JUL 13 2016

Mr. Stephen Comley
Tesoro Logistics Operations LLC
3003 Navy Drive
Stockton, CA 95206

Re: Proposed ATC / Certificate of Conformity (Significant Mod)
District Facility # N-845
Project # N-1160048

Dear Mr. Comley:

Enclosed for your review is the District’s analysis of an application for Authorities to Construct for the facility identified above. You requested that Certificates of Conformity with the procedural requirements of 40 CFR Part 70 be issued with this project. This project is to remove an existing gasoline storage tank and replace with a new denatured ethanol storage tank, install an additional gasoline tank and a denatured ethanol bulk offloading operation, and also increase the daily and annual loading throughputs for the loading rack.

After addressing all comments made during the 30-day public notice and the 45-day EPA comment periods, the District intends to issue the Authorities to Construct with Certificates of Conformity. Please submit your comments within the 30-day public comment period, as specified in the enclosed public notice. Prior to operating with modifications authorized by the Authorities to Construct, the facility must submit an application to modify the Title V permit as an administrative amendment, in accordance with District Rule 2520, Section 11.5.

If you have any questions, please contact Mr. Nick Peirce, Permit Services Manager, at (209) 557-6400.

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)
1980 E. Gettysburg Avenue
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Southern Region
34946 Flyover Court
Bakersfield, CA 93308-6725
Tel: 661-392-5500 FAX: 661-392-5585

www.valleyair.org www.healthyairliving.com
Thank you for your cooperation in this matter.

Sincerely,

Arnaud Marjollet
Director of Permit Services

Enclosures

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

Tesoro Logistic Operations LLC (hereafter Tesoro) is requesting Authorities to Construct (ATC) to remove an existing gasoline storage tank (N-845-1) and replace with a new denatured ethanol storage tank, install a new gasoline storage tank, install a denatured ethanol bulk offloading operation, and increase the daily and annual loading throughputs for the loading rack (N-845-6). The draft ATCs are included in Appendix A. Proposal is detailed below:

N-845-6-6 (Loading Rack) & N-845-22-5 (Vapor Recovery System)

Increase the daily and annual organic liquids throughputs from 771,120 gallons per day and 240,350,000 gallons per year to 1,000,000 gallons per day and 365,000,000 gallons per year, respectively. No physical modification to the loading rack is proposed, and the number and type of the fugitive component will not be changed as a result of this project.

N-845-25-0 (New Denatured Ethanol Storage Tank)

Demolish the existing 420,000 gallon gasoline storage tank under permit unit N-845-1 (with Tesoro internal identification number of Tank #20), and replace with one 571,068 gallon aboveground internal floating roof denatured ethanol storage tank (with same ID of Tank #20) at the same location.

N-845-26-0 (New gasoline storage tank)

Install a new 1,347,627 gallons aboveground internal floating roof gasoline storage tank (with Tesoro internal identification number of Tank #32).
N-845-27-0 (Denatured ethanol bulk offloading operation)

Tesoro also proposed to install a denatured ethanol bulk offloading operation at an off-site location at 2650 West Washington Street in Port of Stockton. This site is about 500 feet North East to the existing Tesoro Terminal located at 3003 Navy Drive in Port of Stockton. Tesoro will install new piping to transfer denatured ethanol from the bulk offloading stations to the new denature ethanol storage tank, Tank #20. See facility layout and equipment locations map in Appendix C of this document. This off-site location is located on a different parcel than the Tesoro Terminal, and is not adjacent or contiguous to the existing Tesoro Terminal parcel. However, the denatured ethanol from the proposed offloading operation will be fed solely to the Tesoro Terminal, so this operation supplements the Tesoro Terminal operation. Therefore, the off-site denatured ethanol offloading operation and the existing Tesoro Terminal are considered same stationary source.

Tesoro possesses a Title V permit. The proposed project is a Significant Modification to the Title V permit, as this project is a Federal Major Modification under Rule 2201. The applicant has requested to issue the ATCs with a Certificate of Conformity (COC), which is EPA's 45-day review of the project prior to the issuance of the final ATCs. This project will be published in the local newspaper, The Record, for public review and comment. The public comment period will last 30-days from the date of publication. Both COC and public notice will run concurrently.

II. Applicable Rules

<table>
<thead>
<tr>
<th>Rule</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>Rule 1081</td>
<td>Source Sampling (12/17/92)</td>
</tr>
<tr>
<td>Rule 1100</td>
<td>Equipment Breakdown (12/17/92)</td>
</tr>
<tr>
<td>Rule 2201</td>
<td>New and Modified Stationary Source Review Rule (04/21/11)</td>
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<td>Rule 2410</td>
<td>Prevention of Significant Deterioration (6/16/11)</td>
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<tr>
<td>Rule 2520</td>
<td>Federally Mandated Operating Permits (6/21/01)</td>
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<td>Rule 4001</td>
<td>New Source Performance Standards (4/14/99)</td>
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<tr>
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<td>40 CFR Part 60 Subpart XX – Standards of Performance for Bulk Gasoline Terminals</td>
</tr>
<tr>
<td>Rule 4002</td>
<td>National Emissions Standards for Hazardous Air Pollutants (5/20/04)</td>
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<td>40 CFR Part 63 Subpart R – Gasoline Distribution Facilities (Bulk Gasoline Terminals and Pipeline Breakout Stations)</td>
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<td>40 CFR Part 63 Subpart BBBB – Gasoline Distribution Bulk Terminals, Bulk Plants, and Pipeline Facilities</td>
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<tr>
<td>Rule 4101</td>
<td>Visible Emissions (2/17/05)</td>
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<td>Rule 4102</td>
<td>Nuisance (12/17/92)</td>
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<tr>
<td>Rule 4623</td>
<td>Storage of Organic Liquids (05/19/05)</td>
</tr>
<tr>
<td>Rule 4624</td>
<td>Transfer of Organic Liquids (12/20/07)</td>
</tr>
<tr>
<td>CH&amp;SC 41700</td>
<td>Health Risk Assessment</td>
</tr>
</tbody>
</table>

1 Project deemed complete prior to the latest Rule 2201 amendment date February 18, 2016; and therefore, this project will be processed under the April 21, 2011 version of the Rule 2201.
III. Project Location

The facility is located at 3003 Navy Drive in Stockton, California. The equipment is not located within 1,000 feet of the outer boundary of any K-12 school. Therefore, the public notification requirement of California Health and Safety Code 42301.6 is not applicable to this project.

IV. Process Description

TLO is a petroleum distribution terminal that consists of a truck loading rack with a VRS and multiple storage tanks that store gasoline, distillate fuel oil (diesel), denatured ethanol, and others organic liquid. (TLO) receives petroleum products, denatured ethanol, and additives via pipelines, railcar, and/or tanker trucks. Products will be stored in storage tanks and then be loaded into tanker trucks using the existing loading rack.

Gasoline and distillate fuel oil tanker truck loading is done by submerged fill with the displaced vapors being processed through the VRS. Specific additives are stored at the facility and blended with either gasoline or distillate fuel oil at the loading rack. Denatured ethanol is brought on-site via railcar or tanker truck and is stored in the terminal. Denatured ethanol is then blended with gasoline at the loading rack prior to loading the tanker trucks.

The operating schedule of this operation is 24 hours per day and 365 days per year.

V. Equipment Listing

Pre-Project Equipment Description:

N-845-1-3: ONE 420,000 GALLON GASOLINE STORAGE TANK (NO. 20) WITH A STEEL PAN INTERNAL FLOATING ROOF WITH A METAL SHOE PRIMARY SEAL AND A FABRIC WIPER SECONDARY SEAL

N-845-6-5: BULK LOADING RACK CONSISTING OF EIGHT GASOLINE/DENATURED ETHANOL LOADING ARMS AND EIGHT DIESEL LOADING ARMS SERVED BY THE CARBON ADSORPTION VAPOR RECOVERY SYSTEM (N-845-22)

N-845-22-4: JOHN ZINK, LLC MODEL #S3-AAD-3-80-80-8 CARBON ADSORPTION VAPOR RECOVERY SYSTEM
Proposed Modification:

N-845-6-5: MODIFICATION OF BULK LOADING RACK CONSISTING OF EIGHT GASOLINE/DENATURED ETHANOL LOADING ARMS AND EIGHT DIESEL LOADING ARMS SERVED BY THE CARBON ADSORPTION VAPOR RECOVERY SYSTEM (N-845-22): INCREASE THE DAILY AND ANNUAL ORGANIC LIQUIDS THROUGHPUTS FROM 771,120 GALLONS PER DAY AND 240,350,000 GALLONS PER YEAR TO 1,000,000 GALLONS PER DAY AND 365,000,000 GALLONS PER YEAR

N-845-22-4: MODIFICATION OF JOHN ZINK, LLC MODEL #S3-AAD-3-80-80-8 CARBON ADSORPTION VAPOR RECOVERY SYSTEM: EXCEPT TO INCREASE THE DAILY AND ANNUAL THROUGHPUT LIMITS, NO PHYSICAL CHANGE TO THE EQUIPMENT

Post-Project Equipment Description:

N-845-6-6: BULK LOADING RACK CONSISTING OF EIGHT GASOLINE/DENATURED ETHANOL LOADING ARMS AND EIGHT DIESEL LOADING ARMS SERVED BY THE CARBON ADSORPTION VAPOR RECOVERY SYSTEM (N-845-22)

N-845-22-5: JOHN ZINK, LLC MODEL #S3-AAD-3-80-80-8 CARBON ADSORPTION VAPOR RECOVERY SYSTEM

N-845-25-0: ONE 571,068 GALLON ABOVEGROUND WELDED INTERNAL FLOATING ROOF DENATURED ETHANOL STORAGE TANK WITH A MECHANICAL SHOE TYPE PRIMARY SEAL AND A RIM-MOUNTED SECONDARY SEAL

N-845-26-0: ONE 1,347,627 GALLON ABOVEGROUND WELDED INTERNAL FLOATING ROOF GASOLINE STORAGE TANK WITH A MECHANICAL SHOE TYPE PRIMARY SEAL AND A RIM-MOUNTED SECONDARY SEAL

N-845-27-0: DENATURED ETHANOL BULK OFFLOADING OPERATION CONSISTING OF ONE RAILCAR OFFLOADING STATION AND ONE TRUCK OFFLOADING STATION
VI. Emission Control Technology Evaluation

Volatile Organic Compound (VOC) is emitted from the organic liquids loading, unloading, transfer and storage. VOC emissions from the loading rack will be vented to the existing VRS that has a minimum control efficiency of 99% for VOC.

VOC emissions from the unloading stations via the hoses disconnect will be minimized by good operating practices to ensure liquid drainage when the hoses are disconnected is not excessive.

Each new storage tank is equipped with a mechanical shoe primary seal and a rim-mounted secondary seal to reduce VOC emissions. These seals are expected to control at least 95% of VOC emissions over the uncontrolled storage tank.

Only fugitive VOC emissions from the components, such as flanges, valves, connectors, compressor seals, and other piping components are expected.

VII. General Calculations

A. Assumptions

- VOC is the only emitted criteria pollutant associated to this project.
- The loading rack’s post-project annual throughput of 521,428,571 gallons encompasses 365,000,000 gallons organic liquids and 156,428,571 gallons of distillate fuel oil #2 (diesel) (per applicant).
- The loading rack processes the following organic liquids: gasoline, denatured ethanol, and additive 121 (per applicant).
- Denatured ethanol is offloaded via railcar or tanker truck, and is stored at this facility. Denatured ethanol is then blended with gasoline and or additive 121 prior to loading the tanker trucks (per applicant).
- The post-project daily organic liquids (not including distillate fuel oil #2) throughput of the loading rack is 1,000,000 gallons (per applicant).
- Densities of organic liquid and denatured ethanol loaded through the loading rack are 5.6 pounds per gallon and 6.61 pounds per gallon, respectively (per applicant).
- Only fugitive VOC is emitted from the components such as flanges, valves, connectors, seals, and others piping components (per applicant).
- The daily and annual fugitives emissions from the associated components are determined using Marketing Terminal Average Emissions Factors of Table IV-1b listed in CAPCOA document, “California Implementation Guidelines for Estimating Mass Emission of Fugitive Hydrocarbon leaks at Petroleum Facilities, 1999” (February 1999).
- Other assumptions will be stated as each is made.
B. Emission Factors

Pre-Project Emission Factor (EF1)

N-845-6-5 & -22-4

Emissions from the organic liquids loading operation are including four sources of emissions: a) captured loading losses that vent to the VRS; b) uncaptured fugitive loading losses; c) disconnection emissions; and d) fugitive emissions from the component

Loading Rack Emissions:
Emission from the loading rack is vented to the VRS (N-845-22). VOC emission factor of 0.08 pounds VOC per 1,000 gallons of organic liquid transferred is taken from District Rule 4624, Section 5.1.

\[ \text{EF1}_{\text{Captured}} = 0.08 \text{ lb-VOC/1,000 gallon organic liquid transferred} \]

Uncaptured Loading Emissions
Per AP-42, Chapter 5, section 5.2.2.1.1 not all of the displaced vapors reach the control device because of leakage from both the tank truck and vapor collection system. In order to quantify the uncaptured fugitive emissions from the loading process, the uncontrolled emission factors provided in AP-42, Table 5.2-5 for loading operations are used in conjunction with a 99.2% collection efficiency for tank truck that meet the requirements of MACT-level annual leak test. Per applicant, tank truck loading in Tesoro Terminal will meet the requirements of MACT-level annual leak test.

Per AP-42 Table 5.2-5, the EF of loading operation with submerged loading is 5 pounds per 1,000 gallon, along with the use of capture efficiency of 99.2% for the tank truck. The uncaptured offloading process EF is:

\[ \text{EF1}_{\text{Uncaptured}} = 5 \text{ lb-VOC/1,000 gal} \times (1 - 0.992) = 0.04 \text{ lb-VOC/1,000 gal} \]

Disconnection Emissions:
During organic liquids loading into tank truck, VOC emission will be accounted for due to liquid spillage during connection and disconnection between the tank truck and the loading rack.

An emission factor of 10 milliliters-VOC per disconnect (in accordance with the requirements of District Rule 4624) will be used to quantify disconnect VOC emissions from the loading processes. Per application, the density of organic liquid is 5.6 lb/gal. Assuming that all of the liquid spilled evaporates as VOC's, the VOC emission factor per disconnection can be calculated as follows:

\[ \text{EF1}_{\text{Disconnection}} = (10 \text{ mL-VOC/disconnect}) \times (5.6 \text{ lb/gal}) \times (1 \text{ gal/3,785.41 mL}) \]

\[ \text{EF1}_{\text{Disconnection}} = 0.0148 \text{ lb-VOC/disconnect} \]
**Fugitive Emissions:**
Fugitive VOC emission from the valves, flanges, compressor seals etc. will be determined using Marketing Terminal Average Emissions Factors of Table IV-1b listed in CAPCOA document, "California Implementation Guidelines for Estimating Mass Emission of Fugitive Hydrocarbon leaks at Petroleum Facilities, 1999" (February 1999). The total hydrocarbons (THC) emission factors reported in this Table IV-1b are assumed to be VOC calculating the fugitive VOC emissions.

<table>
<thead>
<tr>
<th>Component Type</th>
<th>Source Type</th>
<th>VOC EF (kg/hr/source)</th>
<th>VOC EF (lb/hr/source)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valves</td>
<td>Gas</td>
<td>1.3E-05</td>
<td>2.87E-05</td>
</tr>
<tr>
<td></td>
<td>Light Liquid</td>
<td>4.3E-05</td>
<td>9.48E-05</td>
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<tr>
<td>Pump Seals</td>
<td>Gas</td>
<td>6.5E-05</td>
<td>1.43E-04</td>
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<tr>
<td></td>
<td>Light Liquid</td>
<td>5.4E-04</td>
<td>1.19E-03</td>
</tr>
<tr>
<td>Others (compressors and others)</td>
<td>Gas</td>
<td>1.2E-04</td>
<td>2.65E-04</td>
</tr>
<tr>
<td></td>
<td>Light Liquid</td>
<td>1.3E-04</td>
<td>2.87E-04</td>
</tr>
<tr>
<td>Fittings (connectors and flanges)</td>
<td>Gas</td>
<td>4.2E-05</td>
<td>9.26E-05</td>
</tr>
<tr>
<td></td>
<td>Light Liquid</td>
<td>8.0E-06</td>
<td>1.76E-05</td>
</tr>
</tbody>
</table>

N-845-25-0 -26-0, & -27-0

These are new emission units. Therefore, EF1 is equal to zero.

**Post-Project Emission Factor (EF2)**

N-845-6-6 & -22-5

**Loading Emissions:**
Increase of loading throughputs will not change the liquid transfer emissions rate. Therefore, EF2 = EF1 = 0.08 lb-VOC/1,000 gallon organic liquid transferred.

**Uncaptured Loading Emissions:**
Increase of loading throughputs will not change the uncaptured fugitive emissions rate. Therefore, EF2 = EF1 = 0.04 lb-VOC/1,000 gallon organic liquid loaded.

**Disconnection Emissions:**
Increase of loading throughputs will not change the liquid spillage rate during pipe disconnection. Therefore, EF2 = EF1 = 0.0148 lb-VOC/disconnect.

**Fugitive Emissions:**
Fugitive emissions factors will not be changed. Therefore, EF2 = EF1 listed above.

N-845-25-0 & -26-0

The VOC emissions from these tanks will be calculated using EPA's Tanks 4.09d software program. Therefore, a separate emissions factor is not necessary.
N-845-27-0

The proposed denatured ethanol bulk offloading operation consisting of one railcar offloading station and one truck offloading station, and emissions from each offloading station including two sources of emissions: a) disconnection emissions; and b) fugitive emissions from the component.

Disconnection Emissions:
During denatured ethanol offloading, VOC emission will be accounted for due to liquid spillage during connection and disconnection between either the railcar or truck to the pipe header at the pumping stations.

The applicant proposes an emission factor of 8 milliliters-VOC per disconnect. This emission factor will be used to quantify disconnect VOC emissions from the offloading processes. Per application, the density of denatured ethanol is 6.61 lb/gal. Assuming that all of the liquid spilled evaporates as VOC's, the VOC emission factor per disconnection can be calculated as follows:

\[
\text{EF2}_{\text{Disconnection}} = (8 \text{ mL-VOC/disconnect}) \times (6.61 \text{ lb/gal}) \times (1 \text{ gal/3,785.41 mL})
\]

\[
\text{EF2}_{\text{Disconnection}} = 0.0140 \text{ lb-VOC/disconnect}
\]

Fugitive Emissions:
Fugitive VOC emission from the valves, flanges, compressor seals etc. will be determined using Marketing Terminal Average Emissions Factors of Table IV-1b listed in CAPCOA document, "California Implementation Guidelines for Estimating Mass Emission of Fugitive Hydrocarbon Leaks at Petroleum Facilities, 1999" (February 1999). The total hydrocarbons (THC) emission factors reported in this Table IV-1b are assumed to be VOC calculating the fugitive VOC emissions.

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<tr>
<td>Others (compressors and others)</td>
<td>Gas</td>
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<td></td>
<td>Light Liquid</td>
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</tr>
<tr>
<td></td>
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</tr>
</tbody>
</table>
C. Calculations

1. Pre-Project Potential to Emit (PE1)

N-845-6-5 & -22-4:

Loading Process Emissions:

Emissions from the loading rack are vented to the VRS under permit unit N-845-22. As discussed in emissions factor section above, the loading process encompass four areas of emissions: loading emissions, uncaptured loading emissions, disconnection emissions, and fugitive emissions.

\[
\text{PE Loading Process Emissions} = \text{PE Loading Rack} + \text{PE Uncaptured} + \text{PE Disconnected} + \text{PE Fugitive}
\]

**Loading Rack Emissions:**

VOC Emissions from the VRS is limited to 0.08 pounds per 1,000 gallons of organic liquid loaded. The daily and annual throughputs of the loading rack are limited to 771,120 gallons per day and 240,350,000 gallons per year, respectively. The daily and annual emissions from the VRS are calculated to:

- **Daily PE1**  
  \[= 0.08 \text{ lb-VOC/1,000 gal} \times 771,120 \text{ gal/day} = 61.7 \text{ lb-VOC/day}\]

- **Annual PE1**  
  \[= 0.08 \text{ lb-VOC/1,000 gal} \times 240,350,000 \text{ gal/yr} = 19,228 \text{ lb-VOC/yr}\]

**Uncaptured Loading Emissions:**

Uncaptured fugitive loading emissions are calculated based on emission factor listed above and the pre-project daily and annual loading throughputs. The daily and annual emissions calculated as follows:

- **Daily PE1**  
  \[= 0.04 \text{ lb-VOC/1,000 gal} \times 771,120 \text{ gal/day} = 30.8 \text{ lb-VOC/day}\]

- **Annual PE1**  
  \[= 0.04 \text{ lb-VOC/1,000 gal} \times 240,350,000 \text{ gal/yr} = 9,614 \text{ lb-VOC/yr}\]

**Disconnection emissions:**

Per applicant, the maximum daily and annual loadout events for the loading rack are 125 events per day and 39,018 events per year, the number of disconnect per each loadout event is 5 disconnects per event, the density of organic liquid loaded through the loading rack is 5.6 pounds per gallon. The daily and annual disconnection emissions are calculated as follows:

- **Daily PE1 Disconnect**  
  \[= 10 \text{ mL/disconnect} \times 125 \text{ event/day} \times 5 \text{ disconnect/event} \times 1 \text{ gal/3785.41 mL} \times 5.6 \text{ lb/gal} = 9.2 \text{ lb-VOC/day}\]

- **Annual PE1 Disconnect**  
  \[= 10 \text{ mL/disconnect} \times 39,018 \text{ event/year} \times 5 \text{ disconnect/event} \times 1 \text{ gal/3785.41 mL} \times 5.6 \text{ lb/gal} = 2,886 \text{ lb-VOC/year}\]
**Fugitive Emissions:**
The daily and annual fugitive VOC emissions are taken from engineering evaluation under project N-1112963, and summarized below:

Daily PE1  =  1.7 lb-VOC/day  
Annual PE1 =  621 lb-VOC/year

**Total Loading Process Emissions PE1:**

<table>
<thead>
<tr>
<th></th>
<th>Daily PE1 (lb-VOC/day)</th>
<th>Annual PE1 (lb-VOC/year)</th>
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</thead>
<tbody>
<tr>
<td>Captured Loading Emissions</td>
<td>61.7</td>
<td>19,228</td>
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<tr>
<td>Uncaptured Loading Emissions</td>
<td>30.8</td>
<td>9,614</td>
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<td>Disconnection Emissions</td>
<td>9.2</td>
<td>2,886</td>
</tr>
<tr>
<td>Fugitive Emissions</td>
<td>1.7</td>
<td>621</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>103.4</strong></td>
<td><strong>32,349</strong></td>
</tr>
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</table>

N-845-25-0, -26-0, & -27-0:

These are new permit units. Therefore, PE1 is equal to zero.

2. **Post Project Potential to Emit (PE2)**

N-845-6-6 & -22-5:

As discussed in PE1 above, emissions from the organic liquids loading process will vent to the VRS (N-845-22).

**Loading Rack Emissions:**
The applicant proposed to increase the daily and annual organic liquids throughputs to 1,000,000 gallons per day and 365,000,000 gallons per year, respectively. The daily and annual emissions from the VRS are calculated to:

Daily PE2  =  0.08 lb-VOC/1,000 gal x 1,000,000 gal/day  =  80.0 lb-VOC/day  
Annual PE2 =  0.08 lb-VOC/1,000 gal x 365,000,000 gal/yr = 29,200 lb-VOC/yr

**Uncaptured Loading Emissions:**
The post-project loading throughputs are 1,000,000 gallons per day and 365,000,000 gallons per year. The post-project uncaptured loading emissions are calculated as follows:

Daily PE2  =  0.04 lb-VOC/1,000 gal x 1,000,000 gal/day  =  40.0 lb-VOC/day  
Annual PE2 =  0.04 lb-VOC/1,000 gal x 360,000,000 gal/yr = 14,600 lb-VOC/yr

**Disconnection emissions:**
Per applicant, the maximum daily and annual loadout events for the loading rack are 162 events per day and 59,253 events per year, the number of disconnect per each
loadout event is 5 disconnects per event, the density of organic liquid loaded through the loading rack is 5.6 pounds per gallon. The daily and annual disconnection emissions are calculated as follows:

\[
\text{Daily PE2} \_{\text{Disconnect}} = \frac{10 \text{ mL/Disconnect} \times 162 \text{ event/day} \times 5 \text{ disconnect/event} \times 1 \text{ gal/3785.41 mL} \times 5.6 \text{ lb/gal}}{12.9 \text{ lb-VOC/day}}
\]
\[
= 10 \text{ mL/Disconnect} \times 59,253 \text{ event/year} \times 5 \text{ disconnect/event} \times 1 \text{ gal/3785.41 mL} \times 5.6 \text{ lb/gal}
\]
\[
= 4,383 \text{ lb-VOC/year}
\]

**Fugitive Emissions:**
The applicant is not proposing any changes to the type and number of components to the loading rack. Therefore, PE2 = PE1 and summarized below:

\[
\text{Daily PE2} = 1.7 \text{ lb-VOC/day}
\]
\[
\text{Annual PE2} = 621 \text{ lb-VOC/year}
\]

**Total Loading Process Emissions PE2:**

<table>
<thead>
<tr>
<th></th>
<th>Daily PE2 (lb-VOC/day)</th>
<th>Annual PE2 (lb-VOC/year)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Captured Loading Emissions</td>
<td>80.0</td>
<td>29,200</td>
</tr>
<tr>
<td>Uncaptured Loading Emissions</td>
<td>40.0</td>
<td>14,600</td>
</tr>
<tr>
<td>Disconnection Emissions</td>
<td>12.0</td>
<td>4,383</td>
</tr>
<tr>
<td>Fugitive Emissions</td>
<td>1.7</td>
<td>621</td>
</tr>
<tr>
<td>Total</td>
<td>133.7</td>
<td>48,804</td>
</tr>
</tbody>
</table>

N-845-25-0:

This new tank will use for denatured ethanol storage. Emissions from this tank will be determined by using EPA's TANKS 4.09d program (see detail emissions report in Appendix D of this document). From the emissions report, the highest monthly VOCs emission was identified, as July, and is used in estimating the daily emissions from this tank.

**Standing Loss:**
The standing loss includes the losses from the rim seal, deck fitting, and deck seam, which totaled as follow:

\[
\text{Standing Loss} = \text{Rim Seal Loss} + \text{Deck Fitting Loss} + \text{Deck Seam Loss}
\]
\[
= 2.97 \text{ lb/month} + 15.96 \text{ lb/month} + 0 \text{ lb/month}
\]
\[
= 18.93 \text{ lb/month}
\]

Given that the standing losses occur each day, the potential daily emission is calculated:
Standing Loss = 18.93 lb-VOC/month + 31 day/month of July
= 0.61 lb-VOC/day

Withdrawal Loss:
The withdrawal losses occur on the days the proposed tank is loaded or unloaded. The maximum monthly throughput is equivalent to the annual throughput of 24,000,000 gallons, and the tank capacity is 571,068 gallon, so the monthly turnover rate of this tank is calculated 42.03 turnovers. Therefore, the withdrawal loss during the July is calculated:

Withdrawal Loss = 121.63 lb-VOC/month + 42.03 turnovers/month
= 2.89 lb-VOC/turnover

Per applicant, the proposed maximum daily ethanol receiving rate is 100,000 gallons, and the tank capacity is 571,068 gallon, so the daily turnover rate of this new tank is 0.18 per day, the maximum withdrawal loss is calculated to:

Withdrawal Loss = 2.89 lb-VOC/turnover x 0.18 turnovers/day
= 0.52 lb-VOC/day

The daily potential emission from the storage tank is calculated:

Daily PE2 = Standing Loss + Withdrawal Loss
= 0.61 lb-VOC/day + 0.52 lb-VOC/day
= 1.1 lb-VOC/day

The annual potential emission from this storage tank is determined by using EPA's TANKS 4.09d program, which is 302 lb-VOC/yr.

Fugitive Emissions:
Fugitive emissions from the components are calculated using the following equation and are summarized in the following table:

\[
\text{Daily PE} = \text{VOC (lb/hr/source)} \times \text{Component Count} \times 24 \text{ hr/day}
\]

<table>
<thead>
<tr>
<th>Component Type</th>
<th>Source Type</th>
<th>VOC EF (lb/hr/source)</th>
<th>Component Count</th>
<th>Daily PE (lb-VOC/day)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valves</td>
<td>Gas</td>
<td>2.87E-05</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td></td>
<td>Light Liquid</td>
<td>9.46E-05</td>
<td>18</td>
<td>0.041</td>
</tr>
<tr>
<td>Pump Seals</td>
<td>Gas</td>
<td>1.43E-04</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td></td>
<td>Light Liquid</td>
<td>1.19E-03</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Others (compressors and others)</td>
<td>Gas</td>
<td>2.65E-04</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td></td>
<td>Light Liquid</td>
<td>2.87E-04</td>
<td>20</td>
<td>0.138</td>
</tr>
<tr>
<td>Fittings (connectors and flanges)</td>
<td>Gas</td>
<td>9.26E-05</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td></td>
<td>Light Liquid</td>
<td>1.76E-05</td>
<td>68</td>
<td>0.029</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td></td>
<td>0.2 (0.208)</td>
</tr>
</tbody>
</table>
Annual PE2 = Daily PE x 365 day/yr
= 0.208 lb-VOC/day x 365 day/yr = 76 lb-VOC/year

**Total Emissions PE2:**

<table>
<thead>
<tr>
<th></th>
<th>Daily PE2 (lb-VOC/day)</th>
<th>Annual PE2 (lb-VOC/year)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tank</td>
<td>1.1</td>
<td>302</td>
</tr>
<tr>
<td>Components</td>
<td>0.2</td>
<td>76</td>
</tr>
<tr>
<td>Total</td>
<td>1.3</td>
<td>378</td>
</tr>
</tbody>
</table>

**N-845-26-0:**

This new tank will use for gasoline storage. Emissions from this tank will be determined by using EPA's TANKS 4.09d program (see detail emissions report in Appendix D of this document). From the emissions report, the highest monthly VOCs emission was identified, as October, and is used in estimating the daily emissions from this tank.

**Standing Loss:**
The standing loss includes the losses from the rim seal, deck fitting, and deck seam, which totaled as follows:

Standing Loss = Rim Seal Loss + Deck Fitting Loss + Deck Seam Loss
= 39.96 lb/month + 151.11 lb/month + 0 lb/month
= 191.07 lb/month

Given that the standing losses occur each day, the potential daily emission is calculated:

Standing Loss = 191.07 lb-VOC/month + 31 day/month of October
= 6.16 lb-VOC/day

**Withdrawal Loss:**
The withdrawal losses occur on the days the proposed tank is loaded or unloaded. The maximum monthly throughput is equivalent to the annual throughput of 90,720,000 gallons, and the tank capacity is 1,347,627 gallon, so the monthly turnover rate of this tank is calculated 67.32 turnovers. Therefore, the withdrawal loss during the October is calculated:

Withdrawal Loss = 271.94 lb-VOC/month + 67.32 turnovers/month
= 4.04 lb-VOC/turnover

Per applicant, the maximum turnover rate of this new tank is 1 per day, the maximum withdrawal loss is calculated to:

Withdrawal Loss = 4.04 lb-VOC/turnover x 1 turnovers/day
= 4.04 lb-VOC/day
The daily potential emission from the storage tank is calculated:

\[
\text{Daily PE2} = \text{Standing Loss} + \text{Withdrawal Loss} \\
= 6.16 \text{ lb-VOC/day} + 4.04 \text{ lb-VOC/day} \\
= 10.2 \text{ lb-VOC/day}
\]

The annual potential emission from this storage tank is determined by using EPA’s TANKS 4.09d program, which is 1,686 lb-VOC/yr.

