



SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

STATIONARY SOURCE COMPLIANCE DIVISION

APPLICATION PROCESSING AND CALCULATIONS

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557871 & 557872

DATE
12/19/2013

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**CHANGE OF CONDITIONS
PERMIT TO CONSTRUCT/PERMIT TO OPERATE**

APPLICANT'S NAME: TESORO REFINING & MARKETING CO. LLC
TESORO LOS ANGELES REFINERY-CARSON OPERATIONS

MAILING ADDRESS: P.O. BOX 6210
CARSON, CA 90749-6210

EQUIPMENT ADDRESS: 2350 EAST 223RD STREET
CARSON, CA 90810
FACILITY ID: 174655

EQUIPMENT DESCRIPTION:

Additions to the equipment description are **bold** and **underlined**. Deletions are ~~strikeouts~~.

Section D (Permit to Operate)

Description	ID No.	Connected To	RECLAIM Source Type	Emissions* And Requirements	Conditions
Process 16: PETROLEUM STORAGE TANKS					
SYSTEM 2: FLOATING ROOF TANKS					S13.3
STORAGE TANK, EXTERNAL FLOATING ROOF, NO. 33, 80,000 BBL; DIAMETER: 117 FT 2 IN; HEIGHT: 42 FT 10 IN WITH FLOATING ROOF, RIVETED SHELL PRIMARY SEAL, CATEGORY A, <u>METALLIC SHOE</u> <u>SECONDARY SEAL, CATEGORY B , RIM MOUNTED WIPER TYPE</u> A/N: 553079 , 557871	D1159			HAP: (10) [RULE 40CFR 63 SUBPART CC, #2, 5-25-2001]	B22.9, C1.72, K67.5, <u>B22.XX,</u> <u>B59.X,</u> <u>K67.21</u>



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Description	ID No.	Connected To	RECLAIM Source Type	Emissions* And Requirements	Conditions
<p>STORAGE TANK, EXTERNAL FLOATING ROOF, NO. 34, 100,000 BBL; <u>DIAMETER: 134 FT 8 IN;</u> <u>HEIGHT: 40 FT 7 IN</u> WITH FLOATING ROOF, DOUBLE DECK</p> <p>PRIMARY SEAL, CATEGORY A, <u>METALLIC SHOE</u></p> <p><u>SECONDARY SEAL, CATEGORY B , RIM MOUNTED</u></p> <p>A/N: 553080-557872</p>	D1160			HAP: (10) [RULE 40CFR 63 SUBPART CC, #2, 5-25-2001]	B22.9, C1.72, K67.5, <u>B22.XX,</u> <u>B59.X,</u> <u>K67.21</u>

- * (1) Denotes RECLAIM emission factor
- (2) Denotes RECLAIM emission rate
- (3) Denotes RECLAIM concentration limit
- (4) Denotes BACT emission limit
- (5)(5A)(5B) Denotes command and control emission limit
- (6) Denotes air toxic control rule limit
- (7) Denotes NSR applicability limit
- (8)(8A)(8B) Denotes 40 CFR limit(e.g. NSPS, NESHAPS, etc.)
- (9) See App B for Emission Limits
- (10) See Section J for NESHAP/MACT requirements

** Refer to Section F and G of this permit to determine the monitoring, recordkeeping and reporting requirements for this device.

BACKGROUND:

These applications were received by the AQMD on December 4, 2013 from Tesoro Refining and Marketing Company, LLC, Los Angeles Refinery Carson Operations (Tesoro - Carson) for the Change of condition of both storage tanks 33 (D1059) and 34 (D1160). In these both applications, Tesoro is installing rim-mounted secondary seals for each tank and requesting a change in permit condition to lower the maximum allowable true vapor pressure limit of stored organic liquids from <0.1 to <0.066 psia under actual operating conditions and to increase the allowable throughput from 320,000 barrels per month to 640,000 barrels per month.

Permitting history for tank 33:

- This subject tank is currently covered by permit no. G25147 (A/N 553079).



