San Joaquin Valley
AIR POLLUTION CONTROL DISTRICT

HEALTHY AIR LIVING™

FEB 2 1 2017

Ms. Ruthanne Walker
Tesoro Logistics Operations LLC
3003 Navy Drive
Stockton, CA 95206

Re: Proposed ATC / Certificate of Conformity (Significant Mod)
District Facility # N-845
Project # N-1163274

Dear Ms. Walker:

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 it with a new denatured ethanol storage tank, install an additional gasoline storage tank and a denatured ethanol bulk offloading operation.

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.

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

Seyed Sadredin
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San Joaquin Valley Air Pollution Control District

Authority to Construct Application Review

Modification of the Bulk Terminal - Ethanol Expansion

Facility Name:	Tesoro Logistics Operations LLC	Date:	February 21, 2017
Mailing Address:	3003 Navy Drive Stockton, CA 95206	Engineer:	Wai-Man So
		Lead Engineer:	Nick Peirce
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Application #(s):	N-0845-28-0, -29-0, and -30-0		
Project #:	N-1163274		
Deemed Complete:	December 27, 2016		

I. Proposal

Tesoro Logistics Operations LLC (hereinafter Tesoro) requested Authorities to Construct (ATC) to remove an existing gasoline storage tank (N-845-1) and replace it with a new denatured ethanol storage tank, install a new gasoline storage tank, and install a new denatured ethanol bulk offloading operation that consisting of one railcar offloading station and one truck offloading station.

Tesoro is a petroleum distribution terminal in an industrial zone within the Port of Stockton, and is situated between the Port of Stockton West Complex Development Plan and the East Complex Development Plan (i.e. development of commercial and industrial park on more than 500 acres). The operation is an allowed-use by the Port of Stockton, and is surrounded by similar industrial and petroleum operations.

Tesoro's proposal is detailed below:

N-845-28-0 (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 it with one 571,068 gallon aboveground internal floating roof denatured ethanol storage tank (with same internal ID of Tank #20) at the same location.

N-845-29-0 (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-845-30-0 (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 B 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, as a supporting facility. Therefore, the off-site denatured ethanol offloading operation and the existing Tesoro Terminal are considered to be part of the 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

Rule 1081	Source Sampling (12/17/92)
Rule 1100	Equipment Breakdown (12/17/92)
Rule 2201	New and Modified Stationary Source Review Rule (2/18/16)
Rule 2410	Prevention of Significant Deterioration (6/16/11)
Rule 2520	Federally Mandated Operating Permits (6/21/01)
Rule 4001	New Source Performance Standards (4/14/99) 40 CFR Part 60 Subpart Kb – Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage vessels) for Which Construction after July 23, 1984
Rule 4002	National Emissions Standards for Hazardous Air Pollutants (5/20/04) 40 CFR Part 63 Subpart R – Gasoline Distribution Facilities (Bulk Gasoline Terminals and Pipeline Breakout Stations) 40 CFR Part 63 Subpart BBBBBB – Gasoline Distribution Bulk Terminals, Bulk Plants, and Pipeline Facilities
Rule 4101	Visible Emissions (2/17/05)
Rule 4102	Nuisance (12/17/92)
Rule 4623	Storage of Organic Liquids (05/19/05)
Rule 4624	Transfer of Organic Liquids (12/20/07)
CH&SC 41700	Health Risk Assessment
CH&SC 42301.6	School Notice

Public Resources Code 21000-21177: California Environmental Quality Act (CEQA)
California Code of Regulations, Title 14, Division 6, Chapter 3, Sections 15000-15387: CEQA Guidelines

III. Project Location

The equipment is located at 3003 Navy Drive and 2650 West Washington Street in Stockton, California, in an industrial zone within the Port of Stockton, situated between the Port of Stockton West Complex Development Plan and the East Complex Development Plan. 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

Tesoro is a petroleum distribution terminal that consists of a truck loading rack with a vapor recovery system (VRS) and multiple storage tanks. Currently, Tesoro receives petroleum products, denatured ethanol, and additives via pipelines, and/or cargo tanker trucks. Products (except for denatured ethanol) are 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 from the empty tanker trucks being processed through the facility's VRS. Specific additives are stored at the facility and blended with either gasoline or distillate fuel oil at the loading rack. Tesoro currently purchases denatured ethanol from a competitor, and due to the way it is transferred to the facility Tesoro must blend it with gasoline directly at the loading rack. This practice significantly limits the operational flexibility of Tesoro's business.

Consequently, Tesoro is proposing to install equipment which will provide the flexibility to receive and store denatured ethanol from multiple third party sources, which will greatly enhance their operational flexibility. As explained earlier, this project includes removal of an existing gasoline storage tank, installation of new a denatured ethanol storage tank, installation of a new gasoline storage tank, and installation of a denatured ethanol truck and railcar offloading station.

The operating schedule of this facility is up to 24 hours per day and 365 days per year.

V. Equipment Listing

N-845-28-0: 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

N-845-29-0: 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

N-845-30-0: DENATURED ETHANOL BULK OFFLOADING OPERATION CONSISTING OF ONE RAILCAR OFFLOADING STATION AND ONE TRUCK OFFLOADING STATION

VI. Emission Control Technology Evaluation

Each new internal floating roof storage tank will be equipped with a covered roof and mechanical shoe primary seals and rim-mounted secondary seals to reduce VOC emissions. A covered internal floating roof tank with these types of seals is expected to control more than 95% of VOC emissions compared to an uncontrolled storage tank. Only fugitive VOC emissions are expected from each tank's piping components, such as flanges, valves, connectors, and compressor seals. Fugitive VOC emissions from tank piping components are minimized through best management practices.

Similarly, since there are no displaced vapors from the transfer of denatured ethanol from proposed truck and railcar receiving stations to the internal floating roof storage tank, only fugitive VOC emissions are expected from the truck and railcar hose disconnections and from the transfer piping components, such as flanges, valves, connectors, and compressor seals. The proposed denatured ethanol truck and railcar offloading stations are equipped with cam lock fitting components or equivalent equipment, which is expected to limit the excess drainage from hose disconnection to no more than 8 ml liquid per disconnect. Furthermore, fugitive VOC emissions from denatured ethanol transfer piping components are minimized through best management practices.

VII. General Calculations

A. Assumptions

- VOC is the only emitted criteria pollutant associated to this project.
- Denatured ethanol will be offloaded via railcar or tanker truck, and will be stored at the facility. Denatured ethanol is then blended with gasoline and/or additive 121 prior to loading the tanker trucks (per applicant).
- Only fugitive VOC is emitted from the components such as flanges, valves, connectors, seals, and other piping components (per applicant).
- The daily and annual fugitives emissions from the associated piping 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-845-28-0 -29-0, & -30-0

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

Post-Project Emission Factor (EF2)

N-845-28-0 & -29-0

The VOC emissions from these internal floating roof tanks will be calculated using EPA's Tanks 4.09d software program. Therefore, a separate emissions factor for the tanks is not necessary.

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.

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

Note: Maintenance activities such as tank roof landings and tank cleaning are exempt from permit requirements per Section 7.3 of District Rule 2020; as such, emissions from these maintenance activities are not included in this evaluation. Furthermore, tank roof landings and tank cleaning events occur very infrequently, so emissions from these maintenance activities are expected to minimal.

N-845-30-0

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

Disconnection Emissions:
During denatured ethanol offloading, VOC emission will be accounted for due to liquid spillage during connection and disconnection between either 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 SDS, the density of denatured ethanol is 6.676 lb/gal. Assuming that all of the liquid spilled evaporates as VOC's, the VOC emission factor per disconnection can be calculated as follows:

$EF2_{Disconnection}$ = (8 mL-VOC/disconnect) x (6.676 lb/gal) x (1 gal/3,785.41 mL)
$EF2_{Disconnection}$ = 0.0141 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.

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

C. Calculations

1. Pre-Project Potential to Emit (PE1)

N-845-28-0, -29-0 & -30-0:

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

2. Post Project Potential to Emit (PE2)

N-845-28-0:

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 reports in Appendix C of this document). From the emissions report, the highest monthly VOC emissions occur in July, and the July emission data are used to estimate the daily emissions from this tank.

Standing Loss:
The standing loss includes the losses from the rim seal, deck fitting, and deck seam, which are totaled below:

Standing Loss = Rim Seal Loss + Deck Fitting Loss + Deck Seam Loss
= 2.97 lb/month + 15.96 lb/month + 0 lb/month
= 18.93 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 = 122.84 lb-VOC/month ÷ 42.03 turnovers/month
= 2.92 lb-VOC/turnover

Per applicant, the proposed maximum daily ethanol receiving rate is 180,000 gallons, and the tank capacity is 571,068 gallon, so the daily turnover rate of this new tank is 0.32 per day, the maximum withdrawal loss is calculated to:

Withdrawal Loss = 2.92 lb-VOC/turnover x 0.32 turnovers/day
= 0.93 lb-VOC/day

The daily potential emission from the storage tank is calculated:

Daily PE2 = Standing Loss + Withdrawal Loss
= 0.61 lb-VOC/day + 0.93 lb-VOC/day
= 1.5 lb-VOC/day

The annual potential emission from this storage tank is determined by using EPA's TANKS 4.09d program, which is 304 lb-VOC/yr.

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

Daily PE = VOC (lb/hr/source) x Component Count x 24 hr/day

Component Type	Source Type	VOC EF (lb/hr/source)	Component Count	Daily PE (lb-VOC/day)
Valves	Gas	2.87E-05	--	--
	Light Liquid	9.48E-05	18	0.041
Pump Seals	Gas	1.43E-04	--	--
	Light Liquid	1.19E-03	1	0.029
Others (compressors and others)	Gas	2.65E-04	--	--
	Light Liquid	2.87E-04	20	0.138
Fittings (connectors and flanges)	Gas	9.26E-05	--	--
	Light Liquid	1.76E-05	68	0.029
Total				**0.2 (0.237)**

Annual PE2 = Daily PE x 365 day/yr
= 0.237 lb-VOC/day x 365 day/yr = 87 lb-VOC/year

Total Emissions PE2 for N-845-28-0:

Units	Daily PE2 (lb-VOC/day)	Annual PE2 (lb-VOC/year)
Tank	1.5	304
Components	0.2	87
Total	**1.7**	**391**

N-845-29-0:

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 reports in Appendix C of this document). From the emissions report, the highest monthly VOCs emissions occur in October, and the October emission date are used to estimate 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 turnover/day
= 4.04 lb-VOC/day

The daily potential emission from the storage tank is calculated:

Daily PE2 = Standing Loss + Withdrawal Loss
= 6.16 lb-VOC/day + 4.04 lb-VOC/day
= 10.2 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 tank's piping components are calculated using the following equation and are summarized in the following table:

Daily PE = VOC (lb/hr/source) x Component Count x 24 hr/day

Component Type	Source Type	VOC EF (lb/hr/source)	Component Count	Daily PE (lb-VOC/day)
Valves	Gas	2.87E-05	--	--
	Light Liquid	9.48E-05	27	0.061
Pump Seals	Gas	1.43E-04	--	--
	Light Liquid	1.19E-03	1	0.029
Others (compressors and others)	Gas	2.65E-04	--	--
	Light Liquid	2.87E-04	20	0.138
Fittings (connectors and flanges)	Gas	9.26E-05	--	--
	Light Liquid	1.76E-05	42	0.018
Total				**0.2 (0.246)**

Annual PE2 = Daily PE x 365 day/yr
= 0.246 lb-VOC/day x 365 day/yr = 90 lb-VOC/year

Total Emissions PE2 for N-845-29-0:

Units	Daily PE2 (lb-VOC/day)	Annual PE2 (lb-VOC/year)
Tank	10.2	1,686
Components	0.2	90
Total	**10.4**	**1,776**

N-845-30-0

Denatured ethanol will be offloaded from railcars or cargo tanker trucks at a dedicated receiving station, and transferred from the receiving station to Tesoro's internal floating roof tank via a 1,000 foot long pipeline which is constructed of welded sections (i.e. fully sealed from the atmosphere) along its entire length except for four flanges installed for isolation purposes. Potential emissions from these four flanges are already included as part of fugitive components under the denatured ethanol unloading operation evaluated below.
No others valves, fittings, pumps, or compressors components that have potential fugitive VOC emissions are associated with the new denatured ethanol transfer pipeline.

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 6 events per day and 780 events per year, the number of disconnect per each loadout event is 3 disconnects per event, the density of the denatured ethanol is 6.676 pounds per gallon. The uncontrolled daily disconnection emissions are calculated:

Daily PE2 $_{Disconnect}$ = 8 mL/disconnect x 6 event/day x 3 disconnect/event x 1 gal/3785.41 mL x 6.676 lb/gal
= 0.3 lb-VOC/day

Annual PE2 $_{Disconnect}$ = 8 mL/disconnect x 780 event/year x 3 disconnect/event x 1 gal/3785.41 mL x 6.676 lb/gal
= 33 lb-VOC/year

Fugitive Emissions:
Per applicant, the railcar offloading station has the following transfer piping components that contribute fugitive emissions: 12 valves, 1 pump seal and 34 fittings (connectors and flanges, and this total number includes 2 flanges associated with the new pipeline).

Daily PE2 = VOC (lb/hr/source) x Component Count x 24 hr/day

Component Type	Source Type	VOC EF (lb/hr/source)	Component Count	Daily PE (lb-VOC/day)
Valves	Gas	2.87E-05	--	--
	Light Liquid	9.48E-05	12	0.027
Pump Seals	Gas	1.43E-04	--	--
	Light Liquid	1.19E-03	1	0.029
Others (compressors and others)	Gas	2.65E-04	--	--
	Light Liquid	2.87E-04	--	--
Fittings (connectors and flanges)	Gas	9.26E-05	--	--
	Light Liquid	1.76E-05	34	0.014
Total				**0.1 (0.07)**

Annual PE2 = Daily PE2 x 365 day/year
= 0.07 lb-VOC/day x 365 day/year = 26 lb-VOC/year

Total Railcar Emissions:

Operation	Daily PE2 (lb-VOC/day)	Annual PE2 (lb-VOC/year)
Disconnect	0.3	33
Components	0.1	26
Total	**0.4**	**59**

Scenario 2 - Tank Truck Offloading

Disconnection Emissions

Per applicant, the maximum daily and annual loadout events for the tank truck offloading station are 21 events per day and 2,600 events per year, the number of disconnect per each loadout event is 5 disconnects per event, the density of the denatured ethanol is 6.676 pounds per gallon. The uncontrolled daily disconnection emissions are calculated:

Daily PE2 $_{Disconnect}$ = 8 mL/disconnect x 21 event/day x 5 disconnect/event
x 1 gal/3785.41 mL x 6.676 lb/gal
= 1.5 lb-VOC/day

Annual PE2 $_{Disconnect}$ = 8 mL/disconnect x 2,600 event/year x 5 disconnect/event
x 1 gal/3785.41 mL x 6.676 lb/gal
= 183 lb-VOC/year

Fugitive Emissions

Per applicant, the tank truck offloading station has the following transfer piping components that contribute fugitive emissions: 5 valves, 1 pump seal and 36 fittings

(connectors and flanges, and this total number includes 2 flanges associated with the new pipeline).