**Fugitive Emissions:**
Fugitive emissions from the components are calculated using the following equation and are summarized in the following table:

\[
\text{Daily PE} = \text{VOC (lb/hr/source)} \times \text{Component Count} \times 24 \text{ hr/day}
\]

<table>
<thead>
<tr>
<th>Component Type</th>
<th>Source Type</th>
<th>VOC EF (lb/hr/source)</th>
<th>Component Count</th>
<th>Daily PE (lb-VOC/day)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valves</td>
<td>Gas</td>
<td>2.87E-05</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td></td>
<td>Light Liquid</td>
<td>9.48E-05</td>
<td>27</td>
<td>0.061</td>
</tr>
<tr>
<td>Pump Seals</td>
<td>Gas</td>
<td>1.43E-04</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td></td>
<td>Light Liquid</td>
<td>1.19E-03</td>
<td>2</td>
<td>0.057</td>
</tr>
<tr>
<td>Others (compressors and others)</td>
<td>Gas</td>
<td>2.65E-04</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td></td>
<td>Light Liquid</td>
<td>2.87E-04</td>
<td>20</td>
<td>0.138</td>
</tr>
<tr>
<td>Fittings (connectors and flanges)</td>
<td>Gas</td>
<td>9.26E-05</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td></td>
<td>Light Liquid</td>
<td>1.76E-05</td>
<td>42</td>
<td>0.018</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td></td>
<td>0.3 (0.274)</td>
</tr>
</tbody>
</table>

\[
\text{Annual PE2} = \text{Daily PE} \times 365 \text{ day/yr} \\
= 0.274 \text{ lb-VOC/day} \times 365 \text{ day/yr} \\
= 100 \text{ lb-VOC/year}
\]

**Total Emissions PE2:**

<table>
<thead>
<tr>
<th></th>
<th>Daily PE2 (lb-VOC/day)</th>
<th>Annual PE2 (lb-VOC/year)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tank</td>
<td>10.2</td>
<td>1,686</td>
</tr>
<tr>
<td>Components</td>
<td>0.3</td>
<td>100</td>
</tr>
<tr>
<td>Total</td>
<td><strong>10.5</strong></td>
<td><strong>1,786</strong></td>
</tr>
</tbody>
</table>

N-845-27-0

Per applicant, the denatured ethanol will be offloaded to the facility via either railcar or truck in any single day, and the combined annual disconnect events for both railcar and truck will not exceed 2,600 events. Therefore, two operating scenarios are proposed as follows:
Scenario 1 - Railcar Offloading

Disconnection Emissions:
Per applicant, the maximum daily and annual loadout events for the railcar offloading station are 3 events per day, the number of disconnect per each loadout event is 3 disconnects per event, the density of the denatured ethanol is 6.61 pounds per gallon. The uncontrolled daily disconnection emissions are calculated:

\[
\text{Daily PE2}_{\text{Disconnect}} = 8 \text{ mL/disconnect} \times 3 \text{ event/day} \times 3 \text{ disconnect/event} \times 1 \text{ gal/3785.41 mL} \times 6.61 \text{ lb/gal} = 0.1 \text{ lb-VOC/day}
\]
\[
\text{Annual PE2}_{\text{Disconnect}} = 8 \text{ mL/disconnect} \times 780 \text{ event/year} \times 3 \text{ disconnect/event} \times 1 \text{ gal/3785.41 mL} \times 6.61 \text{ lb/gal} = 33 \text{ lb-VOC/year}
\]

Fugitive Emissions:
Per applicant, the railcar offloading station has the following components that contribute fugitive emissions: 12 valves, 1 pump seal and 32 fittings (connectors and flanges). The uncontrolled daily fugitive emissions are calculated:

\[
\text{Daily PE2} = \text{VOC (lb/hr/source)} \times \text{Component Count} \times 24 \text{ hr/day}
\]

<table>
<thead>
<tr>
<th>Component Type</th>
<th>Source Type</th>
<th>VOC EF (lb/hr/source)</th>
<th>Component Count</th>
<th>Daily PE (lb-VOC/day)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valves</td>
<td>Gas</td>
<td>2.87E-05</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td></td>
<td>Light Liquid</td>
<td>9.48E-05</td>
<td>12</td>
<td>0.027</td>
</tr>
<tr>
<td>Pump Seals</td>
<td>Gas</td>
<td>1.43E-04</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td></td>
<td>Light Liquid</td>
<td>1.19E-03</td>
<td>1</td>
<td>0.029</td>
</tr>
<tr>
<td>Others (compressors and others)</td>
<td>Gas</td>
<td>2.65E-04</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td></td>
<td>Light Liquid</td>
<td>2.87E-04</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Fittings (connectors and flanges)</td>
<td>Gas</td>
<td>9.26E-05</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td></td>
<td>Light Liquid</td>
<td>1.76E-05</td>
<td>32</td>
<td>0.014</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td></td>
<td>0.1 (0.07)</td>
</tr>
</tbody>
</table>

\[
\text{Annual PE2} = \text{Daily PE2} \times 365 \text{ day/year} = 0.07 \text{ lb-VOC/day} \times 365 \text{ day/year} = 26 \text{ lb-VOC/year}
\]

Total Railcar Emissions:

<table>
<thead>
<tr>
<th></th>
<th>Daily PE2 (lb-VOC/day)</th>
<th>Annual PE2 (lb-VOC/year)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disconnect</td>
<td>0.1</td>
<td>33</td>
</tr>
<tr>
<td>Components</td>
<td>0.1</td>
<td>26</td>
</tr>
<tr>
<td>Total</td>
<td>0.2</td>
<td>59</td>
</tr>
</tbody>
</table>
Scenario 2 - Tank Truck Offloading

Disconnection Emissions
Per applicant, the maximum daily and annual loadout events for the tank truck offloading station are 10 events per day, the number of disconnect per each loadout event is 5 disconnects per event, the density of the denatured ethanol is 6.61 pounds per gallon. The uncontrolled daily disconnection emissions are calculated:

\[
\text{Daily PE2}_{\text{Disconnect}} = 8 \text{ mL/disconnect} \times 10 \text{ event/day} \times 5 \text{ disconnect/event} \times 1 \text{ gal/3785.41 mL} \times 6.61 \text{ lb/gal}
\]
\[
= 0.7 \text{ lb-VOC/day}
\]

\[
\text{Annual PE2}_{\text{Disconnect}} = 8 \text{ mL/disconnect} \times 2,600 \text{ event/year} \times 5 \text{ disconnect/event} \times 1 \text{ gal/3785.41 mL} \times 6.61 \text{ lb/gal}
\]
\[
= 182 \text{ lb-VOC/year}
\]

Fugitive Emissions
Per applicant, the tank truck offloading station has the following components that contribute fugitive emissions: 5 valves, 1 pump seal and 34 fittings (connectors and flanges).

\[
\text{Daily PE} = \text{VOC (lb/hr/source)} \times \text{Component Count} \times 24 \text{ hr/day}
\]

<table>
<thead>
<tr>
<th>Component Type</th>
<th>Source Type</th>
<th>VOC EF (lb/hr/source)</th>
<th>Component Count</th>
<th>Daily PE (lb-VOC/day)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valves</td>
<td>Gas</td>
<td>2.87E-05</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td></td>
<td>Light Liquid</td>
<td>9.48E-05</td>
<td>5</td>
<td>0.011</td>
</tr>
<tr>
<td>Pump Seals</td>
<td>Gas</td>
<td>1.43E-04</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td></td>
<td>Light Liquid</td>
<td>1.19E-03</td>
<td>1</td>
<td>0.029</td>
</tr>
<tr>
<td>Others (compressors and others)</td>
<td>Gas</td>
<td>2.65E-04</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td></td>
<td>Light Liquid</td>
<td>2.87E-04</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Fittings (connectors and flanges)</td>
<td>Gas</td>
<td>9.26E-05</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td></td>
<td>Light Liquid</td>
<td>1.76E-05</td>
<td>34</td>
<td>0.014</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td></td>
<td>0.1 (0.05)</td>
</tr>
</tbody>
</table>

\[
\text{Annual PE2} = 0.05 \text{ lb-VOC/day} \times 365 \text{ day/year} = 18 \text{ lb-VOC/year}
\]

Total Truck Emissions:

<table>
<thead>
<tr>
<th></th>
<th>Daily PE2 (lb-VOC/day)</th>
<th>Annual PE2 (lb-VOC/year)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disconnect</td>
<td>0.7</td>
<td>182</td>
</tr>
<tr>
<td>Components</td>
<td>0.1</td>
<td>18</td>
</tr>
<tr>
<td>Total</td>
<td>0.8</td>
<td>200</td>
</tr>
</tbody>
</table>
Total Potential Emissions for N-845-27-0:

<table>
<thead>
<tr>
<th></th>
<th>Daily PE2 (lb-VOC/day)</th>
<th>Annual PE2 (lb-VOC/year)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Railcar</td>
<td>0.2</td>
<td>(33 + 26)</td>
</tr>
<tr>
<td>Tank Truck</td>
<td>1.0</td>
<td>(182 + 18)</td>
</tr>
<tr>
<td>Total</td>
<td>0.8²</td>
<td>226 (182 + 26 + 18)³</td>
</tr>
</tbody>
</table>

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

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

Except permit units are modified under this project, SSPE1 values are taken from engineering evaluation under project N-1143723. The SSPE1 can be calculated by adding the PE1 from all units with valid ATCs or PTOs and the sum of the ERCs that have been banked at the source and which have not been used on-site (Total ERC).

\[
SSPE1_{\text{Total}} = SSPE1_{\text{Permit Unit}} + \text{Total}_{\text{ERC}}
\]

<table>
<thead>
<tr>
<th>Permit Unit/ERC</th>
<th>NO\textsubscript{X}</th>
<th>SO\textsubscript{X}</th>
<th>PM\textsubscript{10}</th>
<th>CO</th>
<th>VOC</th>
</tr>
</thead>
<tbody>
<tr>
<td>N-845-1-3</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1,621</td>
</tr>
<tr>
<td>N-845-4-2</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>4,477</td>
</tr>
<tr>
<td>N-845-5-3</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>2,761</td>
</tr>
<tr>
<td>N-845-6-5</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>32,349</td>
</tr>
<tr>
<td>N-845-22-4</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>48</td>
</tr>
<tr>
<td>N-845-10-3</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>31</td>
</tr>
<tr>
<td>N-845-23-2</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>3,150</td>
</tr>
<tr>
<td>N-845-24-1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>44,437</td>
</tr>
<tr>
<td>SSPE1_{\text{Permit Unit}}</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>6,154</td>
</tr>
<tr>
<td>ERC N-1078-1</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>6,154</td>
</tr>
<tr>
<td>Total_{ERC}</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>6,154</td>
</tr>
<tr>
<td>SSPE1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>50,591</td>
</tr>
</tbody>
</table>

² Emissions are taken from the worst-case operating scenario of either railcar or truck offloading.

³ Ethanol is offloaded via either truck or railcar in any one day, and the worst case emission is from the truck offloading of 182 lb-VOC/yr plus the fugitive emissions from the components on both railcar and truck offloading stations of 44 lb-VOC/yr (26 + 18).
4. Post Project Stationary Source Potential to Emit (SSPE2)

Pursuant to District Rule 2201, the SSPE2 is the PE from all units with valid ATCs or PTOs at the Stationary Source and the quantity of ERCs which have been banked since September 19, 1991 for AER that have occurred at the source, and which have not been used on-site.

The SSPE2 can be calculated by adding the PE2 from all units with valid ATCs or PTOs and the sum of the ERCs that have been banked at the source and which have not been used on-site (Total\textsubscript{ERC}).

\[
\text{SSPE2}_{\text{Total}} = \text{SSPE2}_{\text{Permit Unit}} + \text{Total}_{\text{ERC}}
\]

<table>
<thead>
<tr>
<th>Permit Unit/ERC</th>
<th>NO\textsubscript{X}</th>
<th>SO\textsubscript{X}</th>
<th>PM\textsubscript{10}</th>
<th>CO</th>
<th>VOC</th>
</tr>
</thead>
<tbody>
<tr>
<td>\textit{N-845-1-3}</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>\textit{N-845-4-2}</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>4,477</td>
</tr>
<tr>
<td>\textit{N-845-5-3}</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>2,761</td>
</tr>
<tr>
<td>\textit{ATC N-845-6-6}</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>48,804</td>
</tr>
<tr>
<td>\textit{ATC N-845-22-5}</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>31</td>
</tr>
<tr>
<td>\textit{N-845-10-3}</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>3,150</td>
</tr>
<tr>
<td>\textit{N-845-23-2}</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1,786</td>
</tr>
<tr>
<td>\textit{N-845-24-1}</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>226</td>
</tr>
<tr>
<td>\textit{ATC N-845-25-0}</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>61,661</td>
</tr>
<tr>
<td>\textit{ATC N-845-26-0}</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>6,154</td>
</tr>
<tr>
<td>\textit{ATC N-845-27-0}</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>6,154</td>
</tr>
<tr>
<td>SSPE2\textsubscript{Permit Unit}</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>67,815</td>
</tr>
<tr>
<td>ERC N-1078-1</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>6,154</td>
</tr>
</tbody>
</table>

5. Major Source Determination

**Rule 2201 Major Source Determination:**

Pursuant to District Rule 2201, a Major Source is a stationary source with a SSPE2 equal to or exceeding one or more of the following threshold values. For the purposes of determining major source status the following shall not be included:

- any ERCs associated with the stationary source
- Emissions from non-road IC engines (i.e. IC engines at a particular site at the facility for less than 12 months)
- Fugitive emissions, except for the specific source categories specified in 40 CFR 51.165
The facility is one of the source categories specified in 40 CFR 51.165, and therefore, the fugitive emissions from the proposed operations are included in the Major Source determination.

<table>
<thead>
<tr>
<th>Rule 2201 Major Source Determination (lb/year)</th>
</tr>
</thead>
<tbody>
<tr>
<td>NOX</td>
</tr>
<tr>
<td>SSPE1</td>
</tr>
<tr>
<td>SSPE2</td>
</tr>
<tr>
<td>Major Source Threshold</td>
</tr>
<tr>
<td>Major Source?</td>
</tr>
</tbody>
</table>

Note: PM2.5 assumed to be equal to PM10

As seen above, the facility is an existing Major Source for VOC and is remain a Major Source for VOC as a result of this project.

**Rule 2410 Major Source Determination:**

The facility or equipment evaluated under this project is listed as one of the categories specified in 40 CFR 52.21(b)(1)(i)(ii). Therefore, the PSD Major Source threshold is 100 tpy for any regulated NSR pollutant.

<table>
<thead>
<tr>
<th>PSD Major Source Determination (tons/year)</th>
</tr>
</thead>
<tbody>
<tr>
<td>NO2</td>
</tr>
<tr>
<td>Estimated Facility PE before Project Increase</td>
</tr>
<tr>
<td>PSD Major Source Thresholds</td>
</tr>
<tr>
<td>PSD Major Source? (Y/N)</td>
</tr>
</tbody>
</table>

As shown above, the facility is not an existing PSD Major Source for any regulated NSR pollutant expected to be emitted at this facility.

**6. Baseline Emissions (BE)**

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

Pursuant to District Rule 2201, BE = PE1 for:
- Any unit located at a non-Major Source,
- Any Highly-Utilized Emissions Unit, located at a Major Source,
- Any Fully-Offset Emissions Unit, located at a Major Source, or
- Any Clean Emissions Unit, located at a Major Source.

otherwise,
BE = Historic Actual Emissions (HAE), calculated pursuant to District Rule 2201.

As shown in previous section, this facility is a major source for VOC emissions. Therefore, the baseline emission for emission units involved this project is calculated as follows:

**N-845-1**

This gasoline storage tank is equipped with a primary metal seal and a secondary wiper seal, which meet the requirements for achieved-in-practice BACT as accepted by the District. Therefore, this storage tank is Clean Emissions Units, and BE is equal to PE1 of 1,621 lb-VOC/year.

**N-845-6 & -22**

This loading rack is equipped with bottom loading technique and dry break couples, and is currently served by a CARB-certified John Zink Carbon Adsorption Vapor Recovery System under permit under N-845-22. This vapor recovery system has certified VOC control efficiency of a minimum of 99% that meets the requirements for achieved-in-practice BACT. Therefore, this loading rack is a Clean Emissions Unit, and BE is equal PE1 of 32,349 lb-VOC/year.

**N-845-25, -26- & -27**

These are new emissions units to the facility. Therefore, BE = PE1 = 0.

As shown above, the baseline emission for this project is equal to 33,970 lb-VOC/year (1,621 + 32,349).

7. SB 288 Major Modification

SB 288 Major Modification is defined in 40 CFR Part 51.165 as "any physical change in or change in the method of operation of a major stationary source that would result in a significant net emissions increase of any pollutant subject to regulation under the Act."

As shown in Section VII.D.4 of this document, this facility is an existing Major Source for VOC emissions. Therefore, the project's PE2 of 51,194 lb/year is compared to the SB 288 Major Modification Threshold of 50,000 lb/year for VOC in the following table in order to determine if the SB 288 Major Modification calculation is required.

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>Project's PE (lb/year)</th>
<th>Thresholds (lb/year)</th>
<th>SB 288 Major Modification Calculation Required?</th>
</tr>
</thead>
<tbody>
<tr>
<td>VOC</td>
<td>51,194</td>
<td>50,000</td>
<td>Yes</td>
</tr>
</tbody>
</table>
Since the project's PE2 surpasses the SB 288 Major Modification Thresholds for VOC, the Net Emissions Increase (NEI) will be compared to the SB 288 Major Modification thresholds in order to determine if this project constitutes an SB 288 Major Modification.

The NEI is the total of emission increases for every permit unit addressed in this project and is calculated as follows:

\[ \text{NEI} = \text{PE2} - \text{BAE} \]

Where:
- PE2 = the sum of all the PE2s for each permit unit in this project
- BAE = for units that are fully offset, the BAE = the PE1 for every unit, otherwise, the BAE is the actual annual emissions averaged over the baseline period for every unit.

As calculated in Section VII.C.1 of this document, the sum of all the PE2s for each permit unit in this project is 51,194 lb-VOC/year (48,804 + 378 + 1,786 + 226), and the total BAE is 9,055 lb-VOC/year. (See total BAE calculations in Appendix E of this document.)

The BAE is used to calculate the NEI and make the SB 288 Major Modification determination in the following table.

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>PE2 (lb/yr)</th>
<th>BAE (lb/yr)</th>
<th>NEI (lb/yr)</th>
<th>Thresholds (lb/yr)</th>
<th>SB 288 Major Modification?</th>
</tr>
</thead>
<tbody>
<tr>
<td>VOC</td>
<td>51,194</td>
<td>9,055</td>
<td>42,139</td>
<td>50,000</td>
<td>No</td>
</tr>
</tbody>
</table>

As demonstrated in the preceding table, this project does not constitute a SB288 Major Modification.

8. Federal Major Modification

District Rule 2201 states that a Federal Major Modification is the same as a "Major Modification" as defined in 40 CFR 51.165 and part D of Title I of the CAA.

The determination of Federal Major Modification is based on a two-step test. For the first step, only the emission increases are counted. Emission decreases may not cancel out the increases for this determination.

Step 1

For new emissions units, the increase in emissions is equal to the PE2 for each new unit included in this project.
N-845-25-0, -26-0 & -27-0

These are new emissions units, and as shown in Section VII.C.2 of this document, the PE2 for permit units N-845-25, N-845-26, and N-845-27-0 are 378 lb-VOC/yr, 1,786 lb-VOC/yr and 226 lb-VOC/yr respectively.

For existing emissions units, the increase in emissions is calculated as follows.

Emission Increase = PAE – BAE - UBC

Where: PAE = Projected Actual Emissions, and  
BAE = Baseline Actual Emissions  
UBC = Unused baseline capacity

N-845-6 & -22

The proposed modification results in an increase in design capacity and potential to emit. The emission increase is calculated as follows:

Emission Increase = PAE – BAE

As calculated in Section VII.C.2 of this document, the PAE for these two permit units are calculated to 48,804 lb-VOC/yr. As discussed in previous section, the total BAE for these units is calculated to 9,055 lb-VOC/yr

Emission Increase for these two units = 48,804 – 9,055 (lb-VOC/yr) = 39,749 lb-VOC/yr

The total emission increase for the project is calculated as follows:

Total Emission Increase = [378 + 1,786 + 226 + 39,749] (lb-VOC/yr)  
= 42,139 lb-VOC/yr

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>Total Emissions Increases (lb/year)</th>
<th>Thresholds (lb/year)</th>
<th>Federal Major Modification?</th>
</tr>
</thead>
<tbody>
<tr>
<td>VOC</td>
<td>42,139</td>
<td>0</td>
<td>Yes</td>
</tr>
</tbody>
</table>

As demonstrated in the preceding table, this project does constitute a Federal Major Modification. Federal Offset quantities are calculated below.

Federal Offset Quantity Calculations

As discussed above, the proposed project triggers Federal Major Modification for VOC emission, and the Federal Offset Ratio for VOC is 1.5. Federal Offset quantities for this project are calculated as follows:
Federal Offset Quantity Calculations

<table>
<thead>
<tr>
<th>Permit</th>
<th>Actual Emissions (lb/yr)</th>
<th>Potential Emissions (lb/yr)</th>
<th>Emissions Change (lb/yr)</th>
</tr>
</thead>
<tbody>
<tr>
<td>N-845-6</td>
<td>9,055</td>
<td>48,804</td>
<td>39,749</td>
</tr>
<tr>
<td>N-845-22</td>
<td>0</td>
<td>378</td>
<td>378</td>
</tr>
<tr>
<td>N-845-25</td>
<td>0</td>
<td>1,786</td>
<td>1,786</td>
</tr>
<tr>
<td>N-845-26</td>
<td>0</td>
<td>226</td>
<td>226</td>
</tr>
<tr>
<td>N-845-27</td>
<td>0</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Net Emission Change (lb/yr): 42,139
Federal Offset Quantity: (NEC * 1.5) 63,209

9. Rule 2410 – Prevention of Significant Deterioration (PSD) Applicability Determination

Rule 2410 applies to any pollutant regulated under the Clean Air Act, except those for which the District has been classified nonattainment. The pollutants which must be addressed in the PSD applicability determination for sources located in the SJV and which are emitted in this project are: (See 52.21 (b) (23) definition of significant)

I. Project Emissions Increase – New Major Source Determination

The post-project potentials to emit from all new and modified units are compared to the PSD major source thresholds to determine if the project constitutes a new major source subject to PSD requirements.

The equipment evaluated under this project is listed as one of the categories specified in 40 CFR 52.21 (b)(1)(iii). The PSD Major Source threshold is 100 tpy for any regulated NSR pollutant.

<table>
<thead>
<tr>
<th>PSD Major Source Determination: Potential to Emit (tons/year)</th>
<th>NO2</th>
<th>VOC</th>
<th>SO2</th>
<th>CO</th>
<th>PM</th>
<th>PM10</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total PE from New and Modified Units</td>
<td>0</td>
<td>25.6</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>PSD Major Source threshold</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>New PSD Major Source?</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
</tr>
</tbody>
</table>

As shown in the table above, the potential to emit for the project, by itself, does not exceed any PSD major source threshold. Therefore Rule 2410 is not applicable and no further analysis is required.
10. Quarterly Net Emissions Change (QNEC)

The QNEC is calculated solely to establish emissions that are used to complete the District's PAS emissions profile screen. Detailed QNEC calculations are included in Appendix F.

VIII. Compliance Determination

Rule 1081 Source Sampling

This Rule requires adequate and safe sampling facilities such as sampling ports, sampling platforms, access to the sampling platforms for use in sampling to determine compliance with emissions limits, and specifies methods and procedures for source testing and sample collection. Therefore, the following conditions will be listed on the permit to ensure continuous compliance:

N-845-22-5

- {33} Sampling facilities for source testing shall be provided in accordance with the provisions of Rule 1081 (Source Sampling). [District Rule 1081]

- Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081]

- Source testing shall be witnessed or authorized by District personnel and samples shall be collected by a California Air Resources Board (CARB) certified testing laboratory or a CARB certified source testing firm. [District Rule 1081]

- The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081]

Compliance with the requirements of this Rule is expected.

District Rule 1100 Equipment Breakdown

This Rule defines a breakdown condition and the procedures to follow if one occurs. The corrective action, the issuance of an emergency variance, and the reporting requirements are also specified. Therefore, the following conditions will be listed on the permit to ensure continuous compliance:

N-845-22-5

- 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]

- 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 (e.g. breakdown of vapor recovery system), the date and cause of the initial failure, the estimated emissions in excess of those allowed including the amount of gasoline loaded during the breakdown period, and the methods utilized to restore normal operations. [District Rule 1100]

Compliance with the requirements of this Rule is expected.

**Rule 2201 New and Modified Stationary Source Review Rule**

**A. Best Available Control Technology (BACT)**

**1. BACT Applicability**

BACT requirements are triggered on a pollutant-by-pollutant basis and on an emissions unit-by-emissions unit basis. Unless specifically exempted by Rule 2201, BACT shall be required for the following actions*:

a. Any new emissions unit with a potential to emit exceeding two pounds per day,

b. The relocation from one Stationary Source to another of an existing emissions unit with a potential to emit exceeding two pounds per day,

c. Modifications to an existing emissions unit with a valid Permit to Operate resulting in an AIPE exceeding two pounds per day, and/or

d. Any new or modified emissions unit, in a stationary source project, which results in an SB 288 Major Modification or a Federal Major Modification, as defined by the rule.

*Except for CO emissions from a new or modified emissions unit at a Stationary Source with an SSPE2 of less than 200,000 pounds per year of CO.

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

As seen in Section VII.C.2 above, the applicant is proposing to install two new storage tanks and one ethanol bulk offloading operation. PE of VOC is greater than 2 lb/day for the new gasoline storage tank, but not for the ethanol storage tank and ethanol bulk offloading operation. Therefore, BACT for new units with PE > 2 lb/day purposes is triggered.

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

As discussed in Section I above, there are no emissions units being relocated from one stationary source to another. Therefore BACT is not triggered for this purpose.
c. Modification of emissions units – AIPE > 2 lb/day

As discussed in Section I above, the applicant is proposing to increase the materials throughput for the loading rack and VRU. AIPE for VOC is calculated as follows:

\[ AIPE = PE2 - HAPE \]

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

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

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

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

N-845-6-6 & -22-5:
\[ AIPE_{VOC} = 133.7 - [103.4 \times (1)] = 30.3 \text{ lb-VOC/day} \]

As demonstrated above, the AIPE is greater than 2.0 lb/day for VOC emissions. Therefore, BACT is triggered.

d. SB 288/Federal Major Modification

As discussed in Section VII.C.8 above, this project does constitute a Federal Major Modification for VOC emissions. Therefore BACT is triggered for VOC for all emissions units in the project for which there is an emission increase.

2. BACT Guideline

N-845-6-6 & -22-5

BACT Guideline 7.1.10 lists emissions control requirements for Loading Rack/Switch Loading operations. (See Appendix G)

N-845-25-0 & -26-0

BACT Guideline 7.3.3 lists emissions control requirements for Petroleum and Petrochemical Production – Floating Roof Organic Liquid Storage or Processing Tank
with tank capacity equal to or greater than 477 bbl (equivalent to 19,782 gallons), and true vapor pressure equal to or greater than 0.5 psia. (See Appendix G)

N-845-27-0

BACT Guideline 7.1.14 lists emissions control requirements for bulk unloading rack. (See Appendix G)

3. Top-Down BACT Analysis

Per Permit Services Policies and Procedures for BACT, a Top-Down BACT analysis shall be performed as a part of the application review for each application subject to the BACT requirements pursuant to the District’s NSR Rule.

N-845-6-6 & -22-5

Pursuant to the attached Top-Down BACT Analysis (see Appendix H), BACT has been satisfied with the following:

VOC: Bottom loading with dry break couplers and vapor collection vented to a thermal incinerator or flare with destruction efficiency equal to or greater than 99%

N-845-25-0 & -26-0

Pursuant to the attached Top-Down BACT Analysis (see Appendix H), BACT has been satisfied with the following for each tank:

VOC: 95% control (Primary metal shoe seal with secondary wiper seal, or equal)

N-845-27-0

Pursuant to the attached Top-Down BACT Analysis (see Appendix H), BACT has been satisfied with the following:

VOC: Limit excess drainage at disconnect to no more than 8 ml liquid per disconnect through good work and management practice.

B. Offsets

1. Offset Applicability

Offset requirements shall be triggered on a pollutant by pollutant basis and shall be required if the SSPE2 equals to or exceeds the offset threshold levels in Table 4-1 of Rule 2201.

The SSPE2 PM$_{10}$ is compared to the offset threshold in the following table.
### Offset Determination (lb/year)

<table>
<thead>
<tr>
<th></th>
<th>NO(_x)</th>
<th>SO(_x)</th>
<th>PM(_{10})</th>
<th>CO</th>
<th>VOC</th>
</tr>
</thead>
<tbody>
<tr>
<td>SSPE2</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>67,815</td>
</tr>
<tr>
<td>Offset Thresholds</td>
<td>20,000</td>
<td>54,750</td>
<td>29,200</td>
<td>200,000</td>
<td>20,000</td>
</tr>
<tr>
<td>Offsets triggered?</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
</tr>
</tbody>
</table>

2. **Quantity of Offsets Required**

As seen above, the SSPE2 is greater than the offset thresholds for VOC only. Therefore offset calculations will be required for this project.

The quantity of offsets in pounds per year for VOC is calculated as follows for sources with an SSPE1 greater than the offset threshold levels before implementing the project being evaluated:

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

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

**BE = PE1 for:**
- Any unit located at a non-Major Source,
- Any Highly-Utilized Emissions Unit, located at a Major Source,
- Any Fully-Offset Emissions Unit, located at a Major Source, or
- Any Clean Emissions Unit, Located at a Major Source.

otherwise,

**BE = HAE**

Per applicant, Tesoro will not have a dedicated cargo carrier equipment, defined in section 3.12 of Rule 2201 on site, and therefore, no increases in Cargo Carrier emissions as a result of this project, ICCE = 0.

Tesoro is proposing to modify the organic liquid loading operation and install three new emissions units under this project.

As discussed in sections VII.D.6 and VII.D.7 of this document, BE and PE2 for emission units involved in this project are calculated to 33,970 lb/year and 51,194 lb-VOC/yr, respectively.

This proposed project constitutes a Federal Major Modification, which requires DOR of 1.5 pursuant to section 4.8.1 of this Rule. Thus,
Offset Required = \( \sum [(PE2 - BE) + 0] \times 1.5 \)

Offset Required \( (\text{lb/year}) = \) \( [51,194 - 33,970] \times 1.5 \) lb-VOC/year
\[ = 17,224 \times 1.5 \text{ lb-VOC/year} \]
\[ = 25,836 \text{ lb-VOC/year} \]

Calculating the appropriate quarterly emissions to be offset is as follows:

Quarterly offsets required \( (\text{lb/qtr}) = \frac{(25,836 \text{ lb-VOC/year})}{(4 \text{ quarters/year})} \]
\[ = 6,459 \text{ lb-VOC/qtr} \]

The appropriate quarterly emissions to be offset are as follows:

<table>
<thead>
<tr>
<th>Total Annual (lb)</th>
<th>1st Quarter (lb)</th>
<th>2nd Quarter (lb)</th>
<th>3rd Quarter (lb)</th>
<th>4th Quarter (lb)</th>
</tr>
</thead>
<tbody>
<tr>
<td>25,904</td>
<td>6,459</td>
<td>6,459</td>
<td>6,459</td>
<td>6,459</td>
</tr>
</tbody>
</table>

The applicant has stated that the facility plans to use ERC certificate N-1078-1 to offset the increase in VOC emissions associated with this project. The above certificate has available quarterly VOC credits as follows:

<table>
<thead>
<tr>
<th>ERC N-1078-1</th>
<th>1st Quarter (lb)</th>
<th>2nd Quarter (lb)</th>
<th>3rd Quarter (lb)</th>
<th>4th Quarter (lb)</th>
</tr>
</thead>
<tbody>
<tr>
<td>VOC</td>
<td>1,539</td>
<td>1,539</td>
<td>1,539</td>
<td>1,537</td>
</tr>
</tbody>
</table>

As seen above, the ERC N-1078-1 has not enough credits to fully offset the quarterly VOC emissions increase associated with this project.

Therefore, Tesoro has proposed to purchase and utilize ERC certificate S-4676-1 to offset the remaining increase of VOC emissions in this project.

The available credits on this certificate are listed in the tables below:

<table>
<thead>
<tr>
<th>ERC S-4676-1</th>
<th>1st Quarter (lb)</th>
<th>2nd Quarter (lb)</th>
<th>3rd Quarter (lb)</th>
<th>4th Quarter (lb)</th>
</tr>
</thead>
<tbody>
<tr>
<td>VOC</td>
<td>570,904</td>
<td>563,128</td>
<td>587,574</td>
<td>592,334</td>
</tr>
</tbody>
</table>

As seen above, the certificate S-4676-1 has sufficient credits to fully offset the increase of VOC emissions associated with this project.

To ensure the emission credits from ERC Certificates N-1078-1 and S-4676-1 utilize for offset the increase of VOC emissions in this project. The following conditions will be listed on the ATCs.
Proposed Rule 2201 (offset) Conditions:

N-845-6-6, -22-5, -25-0, -26-0, & -27-0

- Prior to operating equipment under Authorities to Construct N-845-6-6, N-845-22-5, N-845-25-0, N-845-26-0 and N-845-27-0, the permittee shall mitigate the following quantities of VOC: 1\textsuperscript{st} quarter – 6,459 lb, 2\textsuperscript{nd} quarter – 6,459 lb, 3\textsuperscript{rd} quarter – 6,459 lb, and 4\textsuperscript{th} quarter – 6,459 lb. The quarterly amounts already include the applicable distance offset ratio per Section 4.8.1 of Rule 2201 (04/21/11). [District Rule 2201]

- ERC certificates N-1078-1 (or a certificate split from this certificate) and S-4676-1 (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]

C. Public Notification

1. Applicability

Public noticing is required for:
  a. New Major Sources, Federal Major Modifications, and SB 288 Major Modifications,
  b. Any new emissions unit with a Potential to Emit greater than 100 pounds during any one day for any one pollutant,
  c. Any project which results in the offset thresholds being surpassed, and/or
  d. Any project with an SSPE of greater than 20,000 lb/year for any pollutant.
  e. Any project which results in a Title V significant permit modification

a. New Major Sources, Federal Major Modifications, and SB 288 Major Modifications

As demonstrated in Section VII.D.7 of this document, this project triggers Federal Major Modification. Therefore, public noticing for this purpose is required.

b. PE > 100 lb/day

As seen in Section VII.C.1 above, this project does not include a new emissions unit, which has daily emissions greater than 100 lb/day for any pollutant. Therefore, public noticing for this purpose is not required.

c. Offset Threshold

The following table compares the SSPE1 with the SSPE2 in order to determine if any offset thresholds have been surpassed with this project.
### Offset Thresholds

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>SSPE1 (lb/year)</th>
<th>SSPE2 (lb/year)</th>
<th>Offset Threshold</th>
<th>Public Notice Required?</th>
</tr>
</thead>
<tbody>
<tr>
<td>NO&lt;sub&gt;x&lt;/sub&gt;</td>
<td>0</td>
<td>0</td>
<td>20,000 lb/year</td>
<td>No</td>
</tr>
<tr>
<td>SO&lt;sub&gt;x&lt;/sub&gt;</td>
<td>0</td>
<td>0</td>
<td>54,750 lb/year</td>
<td>No</td>
</tr>
<tr>
<td>PM&lt;sub&gt;10&lt;/sub&gt;</td>
<td>50,591</td>
<td>67,815</td>
<td>29,200 lb/year</td>
<td>No</td>
</tr>
<tr>
<td>CO</td>
<td>0</td>
<td>0</td>
<td>200,000 lb/year</td>
<td>No</td>
</tr>
<tr>
<td>VOC</td>
<td>0</td>
<td>0</td>
<td>20,000 lb/year</td>
<td>No</td>
</tr>
</tbody>
</table>

As shown in the table, the SSPE1 was already greater than the VOC offset threshold. Therefore, public noticing is not required for offset purpose.

d. **SSIPE > 20,000 lb/year**

The following table compares the SSPE1 with the SSPE2 in order to determine if the PM<sub>10</sub> offset threshold has been surpassed with this project.