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- This external floating roof tank was constructed in 1954 under A/N T00335 (Permit No.104380).
- In 2001, there was a change of ownership from ARCO Products Company to BP West Coast Products under A/N 395298 (Permit No. F50107).
- In 2002, under A/N 406117 (Permit No G4085) this tank was submitted to re-permit the tank as a single seal and increase the throughput to 320,000 barrels a month with same vapor pressure of <0.1 psia. The permit was issued in 2009.

Permitting history for tank 34:

- This subject tank is currently covered by permit no. G25148 (A/N 553080).
- This external floating roof tank was constructed in 1952 under A/N Z00752 (Permit No.004676).
- In 2001, there was a change of ownership from ARCO Products Company to BP West Coast Products under A/N 395302 (Permit No. F49989).
- In 2002, under A/N 406118 (Permit No G4086) this tank was submitted to re-permit the tank as a single seal and increase the throughput to 320,000 barrels a month with same vapor pressure of <0.1 psia. The permit was issued in 2009.

FEE ANALYSIS

Summary of Fee Analysis shown in Table 1

Table 1 – Summary of Fee Analysis

A/N	Equipment Description	BCAT/CCAT	Fee Schedule	Fee Type	Fee paid	Fees calculated	XPP Fee	Total Fee
557870	Permit Amendment	555015 (BCAT)		FP – RECLAIM/ Title V Significant Amendment	\$1,824.90	\$1,824.90		\$1,824.90
557871	Storage tank	350904	C	P/C	\$3,508.86	\$3,508.86	\$1754.43	\$5,263.29
557872	Storage tank	350904	C	P/C	\$3,508.86	\$3,508.86	\$1754.43	\$5,263.29
Total								\$12,351.48



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COMPLIANCE RECORD REVIEW:

A two year printout of the facility's compliance history is shown in Attachment 1. All NOVs issued to this facility are listed as either in compliance or closed. There are no open NOVs currently.

PROCESS DESCRIPTION:

Storage Tanks No. 33 & 34 are external floating roof tanks with 80,000 and 100,000 barrel capacity respectively. Table 2 describes the material stored in each tank .

Table 2- Storage tanks

A/N	EQUIPMENT	DEVICE ID	PRODUCT STORED
557871	Storage Tank No. 33	D1059	Jet Fuel /Sweet Distillate
557872	Storage Tank No. 34	D1060	Jet Fuel /Sweet Distillate

See Attachment 2 for the MSDS submitted by Tesoro for the products stored in these tanks.

EMISSIONS CALCULATIONS:

The emissions from both tanks were calculated using EPA tanks 4.09 program (Attachment 3). The Tanks currently store jet fuel with a throughput limit of 320,000 barrels per month. Tanks 33 & 34 were subject to Regulation XIII because they were modified in 2002 under A/Ns 406117 & 406118 respectively. C1.72 specifies a throughput condition of 320,000 barrels/month and B22.9 specifies to store product with vapor pressure of <0.1 psia.

In these both current applications, Tesoro is requesting a change in permit condition to lower the maximum allowable true vapor pressure limit of stored organic liquids from <0.1 to <0.066 psia under actual operating conditions and to increase the allowable throughput from the currently permitted 320,000 barrels per month to 640,000 barrels per month. Tesoro is also adding rim –mounted secondary seals to these external floating roof tanks.

See Table 3 & 4 below for Maximum Potential change of VOC emissions for each tank.



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Table 3- Tank 33 VOC Emissions

<i>Appl. No</i>	<i>Source</i>	<i>Product</i>	<i>Throughput barrels/month</i>	<i>Control?</i>	<i>Controlled Emissions lbs/yr</i>	<i>Emissions lbs/day</i>
557871	Tank 33 Baseline	<i>Petroleum Product (TVP≤0.1psia)</i>	320,000	<i>Yes-EFR with primary seal only</i>	398.80	1.1
	Tank 33 Post-modification	<i>Petroleum product (TVP≤0.066psia)</i>	640,000	<i>Yes-EFR with primary seal & rim-mounted secondary seal</i>	749.15	2.06
	Net emissions				350.35	+0.96

Table 4- Tank 34 VOC Emissions

<i>Appl.No</i>	<i>Source</i>	<i>Product</i>	<i>Throughput barrels/month</i>	<i>Control</i>	<i>Controlled Emissions lbs/yr</i>	<i>Emissions lbs/day</i>
557872	Tank 34 Baseline	<i>Petroleum Product (TVP≤0.1 Psia)</i>	320,000	<i>Yes-EFR with primary seal only</i>	348	0.95
	Tank 34 Post-modification	<i>Petroleum product up (TVP≤0.066 Psia)</i>	640,000	<i>Yes-EFR with primary seal & rim-mounted secondary seal</i>	676.17	1.85
	Net emissions				328.17	+0.90

See Attachment 3 for detailed emissions calculations and printouts from the EPA Tanks program.

