

ENGINEERING EVALUATION

Shore Terminals, LLC
Plant 581 | Application 31506
90 San Pablo Ave, Crockett, CA 94525

BACKGROUND

Shore Terminals, LLC (Subsidiary of NuStar Energy) has applied to obtain an Authority to Construct and a Permit to Operate for the following equipment:

- S-53 Internal Floating Roof Tank (T-20107)**
Materials Stored: Gasoline blendstock, ethanol, transmix, diesel, renewable fuels
Tank Volume: 8,022,000 gallons; 191,000 barrels
Tank Dimensions: 150-foot diameter; 64-foot height
Maximum Throughput: 9 million barrels (mmbbls) per year
Maximum True Vapor Pressure: 5.2 psia
- S-54 Internal Floating Roof Tank (T-20109)**
Materials Stored: Gasoline blendstock, ethanol, transmix, diesel, renewable fuels
Tank Volume: 8,022,000 gallons; 191,000 barrels
Tank Dimensions: 150-foot diameter; 64-foot height
Maximum Throughput: 9 million barrels (mmbbls) per year
Maximum True Vapor Pressure: 5.2 psia

On October 15, 2019, fixed-roof storage tanks T-20107 and T-20109 (formerly S-39 and S-41, respectively) were destroyed in a fire, which occurred at the facility in Crockett, CA. The proposed reconstruction would include fitting the storage tanks with cable-suspended internal floating roofs (IFR) for emissions control instead of connecting them to the vapor recovery and control systems. Source IDs S-39 and S-41 will be removed from service. This tank reconstruction project will consider S-53 and S-54 to be new sources and therefore subject to new source review.

The Air District recently granted an Authority to Construct to Shore Terminals under Application #30713 for the facility's tanks retrofit project. Additional changes made to permit conditions #6185 and #27277 have also been made in this application and are outlined in Appendix A of this evaluation.

Storage tanks T-20107 (S-39) and T-20109 (S-41) were previously permitted as "MTBE/gasoline storage tanks." However, the facility is requesting to store the following products in the proposed tanks, S-53 and S-54: gasoline blendstock (California Reformulated Blendstock for Oxygenate Blending (CARBOB)), ethanol, and transportation mixtures (transmix), diesel, and renewable fuels.

EMISSIONS

Criteria Pollutants

Precursor organic compound (POC) emissions are expected from storage tank standing and working losses. The potential to emit per tank will assume gasoline throughputs as conservative estimates since gasoline has the highest vapor pressure among the list of products to be stored. The California Air Resources Board (CARB) Phase 3 CARBOB standards limit gasoline blendstock to a Reid vapor pressure (RVP) of 6.9 pounds per square inch (psi) for the months of May through October within the Air District's jurisdiction. Gasoline was defined in the TankESP program using the default properties for gasoline with an RVP of 7 psi for the months of May through October and 10 psi throughout the remainder of the year to account for the CARB standards. The facility will accept a permit condition to

not exceed a maximum true vapor pressure of 5.2 psia at 60 degrees Fahrenheit (which is equivalent to a RVP of 10 psia).

The proposed annual throughput limit for each tank is 9 mmbbls or 378 million gallons and the maximum daily throughput limit for each tank is 250,000 bbl (10.5 million gallons). Working and standing losses were estimated using TankESP.

Table 1. Tank Characteristics and Fittings for S-53 and S-54

Deck Fitting Category	Detail
Deck Type	Welded
Primary Seal	Mechanical shoe
Secondary Seal	Rim-mounted
Access Hatch (24-in. Diam.)/Bolted Cover, Gasketed	2
Column Well (24-in. Diam.)/Pipe Col.-Flex. Fabric Sleeve Seal	19
Stub Drain (1-in. Diameter)	17
Sample Pipe or Well (24-in. Diam.)/Slit Fabric Seal 10% Open	1
Ladder Well (36-in. Diam.)/Slotted w. Sleeve, Gasketed	1
Slotted Guide-Pole/Sample Well/Gask Sliding Covr, w. Float, Sleeve, Wiper	2
Vacuum Breaker (10-in. Diam.)/Weighted Mech. Actuation, Gask.	2

Table 2. S-53 & S-54 IFR Tanks Emissions Summary

Pollutant	S-53 Emissions			S-54 Emissions		
	Max Hourly (lb/hr)	Max Daily (lb/day)	Annual (lb/yr)	Max Hourly (lb/hr)	Max Daily (lb/day)	Annual (lb/yr)
POC	0.96	23.04	3,483.39	0.96	23.04	3,483.39

Fugitive POC emissions are estimated using CARB’s Correlation Equations Method presented in Table IV-3a of CARB’s Guidance for Petroleum Refineries (ca. 1999). Fugitive POC emissions for non-repairable equipment are estimated per the Air District’s Rule 8-18.

Table 3. CARB Correlation Equations for Component Fugitive Emissions

Components	Screening Value	Emission Factor (kg/hr/comp)	Count	Emissions (lb/hr)	Pegged Leakers	Pegged Emission Factor (kg/hr/comp)	Pegged Emissions (lb/hr)
Valves	100	7.08E-05	215	3.35E-02	1	6.4E-02	1.41E-01
Connectors	100	4.54E-05	350	3.49E-02	-	-	
Flanges	100	1.17E-04	300	7.72E-02	-	-	

Annual Fugitive Emissions

Valves

$$(7.08E-05 \text{ kg/hr/valve}) * (214 \text{ valves}) * (2.2 \text{ lb/kg}) * (8,760 \text{ hrs/yr}) = 291.99 \text{ lb/yr}$$

$$(6.4E-02 \text{ kg/hr/valve}) * (1 \text{ valve}) * (2.2 \text{ lb/kg}) * (24 \text{ hrs/day}) * (90 \text{ days max/yr}) = 304.13 \text{ lb/yr}$$

$$(7.08E-05 \text{ kg/hr/valve}) * (1 \text{ valve}) * (2.2 \text{ lb/kg}) * (6,600 \text{ hrs/yr}) = 1.03 \text{ lb/yr}$$

Connectors

$$(4.54E-05 \text{ kg/hr/connector}) * (350 \text{ connectors}) * (2.2 \text{ lb/kg}) * (8,760 \text{ hrs/yr}) = 306.23 \text{ lb/yr}$$

Flanges

$$(1.17E-04 \text{ kg/hr/flange}) * (300 \text{ flanges}) * (2.2 \text{ lb/kg}) * (8,760 \text{ hrs/yr}) = 676.45 \text{ lb/yr}$$

Total Annual Fugitive Emissions

$$(291.99 \text{ lbs/yr}) + (304.13 \text{ lbs/yr}) + (1.03 \text{ lbs/yr}) + (306.23 \text{ lbs/yr}) + (676.45 \text{ lbs/yr}) = 1,579.83 \text{ lb/yr}$$

Table 4. Fugitive Emissions Summary

Pollutant	Max Hourly Fugitive Emissions (lb/hr)	Max Daily Fugitive Emissions (lb/day)	Annual Fugitive Emissions (lb/yr)
POC	2.86E-01	6.88	1,579.83

Table 5. Total Project Emissions Summary

Pollutant	Max Hourly Emissions (lb/hr)	Max Daily Emissions (lb/day)	Annual Emissions (lb/yr)	Annual Emissions (ton/yr)
POC	2.21	52.96	8,546.61	4.273

Toxic Air Contaminants (TACs)

TAC emissions are shown in Table 6 below. A refined health risk assessment (HRA) is required for this project due to the annual benzene, ethylbenzene, naphthalene, and polycyclic aromatic hydrocarbons (PAHs) emissions exceeding their respective chronic trigger limits.

Table 6. TAC Emissions Summary

TACs	Tank Emissions ¹		Fugitive Emissions		Total Project	
	Max Hourly (lb/hr)	Annual (lb/yr)	Max Hourly (lb/hr)	Annual (lb/yr)	Max Hourly (lb/hr)	Annual (lb/yr)
Benzene	1.31E-02	26.39	3.91E-03	21.56	3.01E-02	74.34
Ethylbenzene	8.84E-03	8.68	2.64E-03	14.55	2.03E-02	31.91
Hexane (n-)	7.95E-03	20.65	2.37E-03	13.08	1.83E-02	54.16
Naphthalene	2.58E-03	2.24	7.70E-04	4.25	5.93E-03	8.73
PAHs	1.62E-05	0.014	4.83E-06	2.67E-02	3.72E-05	5.47E-02
Toluene	4.57E-02	56.02	1.36E-02	75.21	1.05E-01	187.25
Xylene	4.41E-02	42.65	1.32E-02	72.57	1.01E-01	157.87

¹Tank Emissions are for 1 tank. Total Project considers both emissions data from both S-53 and S-54 tanks.

NOTE: The HRA was originally conducted with the following assumptions: (1) assumed 365 days for pegged leakers; and (2) included 1 pegged leaker per component (1 valve, 1 connector, and 1 flange) instead of 0.15% of total component count (1 pegged leaker for all valves, connectors, flanges combined). These assumptions forecasted higher emissions than the numbers shown in Table 6 above, but the correct numbers are included in this evaluation.

Plant Cumulative Increase

Table 7. Plant Cumulative Increase

Pollutant	Current Emissions (since 04/05/1991) (tons/year)	S-53 Emissions (tons/year)	S-54 Emissions (tons/year)	Fugitive Emissions (tons/year)	Total Project Increase (tons/year)	Cumulative Emissions (Current + Increase) (tons/year)
NO _x	0.205	0	0	0	0	0.205
POC	17.734	1.742	1.742	0.789	4.273	22.007
CO	0.030	0	0	0	0	0.030
PM ₁₀	0.003	0	0	0	0	0.003
PM _{2.5}	0.000	0	0	0	0	0.000
SO ₂	0.000	0	0	0	0	0.000

STATEMENT OF COMPLIANCE

Regulation 2, Rule 1 – General Requirements

California Environmental Quality Review (CEQA)

This application is considered categorically exempt from CEQA as per CEQA Guidelines Section 15301 (“No or Negligible Expansion of Existing Use”) because the project has no potential for causing a significant adverse environmental impact. In making the determination that this application is categorically exempt: 1) the Air District reviewed the CEQA-related information (Appendix H) from the applicant (Regulation 2-1-426.1) indicating that there is no potential for a significant adverse environmental impact from the project; 2) a formal health risk assessment was approved by the Air District; and 3) the Air district determined there are no unusual circumstances, or that the cumulative impacts from successive projects of the same type in the same place do not result in significant adverse environmental impacts. Shore Terminals has submitted Appendix H “Environmental Information Form” in accordance with Regulation 2-1-312. A Notice of Exemption (NOE) will be filed with the Contra Costa County Clerk’s Office.

Public Notification, Overburdened Community

Public notice is required pursuant to Regulation 2-1-412 since this facility is located within an Air District designated Overburdened Community and this project required an HRA. The facility has paid the requisite OBC fees. **A public notice was prepared on ### 2024, and distributed on ### 2024.**

Regulation 2, Rule 2, Section 301 – New Source Review

Per Regulation 2-2-301, BACT is triggered for any new or modified source with the potential to emit 10 pounds or more per highest day of POC, NPOC, NO_x, CO, SO₂, PM₁₀, or PM_{2.5}. For this source, BACT is triggered since the maximum daily POC emissions exceed 10 lb/day.

