seal envelope that surrounds the annular vapor space enclosed by the roof edge, seal fabric, and secondary seal. [District Rule 4623, 5.3.2.1.5 and 5.4.1] Federally Enforceable Through Title V Permit

17. The secondary seal shall allow easy insertion of probes of up to 1 1/2 inches in width in order to measure gaps in the primary seal. [District Rule 4623, 5.3.2.1.6 and 5.4.1] Federally Enforceable Through Title V Permit

18. The secondary seal shall extend from the roof to the tank shell and shall not be attached to the primary seal. [District Rule 4623, 5.3.2.1.7 and 5.4.1] Federally Enforceable Through Title V Permit

19. All openings in the roof used for sampling and gauging 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 for sampling and gauging. [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 gas leak is defined as a reading in excess of 10,000 parts per million by volume (ppmv), as methane, above background on a portable hydrocarbon detection instrument that is calibrated with methane in accordance with the procedures specified in EPA Method 21. Liquid leak is defined as the dripping of organic liquid at a rate of more than 3 drops per minute. A reading in excess to 10,000 ppmv, as methane, above background, or dripping of organic liquid at a rate of more than 3 drops per minute, is a violation of this permit and Rule 4623 and shall be reported as a deviation. [District Rule 4623, 3.11, 3.17, 3.18 and 6.4.8] Federally Enforceable Through Title V Permit

21. 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, 40 CFR 60.112b(a)(1)(iii) and 40 CFR 63.11087(a)] Federally Enforceable Through Title V Permit

22. Each opening in the internal floating roof except for leg sleeves, automatic bleeder vents, rim space vents, column wells, ladder wells, sample wells, combination manway/vacuum breakers, and stub drains shall be equipped with a cover, or a lid shall be maintained in a closed position at all times (i.e. no visible gaps) except when the device is in use. The cover or lid shall be equipped with a gasket. Covers on each access hatch and automatic gauge float well shall be bolted in place except when they are in use. [District Rule 4623, 5.5.2.1.2 and 40 CFR 60.112b(a)(1)(iv)] 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 leg roof supports. [District Rule 4623, 5.5.2.1.3 and 40 CFR 60.112b(a)(1)(v)] Federally Enforceable Through Title V Permit

24. Rim vents shall be equipped with a gasket and shall 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 and 40 CFR 60.112b(a)(1)(vi)]

25. Each penetration of the internal floating roof for the purpose of sampling shall be a sample well. The well shall have a slit fabric cover that covers at least 90 percent of the opening. The fabric cover must be impermeable. [District Rule 4623, 5.5.2.1.5 and 40 CFR 60.112b(a)(1)(vii)] Federally Enforceable Through Title V Permit

26. Each penetration of the internal floating roof that allows for the 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 and 40 CFR 60.112b(a)(1)(viii)] Federally Enforceable Through Title V Permit

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27. Each penetration of the internal floating roof that allows for the passage of a ladder shall have a gasketed sliding cover. [40 CFR 60.112b(a)(1)(ix)] Federally Enforceable Through Title V Permit

28. All slotted sampling or gauging 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

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 not exceed 1/8 inch. [District Rule 4623, 5.5.2.4.3] Federally Enforceable Through Title V Permit

30. The permittee shall notify the District in writing at least 30 days prior to conduct the visual inspection of the storage vessel, so the District can arrange an observer. [40 CFR 60.113b(a)(5) and 40 CFR 63.11087(c)] Federally Enforceable Through Title V Permit

31. For newly constructed, repaired, or rebuilt internal floating roof tanks, 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. 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, 6.1.4.1, 40 CFR 60.113b(a)(1) and 40 CFR 63.11087(c)] Federally Enforceable Through Title V Permit

32. The owner or operator shall perform a monthly leak inspection of all equipment in gasoline service, as defined in section 63.11100. For this inspection, detection methods incorporating sight, sound, and smell are acceptable. [40 CFR Part 63.11089(a)] Federally Enforceable Through Title V Permit

33. For monthly leak inspection, a log book shall be used and shall be signed by the owner or operator at the completion of each inspection. A section of the log book shall contain a list, summary description, or diagram(s) showing the location of all equipment in gasoline service at the facility. [40 CFR Part 63.11089(b)] Federally Enforceable Through Title V Permit