RULES EVALUATION:

PART 1 SCAQMD REGULATIONS

Rule	Standards for Approving Permits	November 14, 1997
212	<p>The proposed modifications meet all criteria in Rule 212 for permit approval. The new modification is designed so it can be expected to operate without emitting air contaminants in violation of division 26 of the state health and safety code or in violation of AQMD rules and regulations.</p> <p>The addition of secondary seal to both tanks and to increase in throughput that will increase</p>	



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the VOC emissions of total of 2 lbs per day does not constitute a significant project because (1) the modified permit unit is not located within 1000 feet of a school; (2) the emissions increase does not exceed the daily maximum specified in subdivision (g) of this rule (30 lbs/day); and (3) the modified permit unit does not have an increased cancer risk greater than, or equal to, one in a million (1×10^{-6}) during a lifetime of 70 years or pose a risk of nuisance.

Rule 401	Visible Emissions	November 9, 2001
	Visible emissions are not expected under normal operating conditions from the above storage tanks. Continued compliance is expected.	
Rule 402	Nuisance	May 7, 1976
	Nuisance complaints associated with the above project are not expected under normal operating conditions. Continued compliance is expected.	

Rule 463	Organic Liquid Storage	May 6, 2005
	This rule applies to any above-ground tank with capacity 19,815 gallons or greater for storing organic liquids.	
463(c)	The tank roof requirements of Rule 463 apply to storage tanks with capacity of 150,000 liters (39,630 gallons) or greater and storing an organic liquid having a true vapor pressure of 25.8 mm Hg (0.5 psi) absolute or greater. Storage tanks with capacity of 75,000 liters (19,815 gallons) or greater and storing any organic liquid having a true vapor pressure of 77.5 mm Hg (1.5 psi) absolute or greater under actual storage conditions must also comply with the tank roof requirements of this rule.	
	Both tanks are currently subject to the provisions of this rule (see condition S13.3). The proposed increase in throughput or change in commodity is not expected to affect the facility's ability to comply with the requirements of this Rule. Continued compliance is expected.	



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Rule 463	Organic Liquid Storage	May 6, 2005
463(d)	<p>463(d)(1) Requires a pressure –vacuum valve to be set within 10 percent of the maximum working pressure of the tank, for storage tanks between 251 and 19,815 gallons. This requirement does not apply to the subject tanks since their capacities are greater than 19,815 gallons.</p> <p>463(d)(2) Requires the roof to float on the stored organic liquid at all time, except when emptied for cleaning or repair. The subject tanks are expected to comply with this requirement.</p> <p>463(d)(3) Requires that a tank that has been gas-freed and is to be refilled with gasoline, the roof shall be refloated with water or by an equivalent procedure approved by the executive Officer. The subject tanks do not store gasoline. This paragraph does not apply.</p> <p>463(d)(4) Limits the maximum vapor pressure to no more than 11 psia. The permit of these tanks will include condition B59.X, which limits the storage tank commodity to Jet fuel or sweet Distillate. Compliance with this requirement is expected.</p> <p>463(d)(5) Requires replacement seals to be chosen from a list approved by the Executive Officer. The applicant is expected to comply with this requirement.</p>	
	Compliance with Rule 463 is expected with proper recordkeeping and inspections.	