Table 8. BACT Determination for Internal Floating Roof Storage Tanks

Source:	Storage Tank – Internal Floating Roof, Organic Liquids	Revision:	2
		Document #:	167.4.1
Class:	All	Date:	03/03/1995

Pollutant	BACT	
	1. Technologically Feasible / Cost Effective 2. Achieved in Practice	Typical Technology
POC/NPOC	<p>1. Vapor recovery system w/ an overall system efficiency $\geq 98\%$</p> <p>2. BAAQMD Approved roof w/ liquid mounted primary seal and zero gap secondary seal, all meeting design criteria of Reg. 8, Rule 5. Also, no ungasketed roof penetrations, no slotted pipe guide pole unless equipped with float and wiper seals, and no adjustable roof legs unless fitted w/ vapor seal boots or equivalent.</p>	<p>1. Thermal Incinerator; or Carbon Adsorber; or Refrigerated Condenser; or BAAQMD approved equivalent</p> <p>2. BAAQMD Approved Roof and Seal Design</p>

Similar to the case for S-38, S-40, S-42, S-43, and S-44 in application #30713, utilizing the current A-421 and A-422 vapor recovery systems for S-53 and S-54 pose potential safety concerns and violations to the American Petroleum Institute (API) standards for IFRs; specifically, API 650 H.5.2.2 (Tank Circulation Vents) and subsection H.5.2.2.1. The Air District initially inquired whether the circulation vents can continue to be connected to the existing manifold system such that all vented emissions are still routed to A-421 and A-422 or to another vapor recovery system that achieves $\geq 98\%$. The facility stated that retaining the existing manifold that is routed to A-421 and A-422 (which was used for the fixed-roof tank configuration) would pose potential safety concerns and would violate API standards for

IFRTs. Specifically, API 650 H.5.2.2 provides design standards for the cone roof circulation vents that are necessary for tanks operating with an IFR configuration. These circulation vents are required to prevent the development of a combustible gas mixture within the tank and above the IFR and prevent proper circulation above the IFR when the tanks are in a static state (not being filled or emptied). API 650 H.5.2.2.1 requires that the maximum spacing for these vents is 32 feet (no fewer than four equally spaced vents) and the venting shall be distributed such that the sum of the open areas of the vents located within any 32 feet interval is at least 2 square feet. Therefore, routing these vents to a vapor recovery system and/or extending these vents for the purpose of installing a continuous hydrocarbon analyzer would prevent the minimum spacing and opening requirements set forth in API 650. Additionally, pressure relief valves will not allow air to be freely circulated when the tank is in a static state. The facility stated that there is no benefit gained from installing an IFR in the tanks in this configuration, and it presents operational complexities of having two fundamentally different abatement approaches (one preventing emissions and the other allowing emissions and collecting them). Vapor recovery system for S-53 and S-54 is therefore technologically infeasible.

BACT(2) requires an Air District-approved roof in accordance with design criteria outlined in Regulation 8-5. In addition to meeting the minimum BACT(2) requirements, the proposed IFRs will include additional features that are expected to achieve further emissions reductions more stringent than BACT(2) level of control. Some of these features include roof construction material and cable suspension. The roofs will be constructed from vinyl ester resin, which allow the roofs to be constructed as one seamless piece; therefore, no deck seam emissions. The IFRs are designed to be cable-suspended from the storage tank’s fixed roof; therefore, there are no deck penetrations for roof legs, which greatly reduce the total number of penetrations and potential emissions from tank fittings.

Offsets

Offsets are required for any new or modified sources at a facility that emits more than 10 TPY of POC or NO_x (2-2-302) or more than 100 TPY of PM₁₀, PM_{2.5}, and SO₂ (2-2-303). This facility has been permitted to emit more than 35 tons of NO_x and POC per year, this facility must provide offsets for POC emissions increases in this application at a 1.15:1 ratio.

Table 9. Plant Cumulative Emissions Increase

Pollutant	Current Emissions (Pre- and Post-04/05/1991) (tons/year)*	Total Project Increase (tons/year)	Cumulative Emissions (Current + Increase) (tons/year)
NO _x	101.087	0	101.087
POC	129.014	4.273	133.287
CO	99.631	0	99.631
PM ₁₀	0.056	0	0.056
PM _{2.5}	0.053	0	0.053
SO ₂	62.649	0	62.649

*Note: Post-4/5/91 emissions of POC and NO_x have been fully offset.

4.273 TPY (increase this application) * (1.15 POC offset ratio) = 4.914 TPY

The facility will provide 4.914 tpy of POC offsets using **Banking Certificate #.**

Prevention of Significant Deterioration (PSD)

This application is not part of a PSD project.

Regulation 2, Rule 5 –New Source Review of Toxic Air Contaminants)

New or modified sources of toxic air contaminants (TAC) requiring an authority construct or permit to operate pursuant to Regulation 2-1 are subject to review to evaluate potential public exposure and health

risk, mitigate potentially significant health risks resulting from these exposures, and to provide net health risk benefits by improving the level of control when existing sources are modified or replaced. The TAC emissions shown in Table 6 exceed their respective acute and/or chronic trigger levels set forth in Table 2-5-1 of Regulation 2-5 and thus this project requires a health risk assessment.

The HRA results reported on March 3, 2023 show that the risk levels are acceptable per Regulation 2-5-302: project cancer risk is 1.2 in a million; project chronic hazard index is 0.0045; and project acute hazard index is 0.55. Since the project cancer risk is more than 1 in a million, Best Available Control Technology for Toxics (TBACT) is triggered. The proposed roofs will meet the BACT(2) level of control, which also meet the TBACT requirement.

Regulation 2, Rule 6 – Major Facility Review

This facility is subject to the Operating Permit Requirements of Title V of Federal Clean Air Act, Part 70 of 40 CFR, and BAAQMD Regulation 2, Rule 6, Major Facility Review (MFR) because it is a major facility as defined by BAAQMD Regulation 2-6-212. It is a major facility because it has the “potential to emit,” as defined by Regulation 2-6-218, of more than 100 tons per year of a regulated air pollutant, and 10 tons per year of a hazardous air pollutant, or more than 25 tons per year of a combination of hazardous air pollutants.

The initial MFR Permit for this facility was issued on March 12, 2001 with the most recent revision in progress under Application #31070. This application will satisfy the requirements of Regulation 2-6-226 to be considered a significant permit revision and thus, this will constitute a significant revision of the MFR permit and will be discussed in the Statement of Basis for the significant revision. The sections which will be affected are shown in Appendix A.

Regulation 8, Rule 5 – Storage of Organic Liquids

This project is proposing storage of multiple products (gasoline blendstock, CARBOB, ethanol, transmix, diesel, and renewable fuels), none of which are to exceed 5.2 true vapor pressure (TVP) within the internal floating roof tanks S-53 and S-54 pursuant to Regulation 8-5-301. The owner/operator of S-53 and S-54 are expected to ensure floating roof tank fitting requirements outlined in Regulation 8-5-320, have properly fitted primary seals that meet requirements of Regulation 8-5-321, and equip the tanks with secondary seals that meet the requirements of Regulation 8-5-322. The facility must not open interior vapor space of the tanks S-53 and S-54 to the atmosphere through hatch or manway, except to connect or disconnect degassing equipment to conduct tank contents or emissions sampling (Section 8-5-328, tank degassing requirements). Section 8-5-331 requires tank cleaning agents to meet outlined requirements unless all organic vapors and gases emitted during tank cleaning are collected and processed by an abatement device with an abatement efficiency of at least 90% by weight. The facility is expected to comply with all applicable requirements of Regulation 8-5.

Regulation 8, Rule 18 – Equipment Leaks

Shore Terminals is expected to continue to ensure that the replaced valves (Regulation 8-18-302), flanges and connections (Regulation 8-18-304) for storage tanks S-53 and S-54 do not leak more than 100 ppmv of total organic compounds. The aforementioned sections outline requirements when exceeding these limits. The Air District estimates 0.15% of valves and connections as non-repairable equipment. A conservative estimate of 1 pegged valve was assumed in this application. Leaks from this one valve will be limited to 10,000 ppm (Regulation 8-18-306). The fugitive emissions of total organic compounds shall not exceed 5 pounds per day expect during the repair periods.

National Emission Standards for Hazardous Air Pollutants (NESHAP) 40 CFR Part 63, Subpart BBBBBB – Gasoline Distribution Bulk Terminals, Bulk Plants, and Pipeline Facilities

Shore Terminals is expected to comply with 40 CFR Part 63 Subpart BBBBBB by using roof seals and roof fittings that meet the design criteria of District Regulation 8-5.

New Source Performance Standards (NSPS) 40 CFR Part 60, Subpart Kb

The owner/operator of S-53 and S-54 is expected to ensure compliance with NSPS 40 CFR Part 60, Subpart Kb by using roof seal and roof fittings that meet District Regulation 8-5.

CONDITIONS

A new set of permit conditions, Permit Condition # 100228, will apply to the new tanks S-53 and S-54. Changes proposed in this application # 31506 are considered a significant revision to the facility’s Title V permit. The proposed changes to existing permit conditions #6185 and #27277 will also be reflected in the Title V permit.

COND# 100228 -----

Applies to Storage Tanks S-53 and S-54

1. The owner/operator of Storage Tank S-53 shall not exceed a throughput of 378,000,000 gallons (9.0 million barrels) of gasoline, ethanol, transmix, diesel, renewable fuels, or other organic liquids (as allowed by Part 6) combined in any consecutive 12-month period.
[Basis: Cumulative Increase]
2. The owner/operator for Storage Tank S-54 shall not exceed a throughput of 378,000,000 gallons (9.0 million barrels) of gasoline, ethanol, transmix, diesel, renewable fuels, or other organic liquids (as allowed by Part 6) combined in any consecutive 12-month period.
[Basis: Cumulative Increase]
3. The owner/operator of Storage Tank S-53 shall not exceed a throughput of 10,500,000 gallons (250,000 barrels) of gasoline, ethanol, transmix, diesel, renewable fuels, or other organic liquids (as allowed by Part 6) in any calendar day.
[Basis: Cumulative Increase]
4. The owner/operator of Storage Tank S-54 shall not exceed a throughput of 10,500,000 gallons (250,000 barrels) of gasoline, ethanol, transmix, diesel, renewable fuels, or other organic liquids (as allowed by Part 6) in any calendar day.
[Basis: Cumulative Increase]
5. The owner/operator of Storage Tanks S-53 and/or S-54 shall not store any materials that exceed a true vapor pressure (TVP) of 5.2 psia in each of the S-53 and/or S-54 tanks.
[Basis: Regulation 8-5, Cumulative Increase]
6. The owner/operator of Storage Tanks S-53 and/or S-54 may store organic liquids other than those specified in Parts 1 through 5, and/or usages in excess of the quantities specified in Parts 1 through 4 of this condition, provided that the owner/operator can demonstrate that all of the following are satisfied:
 - a. Total POC and/or NPOC emissions from each of S-53 and/or S-54 do not exceed 3,483 pounds in any consecutive twelve-month period using AP-42 internal floating roof tank equations;
 - b. Total POC emissions from each of S-53 and/or S-54 do not exceed 23 pounds in any one calendar day using AP-42 internal floating roof tank equations;
 - c. Total NPOC emissions from each of S-53 and/or S-54 do not exceed 9 pounds in any one calendar day using AP-42 internal floating roof tank equations or other Air District approved method;

- d. The total toxic air contaminants emissions from S-53 and S-54 combined do not exceed the following annual emission limits:

TAC	Annual Limit (lb/yr)
Benzene	7.43E+01
Ethylbenzene	3.19E+01
Naphthalene	8.73E+00
PAHs	5.47E-02

- e. The maximum TVP of organic liquids stored in each of S-53 and S-54 does not exceed 5.2 psia;
- f. The use of these organic liquids does not increase toxic emissions from each of S-53 and/or S-54 and/or the combination of emissions from S-53 and S-54 combined to equal to or exceed any toxic air contaminant trigger level (except the annual emissions of benzene, ethylbenzene, naphthalene, and PAHs, which shall not exceed the limits in Part 6(d)) of Table 2-5-1 in Regulation 2-5.