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>SSPE2 (lb/year)</th>
<th>SSPE1 (lb/year)</th>
<th>SSPIE (lb/year)</th>
<th>SSPIE Public Notice Threshold</th>
<th>Public Notice Required?</th>
</tr>
</thead>
<tbody>
<tr>
<td>PM&lt;sub&gt;10&lt;/sub&gt;</td>
<td>67,815</td>
<td>50,591</td>
<td>17,224</td>
<td>20,000 lb/year</td>
<td>No</td>
</tr>
</tbody>
</table>

As demonstrated above, the SSIPEs for all pollutants were less than 20,000 lb/year; therefore public noticing for SSIPE purposes is not required.

e. **Title V Significant Permit Modification**

As shown in the Discussion of Rule 2520 below, this project constitutes a Title V significant modification. Therefore, public noticing for Title V significant modifications is required for this project.

2. **Public Notice Action**

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

D. **Daily Emission Limits (DELs)**

DELs and other enforceable conditions are required by Rule 2201 to restrict a unit's maximum daily emissions, to a level at or below the emissions associated with the maximum design capacity. The DEL must be contained in the latest ATC and contained in
or enforced by the latest PTO and enforceable, in a practicable manner, on a daily basis. DELs are also required to enforce the applicability of BACT.

**Proposed Rule 2201 (DEL) Conditions:**

**N-845-6-6 & -22-5**

- The quantity of organic liquids (as defined in District Rule 4624) loaded through the loading rack shall not exceed 1,000,000 gallons in any one day and 365,000,000 gallons in any one calendar year. [District Rule 2201]

- The loading rack shall be equipped with bottom loading equipment, dry break couplers, and a vapor collection and control system such that the VOC emissions shall not exceed 0.08 pounds per 1,000 gallons of organic liquid loaded. [District Rules 2201 and 4624]

- The maximum number of organic liquid hose disconnect performed by the loading rack shall not exceed 810 disconnects in any one day. [District Rule 2201]

- The VOC emission rate from each organic liquid hose disconnect shall not exceed 0.0148 pounds per disconnect. {The VOC emissions rate from each disconnect shall be calculated as follow: VOC emissions rate (lb/disconnect) = 10 mL-VOC/disconnect x organic liquid density (lb/gal) x (1 gal/3785.41 mL)}. [District Rule 2201]

**N-845-25-0**

- VOC emissions from this tank shall not exceed 1.3 pounds in any one day. [District Rule 2201]

**N-845-26-0**

- VOC emissions from this tank shall not exceed 10.5 pounds in any one day. [District Rule 2201]

**N-845-27-0**

- The maximum number of organic liquid hose disconnect performed by the unloading equipment shall not exceed 50 disconnects in any one day. [District Rule 2201]

- The VOC emission rate from each organic liquid hose disconnect shall not exceed 0.0140 pounds per disconnect. {The VOC emissions rate from each disconnect shall be calculated as follow: VOC emissions rate (lb/disconnect) = 8 mL-VOC/disconnect x organic liquid density (lb/gal) x (1 gal/3785.41 mL)}. [District Rule 2201]
E. Compliance Assurance

1. Source Testing

   N-845-6-6 & -22-5

   Emissions from the loading rack will vent to the VRS under permit N-845-22. Therefore, initial source testing to verify the proposed control efficiency will be required.

   N-845-25-0 -26-0, & -27-0

   No source testing is required to demonstrate compliance with Rule 2201.

2. Monitoring

   N-845-6-6 -22-5, & -27-0

   These permit units are subject to Rule 4624 requirement. Monitoring requirements for these units will be discussed in the associated sections of this document.

   N-845-25-0 & -26-0

   These permit units are subject to Rule 4623 requirement. Monitoring requirements for these units will be discussed in the associated sections of this document.

3. Recordkeeping

   N-845-6-6, -22-5, -25-0 -26-0, & -27-0

   Recordkeeping is required to demonstrate compliance with the offset, public notification and daily emission limit requirements of Rule 2201. All records are required to be maintained on-site for a period of at least five years, and such records shall be made available for District, ARB, and EPA inspection upon request.

4. Reporting

   No reporting is required to demonstrate compliance with Rule 2201.

F. Ambient Air Quality Analysis (AAQA)

An AAQA shall be conducted for the purpose of determining whether a new or modified Stationary Source will cause or make worse a violation of an air quality standard.

This project involves only VOCs for which AAQS does not exist; therefore, AAQA is not performed for this project.
G. Compliance Certification

Section 4.15.2 of this Rule requires the owner of a new Major Source or a source undergoing a Title I Modification to demonstrate to the satisfaction of the District that all other Major Sources owned by such person and operating in California are in compliance or are on a schedule for compliance with all applicable emission limitations and standards. As discussed in Section VII.D.7 above, this project does constitute a Title I modification, therefore this requirement is applicable. Tesoro's compliance certification is included in Appendix I.

H. Alternate Siting Analysis

The current project occurs at an existing facility. The applicant proposes to increase the throughputs of the loading operation, and install two new storage tanks and an ethanol unloading operation in the facility.

Since the current project involves increase the throughputs of the loading operation, and install two new storage tanks and an ethanol unloading operation to be used at the same location, the existing site will result in the least possible impact from the project. Alternative sites would involve the relocation and/or construction of various support structures and facilities on a much greater scale, and would therefore result in a much greater impact.

Therefore, compliance with the requirements of this Rule is expected.

Rule 2410 Prevention of Significant Deterioration

As shown in Section VII. C. 9. above, this project does not result in a new PSD major source or PSD major modification. No further discussion is required.

Rule 2520 Federally Mandated Operating Permits

This facility is subject to this Rule, and has received their Title V Operating Permit. A significant permit modification is defined as a "permit amendment that does not qualify as a minor permit modification or administrative amendment."

A minor permit modification is a permit modification that does not meet the definition of modification as given in Section 111 or Section 112 of the Federal Clean Air Act. Since this project involves the installation of a new emission unit that is subject to an NSPS requirement, the proposed project is considered to be a modification under the Federal Clean Air Act. As a result, the proposed project constitutes a Significant Modification to the Title V Permit.

As discussed above, the facility has applied for a Certificate of Conformity (COC); therefore, the facility must apply to modify their Title V permit with an administrative amendment prior to operating with the proposed modifications. Continued compliance with this rule is expected. The facility shall not implement the changes requested until the final permit is issued.
Rule 4001  New Source Performance Standards (NSPS)


This subpart applies to each storage vessel with a capacity greater than or equal to 75 m³ (equivalent 19,813 gallons) to that is used to store volatile organic liquids for which construction, reconstruction, or modification is commenced after July 23, 1984.

§60.112b Standard for Volatile Organic Compounds (VOC)

§60.112b(a) requires that the storage tank shall meet the requirement under §60.112b(a)(1) for a fixed roof tank in combination with an internal floating roof, and §60.112b(a)(3) for a closed vent system & control device.

N-845-26-0

This is a 1,347,627 gallon internal floating roof gasoline storage tank and the gasoline be stored has a maximum true vapor pressure greater than 76.6 kPa (equivalent to 11.11 psia). Therefore, this permit unit is subject to the requirement of this subpart.

§60.112b(a)(1)(i) requires that 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 floating roof shall be floating on the liquid surface at all times, except during initial fill and during those intervals when the storage vessel is completely 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. Therefore, the following condition will be listed on the permit to ensure compliance:

- 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 owner or operator intends to land the roof on its legs, the owner or operator shall notify the APCO in writing at least five calendar days prior to performing the work. The tank must be in compliance with Rule 4623 before it may land the roof on its legs. [District Rule 4623 and 40 CFR Part 60.112b(a)(1)(i)]

§60.112b(a)(1)(ii) requires that the internal floating roof shall be equipped with one of the closure devices provided in §60.112b(a)(1)(ii)(A), §60.112b(a)(1)(ii)(B), or §60.112b(a)(1)(ii)(C).

This tank is equipped with a mechanical shoe seal listed in §60.112b(a)(1)(ii)(C). The equipment description of permit includes mechanical shoe seal. Therefore, compliance with the requirement of this section is expected.
§60.112b(a)(1)(iii) requires that each opening in a non-contact internal floating roof except for automatic bleeder vents (vacuum breaker vents) and the rim space vents is to provide a projection below the liquid surface. Therefore, the following condition will be listed on the permit to ensure compliance:

- 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 and 40 CFR Part 60.112b(a)(1)(iii)]

§60.112b(a)(1)(iv) requires that each opening in the internal floating roof except for leg sleeves, automatic bleeder vents, rim space vents, column wells, ladder wells, sample wells, 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. Therefore, the following condition will be listed on the permit to ensure compliance:

- 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 and 40 CFR Part 60.112b(a)(1)(iv)]

§60.112b(a)(1)(v) requires that automatic bleeder vents shall be equipped with a gasket and shall be closed at all times when the roof is floating except when the roof is being floated off or is being landed on the leg roof supports. Therefore, the following condition will be listed on the permit to ensure compliance:

- 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 Part 60.112b(a)(1)(v)]

§60.112b(a)(1)(vi) requires that rim vents shall be equipped with a gasket and shall be set to open only when the internal floating roof is not floating or at the manufacturer’s recommended setting. Therefore, the following condition will be listed on the permit to ensure compliance:

- 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 Part 60.112b(a)(1)(vi)]

§60.112b(a)(1)(vii) requires that each penetration of the internal floating roof for the purpose of sampling shall be a sample well. The well shall have a slit fabric cover that covers at least 90 percent of the opening. Therefore, the following condition will be listed on the permit to ensure compliance:
• 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 and 40 CFR Part 60.112b(a)(1)(vii)]

§60.112b(a)(1)(viii) requires that 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. Therefore, the following condition will be listed on the permit to ensure compliance:

• 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 Part 60.112b(a)(1)(viii)]

§60.112b(a)(1)(ix) requires that each penetration of the internal floating roof that allows for passage of a ladder shall have a gasketed sliding cover. Therefore, the following condition will be listed on the permit to ensure compliance:

• Each penetration of the internal floating roof that allows for the passage of a ladder shall have a gasketed sliding cover. [40 CFR Part 60.112b(a)(1)(ix)]

§60.113 Testing and procedures

This section requires the owner or operator of each storage vessel as specified in §60.112b(a) to meet the requirements of paragraph (a), (b), or (c) of this section. The applicable paragraph for a particular storage vessel depends on the control equipment installed to meet the requirements of §60.112b.

N-845-26-0

§60.113b(a)(1) requires that the owner or operator shall visually inspect the internal floating roof, the primary seal, and the secondary seal (if one is in service), prior to filling the storage vessel with volatile organic liquid. 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 both, the owner or operator shall repair the items before filling the storage vessel. Therefore, the following condition will be listed on the permit to ensure compliance:

• The owner or operator shall visually inspect the internal floating roof, and its appurtenant parts, fittings, etc. and measure the gaps of the primary seal and/or secondary seal prior to filling the tank 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 and 40 CFR Part 60.113b(a)(1)]
§60.113b(a)(2) requires that the owner or operator shall visually inspect the internal floating roof and the primary seal, or the secondary seal (if one is in service) through manholes and roof hatches on the fixed roof at least once every 12 months after initial fill. If the internal floating roof is not resting on the surface of the volatile organic liquid inside the storage vessel, or there is liquid accumulated on the roof, or the seal is detached, or there are holes or tears in the seal fabric, the owner or operator shall repair the items or empty and remove the storage vessel from service within 45 days. If a failure that is detected during inspections 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 Administrator in the inspection report required in §60.115b(a)(3). Such a request for an extension 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. Therefore, the following conditions will be listed on the permit to ensure compliance:

- The owner or operator 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 and 40 CFR Part 60.113b(a)(2)]

- 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 months visual inspection, the owner or operator 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 Part 60.113b(a)(2)]

§60.113b(a)(5) requires that the owner or operator to notify the Administrator in writing at least 30 days prior to the filling or refilling of each storage vessel for which an inspection is required by §60.113b(a)(1) of this section to afford the Administrator the opportunity to have an observer present. Therefore, the following condition will be listed on the permit to ensure compliance:

- The owner or operator 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 Part 60.113b(a)(5)]
§60.115b: Reporting and recordkeeping requirements

This section requires the owner or operator of each storage vessel as specified in §60.112b(a) shall keep records and furnish reports as required by paragraphs (a), (b), or (c) of this section depending upon the control equipment installed to meet the requirements of §60.112b(a). The owner or operator shall keep copies of all reports and records required by this section, except for the record required by (c)(1), for at least two years. The records required by (c)(1) will be kept for the life of the control equipment.

N-845-26-0

§60.115b(a)(1) requires that the owner or operator shall furnish the Administrator with a report that describes the control equipment and certifies that the control equipment meets the specifications of §60.112b(a)(1) and §60.113b(a)(1). This report shall be an attachment to the notification required by §60.7(a)(3) (i.e. initial startup notification). Therefore, the following condition will be listed on the permit to ensure compliance:

- The owner or operator shall furnish the Administrator with a report that describes the control equipment and certifies that the control equipment meets the specification of §60.112b(a)(1) and §60.113b(a)(1) within 15 days after the initial startup of the equipment. [40 CFR Part 60.115b(a)(1)]

§60.115b(a)(2) requires that the owner or operator shall keep a record of each inspection performed as required by §60.113b(a)(1) and (a)(2). Each record shall identify the storage vessel on which the inspection was performed and shall contain the date the vessel was inspected and the observed condition of each component of the control equipment (seals, internal floating roof, and fittings).

§60.115b(a)(3) requires that the owner or operator shall furnish a report to the Administrator within 30 days if any of the condition described in §60.113b(a)(2) are detected during annual visual inspection required by §60.113 b(a)(2). The report shall identify the storage vessel, the nature of the defects, and the date the storage vessel was emptied or the nature of the defect and date the repair was made.

The following condition will be listed on the permit to ensure compliance with the requirements of §60.115b(a)(2) and (a)(3):

- The owner or operator shall submit the reports of the floating roof tank inspections to the APCO within five calendar days after the completion of the inspection only for those tanks that failed to meet the applicable requirements of Rule 4623, Sections 5.2 through 5.5. The inspection report for tanks that 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 the storage vessel was emptied, date of inspection and names and titles of company personnel doing the inspection. 2) Tank identification number and Permit to Operate number. 3)
Observed condition of each component of the control equipment (seals, internal floating roof, and fittings). 4) Measurements of the gaps between the tank shell and primary and secondary seals. 5) Leak free status of the tank and floating roof deck fittings. Records of the leak-free status shall include the vapor concentration values measured in parts per million by volume (ppmv). 6) Data, supported by calculations, demonstrating compliance with the requirements specified in Sections 5.4 and 5.5.2.4.3 of Rule 4623. 7) Nature of defects and any corrective actions or repairs performed on the tank in order to comply with rule 4623 and 40 CFR Part 60 Subpart Kb and the date(s) such actions were taken. [District Rule 4623 and 40 CFR Part 60.115b(a)(2) and 40 CFR Part 60.115b(a)(3)]

§60.116b: Monitoring of operations

N-845-26-0

§60.116b(a) requires the owner or operator to keep copies of all records for at least two years. However, Rule 4623, requires all records be kept for a period of at least five year. Therefore, the following condition will be listed on the permit to ensure compliance:

• All records shall be maintained on site for a period of at least five years and shall be made available for District, ARB, and EPA inspection upon request. [District Rules 1070, 2201, 4623, 40 CFR Part 60.116b(a), and 40 CFR Part 63.11094(a)]

§60.116b(b) requires the owner or operator to keep records showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel, and these records shall be kept for the life of the source. Therefore, the following condition will be listed on the permit to ensure compliance:

• The owner or operator shall keep readily accessible records showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel, and these records shall be kept for the life of the source. [40 CFR Part 60.116b(b)]

§60.116b(c) requires the owner or operator to maintain records of the volatile organic liquid stored, the period of storage, and the maximum true vapor pressure of that volatile organic liquid during the respective storage period. Therefore, the following condition will be listed on the permit to ensure compliance:

• The owner or operator shall maintain records of the volatile organic liquid stored, the period of storage, and TVP of that volatile organic liquid during the respective storage period. TVP shall be determined using the data on the Reid vapor pressure (highest receipt or highest tank sample results) and actual storage temperature. [District Rule 2201 and 40 CFR Part 60.116b(c)]
40 CFR Part 60 Subpart XX – Standards of Performance for Bulk Gasoline Terminals

This subpart applies to all of the loading racks at a bulk gasoline terminal, which deliver liquid product into gasoline tank trucks and that commenced construction or modification after December 17, 1980.

The loading rack is located at a bulk gasoline terminal, which deliver liquid product into organic liquid (including gasoline) tank trucks. Therefore, the loading rack is subject to the requirement of this subpart.

§60.502 Standard for Volatile Organic Compounds (VOC) emissions from bulk gasoline terminals

N-845-6-6:

§60.502(a) requires that each affected facility must be equipped with a vapor collection system designed to collect the total organic compounds vapors displaced from tank trucks during product loading. Therefore, the following condition will be listed on the permit to ensure compliance:

- All vapors displaced from tank truck loading shall be vented to the vapor recovery system under Permit to Operate N-845-22. [District Rule 2201 and 40 CFR Part 60.502(a), (f), and (g)]

§60.502(c) states that each affected facility equipped with an existing vapor processing system, the emissions to the atmosphere from the vapor collection system due to the loading of liquid product into gasoline tank trucks are not to exceed 80 milligrams of total organic compounds per liter of gasoline loaded.

The 80 milligrams/liter limit is converted to an equivalent lb/1000 gallons number as follows:

Limit (lb/1000 gal) = 80 mg/liter x 1g/1000mg x 1 lb/453.6g x 3.785 liters/gal x 1000

= 0.67 lb/1000 gal

This loading rack is currently served by the vapor recovery system (VRS) under permit unit N-845-22 that has an emission limit of 0.08 lb/1000 gallon loaded. Therefore, continuous compliance with the requirement of this section is expected.

§60.502(d) states that each vapor collection system must be designed to prevent any total organic compounds vapors collected at one loading rack from passing to another loading rack.

This facility has only one loading rack that served by the vapor recovery system. Therefore, continuous compliance with the requirement of this section is expected.
§60.502(e) states that loading of liquids into gasoline tank trucks shall be limited to vapor tight gasoline tank trucks. Therefore, the following conditions will be listed on the permits to ensure compliance:

- Gasoline shall be loaded only into vapor-tight tank trucks. [40 CFR Part 60.502(e) and 40 CFR Part 63.11088(a)]
- 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)]

§60.502(f) states that the owner or operator shall act to assure that loading of gasoline tank trucks at the affected facility are made only into trucks equipped with vapor collection equipment that is compatible with the terminal's vapor collection system.

§60.502(g) states that the owner or operator must act to assure that the terminals and the tank truck's vapor collection systems are connected during each loading of a gasoline tank truck at the facility. Therefore, the following condition will be listed on the permit to ensure compliance:

- All vapors displaced during truck loading shall be vented to the vapor recovery system under Permit to Operate N-845-22. [District Rule 2201 and 40 CFR Part 60.502(a), (f) and (g)]

§60.502(h) states that the vapor collection and liquid loading equipment must be designed to prevent gauge pressure in the delivery tank from exceeding 4,500 pascals (450 mm of water) during product loading. This level is not to be exceeded when measured by the procedures specified in §60.503(d)

The 450 millimeter water limit is converted to an equivalent inch water number as follows:

Limit (inches water)  = 450 mm-water x 1 inch/24.5 mm  = 18.4 inches water

District Rule 4624 section 5.4 requires that 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. Therefore, the following condition will be listed on the permit to ensure compliance:

- 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 and 40 CFR Part 60.502(h)]

§60.502(j) states that the owner or operator must inspect the vapor collection system, vapor processing system, and each loading rack handling gasoline for leaks, each month. For the purposes of determining whether there is a leak, detection methods incorporating sight, sound, and smell are acceptable.
This subpart states that a leak must be repaired within 15 calendar days. However, District Rule 4624 requires leaks to be repaired within 3 calendar days. Therefore, the following condition will be listed on the permit to ensure compliance:

- 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. [40 CFR Part 60.502(j) and 40 CFR Part 63.11089(a)]

§60.503 Test Methods and Procedures

This section lists testing methods and procedures for the vapor recovery system. These requirements do not apply directly to the loading rack. Therefore, the testing methods and procedures requirements will be listed on the vapor recovery system permit (N-845-22).

N-845-22-5

§60.503(d) requires that the owner or operator shall demonstrate compliance with the standard in §60.502(h) by using:

1. A pressure measurement device (liquid manometer, magnehelic gauge, or equivalent instrument), capable to measuring up to 500 mm of water gauge pressure with ± 2.5 mm of water precision, shall be calibrated and installed on the terminal's vapor recovery system at a pressure tap located as close as possible to the connection with the gasoline tank truck, and

2. During the performance test, the pressure shall be recorded every 5 minutes while a gasoline truck is being loaded; the highest instantaneous pressure that occurs during each loading shall also be recorded. Every loading position must be tested at least once during the performance test.

Therefore, the following condition will be listed on the permit to ensure compliance:

- During source testing the loading rack's vapor collection and control system 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 vapor collection and control system at a pressure tap located 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. [40 CFR Part 60.503(d)]
§60.505 Reporting and Recordkeeping

N-845-6-6

§60.505(a) states that the tank truck vapor tightness documentation must be kept on file at the terminal in a permanent form available for inspection.

§60.505 (b) states that the documentation file for each gasoline tank truck must be updated at least once per year to reflect current test results as determined by Method 27. This documentation must include as a minimum, the following information:

1. Test title: Gasoline Delivery tank Pressure Test – EPA Method 27.
2. Tank owner and address.
3. Tank identification number.
4. Testing Location.
5. Date of test.
6. Tester name and signature.
7. Witnessing inspector, if any: Name, signature, affiliation.
8. Test Results: Actual pressure change in 5 minutes, mm of water (average over 2 runs).

Therefore, the following condition will be listed on the permit to ensure compliance:

- 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 60.505(a) and (b), and 40 CFR Part 63.11094(b)]

§60.505 (b) states that a record of each monthly leak inspection shall be kept on file at the terminal at least 2 years, and the inspection records shall include the following information:

1. Date of inspection.
2. Findings (may indicate no leaks discovered; or location, nature, and severity of each leak).
3. Leak determination method.
4. Corrective action (date each leak is repaired; reasons for any repair interval in excess of 15 days).

However, District Rule 4624 requires leaks to be repaired within 3 calendar days. Therefore, the following condition will be listed on the permit to ensure compliance:

- The permittee shall maintain a log book that contains the following information: 1.) dates of leak inspections, 2.) the nature of the leak and the method of detection; 3.) findings, 4.) corrective action (date each leak is repaired), 5.) repair methods applied in each attempt to repair the leak; 6.) the reason for the delay if the leak is not repaired within 3 calendar days after discovery of the leak; 7.) the date of successful repair of the leak;
and 8.) inspector name and signature. [District Rule 4624, 40 CFR Part 60.505(c), 40 CFR Part 63.11089(g), and 40 CFR 63.11094(e)]

Compliance with the requirements of this rule is expected.

Rule 4002 National Emission Standards for Hazardous Air Pollutants (NESHAPs)

40 CFR Part 63 Subpart R – Gasoline Distribution Facilities (Bulk Gasoline Terminals and Pipeline Breakout Stations)

This terminal is not subject to the requirement of this subpart, since this terminal is not a major source for Hazardous Air Pollutants (HAP), which is determined below:

§63.2 of Subpart A defines “major HAP source” as any stationary source or group of stationary sources that emits or has the potential to emit 10 tons per year or more of any HAP, or 25 tons per year or more of any combination of HAPs.

Per EPA's document, Gasoline Distribution Industry (Stage 1) – Background Information for Proposed Standards, EPA-453/R-94-002a, Table 3.1, Vapor Profile of Normal Gasoline (see copy of this Table 3.1 in Appendix J of this document), the total HAPs to VOC ratio is 11% by weight.

As shown in section VII.C.4 of this document, the total VOC emissions from this facility are calculated to 67,815 pounds per year. The total HAPs from this facility are then calculated to:

Total HAPs = 67,815 lb-VOC/yr x 0.11 lb-HAPs/lb-VOC
           = 7,460 lb-HAPs/yr (equivalent to 3.73 tons/yr)

The total HAPs emissions, 3.73 tons per year from this facility is less than 25 tons per year threshold for combined HAPs. Since the combined HAPs emissions is less than 10 tons per year, the individual HAP emissions must be less than 10 tons per year. This terminal is not a major source of HAPs. Therefore, this facility is not subject to the requirements of this subpart.

40 CFR Part 63 Subpart BBBBBB – Gasoline Distribution Facilities (Bulk Gasoline Terminal and Pipeline Breakout Stations)

§63.11080 The purpose of this subpart

§63.11080 states that this subpart established national emission limitations and management practices for Hazardous Air Pollutants (HAP) emitted from area source (not a major HAP source) gasoline distribution bulk terminals, bulk plants, and pipeline facilities.
§63.11081 Applicability of this subpart

§63.11081(a) states that the affected source to which this subpart applies is each area source bulk gasoline terminal, pipeline breakout station, pipeline pumping station, and bulk gasoline plant.

§63.11100 defines that a bulk gasoline terminal means any gasoline storage and distribution facility that receives gasoline by pipeline, ship or barge, or cargo tank and has a gasoline throughput of 20,000 gallons per day or greater.

The facility proposed to increase the existing daily organic liquids (including gasoline) throughput from 771,120 gallons to 1,000,000 gallons. Therefore, the requirements of this subpart will continue apply to this facility.

§63.11082 Affected source covered by this subpart

§63.11082(a) states the emission sources to which this subpart applies are gasoline storage tanks, gasoline loading racks, vapor collection-equipped gasoline cargo tanks, and equipment components in vapor or liquid gasoline service that meet the criteria specified in Table 1 through 3 to this subpart.

This facility has the emissions units listed above, and therefore are required to comply with the requirements of this subpart.

§63.11083 Compliance Date of this subpart

§63.11083(b) states an existing affected source must comply with the standards in this subpart no later than January 10, 2011. The facility submitted the Notification of Compliance Status to the Administrator and District prior to this date. Therefore, continuous compliance with the requirements of this section is expected.

§63.11087 Gasoline Storage Tanks Requirements

§63.11087(a) requires each gasoline storage tank to meet the emissions limit and management practices in Table 1 to this subpart.

N-845-26-0:

This is a 1,347,627 gallons internal floating roof gasoline storage tank. Therefore, this gasoline storage tank must meet the requirements listed under §63.11100, Table 1, item 2, as follows:

a. Reduce emissions of total organic HAP or TOC by 95% (by weight) with a closed vent system and control device; or
b. equip each internal floating roof gasoline tank according to the requirements in 40 CFR Part 60 Subpart Kb, specifically, §60.112b(a)(1) except for the secondary seal
requirement under §60.112b(a)(1)(ii)(B) and the requirements in §60.112b(a)(1)(iv) through (ix); and

c. equip each external roof gasoline storage tank according to the requirements in §60.112b(a)(2), except that the requirements of §60.112b(a)(2)(ii) shall only be required if such storage tank does not currently meet the requirements of §60.112b(a)(2)(i); or

d. equip and operate each internal and external floating roof gasoline storage tank according to the applicable requirements in §63.1063(a)(1) and (b), and equip each external floating roof gasoline storage tank according to the requirements of §63.1063(a)(2) if such storage tank does not currently meet the requirements of §63.1063(a)(1).

As discussed in previous section of this document, this internal floating roof gasoline storage tank will comply with the requirements of 40 CFR Part 60 Subpart Kb. Therefore, compliance with the requirements of this section is expected.

§63.11087(c) requires the owner or operator to perform testing and monitoring specified in §63.11092(e).

§63.11092(e) requires the owner or operator to perform inspections of internal floating roof gasoline storage tank per §60.113(a). As discussed above, this tank will comply with the requirements of 40 CFR Part 60 Subpart Kb, which includes §60.113(a), therefore, compliance with the requirements of this section is expected.

§63.11087(d) requires the owner or operator to submit the applicable notifications as required under §63.11093.

§63.11093(a) requires the owner or operator to submit an Initial Notification as specified in §63.9(b). If the facility is in compliance with the requirements of this subpart at the time the Initial Notification is due, the Notification of Compliance Status required under paragraph (b) of this section may be submitted in lieu of the Initial Notification.

The facility submitted the Initial Notification to the Administrator and District on May 09, 2008. Therefore, continuous compliance with the requirements of this section is expected.

§63.11093(b) requires the owner or operator of an affected source under this subpart must submit a Notification of Compliance Status as specified in §63.9(b). The Notification of Compliance Status must specify which of the compliance options included in Table 1 of this subpart is used to comply with this subpart.

The facility submitted the Notification of Compliance Status to the Administrator and District on January 7, 2011. Therefore, continuous compliance with the requirements of this section is expected.

§63.11087(e) requires the owner or operator to keep records and submit reports as specified in §63.11094 and §63.11095.
§63.11094 and §63.11095 require to keep records and submit reports per §60.115b(a). As discussed above, this tank will comply with the requirements of 40 CFR Part 60 Subpart Kb, therefore, compliance with the requirements of this section is expected.

§63.11088 Gasoline Loading Rack Requirements

§63.11088(a) requires each loading rack to meet the emissions limit and management practices in Table 2 to this subpart.

N-845-6-6:

This is a bulk gasoline terminal loading rack with daily organic liquids throughput of 1,000,000 gallons. Therefore, the unit must meet the requirements listed in §63.11088(a), Table 2, item 1 as follows:

a. equip your loading rack with a vapor collection system designed to collect the TOC vapors displaced from cargo tanks during product loading; and
b. reduce emissions of TOC to less than or equal to 80 mg/l of gasoline loaded into gasoline cargo tanks at the loading rack; and
c. design and operate the vapor collection system to prevent any TOC vapors collected at one loading rack or land from passing through another loading rack or lane to the atmosphere; and
d. limit the loading of gasoline into gasoline cargo tanks that are vapor tight using the procedures specified in §60.502(e) through (j).

As discussed in previous section of this document, this bulk loading rack will comply with the requirements of 40 CFR Part 60 Subpart XX as follows:

- This loading rack is served by a vapor recovery system designed to collected the TOC to less than 80 mg/l of gasoline loaded into gasoline cargo tanks at the loading rack; and
- This facility has only one loading rack, and the vapor recovery system is designed and operated to prevent any TOC vapors collected at one loading rack from passing through to the atmosphere; and
- The facility is required to obtain and keep records of vapor tightness documentation for each truck loading at this site.

Therefore, continuous compliance with the requirements of this section is expected.

§63.11089 Equipment Leak Inspections Requirements

§63.11089(a) requires the owner or operator to perform a monthly leak inspection of all equipment in gasoline service. For this inspection, detection methods incorporating sight, sound, and smell are acceptable. Therefore, the following conditions will be listed on the permits to ensure compliance:
N-845-6-6 & -22-5

- 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. [40 CFR Part 60.502(j) and 40 CFR Part 63.11089(a)]

N-845-26-0

- Each calendar month, the owner or operator shall perform leak inspection of all equipment in gasoline service. Equipment in gasoline service is defined as a piece of equipment used in a system that transfers gasoline or gasoline vapors. For this inspection, detection methods incorporating sight, sound, and smell are acceptable. [40 CFR Part 63.11089(a)]

§63.11089(b) requires that a log book must be used and must be signed by the owner or operator at the completion of each inspection. A section of the log book must contain a list, summary description, or diagram(s) showing the location of all equipment in gasoline service at the facility. Therefore, the following condition will be listed on the permits to ensure compliance:

N-845-6-6, -22-5, & -26-0

- 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) and 40 CFR Part 63.11094(d)]

§63.11089(c) requires that each detection of a liquid or vapor leak must be recorded in the log book. When a leak is detected, an initial attempt at repair must be made as soon as practicable, but no later than 5 calendar days after the leak is detected. Repair or replacement of leaking equipment must be completed within 15 days after detection of the leak, except as provided in §63.11089(d).

§63.11089(d) states that delay of repair of leaking equipment will be allowed if the repair is not feasible within 15 days. The owner or operator must submit a semiannual report that includes the reason(s) why the repair was not feasible and the date each repair was completed.

N-845-6-6 & -22-5

However, District Rule 4624 requires leaks to be repaired within 3 calendar days. Therefore, the following condition will be listed on the permits to ensure compliance:
• The equipment that are found leaking shall be repaired 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]

N-845-26-0

The following condition will be listed on the permit to ensure compliance:

• 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)]

§63.11089(e) requires the owner or operator must comply with the requirements of this subpart by the applicable dates specified in §63.11083. §63.11089(f) requires the owner or operator must submit the applicable notifications as required under §63.11093.

As discussed in §63.11083(c), the facility is currently comply with the requirements of these sections.

§63.11089(g) requires the owner or operator must keep records and submit reports as specified in §63.11094 and §63.11095.

The owner or operator is expected to comply with the requirements of these subparts. The following condition will be listed on the permits to ensure compliance:

N-845-6-6 & -22-5

• The permittee shall maintain a log book that contains the following information: 1.) dates of leak inspections, 2.) the nature of the leak and the method of detection; 3.) findings, 4.) corrective action (date each leak is repaired), 5.) repair methods applied in each attempt to repair the leak; 6.) the reason for the delay if the leak is not repaired within 3 calendar days after discovery of the leak; 7.) the date of successful repair of the leak; and 8.) inspector name and signature. [District Rule 4624, 40 CFR Part 60.505(c), 40 CFR Part 63.11089(g), 40 CFR Part 11094(e), and 40 CFR Part 63.11095(a)(3)]

N-845-26-0

• The permittee shall maintain a log book that contains the following information: 1.) dates of leak inspections, 2.) the nature of the leak and the method of detection; 3.) findings,
4.) corrective action (date each leak is repaired), 5.) repair methods applied in each attempt to repair the leak; 6.) the reason for the delay if the leak is not repaired within 15 calendar days after discovery of the leak; 7.) the date of successful repair of the leak; and 8.) inspector name and signature. [40 CFR Part 63.11089(g), 40 CFR Part 11094(e), and 40 CFR Part 63.11095(a)(3)]

§63.11092 Testing and Monitoring Requirements

§63.11092(a) states that the owner or operator must comply with the requirements in paragraphs (a) through (d) of this section.