Rule 1149	Storage Tank Cleaning and Degassing	Amended May 2, 2008
	<p>When the tanks are opened to the atmosphere to clean or degas the tank, emissions must be controlled unless the organic liquid which was stored has a Reid vapor pressure less than 202 mm Hg (3.9 psi). Since Tesoro is proposing a condition limiting true vapor pressure of the stored organic liquid below 5.2 mm Hg (0.1 psi) absolute, emissions control during cleaning and degassing are not required and the provisions of this rule are not applicable.</p>	

Rule 1173	Control of Volatile Organic Compound Leaks and Releases from Components at Petroleum Facilities and Chemical Plants	June 1, 2007



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This rule specifies leak control, identification, operator inspection, maintenance, and recordkeeping requirements for valves, pumps, compressors, pressure relief valves, and other components from which fugitive VOC emissions may emanate. The facility has an approved Inspection and Maintenance (I&M) Program (A/N 553142). Since this modification does not involve a change to any component outside of the storage tank, no change in fugitive VOC emissions is expected. Continued compliance is expected.

Rule 1178 Further Reduction of VOC emissions from Storage Tanks at Petroleum Facilities April 7, 2006

1178(b) The rule applies to all aboveground storage tanks that have capacity equal to or greater than 75,000 liters (19,815 gallons), are used to store organic liquids with a true vapor pressure greater than 5 mm Hg (0.1 psi) absolute under actual storage conditions, and are located at any petroleum facility that emits more than 40,000 pounds (20 tons) per year of VOC in any emission inventory starting with the emission inventory year 2000.

This rule is not applicable to storage tanks 33 & 34 since its true vapor pressure under operating conditions is <0.066 psia. Condition B22.xx has been added to the permit to specify this vapor pressure limit.

**REG
XIII**

New Source Review

December 6, 2002

The modification proposed in this project will cause an emission increase of ROG. The emission increase due to this project is shown in Table 3 & 4. The following is a discussion of each requirement in NSR.

**BACT:
1303(a)**

Any new or modified source which results in an emission increase of any nonattainment contaminants must employ BACT for the new or relocated source or for the actual modification to an existing source. BACT is required for any increase of emissions that exceed 1 lb/day on a maximum daily basis. As shown in Emissions Calculations section, due to an increase in throughput and the product vapor pressure requested by Tesoro, there is an emission increase less than 1 lb/day, therefore, BACT does not apply.



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REG	New Source Review	December 6, 2002
XIII	However, both tanks are equipped with BACT. The BACT for external floating roof tank is District Category "A" –approved seals and fittings that comply with Rule 1178. Both tanks have category "A" –approved seals, as well as secondary seals.	
1303(b)(1)	Modeling: The only emissions resulting from the proposed modification will be ROG. According to the screening requirements in Rule 1303 Appendix A, Table A-1, modeling is not required for ROG. Therefore, no air quality modeling is required for the new installations.	
1303(b)(2)	Offset: This change of conditions will result in increase of VOC emissions of 1 lb/day for each tank. Since the refinery is located in the South Coast Air Basin (SOCAB), an offset ratio of 1.2-to-1 is required. For each tank, the resulting estimated offset of 1.2 (0.96 x1.2) lbs/day is rounded off to 1 lbs/day. Tesoro has an ERC Certificate #AQ0013060 has 6 lbs of Coastal ROG, which will be utilized to offset an increase of a total of 2 lbs of ROG. See attachment 5 for a copy of ERC certificate.	
1303(b)(3)	Sensitive Zone Requirements. Unless credits are obtained from the Priority Reserve, facilities located in the South Coast Air Basin are subject to the Sensitive Zone requirements specified in Health and Safety Code Section 40410.5. A facility in zone 1 may obtain Emission Reduction Credits originated in zone 1 only, and a facility in zone 2A may obtain Emission Reduction Credits from either zone 1 or zone 2A, or both, or demonstrate to the Executive Officer or designee a net air quality benefit in the area impacted by the emissions from the subject facility. Tesoro is in Zone 1 and the ERCs that will be utilized were originated in Zone 1. See attachment 5 for a copy of ERC certificate. Compliance is expected.	
1303(b)(4)	Facility Compliance. Tesoro must comply with all applicable Rules and Regulations of the AQMD. According to the enforcement records, Tesoro is currently in compliance with all applicable rules and regulations of the District.	
1303(b)(5)	Major Polluting Facilities. This Project is a modification at a major polluting facility. Therefore, the facility shall comply with the following requirements.	
	(A) <i>Alternative Analysis</i> – Applicant must conduct an analysis of alternative sites, sizes, production processes, and environmental control techniques for such proposed source and demonstrate that the benefits of the proposed project significantly	