[Basis: Cumulative Increase; Regulation 2-5]

7. The owner/operator of Storage Tanks S-53 and/or S-54 shall equip each tank with an internal and seamless deck floating roof using a mechanical shoe primary seal and a rim-mounted secondary seal that meet the design criteria specified in Regulation 8, Rule 5. There shall be no ungasketed roof fittings. Except for roof legs, each roof fitting shall be designed to minimize roof fitting losses.

The following list specifies the types of roof fittings allowed for S-53 and/or S-54, the maximum count for each fitting, and the control technique required. Control techniques for roof fittings not included in this list shall be subject to District approval prior to installing the internal floating roof on the tank.

<u>Fitting Type and Count</u>	<u>Control Technique</u>
Access hatch (24" diameter), 2 total	Bolted cover, gasketed
Ladder-Slotted Guidepole Combination Well, 1 total	Ladder sleeve, gasketed sliding cover
Stub drain (1" diameter), 17 total	
Column well (20" diameter), 1 total	Flexible fabric sleeve seal
Column well (12" diameter), 19 total	Flexible fabric sleeve seal
Vacuum breaker (10" diameter), 2 total	Weighted mechanical actuation, gasketed
Sample Pipe or Well (24" diameter), 1 total	Slit fabric seal 10% open area
Slotted Guidepole/Sample Well, 2 total	Gasketed sliding cover with float, sleeve, wiper

Not more than 30 days after the startup of S-53 and/or S-54, the owner/operator of S-53 and/or S-54 shall provide the Air District's Engineering Division with a final accounting of the types and counts of roof fittings to be incorporated into this condition.

[Basis: BACT]

8. The owner/operator of S-53 and/or S-54 shall ensure that the maximum benzene concentration in any organic materials stored in each of S-53 and/or S-54 do not exceed 2% by weight. The owner/operator of sources S-53 and/or S-54 shall analyze materials stored in S-53 and S-54 for benzene concentration at least once every 6 months. S-53 and/or S-54 shall each be sampled within 30 days of startup. The startup for S-53 and S-54 in this application is defined as the time

when S-53 and S-54 get initially filled with enough organic liquid to float the roof safely. The owner/operator of S-53 and/or S-54 shall not store any smaller volumes of organic liquids in S-53 and/or S-54 prior to the startup of S-53 and/or S-54. These records shall be kept on file for at least five years after the date of entry and shall be made available to District personnel upon request. All tests shall be performed in accordance with District approved laboratory procedures.

[Basis: Cumulative Increase, Regulation 2-5]

9. The owner/operator of S-53 and/or S-54 has been approved to install the following component types and counts as part of AN 31506: 215 valves, 350 connectors, and 300 flanges. The owner/operator of S-53 and/or S-54 shall assign a unique identification code to each valve, flange, connector, compressor, pump seal, and miscellaneous (other fitting) component. The facility shall keep the following records: The fitting identification code, the date of each inspection, and the corresponding leak concentration measured. Records shall be maintained for at least 5 years from the date of entry and shall be made available for inspection by District staff upon request.
[Basis: Regulation 2-1-403, Cumulative Increase, Recordkeeping]
10. The owner/operator of S-53 and/or S-54 shall ensure that POC emissions from all fugitive components contained in Part 9 combined do not exceed 0.790 tpy in any consecutive 12-month period.
[Basis: Cumulative Increase; Offsets]
11. The owner/operator of S-53 and/or S-54 shall not exceed the emission limit of Part 10. This emission limit includes fugitive component emissions from default zero components, non-pegged leaking components, and from pegged leaking components. Pegged leaking components (pegged leakers) are defined as components leaking at or greater than the maximum useful range of the monitoring instrument (or 10,000 ppmv measured as C1). The owner/operator shall calculate the POC fugitive emissions from non-pegged leaking fugitive components by using the correlation equations provided in Table IV-3a. of the California Air Pollution Control Officers Association (CAPCOA) document titled "California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities" dated February 1999 in concert with the actual screening levels including default zeros and pegged leakers measured by the facility's Leak Detection and Repair (LDAR) program, or employ any other Air District approved method to measure and quantify such emissions. The owner/operator shall calculate the POC fugitive emissions from pegged leaking fugitive components by using the correlation equations provided in Table IV-3a in the above CAPCOA document for leak rates greater than or equal to 10,000 ppmv, or employ any other Air District approved method to measure and quantify such emissions. The owner/operator of S-53 and/or S-54 shall use the midpoint method to determine the length of time that a fugitive component is assumed to be leaking for the purposes of compliance with these conditions. These calculations shall be conducted on a bi-annual basis.
[Basis: Regulation 2-1-403, Cumulative Increase]
12. The owner/operator of S-53 and/or S-54 shall ensure all pegged leakers are repaired or replaced as soon as possible and under no circumstance continue to leak for more than 90 days in any consecutive 12-month period.
[Basis: Cumulative Increase, Regulation 2-1-403, Offsets]
13. The owner/operator of S-53 and/or S-54 shall provide the final component count to the Air District once S-53 and/or S-54 are installed prior to PO issuance. If there is an increase in the fugitive component count is greater than that permitted as per Part 9, the plant's cumulative emissions for the project shall be adjusted to reflect the difference between emissions based on predicted versus actual component counts. The owner/operator shall provide to the District all

additional required offsets at an offset ratio of 1.15:1 no later than 14 days after submittal of the final POC fugitive count. If the actual component count is less than the predicted, the total will be adjusted accordingly and all emission offsets applied by the owner/operator in excess of the actual total fugitive emissions will be credited back to the owner/operator. If the component count and emissions increase an HRA may be required.

[Basis: Offsets]

14. The owner/operator of S-53 and/or S-54 shall inspect all valves contained in Part 9 at least once every quarter and the flanges at least once biannually using a District approved handheld hydrocarbon analyzer.
[Basis: Regulation 2-1-403, Regulation 8-18-401]
15. To determine compliance with the above parts, the owner/operator of Storage Tanks S-53 and/or S-54 shall maintain the following records in an Air District-approved log and provide all of the data necessary to evaluate compliance with the above parts, including the following information:
 - a. Quantities of each type of organic liquid stored in each of S-53 and S-54 on a daily basis.
 - b. Quantities of each type of organic liquid loaded into each of S-53 and S-54 on a daily and monthly basis.
 - c. Monthly throughput for each of S-53 and S-54 shall be totaled for each consecutive twelve-month period.
 - d. Daily and monthly emission calculations for each of S-53 and S-54 and total emissions for each consecutive twelve-month period.
 - e. To demonstrate compliance with Part 5, organic liquid specifications or certifications from the vendor, including the liquid's maximum TVP, for each shipment of a different type of organic liquid stored in S-53 and/or S-54 shall be maintained if available. If a transportation mixture of different organic liquids is stored, either mixture sampling data or the maximum TVP of the most volatile organic liquid shall be used to demonstrate compliance. The Air District staff shall have the discretion to collect a sample of the organic liquid stored to test or require the owner/operator to collect and test its maximum TVP for compliance with Part 5.
 - f. Unique identification code of each fugitive component identified in Part 9.
 - g. All fugitive emission calculations required per Part 10.
 - h. Date of each inspection, and the corresponding location of each leak concentration measured based on its location with respect to adjacent maintainable equipment component(s).
 - i. Number of days that each individual component leaked at or greater than 10,000 ppmv (measured as C1), type of component, identification number of component.
 - j. The total number of days component identified in Part 15(i) leaked. Date of repair
 - k. To demonstrate compliance with Part 6, when storing organic liquids other than those specified in Parts 1 through 5 and/or usages in excess of those specified in Parts 1 through 4, POC, NPOC, and toxic emission calculations for S-53 and/or S-54 shall be totaled monthly and for each consecutive twelve-month period.
 - l. Benzene concentrations in each of S-53 and S-54.

All records shall be retained on-site for at least five years, from the date of entry, and made available for inspection by Air District staff upon request. These recordkeeping requirements shall not replace the recordkeeping requirements contained in any applicable District Regulations.
[Basis: Recordkeeping]

COND# 6185

For S-1, S-2, S-3, S-5, S-6, S-12, S-15, S-24, S-25, S-30, S-32 through S-38, ~~S-39, S-40, S-41, S-42, S-43~~, and S-44 Storage Tanks and S-27 Marine Loading

1. The Owner/Operator of Storage Tanks S-32, S-33, S-34, S-35, S-36, S-37, ~~S-39, and S-41~~ and Marine Loading Berth S-27 shall vent all emissions at all times of operation to the properly maintained and properly operated A-421 and A-422 Regenerative Carbon Units. The switching time between carbon canisters for these units shall not exceed 20 minutes while the system is operating. This condition shall not apply to exempt materials. [Basis: Cumulative Increase]
2. The Owner/Operator shall not load more than 18.8 million barrels of organic materials into Storage Tanks S-32 through ~~S-38, S-39, S-40, S-41, S-42, S-43, S-44, S-53, and S-54~~ in any consecutive 12-month period. [Basis: Cumulative Increase]
 - a. The owner/operator of S-32 through ~~S-38, S-39, S-40, S-41, S-42, S-43, S-44, S-53, and S-54~~ may store usages in excess of those specified in Part 2, provided that the owner/operator can demonstrate that the following are satisfied:
 - i. Total combined POC/NPOC emissions from S-32 through ~~S-38, S-39, S-40, S-41, S-42, S-43, S-44, S-53, and S-54~~ do not exceed 18,800 pounds in any consecutive 12-month period; and
 - ii. The use of these materials does not increase toxic emissions above any risk screening trigger level of Table 2-5-1 in Regulation 2-5.

Daily records of the total liquid loaded into Storage Tanks S-32 through ~~S-38, S-39, S-40, S-41, S-42, S-43, S-44, S-53, and S-54~~ shall be kept in a District approved log and retained for at least five years from the date of entry. This log shall be kept on site and made available to District staff upon request.