N-845-22-5

§63.11092(a)(1) requires the owner or operator conduct a performance test on the vapor processing and collection systems according to either (1) use the test methods and procedures in §60.503 of this chapter, except a reading of 500 parts per million shall be used to determine the level of leaks to be repaired under §60.503(b) of this chapter, or (2) use alternative test methods and procedures in accordance with the alternative test method requirements in §63.7(f).

The applicant proposed to increase the loading rack throughputs that exceed previous tested limits. Therefore, source testing will be required, and the following condition will be listed on the permit to ensure compliance:


N-845-22-5

§63.11092(b) requires the owner or operator shall install, calibrate, certify, operate, and maintain, according to the manufacturer's specifications, a Continuous Monitoring System (CMS) while gasoline vapors are displaced to the vapor processor systems, and the CMS must be installed by January 10, 2011. Therefore, the following condition will be listed on the permit to ensure compliance:

- The permittee shall install, calibrate, certify, and maintain, and quality-assure a Continuous Monitoring System (CMS) which continuously measures and records the VOCs (and other parameters, if any, to determine compliance with 0.08 lb-VOC/1,000 gallon of organic liquid) while organic liquid vapors are displaced to this vapor recovery system. The CEMS shall be installed in the exhaust air stream. [40 CFR Part 63.11092(b)]

§63.11092(c) requires the owner or operator shall document the reasons for any change to the operating parameter established during initial performance testing. Therefore, the following conditions will be listed on the permit to ensure compliance:
• The permittee shall document the reasons for any change to the operating parameter established during initial performance testing. [40 CFR Part 63.11092(c)]

N-845-26-0

§63.11092(e)(1) requires the owner or operator operates an internal floating roof gasoline storage tank must perform inspections according to the requirement of §60.113b(a).

As discussed in the previous section, this internal floating roof gasoline storage tank will comply with the requirements of §60.113b(a). Therefore, compliance with the requirements of this section is expected.

§63.11093 Notifications, Records, and Reports

As discussed above, the facility submitted the Notification of Compliance Status to the Administrator and District on January 7, 2011. Therefore, continuous compliance with the requirements of this section is expected.

§63.11094 Recordkeeping Requirements

N-845-6-6 & 22-5

§63.11094(a) requires that all records must be kept for at least five year. Therefore, the following condition will be listed on the permit to ensure compliance:

• All records shall be maintained on site for a period of at least five years and shall be made available for District, ARB, and EPA inspection upon request. [District Rules 1070, 2201, 4624, and 40 CFR Part 60.505, and 40 CFR Part 63.11094(a)]

N-845-26-0

§63.11094(a) requires that all records must be kept for at least five year. Therefore, the following condition will be listed on the permit to ensure compliance:

• All records shall be maintained on site for a period of at least five years and shall be made available for District, ARB, and EPA inspection upon request. [District Rules 1070, 2201, 4623, and 40 CFR Part 60.505, and 40 CFR Part 63.11094(a)]

N-845-6-6

§63.11094(b) lists recordkeeping requirements for vapor tightness of trucks. Therefore, the following condition will be listed on the permit to ensure compliance:

• 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 60.505(a) and (b), and 40 CFR Part 63.11094(b)]
§63.11094(d) requires owners or operators that are subject to leak provisions, to keep a record describing the types, identification numbers, and locations of all equipment in gasoline service. Therefore, the following condition will be listed on the permits to ensure compliance:

- 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) and 40 CFR Part 63.11094(d)]

§63.11094(e) requires the owner or operator to keep records of equipment leak inspections. Therefore, the following condition will be listed on the permits to ensure compliance:

N-845-6-6 & -22-5

- The permittee shall maintain a log book that contains the following information: 1.) dates of leak inspections, 2.) the nature of the leak and the method of detection; 3.) findings, 4.) corrective action (date each leak is repaired), 5.) repair methods applied in each attempt to repair the leak; 6.) the reason for the delay if the leak is not repaired within 3 calendar days after discovery of the leak; 7.) the date of successful repair of the leak; and 8.) inspector name and signature. [40 CFR Part 60.505(c), 40 CFR Part 63.11089(g), 40 CFR Part 63.11094(e), and 40 CFR Part 63.11095(a)(3)]

N-845-26-0

- The permittee shall maintain a log book that contains the following information: 1.) dates of leak inspections, 2.) the nature of the leak and the method of detection; 3.) findings, 4.) corrective action (date each leak is repaired), 5.) repair methods applied in each attempt to repair the leak; 6.) the reason for the delay if the leak is not repaired within 3 calendar days after discovery of the leak; 7.) the date of successful repair of the leak; and 8.) inspector name and signature. [40 CFR Part 63.11089(g), 40 CFR Part 63.11094(e), and 40 CFR Part 63.11095(a)(3)]

§63.11095 Reporting Requirements

N-845-26-0

§63.11095(a)(1) requires the owner or operator to submit a semi-annual compliance report that includes information specified in §60.115(b)(a) for internal floating roof storage tank.

The tank will comply with the requirements under §60.115(b)(a). Therefore, compliance with the requirements of this section is expected.
N-845-6-6

§63.11095(a)(2) requires the owner or operator shall report each loading of a gasoline cargo tank for which vapor tightness document had not been previously obtained by the facility.

This facility uses an automated system which only allows loading of gasoline cargo tanks for which vapor tightness documentation had previously been obtained. Therefore, the following condition will be listed on the permit to ensure compliance:

- The owner or operator shall submit a semi-annual compliance report that includes each loading of a gasoline cargo tank for which vapor tightness documentation had not been previously obtained by the facility. [40 CFR Part 63.11088(f) and 40 CFR Part 63.11095(a)(2)]

§63.11095(a)(3) requires the owner or operator shall report the number of equipment leaks not repaired within 15 days after detection.

However, District Rule 4624 requires leaks to be repaired with 72 hours. Therefore, the following condition will be listed on the permit to ensure compliance:

- The permittee shall maintain a log book that contains the following information: 1.) dates of leak inspections, 2.) the nature of the leak and the method of detection; 3.) findings, 4.) corrective action (date each leak is repaired), 5.) repair methods applied in each attempt to repair the leak; 6.) the reason for the delay if the leak is not repaired within 3 calendar days after discovery of the leak; 7.) the date of successful repair of the leak; and 8.) inspector name and signature. [District Rule 4624, 40 CFR Part 60.505(c), 40 CFR Part 63.11089(g), 40 CFR Part 63.11094(e), and 40 CFR Part 63.11095(a)(3)]

§63.11095(a)(4) states the storage vessels complying with §63.11087(b) after January 10, 2011, the storage vessel’s Notification of Compliance Status information can be included in the next semi-annual compliance report in lieu of filing a separate Notification of Compliance Status report under §63.11093.

The new internal floating roof storage tank (N-845-26) Notification of Compliance Status information will be included in the new semi-annual compliance report. Therefore, compliance with the requirement of this section is expected.

§63.11095(b) states the owner or operator of an affected source subject to the control requirements of this subpart shall submit an excess emissions report to the Administrator at the time the semi-annual compliance report is submitted.

§63.11095(d) states the owner or operator of an affected source under this subpart shall submit a semi-annual report including the number, duration, and a brief description of each type of malfunction which occurred during the reporting period and which caused or may have caused any applicable emission limitation to be exceeded. The report must also include a description of actions taken by an owner or operator during a malfunction of an
affected source to minimize emissions in accordance with §63.11085(a), including actions taken to correct a malfunction.

The facility submitted the most recent semi-annual compliance report to the Administrator and District on January 21, 2016, which included discussion of all requirements under these sections. Therefore, continuous compliance with the requirements of these sections is expected.

Compliance with the requirements of this rule is expected.

**Rule 4101 Visible Emissions**

District Rule 4101 states that 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 dark or darker than Ringlemann 1 or equivalent to 20% opacity. The following condition will be listed on the permit to ensure compliance:

- (15) 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, Ringlemann 1 or 20% opacity. [District Rule 4101]

Compliance with the requirements of this rule is expected.

**Rule 4102 Nuisance**

Rule 4102 prohibits discharge of air contaminants which could cause injury, detriment, nuisance or annoyance to the public. Public nuisance conditions are not expected as a result of this operation provided the equipment is well maintained.

**California Health & Safety Code 41700 (Health Risk Assessment)**

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

An HRA is not required for a project with a total facility prioritization score of less than one. According to the Technical Services Memo for this project *(Appendix K)*, the total facility prioritization score including this project was greater than one. Therefore, an HRA was required to determine the short-term acute and long-term chronic exposure from this project.

The cancer risk for this project is shown below:
<table>
<thead>
<tr>
<th>Unit</th>
<th>Cancer Risk</th>
<th>T-BACT Required</th>
</tr>
</thead>
<tbody>
<tr>
<td>N-845-6-6</td>
<td>8.07 per million</td>
<td>Yes</td>
</tr>
<tr>
<td>N-845-22-5</td>
<td>3.32 per million</td>
<td>Yes</td>
</tr>
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<td>N-845-25-0</td>
<td>0.00 per million</td>
<td>No</td>
</tr>
<tr>
<td>N-845-26-0</td>
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<td>No</td>
</tr>
<tr>
<td>N-845-27-0</td>
<td>0.00 per million</td>
<td>No</td>
</tr>
</tbody>
</table>

**Discussion of T-BACT**

**N-845-6 & -22**

BACT for toxic emission control (T-BACT) is required if the cancer risk exceeds one in one million. As demonstrated above, T-BACT is required for these units because the HRA indicates that the risk for each unit is above the District’s thresholds for triggering T-BACT requirements.

For this project T-BACT is triggered for VOC. T-BACT is satisfied with BACT for VOC (see Appendix H), which is the bottom loading with dry break couplers and vapor collection vented to a thermal incinerator or flare with destruction efficiency equal to or greater than 99%; therefore, compliance with the District’s Risk Management Policy is expected.

**N-845-25, -26, & -27**

BACT for toxic emission control (T-BACT) is required if the cancer risk exceeds one in one million. As demonstrated above, T-BACT is not required for each of these units because the HRA indicates that the risk is not above the District’s thresholds for triggering T-BACT requirements; therefore, compliance with the District’s Risk Management Policy is expected.

District policy APR 1905 also specifies that the increase in emissions associated with a proposed new source or modification not have acute or chronic indices, or a cancer risk greater than the District’s significance levels (i.e. acute and/or chronic indices greater than 1 and a cancer risk greater than 20 in a million). As outlined by the HRA Summary in Appendix K of this report, the emissions increases for this project was determined to be less than significant. The following conditions\(^4\) will be listed on the permit to ensure the equipment is operated in the manner assumed when the RMR was performed.

**N-845-6-6**

- VOC emissions shall not exceed 6.1 lb/hr and 18,983 lb/year.

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\(^4\) Each permit will contain a daily VOC emission limit. Compliance with the daily emission limit would also satisfy compliance with the hourly limit in the conditions proposed by Tech Services; and therefore, no separate hourly condition is being established in the permits.
N-845-22-5

- VOC emissions shall not exceed 10 lb/hr and 9,972 lb/year.
- The exhaust stack shall vent vertically upward. The vertical exhaust flow shall not be impeded by a rain cap (flapper ok), roof overhand, or any other obstruction.

N-845-25-0

- VOC emissions shall not exceed 0.212 lb/hr and 378 lb/year.

N-845-26-0

- VOC emissions shall not exceed 0.823 lb/hr and 1,786 lb/year.

N-845-27-0

- VOC emissions shall not exceed 0.279 lb/hr and 226 lb/year.

Therefore, compliance with the requirements of this rule is expected and the following condition will be listed on the permits:

- {98} No air contaminant shall be released into the atmosphere, which causes a public nuisance. [District Rule 4102]

**Rule 4623  Storage of Organic Liquids.**

N-845-25-0 & -26-0

Section 5.1 of this rule requires Group C vessels (capacity greater than 39,600 gallons) storing liquids with a TVP of greater than 1.5 psia but less than 11 psia to be equipped with a floating roof or have vapor control installed.

The applicant is proposing to install two internal floating roof storage tank storing liquids with TVP each greater than 1.5 psia but less than 11 psia; and therefore, the requirements of this section are satisfied.

Section 5.1.3 requires all tanks to be leak-free, as defined by Section 3.17 of the rule. The following condition will be listed on the permits to ensure compliance:

- 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 drops per minute. A reading in excess of 10,000 ppmv as methane above background or a liquid leak of greater than three drops per minute is a violation of this permit and Rule 4623 and shall be reported as a deviation. [District Rule 4623]
Section 5.4.1, the internal floating roof tanks shall be equipped with seals that meet the criteria set forth in Section 5.3 except for complying with the requirement specified in Section 5.3.2.1.3.

Each tank is a welded type tank and is equipped with mechanical shoe-type design primary seal, so these tanks must meet all the specifications listed in Section 5.3.2.1. Therefore, the following conditions will be listed on the permits to ensure compliance:

- {2506} Gaps between the tank shell and the primary seal shall not exceed 1 1/2 inches. [District Rule 4623]

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

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

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

- {2510} No gap between the tank shell and the secondary seal shall exceed 1/2 inch. [District Rule 4623]

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

- {2555} 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]

- {2513} The geometry of the metallic-shoe type seal shall be such that the maximum gap between the shoe and the tank shell shall be no greater than 3 inches for a length of at least 18 inches in the vertical plane above the liquid. [District Rule 4623]

- {2514} There shall be no holes, tears, or openings in the secondary seal or in the primary seal envelope that surrounds the annular vapor space enclosed by the roof edge, seal fabric, and secondary seal. [District Rule 4623]

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

- {2516} The secondary seal shall extend from the roof to the tank shell and shall not be attached to the primary seal. [District Rule 4623]
Section 5.4.3 requires the owner or operator to comply with floating roof landing requirements specified in Section 5.3.1.3. Therefore, the following condition will be listed on the permits to ensure compliance:

- 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 owner or operator intends to land the roof on its legs, the owner or operator shall notify the APCO in writing at least five calendar days prior to performing the work. The tank must be in compliance with this rule before it may land the roof on its legs. [District Rule 4623]

Section 5.5.1 requires that all openings in the roof used for sampling and gauging, except pressure-vacuum valves complying with Section 5.2, shall provide a projection below the liquid surface to prevent belching of liquid and to prevent entrained organic vapor from escaping from the liquid contents of the tank. These tanks shall be equipped with a cover, seal or lid. Therefore, the following condition will be listed on the permits to ensure compliance:

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

Section 5.5.2.1 requires that internal floating roof deck fittings shall meet all the requirements specified in Section 5.5.2.1.1 through 5.5.2.1.6. Therefore, the following conditions will be listed on the permits to ensure compliance:

- 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]

- 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]

- 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]
• 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]

• 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]

• 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]

Sections 5.5.2.4 list requirements for slotted guidepole. Per applicant, these internal floating roof storage tanks will equip with a slotted guidepole. Therefore, the following conditions will be listed on the permits to ensure compliance:

• All slotted sampling or gauging wells shall provide a projection below the liquid surface. [District Rule 4623]

• The gap between the pole wiper and the slotted guidepole shall be added to the gaps measured to determine compliance with the secondary seal requirement, and in no case shall exceed one-eighth inch. [District Rule 4623]

Section 6.1.4 requires the owner or operator shall perform a visually inspections, and conduct actual gap measurements according to the timelines specified in this section. Therefore, the following conditions will be listed on the permits to ensure compliance:

• The owner or operator shall visually inspect the internal floating roof, and its appurtenant parts, fittings, etc. and measure the gaps of the primary seal and/or secondary seal prior to filling the tank 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]

• The owner or operator 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]

• The owner or operator shall conduct actual gap measurements of the primary seal and/or secondary seal at least once every 60 months. Other than the gap criteria specified by this 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 6.3 requires the owner or operator shall retain accurate records required by this rule for a period of five years. These tanks are subject to the requirements of Section 6.3.5. Therefore, the following conditions will be listed on the permits to ensure compliance:

- The owner or operator shall submit the reports of the floating roof tank inspections to the APCO within five calendar days after the completion of the inspection only for those tanks that failed to meet the applicable requirements of Rule 4623, Sections 5.2 through 5.5. The inspection report for tanks that 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 the storage vessel was emptied, date of inspection and names and titles of company personnel doing the inspection. 2) Tank identification number and Permit to Operate number. 3) Observed condition of each component of the control equipment (seals, internal floating roof, and fittings). 4) Measurements of the gaps between the tank shell and primary and secondary seals. 5) Leak free status of the tank and floating roof deck fittings. Records of the leak-free status shall include the vapor concentration values measured in parts per million by volume (ppmv). 6) Data, supported by calculations, demonstrating compliance with the requirements specified in Sections 5.4 and 5.5.2.4.3 of Rule 4623. 7) Nature of defects and any corrective actions or repairs performed on the tank in order to comply with rule 4623 and 40 CFR Part 60 Subpart Kb and the date(s) such actions were taken. [District Rule 4623, and 40 CFR Part 60.115b(a)(2) and (3)]

- All records shall be maintained on site for a period of at least five years and shall be made available for District, ARB, and EPA inspection upon request. [District Rules 1070, 2201, and 4623]

Section 6.3.7 requires an operator to maintain records of the external floating roof or internal floating roof landing activities. Therefore, the following condition will be listed on the permits to ensure compliance:

- The owner or operator shall maintain the records of the internal floating roof landing activities that are performed pursuant to Rule 4623, Section 5.3.1.3 and 5.4.3. The records shall include information on the TVP, API gravity, and 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]

Compliance with the requirements of this Rule is expected.
Rule 4624  Transfer of Organic Liquid

Section 3.8 classifies an organic liquids transfer facility with daily transfer throughput more than 20,000 gallons of organic liquids as Class 1 organic liquid transfer facility.

N-845-6-6, -22-5, & -27-0

The proposed daily organic liquids throughput limit of the loading rack (N-845-6) is 1,000,000 gallons. Therefore, this facility is a Class 1 organic liquid transfer facility per Section 3.8.

Section 5.1 requires emissions of VOC from this transfer operation to not exceed 0.08 pounds per 1,000 gallons of organic liquid transferred and use one of the following systems: (1) bottom loaded organic liquid loading operation, (2) a system that routes emissions from the transfer operation to: (a) a vapor collection and control system, (b) a fixed roof container that meets the control requirements specified in Rule 4623 (Storage of Organic Liquids), (c) a floating roof container that meets the control requirements specified in District Rule 4623, (d) a pressure vessel equipped with an APCO-approved vapor recovery system that meets the control requirements of Rule 4623, or (e) a closed VOC emission control system.

This existing loading rack is a bottom loaded loading rack and is served by an existing vapor collection and control system (N-845-22). The 0.08 lb/1000 gallons emission limit is currently listed on the vapor recovery system permit to enforce this requirement, and therefore compliance with this requirement is expected.

Section 5.4 states that the vapor collection and control system must 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.

This requirement will continue be listed on the VRS permit to ensure compliance with this requirement.

Section 5.6 states that the transfer rack and vapor collection equipment must be designed, installed, maintained, and operated such that there are no leaks and no excess organic liquid drainage at disconnections. Therefore, the following condition will continue be listed on the permits to ensure compliance:

N-845-6-6 & -22-5

- The transfer rack and vapor collection equipment shall be maintained and operated such that there are no leaks and is no excess organic liquid drainage during disconnections. 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. Excess organic liquid drainage is defined as
an average of more than 10 milliliters liquid drainage per disconnect from three consecutive disconnects. [District Rule 4624]

N-845-27-0

• The operator/permittee shall design, install, maintain, and operate the equipment under this permit such that there are no leaks and is no excess organic liquid drainage at disconnection. A leak is defined as the dripping of organic compounds at a rate of more than three drops per minute or the detection of any gaseous or vapor emissions with a concentration of VOC greater than 10,000 ppm above a background as methane. Excess organic liquid drainage is defined as an average of more than 10 milliliters liquid drainage per disconnect from three consecutive disconnects. [District Rules 2201 and 4624]

Section 5.9.1 states that the operator of an organic liquid transfer facility must inspect the vapor collection system, the vapor disposal system, and each transfer rack handling organic liquids for leaks during transfer at least once every calendar quarter using the test method prescribed in Section 6.3.8. Therefore, the following condition will continue be listed on the permits to ensure compliance:

N-845-6-6 & -22-5

• The vapor collection system, the vapor processing system, and each transfer rack handling organic liquids shall be tested for leaks, using EPA Method 21, at least once every calendar quarter. [District Rule 4624]

N-845-27-0

• Each transfer rack handling organic liquids shall be tested for leaks, using EPA Method 21, at least once every calendar quarter. [District Rule 4624]

Section 5.9.3 states that all equipment that is found leaking must be repaired or replaced within 72 hours. If the leaking component cannot be repaired or replaced within 72 hours, the component must be taken out of service until it is repaired or replaced. The repaired or replaced equipment must be re-inspected the first time the equipment is on operation after performing the repair or replacement. Therefore, the following condition will be listed on the permits to ensure compliance:

• The equipment that are found leaking shall be repaired or replaced within 72 hours of discovery. 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 replaced equipment shall be re-inspected the first time the equipment is in operation after the repair or replacement. [District Rule 4624]

Section 5.9.4 states that the operator may apply for a written approval from the APCO to change the inspection frequency from quarterly to annually provided no leaks were found during five consecutive quarterly inspections. Upon the identification of any leak during an
annual inspection, the frequency will return to quarterly inspections and the operator must contact the APCO in writing within 14 days. Therefore, the following condition will be listed on the permits to ensure compliance:

- An operator/permittee may apply for a written approval from the APCO to change the EPA Method 21 leak inspection frequency from quarterly to annually provided no leaks were found during five consecutive quarterly inspections. Upon identification of any leak during an annual inspection, the inspection frequency shall revert back to quarterly, and the operator shall contact the APCO in writing within 14 days. [District Rule 4624]

Section 6.1.3 states that an operator subject to any part of Section 5.0 must keep records of the daily liquid throughput and the results of any leak inspections. Therefore, the following conditions will be listed on the permits to ensure compliance:

**N-845-6-6 & 22-5**

- The owner or operator shall keep records of the daily organic liquids throughput, the cumulative annual organic liquids throughput, in gallons. [District Rules 2201 and 4624]

- The owner or operator shall maintain a log book that contains the following information: 1.) dates of leak inspections, 2.) the nature of the leak and the method of detection; 3.) findings, 4.) corrective action (date each leak is repaired), 5.) repair methods applied in each attempt to repair the leak; 6.) the reason for the delay if the leak is not repaired within 3 calendar days after discovery of the leak; 7.) the date of successful repair of the leak; and 8.) inspector name and signature. [District Rule 4624, 40 CFR Part 60.505 (c) 40 CFR Part 63.11089(g), and 40 CFR Part 63.11094(d)]

Section 6.1.4 states that records shall be retained for a minimum of five years and shall be made readily available to the APCO, ARB, or EPA during normal business hours and submitted upon request to the APCO, ARB, or EPA. Therefore, the following conditions will continue be listed on the permit to ensure compliance:

- All records shall be maintained on site for a period of at least five years and shall be made available for District, ARB, EPA inspection upon request. [District Rules 1070, 2201, and 4624, and 40 CFR Part 63.11094(a)]

Section 6.2.1 requires that this facility to perform an initial source test of the VOC emission control system in accordance with the method prescribed in Section 6.3.2, and

Section 6.2.2 requires the operator to perform source test specified in Section 6.3.2 once every 60 months, but no more than 30 days before or after initial source test anniversary date. However, District Policy APR 1705 requires annual testing.

Therefore, the following condition will continue be listed on the VRS permit (N-845-22) to ensure compliance:
Source testing to demonstrate compliance with the VOC emission rate from the vapor recovery system serving the loading rack under Permit to Operate N-845-6, and the VOC removal efficiency of the vapor recovery system shall be conducted once every 60 months, but no more than 30 days before or after initial source test anniversary date. [District Rule 4624]

Section 6.3.2 states that demonstrate compliance with the VOC emission limit shall be determined using 40 CFR 60.503 "Test Methods and Procedures" and EPA Methods 2A, 2B, 25A and 25B and ABR method 422, or ARB Test Procedure TP-203.1.

Therefore, the following condition will continue be listed on the VRS permit (N-845-22) to ensure compliance:


Compliance with the requirements of this Rule is expected.

California Health & Safety Code 42301.6 (School Notice)

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

California Environmental Quality Act (CEQA)

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

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

District is a Lead Agency and Project not Covered Under Cap-and-Trade

It is determined that no other agency has or will prepare an environmental review document for the project. Thus the District is the Lead Agency for this project. The District's engineering evaluation (this document) demonstrates that the project would not result in an increase in project specific greenhouse gas emissions. The District therefore concludes that the project would have a less than cumulatively significant impact on global climate change.

District CEQA Findings

The District is the Lead Agency for this project because there is no other agency with broader statutory authority over this project. The District performed an Engineering Evaluation (this document) for the proposed project and determined that the activity will occur at an existing facility and the project involves negligible expansion of the existing use. Furthermore, the District determined that the activity will not have a significant effect on the environment. The District finds that the activity is categorically exempt from the provisions of CEQA pursuant to CEQA Guideline § 15301 (Existing Facilities), and finds that the project is exempt per the general rule that CEQA applies only to projects which have the potential for causing a significant effect on the environment (CEQA Guidelines §15061(b)(3)).

Indemnification Agreement/Letter of Credit Determination

The criteria pollutant emissions and toxic air contaminant emissions associated with the proposed project are not significant, and there is minimal potential for public concern for this particular type of facility/operation. Therefore, an Indemnification Agreement and/or a Letter of Credit will not be required for this project in the absence of expressed public concern.

IX. Recommendation

Compliance with all applicable rules and regulations is expected. Pending a successful NSR Public Noticing period, issue ATCs N-845-6-6, N-845-22-5, N-845-25-0, N-845-26-0, and N-845-27-0 subject to the permits conditions listed on the attached draft ATCs in Appendix A.

X. Billing Information

<table>
<thead>
<tr>
<th>Permit Number</th>
<th>Fee Schedule</th>
<th>Fee Description</th>
<th>Annual Fee</th>
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<td>55 hp (total)</td>
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Appendixes

A: Draft ATC(s)
B: Current PTO(s)
C: Facility Layout and Equipment Location Map
D: Tanks 4.0.9d Emissions Reports
E: Baseline Actual Emission Calculations
F: Quarterly Net Emissions Change
G: BACT Guidelines
H: BACT Analyses
I: Compliance Certificate
J: Gasoline Distribution Industry (Stage I) – Background Information for Proposed Standards
K: HRA Summary
L: Emissions Profile(s)
APPENDIX A
Draft ATCs
AUTHORITY TO CONSTRUCT

PERMIT NO: N-845-6-6

LEGAL OWNER OR OPERATOR: TESORO LOGISTICS OPERATIONS LLC
MAILING ADDRESS: ATTN: STEPHEN D COMLEY
3003 NAVY DR
STOCKTON, CA 95206

LOCATION: 3003 NAVY DR
STOCKTON, CA 95206

EQUIPMENT DESCRIPTION:
MODIFICATION OF BULK LOADING RACK CONSISTING OF EIGHT GASOLINE/DENATURED ETHANOL LOADING ARMS AND EIGHT DIESEL LOADING ARMS SERVED BY THE CARBON ADSORPTION VAPOR RECOVERY SYSTEM (N-845-22): INCREASE MAXIMUM DAILY AND ANNUAL THROUGHPUT FROM 771,120 GALLONS/DAY AND 240,350,000 GALLONS/YR TO 1,000,000 GALLONS/DAY AND 365,000,000 GALLONS/YEAR

CONDITIONS

1. {1830} This Authority to Construct serves as a written certificate of conformity with the procedural requirements of 40 CFR 70.7 and 70.8 and with the compliance requirements of 40 CFR 70.6(e). [District Rule 2201] Federally Enforceable Through Title V Permit

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

3. Prior to operating equipment under Authorities to Construct N-845-6-6, N-845-22-5, N-845-25-0, N-845-26-0 and N-845-27-0, the permittee shall mitigate the following quantities of VOC: 1st quarter - 6,459 lb, 2nd quarter - 6,459 lb, 3rd quarter - 6,459 lb, and 4th quarter - 6,459 lb. The quarterly amounts already include the applicable distance offset ratio per Section 4.8.1 of Rule 2201 (04/21/11). [District Rule 2201] Federally Enforceable Through Title V Permit

4. ERC certificates N-1078-1 (or a certificate split from this certificate) and S-4676-1 (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

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

Arnaud Marjolle, Director of Permit Services
N-845-6-6 Jun 30 2015 5:14PM - DOWl Joint Inspection NOT Required
Northern Regional Office • 4800 Enterprise Way • Modesto, CA 95356-8718 • (209) 557-6400 • Fax (209) 557-6475
5. This Authority to Construct shall be implemented concurrently with Authority to Construct N-845-22-5. [District Rule 2201] Federally Enforceable Through Title V Permit

6. {98} No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]

7. {15} 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]

8. Fugitive VOC from components, such as valve, flange, connector, pump seal, etc., associated with this permit unit shall not exceed 621 pounds in any one calendar year. [District Rule 2201] Federally Enforceable Through Title V Permit

9. Fugitive VOC emissions from component leaks shall be calculated using component count and appropriate emission factors from "California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities", Table IV-1b (Feb 1999) - Marketing Terminal Average Emission Factors. [District Rule 2201] Federally Enforceable Through Title V Permit

10. The quantity of organic liquids (as defined in District Rule 4624) loaded through this loading rack shall not exceed 1,000,000 gallons in any one day. [District Rule 2201] Federally Enforceable Through Title V Permit

11. The quantity of organic liquids (as defined in District Rule 4624) loaded through this loading rack shall not exceed 365,000,000 gallons in any one rolling 12-month period. [District Rule 2201] Federally Enforceable Through Title V Permit

12. This 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 1,000 gallons of organic liquid loaded. [District Rule 4624] Federally Enforceable Through Title V Permit

13. The maximum number of organic liquid hose disconnect performed by this loading rack shall not exceed 810 disconnects in any one day. [District Rule 2201] Federally Enforceable Through Title V Permit

14. The maximum number of organic liquid hose disconnect performed by this loading rack shall not exceed 296,265 disconnects in any one rolling 12-month period. [District Rule 2201] Federally Enforceable Through Title V Permit

15. The VOC emissions rate from each organic liquid hose disconnect shall not exceed 0.0148 pound per disconnect. (The VOC emissions rate from each disconnect shall be calculated as follow: VOC emissions rate (lb/disconnect) = 10 mL-VOC/disconnect x organic liquid density (lb/gal) x (1 gal/3785.41 mL)). [District Rule 2201] Federally Enforceable Through Title V Permit

16. The permittee 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] Federally Enforceable Through Title V Permit

17. 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 (e.g. breakdown of vapor recovery system), the date and cause of the initial failure, the estimated emissions in excess of those allowed including the amount of gasoline loaded during the breakdown period, and the methods utilized to restore normal operations. [District Rule 1100] Federally Enforceable Through Title V Permit

18. All vapors displaced from tank truck loading shall be vented to the vapor recovery system under Permit to Operate N-845-22. [District Rule 2201 and 40 CFR 60.502(a), (f), and (g)] Federally Enforceable Through Title V Permit

19. Gasoline shall be loaded only into vapor-tight tank trucks. [40 CFR 60.502(e) and 40 CFR 63.11088(a)] Federally Enforceable Through Title V Permit

20. 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 60.502(e)(1)] Federally Enforceable Through Title V Permit

21. 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 and 40 CFR 60.502(h)] Federally Enforceable Through Title V Permit
22. 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 pounds per 1,000 gallons of organic liquid loaded and which operate so the delivery tank does not exceed 18 inches water column pressure nor 6 inches water column. [District Rule 4624] Federally Enforceable Through Title V Permit

23. The vapor collection system, the vapor processing system, and each transfer rack handling organic liquids shall be tested for leaks with a portable hydrocarbon analyzer in accordance with EPA Method 21, at least once every calendar quarter. [District Rule 4624] Federally Enforceable Through Title V Permit

24. The transfer rack and vapor collection equipment shall be installed, maintained, and operated such that there are no leaks and no excess organic liquid drainage at disconnections. 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. Excess organic liquid drainage is defined as an average of more than 10 milliliters liquid drainage per disconnect from three consecutive disconnects. [District Rule 4624] Federally Enforceable Through Title V Permit

25. The equipment that are found leaking shall be repaired 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

26. Each calendar month, the vapor collection system, the vapor processing system and each loading rack handling gasoline, and all equipment in gasoline service shall be inspected during the loading of gasoline tank trucks for organic liquid and organic vapor leaks. Equipment in gasoline service is defined as a piece of equipment used in a system that transfers gasoline or gasoline vapors. For the purpose of this condition, detection methods incorporating sight, sound and smell are acceptable. [40 CFR 60.502(j) and 40 CFR 63.11089(a)] Federally Enforceable Through Title V Permit

27. The permittee may apply for a written approval from the APCO to change the inspection frequency from quarterly to annually provided no leaks were found during five consecutive quarterly inspections. Upon identification of any leak during an annual inspection, the inspection frequency shall revert back to quarterly, and the operator shall contact the APCO in writing within 14 days. [District Rule 4624] Federally Enforceable Through Title V Permit

28. For monthly leak inspection, a log book shall be used and shall be signed by the 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 63.11089(b) and 40 CFR 63.11094(d)] Federally Enforceable Through Title V Permit