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**REG
XIII**

New Source Review

December 6, 2002

outweigh the environmental and social costs associated imposed as a result of its location, construction, or modification (42 U.S.C. Section 7503(a)(5). Since this project is exempt from CEQA analysis, it will be exempt from this requirement per (b)(5)(D)(i)

(B) *Statewide Compliance*-The applicant must demonstrate prior to the issuance of a Permit to Construct, that all major stationary sources, as defined in the jurisdiction where the facilities are located, that are owned or operated by such person (or by any entity controlling, controlled by, or under common control with such person) in the State of California are subject to emission limitations and are in compliance or on a schedule for compliance with all applicable emission limitations and standards under the Clean Air Act.

A letter from the Tesoro Los Angeles Refinery, indicating that all major sources owned or operated by Tesoro Refining and Marketing Company in California are in compliance or are on a schedule for compliance with all applicable standards emission limitations and standards under the clean Air Act. The certification letter dated December 20, 2013 is provided in Attachment 6.

(C) *Protection of Visibility* -The applicant must conduct a modeling analysis for plume visibility in accordance with the procedures specified in Appendix B if the net emission increase from the new or modified source exceeds 15 tons/year of PM10 or 40 tons/year of NOX;. There will not be any PM10 or NOx emissions from this source; therefore, requirements of this subsection do not apply.

(D) *California Environmental Quality Act (CEQA)*-CEQA requires that the environmental impacts of proposed projects be evaluated and that feasible methods to reduce, avoid or eliminate identified significant adverse impacts of these projects be considered. The CEQA Applicability Form (400-CEQA) indicates that the project does not have any impacts which trigger the preparation of a CEQA document. The expected impacts of the project on the environment



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REG XIII	New Source Review	December 6, 2002
	are not significant since the net emission ROG increase does not trigger the thresholds ROG: 55 LBS/DAY of The District's CEQA Guidelines. Therefore a CEQA analysis is not required.	

Rule 1401	New Source Review of Toxic Air Contaminants	September 10, 2010
	This rule has requirements including that the Maximum Individual Cancer Risk (MICR) associated with the project be under 1×10^{-6} if T-BACT is not used, or 10×10^{-6} if T-BACT is applied, that the hazard indices be less than 1.0 and the cancer burden be under 0.5. The Tier I Screening Health Risk Assessment for distillates (Attachment 4) indicates the requirements of Rules 1401/212 are met. Compliance with this rule is expected.	

Regulation XX	RECLAIM	March 16, 2001
	TESORO has been designated as a RECLAIM facility and is a participant in both the NOx and SOx markets. However, these tanks do not emit any NOx or SOx emission, are not heated and are not associated with any combustion equipment.	

Regulation XXX	Title V	March 16, 2001
	<p>The Tesoro Carson Refinery has been designated as a Title V facility (ID 174655). Tesoro Refinery is currently subject to Title V. The permit issued for both tanks will be issued as a revision of the Title V permit. Permit revisions are categorized into the following four types: administrative, minor, de minimis significant and significant.</p> <p>As defined in Rule 3000(b)(7), a De-Minimis Significant permit revision means any Title V permit revision where the cumulative emission increases of non-RECLAIM pollutants or hazardous air pollutants (HAP) from these permit revisions during the term of the permit are not greater than any of the emission threshold levels in Table below.</p>	



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De Minimis Emission Threshold Level	
<u>Air Contaminant</u>	<u>Daily Maximum lbs/day</u>
Volatile Organic Compounds	30
Nitrogen Oxides	40
PM10	30
Sulfur Dioxide	60
Carbon Monoxide	220
Lead	3

Since the proposed applications for both storage tanks have an emission increase of VOC and do not exceed the cumulative thresholds (see the table below), the Title V permit revision A/N 557870 qualifies as a **De Minimis Significant Revision**, which will be sent to EPA for a 45-day review. Public notice is not required. A final copy of the permit will be submitted to the EPA within 5 working days of its issuance.