[Basis: Cumulative Increase; Toxics]

3. The Owner/Operator shall not load more than 250,000 barrels of organic materials into Storage Tanks S-32 through ~~S-38, S-39, S-40, S-41, S-42, S-43, S-44, S-53, and S-54~~ in any calendar day. Daily records of the total liquid loaded into Storage Tanks S-32 through ~~S-38, S-39, S-40, S-41, S-42, S-43, S-44, S-53, and S-54~~ shall be kept in a District approved log and retained for at least five years from the date of entry. This log shall be kept on site and made available to District staff upon request. [Basis: Cumulative Increase]
 - a. The owner/operator of S-32 through ~~S-38, S-39, S-40, S-41, S-42, S-43, S-44, S-53, and S-54~~ may store usages in excess of those specified in Part 3, provided that the owner/operator can demonstrate that the following are satisfied:
 - i. Total combined POC/NPOC emissions from S-32 through ~~S-38, S-39, S-40, S-41, S-42, S-43, S-44, S-53, and S-54~~ do not exceed 250 pounds in any calendar day; and
 - ii. The use of these materials does not increase toxic emissions above any risk screening trigger level of Table 2-5-1 in Regulation 2-5.

Daily records of the total liquid loaded into Storage Tanks S-32 through ~~S-38, S-39, S-40, S-41, S-42, S-43, S-44, S-53, and S-54~~ shall be kept in a District approved log and retained for at least five years from the date of entry. This log shall be kept on site and made available to District staff upon request.

[Basis: Cumulative Increase; Toxics]]

4. The Owner/Operator shall not load more than 47.6 million barrels of organic materials into marine vessels at the Marine Loading Terminal S-27 in any consecutive 12-month period. Monthly records of the total hydrocarbon liquid loaded into marine vessels at S-27 shall be kept in a District approved log and retained for at least five years from the date of entry. This log shall be kept on site and made available to District staff upon request. [Basis: Cumulative Increase]
 - a. The owner/operator of S-27 may load usages in excess of those specified in Part 4, provided that the owner/operator can demonstrate that the following are satisfied:

- i. Total combined POC/NPOC emissions from loading any organic material into marine vessels at S-27 do not exceed 47,600 pounds in any consecutive 12-month period;
- ii. Total combined POC/NPOC emissions from loading any organic material into marine vessels at S-27 do not exceed 10 pounds in any given hour;
- iii. The use of these materials does not increase toxic emissions above any risk screening trigger level of Table 2-5-1 in Regulation 2-5.

Daily and hourly records of the total liquid loaded at S-27 shall be kept in a District approved log and retained for at least five years from the date of entry. This log shall be kept on site and made available to District staff upon request.

[Basis: Cumulative Increase; Toxics]

5. The Owner/Operator shall ensure that emissions from the A-421 and A-422 Regenerative Carbon Units do not exceed 1 pound of POC's per 1000 barrels of hydrocarbon liquid transferred at S-27, S-32, S-33, S-34, S-35, S-36, and S-37~~S-39, and S-41~~. [Basis: Cumulative Increase]]
6. *The Owner/Operator shall ensure that the Benzene emissions from the A-421 and A-422 Carbon Systems combined do not exceed 0.15 lbs per calendar day. [Basis: Toxics]
7. *The Owner/Operator shall ensure that the average benzene concentration in all organic materials stored in Storage Tanks S-32 through ~~S-38, S-39, S-40, S-41, S-42, S-43, and S-44~~ do not exceed 2% by weight. The owner/operator of sources S-32 through ~~S-38, S-39, S-40, S-41, S-42, S-43, and S-44~~ shall randomly analyze materials stored in at least three storage tanks for the average benzene concentration at least once every 6 months. Each tank shall be sampled within 30 days of start-up. If the owner/operator can demonstrate that several tanks contain non-exempt organic compounds from a single source (shipment), then a single benzene analysis may be performed for that group of tanks. These records shall be kept on file for at least five years after the date of entry and shall be made available to District personnel upon request. All tests shall be performed in accordance with District approved laboratory procedures. [Basis: Toxics]
8. Start-up source test condition, deleted.
9. Deleted.
10. The Owner/Operator shall ensure all new hydrocarbon liquid product pumps shall be equipped with either double mechanical shaft seals or shall utilize seal-less magnetically coupled pumps. These new pumps shall be subject to the inspection and maintenance requirements of District Regulation 8-18 and any future revisions to this rule [Basis: Regulation 8-18]
11. The Owner/Operator shall ensure all new valves and flanges shall be subject to the inspection and maintenance criteria of District Regulation 8-18 and any future revisions to this rule. [Basis: Regulation 8-18]
12. The Owner/Operator shall equip Storage Tanks S-32, S-33, S-34, S-35, S-36, and S-37~~, S-39, and S-41~~ with properly installed and properly operated pressure relief valves which do not open under normal operating conditions and thereby allow bypassing of the A-421/A-422 Carbon System. The Owner/Operator of S-27 Marine Terminal shall use connection couplings, which minimize fugitive leaks during connection and disconnection of the product loading and vapor recovery piping. [Basis: Regulation 8-18]
13. Deleted.

14. The Owner/Operator of the A-421 and A-422 Regenerative Carbon Systems shall install an infrared combustible gas detector or District approved equivalent at the outlet of these carbon units. This detector shall continuously measure and record non-methane hydrocarbon concentration in PPM as propane. The type and design specifications of this detector shall be approved by the District's Source Test Manager before installation. [Basis: NSPS]
15. Deleted, extra requirement, continuous hydrocarbon monitor and recorder installed at the tail end of the abatement's outlet is already a good indicator.
16. The Owner/Operator shall not degas more than six tanks at this facility using A-421 and A-422 in any consecutive 12-month period. [Basis: Cumulative Increase]
17. The Owner/Operator shall vent all tank degassing operations at all times in accordance with Regulation 8-5-328. [Basis: Regulation 8-5]
18. Deleted.
19. The Owner/Operator shall ensure that the tank cleaning operations are in accordance with Regulation 8-5-331. Fugitive emissions during tank cleaning operations shall be minimized. [Basis: Cumulative Increase]
20. The Owner/Operator shall vent storage tank vapors from Storage Tanks S-32, S-33, S-34, S-35, S-36, and S-37, ~~S-39, and S-41~~ to A-421 and A-422 control equipment, or an authorized portable unit for as long as is necessary to reduce the POC concentration in the vapor stream to less than 1% (vol) or 10,000 ppm. [Basis: Cumulative Increase]
21. Deleted.
22. The Owner/Operator shall equip A-421 and A-422 with a continuous hydrocarbon concentration monitor and recorder that measures the outlet concentrations at this abatement equipment. [Basis: NSPS]
23. The Owner/Operator shall not degas any tanks to the A-421/A-422 Carbon Systems during bulk liquid transfers at any other sources abated by A-421 and A-422. [Basis: Cumulative Increase]
24. The Owner/Operator shall maintain the following records pertaining to tank degassing operations:
 - a. Number of tank degassing operations,
 - b. Abatement device used for each degassing operation,
 - c. The hydrocarbon concentration at the outlet of the abatement device during the venting operation. [Basis: Recordkeeping]These records shall be kept in a District approved log and retained for at least five years from the date of entry. This log shall be kept on site and made available to District Staff upon request. [Basis: Cumulative Increase]
25. The Owner/Operator shall ensure that the combined total pumping rate through the two loading arms associated with S-27 does not exceed 10,000 barrels per hour. [Basis: Cumulative Increase]
26. The Owner/Operator shall transfer only the following materials at Marine Loading Terminal S-27:
 - a. Ethanol, Methanol
 - b. Gasoline
 - c. MTBE

- d. Any material which is exempt from District permitting requirements (as long as the loading of this exempt material has been properly reported to the District), or any other petroleum hydrocarbon material with a vapor pressure less than unleaded gasoline (6.2 psia at 70 deg F) and toxicity less than unleaded gasoline (4% benzene by weight).

e. Renewable/alternative jet fuel

[Basis: Cumulative Increase, Toxics]

27. The Owner/Operator shall conduct an annual emissions and efficiency test on equipment A-421 and A-422 when loading a marine vessel with any organic material at S-27. If no marine vessels are loaded at S-27 during a given calendar year, the owner/operator shall submit to the District's Engineering Division no later than 60 days after the end of the calendar year written notification and the corresponding monthly records showing zero throughput at S-27 during the given calendar year or the last recorded throughput at S-27 occurring during the prior calendar year and shall conduct an annual emissions and efficiency test on equipment A-421 and A-422 during the next marine vessel loading event at S-27. The owner/operator shall obtain approval for all source test procedures from the District's Source Test Section prior to conducting any tests. The owner/operator shall comply with all applicable testing requirements as specified in 40 CFR 63, Section 63.565(d). The owner/operator shall notify the District's Source Test Section, in writing, of the source test protocols and projected test dates at least 7 days prior to testing. These records shall be kept on file for at least five years after the date of entry and shall be made available to District personnel upon request. [Basis: 40 CFR 63, 63.563(b)6]

28. The Owner/Operator shall not store products in Tanks S-53 and/or S-54 that exceed a maximum True Vapor pressure of 5.2 psia. [Basis Regulation 8-5, Cumulative Increase]

Condition No. 27277

1. The owner/operator of S-1, S-2, S-3, S-5, S-6, S-12, S-15, S-24, S-25, S-30, S-32, S-33, S-34, S-35, S-36, S-37, S-38, ~~S-39~~, S-40, ~~S-41~~, S-42, S-43, and S-44, ~~S-53~~, and/or ~~S-54~~ shall not exceed a combined total throughput of more than 1,110,159,246 gallons of material in any consecutive 12-month period. The owner/operator may exceed the preceding throughput limit at of S-1, S-2, S-3, S-5, S-6, S-12, S-15, S-24, S-25, S-30, S-32, S-33, S-34, S-35, S-36, S-37, S-38, ~~S-39~~, S-40, ~~S-41~~, S-42, S-43, and S-44, ~~S-53~~, and/or ~~S-54~~ by a combined total of no more than 546,361,200 gallons of ethanol and Regulation 2, Rule 1 exempt materials that are received by rail car in any consecutive 12-month period. [Basis: Regulation 2-1-233]
2. The owner/operator of of S-1, S-2, S-3, S-5, S-6, S-12, S-15, S-24, S-25, S-30, S-32, S-33, S-34, S-35, S-36, S-37, S-38, ~~S-39~~, S-40, ~~S-41~~, S-42, S-43, and S-44, ~~S-53~~, and/or ~~S-54~~ shall not exceed a combined total throughput of more than 13,301,400 gallons of material in any calendar day. The owner/operator may exceed the preceding throughput limit at of S-1, S-2, S-3, S-5, S-6, S-12, S-15, S-24, S-25, S-30, S-32, S-33, S-34, S-35, S-36, S-37, S-38, ~~S-39~~, S-40, ~~S-41~~, S-42, S-43, and S-44, ~~S-53~~, and/or ~~S-54~~ by a combined total of no more than 1,995,840 gallons of ethanol and Regulation 2, Rule 1 exempt materials that are received by rail car in any calendar day. [Basis: Regulation 2-1-233]
3. The owner/operator of S-22 shall not load more than 420,480,000 gallons of all materials at S-22 during any consecutive 12-month period. [Basis: Regulation 2-1-233]

4. The owner/operator of S-22 shall not load more than 1,536,000 gallons of all materials at S-22 in any calendar day. [Basis: Regulation 2-1-233]
5. The owner/operator of S-22 shall vent all emissions from the S-22 Truck Loading Rack to S-1 whenever any organic liquid (including but not limited to gasoline, transmix, jet fuel, renewable jet fuel, and diesel) is loaded into a truck in accordance with the requirements of Regulation 8-33-301. [Basis: Regulation 2-1-233]
6. Not more than 30 days after the startup of S-1, S-3, S-5, S-12, S-22, and S-27; the owner/operator shall provide the Air District's Engineering Division with a final count of fugitive components installed. The owner/operator has been permitted for an increase in the following fugitive components as part of their renewable jet project:

Valves in light liquid service	92
Pump seals in light liquid service	4
Connectors/flanges	419

 - a. The valves shall be either bellow valves, diaphragm valves, quarter turn valves, live loaded valves, or other low emission valves.
 - b. The pumps shall be double mechanical seals with barrier fluid or Air District-approved equivalent.
 - c. The connectors and flanges shall have graphitic gaskets or Air District-approved equivalent.