34. Each detection of a liquid or vapor leak shall be recorded in the log book. When a leak is detected, an initial attempt at repair shall be made as soon as practicable, but no later than 5 calendar days after the leak is detected. Repair or replacement of leaking equipment shall be completed within 15 calendar days after detection of each leak. Delay of repair of leaking equipment will be allowed if the repair is not feasible within 15 days. The owner or operator shall provide in the semiannual report the reason(s) why the repair was not feasible and the date each repair was completed. [40 CFR Part 63.11089(d)] Federally Enforceable Through Title V Permit

35. The owner or operator shall maintain a log book that contain the following information for a leak during during monthly inspection: 1.) equipment type and identification number; 2.) the nature of the leak (i.e. vapor or liquid) and the method of detection (i.e. sight, sound, or smell); 3.) the date the leak was detected and the date of each attempt to repair the leak; 4.) repair methods applied in each attempt to repair the leak; 5.) repair delayed and the reason for the delay if the leak is not repaired within 15 calendar days after discovery of the leak; 6) the expected date of successful repair of the leak if the leak is not repaired within 15 days; and 7.) the date of successful repair of the leak. [40 CFR 63.11089(g)] Federally Enforceable Through Title V Permit

36. The permittee shall visually inspect, through the manholes, roof hatches, or other opening 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, 6.1.4.2, 40 CFR 60.113b(a)(2) and 40 CFR 63.11087(c)] Federally Enforceable Through Title V Permit

37. If any failure (i.e. visible organic liquid on the internal floating roof, tank walls or anywhere, holes or tears in the seal fabric) is detected during 12 month visual inspection, the permittee shall repair the items or empty and remove the storage vessel from service within 45 days. If the detected failure cannot be repaired within 45 days and if the vessel cannot be emptied within 45 days, a 30-day extension may be requested from the APCO in the inspection report. Such a request must document that alternate storage capacity is unavailable and specify a schedule of actions the company will take that will assure theat the control equipment will be repaired or the vessel will be emptied as soon as possible. [40 CFR 60.113b(a)(2) and 40 CFR 63.11087(c)] Federally Enforceable Through Title V Permit

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38. The permittee shall visually inspect the internal floating roof, the primary seal, the secondary seal, gaskets, slotted memberanes and sleeve seals (if any) each time the vessel is emptied and degassed. If the internal floating roof has defects, the primary seal has holes, tears, or other openings in the seal or the seal fabric, or the secondary seal has holes, tears, or other openings in the seal or the seal fabric, or the gaskets no longer close off the liquid surfaces from the atmosphere, or the slotted membrane has more than 10 percent open area, the owner or operator shall repair the items as necessary so that none of the conditions specified in this paragraph exist before refilling the storage vessel. [40 CFR Part 63.11087(c)] Federally Enforceable Through Title V Permit

39. The owner or operator shall report the number of equipment leaks not repaired within 15 days after detection in a semi-annual report. [40 CFR 63.11089(g)] Federally Enforceable Through Title V Permit

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

41. The operator shall determine the presence of gas leaks using portable hydrocarbon detection instrument in accordance with EPA Method 21. The instrument shall be calibrated before use each day of its use by the procedures specified in Method 21 using the following calibration gases: 1.) Zero air (less than 10 ppm of hydrocarbon in air); and 2.) A mixture of methane or n-hexane and air at a concentration of about, but less than, 10,000 ppm methane or n-hexane. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

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

43. The permittee shall conduct actual gap measurements of the primary seal and/or secondary seal at least once every 60 months. Other than the gap criteria specified by this permit, no holes, tears, or other openings are allowed that would permit the escape of hydrocarbon vapors. Any defects found shall constitute a violation of this permit. [District Rule 4623 Section 6.1.4.3] Federally Enforceable Through Title V Permit