Table 5: Summary of Emission Increases for De Minimis Significant Revisions of Tesoro Carson Title V Permit

Appl. No.	Title V Rev. Appl. No.	Section	Rev. #	Equipment	Device ID	Date Approved	Emissions Increase (lb/day)				
							VOC	CO	PM	NOx	SOx
552933		D		Additive Shot Pot Loaders	D2658, D2659, D2660, C2661, C2662 and C2663			0.41			
553072		D		Fuel Storage and Dispensing Facility No. 1			1.24				
553163 549635	553172 549636	H	2	Mid-Barrel Desulfurizer Unit		9/11/13	0.38				
553167 546960	546962	D	1	Storage Tank 173R	D2612	8/9/13	0.41				
539146	530094	D	31	Storage Tank No. 394	D1143	11/1/12	1				
510406	510407	H	50	Groundwater Recovery System	D2912 D2913	6/22/12	0.31				
527741	528139	H	49	Delayed Coking Unit No. 1	D78	2/16/12	0.11				



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527742	528139	H	49	South Area Flare System		2/16/12					
528138	528139	H	49	Wastewater Sump	D2749 C2910	2/16/12	0.32				
504559		H	48	No. 1 Catalytic Reformer Unit		10/5/11	5.12				
504560		H	48	No. 2 Catalytic Reformer Unit		10/5/11	0.78				
506084		H	48	Vapor Recovery System		10/5/11	0.00				
515390		H	48	Superfractionation Unit	D264 D266 D268 D273 D1370	10/5/11	0.19				
515465		H	48	South Area Flare System		10/5/11					
511728	512087	H	47	Light Ends Depropanizer Unit	D297	12/22/10	0.04				
511727	512087	H	47	Hydrocracker Flare System		12/22/10					
512089	512087	H	47	Superfractionation Unit	D270 D272 D282	12/22/10	0.04				
512088	512087	H	47	South Area Flare System		12/22/10					
502189	502188	H	46	Hydrocracker Unit (Reaction)		8/26/10	0.50				
502190	502188	H	46	Hydrocracker Unit (Fractionation)		8/26/10	-0.21				
502191	502188	H	46	Hydrocracker Flare System		8/26/10	0.00				
504383	502188	H	46	Coker Gasoline Fractionation Unit		8/26/10	-1.5				
504384	502188	H	46	Refinery No. 5 Flare		8/26/10					
419002	499005	D	23	Storage Tank No. 619	D1137	3/26/10	0				
419003	499005	D	23	Storage Tank No. 620	D1138	3/26/10	0				
497452	499005	H	43	Firewater Sump	D2902	3/26/10	0.14				
497869	499005	H	43	Hydrogen Plant No. 2	D2892 D2893	3/26/10	0.01				
499006	499005	H	43	Superfractionation Unit	D274 D275 D2894- D2901	3/26/10	1.61				
499007	499005	H	43	South Area Flare System		3/26/10					
501926	499005	H	43	Naphtha Splitter Unit	D290	3/26/10	0.11				
557871 & 557872(2)	557870	D		External Floating Roof Tanks 33 & 34	D1159 & D1160		1.9				
							Total (I)	10.6		0.41	



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- (1) Cumulative emission increase for all De Minimis significant Title V permit revision since issuance of the initial Title V permit on May 17, 2013.
- (2) These applications are covered under the subject evaluation.

PART 2 STATE REGULATIONS

California Environmental Quality Act (CEQA)

This proposed modification is not a significant project and is not subject to CEQA review.

PART 3 FEDERAL REGULATIONS

40CFR Part 60 Subpart K—Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After June 11, 1973, and Prior to May 19, 1978

This subpart applies to all storage tanks which were constructed, reconstructed or modified after June 11, 1973, and prior to May 19, 1978. According to 40CFR Part 60 Subpart A – General Provisions: §60.2 Definitions, *modification* “means any physical change in, or change in the method of operation of, an existing facility which increases the amount of any air pollutant (to which a standard applies) emitted into the atmosphere by that facility or which results in the emission of any air pollutant (to which a standard applies) into the atmosphere not previously emitted.” Both storage tanks were constructed prior to June 11, 1973, and there are no records to indicate both storage tanks have been reconstructed or modified to date. Therefore, both storage tanks are not subject to Subpart K.