29. 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, 9.3.3] Federally Enforceable Through Title V Permit

30. 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

31. 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 60.505(a) and (b), and 40 CFR 63.11094(b)] Federally Enforceable Through Title V Permit

32. The permittee shall submit a semi-annual compliance report that includes 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) and 40 CFR 63.11095(a)(2)] Federally Enforceable Through Title V Permit
33. The permittee shall maintain a log book that contains the following information: 1.) dates of leak inspections, 2.) the nature of the leak and the method of detection; 3.) findings, 4.) corrective action (date each leak is repaired), 5.) repair methods applied in each attempt to repair the leak; 6.) the reason for the delay if the leak is not repaired within 3 calendar days after discovery of the leak; 7.) the date of successful repair of the leak; and 8.) inspector name and signature. [District Rule 4624, 40 CFR 60.505(c), 40 CFR 63.11089(g), and 40 CFR 63.11094(e)] Federally Enforceable Through Title V Permit

34. The permittee shall keep daily records of the following: a) organic liquids throughput, in gallons; and b) number of organic liquid hose disconnect. [District Rules 2201 and 4624] Federally Enforceable Through Title V Permit

35. The permittee shall keep annual records on a rolling 12-month period of the following: a) cumulative organic liquids throughput, in gallons; and b) number of organic liquid hose disconnect. The record shall be updated at least monthly. [District Rule 2201] Federally Enforceable Through Title V Permit

36. All records shall be maintained on site for a period of at least five years and shall be made available for District, ARB, and EPA inspection upon request. [District Rules 1070, 2201, 4624, and 40 CFR 63.11094(a)] Federally Enforceable Through Title V Permit
AUTHORITY TO CONSTRUCT

PERMIT NO: N-845-22-5
LEGAL OWNER OR OPERATOR: TESORO LOGISTICS OPERATIONS LLC
MAILING ADDRESS: ATTN: STEPHEN D COMLEY
3003 NAVY DR
STOCKTON, CA 95206
LOCATION: 3003 NAVY DR
STOCKTON, CA 95206

EQUIPMENT DESCRIPTION:
MODIFICATION OF JOHN ZINK, LLC MODEL #S3-AAD-3-80-80-8 CARBON ADSORPTION VAPOR RECOVERY SYSTEM. INCREASE MAXIMUM DAILY AND ANNUAL THROUGHPUT FROM 771,120 GALLONS/DAY AND 240,350,000 GALLONS/YR TO 1,000,000 GALLONS/DAY AND 365,000,000 GALLONS/YEAR

CONDITIONS

1. {1830} This Authority to Construct serves as a written certificate of conformity with the procedural requirements of 40 CFR 70.7 and 70.8 and with the compliance requirements of 40 CFR 70.6(c). [District Rule 2201] Federally Enforceable Through Title V Permit

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

3. Prior to operating equipment under Authorities to Construct N-845-6-6, N-845-22-5, N-845-25-0, N-845-26-0 and N-845-27-0, the permittee shall mitigate the following quantities of VOC: 1st quarter - 6,459 lb, 2nd quarter - 6,459 lb, 3rd quarter - 6,459 lb, and 4th quarter - 6,459 lb. The quarterly amounts already include the applicable distance offset ratio per Section 4.8.1 of Rule 2201 (04/21/11). [District Rule 2201] Federally Enforceable Through Title V Permit

4. ERC certificates N-1078-1 (or a certificate split from this certificate) and S-4676-1 (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

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 Sadreddin, Executive Director / APCO

Arnaud Marjolle, Director of Permit Services
N-845-22-5 Jun 20 2019 - 6.02 - Bow - Joint Inspection NOT Required
Northern Regional Office • 4800 Enterprise Way • Modesto, CA 95356-8718 • (209) 557-6400 • Fax (209) 557-6475
5. This Authority to Construct shall be implemented concurrently with Authority to Construct N-845-6-6. [District Rule 2201] Federally Enforceable Through Title V Permit

6. The 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 operator demonstrates to the District's satisfaction that the longer reporting period was necessary. [District Rule 1100] Federally Enforceable Through Title V Permit

7. 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 (e.g. breakdown of vapor recovery system), the date and cause of the initial failure, the estimated emissions in excess of those allowed including the amount of gasoline loaded during the breakdown period, and the methods utilized to restore normal operations. [District Rule 1100] Federally Enforceable Through Title V Permit

8. {98} No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]

9. {15} No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101]

10. This loading rack shall be equipped with bottom loading equipment, dry break couplers, and a vapor collection and control system such that VOC emissions shall not exceed 0.08 pounds per 1,000 gallons of organic liquid loaded. [District Rule 4624] Federally Enforceable Through Title V Permit

11. The VOC removal efficiency shall be at least 99% and all organic liquids loading shall be conducted utilizing bottom loading and dry-break couplers. [District Rule 2201] Federally Enforceable Through Title V Permit

12. 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 and 40 CFR 60.502(h)] Federally Enforceable Through Title V Permit

13. The vapor collection system, the vapor processing system, and each transfer rack handling organic liquids shall be tested for leaks, using EPA Method 21, at least once every calendar quarter. [District Rule 4624] Federally Enforceable Through Title V Permit

14. The transfer rack and vapor collection equipment shall be installed, maintained, and operated such that there are no leaks and no excess organic liquid drainage at disconnections. 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. Excess organic liquid drainage is defined as an average of more than 10 milliliters liquid drainage per disconnect from three consecutive disconnects. [District Rule 4624] Federally Enforceable Through Title V Permit

15. 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

16. Each calendar month, the vapor collection system, the vapor processing system and each loading rack handling gasoline shall be inspected during the loading of "product" tank trucks for organic liquid and organic vapor leaks. For the purpose of this condition, "product" means gasoline, denatured ethanol, additives, and/or product blended with any of the following: gasoline, denatured ethanol, and additives; and the detection methods incorporating sight, sound and smell are acceptable. [40 CFR 60.502(j) and 40 CFR 63.11089(a)] Federally Enforceable Through Title V Permit

17. The permittee may apply for a written approval from the APCO to change the inspection frequency from quarterly to annually provided no leaks were found during five consecutive quarterly inspections. Upon identification of any leak during an annual inspection, the inspection frequency shall revert back to quarterly, and the operator shall contact the APCO in writing within 14 days. [District Rule 4624] Federally Enforceable Through Title V Permit
18. During source testing, the loading rack's vapor collection and control system 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 vapor collection and control system at a pressure tap as close as possible to the connection with the "product" tank truck. For the purpose of this condition, "product" means gasoline, denatured ethanol, additives, and/or product blended with any of the following: gasoline, denatured ethanol, and additives. The highest instantaneous pressure measurement as well as all pressure measurements at 5 minute intervals during delivery vessel loading must be recorded. [40 CFR 60.503(d)] Federally Enforceable Through Title V Permit

19. Source testing to demonstrate compliance with the VOC emission rate from the vapor recovery system serving the loading rack under Permit to Operate N-845-6, and the VOC removal efficiency of the vapor recovery system shall be conducted within 60 days of initial start-up. [District Rule 2201] Federally Enforceable Through Title V Permit

20. Source testing to demonstrate compliance with the VOC emission rate from the vapor recovery system serving the loading rack under Permit to Operate N-845-6, and the VOC removal efficiency of the vapor recovery system shall be conducted once every 60 months, but no more than 30 days before or after initial source test anniversary date. [District Rule 4624] Federally Enforceable Through Title V Permit

21. Sampling facilities for source testing shall be provided in accordance with the provisions of Rule 1081 (Source Sampling). [District Rule 1081] Federally Enforceable Through Title V Permit

22. Source testing shall be witnessed or authorized by District Personnel and samples shall be collected and analyzed by a California Air Resources Board (CARB) certified testing laboratory or a CARB certified source testing company. [District Rule 1081] Federally Enforceable Through Title V Permit

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] Federally Enforceable Through Title V Permit


25. Source testing for VOC removal 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 Rule 2201] 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. The permittee shall install, calibrate, certify, maintain, and quality-assure a Continuous Emissions Monitoring System (CEMS) which continuously measures and records the VOCs (and other parameters, if any, to determine compliance with lb-VOC/1,000 gallon of organic liquid) while organic liquid vapors are displaced to this vapor recovery system. The CEMS shall be installed in the exhaust air stream. [40 CFR 63.11092(b)] Federally Enforceable Through Title V Permit

28. The permittee shall document the reasons for any change to the operating parameter established during initial performance testing. [40 CFR 63.11092(c)] Federally Enforceable Through Title V Permit

29. The CEMS for measuring emissions other than opacity shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15-minute period, or shall meet equivalent specifications established by mutual agreement of the District, the CARB and the EPA. [40 CFR 63.8(c)(4)(ii)] Federally Enforceable Through Title V Permit

30. The CEMS shall meet the requirements in 40 CFR Part 60 Appendix B Performance Specification 8 (PS 8) or 8A (PS 8A), as appropriate, or shall meet equivalent specifications established by mutual agreement of the District, the CARB, and the EPA. [40 CFR 63.8(a)(2)] Federally Enforceable Through Title V Permit
31. The CEMS must be audited at least once every six months by conducting cylinder gas audits (CGA) using the procedure in 40 CFR Part 60 Appendix F, 5.1.2. Audit reports shall be submitted along with semi-annual compliance reports to the District, the CARB, and the EPA. [40 CFR 63.8(e)] Federally Enforceable Through Title V Permit

32. The CEMS data shall be reduced to hourly averages as specified in 40 CFR Part 63.8(g), or by other methods deemed equivalent by mutual agreement with the District, the CARB, and the EPA. [40 CFR 63.8(g)] Federally Enforceable Through Title V Permit

33. The permittee shall maintain files of all information (including all reports and notification) required by this part recorded in a form suitable and readily available for expedient inspection and review. The files shall be retained for at least 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. [40 CFR 63.10] Federally Enforceable Through Title V Permit

34. The permittee shall submit an excess emissions report to the Administrator at the time the semiannual compliance report is submitted. The report shall include all applicable information specified in 40 CFR Part 63.11095 (b)(1) through (5). [40 CFR 63.11095(b)] Federally Enforceable Through Title V Permit

35. APCO or an authorized representative shall be allowed to inspect, as determined to be necessary, the required monitoring devices to ensure that such devices are functioning properly. [District Rule 1080] Federally Enforceable Through Title V Permit

36. 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 63.11089(b) and 40 CFR 63.11094(d)] Federally Enforceable Through Title V Permit

37. 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 60.505(a) and (b), and 40 CFR 63.11094(b)] Federally Enforceable Through Title V Permit

38. The permittee shall submit a semi-annual compliance report that includes 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) and 40 CFR 63.11095(a)(2)] Federally Enforceable Through Title V Permit

39. The permittee shall maintain a log book that contains the following information: 1.) dates of leak inspections, 2.) the nature of the leak and the method of detection; 3.) findings, 4.) corrective action (date each leak is repaired), 5.) repair methods applied in each attempt to repair the leak; 6.) the reason for the delay if the leak is not repaired within 3 calendar days after discovery of the leak; 6.) the date of successful repair of the leak; and 8.) inspector name and signature. [District Rule 4624, 40 CFR 60.505(c), 40 CFR 63.11089(g), and 40 CFR 63.11094(e)] Federally Enforceable Through Title V Permit

40. All records shall be maintained on site for a period of at least five years and shall be made available for District, ARB, and EPA inspection upon request. [District Rules 1070, 2201, 4624, and 40 CFR 60.505, and 40 CFR 63.11094(a)] Federally Enforceable Through Title V Permit
AUTHORITY TO CONSTRUCT

PERMIT NO: N-845-25-0

LEGAL OWNER OR OPERATOR: TESORO LOGISTICS OPERATIONS LLC
MAILING ADDRESS: ATTN: STEPHEN D COMLEY
3003 NAVY DR
STOCKTON, CA 95206

LOCATION:
3003 NAVY DR
STOCKTON, CA 95206

EQUIPMENT DESCRIPTION:
ONE 571,068 GALLON ABOVEGROUND WELDED INTERNAL FLOATING ROOF DENATURED ETHANOL STORAGE TANK (NO. 20) WITH A MECHANICAL SHOE TYPE PRIMARY SEAL AND A RIM-MOUNTED SECONDARY SEAL

CONDITIONS

1. {1830} This Authority to Construct serves as a written certificate of conformity with the procedural requirements of 40 CFR 70.7 and 70.8 and with the compliance requirements of 40 CFR 70.6(c). [District Rule 2201] Federally Enforceable Through Title V Permit

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

3. Prior to operating equipment under Authorities to Construct N-845-6-6, N-845-22-5, N-845-25-0, N-845-26-0 and N-845-27-0, the permittee shall mitigate the following quantities of VOC: 1st quarter - 6,459 lb, 2nd quarter - 6,459 lb, 3rd quarter - 6,459 lb, and 4th quarter - 6,459 lb. The quarterly amounts already include the applicable distance offset ratio per Section 4.8.1 of Rule 2201 (04/21/11). [District Rule 2201] Federally Enforceable Through Title V Permit

4. ERC certificates N-1078-1 (or a certificate split from this certificate) and S-4676-1 (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

5. Upon implementation of this Authority to Construct, Permit to Operate N-845-1-3 shall be cancelled. [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 Sadreddin, Executive Director, APCO

Amad Marjole, Director of Permit Services

Northern Regional Office • 4800 Enterprise Way • Modesto, CA 95356-8718 • (209) 557-6400 • Fax (209) 557-6475
6. VOC emissions from this tank shall not exceed 1.3 pounds in any one day. [District Rule 2201] Federally Enforceable Through Title V Permit

7. Fugitive VOC from components, such as valve, flange, connector, pump seal, etc., associated with this permit unit shall not exceed 76 pounds in any one calendar year. [District Rule 2201] Federally Enforceable Through Title V Permit

8. Fugitive VOC emissions from component leaks shall be calculated using component count and appropriate emission factors from "California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities", Table IV-1b (Feb 1999) - Marketing Terminal Average Emission Factors. [District Rule 2201] 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. True vapor pressure of the organic liquid stored shall be less than 11 psia. [District Rule 4623] Federally Enforceable Through Title V Permit

11. 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

12. 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

13. 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

14. No gap between the tank shell and the secondary seal shall exceed 1/2 inch. [District Rule 4623] Federally Enforceable Through Title V Permit

15. The cumulative length 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

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] 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] 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] Federally Enforceable Through Title V Permit

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

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

23. 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 drops per minute. A reading in excess of 10,000 ppmv as methane above background or a liquid leak of greater than three 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

24. 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

25. 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] Federally Enforceable Through Title V Permit

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

27. 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] Federally Enforceable Through Title V Permit

28. 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] Federally Enforceable Through Title V Permit

29. 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] Federally Enforceable Through Title V Permit

30. All slotted sampling or gauging wells shall provide a projection below the liquid surface. [District Rule 4623] 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 exceed one-eighth inch. [District Rule 4623] Federally Enforceable Through Title V Permit

32. Operator shall visually inspect tank shell, hatches, seals, seams, cable seals, valves, flanges, connectors, and any other piping components directly affixed to the tank and within five feet of the tank at least once per year for liquid leaks, and with a portable hydrocarbon detection instrument conducted in accordance with EPA Method 21 for gas leaks. Operator shall also visually inspect the external shells and roofs of uninsulated tanks for structural integrity annually. [District Rule 4623] Federally Enforceable Through Title V Permit

33. Upon detection of a liquid leak, defined as a leak rate of greater than or equal to 30 drops per minute, operator shall repair the leak within 8 hours. For leaks with a liquid leak rate of between 3 and 30 drops per minute, the leaking component shall be repaired within 24 hours after detection. [District Rule 4623] Federally Enforceable Through Title V Permit
34. Upon detection of a gas leak, defined as a VOC concentration of greater than 10,000 ppmv measured in accordance with EPA Method 21, operator shall take one of the following actions: 1) eliminate the leak within 8 hours after detection; or 2) if the leak cannot be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices, and eliminate the leak within 48 hours after minimization. In no event shall the total time to minimize and eliminate a leak exceed 56 hours after detection. [District Rule 4623] Federally Enforceable Through Title V Permit

35. Components found to be leaking either liquids or gases shall be immediately affixed with a tag showing the component to be leaking. Operator shall maintain records of the liquid or gas leak detection readings, date/time the leak was discovered, and date/time the component was repaired to a leak-free condition. [District Rule 4623] Federally Enforceable Through Title V Permit

36. Leaking components that have been discovered by the operator that have been immediately tagged and repaired within the timeframes specified in District Rule 4623, Table 3 shall not constitute a violation of this rule. Leaking components as defined by District Rule 4623 discovered by District staff that were not previously identified and/or tagged by the operator, and/or any leaks that were not repaired within the timeframes specified in District Rule 4623, Table 5 shall constitute a violation of this rule. [District Rule 4623] Federally Enforceable Through Title V Permit

37. If a component type for a given tank is found to leak during an annual inspection, operator shall conduct quarterly inspections of that component type on the tank or tank system for four consecutive quarters. If no components are found to leak after four consecutive quarters, the operator may revert to annual inspections. [District Rule 4623] Federally Enforceable Through Title V Permit

38. Any component found to be leaking on two consecutive annual inspections is in violation of this rule, even if covered under the voluntary inspection and maintenance program. [District Rule 4623] Federally Enforceable Through Title V Permit

39. The permittee shall notify the APCO in writing at least three (3) days prior to performing tank degassing and interior tank cleaning activities. Written notification shall include the following: 1) the Permit to Operate number and physical location of the tank being degassed, 2) the date and time that tank degassing and cleaning activities will begin, 3) the degassing method, as allowed in this permit, to be used, 4) the method to be used to clean the tank, including any solvents to be used, and 5) the method to be used to dispose of any removed sludge, including methods that will be used to control emissions from the receiving vessel and emissions during transport. [District Rule 4623] Federally Enforceable Through Title V Permit

40. During tank cleaning operations, draining and refilling of this tank shall occur as a continuous process and shall proceed as rapidly as practicable while the roof is not floating on the surface of the stored liquid. [District Rule 4623] Federally Enforceable Through Title V Permit

41. Gap seal requirements shall not apply while the roof is resting on its legs, and during the processes of draining, degassing, or refilling the tank. A leak-free condition will not be required if the operator is draining or refilling this tank in a continuous, expeditious manner. [District Rule 4623] Federally Enforceable Through Title V Permit

42. After a tank has been degassed pursuant to the requirements of this permit, vapor control requirements are not applicable until an organic liquid having a TVP of 0.5 psia or greater is placed, held, or stored in this tank. [District Rule 4623] Federally Enforceable Through Title V Permit

43. While performing tank cleaning activities, operators may only use the following cleaning agents: diesel, solvents with an initial boiling point of greater than 302 degrees F, solvents with a vapor pressure of less than 0.5 psia, or solvents with 50 grams of VOC per liter or less. [District Rule 4623] Federally Enforceable Through Title V Permit

44. Steam cleaning shall only be allowed at locations where wastewater treatment facilities are limited, or during the months of December through March. [District Rule 4623] Federally Enforceable Through Title V Permit

45. During sludge removal, the operator shall control emissions from the sludge receiving vessel by operating an APCO-approved vapor control device that reduces emissions of organic vapors by at least 95%. [District Rule 4623] Federally Enforceable Through Title V Permit

46. The permittee shall only transport removed sludge in closed, rigid leak-free containers. [District Rule 4623] Federally Enforceable Through Title V Permit
47. The permittee shall store removed sludge, until final disposal, in vapor leak-free containers, or in tanks complying with the vapor control requirements of District Rule 4623. Sludge that is to be used to manufacture roadmix, as defined in District Rule 2020, is not required to be stored in this manner. Roadmix manufacturing operations exempt pursuant to District Rule 2020 shall maintain documentation of their compliance with Rule 2020, and shall readily make said documentation available for District inspection upon request. [District Rules 2020 and 4623] Federally Enforceable Through Title V Permit

48. 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 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

49. The operator 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] Federally Enforceable Through Title V Permit

50. 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] Federally Enforceable Through Title V Permit

51. The permittee shall submit the reports of the floating roof tank inspections to the APCO within five calendar days after the completion of the inspection only for those tanks that failed to meet the applicable requirements of Rule 4623, Sections 5.2 through 5.5. The inspection report for tanks that have been determined to be in compliance with the requirements of Sections 5.2 through 5.5 need not be submitted to the APCO, but the inspection report shall be kept on-site and made available upon request by the APCO. The inspection report shall contain all necessary information to demonstrate compliance with the provisions of this rule, including the following: 1) Date the storage vessel was emptied, date of inspection and names and titles of company personnel doing the inspection. 2) Tank identification number and Permit to Operate number. 3) Observed condition of each component of the control equipment (seals, internal floating roof, and fittings). 4) Measurements of the gaps between the tank shell and primary and secondary seals. 5) Leak free status of the tank and floating roof deck fittings. Records of the leak-free status shall include the vapor concentration values measured in parts per million by volume (ppmv). 6) Data, supported by calculations, demonstrating compliance with the requirements specified in Sections 5.4 and 5.5.2.4.3 of Rule 4623. 7) Nature of defects and any corrective actions or repairs performed on the tank in order to comply with rule 4623 and the date(s) such actions were taken. [District Rule 4623] Federally Enforceable Through Title V Permit

52. The permittee shall maintain records of the volatile organic liquid stored, the period of storage, and TVP of that volatile organic liquid during the respective storage period. TVP shall be determined using the data on the Reid vapor pressure (highest receipt or highest tank sample results) and actual storage temperature. [District Rule 2201] Federally Enforceable Through Title V Permit

53. The permittee shall maintain the records of the internal floating roof landing activities that are performed pursuant to Rule 4623, Section 5.3.1.3 and 5.4.3. The records shall include information on the TVP, API gravity, and 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

54. All records shall be maintained on site for a period of at least five years and shall be made available for District, ARB, and EPA inspection upon request. [District Rules 1070, 2201, and 4623] Federally Enforceable Through Title V Permit
San Joaquin Valley
Air Pollution Control District

AUTHORITY TO CONSTRUCT

PERMIT NO: N-845-26-0
LEGAL OWNER OR OPERATOR: TESORO LOGISTICS OPERATIONS LLC
MAILING ADDRESS: ATTN: STEPHEN D COMLEY
3003 NAVY DR
STOCKTON, CA 95206

LOCATION: 3003 NAVY DR
STOCKTON, CA 95206

EQUIPMENT DESCRIPTION: ONE 1,347,627 GALLON ABOVEGROUND WELDED INTERNAL FLOATING ROOF GASOLINE STORAGE TANK (NO. 32) WITH A MECHANICAL SHOE TYPE PRIMARY SEAL AND A RIM-MOUNTED SECONDARY SEAL

CONDITIONS

1. {1830} This Authority to Construct serves as a written certificate of conformity with the procedural requirements of 40 CFR 70.7 and 70.8 and with the compliance requirements of 40 CFR 70.6(c). [District Rule 2201] Federally Enforceable Through Title V Permit

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

3. Prior to operating equipment under Authorities to Construct N-845-6-6, N-845-22-5, N-845-25-0, N-845-26-0 and N-845-27-0, the permittee shall mitigate the following quantities of VOC: 1st quarter - 6,459 lb, 2nd quarter - 6,459 lb, 3rd quarter - 6,459 lb, and 4th quarter - 6,459 lb. The quarterly amounts already include the applicable distance offset ratio per Section 4.8.1 of Rule 2201 (04/21/11). [District Rule 2201] Federally Enforceable Through Title V Permit

4. ERC certificates N-1078-1 (or a certificate split from this certificate) and S-4676-1 (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

5. VOC emissions from this tank shall not exceed 10.5 pounds in any one day. [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 Sadrelin, Executive Director TAPCO

Arnaud Marjorie, Director of Permit Services

Northern Regional Office • 4800 Enterprise Way • Modesto, CA 95356-8718 • (209) 557-6400 • Fax (209) 557-6475
6. Fugitive VOC from components, such as valve, flange, connector, pump seal, etc., associated with this permit unit shall not exceed 100 pounds in any one calendar year. [District Rule 2201] Federally Enforceable Through Title V Permit

7. Fugitive VOC emissions from component leaks shall be calculated using component count and appropriate emission factors from "California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities", Table IV-1b (Feb 1999) - Marketing Terminal Average Emission Factors. [District Rule 2201] 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] Federally Enforceable Through Title V Permit

9. True vapor pressure of the organic liquid stored shall be less than 11 psia. [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

14. The cumulative length 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 18 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 18 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. The internal 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 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, 40 CFR 60.112b(a)(1)(i), 40 CFR 63.11087(a)] Federally Enforceable Through Title V Permit

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

CONDITIONS CONTINUE ON NEXT PAGE
22. 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 drops per minute. A reading in excess of 10,000 ppmv as methane above background or a liquid leak of greater than three 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

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

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, 40 CFR 60.112b(a)(1)(iv), and 40 CFR 63.11087(a)] 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, 40 CFR 60.112b(a)(1)(v), and 40 CFR 63.11087(a)] 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, 40 CFR 60.112b(a)(1)(vi), and 40 CFR 63.11087(a)] 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, 40 CFR 60.112b(a)(1)(vii), and 40 CFR 63.11087(a)] 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, 40 CFR 60.112b(a)(1)(viii), and 40 CFR 63.11087(a)] 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) and 40 CFR 63.11087(a)] Federally Enforceable Through Title V Permit

30. All slotted sampling or gauging wells shall provide a projection below the liquid surface. [District Rule 4623] 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 exceed one-eighth inch. [District Rule 4623] Federally Enforceable Through Title V Permit

32. Operator shall visually inspect tank shell, hatches, seals, seams, cable seals, valves, flanges, connectors, and any other piping components directly affixed to the tank and within five feet of the tank at least once per year for liquid leaks, and with a portable hydrocarbon detection instrument conducted in accordance with EPA Method 21 for gas leaks. Operator shall also visually inspect the external shells and roofs of uninsulated tanks for structural integrity annually. [District Rule 4623] Federally Enforceable Through Title V Permit

33. Upon detection of a liquid leak, defined as a leak rate of greater than or equal to 30 drops per minute, operator shall repair the leak within 8 hours. For leaks with a liquid leak rate of between 3 and 30 drops per minute, the leaking component shall be repaired within 24 hours after detection. [District Rule 4623] Federally Enforceable Through Title V Permit

34. Upon detection of a gas leak, defined as a VOC concentration of greater than 10,000 ppmv measured in accordance with EPA Method 21, operator shall take one of the following actions: 1) eliminate the leak within 8 hours after detection; or 2) if the leak cannot be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices, and eliminate the leak within 48 hours after minimization. In no event shall the total time to minimize and eliminate a leak exceed 56 hours after detection. [District Rule 4623] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE
35. Components found to be leaking either liquids or gases shall be immediately affixed with a tag showing the component to be leaking. Operator shall maintain records of the liquid or gas leak detection readings, date/time the leak was discovered, and date/time the component was repaired to a leak-free condition. [District Rule 4623] Federally Enforceable Through Title V Permit

36. Leaking components that have been discovered by the operator that have been immediately tagged and repaired within the timeframes specified in District Rule 4623, Table 3 shall not constitute a violation of this rule. Leaking components as defined by District Rule 4623 discovered by District staff that were not previously identified and/or tagged by the operator, and/or any leaks that were not repaired within the timeframes specified in District Rule 4623, Table 5 shall constitute a violation of this rule. [District Rule 4623] Federally Enforceable Through Title V Permit

37. If a component type for a given tank is found to leak during an annual inspection, operator shall conduct quarterly inspections of that component type on the tank or tank system for four consecutive quarters. If no components are found to leak after four consecutive quarters, the operator may revert to annual inspections. [District Rule 4623] Federally Enforceable Through Title V Permit

38. Any component found to be leaking on two consecutive annual inspections is in violation of this rule, even if covered under the voluntary inspection and maintenance program. [District Rule 4623] Federally Enforceable Through Title V Permit

39. The permittee shall notify the APCO in writing at least three (3) days prior to performing tank degassing and interior tank cleaning activities. Written notification shall include the following: 1) the Permit to Operate number and physical location of the tank being degassed, 2) the date and time that tank degassing and cleaning activities will begin, 3) the degassing method, as allowed in this permit, to be used, 4) the method to be used to clean the tank, including any solvents to be used, and 5) the method to be used to dispose of any removed sludge, including methods that will be used to control emissions from the receiving vessel and emissions during transport. [District Rule 4623] Federally Enforceable Through Title V Permit

40. During tank cleaning operations, draining and refilling of this tank shall occur as a continuous process and shall proceed as rapidly as practicable while the roof is not floating on the surface of the stored liquid. [District Rule 4623] Federally Enforceable Through Title V Permit

41. Gap seal requirements shall not apply while the roof is resting on its legs, and during the processes of draining, degassing, or refilling the tank. A leak-free condition will not be required if the operator is draining or refilling this tank in a continuous, expeditious manner. [District Rule 4623] Federally Enforceable Through Title V Permit

42. After a tank has been degassed pursuant to the requirements of this permit, vapor control requirements are not applicable until an organic liquid having a TVP of 0.5 psia or greater is placed, held, or stored in this tank. [District Rule 4623] Federally Enforceable Through Title V Permit

43. While performing tank cleaning activities, operators may only use the following cleaning agents: diesel, solvents with an initial boiling point of greater than 302 degrees F, solvents with a vapor pressure of less than 0.5 psia, or solvents with 50 grams of VOC per liter or less. [District Rule 4623] Federally Enforceable Through Title V Permit

44. Steam cleaning shall only be allowed at locations where wastewater treatment facilities are limited, or during the months of December through March. [District Rule 4623] Federally Enforceable Through Title V Permit

45. During sludge removal, the operator shall control emissions from the sludge receiving vessel by operating an APCO-approved vapor control device that reduces emissions of organic vapors by at least 95%. [District Rule 4623] Federally Enforceable Through Title V Permit

46. The permittee shall only transport removed sludge in closed, liquid leak-free containers. [District Rule 4623] Federally Enforceable Through Title V Permit

47. The permittee shall store removed sludge, until final disposal, in vapor leak-free containers, or in tanks complying with the vapor control requirements of District Rule 4623. Sludge that is to be used to manufacture roadmix, as defined in District Rule 2020, is not required to be stored in this manner. Roadmix manufacturing operations exempt pursuant to District Rule 2020 shall maintain documentation of their compliance with Rule 2020, and shall readily make said documentation available for District inspection upon request. [District Rules 2020 and 4623] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE
48. 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 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, 40 CFR 60.113b(a)(1), 40 CFR 63.11087(c), and 40 CFR 63.11092(e)(1)] Federally Enforceable Through Title V Permit

49. The operator 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(a)(2), 40 CFR 63.11087(c), and 40 CFR 63.11092(e)(1)] Federally Enforceable Through Title V Permit

50. 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

51. 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 owner or operator 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), 40 CFR 63.11087(c), and 40 CFR 63.11092(e)(1)] Federally Enforceable Through Title V Permit

52. 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), 40 CFR 63.11087(c), and 40 CFR 63.11092(e)(1)] Federally Enforceable Through Title V Permit

53. The permittee shall furnish the Administrator with a report that describes the control equipment and certifies that the control equipment meets the specification of 40 CFR Part 60.112b(a)(1) and 40 CFR Part 60.113b(a)(1) within 15 days after the initial startup of the equipment. [40 CFR 60.115b(a)(1)] Federally Enforceable Through Title V Permit

54. The permittee shall submit the reports of the floating roof tank inspections to the APCO within five calendar days after the completion of the inspection only for those tanks that failed to meet the applicable requirements of Rule 4623, Sections 5.2 through 5.5. The inspection report for tanks that have been determined to be in compliance with the requirements of Sections 5.2 through 5.5 need not be submitted to the APCO, but the inspection report shall be kept on-site and made available upon request to the APCO. The inspection report shall contain all necessary information to demonstrate compliance with the provisions of this rule, including the following: 1) Date the storage vessel was emptied, date of inspection and names and titles of company personnel doing the inspection. 2) Tank identification number and Permit to Operate number. 3) Observed condition of each component of the control equipment (seals, internal floating roof, and fittings). 4) Measurements of the gaps between the tank shell and primary and secondary seals. 5) Leak free status of the tank and floating roof deck fittings. Records of the leak-free status shall include the vapor concentration values measured in parts per million by volume (ppmv). 6) Data, supported by calculations, demonstrating compliance with the requirements specified in Sections 5.4 and 5.5.2.4.3 of Rule 4623. 7) Nature of defects and any corrective actions or repairs performed on the tank in order to comply with rule 4623 and 40 CFR Part 60 Subpart Kb and the date(s) such actions were taken. [District Rule 4623, 40 CFR 60.115b(a), and 40 CFR 63.11087(e)] Federally Enforceable Through Title V Permit

55. Each calendar month, the owner or operator shall perform leak inspection of all equipment in gasoline service. Equipment in gasoline service is defined as a piece of equipment used in a system that transfers gasoline or gasoline vapors. For this inspection, detection methods incorporating sight, sound, and smell are acceptable. [40 CFR 63.11089(a)] Federally Enforceable Through Title V Permit
56. 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 63.11089(b) and 40 CFR 63.11094(d)] Federally Enforceable Through Title V Permit

57. The operator shall visually inspect the internal floating roof, the primary seal and/or secondary seal, gaskets, slotted membrane and/or sleeve seals each time the storage tank is emptied and degassed. 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 refilling the tank. [40 CFR 60.113b(a)(4), 40 CFR 63.11087(c), and 40 CFR 63.11092(e)(1)] Federally Enforceable Through Title V Permit

58. 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 63.11089(c) and (d), and 40 CFR 63.11095(a)(3)] Federally Enforceable Through Title V Permit

59. The permittee shall submit a semi-annual compliance report that contains all required information stipulated under 40 CFR 63.11095(a) to the Administrator and the District. [40 CFR 63.11095(a)] Federally Enforceable Through Title V Permit