Once installed, the fugitive components shall be included incorporated into the Leak Detection and Repair (LDAR) program and comply with the applicable requirements of Regulation 8-18. [Basis: BACT]
7. The owner/operator of S-1, S-3, S-5, S-12, S- 22, and S-27 may not operate both the blend/loading pump and its backup pump at a time when loading, unloading, or blending materials to or from S-1, S-3, S-5, S-12, S-22, and S-27. Basis: 2-1-233]
8. The owner/operator of S-22 shall load only one truck per lane at any given time at S-22. [Basis: 2-1-233]
9. The owner/operator of S-1 shall not install any electric heater to heat materials stored in S-1. [Basis: 2-1-233]
10. (Deleted; moved to Part 17)
11. The owner/operator of S-38, S-40, S-42, S-43, and S-44 shall not exceed a combined total throughput of more than 789,600,000 gallons (18.8 million barrels) of material (including gasoline, ethanol, transmix, biodiesel, renewable fuels, or other materials as allowed by Part 14) in any consecutive 12-month period. [Basis: Cumulative Increase]
12. The owner operator/or S-38, S-40, S-42, S-43, and S-44 shall not exceed a combined total throughput of more than 10,500,000 (250,000 barrels) of materials (including gasoline, ethanol, transmix biodiesel, renewable fuels, or other materials as allowed by Part 14) in any calendar day. [Basis: Cumulative Increase]

13. For each month, the owner/operator of S-38, S-40, S-42, S-43, and S-44 shall not store materials in S-38, S-40, S-42, S-43, and S-44 that exceed the following RVPs:

Months	RVP limit (psia)
January through April	10
May through October	6.9
November through December	10

[Basis: Cumulative Increase]

14. The owner/operator of S-38, S-40, S-42, S-43, and S-44 may store alternate liquid(s) other than those specified in Parts 11, 12, and 13, and/or usages in excess of those specified in Parts 11 and 12, provided that the owner/operator can demonstrate that the following are satisfied:

- a. Total combined POC/NPOC emissions from S-38, S-40, S-42, S-43, and S-44 do not exceed 9,933 pounds in any consecutive 12-month period using AP-42 internal floating roof tank equations; and
- b. Total combined POC/NPOC emissions from S-38, S-40, S-42, S-43, and S-44 do not exceed 58 pounds in any calendar day using AP-42 internal floating roof tank equations; and
- c. The use of these materials does not increase toxic emissions above any risk screening trigger level of Table 2-5-1 in Regulation 2-5.

[Basis: Cumulative Increase; Toxics]

15. The Owner/operator shall control organic emissions from S-38, S-40, S-42, S-43, and S-44 with an internal and seamless deck floating roof using a mechanical shoe primary seal and a rim-mounted secondary seal that meet the design criteria in Regulation 8, Rule 5. Each roof fitting shall be designed to minimize roof fitting losses. The following list specifies for each tank the types of roof fittings allowed, the maximum count for each fitting, and the control technique required. Control techniques for roof fittings not included in this list shall be subject to prior District approval prior to installing the internal floating roof on the given tank.

Not more than 30 days after the startup of S-38, S-40, S-42, S-43, and S-44; the owner/operator shall provide the Air District's Engineering Division with a final accounting the types and counts of roof fittings to be incorporated into this condition.

S-38, S-40, S-42, and S-43 (each tank):

Fitting Type and Count	Control Technique
Access hatch (24" diameter), 2 total	Bolted cover; gasketed
Ladder-slotted Guidepole Combination Well, 1 total	Ladder sleeve, gasketed sliding cover
Stub drain (1" diameter), 17 total	
Column well (20" diameter), 1 total	Flexible fabric sleeve seal
Column well (12" diameter), 8 total	Flexible fabric sleeve seal
Vacuum breaker (10" diameter), 2 total	Weighted mechanical actuation, gasketed
Sample Pipe or Well (24" diameter), 1 total	Slit fabric seal 10% open area
Slotted Guidepole/Sample Well, 1 total	Gasketed sliding cover with float, sleeve, wiper

S-44:

Fitting Type and Count	Control Technique
Access hatch (24" diameter), 2 total	Bolted cover; gasketed
Ladder-slotted Guidepole Combination Well, 1 total	Ladder sleeve, gasketed sliding cover
Stub drain (1" diameter), 17 total	
Column well (20" diameter), 1 total	Flexible fabric sleeve seal
Column well (12" diameter), 8 total	Flexible fabric sleeve seal
Vacuum breaker (10" diameter), 2 total	Weighted mechanical actuation, gasketed
Sample Pipe or Well (24" diameter), 1 total	Slit fabric seal 10% open area
Slotted Guidepole/Sample Well, 1 total	Gasketed sliding cover with float, sleeve, wiper

16. The owner/operator shall ensure that the concentration of organic vapor in the vapor space above the internal floating roof of S-38, S-40, S-42, S-43, and S-44 shall not exceed 30 percent of its lower explosive limit (LEL).

[Basis: Cumulative Increase]

17. To demonstrate compliance with Part 16, the owner/operator shall have a person conduct the following on a quarterly basis:

- a. Using an explosimeter, measure the concentration of the vapor space above the floating roof in terms of lower explosive limit (LEL), and record the reading.
- b. Conduct a visual inspection of the roof openings (including at each viewport) and the rim seal system and recording findings.
- c. Conduct a visual inspection of the slotted guidepole flexible enclosure system.

[Basis: Cumulative Increase]

18. To determine compliance with the above parts, the owner/operator shall maintain the following records in an Air District-approved log and provide all of the data necessary to evaluate compliance with the above parts, including the following information:

- a. Quantities of each type of liquid stored in of S-1, S-2, S-3, S-5, S-6, S-12, S-15, S-24, S-25, S-30, S-32, S-33, S-34, S-35, S-36, S-37, S-38, ~~S-39~~, S-40, ~~S-41~~, S-42, S-43, and S-44, ~~S-53, and/or S-54~~ on a daily basis.
- b. Quantities of each type of liquid loaded into Storage Tanks S-1, S-2, S-3, S-5, S-6, S-12, S-15, S-24, S-25, S-30, S-32, S-33, S-34, S-35, S-36, S-37, S-38, ~~S-39~~, S-40, ~~S-41~~, S-42, S-43, and S-44, ~~S-53, and/or S-54~~ on a daily and monthly basis
- c. The type and amount of materials loaded at S-22 Truck Rack.
- d. Date of each S-22 loading event
- e. Monthly throughput shall be totaled for each consecutive twelve-month period.
- f. To demonstrate compliance with Part 13, material specifications or certifications from the vendor, with the liquid RVP, for each shipment of a different type of material stored in S-38, S-40, S-42, S-43, and S-44. If a mixture of different materials is stored, the RVP of the most volatile material shall be used to demonstrate compliance. Materials without available liquid RVP information from the vendor shall be assumed to be in compliance with Part 13; however, Air District staff has the discretion to collect a sample of the material stored to test the liquid RVP for compliance with Part 13.
- g. To demonstrate compliance with Part 14, when storing alternate liquid(s) other than those specified in Parts 11, 12, or 13 and/or usages in excess of those specified in Parts 11 and 12, emission calculations for S-38, S-40, S-42, S-43, and S-44 shall be totaled for each consecutive twelve-month period.

- h. Inspection findings and vapor space concentration measurements to demonstrate compliance with Parts 16 and 17.

All records shall be retained on-site for five years, from the date of entry, and made available for inspection by Air District staff upon request. These recordkeeping requirements shall not replace the recordkeeping requirements contained in any applicable District Regulations.

[Basis: Cumulative Increase, Regulation 2-1-233]

DRAFT

RECOMMENDATION

I recommend that the District issue an Authority to Construct to Shore Terminals, LLC for the following equipment:

S-53 Internal Floating Roof Tank (T-20107)
Materials Stored: Gasoline blendstock, ethanol, transmix, diesel, renewable fuels
Tank Volume: 8,022,000 gallons; 191,000 barrels
Tank Dimensions: 150-foot diameter; 64-foot height
Maximum Throughput: 9 million barrels (mmbbls) per year
Maximum True Vapor Pressure: 5.2 psia

S-54 Internal Floating Roof Tank (T-20109)
Materials Stored: Gasoline blendstock, ethanol, transmix, diesel, renewable fuels
Tank Volume: 8,022,000 gallons; 191,000 barrels
Tank Dimensions: 150-foot diameter; 64-foot height
Maximum Throughput: 9 million barrels (mmbbls) per year
Maximum True Vapor Pressure: 5.2 psia

Christopher Ablaza
 Air Quality Engineer
 Engineering Division

Date

Attachment:

- Appendix A - Changes to Major Facility Title V Permit

Appendix A

The proposed changes to the tables in Section II- Equipment, Section IV – Source Specific Applicable Requirements, Section VI – Permit Conditions, and Section VII – Limits and Monitoring Requirements of the Title V permit are provided below.

Table II A - Permitted Sources

Each of the following sources has been issued a permit to operate pursuant to the requirements of BAAQMD Regulation 2, Permits. The capacities in this table are the maximum allowable capacities for each source, pursuant to Standard Condition I.J and Regulation 2-1-301.