40CFR Part 60 Subpart Ka—Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After May 18, 1978, and Prior to July 23, 1984

As noted previously, both storage tanks were constructed prior to June 11, 1973, and there are no records to indicate both storage tanks have been reconstructed or modified to date. Therefore, both storage tanks are not subject to Subpart Ka.

40CFR Part 60 Subpart Kb—Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commences after July 23, 1984

As noted previously, all tanks were constructed prior to June 11, 1973, and there are no records to indicate the tanks have been reconstructed or modified after July 23, 1984. Therefore, both storage tanks are not subject to Subpart Kb.



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<p>40CFR Part 63 Subpart CC</p>	<p>National Emission Standards for Hazardous Air Pollutants From Petroleum Refineries</p>
	<p>Group 1 storage vessel means a storage vessel at an existing source that has a design capacity greater than or equal to 177 cubic meters <i>and</i> stored-liquid maximum true vapor pressure greater than or equal to 10.4 kilopascals and stored-liquid annual average true vapor pressure greater than or equal to 8.3 kilopascals <i>and</i> annual average HAP liquid concentration greater than 4 percent by weight total organic HAP. Those tanks not meeting the definition of a Group 1 storage vessel are by definition Group 2 storage vessels under this subpart. Group 1 storage vessels are subject to specific control requirements of this subpart. While Group 2 storage vessels are not subject to control requirements listed in this subpart, they are subject to the recordkeeping requirements.</p> <p>These tanks will store material with maximum true vapor pressure below 0.1 psia, or 0.69 kilopascals; hence, the average true vapor pressure will also be below 0.69 kilopascals. Since these tanks do not meet the definition of a Group 1 storage vessel, they are considered Group 2 storage vessels. Tesoro must maintain records showing the storage tanks meet the determination of a Group 2 storage vessel, vessel dimensions, and analysis of capacity. These records must be retained for 5 years.</p> <p>These tanks are expected to comply with the recordkeeping requirements of this regulation. Group 2 storage vessels are identified in the permit by the following notation in the "Emissions and Requirements" column: HAP: (10) [40CFR 63 Subpart CC, #2, 6-23-2003]. The facility is expected to comply with the requirement by including these subject tanks as a Group 2 vessel in this report.</p>

National Emission Standards for Hazardous Air Pollutants (NESHAP)

<p>40 CFR 61 Subpart FF</p>	<p>National Emission Standard for Benzene Waste Operations</p>
	<p>The Tesoro Los Angeles Refinery is subject to Benzene Waste NESHAP. The facility is expected to continue to comply when it is applicable.</p>



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RECOMMENDATION:

It is recommended that Permit to Operate be issued subject to the conditions listed below

CONDITIONS

PROCESS CONDITIONS (None)

SYSTEM CONDITIONS

S13.3 All devices under this system are subject to the applicable requirements of the following rules or regulations:

Contaminant	Rule	Rule/Subpart
VOC	District Rule	463
VOC	District Rule	1149
VOC	District Rule	1178

[RULE 1149, 5-2-2008; **RULE 1178, 4-7-2006; RULE 463, 5-6-2005]**

[Systems subject to this condition: Process 16, System 2, 3]

DEVICE CONDITIONS

A. Material/Fuel Type Limits

B22.9 The operator shall not use this equipment with materials having a(n) true vapor pressure of 0.1 psia or greater under actual operating conditions.

Whenever there is a change in the product types, the operator shall determine the flash point of the organic material stored using ASTM Method D-93. Those materials having a flash point less than 100 degrees F as determined by this test will be considered as having a true vapor pressure of greater than 5 mm Hg (0.1 psi) absolute under actual storage conditions. The test must be conducted within five days of changing product types.

The operator shall keep records of the date when there is a change in material stored, along with the test results at the facility for a period of five years. These records shall be made available to the Executive Officer upon request.