Daily PE = VOC (lb/hr/source) x Component Count x 24 hr/day

Component Type	Source Type	VOC EF (lb/hr/source)	Component Count	Daily PE (lb-VOC/day)
Valves	Gas	2.87E-05	--	--
	Light Liquid	9.48E-05	5	0.011
Pump Seals	Gas	1.43E-04	--	--
	Light Liquid	1.19E-03	1	0.029
Others (compressors and others)	Gas	2.65E-04	--	--
	Light Liquid	2.87E-04	--	--
Fittings (connectors and flanges)	Gas	9.26E-05	--	--
	Light Liquid	1.76E-05	36	0.015
Total				**0.1 (0.06)**

Annual PE2 = Daily PE2 x 365 day/year
= 0.05 lb-VOC/day x 365 day/year = 18 lb-VOC/year

Total Truck Emissions:

Operation	Daily PE2 (lb-VOC/day)	Annual PE2 (lb-VOC/year)
Disconnect	1.5	183
Components	0.1	18
Total	**1.6**	**201**

Total Potential Emissions for N-845-30-0:

Units	Daily PE2 (lb-VOC/day)	Annual PE2 (lb-VOC/year)
Railcar	0.4	(33 + 26)
Tank Truck	1.6	(183 + 18)
Total	**1.6**[1]	**227 (183 + 26 + 18)**[2]

[1] Emissions are taken from the worst-case operating scenario of either railcar or truck offloading.
[2] As a conservative assumption, the worst case emission scenario is assumed to occur from the truck offloading of 183 lb-VOC/yr plus the fugitive emissions from the components on both railcar and truck offloading stations of 44 lb-VOC/yr (26 + 18).

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.

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 ($Total_{ERC}$).

$SSPE1_{Total} = SSPE1_{Permit\ Unit} + Total_{ERC}$

SSPE1 (lb/year)					
Permit Unit/ERC	**NO_X**	**SO_X**	**PM_{10}**	**CO**	**VOC**
N-845-1-3	***0***	***0***	***0***	***0***	***1,621***
N-845-4-2	0	0	0	0	4,477
N-845-5-3	0	0	0	0	2,761
N-845-6-5	0	0	0	0	19,849
N-845-22-4					
N-845-10-3	0	0	0	0	48
N-845-23-2	0	0	0	0	31
N-845-24-1	0	0	0	0	3,150
$SSPE1_{Permit\ Unit}$	0	0	0	0	31,937
ERC N-1078-1	-	-	-	-	6,154
$Total_{ERC}$	-	-	-	-	6,154
SSPE1	0	0	0	0	**38,091**

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 ($Total_{ERC}$).

$SSPE2_{Total} = SSPE2_{Permit\ Unit} + Total_{ERC}$

SSPE2 (lb/year)					
Permit Unit/ERC	**NO_X**	**SO_X**	**PM_{10}**	**CO**	**VOC**
N-845-1-3	***0***	***0***	***0***	***0***	***0***
N-845-4-2	0	0	0	0	4,477
N-845-5-3	0	0	0	0	2,761
N-845-6-5 N-845-22-4	0	0	0	0	19,849
N-845-10-3	0	0	0	0	48
N-845-23-2	0	0	0	0	31
N-845-24-1	0	0	0	0	3,150
N-845-28-0 (new)	***0***	***0***	***0***	***0***	***391***
N-845-29-0 (new)	***0***	***0***	***0***	***0***	***1,776***
N-845-30-0 (new)	***0***	***0***	***0***	***0***	***227***
$SSPE2_{Permit\ Unit}$	0	0	0	0	32,710
ERC N-1078-1	-	-	-	-	6,154
$Total_{ERC}$	-	-	-	-	6,154
SSPE2	0	0	0	0	**38,864**

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.

Rule 2201 Major Source Determination (lb/year)						
	NO_X	**SO_X**	**PM_{10}**	**$PM_{2.5}$**	**CO**	**VOC**
SSPE1	0	0	0	0	0	38,091
SSPE2	0	0	0	0	0	38,864
Major Source Threshold	20,000	140,000	140,000	140,000	200,000	20,000
Major Source?	No	No	No	No	No	Yes

Note: PM2.5 assumed to be equal to PM_{10}

As shown above, the facility is an existing Major Source for VOC and remains 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)(iii). Therefore, the PSD Major Source threshold is 100 tpy for any regulated NSR pollutant.

PSD Major Source Determination (tons/year)						
	NO2	VOC	SO2	CO	PM	PM10
Estimated Facility PE before Project Increase	0	19	0	0	0	0
PSD Major Source Thresholds	100	100	100	100	100	100
PSD Major Source? (Y/N)	N	N	N	N	N	N

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-845-28, -29- &, -30
These are new emissions units to the facility. Therefore, BE = PE1 = 0.

As shown above, the baseline emission for this project is equal to 1,621 lb-VOC/year.

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 2,394 lb/year (391 + 1,776 + 227) 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.

SB 288 Major Modification Thresholds (Existing Major Source)			
Pollutant	**Project's PE (lb/year)**	**Thresholds (lb/year)**	**SB 288 Major Modification Calculation Required?**
VOC	2,394	50,000	No

Since the project's PE2 VOC emissions, the only pollutant associated with this project, does not surpass the SB 288 Major Modification Threshold, this project does not trigger an SB 288 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-845-28-0, -29-0 & -30-0

These are new emissions units, and as shown in Section VII.C.2 of this document, the PE2 for permit units N-845-28, N-845-29, and N-845-30-0 are 391 lb-VOC/yr, 1,776 lb-VOC/yr and 227 lb-VOC/yr, respectively.

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

Total Emission Increase = [391 + 1,776 + 227] (lb-VOC/yr)
= 2,394 lb-VOC/yr

Federal Major Modification Thresholds for Emission Increases			
Pollutant	Total Emissions Increases (lb/year)	Thresholds (lb/year)	Federal Major Modification?
VOC	2,394	0	Yes

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			
Permit	Actual Emissions (lb/yr)	Potential Emissions (lb/yr)	Emissions Change (lb/yr)
N-845-28	0	391	391
N-845-29	0	1,776	1,776
N-845-30	0	227	227
		Net Emission Change (lb/yr):	2,394
		Federal Offset Quantity: (NEC * 1.5)	3,591

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)

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.

PSD Major Source Determination: Potential to Emit (tons/year)						
	NO2	VOC	SO2	CO	PM	PM10
Total PE from New and Modified Units	0	1.2	0	0	0	0
PSD Major Source threshold	100	100	100	100	100	100
New PSD Major Source?	N	N	N	N	N	N

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 D.

VIII. Compliance Determination

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 receiving operation. The PE for VOC from the new gasoline storage tank is greater than 2 lb/day; however, the PE for VOC from the new ethanol storage tank and the new ethanol bulk receiving operation are each less than 2 lb/day. Therefore, BACT is triggered for VOC only for the new gasoline storage tank (N-845-26) for this purpose.

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, there are no modified emissions units associated with this project. Therefore, BACT is not triggered for this purpose.

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 emissions units in the project for which there is an emission increase.

EPA-approved District policy *Implementing Rule 2201 SB288 major modification and Federal Major Modification requirements*[3] states BACT requirement, for SB 288 and Federal Major Modification purpose is not triggered and required for emission unit with de minimis emissions increases (not greater than 0.5 pounds per day).

N-845-28-0 (Denatured Ethanol Storage Tank)

Equipment	Daily PE (lb-VOC/day)	BACT Triggered
Tank	1.5	Yes
Fugitive Components	0.2	No

N-845-29-0 (Gasoline Storage Tank)

Equipment	Daily PE (lb-VOC/day)	BACT Triggered
Tank	10.2	Yes
Fugitive Components	0.2	No

N-845-30-0 (Denatured Ethanol Offloading Stations)

Equipment	Daily PE (lb-VOC/day)	BACT Triggered
Railcar Station		
Hose Disconnect	0.3	No
Fugitive Components	0.1	No
Tank Truck Station		
Hose Disconnect	1.5	Yes
Fugitive Components	0.1	No

As indicated above, BACT is triggered for VOC for both storage tanks (N-845-28 and -29) and hose disconnect at the denatured ethanol tank truck offloading station (N-845-30).

[3] http://www.valleyair.org/busind/draft-policies/Rule2201draftmajormodpolicyFeb2011.pdf

2. BACT Guideline

N-845-28-0 & -29- 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 E)

N-845-30-0

A project specific BACT analysis will be performed for this equipment.

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-845-28-0 & -29- 0

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

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

N-845-30-0

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

VOC: Use of cam lock fittings on the offloading line and 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 is compared to the offset threshold in the following table.

Offset Determination (lb/year)					
	NO_X	SO_X	PM_{10}	CO	VOC
SSPE2	0	0	0	0	38,864
Offset Thresholds	20,000	54,750	29,200	200,000	20,000
Offsets triggered?	No	No	No	No	Yes

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:

Offsets Required (lb/year) = (Σ[PE2 – BE] + ICCE) x DOR, 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

Tesoro receives its organic materials via a pipeline, as well as the tanker trucks and railcars as proposed in this project. Tesoro does not utilize dedicated cargo carrier equipment, defined in section 3.12 of Rule 2201 on site. Rather, the Port of Stockton's locomotive will move the railcars to the proposed denatured ethanol offloading area, disconnect from the railcars, and leave Tesoro's site. No locomotive will be connected to the railcars during denatured ethanol offloading. Furthermore, Tesoro does not receive any organic materials via ship, and there is no other dockside equipment or dockside activity associated with the Tesoro facility.

Therefore, engine emissions from locomotives and tank trucks are not included in the project's potential emissions for new source review purposes. In conclusion, no increases in Cargo Carrier emissions as a result of this project, ICCE = 0.

Tesoro is proposing to delete one emissions unit 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 1,621 lb/year and 2,394 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 = Σ [(PE2 – BE) + 0] x 1.5

Offset Required (lb/year) = [2,394 – 1,621] x 1.5 lb-VOC/year
= 773 x 1.5 lb-VOC/year
= 1,160 lb-VOC/year

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

Quarterly offsets required (lb/qtr) = (1,160 lb-VOC/year) ÷ (4 quarters/year)
= 290 lb-VOC/qtr

The appropriate quarterly emissions to be offset are as follows:

Total Annual (lb)	1st Quarter (lb)	2nd Quarter (lb)	3rd Quarter (lb)	4th Quarter (lb)
1,160	290	290	290	290

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:

ERC N-1078-1	1st Quarter (lb)	2nd Quarter (lb)	3rd Quarter (lb)	4th Quarter (lb)
VOC	1,539	1,539	1,539	1,537

As seen above, the facility has sufficient credits to fully offset the quarterly VOC emissions increases associated with this project.

Proposed Rule 2201 (offset) Conditions:

N-845-28-0, -29-0, & -30-0

- *Prior to operating equipment under Authorities to Construct N-845-28-0, N-845-29-0 and N-845-30-0, the permittee shall mitigate the following quantities of VOC: 1st quarter – 290 lb, 2nd quarter – 290 lb, 3rd quarter – 290 lb, and 4th quarter – 290 lb. The quarterly amounts already include the applicable distance offset ratio per Section 4.8.1 of Rule 2201 (02/18/16). [District Rule 2201]*

- *ERC certificates N-1078-1 (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 SSIPE 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				
Pollutant	**SSPE1 (lb/year)**	**SSPE2 (lb/year)**	**Offset Threshold**	**Public Notice Required?**
NO_X	0	0	20,000 lb/year	No
SO_X	0	0	54,750 lb/year	No
PM_{10}	0	0	29,200 lb/year	No
CO	0	0	200,000 lb/year	No
VOC	38,091	38,864	20,000 lb/year	No

As shown in above 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_{10} offset threshold has been surpassed with this project.

SSIPE Public Notice Thresholds					
Pollutant	**SSPE2 (lb/year)**	**SSPE1 (lb/year)**	**SSIPE (lb/year)**	**SSIPE Public Notice Threshold**	**Public Notice Required?**
VOC	38,864	38,091	773	20,000 lb/year	No

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-845-28-0

- VOC emissions from this tank shall not exceed 1.5 pounds in any one day and 304 pounds in any one rolling 12-month period. [District Rule 2201]
- The quantity of organic liquid loaded into this tank shall not exceed the following limits: a) 180,000 gallons in any one day, and b) 24,000,000 gallons in any one rolling 12-month period. [District Rule 2201]
- Total VOC emissions from this permit unit shall not exceed 1.7 pounds in any one day. {Total VOC emissions shall be calculated as follow: Total VOC emissions (lb/day) = Daily Tank VOC emissions (lb/day) + Daily Fugitive Components emissions (lb/day)}. [District Rule 2201]

N-845-29-0

- VOC emissions from this tank shall not exceed 10.2 pounds in any one day and 1,686 pounds in any one rolling 12-month period. [District Rule 2201]
- The quantity of organic liquid loaded into this tank shall not exceed the following limits: a) 1,347,627 gallons in any one day, and b) 90,720,000 gallons in any one rolling 12-month period. [District Rule 2201]
- Total VOC emissions from this permit unit shall not exceed 10.4 pounds in any one day. {Total VOC emissions shall be calculated as follow: Total VOC emissions (lb/day) = Daily Tank VOC emissions (lb/day) + Daily Fugitive Components emissions (lb/day)}. [District Rule 2201]

N-845-30-0

- The maximum number of organic liquid hose disconnect performed by the unloading equipment shall not exceed 105 disconnects in any one day. [District Rule 2201]
- The VOC emission rate from each organic liquid hose disconnect shall not exceed 0.0141 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-845-28-0 -29-0, & -30-0

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

2. Monitoring

N-845-28-0 & -29-0

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

N-845-30-0

This permit unit is subject to Rule 4624 requirement. Monitoring requirements for this unit will be discussed in the associated sections of this document.

3. Recordkeeping

N-845-28-0 -29-0, & -30-0

Recordkeeping is required to demonstrate compliance with the offset, public notification and daily emission limit requirements of Rule 2201. The permitted is required to maintain records sufficient to demonstrated compliance with each emission limit and permit requirement. All records are required to be maintained on-site for a period of at least five years, and such records shall be make 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, an AAQA is not necessary 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 G.

H. Alternate Siting Analysis

The current project occurs at an existing facility. The applicant proposes to install two new storage tanks and a denatured ethanol offloading operation.

Since the current project involves install two new storage tanks and an ethanol offloading operation to be used at the same and nearby locations, 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 new emission units 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)

40 CFR Part 60 Subpart Kb – Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage vessels) for Which Construction after July 23, 1984

This subpart applies to each storage vessel with a capacity greater than or equal to 75 m^3 (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-845-28-0 & 29-0

The storage capacity of each of the new internal floating roof denatured ethanol storage tank (571,068 gallon) and the new internal floating roof gasoline storage tank (1,347,627 gallon) is greater than 75 m^3 (equivalent to 19,813 gallon), and the denature ethanol and gasoline to be stored in the tanks have a maximum true vapor pressure greater than 3.5 kPa (equivalent to 0.5 psia). Therefore, these storage tanks are 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).

Each 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)]

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§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.

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§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 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

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§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)]

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 H 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 38,864 pounds per year. The total HAPs from this facility are then calculated to:

Total HAPs = 38,864 lb-VOC/yr x 0.11 lb-HAPs/lb-VOC
= 4,275 lb-HAPs/yr (equivalent to 2.14 tons/yr)

The total HAPs emissions, 2.14 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 keep the existing daily organic liquids (including gasoline) throughput of 771,120 gallons unchanged. 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.

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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, and therefore, compliance with the requirements of this section is expected.

§63.11089 Equipment Leak Inspections Requirements

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§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 permit to ensure compliance:

- 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 permit 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)]

§63.11089(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.

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 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 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(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).

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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

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§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)]

§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 permit 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 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. [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-845-29-0

§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.

§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-845-29) 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 July 25, 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 permits 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, Ringelmann 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)

As part of the application review process, the District performed a Risk Management Review (RMR). Conservative assumptions were utilized to determine the worst-case risk to all possible receptors. Please note that the values used to arrive at the project risk level have many safety factors built in. The purpose of those safety factors is to ensure that the most sensitive receptors (children, elderly, pregnant women and people with weakened immune systems) are protected.

In 2015, the state Office of Environmental Health Hazard Assessment (OEHHA) adopted changes to *Air Toxics Hot Spots Program Guidance Manual for the Preparation of Risk Assessments* (Risk Assessment Guidelines). These revisions were mainly designed to provide enhanced protection of children and other sensitive receptors.