44. The permittee shall submit the reports of the floating roof tank inspections to the APCO within five calendar days after the completion of the inspection only for those tanks that failed to meet the applicable requirements of Rule 4623, Sections 5.2 through 5.5. The inspection report for tanks that that have been determined to be in compliance with the requirements of Sections 5.2 through 5.5 need not be submitted to the APCO, but the inspection report shall be kept on-site and made available upon request by the APCO. The inspection report shall contain all necessary information to demonstrate compliance with the provisions of this rule, including the following: 1.) Date of inspection and names and titles of company personnel doing the inspection; 2.) Tank identification number and Permit to Operate number; 3.) Measurements of the gaps between the tank shell and primary and secondary seals; 4.) Leak-free status of the tank and floating roof deck fittings. Records of the leak-free status shall include the vapor concentration values measured in ppmv. 5.) Data, supported by calculations, demonstrating compliance with the requirements specified in Sections 5.3, 5.4, 5.5.2.3.3, 5.5.2.4.2, and 5.5.2.4.3 of Rule 4623. 6.) Any corrective actions or repairs performed on the tank in order to comply with Rule 4623 and the date(s) such actions were taken. [District Rule 4623, 6.3.5 and 40 CFR 63.11087(e)] Federally Enforceable Through Title V Permit

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

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

46. The following test methods shall be used: ASTM Method D287 for determining API Gravity, ASTM Method D4057 sampling for API Gravity testing; ASTM D323 for determining RVP, and converting RVP to TVP at the tank's maximum organic liquid storage temperature; ARB Method 422 for determining exempt halogenated VOCs in gases; EPA Method 21 for measuring gas-leak concentration. Should the owner or operator wish to use test methods other than the ones mentioned in this condition, the methods must be approved by the District prior to its use. [District Rule 4623, 6.4] Federally Enforceable Through Title V Permit

47. The permittee shall maintain records of daily, monthly, cumulative annual organic liquid throughput in gallons. The cumulative annual records shall be updated weekly. [District Rule 2201] Federally Enforceable Through Title V Permit

48. The permittee shall maintain records of TVP tests and the temperature of the organic liquid stored in the tank. [District Rule 2201] Federally Enforceable Through Title V Permit

49. The permittee shall determine the maximum true vapor pressure of the stored organic liquid on a monthly basis, using the calculation methodology listed in Appendix B of District Rule 4623. The permittee shall keep a record of all reid vapor pressure measurements for the stored organic liquid and shall use the highest recorded reid vapor pressure of the month when determining the maximum true vapor pressure. The permittee shall keep a record of the actual storage temperature of the organic storage tank and shall use the highest temperature recorded of the month when determining the maximum true vapor pressure. [District Rule 4623] Federally Enforceable Through Title V Permit

50. The permittee shall maintain records sufficient to demonstrate compliance with the daily VOC emission limit. These records shall contain the calculated emission quantity as well as each process variable used in the respective calculations/modeling. [District Rule 2080] Federally Enforceable Through Title V Permit

51. The permittee shall keep all records on-site for a period of at least five years. These records shall be made available for District inspection upon request. [District Rules 2201 and 4623, 6.3] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

**PERMIT UNIT:** N-829-32-1 **EXPIRATION DATE:** 11/30/2020

**EQUIPMENT DESCRIPTION:**
MODIFICATION OF 1,953,000 GALLON WELDED INTERNAL FLOATING ROOF GASOLINE, DIESEL, ETHANOL, AND METHANOL STORAGE TANK (#4901) WITH A MECHANICAL SHOE PRIMARY SEAL, A WIPER SECONDARY SEAL AND A SLOTTED GUIDEPOLE:

# PERMIT UNIT REQUIREMENTS

1. This tank shall only store gasoline, diesel fuel, ethanol, and methanol with a TVP of less than or equal to 10 psia. [District Rule 2201] Federally Enforceable Through Title V Permit
2. This tank shall not have more than two (2) turnovers per month. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Annual throughput of fuel shall not exceed 46,922,400 gallons. [District Rule 2201] Federally Enforceable Through Title V Permit
4. Permittee shall maintain records of monthly and annual throughput of fuel in gallons. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Daily emissions shall not exceed 9.0 lbs VOC/day based on a monthly average. [District Rule 2201] Federally Enforceable Through Title V Permit
6. 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
7. Gaps between the tank shell and the primary seal shall not exceed 1 1/2 inches. [District Rule 4623] Federally Enforceable Through Title V Permit
8. The cumulative length of all gaps between the tank shell and the primary seal greater than 1/2 inch shall not exceed 10% of the circumference of the tank. [District Rule 4623] 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] 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] Federally Enforceable Through Title V Permit
11. No gap between the tank shell and the secondary seal shall exceed 1/2 inch. [District Rule 4623] 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] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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 11 inches above the stored liquid surface. [District Rule 4623] Federally Enforceable Through Title V Permit