[**RULE 1178, 4-7-2006]**

[Devices subject to this condition : D1070, D1071, D1090, D1140, ~~D1159, D1160~~]



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B22.xx **The operator shall only use this equipment with materials having a(n) true vapor pressure of 0.066 psia or less under actual operating conditions.**

[RULE 1303(b)(2)-Offset, 5-10-1996; RULE 1303(b)(2)-Offset, 12-6-2002]

[Devices subject to this condition: D1159, D1160]

B59.x **The operator shall only use the following material(s) in this device :**

Jet Fuel /Sweet Distillate

[RULE 1303(b)(2)-Offset, 5-10-1996; RULE 1303(b)(2)-Offset, 12-6-2002]

[Devices subject to this condition : D1159, D1160]

Throughput or Operating Parameters Limits

C1.72 The operator shall limit the throughput to no more than ~~320,000~~ **640,000** barrel(s) in any one calendar month.

The operator shall calculate the throughput, in barrels, by the following equation: $0.14 \times D \times D \times L$, where D is the diameter of the tank in feet based on the tank strapping chart and L is the total vertical one-way roof travel in feet per month.

The operator shall install and maintain an automatic tank level gauge (ATLG) and recorder to continuously record the vertical movement of the roof. For the purpose of this condition, continuous recording is defined as once every 15 minutes.

The operator shall calculate the total one-way roof movement, in feet, on a monthly basis.

The ATLG installed shall be verified once per quarter by comparing against a manual tank level measurement. If the ATLG differs from the manual tank level measurement by more than 1.0 inch or 0.8%, whichever is greater, the ATLG shall be repaired and put back into service within 10 days. While the ATLG is being repaired, the throughput shall be determined by the hourly tank level data averaged from the previous 30 days prior to the discovery of the discrepancy.

In the event of a failure or routine maintenance of the ATLG, the ATLG shall be repaired (if necessary) and put back into service within 10 days of the time that the ATLG failed or was removed from service for maintenance. While the ATLG is being repaired or maintained, the throughput shall be determined by the hourly tank level data averaged from the previous 30 days prior to the time that the ATLG went out of service.



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The operator shall maintain records in a manner approved by the District, to demonstrate compliance with this condition.

[RULE 1303(b)(2)-Offset, 5-10-1996; RULE 1303(b)(2)-Offset, 12-6-2002]

[Devices subject to this condition : D1159, D1160]

Monitoring/Testing Requirements (None)

Record Keeping/Reporting

K67.5 The operator shall keep records, in a manor approved by the District, for the following parameter(s) or item(s):

Throughput and vapor pressure of liquid stored.

[RULE 1178, 4-7-2006; RULE 3004(a)(4)-Periodic Monitoring, 12-12-1997; RULE 463, 5-6-2005]

[Devices subject to this condition : D800, D801, D1067, D1069, D1070, D1071, D1072, D1073, D1074, D1075, D1078, D1079, D1080, D1081, D1083, D1084, D1085, D1086, D1087, D1089, D1090, D1091, D1092, D1093, D1098, D1099, D1102, D1103, D1104, D1106, D1107, D1108, D1109, D1110, D1111, D1116, D1120, D1121, D1122, D1123, D1124, D1125, D1126, D1128, D1130, D1139, D1140, D1141, D1142, D1144, D1145, D1146, D1153, ~~D1159, D1160~~, D1164, D1165, D1175, D1185, D1186, D1187, D1193, D2789]

K67.21 The operator shall keep records, in a manner approved by the District, for the following parameter(s) or item(s):

The operator shall determine the true vapor pressure of each material stored in the equipment by one of the following methods:

- 1) sample and test the materials stored,
- 2) derive the vapor pressure using engineering calculations, or
- 3) maintain on file a copy of the Material Safety Data Sheet (MSDS) of the material stored.

Records of material stored, and their MSDS if applicable, shall be retained for a period of five years and made available to the Executive Officer upon request.

[RULE 1303(b)(2)-Offset, 5-10-1996; RULE 3004(a)(4)-Periodic Monitoring,12-12-1997]

[Devices subject to this condition: D1069, D1159, D1160]



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List of Attachments:

1. South Coast AQMD NOV and NC Report
2. MSDS
3. Emissions Calculations
4. Risk Assessment
5. ERC Certificate
6. Certification letter