To ensure the greatest health protection, the District's incorporated all of OEHHA's suggested

revisions that increased calculated risk, but did not incorporate those changes that decreased calculated risk. The District's revised risk management policies, incorporated the following:

- More health protective 95th percentile breathing rate for both children AND adults, instead of OEHHA's proposed 95th percentile for children only and 80th percentile for adults,
- More health protective 70-year residential exposure instead of OEHHA's proposed 30-year, unless the expected project life is shorter,
- More health protective 40-year worker exposure instead of OEHHA's proposed 25-year, unless the expected project life is shorter,
- More health protective receptor (point-specific) impacts instead of OEHHA's spatial averaging method,
- All of the OEHHA changes that increase calculated risk for children

The District's current thresholds of significance for toxic air contaminant (TAC) emissions are presented in the following table. Evaluated under the new methodologies described above, the proposed project health risk exposure - short-term acute, long-term chronic, and carcinogen are within acceptable limits, and as such, are not expected to pose a significant health risk to any receptor (see Appendix I for further detail).

Maximally Exposed Individual risk Category	Significance Thresholds for Toxic Air Contaminant (TAC) Emissions	Proposed Project	Significant Toxic Air Contaminant Emissions?
Carcinogens	≥ 20 in one million	1.63 in one million	**NO**
Non-Carcinogen (Acute)	≥ 1	0.26	**NO**
Non-Carcinogen (Chronic)	≥ 1	0.02	**NO**

Discussion of Toxic Best Available Control Technology (T-BACT)

Although the project is approvable as shown above, risk can be further reduced by applying additional control techniques, on an emission unit-by-emission unit basis, when emissions are above the District's Toxic Best Available Control Technology (T-BACT) threshold of 1 in a million for cancer risk. The cancer risk for the units in this project are is shown in the table below:

HRA Summary		
Unit	**Cancer Risk**	**T-BACT Required?**
N-845-28-0	0.0184 in one million	**NO**
N-845-29-0	1.6 in one million	**YES**
N-845-30-0	0.0047 in one million	**NO**

As shown above, T-BACT is required only for the gasoline storage tank (N-845-29) because the HRA indicates that the risk is above the District's threshold for triggering T-BACT requirements.

For this project TBACT is triggered for VOC, and T-BACT is satisfied with BACT for VOC (see Appendix F), which is the use of primary metal shoe seal with secondary wiper seal with 95% control efficiency; therefore, compliance with the District's Risk Management Policy is expected.

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.

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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 tanks 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, each of these internal floating roof storage tanks will be equipped 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 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

N-845-30-0

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.

This facility is a Class 1 organic liquid transfer facility per Section 3.8.

Section 5.3 states a transfer operation utilizing a container that meets the control requirements of Rule 4623 (Storage of Organic Liquids) shall complying with the leak inspection requirements of Section 5.9.

Section 5.6 states that the transfer rack 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 be listed on the permit to ensure compliance:

- 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 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 be listed on the permit to ensure compliance:

- 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 permit 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 permit 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]

Compliance with the requirements of this Rule is expected.

California Health & Safety Code 42301.6 (School Notice)

The District has verified that the equipment 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.

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 assessment (this document) to determine whether or not any potential environmental impacts for this project are significant under CEQA. Further details of this analysis are presented below:

Criteria Pollutants - Operational Emissions: Permitted Sources

District implementation of New Source Review (NSR) ensures that there are no net increases in emissions above specified thresholds from New and Modified Stationary Sources for all nonattainment pollutants and their precursors from stationary source emissions which require District-issued permits. The project-related stationary source criteria pollutant emissions are below the District CEQA thresholds of significance for all pollutants (see table below):

Pollutant	CEQA Significance Thresholds for Permitted Equipment and Activities (tpy)	Proposed Project Potential to Emit (tpy)	Significant Criteria Emissions Under CEQA?
CO	100	0	**NO**
NOx	10	0	**NO**
ROG	10	1.2	**NO**
SOx	27	0	**NO**
PM10	15	0	**NO**
PM2.5	15	0	**NO**

Criteria Pollutants - Operational Emissions: Non-Permitted Sources

The non-permitted operational criteria emissions (i.e., from sources which are not subject to District permitting requirements) for the project, consisting of those emissions generated from new vehicle miles traveled or rail traffic, are below the District's established levels of significance for non-permitted equipment and activities, which are the same thresholds as those identified above for Permitted equipment and activities (e.g. 10 tons of NOx per year). The proposed project is below the District's conservative significance screening threshold of 47 one-way truck trips per day, and is therefore below the significance threshold for all pollutants. This proposed project results in an additional 21 one-way truck trips per day for this project, which is proportional to the ethanol throughput limit of 180,000 gal/day and a typical tanker truck capacity of 8,800 gallons. A quantification analysis of the total operational emissions from non-permitted sources demonstrates the project is less than significant (see Appendix J). In conclusion, operational emissions for non-permitted sources are below the District CEQA thresholds of significance for all pollutants (see table below).

Pollutant	CEQA Significance Thresholds for Operational Non-Permitted Activities (tpy)	Proposed Project Potential to Emit (tpy)	Significant Criteria Emissions Under CEQA?
CO	100	1.3	**NO**
NOx	10	0.7	**NO**
ROG	10	0.1	**NO**
SOx	27	0.00	**NO**
PM10	15	0.05	**NO**
PM2.5	15	0.02	**NO**

Criteria Pollutants - Construction

A quantification analysis of the total construction emissions demonstrates the project is less than significant (see Appendix J). In conclusion, construction emissions are below the District CEQA thresholds of significance for all pollutants (see table below).

Pollutant	CEQA Significance Thresholds for Construction (tpy)	Proposed Project Potential to Emit (tpy)	Significant Criteria Emissions Under CEQA?
CO	100	0.9	**NO**
NOx	10	1.3	**NO**
ROG	10	0.2	**NO**
SOx	27	0.00	**NO**
PM10	15	0.09	**NO**
PM2.5	15	0.08	**NO**

Toxic Air Contaminants

As part of the application review process, the District performed a Risk Management Review (RMR). Conservative assumptions were utilized to determine the worst-case risk to all possible receptors. Please note that the values used to arrive at the project risk level have many safety factors built in. The purpose of those safety factors is to ensure that the most sensitive receptors (children, elderly, pregnant women and people with weakened immune systems) are protected.

In 2015, the state Office of Environmental Health Hazard Assessment (OEHHA) adopted changes to *Air Toxics Hot Spots Program Guidance Manual for the Preparation of Risk Assessments* (Risk Assessment Guidelines). These revisions were mainly designed to provide enhanced protection of children and other sensitive receptors.

To ensure the greatest health protection, the District's incorporated all of OEHHA's suggested revisions that increased calculated risk, but did not incorporate those changes that decreased calculated risk. The District's revised risk management policies, incorporated the following:

- More health protective 95th percentile breathing rate for both children AND adults, instead of OEHHA's proposed 95th percentile for children only and 80th percentile for adults,
- More health protective 70-year residential exposure instead of OEHHA's proposed 30-year, unless the expected project life is shorter,
- More health protective 40-year worker exposure instead of OEHHA's proposed 25-year, unless the expected project life is shorter,
- More health protective receptor (point-specific) impacts instead of OEHHA's spatial averaging method,
- All of the OEHHA changes that increase calculated risk for children.

The District's current thresholds of significance for toxic air contaminant (TAC) emissions from the operations of both permitted and non-permitted sources are combined and presented in the following table.

Evaluated under these new methodologies, the proposed project health risk values are within acceptable limits (see table below), and as such, are not expected to pose a significant health risk to any receptor.

Maximally Exposed Individual risk Category	CEQA Significance Thresholds for Toxic Air Contaminant (TAC) Emissions	Proposed Project	Significant Toxic Air Contaminant Emissions Under CEQA?
Carcinogens	≥ 20 in one million	1.63 in one million	**NO**
Non-Carcinogen (Acute)	≥ 1	0.26	**NO**
Non-Carcinogen (Chronic)	≥ 1	0.02	**NO**

Other Impacts (e.g. Water Quality, Noise, Odor Nuisance, etc.)

The District assessed the other possible environmental impacts of the proposed project as well. The proposed project is below all of the District's established screening levels of significance for non-permitted equipment and activities (*District Policy APR 2010 - CEQA Implementation*). In addition, Tesoro is a petroleum distribution terminal in an industrial zone within the Port of Stockton, and is situated between the Port of Stockton West Complex Development Plan and the East Complex Development Plan (i.e. development of commercial and industrial park on more than 500 acres). The operation is an allowed-use by the Port of Stockton, and is surrounded by similar industrial and petroleum operations. As such, the District has concluded that the project will not have any significant adverse effects on the environment due to these other impacts.

Hazardous Waste

CEQA Guidelines section 15300.2(e) prohibits the application of a categorical exemption to a project that is located on a hazardous waste site designated in any list compiled pursuant to Government Code section 65962.5. The Central Valley Regional Water Quality Control Board confirmed to the District that this facility does not meet the criteria for Government Code 65962.5 as it relates to the State Water Resources Control Board. In addition, the District verified that the facility is not listed on the Department of Toxic Substances Control "Envirostar" Hazardous Waste and Substances Site List. The facility is not listed on the leaking underground storage tank sites, the list of sites identified with waste constituents above hazardous waste levels outside the waste management unit, or the active cease and desists/cleanup and abatement list from the State Water Resources Control. The District also determined that the facility is not listed on the CalEPA "Cortese" list, or the EPA Pacific Southwest Region 9 list of Cleanup Sites in California. The site is not included on any list compiled pursuant to Government Code §65962.5 and would not be subject to CEQA due to hazardous waste.

Greenhouse Gases (GHGs)

On December 17, 2009, the District's Governing Board adopted a policy, APR 2005, *Addressing GHG Emission Impacts for Stationary Source Projects Under CEQA When Serving as the Lead Agency,* for addressing GHG emission impacts when the District is Lead Agency under CEQA and approved the District's guidance document for use by other agencies when addressing GHG impacts as lead agencies under CEQA. Under this policy, the District's determination of significance of project-specific GHG emissions is founded on the principal that projects with GHG emission reductions consistent with AB 32 emission reduction targets are considered to have a less than significant impact on global climate change. Consistent with District Policy 2005, projects complying with an approved GHG emission reduction plan or GHG mitigation program, which avoids or substantially reduces GHG emissions within the geographic area in which the project is located, would be determined to have a less than significant individual and cumulative impact for GHG emission.

The California Air Resources Board (ARB) adopted a Cap-and-Trade regulation as part of one of the strategies identified for AB 32. This Cap-and-Trade regulation is a statewide plan, supported by a CEQA compliant environmental review document, aimed at reducing or mitigating GHG emissions from targeted industries. Facilities required to comply with the Cap-and-Trade regulation are subject to an industry-wide cap on overall GHG emissions. Any growth in emissions must be accounted for under that cap such that a corresponding and equivalent reduction in emissions must occur to allow any increase. Further, the cap decreases over time, resulting in an overall decrease in GHG emissions.

Under District policy APR 2025, *CEQA Determinations of Significance for Projects Subject to ARB's GHG Cap-and-Trade Regulation*, the District finds that the Cap-and-Trade is a regulation plan approved by ARB, consistent with AB32 emission reduction targets, and supported by a CEQA compliant environmental review document. As such, consistent with District Policy 2005, projects complying with Cap-and-Trade requirements are determined to have a less than significant individual and cumulative impact for GHG emissions.

Industries covered by Cap-and-Trade are identified in the regulation under section 95811, Covered Entities:

1. *Group 1: Large industrial facilities*

   These types of facilities are subject to Cap and Trade, and the specific companies covered are listed at http://www.arb.ca.gov/cc/capandtrade/capandtrade.htm, Section 95811 (a), under the "Publically Available Market Information" section (list maintained by the California Air Resources Board).

2. *Group 2: Electricity generation facilities located in California, or electricity importers*

   These types of facilities are subject to Cap and Trade (section 95811, b).

3. *Group 3: Suppliers of Natural Gas, Suppliers of Reformulated Gasoline Blendstock for Oxygenate Blending and Distillate Fuel Oil, Suppliers of Liquefied Petroleum Gas, and Suppliers of Blended Fuels*

   These entities are subject to Cap and Trade compliance obligations which must cover all fuels (except jet fuels) identified in section 95811 (c) through (f) of the Cap-and-Trade regulation delivered to end users in California, less the fuel delivered to covered entities (group 1 above).

This facility is subject to the Cap-and-Trade regulation. Therefore, as discussed above, consistent with District Policies APR 2005 and APR 2025, the District concludes that the GHG emissions increases associated with this project would have a less than significant individual and cumulative impact on global climate change.

District CEQA Findings:

As discussed above, the District reviewed and assessed if there would be any potential significant impacts to the environment, and determined that the proposed project will not result in a potentially significant impact to the environment. As such, 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 (e.g.: general CEQA "common sense" exemption.)

In addition, the size of the proposed project is approximately 9,500 ft^2. CEQA Guideline for Categorical Exemptions, specifically 15301(e) (Existing Facilities), allows for addition to existing structures that will not result in an increase in size of existing structure (not to exceed 10,000 ft^2). The size of the proposed project is less than the 10,000 ft^2 and is within the scope of the exemption.

In conclusion, the District 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)), and is also categorically exempt from the provisions of CEQA pursuant to CEQA Guideline §15301 (Existing Facilities).

IX. Recommendation

Compliance with all applicable rules and regulations is expected. Pending a successful NSR Public Noticing period, issue ATCs N-845-28-0, N-845-29-0, and N-845-30-0 subject to the permits conditions listed on the attached draft ATCs in Appendix A.

X. Billing Information

Annual Permit Fees			
Permit Number	**Fee Schedule**	**Fee Description**	**Annual Fee**
N-845-28-0	3020-05-F	571,068 gallon	$316.00
N-845-29-0	3020-05-G	1,347,627 gallon	$401.00
N-845-30-0	3020-01-C	55 hp (total)	$207.00

Appendixes

A: Draft ATC(s)
B: Facility Layout and Equipment Location Map
C: Tanks 4.0.9d Emissions Reports
D: Quarterly Net Emissions Change
E: BACT Guidelines
F: BACT Analyses
G: Compliance Certificate
H: Gasoline Distribution Industry (Stage I) – Background Information for Proposed Standards
I: HRA Summary
J: Construction and Mobile Source Emission Calculations

APPENDIX A
Draft ATCs

San Joaquin Valley
Air Pollution Control District

AUTHORITY TO CONSTRUCT

PERMIT NO: N-845-28-0

ISSUANCE DATE: DRAFT

LEGAL OWNER OR OPERATOR: TESORO LOGISTICS OPERATIONS LLC
MAILING ADDRESS: ATTN: JOHN WALKERS
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-845-28-0, N-845-29-0 and N-845-30-0, the permittee shall mitigate the following quantities of VOC: 1st quarter - 290 lb, 2nd quarter - 290 lb, 3rd quarter - 290 lb, and 4th quarter - 290 lb. The quarterly amounts already include the applicable distance offset ratio per Section 4.8.1 of Rule 2201 (02/18/16). [District Rule 2201] Federally Enforceable Through Title V Permit
4. ERC certificates N-1078-1 (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] 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 Marjollet, Director of Permit Services
N-845-28-0 Feb 7 2017 1:38PM – SOW : Joint Inspection NOT Required

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. VOC emissions from this tank shall not exceed 1.5 pounds in any one day and 304 pounds in any one rolling 12-month period. [District Rule 2201] Federally Enforceable Through Title V Permit
9. The quantity of organic liquid loaded into this tank shall not exceed the following limits: a) 180,000 gallons in any one day and b) 24,000,000 gallons in any one rolling 12-month period. [District Rule 2201] Federally Enforceable Through Title V Permit
10. Total VOC emissions from this permit unit shall not exceed 1.7 pounds in any one day. {Total VOC emissions shall be calculated as follow: Total VOC emissions (lb/day) = Daily Tank VOC emissions (lb/day) + Daily Fugitive Components emissions (lb/day)}. [District Rule 2201] Federally Enforceable Through Title V Permit
11. Fugitive VOC from components, such as valve, flange, connector, pump seal, etc, associated with this permit unit shall not exceed 87 pounds in any one rolling 12-month period. [District Rule 2201] Federally Enforceable Through Title V Permit
12. 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
13. 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
14. True vapor pressure of the organic liquid stored shall be less than 11 psia. [District Rule 4623] Federally Enforceable Through Title V Permit
15. 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
16. 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
17. 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
18. No gap between the tank shell and the secondary seal shall exceed 1/2 inch. [District Rule 4623] Federally Enforceable Through Title V Permit
19. 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
20. 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
21. 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
22. 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
23. 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
24. 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