60. The permittee shall maintain a log book that contains the following information: 1.) dates of leak inspections, 2.) the nature of the leak and the method of detection; 3.) findings, 4.) corrective action (date each leak is repaired), 5.) repair methods applied in each attempt to repair the leak; 6.) the reason for the delay if the leak is not repaired within 15 calendar days after discovery of the leak; 7.) the date of successful repair of the leak; and 8.) inspector name and signature. [40 CFR 63.11089(g), 40 CFR 63.11094(e), and 40 CFR 63.11095(a)(3)] Federally Enforceable Through Title V Permit

61. The permittee shall submit an excess emissions report that contains all required information that stipulated under 40 CFR 63.11095(b)(5) to the Administrator and the District. The excess emissions report shall be submitted along with the semi-annual compliance report. [40 CFR 63.11095(b)(5)] Federally Enforceable Through Title V Permit

62. The permittee shall keep readily accessible records showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel, and these records shall be kept for the life of the source. [40 CFR 60.116(b)] Federally Enforceable Through Title V Permit

63. The permittee shall maintain records of the volatile organic liquid stored, the period of storage, and TVP of that volatile organic liquid during the respective storage period. TVP shall be determined using the data on the Reid vapor pressure (highest receipt or highest tank sample results) and actual storage temperature. [District Rule 2201 and 40 CFR 60.116(b)(c)] Federally Enforceable Through Title V Permit

64. The permittee shall maintain the records of the internal floating roof landing activities that are performed pursuant to Rule 4623, Section 5.3.1.3 and 5.4.3. The records shall include information on the TVP, API gravity, and 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

65. All records shall be maintained on site for a period of at least five years and shall be made available for District, ARB, and EPA inspection upon request. [District Rules 1070, 2201, and 4623, 40 CFR 60.116(b)(a), and 40 CFR 63.11094(a)] Federally Enforceable Through Title V Permit
San Joaquin Valley
Air Pollution Control District

AUTHORITY TO CONSTRUCT

PERMIT NO: N-845-27-0
LEGAL OWNER OR OPERATOR: TESORO LOGISTICS OPERATIONS LLC
MAILING ADDRESS: ATTN: STEPHEN D COMLEY
3003 NAVY DR
STOCKTON, CA 95206
LOCATION:
3003 NAVY DR
STOCKTON, CA 95206

EQUIPMENT DESCRIPTION:
DENATURED ETHANOL BULK OFFLOADING OPERATION CONSISTING OF ONE RAILCAR OFFLOADING STATION AND ONE TRUCK OFFLOADING STATION

CONDITIONS

1. {1830} This Authority to Construct serves as a written certificate of conformity with the procedural requirements of 40 CFR 70.7 and 70.8 and with the compliance requirements of 40 CFR 70.6(c). [District Rule 2201] Federally Enforceable Through Title V Permit

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

3. Prior to operating equipment under Authorities to Construct N-845-6-6, N-845-22-5, N-845-25-0, N-845-26-0 and N-845-27-0, the permittee shall mitigate the following quantities of VOC: 1st quarter - 6,459 lb, 2nd quarter - 6,459 lb, 3rd quarter - 6,459 lb, and 4th quarter - 6,459 lb. The quarterly amounts already include the applicable distance offset ratio per Section 4.8.1 of Rule 2201 (04/21/11). [District Rule 2201] Federally Enforceable Through Title V Permit

4. ERC certificates N-1078-1 (or a certificate split from this certificate) and S-4676-1 (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

5. {98} No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]

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

Arnaud Marjollel, Director of Permit Services
Northern Regional Office • 4800 Enterprise Way • Modesto, CA 95356-8718 • (209) 557-6400 • Fax (209) 557-6475
6. {15} 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]

7. Fugitive VOC from components, such as valve, flange, connector, pump seal, etc, associated with this permit unit shall not exceed 44 pounds in any one calendar year. [District Rule 2201] Federally Enforceable Through Title V Permit

8. Fugitive VOC emissions from component leaks shall be calculated using component count and appropriate emission factors from "California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities", Table IV-1b (Feb 1999) - Marketing Terminal Average Emission Factors. [District Rule 2201] Federally Enforceable Through Title V Permit

9. The maximum number of organic liquid hose disconnect performed by the unloading equipment shall not exceed 50 disconnects in any one day. [District Rule 2201] Federally Enforceable Through Title V Permit

10. The maximum number of organic liquid hose disconnect performed by the unloading equipment shall not exceed 13,000 disconnects in any one rolling 12-month period. [District Rule 2201] Federally Enforceable Through Title V Permit

11. The VOC emissions rate from each organic liquid hose disconnect shall not exceed 0.0140 pound per disconnect. (The VOC emissions rate from each disconnect shall be calculated as follow: VOC emissions rate (lb/disconnect) = 8 mL-VOC/disconnect x organic liquid density (lb/gal) x (1 gal/3785.41 mL)). [District Rule 2201] Federally Enforceable Through Title V Permit

12. The unloading equipment shall be designed, installed, maintained, and operated such that there are no leaks and no excess organic liquid drainage at disconnections. [District Rule 2201]

13. A leak is defined as the dripping of VOC-containing liquid at a rate of more than three drops per minute; or the detection of any gaseous or vapor emissions with a concentration of VOC greater than 1,000 ppmv above a background as methane when measured using a portable hydrocarbon detection instrument in accordance with EPA Method 21. [District Rule 4624]

14. Excess organic liquid drainage from each hose disconnect shall not exceed 8 milliliters per disconnect. Such liquid drainage for disconnect operation shall be determined by computing the average drainage from three consecutive disconnects. Liquid drainage is the volume of organic liquid that reaches the ground and potentially can evaporate into the atmosphere. [District Rule 2201]

15. Each time a tanker truck or railcar is unloaded, the operator/permittee shall ensure all liquid that drops from each disconnect is captured using a collection vessel that will be immediately covered once drainage is complete. The operator/permittee shall ensure the collection vessel will be emptied each time any liquid is collected in a manner so as to prevent any evaporation into the atmosphere. The operator/permittee shall ensure that clean empty collection vessels are available for use each time a tanker truck or railcar is unloaded. [District Rule 2201]

16. The operator/permittee shall ensure that each time a tanker truck or railcar is unloaded, a checklist to be prepared by permittee is completed where the operator or delegate verifies that a collection vessel was used for each disconnect associated with each unloading event. [District Rule 2201]

17. The operator/permittee shall determine an average organic liquid drainage, in unit of milliliters for three consecutive disconnects to demonstrate compliance with the 8 milliliters limit. The drainage shall be determined within 60 days of initial startup under this permit and once every calendar month thereafter. An appropriate action shall be taken in case excess liquid drainage occurs from any unloading hose. If no excess drainage conditions are found during five consecutive monthly inspection, 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 2201]

18. 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 2201]

19. The permittee 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] Federally Enforceable Through Title V Permit
20. 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 (e.g. breakdown of vapor recovery system), the date and cause of the initial failure, the estimated emissions in excess of those allowed including the amount of organic liquid unloaded during the breakdown period, and the methods utilized to restore normal operations. [District Rule 1100] Federally Enforceable Through Title V Permit

21. The equipment that are found leaking shall be repaired 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

22. The permittee may apply for a written approval from the APCO to change the inspection frequency from quarterly to annually provided no leaks were found during five consecutive quarterly inspections. Upon identification of any leak during an annual inspection, the inspection frequency shall revert back to quarterly, and the operator shall contact the APCO in writing within 14 days. [District Rule 4624] Federally Enforceable Through Title V Permit

23. The permittee shall maintain a log book that contains the following information: 1.) dates of leak inspections, 2.) the nature of the leak and the method of detection; 3.) findings, 4.) corrective action (date each leak is repaired), 5.) repair methods applied in each attempt to repair the leak; 6.) the reason for the delay if the leak is not repaired within 3 calendar days after discovery of the leak; 7.) the date of successful repair of the leak; and 8.) inspector name and signature. [District Rule 4624] Federally Enforceable Through Title V Permit

24. The permittee shall keep daily record of the number of organic liquid hose disconnect. [District Rule 2201] Federally Enforceable Through Title V Permit

25. The permittee shall keep annual record of the number of organic liquid hose disconnect on a rolling 12-month period. The record shall be updated at least monthly. [District Rule 2201] Federally Enforceable Through Title V Permit

26. All records shall be maintained on site for a period of at least five years and shall be made available for District, ARB, and EPA inspection upon request. [District Rules 1070, 2201, 4624] Federally Enforceable Through Title V Permit
APPENDIX B
Current PTOs
PERMIT UNIT: N-845-1-3  
EXPIRATION DATE: 07/31/2017

EQUIPMENT DESCRIPTION:
ONE 420,000 GALLON GASOLINE STORAGE TANK (NO. 20) WITH A STEEL PAN INTERNAL FLOATING ROOF WITH A METAL SHOE PRIMARY SEAL AND A FABRIC WIPER SECONDARY SEAL

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 its legs, the permittee shall notify the APCO in writing at least five calendar days prior to performing the work. The tank must be in compliance with this rule before it may land on its legs. [District Rule 4623, 5.3.1.3 and 5.4.3, 40 CFR 60.112b(a)(1)(i), and 40 CFR 63.11087(a)] Federally Enforceable Through Title V Permit

3. 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

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, 5.3.2.1.1 and 5.4.1] Federally Enforceable Through Title V Permit

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, 5.3.2.1.1 and 5.4.1] Federally Enforceable Through Title V Permit

6. 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

7. 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

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, 5.3.2.1.2 and 5.4.1] Federally Enforceable Through Title V Permit

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, 5.3.2.1.3 and 5.4.1] Federally Enforceable Through Title V Permit

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, 5.3.2.1.4 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, 5.3.2.1.5 and 5.4.1] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.
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, 5.3.2.1.6 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, 5.3.2.1.7 and 5.4.1] Federally Enforceable Through Title V Permit

14. 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 apparatus is in use. [District Rule 4623, 5.2 and 5.5.1] Federally Enforceable Through Title V Permit

15. 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. A 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

16. 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

17. Each opening in the internal floating roof except for leg sleeves, automatic bleeder vents, rim space vents, column wells, ladder wells, sample wells, and stub drains is to be equipped with a cover or lid which is to be maintained in a closed position at all times (i.e., no visible gap) except when the device is in actual use. The cover or lid shall be equipped with a gasket. Covers on each access hatch and automatic gauge float well shall be bolted except when they are in use. [District Rule 4623, 5.5.2.1.2, 40 CFR 60.112b(a)(1)(iv), and 40 CFR 63.11087(a)] Federally Enforceable Through Title V Permit

18. 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, 40 CFR 60.112b(a)(1)(v), and 40 CFR 63.11087(a)] Federally Enforceable Through Title V Permit

19. 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, 40 CFR 60.112b(a)(1)(vi), and 40 CFR 63.11087(a)] Federally Enforceable Through Title V Permit

20. Each penetration of the internal floating roof for the purpose of sampling shall be a sample well. The well shall have a slotted fabric cover that covers at least 90% of the opening. The fabric cover must be impermeable. [District Rule 4623, 5.5.2.1.5, 40 CFR 60.112b(a)(1)(vii), and 40 CFR 63.11087(a)] Federally Enforceable Through Title V Permit

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

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

23. Operator shall visually inspect tank shell, hatches, seals, seams, cable seals, valves, flanges, connectors, and any other piping components directly affixed to the tank and within five feet of the tank at least once per year for liquid leaks, and with a portable hydrocarbon detection instrument conducted in accordance with EPA Method 21 for gas leaks. Operator shall also visually inspect the external shells and roofs of uninsulated tanks for structural integrity annually. [District Rule 4623, Table 5] Federally Enforceable Through Title V Permit
24. Upon detection of a liquid leak, defined as a leak rate of greater than or equal to 30 drops per minute, operator shall repair the leak within 8 hours. For leaks with a liquid leak rate of between 3 and 30 drops per minute, the leaking component shall be repaired within 24 hours after detection. [District Rule 4623, Table 5] Federally Enforceable Through Title V Permit

25. Upon detection of a gas leak, defined as a VOC concentration of greater than 10,000 ppmv measured in accordance with EPA Method 21, operator shall take one of the following actions: 1) eliminate the leak within 8 hours after detection; or 2) if the leak cannot be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices, and eliminate the leak within 48 hours after minimization. In no event shall the total time to minimize and eliminate a leak exceed 56 hours after detection. [District Rule 4623, Table 5] Federally Enforceable Through Title V Permit

26. Components found to be leaking either liquids or gases shall be immediately affixed with a tag showing the component to be leaking. Operator shall maintain records of the liquid or gas leak detection readings, date/time the leak was discovered, and date/time the component was repaired to a leak-free condition. [District Rule 4623, Table 5] Federally Enforceable Through Title V Permit

27. Leaking components that have been discovered by the operator that have been immediately tagged and repaired within the timeframes specified in District Rule 4623, Table 3 shall not constitute a violation of this rule. Leaking components as defined by District Rule 4623 discovered by District staff that were not previously identified and/or tagged by the operator, and/or any leaks that were not repaired within the timeframes specified in District Rule 4623, Table 5 shall constitute a violation of this rule. [District Rule 4623, Table 5] Federally Enforceable Through Title V Permit

28. If a component type for a given tank is found to leak during an annual inspection, operator shall conduct quarterly inspections of that component type on the tank or tank system for four consecutive quarters. If no components are found to leak after four consecutive quarters, the operator may revert to annual inspections. [District Rule 4623, Table 5] Federally Enforceable Through Title V Permit

29. Any component found to be leaking on two consecutive annual inspections is in violation of this rule, even if covered under the voluntary inspection and maintenance program. [District Rule 4623, Table 5] Federally Enforceable Through Title V Permit

30. The permittee shall notify the APCO in writing at least three (3) days prior to performing tank degassing and interior tank cleaning activities. Written notification shall include the following: 1) the Permit to Operate number and physical location of the tank being degassed, 2) the date and time that tank degassing and cleaning activities will begin, 3) the degassing method, as allowed in this permit, to be used, 4) the method to be used to clean the tank, including any solvents to be used, and 5) the method to be used to dispose of any removed sludge, including methods that will be used to control emissions from the receiving vessel and emissions during transport. [District Rule 4623, 5.7.5.1] Federally Enforceable Through Title V Permit

31. During tank cleaning operations, draining and refilling of this tank shall occur as a continuous process and shall proceed as rapidly as practicable while the roof is not floating on the surface of the stored liquid. [District Rule 4623, 5.7.5.4.8] Federally Enforceable Through Title V Permit

32. Gap seal requirements shall not apply while the roof is resting on its legs, and during the processes of draining, degassing, or refilling the tank. A leak-free condition will not be required if the operator is draining or refilling this tank in a continuous, expeditious manner. [District Rule 4623, 5.7.5.4.9] Federally Enforceable Through Title V Permit

33. After a tank has been degassed pursuant to the requirements of this permit, vapor control requirements are not applicable until an organic liquid having a TVP of 0.5 psia or greater is placed, held, or stored in this tank. [District Rule 4623, 5.7.5.4.10] Federally Enforceable Through Title V Permit

34. While performing tank cleaning activities, operators may only use the following cleaning agents: diesel, solvents with an initial boiling point of greater than 302 degrees F, solvents with a vapor pressure of less than 0.5 psia, or solvents with 50 grams of VOC per liter or less. [District Rule 4623, 5.7.5.5.1] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE
These terms and conditions are part of the Facility-wide Permit to Operate.
35. Steam cleaning shall only be allowed at locations where wastewater treatment facilities are limited, or during the months of December through March. [District Rule 4623, 5.7.5.5.2] Federally Enforceable Through Title V Permit

36. During sludge removal, the operator shall control emissions from the sludge receiving vessel by operating an APCO-approved vapor control device that reduces emissions of organic vapors by at least 95%. [District Rule 4623, 5.7.5.6.1] Federally Enforceable Through Title V Permit

37. The permittee shall only transport removed sludge in closed, liquid leak-free containers. [District Rule 4623, 5.7.5.6.2] Federally Enforceable Through Title V Permit

38. The permittee shall store removed sludge, until final disposal, in vapor leak-free containers, or in tanks complying with the vapor control requirements of District Rule 4623. Sludge that is to be used to manufacture roadmix, as defined in District Rule 2020, is not required to be stored in this manner. Roadmix manufacturing operations exempt pursuant to District Rule 2020 shall maintain documentation of their compliance with Rule 2020, and shall readily make said documentation available for District inspection upon request. [District Rules 2020 and 4623, 5.7.5.6.3] Federally Enforceable Through Title V Permit

39. 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, CFR 60.113b(a)(1), 40 CFR 63.11087(c), and 40 CFR 63.11092(e)(1)] Federally Enforceable Through Title V Permit

40. 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) and 40 CFR 63.11087(c), and 40 CFR 63.11092(e)(1)] Federally Enforceable Through Title V Permit

41. The permittee shall visually inspect, through the manholes, roof hatches, or other openings on the fixed roof, the internal floating roof and its appurtenant parts, fittings, etc., and the primary seal and/or secondary seal at least once every 12 months after the tank is initially filled with an organic liquid. There should be no visible organic liquid on the roof, tank walls, or anywhere. Other than the gap criteria specified by this rule, no holes, tears, or other openings are allowed that would permit the escape of vapors. Any defects found are violations of this rule. [District Rule 4623, 6.1.4.2, 40 CFR 60.113b(a)(2), and 40 CFR 63.11087(c), and 40 CFR 63.11092(e)(1)] Federally Enforceable Through Title V Permit

42. The permittee shall visually inspect the internal floating roof, the primary seal and/or secondary seal, gaskets, slotted membrane and/or sleeve seals each time the storage tank is emptied and degassed. 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 refilling the tank. [40 CFR 60.113b(a)(4) and 40 CFR 63.11087(c), and 40 CFR 63.11092(e)(1)] Federally Enforceable Through Title V Permit

43. 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), and 40 CFR 63.11092(e)(1)] 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, 6.1.4.3 and 40 CFR 63.11087(c)] Federally Enforceable Through Title V Permit
45. Permittee shall submit the reports of the floating roof tank inspections to the APCO within five calendar days after the completion of the inspection only for those tanks that failed to meet the applicable requirements of Rule 4623, Sections 5.2 through 5.5. The inspection report for tanks that have been determined to be in compliance with the requirements of Sections 5.2 through 5.5 need not be submitted to the APCO, but the inspection report shall be kept on-site and made available upon request by the APCO. The inspection report shall contain all necessary information to demonstrate compliance with the provisions of this rule, including the following: 1) Date the storage vessel was emptied, date of inspection and names and titles of company personnel doing the inspection. 2) Tank identification number and Permit to Operate number. 3) Observed condition of each component of the control equipment (seals, internal floating roof, and fittings). 4) Measurements of the gaps between the tank shell and primary and secondary seals. 5) Leak free status of the tank and floating roof deck fittings. Records of the leak-free status shall include the vapor concentration values measured in parts per million by volume (ppmv). 6) Data, supported by calculations, demonstrating compliance with the requirements specified in Sections 5.4 and 5.5.2.4.3 of Rule 4623. 7) Nature of defects and any corrective actions or repairs performed on the tank in order to comply with rule 4623 and 40 CFR Part 60 Subpart Kb and the date(s) such actions were taken. [District Rule 4623, 6.3.5, 40 CFR 60.115b(a), and 40 CFR 63.11087(c)] Federally Enforceable Through Title V Permit

46. Each calendar month, the owner or operator shall perform leak inspection of all equipment in gasoline service. Equipment in gasoline service is defined as a piece of equipment used in a system that transfers gasoline or gasoline vapors. For this inspection, detection methods incorporating sight, sound, and smell are acceptable. [40 CFR 63.11089(a)] Federally Enforceable Through Title V Permit

47. 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 63.11089(b) and 40 CFR 63.11094(d)] Federally Enforceable Through Title V Permit

48. 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 63.11089(c) and (d) and 40 CFR 63.11095(a)(3)] Federally Enforceable Through Title V Permit

49. The permittee shall submit a semi-annual compliance report that contains all required information stipulated under 40 CFR 63.11095(a) to the Administrator and the District. [40 CFR 63.11095(a)] Federally Enforceable Through Title V Permit

50. The permittee shall maintain a log book that contains the following information: 1.) dates of leak inspections, 2.) the nature of the leak and the method of detection; 3.) findings, 4.) corrective action (date each leak is repaired), 5.) repair methods applied in each attempt to repair the leak; 6.) the reason for the delay if the leak is not repaired within 15 calendar days after discovery of the leak; 7.) the date of successful repair of the leak; and 8.) inspector name and signature. [40 CFR 63.11089(g), 40 CFR 63.11094(e)] Federally Enforceable Through Title V Permit

51. The permittee shall submit an excess emissions report that contains all required information that stipulated under 40 CFR 63.11095(b)(5) to the Administrator and the District. The excess emissions report shall be submitted along with the semi-annual compliance report. [40 CFR 63.11095(b)(5)] Federally Enforceable Through Title V Permit

52. The permittee shall keep readily accessible records showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel, and these records shall be kept for the life of the source. [40 CFR 60.116b(b)] Federally Enforceable Through Title V Permit

53. The permittee shall maintain records of the volatile organic liquid stored, the period of storage, and TVP of that volatile organic liquid during the respective storage period. TVP shall be determined using the data on the Reid vapor pressure (highest receipt or highest tank sample results) and actual storage temperature. [40 CFR 60.116b(c)] Federally Enforceable Through Title V Permit
54. 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

55. All records shall be maintained on site for a period of at least of five years and shall be made available for District, ARB, and EPA inspection upon request. [District Rule 4623, 6.3, 40 CFR 60.116b(a), and 40 CFR 63.11094(a)] Federally Enforceable Through Title V Permit

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

2. Fugitive VOC from components, such as valve, flange, connector, pump seal, etc, associated with this permit unit shall not exceed 621 pounds in any one calendar year. [District Rule 2201] Federally Enforceable Through Title V Permit

3. Fugitive VOC emissions from component leaks shall be calculated using component count and appropriate emission factors from "California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities", Table IV-1b (Feb 1999) - Marketing Terminal Average Emission Factors. [District Rule 2201] Federally Enforceable Through Title V Permit

4. The quantity of organic liquids (as defined in District Rule 4624) loaded through this loading rack shall not exceed 771,120 gallons in any one day. [District Rule 2201] Federally Enforceable Through Title V Permit

5. The quantity of organic liquids (as defined in District Rule 4624) loaded through this loading rack shall not exceed 240,350,000 gallons in any one rolling 12-month period. [District Rule 2201] Federally Enforceable Through Title V Permit

6. This 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 1,000 gallons of organic liquid loaded. [District Rule 4624] Federally Enforceable Through Title V Permit

7. The permittee 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] Federally Enforceable Through Title V Permit

8. 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 (e.g. breakdown of vapor recovery system), the date and cause of the initial failure, the estimated emissions in excess of those allowed including the amount of gasoline loaded during the breakdown period, and the methods utilized to restore normal operations. [District Rule 1100] Federally Enforceable Through Title V Permit

9. All vapors displaced from tank truck loading shall be vented to the vapor recovery system under Permit to Operate N-845-22. [District Rule 2201 and 40 CFR 60.502(a), (f), and (g)] Federally Enforceable Through Title V Permit

10. Gasoline shall be loaded only into vapor-tight tank trucks. [40 CFR 60.502(e) and 40 CFR 63.11088(a)] Federally Enforceable Through Title V Permit

11. 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 60.502(e)(1)] Federally Enforceable Through Title V Permit
12. 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 and 40 CFR 60.502(h)] Federally Enforceable Through Title V Permit

13. 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 pounds per 1,000 gallons of organic liquid loaded and which operate so the delivery tank does not exceed 18 inches water column pressure nor 6 inches water column vacuum. [District Rule 4624] Federally Enforceable Through Title V Permit

14. The vapor collection system, the vapor processing system, and each transfer rack handling organic liquids shall be tested for leaks with a portable hydrocarbon analyzer in accordance with EPA Method 21, at least once every calendar quarter. [District Rule 4624] Federally Enforceable Through Title V Permit

15. The transfer rack and vapor collection equipment shall be installed, maintained, and operated such that there are no leaks and no excess organic liquid drainage at disconnections. 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. Excess organic liquid drainage is defined as an average of more than 10 milliliters liquid drainage per disconnect from three consecutive disconnects. [District Rule 4624] Federally Enforceable Through Title V Permit

16. The equipment that are found leaking shall be repaired 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

17. Each calendar month, the vapor collection system, the vapor processing system and each loading rack handling gasoline, and all equipment in gasoline service shall be inspected during the loading of gasoline tank trucks for organic liquid and organic vapor leaks. Equipment in gasoline service is defined as a piece of equipment used in a system that transfers gasoline or gasoline vapors. For the purpose of this condition, detection methods incorporating sight, sound and smell are acceptable. [40 CFR 60.502(j) and 40 CFR 63.11089(a)] Federally Enforceable Through Title V Permit

18. The permittee may apply for a written approval from the APCO to change the inspection frequency from quarterly to annually provided no leaks were found during five consecutive quarterly inspections. Upon identification of any leak during an annual inspection, the inspection frequency shall revert back to quarterly, and the operator shall contact the APCO in writing within 14 days. [District Rule 4624] Federally Enforceable Through Title V Permit

19. For monthly leak inspection, a log book shall be used and shall be signed by the 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 63.11089(b) and 40 CFR 63.11094(d)] Federally Enforceable Through Title V Permit

20. 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, 9.3.3] Federally Enforceable Through Title V Permit

21. 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

22. 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 60.505(a) and (b), and 40 CFR 63.11094(b)] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.
23. The permittee shall submit a semi-annual compliance report that includes 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) and 40 CFR 63.11095(a)(2)] Federally Enforceable Through Title V Permit

24. The permittee shall maintain a log book that contains the following information: 1.) dates of leak inspections, 2.) the nature of the leak and the method of detection; 3.) findings, 4.) corrective action (date each leak is repaired), 5.) repair methods applied in each attempt to repair the leak; 6.) the reason for the delay if the leak is not repaired within 3 calendar days after discovery of the leak; 7.) the date of successful repair of the leak; and 8.) inspector name and signature. [District Rule 4624, 40 CFR 60.505(c), 40 CFR 63.11089(g), and 40 CFR 63.11094(e)] Federally Enforceable Through Title V Permit

25. The permittee shall keep a record of the daily organic liquids throughput, in gallons. [District Rules 2201 and 4624] Federally Enforceable Through Title V Permit

26. The permittee shall keep a record of the cumulative organic liquids throughput on a rolling 12-month basis, in gallons. The record shall be updated at least monthly. [District Rule 2201] Federally Enforceable Through Title V Permit

27. All records shall be maintained on site for a period of at least five years and shall be made available for District, ARB, and EPA inspection upon request. [District Rules 1070, 2201, 4624, and 40 CFR 63.11094(a)] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.
San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: N-845-22-4
EXPIRATION DATE: 07/31/2017

EQUIPMENT DESCRIPTION:
JOHN ZINK, LLC MODEL #S3-AAD-3-80-80-8 CARBON ADSORPTION VAPOR RECOVERY SYSTEM

PERMIT UNIT REQUIREMENTS

1. The 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 operator demonstrates to the District's satisfaction that the longer reporting period was necessary. [District Rule 1100] 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 (e.g. breakdown of vapor recovery system), the date and cause of the initial failure, the estimated emissions in excess of those allowed including the amount of gasoline loaded during the breakdown period, and the methods utilized to restore normal operations. [District Rule 1100] Federally Enforceable Through Title V Permit

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. This 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 1,000 gallons of organic liquid loaded. [District Rule 4624] Federally Enforceable Through Title V Permit

5. The VOC removal efficiency shall be at least 99% and all organic liquids loading shall be conducted utilizing bottom loading and dry-break couplers. [District Rule 2201] 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 and 40 CFR 60.502(h)] Federally Enforceable Through Title V Permit

7. The vapor collection system, the vapor processing system, and each transfer rack handling organic liquids shall be tested for leaks, using EPA Method 21, at least once every calendar quarter. [District Rule 4624] Federally Enforceable Through Title V Permit

8. The transfer rack and vapor collection equipment shall be installed, maintained, and operated such that there are no leaks and no excess organic liquid drainage at disconnections. 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. Excess organic liquid drainage is defined as an average of more than 10 milliliters liquid drainage per disconnect from three consecutive disconnects. [District Rule 4624] Federally Enforceable Through Title V Permit

9. 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

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE
These terms and conditions are part of the Facility-wide Permit to Operate.
10. Each calendar month, the vapor collection system, the vapor processing system and each loading rack handling gasoline shall be inspected during the loading of "product" tank trucks for organic liquid and organic vapor leaks. For the purpose of this condition, "product" means gasoline, denatured ethanol, additives, and/or product blended with any of the following: gasoline, denatured ethanol, and additives; and the detection methods incorporating sight, sound and smell are acceptable. [40 CFR 60.502(j) and 40 CFR 63.11089(a)] Federally Enforceable Through Title V Permit

11. The permittee may apply for a written approval from the APCO to change the inspection frequency from quarterly to annually provided no leaks were found during five consecutive quarterly inspections. Upon identification of any leak during an annual inspection, the inspection frequency shall revert back to quarterly, and the operator shall contact the APCO in writing within 14 days. [District Rule 4624] Federally Enforceable Through Title V Permit

12. During source testing, the loading rack's vapor collection and control system shall be tested at every loading position to demonstrate the presence 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, manegheletic 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 vapor collection and control system at a pressure tap as close as possible to the connection with the "product" tank truck. For the purpose of this condition, "product" means gasoline, denatured ethanol, additives, and/or product blended with any of the following: gasoline, denatured ethanol, and additives. The highest instantaneous pressure measurement as well as all pressure measurements at 5 minute intervals during delivery vessel loading must be recorded. [40 CFR 60.503(d)] Federally Enforceable Through Title V Permit

13. Source testing to demonstrate compliance with the VOC emission rate from the vapor recovery system serving the loading rack under Permit to Operate N-845-6, and the VOC removal efficiency of the vapor recovery system shall be conducted once every 60 months, but no more than 30 days before or after initial source test anniversary date. [District Rule 4624] Federally Enforceable Through Title V Permit

14. Sampling facilities for source testing shall be provided in accordance with the provisions of Rule 1081 (Source Sampling). [District Rule 1081] Federally Enforceable Through Title V Permit

15. 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

16. Source testing shall be witnessed or authorized by District Personnel and samples shall be collected and analyzed by a California Air Resources Board (CARB) certified testing laboratory or a CARB certified source testing company. [District Rule 1081] Federally Enforceable Through Title V Permit


18. Source testing for VOC removal 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 Rule 2201] Federally Enforceable Through Title V Permit

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

20. The permittee shall install, calibrate, certify, maintain, and quality-assure a Continuous Emissions Monitoring System (CEMS) which continuously measures and records the VOCs (and other parameters, if any, to determine compliance with lb-VOC/1,000 gallon of organic liquid) while organic liquid vapors are displaced to this vapor recovery system. The CEMS shall be installed in the exhaust air stream. [40 CFR 63.11092(b)] Federally Enforceable Through Title V Permit

21. The permittee shall document the reasons for any change to the operating parameter established during initial performance testing. [40 CFR 63.11092(c)] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE
These terms and conditions are part of the Facility-wide Permit to Operate.
22. The CEMS for measuring emissions other than opacity shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15-minute period, or shall meet equivalent specifications established by mutual agreement of the District, the CARB and the EPA. [40 CFR 63.8(c)(4)(ii)] Federally Enforceable Through Title V Permit

23. The CEMS shall meet the requirements in 40 CFR Part 60 Appendix B Performance Specification 8 (PS 8) or 8A (PS 8A), as appropriate, or shall meet equivalent specifications established by mutual agreement of the District, the CARB, and the EPA. [40 CFR 63.8(a)(2)] Federally Enforceable Through Title V Permit

24. The CEMS must be audited at least once every six months by conducting cylinder gas audits (CGA) using the procedure in 40 CFR Part 60 Appendix F, 5.1.2. Audit reports shall be submitted along with semi-annual compliance reports to the District, the CARB, and the EPA. [40 CFR 63.8(e)] Federally Enforceable Through Title V Permit

25. The CEMS data shall be reduced to hourly averages as specified in 40 CFR Part 63.8(g), or by other methods deemed equivalent by mutual agreement with the District, the CARB, and the EPA. [40 CFR 63.8(g)] Federally Enforceable Through Title V Permit

26. The permittee shall maintain files of all information (including all reports and notification) required by this part recorded in a form suitable and readily available for expeditious inspection and review. The files shall be retained for at least 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. [40 CFR 63.10] Federally Enforceable Through Title V Permit

27. The permittee shall submit an excess emissions report to the Administrator at the time the semiannual compliance report is submitted. The report shall include all applicable information specified in 40 CFR Part 63.11095 (b)(1) through (5). [40 CFR 63.11095(b)] Federally Enforceable Through Title V Permit

28. APCO or an authorized representative shall be allowed to inspect, as determined to be necessary, the required monitoring devices to ensure that such devices are functioning properly. [District Rule 1080] 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 63.11089(b) and 40 CFR 63.11094(d)] 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 60.505(a) and (b), and 40 CFR 63.11094(b)] Federally Enforceable Through Title V Permit

31. The permittee shall submit a semi-annual compliance report that includes 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) and 40 CFR 63.11095(a)(2)] Federally Enforceable Through Title V Permit

32. The permittee shall maintain a log book that contains the following information: 1.) dates of leak inspections, 2.) the nature of the leak and the method of detection; 3.) findings; 4.) corrective action (date each leak is repaired), 5.) repair methods applied in each attempt to repair the leak; 6.) the reason for the delay if the leak is not repaired within 3 calendar days after discovery of the leak; 6.) the date of successful repair of the leak; and 8.) inspector name and signature. [District Rule 4624, 40 CFR 60.505(c), 40 CFR 63.11089(g), and 40 CFR 63.11094(e)] Federally Enforceable Through Title V Permit

33. All records shall be maintained on site for a period of at least five years and shall be made available for District, ARB, and EPA inspection upon request. [District Rules 1070, 2201, 4624, and 40 CFR 60.505, and 40 CFR 63.11094(a)] Federally Enforceable Through Title V Permit
APPENDIX C
Facility Layout and Equipment Location Map
N845, N-1160048 Tesoro Logistics Operations LLC is located at 3003 Navy Driver, Stockton, CA 95206. The property line is highlighted in RED.