S-#	Description	Make or Type	Model	Capacity	Grandfathered Limit, or Firm Limit and Basis
S-39	T-20107, ethanol/gasoline/ petroleum storage tank	Fixed Roof Tank		8,022,000 gallons Facility Emissions Cap Condition 12677	NSR Application 6719 (1991)
S-41	T-20109, ethanol/gasoline/ petroleum storage tank	Fixed Roof Tank		8,022,000 gallons Facility Emissions Cap Condition 12677	NSR Application 6719 (1991)
<u>S-53</u>	<u>T-20107, ethanol, gasoline, Petroleum, CARBOB, ethanol, transmix, diesel, renewable fuels storage tank</u>	<u>Internal Floating Roof Tank</u>		<u>8,022,000 gallons Facility Emissions Cap Condition 12677</u>	
<u>S-54</u>	<u>T-20109, ethanol, gasoline, Petroleum, CARBOB, ethanol, transmix, diesel, renewable fuels petroleum storage tank</u>	<u>Internal Floating Roof Tank</u>		<u>8,022,000 gallons Facility Emissions Cap Condition 12677</u>	

Table II B – Abatement Devices

A-#	Description	Source(s) Controlled	Applicable Requirement	Operating Parameters	Limit or Efficiency
A-421	Charcoal Adsorption Vapor Recovery Unit	S-27, S-32 through S-44, S-38, S-40, S- 42, S-43, S-44	BAAQMD Condition #6185 Part 5, Part 15	Infrared combustible gas detector measures hydrocarbon concentration	1 lb POC/1000 barrel
A-422	Charcoal Adsorption Vapor Recovery Unit	S-27, S-32 through S-44, S-38, S-40, S- 42, S-43, S-44	BAAQMD Condition #6185 Part 5, Part 15	Infrared combustible gas detector measures hydrocarbon concentration	1 lb POC/1000 barrel

Section IV. Source-specific Applicable Requirements

Table IV – G

Source-specific Applicable Requirements

S-32, S-33, S-34, S-35, S-36, S-37, ~~S-39, S-41~~, – FIXED ROOF TANKS

[No changes to table]

Table IV – H
Source-specific Applicable Requirements

S-38, S-40, S-42, S-43, S-44, S-53, S-54 – INTERNAL FLOATING ROOF TANKS

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
BAAQMD Regulation 8, Rule 5	Organic Compounds-Storage of Organic Liquids (11/3/2021)		
8-5-101	Description	Y	
8-5-111	Limited Exemption, Tank Removal From and Return to Service	N	
8-5-112	Limited Exemption, Tanks in Operation	N	
8-5-117	Exemption, Low Vapor Pressure	Y	
8-5-301	Storage Tanks Control Requirements	N	
8-5-305	Requirements for Internal Floating Roof Tanks	N	
8-5-320	Tank Fitting requirements	Y	
8-5-320.2	Openings in the roof	Y	
8-5-320.3	Gasketed Covers	Y	
8-5-320.4	Solid sampling or gauging wells	Y	
8-5-320.4.1	The well shall provide a projection below the liquid surface	Y	
8-5-320.4.2	The well shall be equipped with a cover	Y	
8-5-320.4.3	The gap between the well and the roof	Y	
8-5-320.5	Slotted sampling or gauging wells	Y	
8-5-320.5.1	The well shall provide a projection below the liquid surface	Y	
8-5-320.5.2	The well requirements	Y	
8-5-320.5.3	The gap between the well and the roof	Y	
8-5-320.6	Emergency roof drain	Y	
8-5-321	Primary seal requirements	Y	
8-5-321.1	No holes, tears, or other openings in the primary seal fabric	Y	
8-5-321.2	The seal shall be liquid mounted except as provided in 8-5-311.2.2	Y	
8-5-321.3	Metallic shoe type seals	Y	
8-5-321.3.1	Geometry of shoe	Y	
8-5-321.3.2	Gaps for welded tanks	Y	
8-5-322	Secondary seal requirements	Y	
8-5-322.1	No holes, tears, or other openings in the secondary seal	Y	
8-5-322.2	Insertion of probes	Y	
8-5-322.3	Gaps for welded tanks	Y	
8-5-322.5	For welded internal floating roof tank with seal installed after February 1, 1993, no gap between tank shell and the secondary seal shall exceed 1.5 mm (0.06 in.). The cumulative length of all secondary seal gaps exceeding 0.5 mm (0.02 in.) shall be not more than 5% of the circumference of the tank excluding gaps less than 5 cm (1.79 in.) from vertical weld seams.	Y	
8-5-322.6	The secondary seal shall extend from the roof to the tank shell and shall not be attached to the primary seal.	Y	
8-5-328	Tank degassing requirements	N	
8-5-328.1	Concentration of <10,000 ppm as methane after cleaning	Y	
8-5-328.2	No degassing during ozone excess	Y	
8-5-328.3	Notification requirements	N	
8-5-331	Tank Cleaning Requirements	N	
8-5-402	Inspection Requirements for Internal Floating Roof Tanks	N	
8-5-402.1	Inspection of primary and secondary seal per 8-5-321 and 8-5-322 once every 10 years	N	
8-5-402.2	Inspection of entire circumference of outermost seal per 8-5-305.1, 8-5-305.2, 8-5-305.3, 8-5-321.1 and 8-5-322.1 twice per calendar year	N	
8-5-402.3	Tank Fitting Inspection twice per calendar year	N	
8-5-501	Recordkeeping Requirements	N	
8-5-502	Source test requirement	Y	
8-5-605	Measurement of Leak Concentrations and Residual Concentrations	N	
8-5-606	Analysis of Samples, Tank Cleaning Agents	N	

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SIP Regulation 8, Rule 5	Organic Compounds-Storage of Organic Liquids (06/05/2003)		
8-5-111	Limited Exemption, Tank Removal From and Return to Service	Y	
8-5-112	Limited Exemption, Preventative Maintenance and Inspection of Tanks in Operation	Y	
8-5-301	Storage Tanks Control Requirements	Y	
8-5-303	Requirements for Pressure Vacuum Valves	Y	
8-5-305	Requirements for Internal Floating Roofs	Y	
8-5-328	Tank degassing requirements	Y	
8-5-328.1.2	Concentration of <10,000 ppm as methane after degassing	Y	
8-5-401	Primary seal inspection	Y	
8-5-401.1	Primary and Secondary Seals Inspection twice per calendar year	Y	
8-5-401.2	Tank Fitting Inspection twice per calendar year	Y	
8-5-501	Keep records	Y	
8-5-502	Tank degassing annual source test requirement	Y	
8-5-503	Portable hydrocarbon detector	Y	
40 CFR 60	Standards of Performance for New Stationary Sources (12/23/71)	Y	
Subpart A	General Provisions	Y	
60.1	Applicability	Y	
60.2	Definitions	Y	
60.3	Units and Abbreviations	Y	
60.4	Address	Y	
60.4(b)	Reports to EPA and District	Y	
60.5	Determination of Construction or Modification	Y	
60.6	Review of Plans	Y	
60.7	Notification and Recordkeeping	Y	
60.7(a)	Written notification	Y	
60.7(b)	Records	Y	
60.8	Performance Tests	Y	
60.9	Availability of Information	Y	
60.11	Compliance with Standards and Maintenance Requirements	Y	
60.11(a)	Compliance with standards and maintenance requirements	Y	
60.11(d)	Minimizing emissions	Y	
60.12	Circumvention	Y	
60.13	Reconstruction	Y	
60.14	Modification	Y	
60.15	Reconstructions	Y	
60.17	Incorporated by Reference	Y	
60.19	General notification and reporting requirements	Y	
NSPS Part 60 Subpart Kb	Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984	Y	
60.110b(a)	Tanks greater than or equal to 40 cubic meters	Y	
60.112b(a)(3)	A closed vent system and control device	Y	
60.112b(a)(3)(i)	The closed vent system that collects all VOC vapors and gases discharged	Y	
60.112b(a)(3)(ii)	The control device that reduces inlet VOC emissions by 95 percent or greater	Y	
60.113b	Testing and Procedures		
60.113b(c)	Exempt from § 60.8 of the General Provisions	Y	
60.113b(c)(1)	Submit for approval by the Administrator	Y	
60.113b(c)(1)(i)	Documentation demonstrating that the control device will achieve the required control efficiency during maximum loading conditions	Y	
60.113b(c)(1)(ii)	A description of the parameter or parameters to be monitored	Y	

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60.113b(c) (2)	Operate and monitor the parameters of the closed vent system and control device	Y	
60.115b	Reporting and recordkeeping requirements	Y	
60.115b(a)	After installing control equipment	Y	
60.115b(a) (1)	Furnish the Administrator with a report	Y	
60.115b(a) (2)	Keep a record of each inspection performed	Y	
60.115b(a) (3)	Report shall identify the storage vessel, the nature of the defects, and the date the storage vessel was emptied	Y	
60.115(c)	Records	Y	
60.115(c)(1)	Operating plan	Y	
60.115(c)(2)	Parameters monitored	Y	
60.116b	Monitoring of Operation	Y	
60.116b(a)	The owner or operator shall keep copies of all records	Y	
60.116b(b)	Accessible records	Y	
60.116b(c)	Record of the VOL stored, the period of storage, and the maximum true vapor pressure of that VOL during the respective storage period	Y	
60.116b(d)	Maximum true vapor pressure	Y	
60.116b(e)	Available data on the storage temperature may be used to determine the maximum true vapor pressure	Y	
60.116b(e) (1)	The maximum true vapor pressure calculation	Y	
60.116b(e) (2)	Vapor pressure for crude oil or refined petroleum products	Y	
60.116b(e) (2)(i)	Reid vapor pressure and the maximum expected storage temperature	Y	
60.116b(e) (2)(ii)	The true vapor pressure	Y	
60.116b(e) (3)	For other liquids, the vapor pressure	Y	
60.116b(e) (3)(i)	May be obtained from standard reference texts	Y	
60.116b(e) (3)(ii)	Determined by ASTM Method D2879–83	Y	
60.116b(e) (3)(iii)	Measured by an appropriate method approved by the Administrator	Y	
60.116b(e) (3)(iv)	Calculated by an appropriate method approved by the Administrator	Y	
40 CFR 63	National Emission Standards for Hazardous Air Pollutants For Source Categories	Y	
Subpart A	General Provisions	Y	
63.1	Applicability	Y	
63.2	Definitions	Y	
63.3	Units and abbreviations	Y	
63.4	Prohibited activities and circumvention	Y	
63.5	Construction and reconstruction	Y	
63.6	Compliance with standards and maintenance requirements	Y	
63.7	Performance testing requirements	Y	
63.8	Monitoring requirements	Y	
63.9	Notification requirements	Y	
63.10	Recordkeeping and reporting	Y	