CONDITIONS CONTINUE ON NEXT PAGE

25. 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, and for tank interior cleaning, and during tank repair and maintenance activities. 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 Rules 2020, 2201, and 4623, and 40 CFR 60.112b(a)(1)(i)] Federally Enforceable Through Title V Permit

26. 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

27. 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

28. 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 60.112b(a)(1)(iii)] Federally Enforceable Through Title V Permit

29. 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 60.112b(a)(1)(iv)] Federally Enforceable Through Title V Permit

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

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

32. 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 60.112b(a)(1)(vii)] Federally Enforceable Through Title V Permit

33. Each penetration of the internal floating roof that allows for the passage of a column supporting the fixed roof shall have a flexible fabric sleeve seal or a gasketed sliding cover. The fabric sleeve must be impermeable. [District Rule 4623 and 40 CFR 60.112b(a)(1)(viii)] Federally Enforceable Through Title V Permit

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

35. All slotted sampling or gauging wells shall provide a projection below the liquid surface. [District Rule 4623] Federally Enforceable Through Title V Permit

36. 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

CONDITIONS CONTINUE ON NEXT PAGE

37. 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

38. 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

39. 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

40. 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

41. 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

42. 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

43. 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

44. 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

45. 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

46. 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

47. This tank shall be in compliance with the applicable requirements of District Rule 4623 at all times during draining, degassing, and refilling the tank with an organic liquid having a TVP of 0.5 psia or greater. [District Rule 4623] Federally Enforceable Through Title V Permit

48. 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

CONDITIONS CONTINUE ON NEXT PAGE

49. 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

50. 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

51. 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

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

53. 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

54. 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 and 40 CFR 60.113b(a)(1)] Federally Enforceable Through Title V Permit

55. 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 and 40 CFR 60.113b(a)(2)] Federally Enforceable Through Title V Permit

56. 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

57. 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)] Federally Enforceable Through Title V Permit

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

59. 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

CONDITIONS CONTINUE ON NEXT PAGE

60. The permittee shall submit the reports of the floating roof tank inspections to the APCO within five calendar days after the completion of the inspection only for those tanks that failed to meet the applicable requirements of Rule 4623, Sections 5.2 through 5.5. The inspection report for tanks that that have been determined to be in compliance with the requirements of Sections 5.2 through 5.5 need not be submitted to the APCO, but the inspection report shall be kept on-site and made available upon request by the APCO. The inspection report shall contain all necessary information to demonstrate compliance with the provisions of this rule, including the following: 1) Date 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 and 40 CFR 60.115b(a)] Federally Enforceable Through Title V Permit

61. 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)] 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 60.116b(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 60.116b(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. The permittee shall keep daily records and annual records on a rolling 12-month period of the quantity of organic liquid loaded into the tank, in gallons. [District Rule 2201] Federally Enforceable Through Title V Permit

66. The permittee shall maintain records sufficient to demonstrate compliance with each emission limit. These records shall contain each calculated emission quantity as well as each process variable used in the respective calculations/modeling. [District Rule 2201] Federally Enforceable Through Title V Permit

67. 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, and 40 CFR 60.116b(a)] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

AUTHORITY TO CONSTRUCT

PERMIT NO: N-845-29-0

ISSUANCE DATE: DRAFT

LEGAL OWNER OR OPERATOR: TESORO LOGISTICS OPERATIONS LLC
MAILING ADDRESS: ATTN: JOHN WALKER
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-845-28-0, N-845-29-0 and N-845-30-0, the permittee shall mitigate the following quantities of VOC: 1st quarter - 290 lb, 2nd quarter - 290 lb, 3rd quarter - 290 lb, and 4th quarter - 290 lb. The quarterly amounts already include the applicable distance offset ratio per Section 4.8.1 of Rule 2201 (02/18/16). [District Rule 2201] Federally Enforceable Through Title V Permit
4. ERC certificates N-1078-1 (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 Marjollet, Director of Permit Services

N-845-29-0 : Feb 9 2017 1:26PM – SOW Joint Inspection NOT Required

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. VOC emissions from the tank shall not exceed 10.2 pounds in any one day and 1,686 pounds in any one rolling 12-month period. [District Rule 2201] Federally Enforceable Through Title V Permit
8. The quantity of organic liquid loaded into this tank shall not exceed the following limits: a) 1,347,627 gallons in any one day and b) 90,720,000 gallons in any one rolling 12-month period. [District Rule 2201] Federally Enforceable Through Title V Permit
9. Total VOC emissions from this permit unit shall not exceed 10.4 pounds in any one day. {Total VOC emissions shall be calculated as follow: Total VOC emissions (lb/day) = Daily Tank VOC emission (lb/day) + Daily Fugitive Components emissions (lb/day)}. [District Rule 2201] Federally Enforceable Through Title V Permit
10. Fugitive VOC from components, such as valve, flange, connector, pump seal, etc, associated with this permit unit shall not exceed 90 pounds in any one rolling 12-month period. [District Rule 2201] Federally Enforceable Through Title V Permit
11. 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
12. Gaps between the tank shell and the primary seal shall not exceed 1 1/2 inches. [District Rule 4623] Federally Enforceable Through Title V Permit
13. True vapor pressure of the organic liquid stored shall be less than 11 psia. [District Rule 4623] Federally Enforceable Through Title V Permit
14. The cumulative length of all gaps between the tank shell and the primary seal greater than 1/2 inch shall not exceed 10% of the circumference of the tank. [District Rule 4623] Federally Enforceable Through Title V Permit
15. The cumulative length of all primary seal gaps greater than 1/8 inch shall not exceed 30% of the circumference of the tank. [District Rule 4623] Federally Enforceable Through Title V Permit
16. No continuous gap in the primary seal greater than 1/8 inch wide shall exceed 10% of the tank circumference. [District Rule 4623] Federally Enforceable Through Title V Permit
17. No gap between the tank shell and the secondary seal shall exceed 1/2 inch. [District Rule 4623] Federally Enforceable Through Title V Permit
18. 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
19. The metallic shoe-type seal shall be installed so that one end of the shoe extends into the stored liquid and the other end extends a minimum vertical distance of 18 inches above the stored liquid surface. [District Rule 4623] Federally Enforceable Through Title V Permit
20. The geometry of the metallic-shoe type seal shall be such that the maximum gap between the shoe and the tank shell shall be no greater than 3 inches for a length of at least 18 inches in the vertical plane above the liquid. [District Rule 4623] Federally Enforceable Through Title V Permit
21. There shall be no holes, tears, or openings in the secondary seal or in the primary seal envelope that surrounds the annular vapor space enclosed by the roof edge, seal fabric, and secondary seal. [District Rule 4623] Federally Enforceable Through Title V Permit
22. The secondary seal shall allow easy insertion of probes of up to 1 1/2 inches in width in order to measure gaps in the primary seal. [District Rule 4623] Federally Enforceable Through Title V Permit
23. The secondary seal shall extend from the roof to the tank shell and shall not be attached to the primary seal. [District Rule 4623] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

24. 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, and for tank interior cleaning, and during tank repair and maintenance activities. 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 Rules 2020, 2201, and 4623, 40 CFR 60.112b(a)(1)(i), and 40 CFR 63.11087(a)] Federally Enforceable Through Title V Permit

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

26. 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

27. 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

28. 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

29. 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

30. 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

31. 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

32. 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

33. 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

34. All slotted sampling or gauging wells shall provide a projection below the liquid surface. [District Rule 4623] Federally Enforceable Through Title V Permit

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

CONDITIONS CONTINUE ON NEXT PAGE

36. 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

37. 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

38. 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

39. 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

40. 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

41. 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

42. 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

43. 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

44. 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

45. 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

46. This tank shall be in compliance with the applicable requirements of District Rule 4623 at all times during draining, degassing, and refilling the tank with an organic liquid having a TVP of 0.5 psia or greater. [District Rule 4623] Federally Enforceable Through Title V Permit

47. 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

CONDITIONS CONTINUE ON NEXT PAGE

48. 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

49. 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

50. 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

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

52. 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

53. 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

54. 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

55. 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

56. 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

57. 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

58. 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

CONDITIONS CONTINUE ON NEXT PAGE

59. The permittee shall submit the reports of the floating roof tank inspections to the APCO within five calendar days after the completion of the inspection only for those tanks that failed to meet the applicable requirements of Rule 4623, Sections 5.2 through 5.5. The inspection report for tanks that that have been determined to be in compliance with the requirements of Sections 5.2 through 5.5 need not be submitted to the APCO, but the inspection report shall be kept on-site and made available upon request by the APCO. The inspection report shall contain all necessary information to demonstrate compliance with the provisions of this rule, including the following: 1) Date 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

60. 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

61. 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

62. 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

63. 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

64. 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

65. 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

66. 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

67. 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

CONDITIONS CONTINUE ON NEXT PAGE

68. 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 60.116b(c)] Federally Enforceable Through Title V Permit

69. 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

70. The permittee shall keep daily records and annual records on a rolling 12-month period of the quantity of organic liquid loaded into the tank, in gallons. [District Rule 2201] Federally Enforceable Through Title V Permit

71. The permittee shall maintain records sufficient to demonstrate compliance with each emission limit. These records shall contain each calculated emission quantity as well as each process variable used in the respective calculations/modeling. [District Rule 2201] Federally Enforceable Through Title V Permit

72. 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 60.116b(a), and 40 CFR 63.11094(a)] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

AUTHORITY TO CONSTRUCT

DRAFT

PERMIT NO: N-845-30-0

ISSUANCE DATE: DRAFT

LEGAL OWNER OR OPERATOR: TESORO LOGISTICS OPERATIONS LLC
MAILING ADDRESS: ATTN: JOHN WALKERS
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-845-28-0, N-845-29-0 and N-845-30-0, the permittee shall mitigate the following quantities of VOC: 1st quarter - 290 lb, 2nd quarter - 290 lb, 3rd quarter - 290 lb, and 4th quarter - 290 lb. The quarterly amounts already include the applicable distance offset ratio per Section 4.8.1 of Rule 2201 (02/18/16). [District Rule 2201] Federally Enforceable Through Title V Permit
4. ERC certificates N-1078-1 (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

DRAFT

Arnaud Marjollet, Director of Permit Services

N-845-30-0 Feb 7 2017 1:31PM – SOW Joint Inspection NOT Required

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 rolling 12-month period. [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 disconnections performed by the unloading equipment for this permit unit shall not exceed 105 disconnects in any one day. [District Rule 2201] Federally Enforceable Through Title V Permit
10. The maximum number of organic liquid hose disconnections performed by the unloading equipment for this permit unit 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 0.0141 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] Federally Enforceable Through Title V Permit
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] Federally Enforceable Through Title V Permit
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] Federally Enforceable Through Title V Permit
15. Each time a tanker truck or railcar is unloaded, the operator or 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 or 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 or permittee shall ensure that clean empty collection vessels are available for use each time a tanker truck or railcar is unloaded. [District Rule 2201] Federally Enforceable Through Title V Permit
16. The operator or permittee shall ensure that each time a tanker truck or railcar is unloaded, a checklist to be prepared by the 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] Federally Enforceable Through Title V Permit
17. The operator or 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 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 2201] Federally Enforceable Through Title V Permit
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] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

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. Safety Data Sheet for each organic liquid processed by the unloading equipment for this permit unit shall be maintained. [District Rule 2201] Federally Enforceable Through Title V Permit

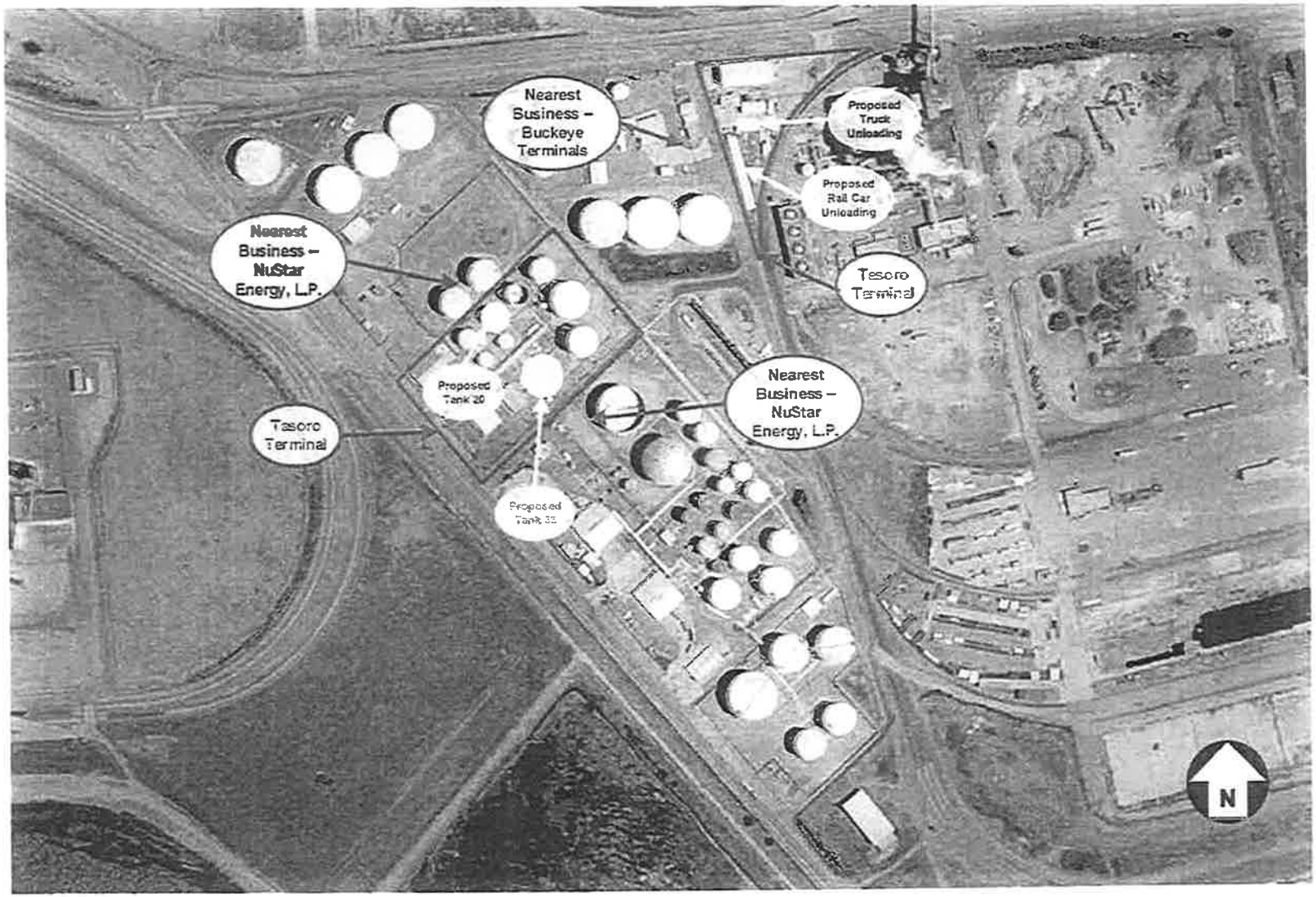
25. The permittee shall keep daily records of the number of organic liquid hose disconnections from both railcars and tank trucks for this permit unit. The records shall be updated at least weekly. [District Rule 2201] Federally Enforceable Through Title V Permit

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

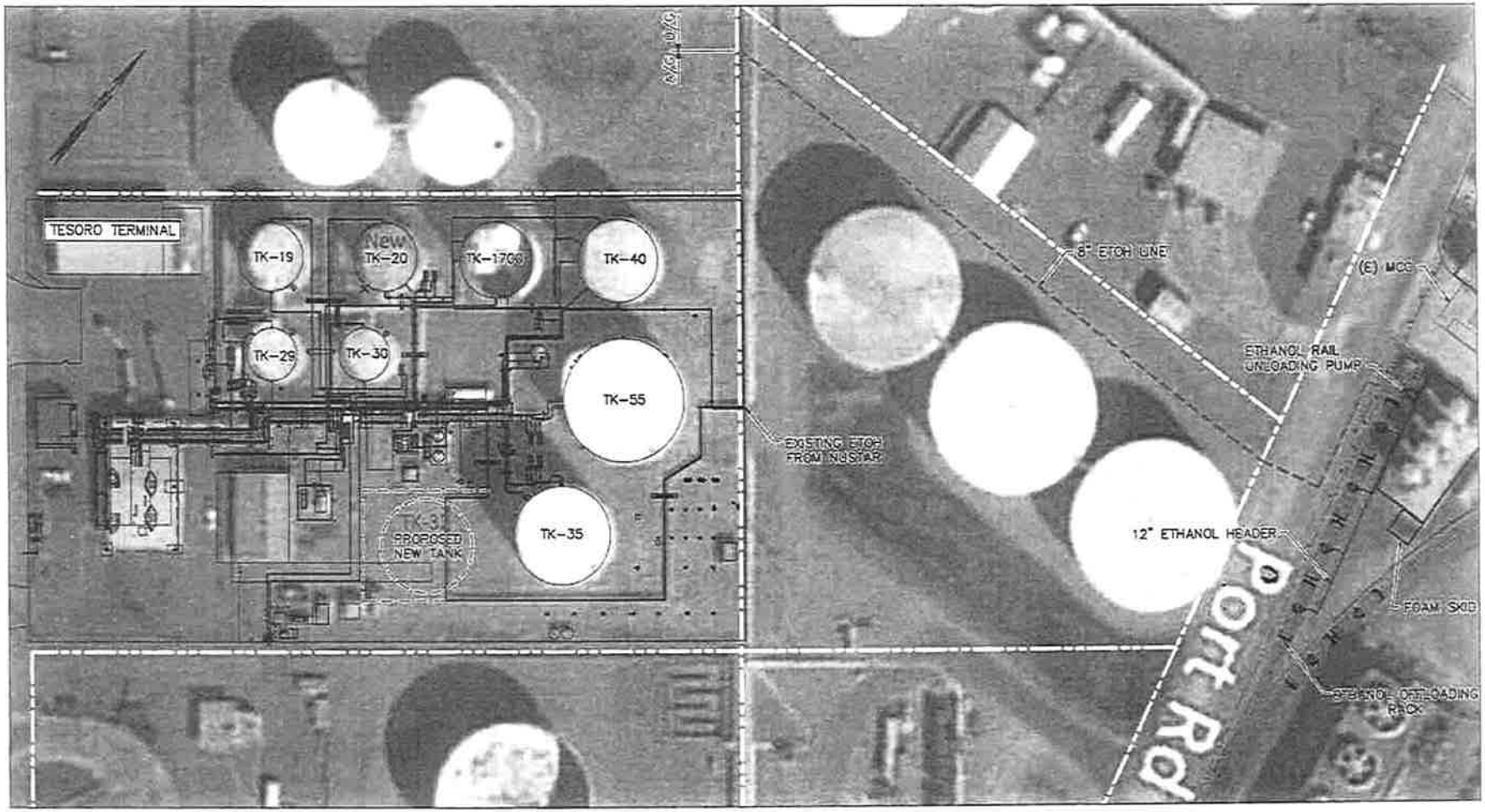
27. The permittee shall maintain records sufficient to demonstrate compliance with each emission limit. These records shall contain each calculated emission quantity as well as each process variable used in the respective calculations. [District Rule 2201] Federally Enforceable Through Title V Permit

28. 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
Facility Layout and Equipment Location Map



Trinity Consultants	TESORO LOGISTICS	Tesoro Logistics Operations, LLC 3903 Navy Drive Stockton, CA 95206	Description: Area Map	
			Scale: NA	Date: December 2016
				Figure: 2



PLOT PLAN

LEGEND:

AECOM

REV	DATE	PROJ#	REVISION	CONTRACTOR	CK	PIC
A	[illegible]	[illegible]	ISSUED FOR REVIEW	AECOM	[illegible]	[illegible]

TESORO LOGISTICS — Tesoro Logistics Operations LLC

PLOT PLAN

STOCKTON ETHANOL EXPANSION

DWG NO 39911316-SK-001 — A

10202172

APPENDIX C
Tanks 4.0.9d Emissions Reports

TANKS 4.0.9d
Emissions Report - Detail Format
Tank Indentification and Physical Characteristics

Identification

User Identification:	N-845-28-0 Annual (Density 6.676)
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
Eff. Col. Diam. (ft):	1.10

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

Meterological 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-845-28-0 Annual (Density 6.676) - Internal Floating Roof Tank
Stockton, California

Mixture/Component	Month	Daily Liquid Surf. Temperature (deg F) Avg.	Min.	Max.	Liquid Bulk Temp (deg F)	Vapor Pressure (psia) Avg.	Min.	Max.	Vapor Mol. Weight	Liquid Mass Fract.	Vapor Mass Fract.	Mol Weight	Basis for Vapor Pressure Calculations
Denaturec Ethanol RVP 3.2 Density 6.676	Jan	55.08	51.49	58.67	61.57	0.9925	N/A	N/A	46.0700			46.07	Option 2: A=7.5187, B=1511.0089, C=247.3229
Denaturec Ethanol RVP 3.2 Density 6.676	Feb	57.96	53.17	62.75	61.57	1.0770	N/A	N/A	46.0700			46.07	Option 2: A=7.5187, B=1511.0089, C=247.3229
Denaturec Ethanol RVP 3.2 Density 6.676	Mar	60.22	54.36	66.07	61.57	1.1476	N/A	N/A	46.0700			46.07	Option 2: A=7.5187, B=1511.0089, C=247.3229
Denaturec Ethanol RVP 3.2 Density 6.676	Apr	63.26	55.98	70.54	61.57	1.2488	N/A	N/A	46.0700			46.07	Option 2: A=7.5187, B=1511.0089, C=247.3229
Denatured Ethanol RVP 3.2 Density 6.676	May	67.10	58.83	75.36	61.57	1.3870	N/A	N/A	46.0700			46.07	Option 2: A=7.5187, B=1511.0089, C=247.3229
Denatured Ethanol RVP 3.2 Density 6.676	Jun	70.33	61.45	79.22	61.57	1.5135	N/A	N/A	46.0700			46.07	Option 2: A=7.5187, B=1511.0089, C=247.3229
Denatured Ethanol RVP 3.2 Density 6.676	Jul	72.25	63.02	81.48	61.57	1.5931	N/A	N/A	46.0700			46.07	Option 2: A=7.5187, B=1511.0089, C=247.3229
Denatured Ethanol RVP 3.2 Density 6.676	Aug	71.45	62.84	80.06	61.57	1.5593	N/A	N/A	46.0700			46.07	Option 2: A=7.5187, B=1511.0089, C=247.3229
Denatured Ethanol RVP 3.2 Density 6.676	Sep	69.03	61.28	76.77	61.57	1.4613	N/A	N/A	46.0700			46.07	Option 2: A=7.5187, B=1511.0089, C=247.3229
Denatured Ethanol RVP 3.2 Density 6.676	Oct	64.64	58.13	71.16	61.57	1.2972	N/A	N/A	46.0700			46.07	Option 2: A=7.5187, B=1511.0089, C=247.3229
Denatured Ethanol RVP 3.2 Density 6.676	Nov	58.87	54.21	63.53	61.57	1.1050	N/A	N/A	46.0700			46.07	Option 2: A=7.5187, B=1511.0089, C=247.3229
Denatured Ethanol RVP 3.2 Density 6.676	Dec	54.98	51.51	58.44	61.57	0.9897	N/A	N/A	46.0700			46.07	Option 2: A=7.5187, B=1511.0089, C=247.3229

TANKS 4.0.9d
Emissions Report - Detail Format
Detail Calculations (AP-42)

N-845-28-0 Annual (Density 6.676) - Internal Floating Roof Tank
Stockton, California

Month:	January	February	March	April	May	June	July	August	September	October	November	December
Rim Seal Losses (lb):	1.8091	1.9692	2.1035	2.2974	2.5645	2.8115	2.9680	2.9015	2.7093	2.3908	2.0224	1.8037
Seal Factor A (lb-mole/ft-yr):	0.6000	0.6000	0.6000	0.6000	0.6000	0.6000	0.6000	0.6000	0.6000	0.6000	0.6000	0.6000
Seal Factor B (lb-mole/ft-yr (mph)^n):	0.4000	0.4000	0.4000	0.4000	0.4000	0.4000	0.4000	0.4000	0.4000	0.4000	0.4000	0.4000
Value of Vapor Pressure Function:	0.0175	0.0190	0.0203	0.0222	0.0247	0.0271	0.0286	0.0280	0.0261	0.0231	0.0195	0.0174
Vapor Pressure at Daily Average Liquid Surface Temperature (psia):	0.9925	1.0770	1.1476	1.2488	1.3870	1.5135	1.5931	1.5593	1.4613	1.2972	1.1050	0.9897
Tank Diameter (ft):	45.0000	45.0000	45.0000	45.0000	45.0000	45.0000	45.0000	45.0000	45.0000	45.0000	45.0000	45.0000
Vapor Molecular Weight (lb/lb-mole):	46.0700	46.0700	46.0700	46.0700	46.0700	46.0700	46.0700	46.0700	46.0700	46.0700	46.0700	46.0700
Product Factor:	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Withdrawal Losses (lb):	10.2371	10.2371	10.2371	10.2371	10.2371	10.2371	10.2371	10.2371	10.2371	10.2371	10.2371	10.2371
Number of Columns:	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Effective Column Diameter (ft):	1.1000	1.1000	1.1000	1.1000	1.1000	1.1000	1.1000	1.1000	1.1000	1.1000	1.1000	1.1000
Net Throughput (gal/mo.):	2,000,000.0000	2,000,000.0000	2,000,000.0000	2,000,000.0000	2,000,000.0000	2,000,000.0000	2,000,000.0000	2,000,000.0000	2,000,000.0000	2,000,000.0000	2,000,000.0000	2,000,000.0000
Shell Clingage Factor (bbl/1000 sqft):	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015
Average Organic Liquid Density (lb/gal):	6.6760	6.6760	6.6760	6.6760	6.6760	6.6760	6.6760	6.6760	6.6760	6.6760	6.6760	6.6760
Tank Diameter (ft):	45.0000	45.0000	45.0000	45.0000	45.0000	45.0000	45.0000	45.0000	45.0000	45.0000	45.0000	45.0000
Deck Fitting Losses (lb):	9.7292	10.5899	11.3121	12.3547	13.7911	15.1198	15.9611	15.6037	14.5700	12.8570	10.8760	9.7001
Value of Vapor Pressure Function:	0.0175	0.0190	0.0203	0.0222	0.0247	0.0271	0.0286	0.0280	0.0261	0.0231	0.0195	0.0174
Vapor Molecular Weight (lb/lb-mole):	46.0700	46.0700	46.0700	46.0700	46.0700	46.0700	46.0700	46.0700	46.0700	46.0700	46.0700	46.0700
Product Factor:	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Tot. Roof Fitting Loss Fact.(lb-mole/yr):	145.2000	145.2000	145.2000	145.2000	145.2000	145.2000	145.2000	145.2000	145.2000	145.2000	145.2000	145.2000
Deck Seam Losses (lb):	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Deck Seam Length (ft):	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Deck Seam Loss per Unit Length Factor (lb-mole/ft-yr):	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Deck Seam Length Factor(ft/sqft):	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Tank Diameter (ft):	45.0000	45.0000	45.0000	45.0000	45.0000	45.0000	45.0000	45.0000	45.0000	45.0000	45.0000	45.0000
Vapor Molecular Weight (lb/lb-mole):	46.0700	46.0700	46.0700	46.0700	46.0700	46.0700	46.0700	46.0700	46.0700	46.0700	46.0700	46.0700
Product Factor:	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total Losses (lb):	21.7754	22.7961	23.5526	24.8891	26.5926	28.1684	29.1661	28.7423	27.5163	25.4848	23.1355	21.7409

Roof Fitting/Status	Quantity	Roof Fitting Loss Factors KFa(lb-mole/yr)	KFb(lb-mole/(yr mph^n))	m	Losses(lb)
Slotted Guide-Pole/Sample Well/Gask Sliding Covr, w. Float,Sleeve,Wiper	1	11.00	9.90	0.89	11.5609
Access Hatch (24-in. Diam.)/Bolted Cover, Gasketed	1	1.60	0.00	0.00	1.6816
Automatic Gauge Float Well/Bolted Cover, Gasketed	1	2.80	0.00	0.00	2.9428
Gauge-Hatch/Sample Well (8-in. Diam.)/Weighted Mech. Actuation, Gask.	1	0.47	0.02	0.97	0.4940
Vacuum Breaker (10-in. Diam.)/Weighted Mech. Actuation, Gask.	1	6.20	1.20	0.94	6.5162
Roof Leg (3-in. Diameter)/Adjustable, Pontoon Area, Sock	4	1.20	0.14	0.65	5.0448
Roof Leg (3-in. Diameter)/Adjustable, Center Area, Gasketed	4	0.53	0.11	0.13	2.2281
Rim Vent (6-in. Diameter)/Weighted Mech. Actuation, Gask.	1	0.71	0.10	1.00	0.7462
Column Well (24-in. Diam.)/Pipe Col.-Sliding Cover, Gask.	1	25.00	0.00	0.00	26.2748
Column Well (24-in. Diam.)/Built-Up Col.-Sliding Cover, Gask.	1	33.00	0.00	0.00	34.6828
Ladder Well (36-in. Diam.)/Sliding Cover, Gasketed	1	56.00	0.00	0.00	58.8556
Roof Drain (3-in. Diameter)/Open	1	1.50	0.21	1.70	1.5765

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-845-28-0 Annual (Density 6.676) - Internal Floating Roof Tank
Stockton, California

	Losses(lbs)				
Components	Rim Seal Loss	Withdrawl Loss	Deck Fitting Loss	Deck Seam Loss	Total Emissions
Denatured Ethanol RVP 3.2 Density 6.676	28.35	122.84	152.46	0.00	303.66

TANKS 4.0.9d
Emissions Report - Detail Format
Tank Indentification and Physical Characteristics

Identification

User Identification:	N-845-28-0 Daily (Density 6.676)
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
Eff. Col. Diam. (ft):	1.10

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

Meterological 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-845-28-0 Daily (Density 6.676) - Internal Floating Roof Tank
Stockton, California

Mixture/Component	Month	Daily Liquid Surf. Temperature (deg F) Avg.	Min.	Max.	Liquid Bulk Temp (deg F)	Vapor Pressure (psia) Avg.	Min.	Max.	Vapor Mol. Weight	Liquid Mass Fract.	Vapor Mass Fract.	Mol. Weight	Basis for Vapor Pressure Calculations
Denatured Ethanol RVP 3.2 Density 6.676	Jul	72.25	63.02	81.48	61.57	1.5931	N/A	N/A	46.0700			46.07	Option 2: A=7.5187, B=1511.0089, C=247.3229

TANKS 4.0.9d
Emissions Report - Detail Format
Detail Calculations (AP-42)

N-845-28-0 Daily (Density 6.676) - Internal Floating Roof Tank
Stockton, California

Month:	January	February	March	April	May	June	July	August	September	October	November	December
Rim Seal Losses (lb):							2.9580					
Seal Factor A (lb-mole/ft-yr):							0.6000					
Seal Factor B (lb-mole/ft-yr (mph)^n):							0.4000					
Value of Vapor Pressure Function:							0.0286					
Vapor Pressure at Daily Average Liquid Surface Temperature (psia):							1.5931					
Tank Diameter (ft):							45.0000					
Vapor Molecular Weight (lb/lb-mole):							46.0700					
Product Factor:							1.0000					
Withdrawal Losses (lb):							122.8449					
Number of Columns:							1.0000					
Effective Column Diameter (ft):							1.1000					
Net Throughput (gal/mo.):							24,000,000.0000					
Shell Clingage Factor (bbl/1000 sqft):							0.0015					
Average Organic Liquid Density (lb/gal):							6.6760					
Tank Diameter (ft):							45.0000					
Deck Fitting Losses (lb):							15.9611					
Value of Vapor Pressure Function:							0.0286					
Vapor Molecular Weight (lb/lb-mole):							46.0700					
Product Factor:							1.0000					
Tot. Roof Fitting Loss Fact.(lb-mole/yr):							145.2000					
Deck Seam Losses (lb):							0.0000					
Deck Seam Length (ft):							0.0000					
Deck Seam Loss per Unit Length Factor (lb-mole/ft-yr):							0.0000					
Deck Seam Length Factor(ft/sqft):							0.0000					
Tank Diameter (ft):							45.0000					
Vapor Molecular Weight (lb/lb-mole):							46.0700					
Product Factor:							1.0000					
Total Losses (lb):							141.7739					

Roof Fitting/Status	Quantity	Roof Fitting Loss Factors KFa(lb-mole/yr)	KFb(lb-mole/(yr mph^n))	m	Losses(lb)
Slotted Guide-Pole/Sample Well/Gask Sliding Cov, w. Float,Sleeve,Wiper	1	11.00	9.90	0.89	1.2324
Access Hatch (24-in. Diam.)/Bolted Cover, Gasketed	1	1.60	0.00	0.00	0.1793
Automatic Gauge Float Well/Bolted Cover, Gasketed	1	2.80	0.00	0.00	0.3137
Gauge-Hatch/Sample Well (8-in. Diam.)/Weighted Mech. Actuation, Gask.	1	0.47	0.02	0.97	0.0527
Vacuum Breaker (10-in. Diam.)/Weighted Mech. Actuation, Gask.	1	6.20	1.20	0.94	0.6946
Roof Leg (3-in. Diameter)/Adjustable, Pontoon Area, Sock	4	1.20	0.14	0.65	0.5378
Roof Leg (3-in. Diameter)/Adjustable, Center Area, Gasketed	4	0.53	0.11	0.13	0.2375
Rim Vent (6-in. Diameter)/Weighted Mech. Actuation, Gask.	1	0.71	0.10	1.00	0.0795
Column Well (24-in. Diam.)/Pipe Col.-Sliding Cover, Gask.	1	25.00	0.00	0.00	2.8008
Column Well (24-in. Diam.)/Built-Up Col.-Sliding Cover, Gask.	1	33.00	0.00	0.00	3.6971
Ladder Well (36-in. Diam.)/Sliding Cover, Gasketed	1	56.00	0.00	0.00	6.2738
Roof Drain (3-in. Diameter)/Open	1	1.50	0.21	1.70	0.1680

TANKS 4.0.9d
Emissions Report - Detail Format
Individual Tank Emission Totals

Emissions Report for: July

N-845-28-0 Daily (Density 6.676) - Internal Floating Roof Tank
Stockton, California

	Losses(lbs)				
Components	Rim Seal Loss	Withdrawl Loss	Deck Fitting Loss	Deck Seam Loss	Total Emissions
Denatured Ethanol RVP 3.2 Density 6.676	2.97	122.84	15.96	0.00	141.77

TANKS 4.0.9d
Emissions Report - Detail Format
Tank Indentification and Physical Characteristics

Identification

User Identification:	N-845-29-0 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
Eff. Col. Diam. (ft):	1.10

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

Meterological 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-845-29-0 Annual PE2 - Internal Floating Roof Tank
Stockton, California

Mixture/Component	Month	Daily Liquid Surf. Temperature (deg F) Avg.	Min.	Max.	Liquid Bulk Temp (deg F)	Vapor Pressure (psia) Avg	Min.	Max.	Vapor Mol. Weight	Liquid Mass Fract.	Vapor Mass Fract.	Mol. Weight	Basis for Vapor Pressure Calculations
Gasoline (RVP 14)	Jan	55.08	51.49	58.67	61.57	6.8836	N/A	N/A	62.0000			103.00	Option 4: RVP=14, ASTM Slope=3
Gasoline (RVP 14)	Feb	57.96	53.17	62.75	61.57	7.2649	N/A	N/A	62.0000			103.00	Option 4: RVP=14, ASTM Slope=3
Gasoline (RVP 14)	Mar	60.22	54.36	66.07	61.57	7.5756	N/A	N/A	62.0000			103.00	Option 4: RVP=14, ASTM Slope=3
Gasoline (RVP 6)	Apr	63.26	55.98	70.54	61.57	3.1390	N/A	N/A	69.0000			92.00	Option 4: RVP=6, ASTM Slope=3
Gasoline (RVP 6)	May	67.10	58.83	75.36	61.57	3.3942	N/A	N/A	69.0000			92.00	Option 4: RVP=6, ASTM Slope=3
Gasoline (RVP 6)	Jun	70.33	61.45	79.22	61.57	3.6226	N/A	N/A	69.0000			92.00	Option 4: RVP=6, ASTM Slope=3
Gasoline (RVP 6)	Jul	72.25	63.02	81.48	61.57	3.7638	N/A	N/A	69.0000			92.00	Option 4: RVP=6, ASTM Slope=3
Gasoline (RVP 6)	Aug	71.45	62.84	80.06	61.57	3.7042	N/A	N/A	69.0000			92.00	Option 4: RVP=6, ASTM Slope=3
Gasoline (RVP 6)	Sep	69.03	61.28	76.77	61.57	3.5290	N/A	N/A	69.0000			92.00	Option 4: RVP=6, ASTM Slope=3
Gasoline (RVP 14)	Oct	64.64	58.13	71.16	61.57	8.2151	N/A	N/A	62.0000			103.00	Option 4: RVP=14, ASTM Slope=3
Gasoline (RVP 14)	Nov	58.87	54.21	63.53	61.57	7.3890	N/A	N/A	62.0000			103.00	Option 4: RVP=14, ASTM Slope=3
Gasoline (RVP 14)	Dec	54.98	51.51	58.44	61.57	6.8705	N/A	N/A	62.0000			103.00	Option 4: RVP=14, ASTM Slope=3

TANKS 4.0.9d
Emissions Report - Detail Format
Detail Calculations (AP-42)

N-845-29-0 Annual PE2 - Internal Floating Roof Tank
Stockton, California

Month	January	February	March	April	May	June	July	August	September	October	November	December
Rim Seal Losses (lb):	31.0203	33.4298	35.4783	13.2262	14.4516	15.5712	16.2743	15.9761	15.1093	39.9628	34.2384	30.9394
Seal Factor A (lb-mole/ft-yr):	0.6000	0.6000	0.6000	0.6000	0.6000	0.6000	0.6000	0.6000	0.6000	0.6000	0.6000	0.6000
Seal Factor B (lb-mole/ft-yr (mph)^n):	0.4000	0.4000	0.4000	0.4000	0.4000	0.4000	0.4000	0.4000	0.4000	0.4000	0.4000	0.4000
Value of Vapor Pressure Function:	0.1564	0.1685	0.1788	0.0599	0.0655	0.0705	0.0737	0.0724	0.0684	0.2014	0.1726	0.1559
Vapor Pressure at Daily Average Liquid Surface Temperature (psia):	6.8836	7.2649	7.5756	3.1390	3.3942	3.6226	3.7638	3.7042	3.5290	8.2151	7.3890	6.8705
Tank Diameter (ft):	64.0000	64.0000	64.0000	64.0000	64.0000	64.0000	64.0000	64.0000	64.0000	64.0000	64.0000	64.0000
Vapor Molecular Weight (lb/lb-mole):	62.0000	62.0000	62.0000	69.0000	69.0000	69.0000	69.0000	69.0000	69.0000	62.0000	62.0000	62.0000
Product Factor:	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Withdrawal Losses (lb):	22.6613	22.6613	22.6613	22.6613	22.6613	22.6613	22.6613	22.6613	22.6613	22.6613	22.6613	22.6613
Number of Columns:	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Effective Column Diameter (ft):	1.1000	1.1000	1.1000	1.1000	1.1000	1.1000	1.1000	1.1000	1.1000	1.1000	1.1000	1.1000
Net Throughput (gal/mo.):	7,560,000.0000	7,560,000.0000	7,560,000.0000	7,560,000.0000	7,560,000.0000	7,560,000.0000	7,560,000.0000	7,560,000.0000	7,560,000.0000	7,560,000.0000	7,560,000.0000	7,560,000.0000
Shell Clingage Factor (bbl/1000 sqft):	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015
Average Organic Liquid Density (lb/gal):	5.6000	5.6000	5.6000	5.6000	5.6000	5.6000	5.6000	5.6000	5.6000	5.6000	5.6000	5.6000
Tank Diameter (ft):	64.0000	64.0000	64.0000	64.0000	64.0000	64.0000	64.0000	64.0000	64.0000	64.0000	64.0000	64.0000
Deck Fitting Losses (lb):	117.2955	126.4065	134.1524	50.0114	54.6449	58.8785	61.5371	60.4097	57.1321	151.1092	129.4638	116.9895
Value of Vapor Pressure Function:	0.1564	0.1685	0.1788	0.0599	0.0655	0.0705	0.0737	0.0724	0.0684	0.2014	0.1726	0.1559
Vapor Molecular Weight (lb/lb-mole):	62.0000	62.0000	62.0000	69.0000	69.0000	69.0000	69.0000	69.0000	69.0000	62.0000	62.0000	62.0000
Product Factor:	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Tot. Roof Fitting Loss Fact.(lb-mole/yr):	145.2000	145.2000	145.2000	145.2000	145.2000	145.2000	145.2000	145.2000	145.2000	145.2000	145.2000	145.2000
Deck Seam Losses (lb):	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Deck Seam Length (ft):	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Deck Seam Loss per Unit Length Factor (lb-mole/ft-yr):	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Deck Seam Length Factor(ft/sqft):	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Tank Diameter (ft):	64.0000	64.0000	64.0000	64.0000	64.0000	64.0000	64.0000	64.0000	64.0000	64.0000	64.0000	64.0000
Vapor Molecular Weight (lb/lb-mole):	62.0000	62.0000	62.0000	69.0000	69.0000	69.0000	69.0000	69.0000	69.0000	62.0000	62.0000	62.0000
Product Factor:	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total Losses (lb):	170.9770	182.4976	192.2920	85.8988	91.7578	97.1110	100.4727	99.0472	94.9027	213.7333	186.3634	170.5901

Roof Fitting/Status	Quantity	Roof Fitting Loss Factors KFa(lb-mole/yr)	KFb(lb-mole/(yr mph^n))	m	Losses(lb)
Slotted Guide-Pole/Sample Well/Gask Sliding Covr, w. Float,Sleeve,Wiper	1	11.00	9.90	0.89	84.6432
Access Hatch (24-in. Diam.)/Bolted Cover, Gasketed	1	1.60	0.00	0.00	12.3117
Automatic Gauge Float Well/Bolted Cover, Gasketed	1	2.80	0.00	0.00	21.5455
Gauge-Hatch/Sample Well (8-in. Diam.)/Weighted Mech. Actuation, Gask.	1	0.47	0.02	0.97	3.6166
Vacuum Breaker (10-in. Diam.)/Weighted Mech. Actuation, Gask.	1	6.20	1.20	0.94	47.7080
Roof Leg (3-in. Diameter)/Adjustable, Pontoon Area, Sock	4	1.20	0.14	0.65	36.9352
Roof Leg (3-in. Diameter)/Adjustable, Center Area, Gasketed	4	0.53	0.11	0.13	16.3131
Rim Vent (6-in. Diameter)/Weighted Mech. Actuation, Gask.	1	0.71	0.10	1.00	5.4633
Column Well (24-in. Diam.)/Pipe Col.-Sliding Cover, Gask.	1	25.00	0.00	0.00	192.3709
Column Well (24-in. Diam.)/Built-Up Col.-Sliding Cover, Gask.	1	33.00	0.00	0.00	253.9296
Ladder Well (36-in. Diam.)/Sliding Cover, Gasketed	1	56.00	0.00	0.00	430.9108
Roof Drain (3-in. Diameter)/Open	1	1.50	0.21	1.70	11.5423

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-845-29-0 Annual PE2 - Internal Floating Roof Tank
Stockton, California

	Losses(lbs)				
Components	Rim Seal Loss	Withdrawl Loss	Deck Fitting Loss	Deck Seam Loss	Total Emissions
Gasoline (RVP 14)	205.07	135.97	775.42	0.00	1,116.45
Gasoline (RVP 6)	90.61	135.97	342.61	0.00	569.19

TANKS 4.0.9d
Emissions Report - Detail Format
Tank Indentification and Physical Characteristics

Identification

User Identification:	N-845-29-0 Daily 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
Eff. Col. Diam. (ft):	1.10

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

Meterological 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-845-29-0 Daily PE2 - Internal Floating Roof Tank
Stockton, California

Mixture/Component	Month	Daily Liquid Surf. Temperature (deg F) Avg.	Min.	Max.	Liquid Bulk Temp (deg F)	Vapor Pressure (psia) Avg.	Min.	Max.	Vapor Mol. Weight	Liquid Mass Fract.	Vapor Mass Fract.	Mol. Weight	Basis for Vapor Pressure Calculations
Gasoline (RVP 14)	Oct	64.64	58.13	71.16	61.57	8.2151	N/A	N/A	62.0000			103.00	Option 4: RVP=14, ASTM Slope=3

TANKS 4.0.9d
Emissions Report - Detail Format
Detail Calculations (AP-42)

N-845-29-0 Daily PE2 - Internal Floating Roof Tank
Stockton, California

Month:	January	February	March	April	May	June	July	August	September	October	November	December
Rim Seal Losses (lb):										39.9628		
Seal Factor A (lb-mole/ft-yr):										0.6000		
Seal Factor B (lb-mole/ft-yr (mph)^n):										0.4000		
Value of Vapor Pressure Function:										0.2014		
Vapor Pressure at Daily Average Liquid Surface Temperature (psia):										8.2151		
Tank Diameter (ft):										64.0000		
Vapor Molecular Weight (lb/lb-mole):										62.0000		
Product Factor:										1.0000		
Withdrawal Losses (lb):										271.9354		
Number of Columns:										1.0000		
Effective Column Diameter (ft):										1.1000		
Net Throughput (gal/mo.):										90,720,000.0000		
Shell Clingage Factor (bbl/1000 sqft):										0.0015		
Average Organic Liquid Density (lb/gal):										5.6000		
Tank Diameter (ft):										64.0000		
Deck Fitting Losses (lb):										151.1092		
Value of Vapor Pressure Function:										0.2014		
Vapor Molecular Weight (lb/lb-mole):										62.0000		
Product Factor:										1.0000		
Tot. Roof Fitting Loss Fact.(lb-mole/yr):										145.2000		
Deck Seam Losses (lb):										0.0000		
Deck Seam Length (ft):										0.0000		
Deck Seam Loss per Unit Length Factor (lb-mole/ft-yr):										0.0000		
Deck Seam Length Factor(ft/sqft):										0.0000		
Tank Diameter (ft):										64.0000		
Vapor Molecular Weight (lb/lb-mole):										62.0000		
Product Factor:										1.0000		
Total Losses (lb):										463.0074		

Roof Fitting/Status	Quantity	Roof Fitting Loss Factors KFa(lb-mole/yr)	KFb(lb-mole/(yr mph^n))	m	Losses(lb)
Slotted Guide-Pole/Sample Well/Gask Sliding Covr, w. Float,Sleeve,Wiper	1	11.00	9.90	0.89	11.6672
Access Hatch (24-in. Diam.)/Bolted Cover, Gasketed	1	1.60	0.00	0.00	1.6970
Automatic Gauge Float Well/Bolted Cover, Gasketed	1	2.80	0.00	0.00	2.9698
Gauge-Hatch/Sample Well (8-in. Diam.)/Weighted Mech. Actuation, Gask.	1	0.47	0.02	0.97	0.4985
Vacuum Breaker (10-in. Diam.)/Weighted Mech. Actuation, Gask.	1	6.20	1.20	0.94	6.5761
Roof Leg (3-in. Diameter)/Adjustable, Pontoon Area, Sock	4	1.20	0.14	0.65	5.0911
Roof Leg (3-in. Diameter)/Adjustable, Center Area, Gasketed	4	0.53	0.11	0.13	2.2486
Rim Vent (6-in. Diameter)/Weighted Mech. Actuation, Gask.	1	0.71	0.10	1.00	0.7531
Column Well (24-in. Diam.)/Pipe Col,-Sliding Cover, Gask.	1	25.00	0.00	0.00	26.5164
Column Well (24-in. Diam.)/Built-Up Col.-Sliding Cover, Gask.	1	33.00	0.00	0.00	35.0016
Ladder Well (36-in. Diam.)/Sliding Cover, Gasketed	1	56.00	0.00	0.00	59.3967
Roof Drain (3-in. Diameter)/Open	1	1.50	0.21	1.70	1.5910

TANKS 4.0.9d
Emissions Report - Detail Format
Individual Tank Emission Totals

Emissions Report for: October

N-845-29-0 Daily PE2 - Internal Floating Roof Tank
Stockton, California

	Losses(lbs)				
Components	Rim Seal Loss	Withdrawl Loss	Deck Fitting Loss	Deck Seam Loss	Total Emissions
Gasoline (RVP 14)	39.96	271.94	151.11	0.00	463.01

APPENDIX D
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:

QNEC = PE2 - PE1, where:

QNEC = Quarterly Net Emissions Change for each emissions unit, lb/qtr.
PE2 = Post Project Potential to Emit for each emissions unit, lb/qtr.
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-845-28

$PE2_{quarterly}$ = $PE2_{annual}$ ÷ 4 quarters/year
= 391 lb/year ÷ 4 qtr/year
= 97.75 lb VOC/qtr

$PE1_{quarterly}$ = $PE1_{annual}$ ÷ 4 quarters/year
= 0 lb/year ÷ 4 qtr/year
= 0 lb VOC/qtr

Quarterly NEC [QNEC]			
	PE2 (lb/qtr)	PE1 (lb/qtr)	QNEC (lb/qtr)
NO_X	0	0	0
SO_X	0	0	0
PM_{10}	0	0	0
CO	0	0	0
VOC	97.75	0	97.75

N-845-29

$PE2_{quarterly}$ = $PE2_{annual}$ ÷ 4 quarters/year
= 1,776 lb/year ÷ 4 qtr/year
= 444 lb VOC/qtr

$PE1_{quarterly}$ = $PE1_{annual}$ ÷ 4 quarters/year
= 0 lb/year ÷ 4 qtr/year
= 0 lb VOC/qtr

Quarterly NEC [QNEC]			
	PE2 (lb/qtr)	PE1 (lb/qtr)	QNEC (lb/qtr)
NO_X	0	0	0
SO_X	0	0	0
PM_{10}	0	0	0
CO	0	0	0
VOC	444	0	444

N-845-30

$PE2_{quarterly}$ = $PE2_{annual}$ ÷ 4 quarters/year
= 227 lb/year ÷ 4 qtr/year
= 56.75 lb VOC/qtr

$PE1_{quarterly}$ = $PE1_{annual}$ ÷ 4 quarters/year
= 0 lb/year ÷ 4 qtr/year
= 0 lb VOC/qtr

Quarterly NEC [QNEC]			
	PE2 (lb/qtr)	PE1 (lb/qtr)	QNEC (lb/qtr)
NO_X	0	0	0
SO_X	0	0	0
PM_{10}	0	0	0
CO	0	0	0
VOC	56.75	0	56.75

APPENDIX E
BACT Guidelines

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

Pollutant	Achieved in Practice or contained in the SIP	Technologically Feasible	Alternate Basic Equipment
VOC	95% control (Primary metal shoe seal with secondary wiper seal, or equal)	95% Control (Dual wiper seal with drip curtain or primary metal shoe seal with secondary wiper seal, or equal.)	

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 s 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 F
BACT Analyses

Units N-845-28 & -29

Top-Down BACT Analysis for VOC emissions from the proposed covered internal floating roof organic liquid storage tanks

The following VOC emission control technologies are listed in BACT guideline 7.3.3, 4th 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 has proposed to install covered internal floating roof storage tanks equipped with both primary metal shoe seals and secondary wiper seals, 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, a cost effectiveness analysis is not performed.

Step 5 - Select BACT

As part of this BACT analysis, the District also considered the use of a domed external floating roof tank as an alternative to the proposed covered internal floating roof tank. Functionally, an internal floating roof tank utilizes the same mechanisms to reduce emissions as an external floating roof tank equipped with a fixed geodesic dome roof. In both cases, the primary emission reduction mechanism is the floating roof, which significantly reduces the vapor space above the organic liquid surface. In addition, the fixed roof employed by both tank designs functions to block the wind and prevent wind induced losses from the organic liquid that "clings" to the tanks interior shell as the roof moves up and down. Furthermore, comparison of a regular fixed roof tank (which represents uncontrolled tank), a domed external floating roof tank, and an internal floating roof tank using the same tank parameters shows that, relative to an uncontrolled tank, the VOC control efficiency of an internal floating roof tank is very similar to that of a domed external floating roof tank. Therefore, the District considers an internal floating roof tank to be equivalent to a domed external floating roof tank for BACT purposes.

The applicant has proposed to install covered internal floating roof storage tanks equipped with both primary metal shoe seals and secondary wiper seals. Therefore, BACT for VOC emissions is satisfied.

Unit N-845-30

Top-Down BACT Analysis for VOC emissions from tanker truck hose disconnections at the proposed denatured ethanol offloading operation

As shown in Section VIII.A.1.d above, BACT is triggered only for VOC emissions from hose disconnections from the bulk ethanol tanker truck offloading operation. The District considers the following techniques that could reduce VOC emissions from hose disconnections from the proposed tanker truck denatured ethanol offloading operation.

Step 1 - Identify all control technologies

Achieved in Practice or contained in the SIP:

Use of cam lock fitting or equivalent on offloading lines with an average disconnect loss of no greater than 8 ml liquid per disconnect

Technologically Feasible:

None

Alternate Basic Equipment:

Use of dry break couplers on offloading lines

Step 2 - Eliminate technologically infeasible options

It is important to note that organic liquid *loading* operations and *offloading* operations are two distinctly different operations.

For organic loading operations
Organic liquid, such as gasoline, diesel, biodiesel, and E85/E90 is loaded from the facility's storage tanks into an empty cargo tanker truck via a loading rack. The displaced organic vapor inside the empty tanker truck is vented through the loading rack vapor line back to a vapor recovery system.

Bulk terminals in California utilize standardized loading equipment including four-inch-diameter connection arms, each equipped with a dry break coupling device that can accommodate the high liquid flow rate during the loading process, which can range from 550-600 gallons per minute.

Loading racks at bulk fueling terminals, and cargo tank truck used for transfer and transport of gasoline in California must be equipped with a vapor recovery system that certified by California Air Resource Board (CARB) under CP-203 vapor certification procedure and CP-204 vapor certification procedure, respectively[4]. The owner or operator of the equipment is required to test and apply for certification annually.

Cargo tanker trucks commonly used in California are equipped with two sets of connectors, one set dedicated for loading (receiving) products and the other set dedicated for offloading products (see image of these connectors at the end of this analysis, the upper set connectors are for loading purposes and the bottom set connectors are for offloading purposes). The typical configurations of these connectors are: a) loading connectors – four inch diameter connection with a compatible dry break coupling device, and b) offloading connectors – three inch diameter connection with cam lock fitting device.

Therefore, use of dry break couplers is determined to be "industry standard" for organic liquid **loading** operations.

For organic liquid offloading operations
There are two organic liquid offloading scenarios:

- Organic liquid, such as denatured ethanol, is offloaded from a cargo tanker truck to the bulk terminal facility's internal floating roof storage tanks, or
- Organic liquid, such as gasoline, diesel, or biodiesel is offloaded under gravity to underground storage tanks at retail gasoline dispensing facilities.

In order to ensure a steady flow of the offloading process at the bulk terminal, an offload pump rated in the range of 250 to 300 gallon per minute is often used. However, no offload pump is used at most gasoline dispensing facilities when offloading products. Products are gravity fed into the underground storage tanks at each retail gasoline facility.

Bulk terminals in California receive gasoline by pipelines that are directly connected to refineries, so gasoline is not offloaded to the bulk fueling terminals via the use of cargo tanker trucks. Denatured ethanol does not meet the CARB's definition of gasoline, and therefore, vapor certification is not required by CARB for cargo tank truck dedicated to offloading denatured ethanol. Therefore, no certified equipment, such as dry break coupling devices is required for denatured ethanol offloading operations.

As stated above, cargo tank trucks are equipped with two different sets of dedicated connectors for products loading and offloading purposes. These connectors are not interchangeable, and to the District's knowledge no organic liquid cargo tanker truck offloading operation uses dry break coupler technology. Furthermore, it is neither reasonably possible nor economically feasible for a bulk fueling terminal facility to require 3rd party cargo tanker trucks to retrofit their truck tank's offloading connections with dry break coupler technology for denatured ethanol offloading. Therefore, using dry break couplers for denatured ethanol cargo tanker truck offloading operations has been removed from consideration at this time.

[4] https://www.arb.ca.gov/vapor/vapor.htm

Step 3 - Rank remaining options by control effectiveness

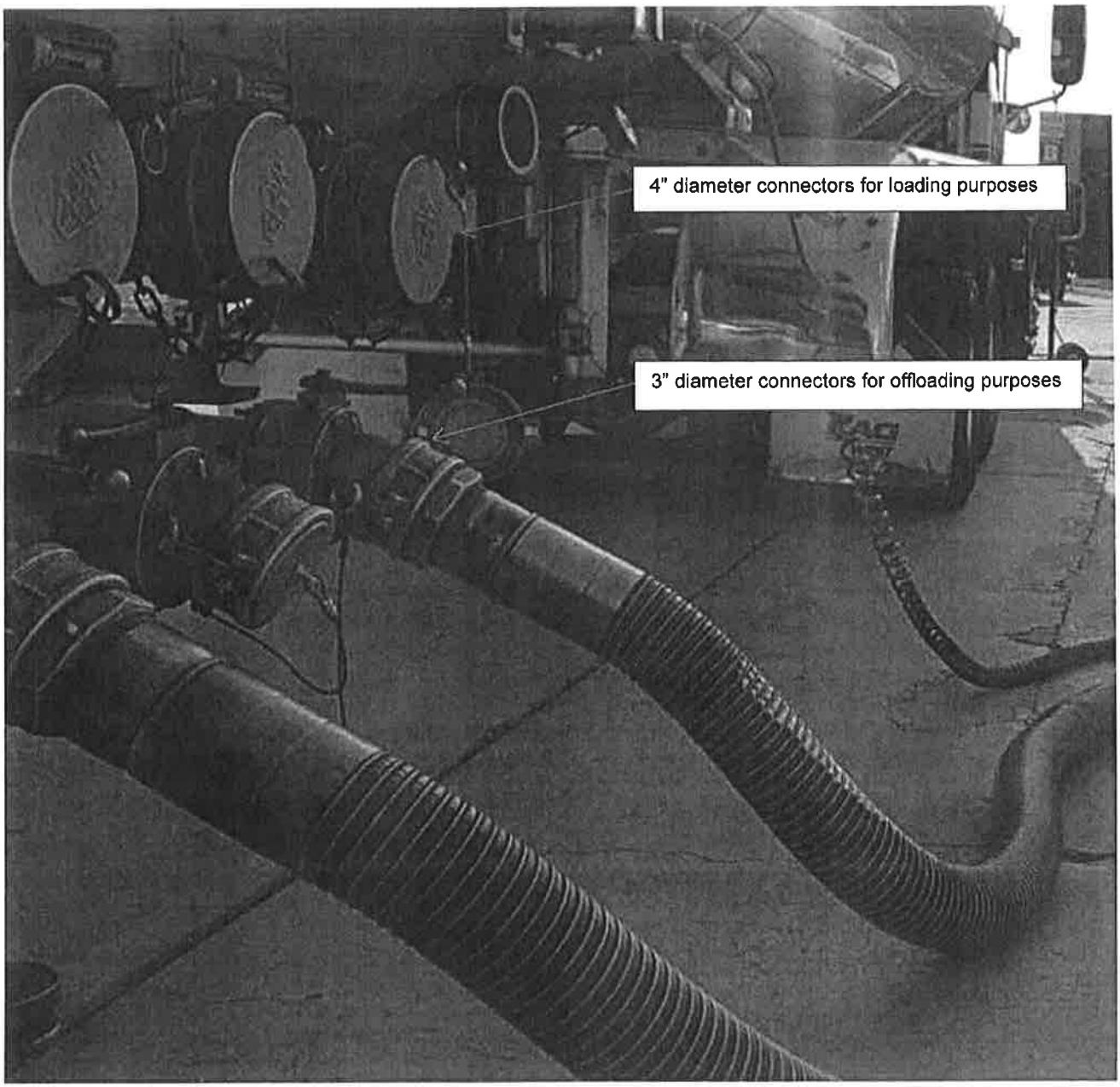
1. Use of cam lock fitting or equivalent on offloading lines with an average disconnect loss of no greater than 8 ml liquid per disconnect

Step 4 - Cost Effectiveness Analysis

The only control technology that is not eliminated is the use of cam lock fitting or equivalent on offloading lines with an average disconnect loss of no greater than 8 ml liquid per disconnect. The applicant is proposing the use of cam lock fitting and limit excess drainage at disconnect to no more than 8 ml liquid per disconnect through good management practices. Therefore, the cost effectiveness analysis is not performed.

Step 5 - Select BACT

The applicant has proposed the use of cam lock fitting on the offloading lines and limit the excess drainage at disconnect to no more than 8 ml liquid per disconnect. Therefore, BACT for VOC emissions is satisfied.


4" diameter connectors for loading purposes
3" diameter connectors for offloading purposes

APPENDIX G
Compliance Certificate

TESORO

Tesoro Refining & Marketing Company and
Tesoro Logistics Operations LLC (Tesoro)
Stockton Terminal
3003 Navy Drive
Stockton, CA 95206
562-728-2265

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:

Facility	Jurisdiction	Individual Contacted	Non-Compliance Items as of April 4, 2016	Schedules for Compliance
Los Angeles Refinery – Wilmington Operations	South Coast Air Quality Management District	Robin Schott – Environmental Superintendent	None	None
Sulfur Recovery Plant	South Coast Air Quality Management District	Robin Schott – Environmental Superintendent	None	None
Los Angeles Refinery – Carson Operations	South Coast Air Quality Management District	Robin Schott – Environmental Superintendent	None	None

Los Angeles Refinery – Calciner Operations	South Coast Air Quality Management District	Dominic DiCarlo – Sr. Environmental Specialist	None	None
Golden Eagle Refinery	Bay Area Air Quality Management District	Chris McDowell – Lead Environmental Engineer	None	None
Amorco Terminal	Bay Area Air Quality Management District	Chris McDowell – Lead Environmental Engineer	None	None
Colton Terminal	South Coast Air Quality Management District	Ruthanne Walker Sr. Environmental Specialist	None	None
Carson Products Terminal	South Coast Air Quality Management District	Ruthanne Walker Sr. Environmental Specialist	None	None
Vinvale Terminal (Tesoro Logistics, ID #174710)	South Coast Air Quality Management District	Ruthanne Walker Sr. Environmental Specialist	None	None
Vinvale Terminal (Tesoro Refining & Marketing Company LLC, Vinvale Remediation Facility, ID # 174727)	South Coast Air Quality Management District	Darrell Fah Retail Environmental Remediation Admin.	None	None
Wilmington Sales Terminal	South Coast Air Quality Management District	Ruthanne Walker Sr. Environmental Specialist	None	None
East Hynes Terminal	South Coast Air Quality Management District	Stephen Comley Sr. Environmental Specialist	None	None
Hathaway Terminal	South Coast Air Quality Management District	Stephen Comley Sr. Environmental Specialist	None	None

Stockton Terminal	San Joaquin Valley Air Quality Management District	Stephen Comley Sr. Environmental Specialist	None	None
Marine Terminal 2	South Coast Air Quality Management District	Donna DiRocco Sr. Environmental Specialist	None	None
Carson Crude Terminal	South Coast Air Quality Management District	Donna DiRocco Sr. Environmental Specialist	None	None
Long Beach Marine Terminal	South Coast Air Quality Management District	Donna DiRocco Sr. Environmental Specialist	None	None

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
Tesoro Logistics Operations LLC

Attachment:

cc: Wai-Man So – SJVAPCD, Air Quality Engineer

APPENDIX H
Gasoline Distribution Industry (Stage I) – Background Information for Proposal Standards

United States
Environmental Protection
Agency

Office of Air Quality
Planning and Standards
Research Triangle Park NC 27711

EPA-453/R-94-002a
January 1994

Air

EPA

Gasoline Distribution Industry (Stage I) - Background Information for Proposed Standards

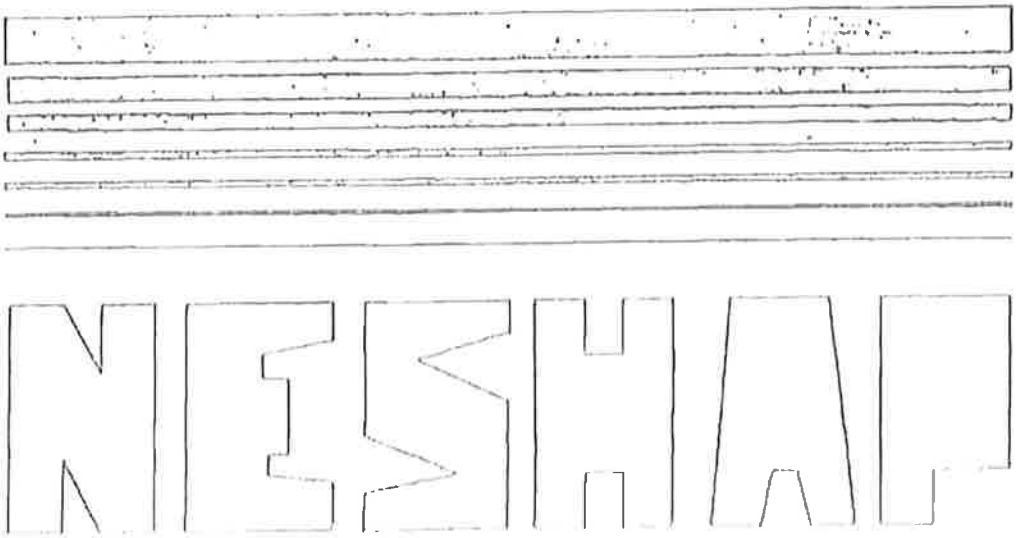


TABLE 3-1. VAPOR PROFILE OF NORMAL GASOLINE

HAZARDOUS AIR POLLUTANT[a]	HAP TO VOC RATIO (percentage by weight) MINIMUM	ARITHMETIC AVERAGE	MAXIMUM
Hexane	0.3	1.6	4.4
Benzene	0.2	0.9	2.2
Toluene	0.4	1.3	4
2,2,4 Trimethylpentane (iso-octane)	0.03	0.8	2.6
Xylenes	0.05	0.5	1.5
Ethylbenzene	0.03	0.1	0.5
TOTAL HAPs[b]	2	4.8	11

[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 I
HRA Summary

San Joaquin Valley Air Pollution Control District
Risk Management Review

To:	Wai-Man So – Permit Services
From:	Kyle Melching – Technical Services
Date:	February 9, 2017
Facility Name:	Tesoro Logistics Operations LLC
Location:	3003 Navy Drive, Stockton
Application #(s):	N-845-28-0, 29-0, 30-0
Project #:	N-1163274

A. RMR SUMMARY

RMR Summary					
Categories	**Ethanol Storage Tank (Unit 28-0)**	**Gasoline Storage Tank (Unit 29-0)**	**Ethanol Bulk Offloading (Unit 30-0)**	**Project Totals**	**Facility Totals**
Prioritization Score	0.65	43.6	0.38	>1.0	>1.0
Acute Hazard Index	0.01	0.24	0.01	0.26	0.26
Chronic Hazard Index	0.00	0.02	0.00	0.02	0.02
Maximum Individual Cancer Risk	1.84E-08	1.60E-06	4.70E-09	1.63E-06	1.74E-06
T-BACT Required?	**No**	**Yes**	**No**		
Special Permit Requirements?	**No**	**No**	**No**		

Proposed Permit Requirements

To ensure that human health risks will not exceed District allowable levels; the following shall be included as requirements for:

No special requirements are required.

T-BACT is required for Unit 29-0 because of emissions of Naphthalene & Benzene which are both VOCs.

B. RMR REPORT

I. Project Description

Technical Services received a request on February 8, 2017, to perform a Risk Management Review (RMR) and Ambient Air Quality Analysis (AAQA) 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, and install a denatured ethanol bulk offloading operation.

This project results in only VOC emission. There is no current Ambient Air Quality standard for VOC's; therefore, no AAQA was performed.

II. Analysis

VOC emission rates used 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 28-0			
Source Type	Area	**Location Type**	Urban
Approximate Area Size (m^2)	184.8	**Closest Receptor (m)**	20
Release Height (m)	12.19	**Type of Receptor**	Business
VOC Emission Rates (lbs)	0.222 hr 391 yr		

Analysis Parameters Unit 29-0			
Source Type	Area	**Location Type**	Urban
Approximate Area Size (m^2)	380.1	**Closest Receptor (m)**	23
Release Height (m)	12.19	**Type of Receptor**	Business
VOC Emission Rates (lbs)	0.833 hr 1,776 yr		

Analysis Parameters Unit 30-0 (Truck Offloading)			
Source Type	Area	**Location Type**	Urban
Approximate Area Size (m^2)	105.4	**Closest Receptor (m)**	34
Release Height (m)	1	**Type of Receptor**	Business
VOC Emission Rates (lbs)[1]	0.282 hr 227 yr		

[1]As a worst case scenario, the total VOC emission rates calculated and submitted by the processing engineer were modeled at both the truck offloading area and the rail offloading area. The area that resulted in the higher risk was used for this project.

Analysis Parameters Unit 30-0 (Rail Offloading)			
Source Type	Area	**Location Type**	Urban
Approximate Area Size (m^2)	233.6	**Closest Receptor (m)**	13
Release Height (m)	1	**Type of Receptor**	Business
VOC Emission Rates (lbs)[1]	0.282 hr 227 yr		

[1]As a worst case scenario, the total VOC emission rates calculated and submitted by the processing engineer were modeled at both the truck offloading area and the rail offloading area. The area that resulted in the higher risk was used for this project.

III. Conclusions

Units 28-0 & 30-0

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.

Unit 29-0

The acute and chronic indices are below 1.0, and the cancer risk associated with the unit is greater than 1.0 in a million, but less than 20 in a million. **In accordance with the District's Risk Management Policy, the unit is approved with Toxic Best Available Control Technology (T-BACT).**

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 & Attachments
B. Emission Calculation Worksheets
C. Prioritization
D. SHARP Risk Results
E. Facility Summary

APPENDIX J
Construction and Mobile Source Emission Calculations

Table 1. Summary of Construction and Operational Emissions from Mobile Sources

Source	Potential Emissions (tpy)									
	ROG	NOX	CO	SO_2	Fugitive PM_{10}	Exhaust PM_{10}	Total PM_{10}	Fugitive $PM_{2.5}$	Exhaust $PM_{2.5}$	Total $PM_{2.5}$
Construction Emissions	0.17	1.28	0.88	0.00	0.01	0.08	0.09	0.00	0.08	0.08
Project Truck Traffic Increase	0.08	0.70	1.28	0.00	0.05	0.01	0.05	0.01	0.01	0.02
Project Rail Traffic Increase	3.13E-05	5.15E-03	4.52E-04	2.04E-09	-	1.33E-06	1.33E-06	-	1.12E-06	1.12E-06
Total Project Emissions:	**0.25**	**1.98**	**2.16**	**0.00**	**0.05**	**0.09**	**0.14**	**0.01**	**0.08**	**0.10**

Table 2. CalEEMod Construction Equipment Emission Calculations

Overall Annual Construction Emissions [1]										
Year	ROG	NOX	CO	SO_2	Fugitive PM_{10}	Exhaust PM_{10}	Total PM_{10}	Fugitive $PM_{2.5}$	Exhaust $PM_{2.5}$	Total $PM_{2.5}$
	tons/yr	tons/yr	tons/yr	tons/yr	tons/yr	tons/yr	tons/yr	tons/yr	tons/yr	tons/yr
2016	0.09	0.67	0.45	7.30E-04	3.33E-03	0.04	0.05	9.00E-04	0.04	0.04
2017	0.08	0.60	0.43	7.10E-04	3.25E-03	0.04	0.04	8.80E-04	0.04	0.04
Total	0.17	1.28	0.88	1.44E-03	6.58E-03	0.08	0.09	1.78E-03	0.08	0.08
2016 Construction Emissions [1]										
	ROG	NOX	CO	SO_2	Fugitive PM_{10}	Exhaust PM_{10}	Total PM_{10}	Fugitive $PM_{2.5}$	Exhaust $PM_{2.5}$	Total $PM_{2.5}$
	tons/yr	tons/yr	tons/yr	tons/yr	tons/yr	tons/yr	tons/yr	tons/yr	tons/yr	tons/yr
Off-Road Equipment	0.09	0.66	0.42	6.70E-04	0.00E+00	0.04	0.04	0.00E+00	0.04	0.04
Worker Trips	1.39E-03	0.01	0.02	3.00E-05	7.80E-04	2.10E-04	9.90E-04	2.20E-04	2.00E-04	4.20E-04
Vendor Trips	1.15E-03	1.45E-03	0.01	3.00E-05	2.55E-03	2.00E-05	2.57E-03	6.80E-04	2.00E-05	7.00E-04
2017 Construction Emissions [1]										
	ROG	NOX	CO	SO_2	Fugitive PM_{10}	Exhaust PM_{10}	Total PM_{10}	Fugitive $PM_{2.5}$	Exhaust $PM_{2.5}$	Total $PM_{2.5}$
	tons/yr	tons/yr	tons/yr	tons/yr	tons/yr	tons/yr	tons/yr	tons/yr	tons/yr	tons/yr
Off-Road Equipment	0.08	0.59	0.40	6.50E-04	0.00E+00	0.04	0.04	0.00E+00	0.04	0.04
Worker Trips	1.18E-03	0.01	0.01	3.00E-05	7.60E-04	1.70E-04	9.40E-04	2.20E-04	1.60E-04	3.80E-04
Vendor Trips	9.80E-04	1.25E-03	0.01	3.00E-05	2.49E-03	2.00E-05	2.50E-03	6.60E-04	2.00E-05	6.80E-04

1. All emissions calculated using CalEEMod utilizing construction schedule and construction equipment listing from Table 6. All other parameters used in calculations were CalEEMod default factors.

Table 3. Overall Annual Operational Emissions

Year	ROG	NOx	CO	SO_2	Fugitive PM_{10}	Exhaust PM_{10}	Total PM_{10}	Fugitive $PM_{2.5}$	Exhaust $PM_{2.5}$	Total $PM_{2.5}$
	tons/yr	tons/yr	tons/yr	tons/yr	tons/yr	tons/yr	tons/yr	tons/yr	tons/yr	tons/yr
Truck Trips Increase [1]	0.08	0.70	1.28	2.04E-03	0.05	9.53E-03	0.05	0.01	8.76E-03	0.02
Locomotives Increase	3.13E-05	5.15E-03	4.52E-04	2.04E-09	-	1.33E-06	1.33E-06	-	1.12E-06	1.12E-06
Total	0.08	0.71	1.28	2.04E-03	4.53E-02	9.53E-03	0.05	0.01	8.76E-03	0.02

1. Truck Trip emissions calculated using CalEEMod utilizing increase operational vehicle counts. Increased truck traffic equal to 40 heavy-duty trucks. Increased rail traffic equal to 1 locamotive. All other parameters used in calculations were CalEEMod default factors.

Table 4. On-site Locomotive Travel Exhaust Emissions at Half Throttle

Locamotive HP:	750	(Half Throttle)
hr/yr:	36.5	(365 trains/yr @ 1 hr/train, 10% on time is spent at half throttle)

Emission Factor	VOC	NOx	CO	SOx	PM_{10}	$PM_{2.5}$
Emissions Factor (grams/bhp-hr) [1]	0.63	8.10	2.40	0.0051	0.13	0.12
Emissions Factor (lb/bhp-hr)	1.39E-03	1.79E-02	5.29E-03	1.12E-05	2.87E-04	2.64E-04
Emissions (lb/hr)	1.04	13.39	3.97	8.43E-03	0.21	0.20
Emissions (lb/year)	0.05	8.73	0.77	3.46E-06	2.25E-03	1.90E-03

1. 40 CFR 1033.101 - EXHAUST EMISSION STANDARDS Table 2 - Tier 2. CARB: Emission factors for SOx based on 15 ppmv S in fuel

Table 5. On-site Locomotive Travel Exhaust Emissions at Half Throttle

Locamotive HP:	15	(Idling)
hr/yr:	328.5	(365 trains/yr @ 1 hr/train, 90% on time is spent idling)

Emission Factor	VOC	NOx	CO	SOx	PM_{10}	$PM_{2.5}$
Emissions Factor (grams/bhp-hr) [1]	0.63	8.10	2.40	5.10E-03	0.13	0.12
Emissions Factor (lb/bhp-hr)	1.39E-03	1.79E-02	5.29E-03	1.12E-05	2.87E-04	2.64E-04
Emissions (lb/hr)	2.09E-02	2.68E-01	7.94E-02	1.69E-04	4.30E-03	3.96E-03
Emissions (lb/year)	0.01	1.57	0.14	6.23E-07	4.05E-04	3.43E-04

1. 40 CFR 1033.101 - EXHAUST EMISSION STANDARDS Table 2 - Tier 2. CARB: Emission factors for SOx based on 15 ppmv S in fuel

Table 6. On-site Only Truck Travel Operational Emissions

Onsite Trip Distance:	0.1	miles
Total Trip Distance:	7.3	miles (CalEEMod Default Value)
Onsite Trip Distance Percentage:	1.4%	

Annual Emissions	ROG	NOx	CO	SO_2	Fugitive PM_{10}	Exhaust PM_{10}	Total PM_{10}	Fugitive $PM_{2.5}$	Exhaust $PM_{2.5}$	Total $PM_{2.5}$
	tons/yr	tons/yr	tons/yr	tons/yr	tons/yr	tons/yr	tons/yr	tons/yr	tons/yr	tons/yr
Truck Trips [1]	1.09E-03	9.62E-03	0.02	2.79E-05	6.21E-04	1.31E-04	7.51E-04	1.70E-04	1.20E-04	2.90E-04

1. Truck Trip emissions calculated using CalEEMod were multiplied by the onsite travel percentage. Total truck emissions were calculated using a trip distance of 7.3 miles (CalEEMod Default Value).