The proposed ethanol bulk offloading operation is located at 2650 West Washington Street, Stockton, CA 95203. The property line is highlighted in BLUE.

The proposed ethanol bulk offloading operation is not located contiguous or adjacent to the Tesoro Terminal, however, all ethanol from the offloading operation will be sent to the existing terminal, which operation supplement the Tesoro Terminal stationary source operation. Therefore, the offsite ethanol offloading operation and the Tesoro Terminal will be considered same stationary source.
New ethanol piping map, Tesoro will install about 1,000 feet 8" pipe from the ethanol bulk offloading rack to Tank #20.
APPENDIX D
Tanks 4.0.9d Emissions Reports
TANKS 4.0.9d
Emissions Report - Detail Format
Tank Identification and Physical Characteristics

Identification
- User Identification: N-845-25-0 Daily PE2
- City: Stockton
- State: California
- Company: Tesoro Logistics Operations LLC
- Type of Tank: Internal Floating Roof Tank
- Description: New denatured ethanol storage tank #20

Tank Dimensions
- Diameter (ft): 45.00
- Volume (gallons): 571,068.00
- Turnovers: 42.03
- Self Supp. Roof? (y/n): N
- No. of Columns: 1.00

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

Rim-Seal System
- Primary Seal: Mechanical Shoe
- Secondary Seal: Rim-mounted

Deck Characteristics
- Deck Fitting Category: Detail
- Deck Type: Welded

Deck Fitting/Status
- Slotted Guide-Pole/Sample Well/Gask Sliding Covr, w. Float, Sleeve, Wiper: 1
- Access Hatch (24-in. Diam)/Bolted Cover, Gasketed: 1
- Automatic Gauge Float Well/Bolted Cover, Gasketed: 1
- Gauge-Hatch/Sample Well (8-in. Diam.)/Weighted Mech. Actuation, Gask.: 1
- Vacuum Breaker (10-in. Diam.)/Weighted Mech. Actuation, Gask.: 1
- Roof Leg (3-in. Diameter)/Adjustable, Pontoon Area, Sock: 4
- Roof Leg (3-in. Diameter)/Adjustable, Center Area, Gasketed: 4
- Rim Vent (6-in. Diameter)/Weighted Mech. Actuation, Gask.: 1
- Column Well (24-in. Diam.)/Pipe Col.-Sliding Cover, Gask.: 1
- Column Well (24-in. Diam.)/Built-Up Col.-Sliding Cover, Gask.: 1
- Ladder Well (36-in. Diam.)/Sliding Cover, Gasketed: 1
- Roof Drain (3-in. Diameter)/Open: 1
Meteorological Data used in Emissions Calculations: Stockton, California (Avg Atmospheric Pressure = 14.72 psia)
# TANKS 4.0.9d

## Emissions Report - Detail Format

### Liquid Contents of Storage Tank

**N-845-25-0 Daily PE2 - Internal Floating Roof Tank**  
Stockton, California

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file:///C:/Program%20Files%20(x86)/Tanks409d/summarydisplay.htm  03/18/2016
# TANKS 4.0.9d
## Emissions Report - Detail Format
### Detail Calculations (AP-42)

## N-845-25-0 Daily PE2 - Internal Floating Roof Tank
Stockton, California

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<th>Month</th>
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<th>April</th>
<th>May</th>
<th>June</th>
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<td>0,0296</td>
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<td>45,0000</td>
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<tr>
<td>Seal Factor A (lb-mole/ft-yr):</td>
<td>1,0000</td>
<td>1,0000</td>
<td>1,0000</td>
<td>1,0000</td>
<td>Vapor Molecular Weight (lb/mole):</td>
<td>1,0000</td>
<td>1,0000</td>
<td>1,0000</td>
<td>1,0000</td>
<td>1,0000</td>
<td>1,0000</td>
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</tr>
<tr>
<td>Seal Factor B (lb-mole/ft-yr (mph)/y):</td>
<td>1,0000</td>
<td>1,0000</td>
<td>1,0000</td>
<td>1,0000</td>
<td>Product Factor:</td>
<td>1,0000</td>
<td>1,0000</td>
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<tr>
<td>Withdrawal Losses (lb):</td>
<td>121,8304</td>
<td>1,0000</td>
<td>24,000,000,000</td>
<td>0,0015</td>
<td>6,6100</td>
<td>45,0000</td>
<td>15,9611</td>
<td>0,0286</td>
<td>46,0700</td>
<td>145,2000</td>
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<td>Number of Columns:</td>
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<td>Deck Fitting Losses (lb):</td>
<td>0,0000</td>
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<td>0,0000</td>
<td>0,0000</td>
<td>0,0000</td>
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<tr>
<td>Net Throughput (gallons):</td>
<td>0,0000</td>
<td>0,0000</td>
<td>0,0000</td>
<td>0,0000</td>
<td>Value of Vapor Pressure Function:</td>
<td>0,0000</td>
<td>0,0000</td>
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<tr>
<td>Shell Clamping Factor b(based on 1000 sqft):</td>
<td>24,000,000,000</td>
<td>0,0015</td>
<td>6,6100</td>
<td>45,0000</td>
<td>Vapor Molecular Weight (lb/mole):</td>
<td>0,0000</td>
<td>0,0000</td>
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<tr>
<td>Average Organic Liquid Density (b/sqft):</td>
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<td>0,0000</td>
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<td>Product Factor:</td>
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<tr>
<td>Deck Diameter (ft):</td>
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<td>0,0000</td>
<td>0,0000</td>
<td>0,0000</td>
<td>Tot. Roof Fitting Loss Fact. (lb-mole/yr):</td>
<td>0,0000</td>
<td>0,0000</td>
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<tr>
<td>Deck Seam Losses (lb):</td>
<td>0,0000</td>
<td>0,0000</td>
<td>0,0000</td>
<td>0,0000</td>
<td>Deck Seam Length (ft):</td>
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<tr>
<td>Deck Seam Loss per Unit Length Factor (lb-mole/ft-yr):</td>
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<td>0,0000</td>
<td>0,0000</td>
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<td>Deck Seam Length Factor (sqft):</td>
<td>0,0000</td>
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<tr>
<td>Tank Diameter (ft):</td>
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<td>Vapor Molecular Weight (lb/mole):</td>
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<tr>
<td>Product Factor:</td>
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<td>0,0000</td>
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<td>0,0000</td>
<td>Total Losses (lb):</td>
<td>140,5565</td>
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<table>
<thead>
<tr>
<th>Roof Fitting/Status</th>
<th>Quantity</th>
<th>KFsa (lb/mole/yr)</th>
<th>Roof Fitting Loss Factors:</th>
<th>KFsfe (lb-mole/yr mph/m^2/sqft)</th>
<th>m</th>
<th>Losses (lb)</th>
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<tbody>
<tr>
<td>Slotted Guide &amp; Pole/ Sample Well/Gasket/ Sliding Cav./ w/ Float/Sleeve/Wiper</td>
<td>1</td>
<td>11.00</td>
<td>0.90</td>
<td>0.89</td>
<td>1.2324</td>
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<tr>
<td>Access Hatch (4-in. Diam) Bolted Cover, Gasketed</td>
<td>1</td>
<td>1.60</td>
<td>0.00</td>
<td>0.00</td>
<td>0.1793</td>
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<tr>
<td>Automatic Gauge Float Well/Bolted Cover, Gasketed</td>
<td>1</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.1793</td>
<td></td>
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<tr>
<td>Vacuum Breaker (10-in. Diam) Weighted Mech. Actuation, Gasketed</td>
<td>1</td>
<td>0.47</td>
<td>0.02</td>
<td>0.07</td>
<td>0.0277</td>
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<tr>
<td>Roof Leg (3-in. Diameter) Adjustable, Pontoon Area/ Sock</td>
<td>4</td>
<td>1.20</td>
<td>0.14</td>
<td>0.65</td>
<td>0.5378</td>
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<tr>
<td>Roof Leg (3-in. Diameter) Adjustable, Center Area, Gasketed</td>
<td>4</td>
<td>0.53</td>
<td>0.11</td>
<td>0.13</td>
<td>0.2375</td>
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<tr>
<td>Rim Vent (5-in. Diameter) Weighted Mech. Actuation, Gasketed</td>
<td>1</td>
<td>0.71</td>
<td>0.10</td>
<td>1.00</td>
<td>0.0796</td>
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<tr>
<td>Column Well (24-in. Diam.) Built-Up Col-Sliding Cover, Gasketed</td>
<td>1</td>
<td>25.00</td>
<td>0.00</td>
<td>0.00</td>
<td>2.6039</td>
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<tr>
<td>Column Well (24-in. Diam.) Built-Up Col-Sliding Cover, Gasketed</td>
<td>1</td>
<td>33.00</td>
<td>0.00</td>
<td>0.00</td>
<td>3.6971</td>
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<tr>
<td>Ladder Well (36-in. Diam.) Sliding Cover, Gasketed</td>
<td>1</td>
<td>56.00</td>
<td>0.00</td>
<td>0.00</td>
<td>6.2738</td>
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<tr>
<td>Roof Drain (3-in. Diameter) Open</td>
<td>1</td>
<td>1.50</td>
<td>0.21</td>
<td>1.70</td>
<td>0.1680</td>
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file://C:/Program%20Files%20(x86)/Tanks409d/summarydisplay.htm

03/18/2016
**Emissions Report for: July**

N-845-25-0 Daily PE2 - Internal Floating Roof Tank  
Stockton, California

<table>
<thead>
<tr>
<th>Components</th>
<th>Rim Seal Loss</th>
<th>Withdraw Loss</th>
<th>Deck Fitting Loss</th>
<th>Deck Seam Loss</th>
<th>Total Emissions</th>
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<tbody>
<tr>
<td>Denatured Ethanol RvP 3.2</td>
<td>2.97</td>
<td>121.63</td>
<td>15.96</td>
<td>0.00</td>
<td>140.56</td>
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TANKS 4.0.9d

Emissions Report - Detail Format
Tank Identification and Physical Characteristics

<table>
<thead>
<tr>
<th>Identification</th>
<th>N-845-25-0 Annual PE2</th>
</tr>
</thead>
<tbody>
<tr>
<td>City</td>
<td>Stockton</td>
</tr>
<tr>
<td>State</td>
<td>California</td>
</tr>
<tr>
<td>Company</td>
<td>Tesoro Logistics Operations LLC</td>
</tr>
<tr>
<td>Type of Tank</td>
<td>Internal Floating Roof Tank</td>
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<tr>
<td>Description</td>
<td>New denatured ethanol storage tank #20</td>
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<table>
<thead>
<tr>
<th>Tank Dimensions</th>
<th>Diameter (ft): 45.00</th>
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<tbody>
<tr>
<td></td>
<td>Volume (gallons): 571,068.00</td>
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<tr>
<td></td>
<td>Turnovers: 42.03</td>
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<tr>
<td></td>
<td>Self Supp. Roof? (y/n): N</td>
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<tr>
<td></td>
<td>No. of Columns: 1.00</td>
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<td></td>
<td>Eff. Col. Diam. (ft): 1.10</td>
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<table>
<thead>
<tr>
<th>Paint Characteristics</th>
<th>Internal Shell Condition: Light Rust</th>
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<tbody>
<tr>
<td></td>
<td>Shell Color/Shade: White/White</td>
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<tr>
<td></td>
<td>Shell Condition: Good</td>
</tr>
<tr>
<td></td>
<td>Roof Color/Shade: White/White</td>
</tr>
<tr>
<td></td>
<td>Roof Condition: Good</td>
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</table>

<table>
<thead>
<tr>
<th>Rim-Seal System</th>
<th>Primary Seal: Mechanical Shoe</th>
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<tr>
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<td>Secondary Seal: Rim-mounted</td>
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<table>
<thead>
<tr>
<th>Deck Characteristics</th>
<th>Deck Fitting Category: Detail</th>
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<tr>
<td></td>
<td>Deck Type: Welded</td>
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<table>
<thead>
<tr>
<th>Deck Fitting/Status</th>
<th>Quantity</th>
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<tbody>
<tr>
<td>Slotted Guide-Pole/Sample Well/Gasket Sliding Cov., w. Float, Sleeve, Wiper</td>
<td>1</td>
</tr>
<tr>
<td>Access Hatch (24-in. Diam.)/Bolted Cover, Gasketed</td>
<td>1</td>
</tr>
<tr>
<td>Automatic Gauge Float Well/Bolted Cover, Gasketed</td>
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</tr>
<tr>
<td>Gauge-Hatch/Sample Well (8-in. Diam.)/Weighted Mech. Actuation, Gask.</td>
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<tr>
<td>Vacuum Breaker (10-in. Diam.)/Weighted Mech. Actuation, Gask.</td>
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</tr>
<tr>
<td>Roof Leg (3-in. Diameter)/Adjustable, Pontoon Area, Sock</td>
<td>4</td>
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<tr>
<td>Roof Leg (3-in. Diameter)/Adjustable, Center Area, Gasketed</td>
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<tr>
<td>Rim Vent (6-in. Diameter)/Weighted Mech. Actuation, Gask.</td>
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<tr>
<td>Column Well (24-in. Diam.)/Pipe Coll.-Sliding Cover, Gask.</td>
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<tr>
<td>Column Well (24-in. Diam.)/Built-Up Coll.-Sliding Cover, Gask.</td>
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<tr>
<td>Ladder Well (36-in. Diam.)/Sliding Cover, Gasketed</td>
<td>1</td>
</tr>
<tr>
<td>Roof Drain (3-in. Diameter)/Open</td>
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</tbody>
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## N-845-25-0 Annual PE2 - Internal Floating Roof Tank
Liquid Contents of Storage Tank

### Stockton, California

<table>
<thead>
<tr>
<th>Mixture/Component</th>
<th>Daily Liquid Surf. Temp. (°C)</th>
<th>Liquid Bulk Temp. (°C)</th>
<th>Vapor Pressure (psia)</th>
<th>Vapor Mol. Weight</th>
<th>Liquid Mass Fract.</th>
<th>Basis for Vapor Pressure Calculations</th>
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</thead>
<tbody>
<tr>
<td>Denatured Ethanol RVP 3.2</td>
<td>Jan 55.08 51.49 58.67 61.57</td>
<td>0.9925 N/A N/A 46.0700</td>
<td>46.07 Option: A=7.5187, B=1511.0069, C=247.3229</td>
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<tr>
<td>Denatured Ethanol RVP 3.2</td>
<td>Feb 57.96 53.17 62.75 61.57</td>
<td>1.0770 N/A N/A 46.0700</td>
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<tr>
<td>Denatured Ethanol RVP 3.2</td>
<td>Mar 60.22 54.36 66.07 61.57</td>
<td>1.1476 N/A N/A 46.0700</td>
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<tr>
<td>Denatured Ethanol RVP 3.2</td>
<td>Apr 63.26 55.98 70.54 61.57</td>
<td>1.2488 N/A N/A 46.0700</td>
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<td>Denatured Ethanol RVP 3.2</td>
<td>May 67.10 58.83 75.36 61.57</td>
<td>1.3870 N/A N/A 46.0700</td>
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<tr>
<td>Denatured Ethanol RVP 3.2</td>
<td>Jun 70.33 61.45 79.22 61.57</td>
<td>1.5135 N/A N/A 46.0700</td>
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<tr>
<td>Denatured Ethanol RVP 3.2</td>
<td>Jul 72.25 63.02 81.48 61.57</td>
<td>1.5931 N/A N/A 46.0700</td>
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<tr>
<td>Denatured Ethanol RVP 3.2</td>
<td>Aug 71.45 62.84 80.06 61.57</td>
<td>1.5593 N/A N/A 46.0700</td>
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<td>Denatured Ethanol RVP 3.2</td>
<td>Sep 69.03 61.28 76.77 61.57</td>
<td>1.4613 N/A N/A 46.0700</td>
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<tr>
<td>Denatured Ethanol RVP 3.2</td>
<td>Oct 64.64 58.13 71.16 61.57</td>
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<tr>
<td>Denatured Ethanol RVP 3.2</td>
<td>Nov 58.87 54.21 63.53 61.57</td>
<td>1.1060 N/A N/A 46.0700</td>
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<tr>
<td>Denatured Ethanol RVP 3.2</td>
<td>Dec 54.98 51.51 58.44 61.57</td>
<td>0.9897 N/A N/A 46.0700</td>
<td>46.07 Option: A=7.5187, B=1511.0069, C=247.3229</td>
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### N-845-25-0 Annual PE2 - Internal Floating Roof Tank

**Stockton, California**

#### Details:

- **Type**: Internal Floating Roof Tank
- **Location**: Stockton, California
- **Report**: Emissions Report - Detail Format
- **Calculation**: Detail Calculations (AP-42)

<table>
<thead>
<tr>
<th>Month</th>
<th>January</th>
<th>February</th>
<th>March</th>
<th>April</th>
<th>May</th>
<th>June</th>
<th>July</th>
<th>August</th>
<th>September</th>
<th>October</th>
<th>November</th>
<th>December</th>
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<tbody>
<tr>
<td>Rain Seal Losses (lb):</td>
<td>1.880</td>
<td>1.680</td>
<td>2.035</td>
<td>2.274</td>
<td>2.034</td>
<td>2.160</td>
<td>2.005</td>
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<td>2.005</td>
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<tr>
<td>Seal Factor A (lb/mole/hr-ft):</td>
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<td>0.600</td>
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<td>0.600</td>
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<tr>
<td>Seal Factor B (lb/mole/hr-ft):</td>
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<td>0.400</td>
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<td>0.400</td>
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<tr>
<td>Value of Vapor Pressure Function:</td>
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<td>0.0190</td>
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<td>0.0222</td>
<td>0.0247</td>
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<td>Tank Diameter (ft):</td>
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<tr>
<td>Vapor Molecular Weight (lb/mole):</td>
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**Withdrawal Losses (lb):**

- **January**: 10.159
- **February**: 10.159
- **March**: 10.159
- **April**: 10.159
- **May**: 10.159
- **June**: 10.159
- **July**: 10.159
- **August**: 10.159
- **September**: 10.159
- **October**: 10.159
- **November**: 10.159
- **December**: 10.159

**Number of Columns:**

- 1.000

**Effective Column Diameter (ft):**

- 1.000

**Net Throughput (gallons):**

- 2,000,000,000,000

**Shell Cladding Factor (psig/1000 sqft):**

- 0.0015

**Average Organic Liquid Density (lb/gal):**

- 6.610

**Deck Fitting Losses (lb):**

- 9.7522

**Deck Seam Loss per Unit Length (lb):**

- 0.0000

**Deck Seam Length (ft):**

- 0.0000

**Deck Seam Loss per Unit Length (lb):**

- 0.0000

**Deck Seam Length (ft):**

- 0.0000

**Tank Diameter (ft):**

- 45.000

**Vapor Molecular Weight (lb/mole):**

- 45.070

**Product Factor:**

- 1.000

**Tot. Roof Fitting Loss Factor (lb/mole):**

- 145.200

**Total Losses (lb):**

- 21.6742

---

**Roof Fitting Status**

- **Shutline Guide Pole**
- **Sample Well**
- **Gasket Sliding Cover, w. Float, Sleeve, Vapor**
- **Access Hatch (24-in. Dia.)**
- **Rollout Cover, Gasketed**
- **Automatic Gauge Float Well/Bottom Cover, Gasketed**
- **Gauge-Hatch**
- **Sample Well (6-in. Dia.)**
- **Weighted Mech, Actuation, Gask**
- **Vacuum Breaker (10-in. Dia.), Weighted Mech, Actuation, Gask**
- **Roof Leg (3-in. Diameter), Adjustable, Center Area, Gasketed**
- **Rim Vent (5-in. Diameter), Weighted Mech, Actuation, Gask**
- **Column Wall (24-in. Dia.), Sliding Cover, w. Float, Sleeve, Vapor**
- **Column Wall (24-in. Dia.)**
- **Slid-Up Cover, Sliding Cover, Gask**
- **Ladder Well (36-in. Dia.)**
- **Gasket Sliding Cover, Gasketed**
- **Roof Drain (3-in. Diameter), Open**

**Roof Fitting Loss Factors**

- **KPa (lb/mole/hr-ft)**
- **m**
- **Losses (lb)**

- **Shutline Guide Pole:** 1.0, 5.0, 11.5, 5.0, 11.5, 5.0
- **Sample Well:** 1.0, 5.0, 11.5, 5.0, 11.5, 5.0
- **Gasket Sliding Cover, w. Float, Sleeve, Vapor:** 1.0, 5.0, 11.5, 5.0, 11.5, 5.0
- **Access Hatch (24-in. Dia.)**
- **Rollout Cover, Gasketed**
- **Automatic Gauge Float Well/Bottom Cover, Gasketed**
- **Gauge-Hatch**
- **Sample Well (6-in. Dia.)**
- **Weighted Mech, Actuation, Gask**
- **Vacuum Breaker (10-in. Dia.), Weighted Mech, Actuation, Gask**
- **Roof Leg (3-in. Diameter), Adjustable, Center Area, Gasketed**
- **Rim Vent (5-in. Diameter), Weighted Mech, Actuation, Gask**
- **Column Wall (24-in. Dia.), Sliding Cover, w. Float, Sleeve, Vapor**
- **Column Wall (24-in. Dia.)**
- **Slid-Up Cover, Sliding Cover, Gask**
- **Ladder Well (36-in. Dia.)**
- **Gasket Sliding Cover, Gasketed**
- **Roof Drain (3-in. Diameter), Open**

---

file://C:/Program%20Files%20(x86)/Tanks409d/summarydisplay.htm
TANKS 4.0.9d
Emissions Report - Detail Format
Individual Tank Emission Totals

Emissions Report for: January, February, March, April, May, June, July, August, September, October, November, December

N-845-25-0 Annual PE2 - Internal Floating Roof Tank
Stockton, California

<table>
<thead>
<tr>
<th>Components</th>
<th>Rim Seal Loss</th>
<th>Withdrawal Loss</th>
<th>Deck Fitting Loss</th>
<th>Deck Seam Loss</th>
<th>Total Emissions</th>
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<tbody>
<tr>
<td>Denatured Ethanol RVP 3.2</td>
<td>28.35</td>
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**TANKS 4.0.9d**

**Emissions Report - Detail Format**

**Tank Identification and Physical Characteristics**

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<th>Identification</th>
<th>Details</th>
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<tbody>
<tr>
<td>User Identification:</td>
<td>N-845-26-0 Daily PE2</td>
</tr>
<tr>
<td>City:</td>
<td>Stockton</td>
</tr>
<tr>
<td>State:</td>
<td>California</td>
</tr>
<tr>
<td>Company:</td>
<td>Tesoro Logistics Operations LLC</td>
</tr>
<tr>
<td>Type of Tank:</td>
<td>Internal Floating Roof Tank</td>
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<tr>
<td>Description:</td>
<td>New gasoline storage tank #32</td>
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<table>
<thead>
<tr>
<th>Tank Dimensions</th>
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<tbody>
<tr>
<td>Diameter (ft):</td>
<td>64.00</td>
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<tr>
<td>Volume (gallons):</td>
<td>1,347,627.00</td>
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<td>Turnovers:</td>
<td>67.32</td>
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<td>Self Supp. Roof? (y/n):</td>
<td>N</td>
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<tr>
<td>No. of Columns:</td>
<td>1.00</td>
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<td>Eff. Col. Diam. (ft):</td>
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<tr>
<th>Paint Characteristics</th>
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<tr>
<td>Internal Shell Condition:</td>
<td>Light Rust</td>
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<tr>
<td>Shell Color/Shade:</td>
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<td>Shell Condition:</td>
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<tr>
<td>Roof Color/Shade:</td>
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<td>Roof Condition:</td>
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<th>Rim-Seal System</th>
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<td>Primary Seal:</td>
<td>Mechanical Shoe</td>
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<tr>
<td>Secondary Seal:</td>
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<table>
<thead>
<tr>
<th>Deck Characteristics</th>
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<tr>
<td>Deck Fitting Category:</td>
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<td>Deck Type:</td>
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<table>
<thead>
<tr>
<th>Deck Fitting/Status</th>
<th>Quantity</th>
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<tbody>
<tr>
<td>Slotted Guide-Pole/Sample Well/Gask Sliding Covr, w. Float, Sleeve, Wiper</td>
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<tr>
<td>Access Hatch (24-in. Diam.)/Bolted Cover, Gasketed</td>
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<td>Automatic Gauge Float Well/Bolted Cover, Gasketed</td>
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<tr>
<td>Gauge-Hatch/Sample Well (8-in. Diam.)/Weighted Mech. Actuation, Gask.</td>
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<tr>
<td>Vacuum Breaker (10-in. Diam.)/Weighted Mech. Actuation, Gask.</td>
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<tr>
<td>Roof Leg (3-in. Diameter)/Adjustable, Pontoon Area, Sock</td>
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<tr>
<td>Roof Leg (3-in. Diameter)/Adjustable, Center Area, Gasketed</td>
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<td>Rim Vent (5-in. Diameter)/Weighted Mech. Actuation, Gask.</td>
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<td>Column Well (24-in. Diam.)/Pipe Col.-Sliding Cover, Gask.</td>
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<tr>
<td>Column Well (24-in. Diam.)/Built-Up Col.-Sliding Cover, Gask.</td>
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<tr>
<td>Ladder Well (36-in. Diam.)/Sliding Cover, Gasketed</td>
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<tr>
<td>Roof Drain (3-in. Diameter)/Open</td>
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## TANKS 4.0.9d

**Emissions Report - Detail Format**

**Liquid Contents of Storage Tank**

**N-845-26-0 Daily PE2 - Internal Floating Roof Tank**

**Stockton, California**

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<thead>
<tr>
<th></th>
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<td>Gasoline (RVP 14)</td>
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# N-845-26-0 Daily PE2 - Internal Floating Roof Tank
## Stockton, California

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<th>Month</th>
<th>January</th>
<th>February</th>
<th>March</th>
<th>April</th>
<th>May</th>
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<th>July</th>
<th>August</th>
<th>September</th>
<th>October</th>
<th>November</th>
<th>December</th>
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<tbody>
<tr>
<td>Rim Seal Losses (lb):</td>
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<td>Vapor Pressure at Daily Average Liquid Surface Temperature (psia):</td>
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<td>Vapor Molecular Weight (lb/mole):</td>
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<td>Withdrawal Losses (lb):</td>
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<td>Net Throughput (gal/min.):</td>
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<td>Average Organic Liquid Density (lb/gal):</td>
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<tr>
<td>Deck Fitting Losses (lb):</td>
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<td>Vapor Molecular Weight (lb/mole):</td>
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<td>Deck Seam Length (ft):</td>
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<td>Deck Seam Loss per Unit Length Factor (lb-mole/ft-yr):</td>
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<td>Deck Seam Length Factor(foot):</td>
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<td>Product Factor:</td>
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## Roof Fitting/Status

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<tr>
<th>Quantity</th>
<th>Roof Fitting Loss Factors</th>
<th>Quantity</th>
<th>Roof Fitting Loss Factors</th>
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<tbody>
<tr>
<td>Stopped Guide-Pole/Sample Well/Gas Sliding Cover, w. Float, Sleeve, Wiper</td>
<td>1</td>
<td>11.00</td>
<td>0.69</td>
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<tr>
<td>Access Hatch (24-in. Diam.), Slotted Cover, Gasketed</td>
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<td>1.60</td>
<td>0.00</td>
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<tr>
<td>Automatic Gauge Float, Well/Slotted Cover, Gasketed</td>
<td>1</td>
<td>2.80</td>
<td>0.00</td>
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<tr>
<td>Gauge-Hatch Sample Well (4-in. Diam.), Weighted Mech., Actuation, Gasketed, Vacuum Breaker (10-in. Diam.), Weighted Mech., Actuation, Gasketed</td>
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<td>0.47</td>
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<tr>
<td>Roof Leg (3-in. Diameter), Adjustable, Portion Area, Sock</td>
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<td>6.20</td>
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<td>Roof Leg (3-in. Diameter), Adjustable, Center Area, Gasketed</td>
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<td>Rim Vent (5-in., Diam.), Weighted Mech., Actuation, Gasket</td>
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<td>Column Well (24-in. Diam.), Built-Up Coll, Sliding Cover, Gasketed</td>
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<td>33.00</td>
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<tr>
<td>Ladder Well (36-in., Diam.), Sliding Cover, Gasketed</td>
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<td>56.00</td>
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<tr>
<td>Roof Drain (3-in. Diameter/Open)</td>
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<td>0.21</td>
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</table>

file:///C:/Program%20Files%20(x86)/Tanks409d/summarydisplay.htm 03/18/2016
TANKS 4.0.9d
Emissions Report - Detail Format
Individual Tank Emission Totals

Emissions Report for: October

N-845-26-0 Daily PE2 - Internal Floating Roof Tank
Stockton, California

<table>
<thead>
<tr>
<th>Components</th>
<th>Rim Seal Loss</th>
<th>Withdraw Loss</th>
<th>Deck Fitting Loss</th>
<th>Deck Seam Loss</th>
<th>Total Emissions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gasoline (RVP 14)</td>
<td>39.96</td>
<td>271.94</td>
<td>151.11</td>
<td>0.00</td>
<td>463.01</td>
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</tbody>
</table>
TANKS 4.0.9d
Emissions Report - Detail Format
Tank Identification and Physical Characteristics

Identification
- User Identification: N-845-26-0 Annual PE2
- City: Stockton
- State: California
- Company: Tesoro Logistics Operations LLC
- Type of Tank: Internal Floating Roof Tank
- Description: New gasoline storage tank #32

Tank Dimensions
- Diameter (ft): 64.00
- Volume (gallons): 1,347,627.00
- Turnovers: 67.32
- Self Supp. Roof? (y/n): N
- No. of Columns: 1.00

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

Rim-Seal System
- Primary Seal: Mechanical Shoe
- Secondary Seal: Rim-mounted

Deck Characteristics
- Deck Fitting Category: Detail
- Deck Type: Welded

Deck Fitting/Status | Quantity
--- | ---
Slotted Guide-Pole/Sample Well/Gask Sliding Covr, w. Float,Sleeve,Wiper | 1
Access Hatch (24-in. Diam.)Bolted Cover, Gasketed | 1
Automatic Gauge Float Well/Bolted Cover, Gasketed | 1
Gauge-Hatch/Sample Well (8-in. Diam.)/Weighted Mech. Actuation, Gask. | 1
Vacuum Breaker (10-in. Diam.)/Weighted Mech. Actuation, Gask. | 1
Roof Leg (3-in. Diameter)/Adjustable, Pontoon Area, Sock | 4
Roof Leg (3-in. Diameter)/Adjustable, Center Area, Gasketed | 4
Rim Vent (6-in. Diameter)/Weighted Mech. Actuation, Gask. | 1
Column Well (24-in. Diam.)/Pipe Col.-Sliding Cover, Gask. | 1
Column Well (24-in. Diam.)/Built-Up Col.-Sliding Cover, Gask. | 1
Ladder Well (36-in. Diam.)/Sliding Cover, Gasketed | 1
Roof Drain (3-in. Diameter)/Open | 1
**TANKS 4.0.9d**

**Emissions Report - Detail Format**

**Liquid Contents of Storage Tank**

**N-845-26-0 Annual PE2 - Internal Floating Roof Tank**

**Stockton, California**

<table>
<thead>
<tr>
<th></th>
<th></th>
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<tbody>
<tr>
<td>Gasoline (RVP 14)</td>
<td>Jan 55.08</td>
<td>51.49</td>
<td>58.67</td>
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<td>Gasoline (RVP 6)</td>
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## N-845-26-0 Annual PE2 - Internal Floating Roof Tank
Stockton, California

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<tr>
<th>Month</th>
<th>January</th>
<th>February</th>
<th>March</th>
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<th>May</th>
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<th>September</th>
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<tr>
<td>Rim Seal Losses (lb)</td>
<td>31,000</td>
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<td>35,733</td>
<td>10,702</td>
<td>14,485</td>
<td>15,575</td>
<td>16,391</td>
<td>16,243</td>
<td>15,916</td>
<td>15,109</td>
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<td>Seal Factor A (lb-mole/yr-ft²)</td>
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<td>Seal Factor B (lb-mole/yr-ft²)</td>
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<td>Vapor Molecular Weight (lb-mole)</td>
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<tr>
<td>Product Factor</td>
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<tr>
<td>Average Cylindrical Liquid Density (lb/gal)</td>
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<td>5.6000</td>
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<tr>
<td>Deck Fitting Losses (lb)</td>
<td>117.2955</td>
<td>126.4065</td>
<td>134.1524</td>
<td>50.114</td>
<td>54.8449</td>
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<td>60.4209</td>
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<td>0.1858</td>
<td>0.1788</td>
<td>0.0999</td>
<td>0.0655</td>
<td>0.0705</td>
<td>0.0724</td>
<td>0.0684</td>
<td>0.2144</td>
<td>0.1762</td>
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<td>62.0000</td>
<td>69.0000</td>
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<td>69.0000</td>
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<td>69.0000</td>
<td>62.0000</td>
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<tr>
<td>Product Factor</td>
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<td>1.0000</td>
<td>1.0000</td>
<td>1.0000</td>
<td>1.0000</td>
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<td>1.0000</td>
<td>1.0000</td>
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<tr>
<td>Total Losses (lb)</td>
<td>170.9770</td>
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<td>192.2920</td>
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<td>91.7578</td>
<td>97.1110</td>
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<td>213.7333</td>
<td>196.3534</td>
<td>170.5901</td>
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### Roof Fitting Status
- Sloped Guide-Plate/Sample Well/Gas Sliding Cover, w. Float, Sleeve, Vapour
- Access Hatch (24-in. Dia.)/Baffled Cover, Gasketed
- Automatic Gauge Float Well/Baffled Cover, Gasketed
- Gauge-Hex/Auxillary Well (6-in. Dia.)/Weighted Mech, Actuation, Gasket
- Vacuum Breaker (10-in. Dia.)/Weighted Mech, Actuation, Gasket
- Roof Leg (3-in. Diameter) Adjustable, Pintle Area, Sock
- Roof Leg (6-ft Diameter) Adjustable, Center Area, Sock
- Rim Vent (6-ft Diameter)/Weighted Mech, Actuation, Gasket
- Column Well (24-in. Dia.)/Plug Collar, Sliding Cover, Gasket
- Column Well (24-in. Dia.)/Built-Up Collar, Sliding Cover, Gasket
- Ladder Well (35-in. Dia.)/Sliding Cover, Gasketed
- Roof Drain (3-in. Diameter)/Open

<table>
<thead>
<tr>
<th>Roof Fitting Status</th>
<th>Quantity</th>
<th>Roof Fitting Loss Factors</th>
</tr>
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<tbody>
<tr>
<td>Sloped Guide-Plate/Sample Well/Gas Sliding Cover, w. Float, Sleeve, Vapour</td>
<td>1</td>
<td>1.90</td>
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<td>Access Hatch (24-in. Dia.)/Baffled Cover, Gasketed</td>
<td>1</td>
<td>1.60</td>
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<td>Automatic Gauge Float Well/Baffled Cover, Gasketed</td>
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<td>2.80</td>
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<td>Gauge-Hex/Auxillary Well (6-in. Dia.)/Weighted Mech, Actuation, Gasket</td>
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<td>0.47</td>
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<td>Vacuum Breaker (10-in. Dia.)/Weighted Mech, Actuation, Gasket</td>
<td>1</td>
<td>6.24</td>
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<td>Roof Leg (3-in. Diameter) Adjustable, Pintle Area, Sock</td>
<td>4</td>
<td>1.20</td>
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<tr>
<td>Roof Leg (6-ft Diameter) Adjustable, Center Area, Sock</td>
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<td>0.53</td>
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<td>Rim Vent (6-ft Diameter)/Weighted Mech, Actuation, Gasket</td>
<td>1</td>
<td>0.71</td>
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<td>Column Well (24-in. Dia.)/Plug Collar, Sliding Cover, Gasket</td>
<td>1</td>
<td>25.00</td>
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<tr>
<td>Column Well (24-in. Dia.)/Built-Up Collar, Sliding Cover, Gasket</td>
<td>1</td>
<td>33.00</td>
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<tr>
<td>Ladder Well (35-in. Dia.)/Sliding Cover, Gasketed</td>
<td>1</td>
<td>56.00</td>
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<tr>
<td>Roof Drain (3-in. Diameter)/Open</td>
<td>1</td>
<td>1.50</td>
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</table>
**TANKS 4.0.9d**

Emissions Report - Detail Format

Individual Tank Emission Totals

Emissions Report for: January, February, March, April, May, June, July, August, September, October, November, December

N-845-26-0 Annual PE2 - Internal Floating Roof Tank

Stockton, California

<table>
<thead>
<tr>
<th>Components</th>
<th>Rim Seal Loss</th>
<th>Withdrawal Loss</th>
<th>Deck Fitting Loss</th>
<th>Deck Seam Loss</th>
<th>Total Emissions</th>
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</thead>
<tbody>
<tr>
<td>Gasoline (RVP 14)</td>
<td>205.07</td>
<td>135.97</td>
<td>775.42</td>
<td>0.00</td>
<td>1,116.45</td>
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<td>Gasoline (RVP 6 )</td>
<td>90.61</td>
<td>135.97</td>
<td>342.61</td>
<td>0.00</td>
<td>569.19</td>
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APPENDIX E
Baseline Actual Emissions Calculations
Baseline Actual Emissions Calculations

N-845-6 & -22

The loading rack was last source tested on May 9, 2013 at emission rate of 0.0002 lb-VOC/1,000 gallon.