14. The geometry of the metallic-shoe type seal shall be such that the maximum gap between the shoe and the tank shell shall be no greater than 3 inches for a length of at least 11 inches in the vertical plane above the liquid. [District Rule 4623] Federally Enforceable Through Title V Permit

15. There shall be no holes, tears, or openings in the secondary seal or in the primary seal envelope that surrounds the annular vapor space enclosed by the roof edge, seal fabric, and secondary seal. [District Rule 4623] Federally Enforceable Through Title V Permit

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

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

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

19. A leak-free condition is defined as a condition without a gas or liquid leak. A gas leak is defined as a reading in excess of 10,000 ppmv as methane, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21. A liquid leak is defined as a dripping rate of more than three (3) drops per minute. A reading in excess of 10,000 ppmv as methane above background or a liquid leak of greater than three (3) drops per minute 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

20. 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

21. 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

22. Automatic bleeder vents shall be equipped with a gasket and shall be closed at all times when the roof is floating except when the roof is being floated off or is being landed on the roof leg supports. [District Rule 4623] Federally Enforceable Through Title V Permit

23. 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

24. 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

25. 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

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

30. 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

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. The permittee shall determine the maximum true vapor pressure of the stored organic liquid on a monthly basis, using the calculation methodology listed in Appendix B of District Rule 4623. The permittee shall keep a record of all reid vapor pressure measurements for the stored organic liquid and shall use the highest recorded reid vapor pressure of the month when determining the maximum true vapor pressure. The permittee shall keep a record of the actual storage temperature of the organic storage tank and shall use the highest temperature recorded of the month when determining the maximum true vapor pressure. [District Rule 4623] Federally Enforceable Through Title V Permit

33. The permittee shall maintain records sufficient to demonstrate compliance with the daily VOC emission limit. These records shall contain the calculated emission quantity as well as each process variable used in the respective calculations/modeling. [District Rule 2080] Federally Enforceable Through Title V Permit

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

# San Joaquin Valley
# Air Pollution Control District

**PERMIT UNIT:** N-829-33-1 **EXPIRATION DATE:** 11/30/2020

**EQUIPMENT DESCRIPTION:**
MODIFICATION OF 3,365,000 GALLON WELDED INTERNAL FLOATING ROOF GASOLINE, DIESEL, ETHANOL, AND METHANOL STORAGE TANK (#8801) WITH A MECHANICAL SHOE PRIMARY SEAL, A WIPER SECONDARY SEAL AND A SLOTTED GUIDEPOLE:

## PERMIT UNIT REQUIREMENTS

1. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101] Federally Enforceable Through Title V Permit
2. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
3. This tank shall only store gasoline, diesel fuel, ethanol, and methanol with a TVP of less than or equal to 10 psia. [District Rule 2201] Federally Enforceable Through Title V Permit
4. This tank shall not have more than two (2) turnovers per month. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Annual throughput of fuel shall not exceed 83,160,000 gallons. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Permittee shall maintain records of monthly and annual throughput of fuel in gallons. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Daily emissions shall not exceed 13.3 lbs VOC/day based on a monthly average. [District Rule 2201] Federally Enforceable Through Title V Permit
8. 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
9. Gaps between the tank shell and the primary seal shall not exceed 1 1/2 inches. [District Rule 4623] Federally Enforceable Through Title V Permit
10. The cumulative length of all gaps between the tank shell and the primary seal greater than 1/2 inch shall not exceed 10% of the circumference of the tank. [District Rule 4623] Federally Enforceable Through Title V Permit
11. The cumulative length of all primary seal gaps greater than 1/8 inch shall not exceed 30% of the circumference of the tank. [District Rule 4623] Federally Enforceable Through Title V Permit
12. No continuous gap in the primary seal greater than 1/8 inch wide shall exceed 10% of the tank circumference. [District Rule 4623] Federally Enforceable Through Title V Permit
13. No gap between the tank shell and the secondary seal shall exceed 1/2 inch. [District Rule 4623] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

15. The metallic shoe-type seal shall be installed so that one end of the shoe extends into the stored liquid and the other end extends a minimum vertical distance of 11 inches above the stored liquid surface. [District Rule 4623] Federally Enforceable Through Title V Permit

16. The geometry of the metallic-shoe type seal shall be such that the maximum gap between the shoe and the tank shell shall be no greater than 3 inches for a length of at least 11 inches in the vertical plane above the liquid. [District Rule 4623] Federally Enforceable Through Title V Permit