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63.12	State authority and delegations	Y	
63.13	Addresses of EPA Regional Offices	Y	
63.14	Incorporation by Reference	Y	
63.15	Availability of Information and confidentiality	Y	
40 CFR Part 63 Subpart R	National Emission Standards for Gasoline Distribution Facilities (Bulk Gasoline Terminals and Pipeline Breakout Stations) (12/14/1994)	Y	
63.420(f)	Demonstrate compliance	Y	
63.420(g)	Most stringent control requirements	Y	
63.420(h)	Subject to the provisions of 40 CFR part 63, subpart A—General Provisions	Y	
63.420(j)	<i>Rules Stayed for Reconsideration</i>	Y	
63.423	Standards: Storage vessels	Y	
63.423(a)	Requirements	Y	
63.423(c)	December 15, 1997 deadline	Y	
63.425	Test methods and procedures	Y	
63.425(a)	Performance test on the vapor processing system	Y	
63.425(b)	Operating parameter	Y	
63.425(b)(1)	Determine an operating parameter value	Y	
63.425(b)(2)	Determine an operating monitoring parameter value	Y	
63.425(b)(3)	Demonstrate continuous compliance	Y	
63.425(c)	Document the reasons for any change in the operating parameter	Y	
63.425(d)	Compliance with § 60.113b	Y	
63.427	Continuous monitoring	Y	
63.427(a)(1)	Continuous emission monitoring system (CEMS)	Y	
63.427(a)(5)	Alternative parameter demonstrates continuous compliance	Y	
63.427(b)	Operate the vapor processing system	Y	
63.427(c)	Monitoring requirements in § 60.116b; 5 years records	Y	
63.428	Reporting and recordkeeping	Y	
63.428(a)	The initial notifications	Y	
63.428(c)(2)	Record and report simultaneously with the notification of compliance	Y	
63.428(c)(2) (i)	Determining the operating parameter value	Y	
63.428(d)	Keep records and furnish reports	Y	
63.428(h)	Submit an excess emissions report to the administrator	Y	
63.428(h)(1)	Each exceedance or failure reports	Y	
63.428(h)(4)	Equipment leak	Y	
63.428(h)(4) (i)	The date on which the leak was detected	Y	
63.428(h)(4) (ii)	The date of each attempt to repair the leak	Y	
63.428(h)(4) (iii)	The reasons for the delay of repair; and	Y	
63.428(h)(4) (iv)	The date of successful repair	Y	
40 CFR 64	Compliance Assurance Monitoring (10/22/1997)	Y	
64.2(a)	Applicability	Y	
64.3	Monitoring design criteria	Y	
64.3(a)	General criteria	Y	

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64.3(a)(1)	Data for one or more indicators	Y	
64.3(a)(2)	Indicator range	Y	
64.3(a)(3)	Design of indicator ranges	Y	
64.3(b)	Performance criteria	Y	
64.3(b)(1)	Specifications for obtaining data	Y	
64.3(b)(2)	Verification procedures	Y	
64.3(b)(3)	Quality assurance and control practices	Y	
64.3(b)(4)	Specifications for frequency, procedures, and averaging periods	Y	
64.3(b)(4)(i)	Design of period over which data are obtained, etc.	Y	
64.3(b)(4)(iii)	Frequency for other pollutant-specific emission units	Y	
64.3(c)	Evaluation factors	Y	
64.4	Submittal requirements	Y	
64.4(a)	Submittal of monitoring that satisfies design requirements in 40 CFR 63.4	Y	
64.4(b)	Justification for the proposed monitoring	Y	
64.4(b)(1)	Presumptively acceptable monitoring approaches	Y	
64.4(c)(1)	Submittal of control device operating parameter data obtained during tests	Y	
64.4(c)(2)	Documentation of no changes to system after performance tests	Y	
64.5(b)	Deadline for submittals for other pollutant-specific emissions units	Y	
64.5(d)	Prior to approval, emissions unit subject to 40 CFR 70.1(a)(3)(i)(B)	Y	
64.6(a)	Approval by permitting authority	Y	
64.6(b)	Additional data collection	Y	
64.6(c)	Establishment of permit terms or conditions	Y	
64.6(d)	Installation, testing or final verification	Y	
64.7	Operation of approved monitoring	Y	
64.7(a)	Commencement of operation	Y	
64.7(b)	Proper maintenance	Y	
64.7(c)	Continued operation	Y	
64.7(d)	Response to excursions or exceedances	Y	
64.7(e)	Documentation of need for improved monitoring	Y	
64.8	Quality improvement plan	Y	
64.9	Reporting and recordkeeping requirements	Y	
64.9(a)	General reporting requirements	Y	
64.9(b)	General recordkeeping requirements	Y	
64.10	Savings provisions	Y	
BAAQMD Condition #6185	Permit Conditions		
Part 2	Hydrocarbon liquids loaded shall not exceed 18.8 million barrels in any consecutive 12-month period [Basis: Cumulative Increase]	Y	
Part 2a	Total combined POC/NPOC emissions shall not exceed 18,800 pounds in any consecutive 12-month period and use of additional materials does not increase toxic emissions above any Regulation 2-5 triggers [Basis: Cumulative Increase; Toxics]	Y	
Part 3	Hydrocarbon liquids loaded shall not exceed 250,000 barrels in any day [Basis: Cumulative Increase]	Y	
Part 3a	Total combined POC/NPOC emissions shall not exceed 250 pounds in any calendar day and use of additional materials does not increase toxic emissions above any Regulation 2-5 triggers [Basis: Cumulative Increase; Toxics]	Y	

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Part 7	The average benzene concentration in all hydrocarbon liquids stored shall not exceed 2% by weight [Basis: Toxics]	N	
Part 17	Tank degassing shall be vented at all times to abatement devices [Basis: Regulation 8-5]	Y	
Part 19	Minimize fugitive emissions during tank cleaning operation [Basis: Cumulative Increase]	Y	
Part 24	Record keeping for tank degassing operations [Basis: Record Keeping]	Y	
Part 28	Hydrocarbon liquids loaded shall not exceed a TVP of 5.2 psia [Basis: Regulation 8-18]	Y	
BAAQMD Condition 27277	Permit Conditions		
Part 11	Total materials loaded shall not exceed 18.8 million barrels in any consecutive 12-month period. [Basis: Cumulative Increase]	Y	
Part 12	Total materials loaded shall not exceed 250,000 barrels in any calendar day. [Basis: Cumulative Increase]	Y	
Part 13	RVP shall not exceed 10 psia from January-April and November-December and 6.9 psia from May-October [Basis: Cumulative Increase]	Y	
Part 14	Total combined POC/NPOC emissions shall not exceed 9933 pounds in any consecutive 12-month period and 58 pounds per calendar day, and use of additional materials does not increase toxic emissions above any Regulation 2-5 triggers [Basis: Cumulative Increase; Toxics]	Y	
Part 15	Roof fittings counts [Basis: BACT]	Y	
Part 16	Records of throughputs, loading events, material specifications [Basis: Cumulative Increase, Regulation 2-1-233]	Y	
BAAQMD Condition 100228	Permit Conditions		
Part 1	Total materials loaded shall not exceed 9 million barrels in any consecutive 12-month period. [Basis: Cumulative Increase]	Y	
Part 2	Total materials loaded shall not exceed 9 million barrels in any consecutive 12-month period. [Basis: Cumulative Increase]	Y	
Part 3	Total materials loaded shall not exceed 250,000 barrels in any calendar day. [Basis: Cumulative Increase]	Y	
Part 4	Total materials loaded shall not exceed 250,000 barrels in any calendar day. [Basis: Cumulative Increase]	Y	
Part 5	TVP shall not exceed 5.2 psia in each of the S-53 and S-54 tanks. [Basis: Cumulative Increase]	Y	
Part 6	Total combined POC/NPOC emissions shall not exceed 3,483 pounds in any consecutive 12-month period and 23 pounds per calendar day, and use of additional materials does not increase toxic emissions above any Regulation 2-5 triggers [Basis: Cumulative Increase; Toxics]	Y	
Part 7	Roof fittings counts [Basis: BACT]	Y	
Part 8	Benzene concentration shall not exceed 2% by weight; material sampling for benzene concentration analysis. [Basis: Cumulative Increase, Regulation 2-5]	Y	
Part 15	Records of throughputs, loading events, material specifications [Basis: Cumulative Increase, Regulation 2-1-233]	Y	

Table IV – **HI**
Source-specific Applicable Requirements
COMPONENTS

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
BAAQMD Regulation 8, Rule 18	Organic Compounds-Equipment Leaks (12/16/2015)		
8-18-110	Exemption, Controlled Seal Systems and Pressure Relief Devices	N	
8-18-113	Limited Exemption, Initial Boiling Point	Y	

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8-18-115	Limited Exemption, Storage Tanks	Y	
8-18-116	Limited Exemption, Vacuum Service	Y	
8-18-301	General	Y	
8-18-302	Valves	N	
8-18-303	Pumps and compressors	N	
8-18-304	Connectors	N	
8-18-305	Pressure relief devices	N	
8-18-306	Non-repairable equipment	N	
8-18-307	Liquid Leaks	N	
8-18-308	Alternate compliance	N	
8-18-401	Inspection	N	
8-18-402	Identification	N	
8-18-403	Visual inspection schedule	N	
8-18-404	Alternate inspection schedule	N	
8-18-405	Alternate inspection reduction plan	N	
8-18-406	Interim Compliance	N	
8-18-501	Portable Hydrocarbon Detector	N	
8-18-502	Records	N	
8-18-503	Reports	N	
SIP BAAQMD Regulation 8, Rule 18	Organic Compounds-Equipment Leaks (6/5/2003)		
8-18-110	Exemption, Controlled Seal Systems and Pressure Relief Devices	Y	
		Y	
8-18-302	Valves	Y	
8-18-303	Pumps and Compressors	Y	
8-18-304	Connections	Y	
8-18-305	New or Replaced Valves	Y	
8-18-306	Non-repairable Equipment	Y	
8-18-307	Liquid Leak	Y	
8-18-401	Inspection	Y	
8-18-402	Identification	Y	
8-18-501	Portable Hydrocarbon Detector	Y	
8-18-502	Records	Y	
SIP BAAQMD Regulation 8, Rule 25	Organic Compounds-Pump and Compressor Seals at Petroleum Refinery Complexes, Chemical Plants, Bulk Plants and Bulk Terminals (3/7/1995)		
8-25-301	Pump and compressor operating requirements	Y	
8-25-302	Pumps	Y	
8-25-303	Compressors	Y	
8-24-304	Non-repairable pumps and compressors	Y	
8-25-305	New or Replaced pumps and compressors	Y	
8-25-306	Repeat Leakers	Y	
8-25-307	Liquid Leak	Y	
8-25-401	Measurement schedule	Y	
8-25-402	Inspection plan	Y	
8-25-403	Visual inspection schedule	Y	
8-25-405	Pump and compressor identification	Y	
8-25-406	Leaking pumps and compressors	Y	

8-25-501	Portable hydrocarbon detector	Y	
8-25-503	Records	Y	
8-25-504	Burden of proof	Y	
40 CFR Part 63 Subpart R	National Emission Standards for Gasoline Distribution Facilities (Bulk Gasoline Terminals and Pipeline Breakout Stations) (12/14/94)	Y	
63.424(a)	Perform monthly leak inspection of each equipment during the loading of a gasoline cargo tank	Y	
63.424(b)	Log book	Y	
63.424(c)	Record leak detection	Y	
63.424(d)	Delay repair	Y	
63.424(e)	December 15, 1997 initial compliance	Y	
63.424(f)	Alternative to compliance	Y	
63.424(g)	Measures taken	Y	
63.424(g)(1)	Minimize gasoline spills	Y	
63.424(g)(2)	Cleanup spills expeditiously	Y	
63.424(g)(3)	Cover all gasoline containers	Y	
63.424(g)(1)	Minimize gasoline sent to waste collection systems	Y	
BAAQMD Condition 27277	Permit Conditions		
Part 6	Fugitive component counts and incorporation into LDAR program	Y	
BAAQMD Condition 100228	Permit Conditions		
Part 9	Fugitive component counts	Y	
Part 10	Fugitive component incorporation into LDAR program		

Table IV – ~~I~~ J

Source-specific Applicable Requirements
S-48 EMERGENCY STANDBY GENERATOR SET FOR FIRE PUMP
[No changes to table]

Section VI. PERMIT CONDITIONS

[Changes to permit conditions #6185 and #27277 are shown in the evaluation for Application #31506.]