Per applicant, the organic liquids loading capacities and the number of disconnection events of year 2014 and 2015 are 178,317,995 gallons & 101,317 disconnects, and 168,705,458 gallons and 95,855 disconnects, respectively

The baseline actual loading process emissions are calculated:

\[ \text{BAE}_{\text{Average}} \ (\text{lb-VOC/yr}) = [\text{BAE}_{2013} + \text{BAE}_{2014}] + 2 \]

\[ \text{BAE}_{2014} = [\text{BAE}_{\text{Loading Rack}} + \text{BAE}_{\text{Uncaptured}} + \text{BAE}_{\text{Disconnected}} + \text{BAE}_{\text{Fugitive}}] \]
\[ = [(178,317,995 \text{ gal} \times 0.0002 \text{ lb-VOC/1,000 gal}) + (178,317,995 \text{ gal} \times 0.04 \text{ lb-VOC/1,000 gal}) + (10 \text{ mL/disconnect} \times 101,317 \text{ disconnect/year} \times 1 \text{ gal/3785.41 mL} \times 5.6 \text{ lb/gal}) + 621 \text{ lb-VOC/yr}] \]
\[ = [35.7 + 7,132.7 + 1,498.8 + 621] \text{ lb-VOC/yr} \]
\[ = 9,288 \text{ lb-VOC/yr} \]

\[ \text{BAE}_{2015} = [\text{BAE}_{\text{Loading Rack}} + \text{BAE}_{\text{Uncaptured}} + \text{BAE}_{\text{Disconnected}} + \text{BAE}_{\text{Fugitive}}] \]
\[ = [(168,705,458 \text{ gal} \times 0.0002 \text{ lb-VOC/1,000 gal}) + (168,705,458 \text{ gal} \times 0.04 \text{ lb-VOC/1,000 gal}) + (10 \text{ mL/disconnect} \times 95,855 \text{ disconnect/year} \times 1 \text{ gal/3785.41 mL} \times 5.6 \text{ lb/gal}) + 621 \text{ lb-VOC/yr}] \]
\[ = [33.7 + 6,748.2 + 1,418.0 + 621] \text{ lb-VOC/yr} \]
\[ = 8,821 \text{ lb-VOC/yr} \]

\[ \text{BAE}_{\text{Average}} (\text{lb-VOC/yr}) = [9,288 + 8,821] + 2 \]
\[ = 9,055 \text{ lb-VOC/year} \]

N-845-25, -26, & -27

These are new emissions units. Therefore, BAE is equal to zero for each unit.
APPENDIX F
Quarterly Net Emissions Change (QNEC)
Quarterly Net Emissions Change (QNEC)

The Quarterly Net Emissions Change is used to complete the emission profile screen for the District's PAS database. The QNEC shall be calculated as follows:

\[
\text{QNEC} = \text{PE2} - \text{PE1}, \text{ where:}
\]

- \( \text{QNEC} = \) Quarterly Net Emissions Change for each emissions unit, lb/qtr.
- \( \text{PE2} = \) Post Project Potential to Emit for each emissions unit, lb/qtr.
- \( \text{PE1} = \) Pre-Project Potential to Emit for each emissions unit, lb/qtr.

Using the values in Sections VII.C.2 and VII.C.6 in the evaluation above, quarterly PE2 and quarterly PE1 can be calculated as follows:

**N-845-6**

\[
\begin{align*}
\text{PE2}_{\text{quarterly}} &= \frac{\text{PE2}^{\text{annual}}}{4 \text{ quarters/year}} \\
                           &= 19,604 \text{ lb/year} \div 4 \text{ qtr/year} \\
                           &= 4,901 \text{ lb PM}_{10}/\text{qtr}
\end{align*}
\]

\[
\begin{align*}
\text{PE1}_{\text{quarterly}} &= \frac{\text{PE1}^{\text{annual}}}{4 \text{ quarters/year}} \\
                           &= 13,121 \text{ lb/year} \div 4 \text{ qtr/year} \\
                           &= 3,280.25 \text{ lb PM}_{10}/\text{qtr}
\end{align*}
\]

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<thead>
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<th>Quarterly NEC [QNEC]</th>
<th>PE2 (lb/qtr)</th>
<th>PE1 (lb/qtr)</th>
<th>QNEC (lb/qtr)</th>
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<td>SO\textsubscript{X}</td>
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<td>PM\textsubscript{10}</td>
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<tr>
<td>CO</td>
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<tr>
<td>VOC</td>
<td>4,901</td>
<td>3,280.25</td>
<td>1620.75</td>
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**N-845-22**

\[
\begin{align*}
\text{PE2}_{\text{quarterly}} &= \frac{\text{PE2}^{\text{annual}}}{4 \text{ quarters/year}} \\
                               &= 29,200 \text{ lb/year} \div 4 \text{ qtr/year} \\
                               &= 7,300 \text{ lb PM}_{10}/\text{qtr}
\end{align*}
\]

\[
\begin{align*}
\text{PE1}_{\text{quarterly}} &= \frac{\text{PE1}^{\text{annual}}}{4 \text{ quarters/year}} \\
                               &= 19,228 \text{ lb/year} \div 4 \text{ qtr/year} \\
                               &= 4,807 \text{ lb PM}_{10}/\text{qtr}
\end{align*}
\]
### Quarterly NEC [QNEC]

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<th>PE1 (lb/qtr)</th>
<th>QNEC (lb/qtr)</th>
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<tr>
<td>SO\textsubscript{X}</td>
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<td>PM\textsubscript{10}</td>
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<td>CO</td>
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<tr>
<td>VOC</td>
<td>7,300</td>
<td>4,807</td>
<td>623.25</td>
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**N-845-25**

PE\textsubscript{2, quarterly} = PE\textsubscript{2, annual} ÷ 4 quarters/year  
= 378 lb/year ÷ 4 qtr/year  
= 94.5 lb PM\textsubscript{10}/qtr

PE\textsubscript{1, quarterly} = PE\textsubscript{1, annual} ÷ 4 quarters/year  
= 0 lb/year ÷ 4 qtr/year  
= 0 lb PM\textsubscript{10}/qtr

### Quarterly NEC [QNEC]

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<th>PE1 (lb/qtr)</th>
<th>QNEC (lb/qtr)</th>
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<td>VOC</td>
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**N-845-26**

PE\textsubscript{2, quarterly} = PE\textsubscript{2, annual} ÷ 4 quarters/year  
= 1,786 lb/year ÷ 4 qtr/year  
= 446.5 lb PM\textsubscript{10}/qtr

PE\textsubscript{1, quarterly} = PE\textsubscript{1, annual} ÷ 4 quarters/year  
= 0 lb/year ÷ 4 qtr/year  
= 0 lb PM\textsubscript{10}/qtr
### Quarterly NEC [QNEC]

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<thead>
<tr>
<th></th>
<th>PE2 (lb/qtr)</th>
<th>PE1 (lb/qtr)</th>
<th>QNEC (lb/qtr)</th>
</tr>
</thead>
<tbody>
<tr>
<td>NO&lt;sub&gt;x&lt;/sub&gt;</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>SO&lt;sub&gt;x&lt;/sub&gt;</td>
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<tr>
<td>PM&lt;sub&gt;10&lt;/sub&gt;</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>CO</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>VOC</td>
<td>446.5</td>
<td>0</td>
<td>446.5</td>
</tr>
</tbody>
</table>

#### N-845-27

\[
PE_{2\text{quarterly}} = \frac{PE_{2\text{annual}}}{4 \text{ quarters/year}} \\
= \frac{226 \text{ lb/year}}{4 \text{ qtr/year}} \\
= 56.5 \text{ lb PM}_{10}/\text{qtr}
\]

\[
PE_{1\text{quarterly}} = \frac{PE_{1\text{annual}}}{4 \text{ quarters/year}} \\
= \frac{0 \text{ lb/year}}{4 \text{ qtr/year}} \\
= 0 \text{ lb PM}_{10}/\text{qtr}
\]

### Quarterly NEC [QNEC]

<table>
<thead>
<tr>
<th></th>
<th>PE2 (lb/qtr)</th>
<th>PE1 (lb/qtr)</th>
<th>QNEC (lb/qtr)</th>
</tr>
</thead>
<tbody>
<tr>
<td>NO&lt;sub&gt;x&lt;/sub&gt;</td>
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<td>0</td>
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<tr>
<td>SO&lt;sub&gt;x&lt;/sub&gt;</td>
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<td>0</td>
<td>0</td>
</tr>
<tr>
<td>PM&lt;sub&gt;10&lt;/sub&gt;</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>CO</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>VOC</td>
<td>56.5</td>
<td>0</td>
<td>56.5</td>
</tr>
</tbody>
</table>
APPENDIX G
BACT Guidelines
# San Joaquin Valley
# Unified Air Pollution Control District

**Best Available Control Technology (BACT) Guideline 7.1.10**

Last Update 2/23/2005

## Loading Rack/Switch Loading

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>Achieved in Practice or contained in the SIP</th>
<th>Technologically Feasible</th>
<th>Alternate Basic Equipment</th>
</tr>
</thead>
<tbody>
<tr>
<td>CO</td>
<td>natural gas fired pilot and air assist</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NOx</td>
<td>natural gas or LPG fired pilot and air assist</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PM10</td>
<td>air assisted flare with smokeless combustion</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SOx</td>
<td>natural gas fired flare</td>
<td></td>
<td></td>
</tr>
<tr>
<td>VOC</td>
<td>bottom loading with dry break couplers and vapor collection vented to a thermal incinerator or flare with destruction efficiency =&gt; 99%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

BACT is the most stringent control technique for the emissions unit and class of source. Control techniques that are not achieved in practice or contained in a state implementation plan must be cost effective as well as feasible. Economic analysis to demonstrate cost effectiveness is required for all determinations that are not achieved in practice or contained in an EPA approved State Implementation Plan.

*This is a Summary Page for this Class of Source*
San Joaquin Valley  
Unified Air Pollution Control District  

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

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

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

BACT is the most stringent control technique for the emissions unit and class of source. Control techniques that are not achieved in practice or contained in a state implementation plan must be cost effective as well as feasible. Economic analysis to demonstrate cost effectiveness is required for all determinations that are not achieved in practice or contained in an EPA approved State Implementation Plan.

*This is a Summary Page for this Class of Source

7.3.3
San Joaquin Valley
Unified Air Pollution Control District

Best Available Control Technology (BACT) Guideline 7.1.14*
Last Update 9/21/2006

Light Crude Oil Unloading Rack

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>Achieved in Practice or contained in the SIP</th>
<th>Technologically Feasible</th>
<th>Alternate Basic Equipment</th>
</tr>
</thead>
<tbody>
<tr>
<td>VOC</td>
<td>use of dry-break couplers or equivalent on unloading lines with an average disconnect loss of no greater than 10 ml liquid per disconnect, and fugitive components subject to Rules 4409 or 4455 as applicable</td>
<td>use of dry-break couplers or equivalent on unloading lines with an average disconnect loss of no greater than 8 ml liquid per disconnect, and fugitive components subject to Rules 4409 or 4455 as applicable</td>
<td></td>
</tr>
</tbody>
</table>

*BACT is the most stringent control technique for the emissions unit and class of source. Control techniques that are not achieved in practice or contained in a state implementation plan must be cost effective as well as feasible. Economic analysis to demonstrate cost effectiveness is required for all determinations that are not achieved in practice or contained in an EPA approved State Implementation Plan.

*This is a Summary Page for this Class of Source
APPENDIX H
BACT Analyses
Top-Down BACT (T-BACT) Analysis for VOC emissions

The following VOC emission control technologies are listed in BACT guideline 7.1.10, 1st quarter of 2016 for loading rack or switch loading operation as follows:

Step 1 - Identify all control technologies

Achieved in Practice or contained in the SIP:

Bottom loading with dry break couplers and vapor collection vented to a thermal incinerator or flare with destruction efficiency equal to or greater than 99%

Technologically Feasible:

There is no technologically feasible control technology listed on this guideline.

Alternate Basic Equipment:

There is no alternate basic equipment listed on this guideline.

Step 2 - Eliminate technologically infeasible options

There are no technologically infeasible options that can be eliminated from step 1.

Step 3 - Rank remaining options by control effectiveness

Ranking of the control technologies is not required, since the applicant has proposed utilize the only control technology, achieved in practice control technology listed on this guideline.

Step 4 - Cost Effectiveness Analysis

Pursuant to District BACT Policy APR 1305 IX.D.3 (11/99), a cost-effective analysis is not required since the applicant has proposed utilize the most stringent control technology option listed in Step 3. Therefore, the cost effectiveness analysis is not required.

Step 5 - Select BACT

The existing loading rack is a bottom loading rack that equipped with dry break couplers. The captured loading vapors are vented to a vapor recovery system with a minimum of 99% destruction efficiency of VOC. The use of dry break couplers would result the least disconnection emissions. The uncaptured loading vapors is minimized by filling tank trucks that meet the most stringent filing requirements of MACT-level annual leak test with 99.2% capture efficiency. Therefore, BACT for VOC emissions is satisfied.
Top-Down BACT Analysis for VOC emissions

The following VOC emission control technologies are listed in BACT guideline 7.3.3, 1st quarter of 2016 for petroleum and petrochemical production – floating roof organic liquid storage or processing tank with tank capacity equal to or greater than 471 bbl, or the true vapor pressure is equal to or greater than 0.5 psia as follows:

Step 1 - Identify all control technologies

Achieved in Practice or contained in the SIP:

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

Technologically Feasible:

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

Alternate Basic Equipment:

There is no alternate basic equipment listed on this guideline.

Step 2 - Eliminate technologically infeasible options

There is no technologically infeasible option.

Step 3 - Rank remaining options by control effectiveness

The technologically feasible and achieved-in-practice have the same control effectiveness.

1. 95% control (dual wiper seal with drip curtain or primary metal shoe seal with secondary wiper seal, or equal)
2. 95% control (primary metal shoe seal with secondary wiper seal, or equal)

Step 4 - Cost Effectiveness Analysis

The applicant is proposing to install storage tanks that equipped with both primary metal shoe seal and secondary wiper seal, which provide a minimum of 95% control of VOC emissions. These seals are equivalent to the control requirements listed in the technologically feasible option. Therefore, the cost effectiveness analysis is not performed.

Step 5 - Select BACT

The applicant has proposed to install storage tank that equipped with both primary metal shoe seal and secondary wiper seal. Therefore, BACT for VOC emissions is satisfied.
Top-Down BACT Analysis for VOC emissions

The following VOC emission control technologies are listed in BACT guideline 7.1.14, 1st quarter of 2016 for unloading rack as follows:

**Step 1 - Identify all control technologies**

*Achieved in Practice or contained in the SIP:*

- Use of dry-break couplers or equivalent on unloading lines with an average disconnect loss of no greater than 10 ml liquid per disconnect

*Technologically Feasible:*

- Use of dry-break couplers or equivalent on unloading lines with an average disconnect loss of no greater than 8 ml liquid per disconnect

*Alternate Basic Equipment:*

There is no alternate basic equipment listed on this guideline.

**Step 2 - Eliminate technologically infeasible options**

There is no technologically infeasible option.

**Step 3 - Rank remaining options by control effectiveness**

The technologically feasible and achieved-in-practice have the same control effectiveness.

1. Use of dry-break couplers or equivalent on unloading lines with an average disconnect loss of no greater than 8 ml liquid per disconnect
2. Use of dry-break couplers or equivalent on unloading lines with an average disconnect loss of no greater than 10 ml liquid per disconnect

**Step 4 - Cost Effectiveness Analysis**

The applicant is proposing to limit excess drainage at disconnect to no more than 8 ml liquid per disconnect through good management practices. The proposed control technology is equivalent to technologically feasible option. Therefore, the cost effectiveness analysis is not performed.

**Step 5 - Select BACT**

The applicant has proposed to limit the excess drainage at disconnect to no more than 8 ml liquid per disconnect. Therefore, BACT for VOC emissions is satisfied.
APPENDIX I

Compliance Certificate
VIA UPS

April 4, 2016

Mr. Nick Peirce
San Joaquin Valley Air Pollution Control District
4800 Enterprise Way
Modesto, CA 95356-8718

Subject: Compliance Statement for State of California Tesoro Facilities

Dear Mr. Peirce:

In accordance with District Rule 2201, Section 4.15, “Additional Requirements for New Major Sources and Federal Major Modifications,” Stockton Terminal is pleased to provide this compliance statement regarding its proposed facility operations modifications (bulk terminal ethanol offloading and blending) project N-845, N-1160048.

All major stationary sources in the State of California owned or operated by Tesoro Refining & Marketing and Tesoro Logistics Operations LLC (Tesoro), controlled by, or under common control with the Stockton Terminal, and which are subject to emission limitations, are in compliance or on a schedule for compliance with all applicable emission limitations and standards. These sources include one or more of the following facilities:

<table>
<thead>
<tr>
<th>Facility</th>
<th>Jurisdiction</th>
<th>Individual Contacted</th>
<th>Non-Compliance Items as of April 4, 2016</th>
<th>Schedules for Compliance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Los Angeles Refinery – Wilmington Operations</td>
<td>South Coast Air Quality Management District</td>
<td>Robin Schott – Environmental Superintendent</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>Sulfur Recovery Plant</td>
<td>South Coast Air Quality Management District</td>
<td>Robin Schott – Environmental Superintendent</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>Los Angeles Refinery – Carson Operations</td>
<td>South Coast Air Quality Management District</td>
<td>Robin Schott – Environmental Superintendent</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>Location</td>
<td>District</td>
<td>Contact Name</td>
<td>Title</td>
<td>None 1</td>
</tr>
<tr>
<td>-----------------------------------------------</td>
<td>-----------------------------------------------</td>
<td>-----------------------------------</td>
<td>---------------------------------</td>
<td>--------</td>
</tr>
<tr>
<td>Los Angeles Refinery - Calciner Operations</td>
<td>South Coast Air Quality Management District</td>
<td>Dominic DiCarlo</td>
<td>Sr. Environmental Specialist</td>
<td>None</td>
</tr>
<tr>
<td>Golden Eagle Refinery</td>
<td>Bay Area Air Quality Management District</td>
<td>Chris McDowell</td>
<td>Lead Environmental Engineer</td>
<td>None</td>
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<td>Amorco Terminal</td>
<td>Bay Area Air Quality Management District</td>
<td>Chris McDowell</td>
<td>Lead Environmental Engineer</td>
<td>None</td>
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<tr>
<td>Colton Terminal</td>
<td>South Coast Air Quality Management District</td>
<td>Ruthanne Walker</td>
<td>Sr. Environmental Specialist</td>
<td>None</td>
</tr>
<tr>
<td>Carson Products Terminal</td>
<td>South Coast Air Quality Management District</td>
<td>Ruthanne Walker</td>
<td>Sr. Environmental Specialist</td>
<td>None</td>
</tr>
<tr>
<td>Vinvale Terminal (Tesoro Logistics, ID #174710)</td>
<td>South Coast Air Quality Management District</td>
<td>Ruthanne Walker</td>
<td>Sr. Environmental Specialist</td>
<td>None</td>
</tr>
<tr>
<td>Vinvale Terminal (Tesoro Refining &amp; Marketing Company LLC, Vinvale Remediation Facility, ID #174727)</td>
<td>South Coast Air Quality Management District</td>
<td>Darrell Fah</td>
<td>Retail Environmental Remediation Admin.</td>
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<td>Wilmington Sales Terminal</td>
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<td>Sr. Environmental Specialist</td>
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<td>East Hynes Terminal</td>
<td>South Coast Air Quality Management District</td>
<td>Stephen Comley</td>
<td>Sr. Environmental Specialist</td>
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<td>Hathaway Terminal</td>
<td>South Coast Air Quality Management District</td>
<td>Stephen Comley</td>
<td>Sr. Environmental Specialist</td>
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<tr>
<td>Stockton Terminal</td>
<td>San Joaquin Valley Air Quality Management District</td>
<td>Stephen Comley Sr. Environmental Specialist</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>-------------------</td>
<td>---------------------------------------------------</td>
<td>---------------------------------------------</td>
<td>------</td>
<td>------</td>
</tr>
<tr>
<td>Marine Terminal 2</td>
<td>South Coast Air Quality Management District</td>
<td>Donna DiRocco Sr. Environmental Specialist</td>
<td>None</td>
<td>None</td>
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<tr>
<td>Carson Crude Terminal</td>
<td>South Coast Air Quality Management District</td>
<td>Donna DiRocco Sr. Environmental Specialist</td>
<td>None</td>
<td>None</td>
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<tr>
<td>Long Beach Marine Terminal</td>
<td>South Coast Air Quality Management District</td>
<td>Donna DiRocco Sr. Environmental Specialist</td>
<td>None</td>
<td>None</td>
</tr>
</tbody>
</table>

Based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

Please contact me if you have any questions regarding this compliance statement.

If you have any questions concerning this information, please call Stephen D. Comley of Tesoro at (562) 728-2265.

Sincerely,

Chris Maudlin
Vice President, West Coast Logistics Operations
Teso operation LLC

Attachment:

cc: Wai-Man So – SJVAPCD, Air Quality Engineer
APPENDIX J
Gasoline Distribution Industry (Stage I) –
Background Information for Proposal Standards
Gasoline Distribution Industry (Stage I) - Background Information for Proposed Standards
### TABLE 3-1. VAPOR PROFILE OF NORMAL GASOLINE

<table>
<thead>
<tr>
<th>HAZARDOUS AIR POLLUTANT</th>
<th>HAP TO VOC RATIO (percentage by weight)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>MINIMUM</td>
</tr>
<tr>
<td>Hexane</td>
<td>0.3</td>
</tr>
<tr>
<td>Benzene</td>
<td>0.2</td>
</tr>
<tr>
<td>Toluene</td>
<td>0.4</td>
</tr>
<tr>
<td>2,2,4 Trimethylpentane (iso-octane)</td>
<td>0.03</td>
</tr>
<tr>
<td>Xylenes</td>
<td>0.05</td>
</tr>
<tr>
<td>Ethylbenzene</td>
<td>0.03</td>
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</table>

**TOTAL HAPs**

<table>
<thead>
<tr>
<th></th>
<th>MINIMUM</th>
<th>AVERAGE</th>
<th>MAXIMUM</th>
</tr>
</thead>
<tbody>
<tr>
<td>TOTAL HAPs</td>
<td>2</td>
<td>4.8</td>
<td>11</td>
</tr>
</tbody>
</table>

---

*a* Cumene and naphthalene were also identified in some of the data points in small quantities. They are not shown as their addition does not significantly change the totals.

*b* The total HAP ratios shown in the table are not simply sums of the individual HAP percentages listed in the columns; rather, total HAPs were calculated for each individual sample in the data base. The values represented in the table reflect the maximum, minimum, and arithmetic average total HAPs of these samples.
APPENDIX K
HRA Summary
San Joaquin Valley Air Pollution Control District
Risk Management Review

To: Wai-Man So – Permit Services
From: Cheryl Lawler – Technical Services
Date: June 1, 2016
Facility Name: Tesoro Logistics Operations LLC
Location: 3003 Navy Drive, Stockton
Application #(s): N-845-6-6, 22-5, 25-0, 26-0, 27-0
Project #: N-1160048

A. RMR SUMMARY

<table>
<thead>
<tr>
<th>Categories</th>
<th>Loading Rack (Unit 6-6)</th>
<th>VRS (Unit 22-5)</th>
<th>Ethanol Storage Tank (Unit 25-0)</th>
<th>Gasoline Storage Tank (Unit 26-0)</th>
<th>Ethanol Bulk Offloading (Unit 27-0)</th>
<th>Facility Totals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prioritization Score</td>
<td>466.0</td>
<td>245.0</td>
<td>0.63</td>
<td>43.8</td>
<td>0.45</td>
<td>&gt;1.0</td>
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<tr>
<td>Acute Hazard Index</td>
<td>0.51</td>
<td>0.35</td>
<td>0.00</td>
<td>0.03</td>
<td>0.01</td>
<td>0.91</td>
</tr>
<tr>
<td>Chronic Hazard Index</td>
<td>0.10</td>
<td>0.04</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.14</td>
</tr>
<tr>
<td>Maximum Individual Cancer Risk</td>
<td>8.07E-06</td>
<td>3.32E-06</td>
<td>2.65E-09</td>
<td>1.79E-07</td>
<td>8.27E-09</td>
<td>11.7E-06</td>
</tr>
<tr>
<td>T-BACT Required?</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Special Permit Requirements?</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

Proposed Permit Requirements

To ensure that human health risks will not exceed District allowable levels; the following shall be included as requirements for:

Unit 6-6

1. VOC emissions shall not exceed 6.1 lbs/hour and 18,983 lbs/year.

Unit 22-5

1. VOC emissions shall not exceed 10 lbs/hour and 9,972 lbs/year.
2. The exhaust stack shall vent vertically upward. The vertical exhaust flow shall not be impeded by a rain cap (flapper ok), roof overhang, or any other obstruction.

Unit 25-0

1. VOC emissions shall not exceed 0.212 lbs/hour and 378 lbs/year.
Unit 26-0

1. VOC emissions shall not exceed 0.823 lbs/hour and 1,786 lbs/year.

Unit 27-0

1. VOC emissions shall not exceed 0.345 lbs/hour and 271 lbs/year.

T-BACT is required for Units 6-6 & 22-5 because of emissions of Benzene which is a VOC.

B. RMR REPORT

I. Project Description

Technical Services received a request on February 16, 2016, to perform a Risk Management Review for a petroleum bulk terminal proposing to remove an existing gasoline storage tank (Unit 1) and replace it with a new denatured ethanol storage tank, install a new gasoline storage tank, install a denatured ethanol bulk offloading operation, and increase the daily and annual loading throughputs for the loading rack.

Public Notice is also required for this project. However, because the only emissions are VOCs; and VOCs are not analyzed as part of the District's Ambient Air Quality Analysis (AAQA), no AAQA was required or performed.

II. Analysis

VOC emission rates were calculated and provided by the processing engineer. Toxic emissions for this project were calculated using MSDS sheets provided by the applicant to determine the Toxic Air Contaminants speciation for the products that will be stored at the facility. Emissions were then input into the San Joaquin Valley APCD’s Hazard Assessment and Reporting Program (SHARP). In accordance with the District’s Risk Management Policy for Permitting New and Modified Sources (APR 1905, May 28, 2015), risks from the project were prioritized using the procedures in the 1990 CAPCOA Facility Prioritization Guidelines. The prioritization score for the facility is greater than 1.0 (see RMR Summary Table). Therefore, a refined health risk assessment was required. The AERMOD model was used, with the parameters outlined below and meteorological data for 2010-2014 from Stockton to determine the dispersion factors (i.e., the predicted concentration or X divided by the normalized source strength or Q) for a receptor grid. These dispersion factors were input into the SHARP Program, which then used the Air Dispersion Modeling and Risk Tool (ADMRT) of the Hot Spots Analysis and Reporting Program Version 2 (HARP 2) to calculate the chronic and acute hazard indices and the carcinogenic risk for the project.
The following parameters were used for the review:

### Analysis Parameters

#### Unit 6-6

<table>
<thead>
<tr>
<th>Source Type</th>
<th>Area</th>
<th>Location Type</th>
<th>Urban</th>
</tr>
</thead>
<tbody>
<tr>
<td>Approximate Area Size (m²)</td>
<td>322.3</td>
<td>Closest Receptor (m)</td>
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<tr>
<td>Release Height (m)</td>
<td>2</td>
<td>Type of Receptor</td>
<td>Business</td>
</tr>
<tr>
<td>VOC Emission Rates (lbs)</td>
<td>6.1 hr</td>
<td></td>
<td>18,983 yr</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Unit 22-5

<table>
<thead>
<tr>
<th>Source Type</th>
<th>Point</th>
<th>Location Type</th>
<th>Urban</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stack Height (m)</td>
<td>7.62</td>
<td>Closest Receptor (m)</td>
<td>220</td>
</tr>
<tr>
<td>Stack Diameter (m)</td>
<td>0.2</td>
<td>Type of Receptor</td>
<td>Business</td>
</tr>
<tr>
<td>Stack Exit Velocity (m/s)</td>
<td>2.43</td>
<td>VOC Emission Rates (lbs)</td>
<td>10 hr</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>9,972 yr</td>
</tr>
<tr>
<td>Stack Exit Temp. (°K)</td>
<td>294</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Unit 25-0

<table>
<thead>
<tr>
<th>Source Type</th>
<th>Area</th>
<th>Location Type</th>
<th>Urban</th>
</tr>
</thead>
<tbody>
<tr>
<td>Approximate Area Size (m²)</td>
<td>184.8</td>
<td>Closest Receptor (m)</td>
<td>220</td>
</tr>
<tr>
<td>Release Height (m)</td>
<td>12.19</td>
<td>Type of Receptor</td>
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#### Unit 26-0

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#### Unit 27-0

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III. Conclusion

Units 6-6 & 22-5

The acute and chronic indices are below 1.0, and the cancer risks associated with the units are greater than 1.0 in a million, but less than 20 in a million. **In accordance with the District’s Risk Management Policy, the units are approved with Toxic Best Available Control Technology (T-BACT).**

To ensure that human health risks will not exceed District allowable levels; the permit requirements listed on page 1 of this report must be included for the proposed units.

Units 25-0, 26-0, & 27-0

The acute and chronic indices are below 1.0, and the cancer risk factors associated with the units are less than 1.0 in a million. **In accordance with the District’s Risk Management Policy, the units are approved without Toxic Best Available Control Technology (T-BACT).**

To ensure that human health risks will not exceed District allowable levels; the permit requirements listed on page 1 of this report must be included for the proposed units.

These conclusions are based on the data provided by the applicant and the project engineer. Therefore, this analysis is valid only as long as the proposed data and parameters do not change.

IV. Attachments

A. RMR Request Form & MSDS  
B. Convert  
C. Emission Calculation Worksheets  
D. Prioritization  
E. Facility Summary
APPENDIX L
Emissions Profile(s)
<table>
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<tr>
<th>Equipment Pre-Baselined: NO</th>
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<th>SOX</th>
<th>PM10</th>
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<th>VOC</th>
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## Application Emissions

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Offset Ratio

1.5

Quarterly Offset Amounts (lb/Qtr)

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