17. There shall be no holes, tears, or openings in the secondary seal or in the primary seal envelope that surrounds the annular vapor space enclosed by the roof edge, seal fabric, and secondary seal. [District Rule 4623] Federally Enforceable Through Title V Permit

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

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

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

21. A leak-free condition is defined as a condition without a gas or liquid leak. A gas leak is defined as a reading in excess of 10,000 ppmv as methane, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21. A liquid leak is defined as a dripping rate of more than three (3) drops per minute. A reading in excess of 10,000 ppmv as methane above background or a liquid leak of greater than three (3) drops per minute 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

22. 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

23. 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

24. Automatic bleeder vents shall be equipped with a gasket and shall be closed at all times when the roof is floating except when the roof is being floated off or is being landed on the roof leg supports. [District Rule 4623] Federally Enforceable Through Title V Permit

25. 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

26. 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

27. 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

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

28. 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

29. 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

30. 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

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

32. 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

33. 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

34. The permittee shall determine the maximum true vapor pressure of the stored organic liquid on a monthly basis, using the calculation methodology listed in Appendix B of District Rule 4623. The permittee shall keep a record of all reid vapor pressure measurements for the stored organic liquid and shall use the highest recorded reid vapor pressure of the month when determining the maximum true vapor pressure. The permittee shall keep a record of the actual storage temperature of the organic storage tank and shall use the highest temperature recorded of the month when determining the maximum true vapor pressure. [District Rule 4623] Federally Enforceable Through Title V Permit

35. The permittee shall maintain records sufficient to demonstrate compliance with the daily VOC emission limit. These records shall contain the calculated emission quantity as well as each process variable used in the respective calculations/modeling. [District Rule 2080] Federally Enforceable Through Title V Permit

36. 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

# San Joaquin Valley
# Air Pollution Control District

**PERMIT UNIT:** N-829-35-1 **EXPIRATION DATE:** 11/30/2020

**EQUIPMENT DESCRIPTION:**
30,000 BBL (1,260,000 GALLON) WELDED INTERNAL FLOATING ROOF TANK (#30006) WITH A MECHANICAL SHOE PRIMARY SEAL, A WIPER SECONDARY SEAL, AND A SLOTTED GUIDEPOLE

## PERMIT UNIT REQUIREMENTS

1. Only denatured ethanol (97.5% or more by weight ethanol, 2.5% or less by weight gasoline) shall be stored in this tank. The permittee shall maintain sufficient records to demonstrate compliance with this condition. [District Rules 2201 and 4102]
2. True vapor pressure (TVP) of the organic liquid stored in the tank shall not exceed 2.8 psia. [District Rule 2201]
3. VOC emissions shall not exceed 6.1 pounds in any one day. [District Rule 2201]
4. The daily throughput of the organic liquid shall not exceed 25,000 barrels/day or 1,050,000 gallons/day (equivalent to 1 tank turnover/day). [District Rule 2201]
5. The monthly throughput of the organic liquid shall not exceed 1,000,000 barrels/month or 42,000,000 gallons/month (equivalent to 4 tank turnover/month). [District Rule 2201]
6. The permittee shall determine TVP and the temperature of the organic liquid stored on monthly basis. [District Rule 2201]
7. The floating roof shall be floating on the surface of the stored liquid at all times (i.e., off the roof leg supports) except during the initial fill until the roof is lifted off the leg supports and when the tank is completely emptied and subsequently refilled. When the roof is resting on the leg supports the processes of filling or emptying and refilling the tank shall be continuous and shall be accomplished as rapidly as possible. Whenever the 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 the roof on its legs. [District Rule 4623 Section 5.4.3, 40 CFR 60.112b(a)(1)(i)] Federally Enforceable Through Title V Permit
8. No gap between the tank shell and the primary seal shall exceed one and one-half (1-1/2) inches. [District Rule 4653 Sections 5.3.2.1.1 and 5.4.1] Federally Enforceable Through Title V Permit
9. The cumulative length of all gaps between the tank shell and the primary seal: 1) Greater than one-half (1/2) inch shall not exceed 10 percent of the circumference of the tank; and 2) Greater than one-eighth (1/8) inch shall not exceed 30 percent of the circumference of the tank. [District Rule 4623 Sections 5.3.2.1.1 and 5.4.1] Federally Enforceable Through Title V Permit
10. The primary seal shall have no continuous gap greater than one-eighth (1/8) inch shall exceed 10 percent of the tank circumference. [District Rule 4623 Sections 5.3.2.1.1 and 5.4.1] Federally Enforceable Through Title V Permit
11. No gap between the tank shell and the secondary seal shall exceed one-half (1/2) inch. [District Rule 4623 Sections 5.3.2.1.2 and 5.4.1] Federally Enforceable Through Title V Permit
12. The cumulative length of all gaps between the tank shell and the secondary seal, greater than one-eighth (1/8) inch shall not exceed 5 percent of the tank circumference. [District Rule 4623 Sections 5.3.2.1.2 and 5.4.1] Federally Enforceable Through Title V Permit