Section VII. Applicable Limits and Compliance Monitoring Requirements

Table VII – F

Applicable Limits and Compliance Monitoring Requirements
S-32, S-33, S-34, S-35, S-36, S-37, S-38, ~~S-39~~, S-40, ~~S-41~~, S-42, S-43, and S-44 –
FIXED ROOF TANKS
[No changes to table]

Table IV – G

Applicable Limits and Compliance Monitoring Requirements
S-38, S-40, S-42, S-43, S-44, ~~S-53~~, ~~S-54~~ – INTERNAL FLOATING ROOF TANKS

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Type of Limit	Emission Limit Citation	FE Y/N	Future Effective Date	Emission Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
POC	BAAQMD 8-5-303.1	Y		PV valve set pressure within 10% of working pressure or at least 0.5 psig	BAAQMD 8-5-403	P/S/A	Inspection
POC	BAAQMD 8-5-303.2	Y		gas tight (< 500 ppm) except when operating pressure exceeds the valve set pressure	BAAQMD 8-5-403	P/SA	Inspection
POC	BAAQMD 8-5-306	Y		Emission controlled $\geq 95\%$ weight	BAAQMD Condition # 6158, part 22, Section 3b	C	Hydrocarbon concentration monitor
POC	BAAQMD 8-5-320.5.2	Y		Well with cover gasket, a pole sleeve, pole wiper, and internal float with gap ≤ 1.3 cm (1/2 in), or zero gap pole wiper seal	BAAQMD 8-5-401.2, 8-5-404	P/twice/yr	Inspection Certification
POC	BAAQMD 8-5-320.5.3	Y		Gap between well and roof ≤ 1.3 cm (1/2 in)	BAAQMD 8-5-401.2, 8-5-404	P/twice/yr	Inspection Certification
POC	BAAQMD 8-5-321.3	Y		Primary seal metallic shoe extends a minimum 61 cm (24 in) above liquid surface	BAAQMD 8-5-401.1, 8-5-404	P/twice/yr P/twice/yr	Inspection Certification
POC	BAAQMD 8-5-321.3.1	Y		Gap between shoe and tank shell is no greater than 46 cm (18 in)	BAAQMD 8-5-401.1, 8-5-404	P/twice/yr P/twice/yr	Inspection Certification
POC	BAAQMD 8-5-321.3.2	Y		Gap between tank shell and the primary seal < 3.8 cm (1 1/2 in). No continuous gap > 0.32 cm ((1/8 in) shall exceed 10% of circumference. The cumulative length of all seal gaps exceeding 1.3 cm (1/2 in) shall be $\leq 10\%$ of circumference and the cumulative length of all seal gaps exceeding 0.32 cm (1/8 in) $\leq 40\%$ of circumference	BAAQMD 8-5-401.1, 8-5-404	P/twice/yr P/twice/yr	Inspection Certification
POC	BAAQMD 8-5-322.2	Y		Secondary seal shall allow insertion of probes up to 3.8 cm (1 1/2 in) in width	BAAQMD 8-5-401.1, 8-5-404	P/twice/yr P/twice/yr	Inspection Certification

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Type of Limit	Emission Limit Citation	FE Y/N	Future Effective Date	Emission Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
POC	BAAQMD 8-5-322.3	Y		Gap between tank shell and the secondary seal shall not exceed 1.3 cm (1/2 in)	BAAQMD 8-5-401.1, 8-5-404	P/ twice/yr P/twice/yr	Inspection Certification
POC	BAAQMD 8-5-328.1.2	Y		Tank Cleaning \geq 90% wt. emission control, POC concentration < 10,000 ppm	BAAMD 8-5-502	P/A	Source test
POC	BAAQMD 8-5-328.1.2	Y		Tank cleaning \geq 90% wt. emission control, POC concentration < 10,000 ppm	BAAQMD Condition # 6158, part 22	P/E	Hydrocarbon concentration monitor
POC	60.112b (a)(1)	Y		Deck fitting closure standards; includes gasketed covers	60.113b (a)(3) & (4)	<u>periodic</u> initially & each time emptied & degassed, at least every 5 yr	visual inspection
POC	60.113b (a)(1) & (4)	Y		Primary rim-seal standards; no holes or tears	60.113b (a)(3) & (4)	<u>periodic</u> initially & each time emptied & degassed & prior to refilling tank with VOL, at least every 5 yr	visual inspection
POC	60.113b (a)(1) & (4)	Y		Secondary rim-seal standards; no holes or tears	60.113b (a)(3) & (4)	<u>periodic</u> initially & each time emptied & degassed & prior to refilling tank with VOL, at least every 5 yr	visual inspection
POC	60.113b (a)(2)	Y		Internal visual inspection from viewports of fixed roof	60.113b (a)(2) & (3)	<u>periodic</u> initially & annually	visual inspection
POC	60.116b (c)	Y		Record of liquid stored and true vapor pressure	60.116b (c) & (e)	<u>periodic</u> upon change of service	records
POC		Y		Record of each initial, annual, and 10-year tank inspection	60.115b(a)(2)	<u>periodic</u> for each tank inspection	records

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Type of Limit	Emission Limit Citation	FE Y/N	Future Effective Date	Emission Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
POC		Y		Report of non-compliant annual inspection for tanks with secondary seals	60.115b(a)(4)	periodic within 30 days of tank inspection	report
POC	BAAQMD Condition #6185, part 2	Y		Hydrocarbon liquid loaded ≤ 18.8 million barrels in any consecutive 12 month period	BAAQMD Condition #12677, part 18	P/A	Records
POC/NPOC	Part 2a	Y		POC/NPOC $\leq 18,800$ pounds in any consecutive 12 month period	BAAQMD Condition #6185, part 2a	P/A	Records
POC	BAAQMD Condition #6185, part 3	Y		Hydrocarbon liquid loaded $\leq 250,000$ barrels per day	BAAQMD Condition #6185, part 3	P/D	Records
POC/NPOC	BAAQMD Condition # 6185 part 3a	Y		POC/NPOC ≤ 250 pounds in any calendar day	BAAQMD Condition #6185, part 3a	P/D	Records
POC	BAAQMD Condition #6185, part 7	N		Benzene concentration ≤ 2 % weight	BAAQMD Condition #6185, part 7	P/Semi-annual	Analysis
POC/NPOC	BAAQMD Condition #27277, part 11	Y		Materials loaded ≤ 18.8 million barrels in any consecutive 12 month period	BAAQMD Condition #27277, part 16	P/A	Records
POC/NPOC	BAAQMD Condition #27277, part 12	Y		Materials loaded $\leq 250,000$ barrels in any calendar day	BAAQMD Condition #27277, part 16	P/D	Records
POC/NPOC	BAAQMD Condition #27277, part 13	Y		RVP ≤ 10 psia (January-April and November-December) RVP ≤ 6.9 psia (May-October)	BAAQMD Condition #27277, part 16	P	Records

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Type of Limit	Emission Limit Citation	FE Y/N	Future Effective Date	Emission Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
POC/ NPOC	BAAQMD Condition #27277, part 14	Y		POC/NPOC ≤ 9933 pounds in any consecutive 12 month period POC/NPOC ≤ 58 pounds in any calendar day	BAAQMD Condition #27277, part 16	P/A and D	Records
POC	BAAQMD Condition #12677, part 1	Y		POC ≤ 73 tons in any consecutive 12 month period, nor ≤ 11644 pounds per day for all sources	BAAQMD Condition #12677, part 18	P/A	Records
POC	BAAQMD Condition #12677, part 9	Y		Pumps, Compressors, Valves and Flanges subject to Regulation 8-18	BAAQMD 8-18-401	P/Q	Inspection
POC/ NPOC	BAAQMD Condition #100228, part 1	Y		Materials loaded ≤ 9 million barrels in any consecutive 12 month period	BAAQMD Condition #100228, part 1	P/A	Records
POC/ NPOC	BAAQMD Condition #100228, part 2	Y		Materials loaded ≤ 9 million barrels in any consecutive 12 month period	BAAQMD Condition #100228, part 1	P/A	Records
POC/ NPOC	BAAQMD Condition #100228, part 3	Y		Materials loaded ≤ 250,000 barrels in any calendar day	BAAQMD Condition #100228, part 3	P/D	Records
POC/ NPOC	BAAQMD Condition #100228, part 4	Y		Materials loaded ≤ 250,000 barrels in any calendar day	BAAQMD Condition #100228, part 4	P/D	Records
POC/ NPOC	BAAQMD Condition #100228, part 5	Y		TVP < 5.2 psia	BAAQMD Condition #100228, part 5	P	Records
POC/ NPOC	BAAQMD Condition #100228, part 6	Y		POC/NPOC ≤ 3,483 pounds in any consecutive 12 month period POC ≤ 23 pounds in any calendar day NPOC < 9 pounds in any one calendar day	BAAQMD Condition #100228, part 6	P/A and D	Records

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Type of Limit	Emission Limit Citation	FE Y/N	Future Effective Date	Emission Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
POC/ NPOC	BAAQMD Condition #100228, part 8	Y		Benzene concentration \leq 2% by weight	BAAQMD Condition #100228, part 8	P/Semi- Annual	Records
POC/ NPOC	BAAQMD Condition #100228, part 9	Y		Component counts; unique identification codes per component; leak inspections	BAAQMD Condition #100228, part 9	P	Records
POC/ NPOC	BAAQMD Condition #100228, part 10	Y		POC < 0.790 pounds in any consecutive 12 month period for fugitive components	BAAQMD Condition #100228, part 10	P/A	Records
POC/ NPOC	BAAQMD Condition #100228, part 11	Y		POC fugitive component leak emission calculations using correlation equations (CAPCOA)	BAAQMD Condition #100228, part 11	P/Bi- Annual	Records
POC/ NPOC	BAAQMD Condition #100228, part 12	Y		Component leaks \leq 90 days; repaired or replaced immediately	BAAQMD Condition #100228, part 12	P/A	Records
POC/ NPOC	BAAQMD Condition #100228, part 14	Y		Valves and Flanges subject to Regulation 8-18	BAAQMD 8-18-401	P/A	Records
POC/ NPOC	BAAQMD Condition #100228, part 15	Y		Organic liquids stored (daily and monthly) Material throughput in consecutive 12-month period Organic liquid specifications or certifications, including max TVP Emission calculations per Parts 6 and 10	BAAQMD Condition #100228, part 15	P/D/A	Records