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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 18 inches above the stored liquid surface. [District Rule 4623 Section 5.4.1] Federally Enforceable Through Title V Permit

14. The geometry of the metallic-shoe type seal shall be such that the maximum gap between the shoe and the tank shell shall be no greater than 3 inches for a length of at least 18 inches in the vertical plane above the liquid. [District Rule 4623 Sections 5.3.2.1.4 and 5.4.1] Federally Enforceable Through Title V Permit

15. There shall be no holes, tears, or openings in the secondary seal or in the primary seal envelope that surrounds the annular vapor space enclosed by the roof edge, seal fabric, and secondary seal. [District Rule 4623 Sections 5.3.2.1.5 and 5.4.1] Federally Enforceable Through Title V Permit

16. The secondary seal shall allow easy insertion of probes of up to one and one-half (1-1/2) inches in width in order to measure gaps in the primary seal. [District Rule 4623 Sections 5.3.2.1.6 and 5.4.1] Federally Enforceable Through Title V Permit

17. The secondary seal shall extend from the roof to the tank shell and shall not be attached to the primary seal. [District Rule 4623 Sections 5.3.2.1.7 and 5.4.1] Federally Enforceable Through Title V Permit

18. All openings in the roof used for sampling and gauging shall provide a projection below the liquid surface to prevent belching of liquid and to prevent entrained or formed organic vapor from escaping from the liquid contents of the tank and shall be equipped with a cover, seal or lid. The cover seal or lid shall be in a closed position, with no visible gaps and be gas tight, except when the device or appurtenance is in use. [District Rule 4623 Section 5.5.1] Federally Enforceable Through Title V Permit

19. A gas-tight condition is defined as a condition without a gas leak. A gas leak is defined as a reading in excess of 10,000 ppmv, as methane, 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 Sections 3.11, 5.1.3, and 6.4.8] Federally Enforceable Through Title V Permit

20. 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 Section 5.5.2.1.1, 40 CFR 60.112b(a)(1)(iii)] Federally Enforceable Through Title V Permit

21. 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 shall be equipped with a cover, or a lid shall be maintained in a closed position at all times (i.e. no visible gaps) except when the device is in use. The cover or lid shall be equipped with a gasket. Covers on each access hatch and automatic gauge float well shall be bolted in place except when they are in use. [District Rule 4623 Section 5.5.2.1.2, 40 CFR 60.112b(a)(1)(iv)] Federally Enforceable Through Title V Permit

22. Automatic bleeder vents shall be equipped with a gasket and shall be closed at all times when the roof is floating except when the roof is being floated off or is being landed on the leg roof supports. [District Rule 4623 Section 5.5.2.1.3, 40 CFR 60.112b(a)(1)(v)] Federally Enforceable Through Title V Permit

23. Rim vents shall be equipped with a gasket and shall be set to open only when the internal floating roof is not floating or at the manufacturer's recommended setting. [District Rule 4623 Section 5.5.2.1.4, 40 CFR 60.112b(a)(1)(vi)] Federally Enforceable Through Title V Permit

24. Each penetration of the internal floating roof for the purpose of sampling shall be a sample well. The well shall have a slit fabric cover that covers at least 90 percent of the opening. The fabric cover must be impermeable. [District Rule 4623 Section 5.5.2.1.5, 40 CFR 60.112b(a)(1)(vii)] Federally Enforceable Through Title V Permit

25. Each penetration of the internal floating roof that allows for the 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 Section 5.5.2.1.6, 40 CFR 60.112b(a)(1)(viii)] Federally Enforceable Through Title V Permit

26. Each penetration of the internal floating roof that allows for the passage of a ladder shall have a gasketed sliding cover. [40 CFR 60.112b(a)(1)(ix)] Federally Enforceable Through Title V Permit

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27. All slotted sampling or gauging wells, and similar fixed projections through the floating roof shall provide a projection below the liquid surface. [District Rule 4623 Section 5.5.2.4.1] Federally Enforceable Through Title V Permit

28. 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 not exceed one-eighth (1/8) inch. [District Rule 4623 Section 5.5.2.4.3] Federally Enforceable Through Title V Permit

29. 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. If there are holes, tears, or other openings in the primary seal, the secondary seal, or the seal fabric or defects in the internal floating roof or its appurtenant parts, components, fittings, etc., the operator shall repair the defects before filling the tank. [District Rule 4623 Section 6.1.4.1, 40 CFR 60.113b(a)(1)] Federally Enforceable Through Title V Permit

30. The permittee shall visually inspect, through the manholes, roof hatches, or other opening 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 Section 6.1.4.2, 40 CFR 60.113b(a)(2)] Federally Enforceable Through Title V Permit

31. If any failure (i.e. visible organic liquid on the internal floating roof, tank walls or anywhere, holes or tears in the seal fabric) is detected during 12 month visual inspection, the permittee shall repair the items or empty and remove the storage vessel from service within 45 days. If the detected failure cannot be repaired within 45 days and if the vessel cannot be emptied within 45 days, a 30-day extension may be requested from the APCO in the inspection report. Such a request must document that alternate storage capacity is unavailable and specify a schedule of actions the company will take that will assure theat the control equipment will be repaired or the vessel will be emptied as soon as possible. [40 CFR 60.113b(a)(2)] Federally Enforceable Through Title V Permit

32. The permittee shall conduct actual gap measurements of the primary seal and/or secondary seal at least once every 60 months. Other than the gap criteria specified by this permit, no holes, tears, or other openings are allowed that would permit the escape of hydrocarbon vapors. Any defects found shall constitute a violation of this rule. [District Rule 4623 Section 6.1.4.3] Federally Enforceable Through Title V Permit

33. The permittee shall submit the reports of the floating roof tank inspections to the APCO within five calendar days after the completion of the inspection only for those tanks that failed to meet the applicable requirements of Rule 4623, Sections 5.2 through 5.5. The inspection report for tanks that that have been determined to be in compliance with the requirements of Sections 5.2 through 5.5 need not be submitted to the APCO, but the inspection report shall be kept on-site and made available upon request by the APCO. The inspection report shall contain all necessary information to demonstrate compliance with the provisions of this rule, including the following: 1) Date of inspection and names and titles of company personnel doing the inspection. 2) Tank identification number and Permit to Operate number. 3) Measurements of the gaps between the tank shell and primary and secondary seals. 4) Gas-tight status of the tank and floating roof deck fittings. Records of the gas-tight status shall include the vapor concentration values measured in parts per million by volume (ppmv). 5) Data, supported by calculations, demonstrating compliance with the requirements specified in Sections 5.3.1.3 and 5.5.2.4.3 of Rule 4623. 6) Any corrective actions or repairs performed on the tank in order to comply with rule 4623 and the date(s) such actions were taken. [District Rule 4623 Section 6.3.5] Federally Enforceable Through Title V Permit

34. 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 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 Section 6.3.7] Federally Enforceable Through Title V Permit

35. The permittee shall notify the District in writing at least 30 days prior to conduct the visual inspection of the storage vessel, so the District can arrange an observer. [40 CFR 60.113b(a)(5)] Federally Enforceable Through Title V Permit

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36. The permittee shall maintain records of daily, monthly, cumulative annual organic liquid throughput in gallons. The cumulative annual records shall be updated weekly. [District Rule 2201] Federally Enforceable Through Title V Permit

37. The permittee shall maintain records of TVP tests and the temperature of the organic liquid stored in the tank. [District Rule 2201] Federally Enforceable Through Title V Permit

38. The permittee shall maintain records sufficient to demonstrate compliance with the daily VOC emission limit. These records shall contain the calculated emission quantity as well as each process variable used in the respective calculations/modeling. [District Rule 2080] Federally Enforceable Through Title V Permit

39. The permittee shall keep all records on-site for a period of at least five years. These records shall be made available for District inspection upon request. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit