



SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

ENGINEERING AND COMPLIANCE DIVISION

APPLICATION PROCESSING AND CALCULATIONS

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PERMIT TO CONSTRUCT/OPERATE

COMPANY NAME

TESORO REFINING AND MARKETING CO
P.O. BOX 817, WILMINGTON, CA 90748-0817

EQUIPMENT LOCATION

2101 E. PACIFIC COAST HIGHWAY
WILMINGTON, CA 90744
Facility ID#: 800436, Facility Type: NOx & SOx RECLAIM (Cycle 1), Title V

EQUIPMENT DESCRIPTION

Additions are shown as underlined and deletions are shown as ~~strikeouts~~.

Section D: Permit to Construct/ Permit to Operate

The following device will be moved from process 15 System 1 to System 7 in Section D of the following permit:

Equipment	ID No.	Connected To	RECLAIM Source Type / Monitoring Unit	Emissions and Requirements	Conditions
PROCESS 15: STORAGE TANKS					P13.1
SYSTEM 7 : INTERNAL FLOATING ROOF TANKS					S13-7
STORAGE TANK, FIXED ROOF <u>INTERNAL FLOATING ROOF,</u> TANK 80045, 80000 BBL; DIAMETER: 117 FT; HEIGHT:42FT <u>FLOATING ROOF, PONTOON,</u> <u>WELDED SHELL</u> <u>PRIMARY SEAL, CATEGORY A,</u> <u>METALLIC SHOE</u> <u>SECONDARY SEAL, RIM</u> <u>MOUNTED, MULTIPLE WIPERS</u> <u>TYPE</u> <u>GUIDEPOLE, SLOTTED, WITH</u> <u>GASKETED SLIDING COVER WITH</u> <u>POLE WIPER, AND A POLE FLOAT</u> <u>WIPER</u> A/N: 470097 <u>518304</u>	D593			<u>HAP: (10) [40CFR 63</u> <u>Subpart CC, #3A,</u> <u>6-23-2003]</u> <u>VOC: 500 PPMV (8)</u> <u>[40CFR 60 Subpart</u> <u>Kb, 10-15-2003]</u>	<u>B59.9, C1.53,</u> <u>C6.4, H23.1,</u> <u>K67.15</u> <u>K171.3,</u> <u>K67.2, E336.2</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.

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FEE ANALYSIS

All fees shown in Table 1 have been paid by the applicant.

Table 1 – Summary of Fee Analysis

A/N	Equipment Description	BCAT/CCAT	Fee Schedule	Fee Type	Fee	XPP Fee	Total Fee
518301	Permit Amendment	555009 (BCAT)		FP – RECLAIM/ Title V Significant Amendment	\$1,723.07		\$1,723.07
518304	Storage tank	251902	C	Modification	\$3,313.05	\$1656.53	\$4,969.58
Total							\$6,692.65

BACKGROUND AND PROCESS DESCRIPTION

This application was received by the AQMD on February 1, 2011 from Tesoro Refining And Marketing Co for the modification of storage Tank 800451(D593). The tank will be modified from fixed roof tank to internal floating roof tank. The internal floating roof will be full contact new cable-suspended floating roof (the manufacturer design of the roof tank and the seals were submitted with the application). The new roof would be equipped with a shoe-type primary seal and a rim mounted secondary seal, both Category “A” seals.

The reason for the modification is to retrofit the tank from fixed roof to internal floater.

This subject tank is currently covered by permit no. G2073 (A/N 470097).

This tank was constructed in 1955 storing gasoline under A/N T501 (Permit no.13559) as floating roof tank.

In 1979, The tank was modified to install a secondary seal to comply with Rule 463 under A/N C-11759(M12431).

In 1985, there was a change of ownership from Texaco Inc to Texaco Refining & Marketing Inc under A/N 136882(M46931).

In 1988, the tank was converted from external floating roof tank to fixed roof tank and connected to vapor recovery system under A/N162873(D38052).

In 1998, there was a change of ownership from Texaco Refining & Marketing Inc to Equilon Enter LLC, Shell Oil Products US under A/N 346377 (F17904).

In 2007, there was a change of ownership from Equilon Enter LLC, Shell Oil Pro US to Tesoro Refining & Marketing Company under A/N 470097 (G2073).

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Table 2 lists the application submitted along with the equipment description and the proposed modification. See Attached MSDS sheet submitted by Tesoro.

Table 2

<i>A/N</i>	<i>Device ID No.</i>	<i>Current A/N</i>	<i>Equipment Description</i>	<i>Current Permit limit</i>	<i>Proposed Change</i>
518304	D593	470097	Storage tank, No. 80045, Fixed Roof, Gasoline	None	Convert from Fixed roof to Internal Roof with primary and secondary seals category "A"

COMPLIANCE RECORD REVIEW

The facility's compliance history for the past 2 years indicates one NOV (P52842) is still pending (see Attachment 1). P52842 was issued to Tesoro on 4-27-10 for multiple violations of Rule 1189(c)(3). An emergency hearing was conducted at the AQMD Hearing Board on 4-28-10 and the facility was denied a variance. Tesoro is expected to be placed under an abatement order by the District to have this compliance issue resolved. Note that the HGU-2 unit has been shutdown since 4-6-10 and is not expected to operate till a variance or order of abatement is granted. The NOV details are with Attachment 1.

EMISSIONS CALCULATIONS

The emissions from tank 80045 was calculated using EPA tanks 4.09 program (Attachment 3) Since the subject storage tank was modified in 1989, this tank was subject to New Source Review Regulation (REG XIII), however, there was no throughput or commodity limit.

Calculations procedures for the District's New Source Review(NSR) Regulation with regards to determining Offset and BACT requirements are contained in Rule 1306 (b) & (d).

For determining BACT and offset requirements, the net increase is based on the post-modification potential to emit minus the permitted or allowable pre-modification potential to emit.

As shown in Attachment 3, the post –modification maximum potential to emit (PTE) for ROG is calculated with EPA Tanks 4.09d based on storing gasoline.

Table 3: Max. Potential change in VOC emissions

<i>Tank No.</i>	<i>Product</i>	<i>Pre-Modification Throughput (1)</i>	<i>Pre-Modification Emissions lbs/yr lbs/day (1)</i>	<i>Post-modification Product</i>	<i>Post-modification Throughput</i>	<i>Post-Modification Emissions with internal floating roof</i>	<i>Change</i>
80045 D613	Gasoline	2.5 MMbbl/year	10,665lbs/year 29.2 lbs/day 1.216lb/hr	Gasoline	7,300,000 barrels/year 608,333 barrels/month	3,552.71 lbs/yr 9.734 lbs/day 0.4 lb/hr	-7112.1 lbs/yr -19.48 lbs/day -0.812lb/hr

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(1) See the attached calculations in page 30 of Application no. 162873 in Attachment 2.

RULES EVALUATION

PART 1: DISTRICT RULES

Regulation II- PERMITS

Rule 212: Standards for approving and Issuing Public Notice (Amended Nov. 14, 1997)

- 212 (a) The applicant is required to show that the equipment, the use of which may cause the issuance of air contaminants or the use of which may eliminate, reduce, or control the issuance of air contaminants, is so designed, controlled, or equipped with such air pollution control equipment that it may be expected to operate without emitting air contaminants in violation of provisions of Division 26 of the State Health and Safety Code of these rules. The installation of the internal roof of the storage tank is expected to comply with this requirement.

- 212(c)(1) Public notification is required if any new or modified permit unit, source under Regulation XX, or equipment under Regulation XXX may emit air contaminants located within 1000 feet from the outer boundary of a school. The source is not within 1000 feet of a school, public notification is therefore not required.

- 212(c)(2) Public notification is required if any new or modified facility has on-site increases exceeding any of the daily maximums specified in subdivision (g) of this rule. There is no increase in emissions with the tank modification, public notification is therefore not required.

- 212(c)(3) Public notification is required if the maximum individual cancer risk (MICR), based on Rule 1401, exceeds one in a million (1×10^{-6}), due to a project's new construction or proposed modification. According to 1401(f)(3), for the purpose of determining MICR, the increase in emissions from the modified permit unit shall be calculated based on the difference between the total permitted emissions after the modification and the total permitted emissions after modification and the total permitted emissions prior to the modification as stated in the permit condition. The subject modification does not result in emission increase, public notification is therefore not required.

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212(g) This subdivision sets forth the process for general public notification and distribution and specifies the daily maximum emissions increase as follows:

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

Since there is no increase in emissions associated with modified source, public notification is not required.

Regulation IV PROHIBITIONS

Rule 401 Visible Emissions (Amended November 9, 2001)

Operation of storage tank 80045 is not expected to result in visible emissions. Therefore, compliance with this rule is expected.

Rule 402 Nuisance (Adopted May 7, 1976)

Operation of storage tank 80045 is not expected to result in a public nuisance. Therefore, compliance with this rule is expected.

Rule 463 Organic Liquid Storage (Amended May 6, 2005)

This rule applies to any above-ground tank with a capacity of 19,815 gallons or greater for storing organic liquids. The internal floating roof tanks are subject to the requirements of Rule 463 (c)(2)(B) 463(c)(2)(B) A fixed roof tank which has an internal floating-type cover installed, modified, or replaced after June 1, 1984, shall have a closure device which consists of either a single liquid mounted primary seal or a primary and a secondary seal. All openings and fittings shall be fully gasketed or controlled in a manner specified by the Executive Officer. The closure device shall control vapor loss with an effectiveness equivalent to a closure device which meets the requirements of

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subparagraph (c) (1) (A). Seal designs not identified on the current list of seals approved by the Executive Officer shall not be installed or used.

The proposed roof is equipped with category A primary and secondary seals that meet the requirement of this rule (See attachment 2 for AQMD approval letter and the seals drawings).

All openings and fittings will be gasketed and controlled in a manner that meets Rule 1178 requirements, which are more specific than the requirements of this rule. Additional specification of the seal and opening fittings/controls is contained in the Rule 1178 evaluation.

Compliance with Rule 463 is expected with proper recordkeeping and inspections

Regulation XI - SOURCE SPECIFIC STANDARDS

Rule 1149: Storage Tank Cleaning and Degassing (Amended May 2, 2008)

This Rule has requirements for tank cleaning and degassing operations. Emissions from above ground tanks are required to be controlled by one of the following methods: liquid balance, negative pressure displacement and subsequent incinerations, vapor condensation with a refrigeration system, or any other method which controls VOC by at least 90%. The permit condition S13.7 requires continued compliance with this rule.

Rule 1173: Fugitive Emissions of volatile Organic Compounds (Amended February 6, 2009)

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. Since this project does not involve a change to any component outside of the storage tanks, no change in fugitive VOC emissions is expected.

Rule 1178: Further Reductions of VOC Emissions from Storage Tanks at Petroleum Refineries (Amended April 7, 2006)

This Rule applies to facilities which VOC emissions exceeding 20 tons in their Annual emissions Report (AER) for any year starting with 2000. Tesoro/Shell AER for the year 2000 exceeded 20 tons VOC. Therefore, this rule applies to the subject tank. The rule requires that the Internal Floating Roof Tank shall be equipped as follows:



- (a) Equip each fixed roof support column and well with a sliding cover that is gasketed or with flexible fabric sleeves;
- (b) Equip each ladder well with a gasketed cover. The cover shall be closed at all times, with no visible gaps, except when the well must be opened for access;
- (c) Equip and maintain other roof openings according to the specifications listed in subparagraph (d)(1)(A) or (d)(1)(C);
- (d) Equip the tank with a rim seal system consisting of either a primary and a secondary seal meeting the specifications listed in subparagraph (d)(1)(B); and
- (e) Ensure that the concentration of organic vapor in the vapor space above the internal floating roof shall not exceed 50 percent of its lower explosive limit (LEL) for those installed prior to June 1, 1984 and 30 percent of its LEL for those installed after June 1, 1984. A permit condition C6.4 with this requirement will be imposed.

As shown in the table below, the proposed fittings and seals for the proposed pontoon type internal roof meet the requirements of this rule

Summary of Roof Opening /Fitting Controls and seals

Roof opening/ Fitting or seal type	Roof Seal and Opening /Fitting configuration		Applicable Rule 1178
	No	Type	
Support Column and well	8	Sliding Cover gasketed	1178(d)(3)(A)
Ladder Well	1	Sliding Cover,gasketed	1178(d)(3)(B)
Access Hatch	1	Cover, bolted & gasketed	1178(d)(1)(A)(i)
Automatic Gauge Float Well	0	Cover ,bolted & gasketed	1178(d)(1)(A)(i)
Guage Hatch/sample well	0	Weighted mechanical actuation, cover,gasketed	1178(d)(1)(A)(ii)
Rim Vent	0	Gasketed	1178(d)(1)(A)(iv)
Vacuum Breaker	0	Weighted mechanical actuation, gasketed	1178(d)(1)(A)(v)
Roof Drain	0	Slotted membrane fabric cover that covers at least 90 percent of the area of the opening.	1178(d)(1)(A)(vi)
Slotted Guidepole	1	slotted guidepole having a pole float with a gasketed cover, a pole wiper, and a pole float wiper	1178(d)(1)(A)(x)
Primary seal	1	Mechanical shoe	1178(d)(1)(B)(i)
Secondary Seal	1	Rim mounted and shall not be attached to the primary seal	1178(d)(1)(B)(ii)

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Tank 80045, with the proposed internal floating roof, is expected to comply with the requirements of this rule.

Regulation XIII: NEW SOURCE REVIEW

RULE1303: REQUIREMENTS (Amended Dec. 6, 2002)

Rule 1303(a):-Best Available Control Technology

Since this application do not result in a net emission increase of any non-attainment air contaminant, BACT does not apply. However, tank will be equipped with current BACT (internal floating roofs with District Category “A” –approved seals). Compliance is expected.

Rule 1303(b):-This subdivision lists the following requirements for a permit to construct for any new or modified source which results in a net emission increase of any non-attainment air contaminant at a facility.

Rule 1303(b)(1):-Modeling

Rule 1303(b)(2):-Emissions Offsets

Rule 1303(b)(3) Sensitive Zone Requirements:

Rule 1303(b)(4) Facility Compliance

Rule 1303(b)(5) Major Polluting Facilities

(A) Alternative Analysis

(B) Statewide Compliance

(C) Protection of Visibility

(D) California Environmental Quality Act (CEQA)

Since the subject application does not result in a net emission increase of any non-attainment air contaminant, all the requirements of this subdivision do not apply.

To ensure there will be no VOC emissions increase, tank commodity and throughput limits will be added as conditions for the tank.

Regulation XIV - TOXICS AND OTHER NON-CRITERIA POLLUTANTS

Rule 1401: New Source Review of Toxic Air Contaminants (Amended March 4, 2005)

This rule specifies limits for maximum individual cancer risk (MICR), cancer burden, and noncancer acute and chronic hazard index (HI) from new permit units, relocations or modifications to existing permit units which emit toxic air contaminants listed in Table 1 of this rule.

1401(d) This subdivision lists the following requirements for a Permit to construct for any new or modified source:

1401(d)(1)MICR and Cancer Burden

1401(d)(2)Chronic Hazard Index

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- 1401(d)(3)Acute Hazard Index
- 1401(d)(4)Risk Per Year
- 1401(d)(5)Operating Conditions
- 1401(d)(6)Risk Per Year

According to 1401(g)(1)(B), the requirements of subdivision (d) as listed above, shall not apply to a modification of a permit unit that causes a reduction or no increase in the cancer burden, MICR or acute or chronic HI at any receptor location.

For the purpose of determining MICR, cancer burden and chronic HI due to a modified permit unit installed prior to October 8, 1976, resulting from the addition of air pollution controls installed solely to reduce the issuance of air contaminants, emissions shall be calculated according to 1401(f)(3)(C). Emissions are calculated using the worst case scenario. The emissions from the storage tank before and after installation of the internal floating roof tank are then calculated using EPA Tanks 4.0 program and are tabulated in Table 3 which can be found on page 4. Tank 80045 Emissions Calculation Report after modification is included in Attachment 3.

Because the modification of the tank will not increase the VOC emissions as calculated according to R1401(f), there would not be an increase in toxic health risk. Therefore, all the requirements of this subdivision do not apply.

Reg XX Regional Clean Air Incentives Market (RECLAIM)

Rule 2005: New Source Review for RECLAIM

Tesoro is a NOx and SOx RECLAIM facility. It is therefore subject to Reg XX.

2005(c)Requirements for Existing RECLAIM facilities

This subdivision requires BACT, modeling and proof of sufficient RECLAIM Trading Credits (RTC) for an application for a Facility Permit amendment that results in any increase in NOx and SOx emissions. This application will not increase NOx or SOx emissions, therefore this subdivision does not apply.

2005(g)Additional Federal Requirements for Major Stationary Sources

This subdivision lists additional requirements for application for a Facility Permit or an Amendment to a Facility Permit for a new, relocated or modified major stationary source, as defined in the Clean Air Act, 42, U.S.C. Section 7511a(e). Section 7511a(e)(2) defines modification as any change at a major stationary source which results in any increase in emissions. This application will not increase NOx or SOx emissions, therefore this subdivision does not apply.

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Reg XXX Title V Permits

Rule 3001(a): Applicability (Amended November 14, 1997)

The Tesoro Los Angeles Refinery has been designated as a Title V facility. The initial Title V permit was issued on November 23, 2009. Tesoro Refinery is currently subject to Title V. The permit issued for tank 80045 will be issued as a revision of the Title V permit. Permit revisions are categorized into the following four types: administrative, minor, de minimus significant and significant.

As defined in Rule 3000, a significant permit revision means any facility permit revision that is not eligible for administrative permit revision, minor permit revision, or de minimus significant permit revision procedures. Such revisions include any of the following:

1. relaxation of any monitoring, recordkeeping, or reporting requirement, term, or condition in the Title V permit;
2. the addition of equipment or modification to existing equipment or processes that result in an emission increase of non-RECLAIM pollutants or hazardous air pollutants (HAP) in excess of any of the emission threshold levels ;
3. any modification at a RECLAIM facility that results in an emission increase of RECLAIM pollutants over the facility's starting Allocation plus the nontradeable Allocations;
4. requests for a permit shield when such requests are made outside applications for initial permit or permit renewal issuance;
5. any revision that requires or changes a case-by-case evaluation of: reasonably available control technology (RACT) pursuant to Title I of the federal Clean Air Act; or maximum achievable control technology (MACT) pursuant to 40 CFR Part 63, Subpart B;
6. any revision that results in a violation of regulatory requirements;
7. any revision that establishes or changes a permit condition that the facility assumes to avoid an applicable requirement;
8. installation of new equipment subject to a New Source Performance Standard (NSPS) pursuant to 40 CFR Part 60, or a National Emission Standard for Hazardous Air Pollutants (NESHAP) pursuant to 40 CFR Part 61 or 40 CFR Part 63; or,
9. modification or reconstruction of existing equipment, resulting in an emission increase subject to new or additional NSPS requirements

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pursuant to 40 CFR Part 60, or to new or additional NESHAP requirements pursuant to 40 CFR Part 61 or 40 CFR Part 63.

Since the proposed changes for tank 80045 is subject to new NSPS requirements pursuant to 40 CFR Part 60, and new NESHAP requirements pursuant to 40 CFR Part 61 or 40 CFR Part 63, this revision will be considered a *significant revision* to the existing Title V permit. For Significant revisions, AQMD needs to notify the public and the EPA prior to permit issuance. Therefore, the permit is subject to a 30 day public Notice and a 45 day EPA review and comment period.

Since Tesoro is expected to be placed under a variance or order of Abatement for the NOV (P52842) that was issued for HGU-2 unit and this unit has been shutdown since 4-6-2010 and is not expected to operate till a variance or order of abatement is granted. Thus, the District considers this facility to be in compliance with all the permit requirements, and recommends the issuance of the subject permit to construct/operate.

PART 2: STATE REGULATIONS

CEQA

California Environmental Quality Act

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) submitted by Tesoro indicates the expected impacts of the project on the environment 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.

PART 3: FEDERAL REGULATIONS

Standards of Performance for New Stationary Sources (NSPS)

40 CFR 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 standard does not apply. Tank 80045 was not constructed or modified between June 11, 1973 and May 19, 1978.

40 CFR 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.

This standard does not apply. Tank 80045 had no modification between May 18, 1978 and July 23, 1984.

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40 CFR 60, Subpart Kb: Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction or Modification Commenced after July 23, 1984

The subject application is the modification of tank 80045 by changing from fixed roof to an internal roof tank.

Modification is defined in 60.14 as any physical change or operational change to an existing facility which results in an increase in the emission rate to the atmosphere of any pollutant to which a standard applies. The modification to this tank does not result in an emissions increase.

Reconstruction is defined in 60.15 as the replacement of components of an existing facility to such an extent that:

- (1) The fixed capital cost of the new components exceeds 50 percent of the fixed capital cost that would be required to construct a comparable entirely new facility, and
- (2) It is technologically and economically feasible to meet the applicable standards set forth in this part.

The installation of the new roof and reconstruction of the tank qualify as a “reconstruction” since the fixed capital cost of new components exceeds 50 % of the fixed capital cost for construction a new tank (based on the e-mails by Royann Winchester February 1, 2011). Therefore, this tank is subject to the requirements of this rule.

According to 60.112b(a)(1), any internal floating roof tank with a capacity greater than 40,000 gallons that stores a petroleum liquid with a vapor pressure greater than 0.5 psia must be equipped with following :

- (i) The internal floating roof shall rest or float on the liquid surface (but not necessarily in contact with it). The proposed pontoon type IFR will comply with this requirement.
- (ii) The IFR shall be equipped with one of the following: (A) a liquid mounted foam or liquid filled seal, (B) Two seals mounted one above the other so that each forms a continuous closure(bottom one may be vapor mounted), or (C) a mechanical shoe seal. The proposed roof complies with (B) since it has continuous primary and secondary seals.
- (iii) Each opening in a non –contact internal floating roof except for automatic bleeder vents (vacuum breaker vents) and the rim space vents is to provide a projection below the liquid surface. The proposed roof will comply with this requirement.

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(iv) Each opening in the internal floating roof except for leg sleeves, automatic bleeder vents, vents rim space vents, column wells, ladder wells, sample wells and stub drains is to be equipped with a cover or lid which is to be maintained in a closed position at all times (i.e. no visible gap) except when the device is in actual use. The cover or lid shall be bolted except when they are in use. The proposed roof complies with this requirement. The slotted guidepole is equipped with a pole float that will comply with the requirement to be equipped with a cover or lid.

The proposed roof also complies with the following Subpart Kb requirements

- (i) Automatic bleeder vents shall be equipped with a gasket.
- (ii) Rim space vents shall be equipped with a gasket.
- (iii) The sample well shall have a slit fabric cover that covers at least 90 percent of the opening.
- (iv) Each penetration of the internal roof that allows for passage of a column supporting the fixed roof shall have a flexible fabric sleeve seal or a gasketed sliding cover.
- (v) Each penetration of the internal floating roof that allows for passage of a ladder shall have a gasketed sliding cover.

Condition H 23.1 ensures continued compliance with all applicable requirements of this rule.

As discussed below, this tank is subject to 40CFR63 Subpart CC as group 1 storage tank. It is specified in §63.640(n)(1) that a Group 1 storage tank that is also subject to the provisions of 40 CFR part 60, subpart Kb, is required to comply only with the requirements of 40 CFR part 60, subpart Kb.

Subpart CC: National Emissions Standards for Hazardous Air Pollutants for Petroleum Refineries

63.640 Applicability and designation of affected source (Amended October 28, 2009)

The refining process units and equipment located at the Tesoro are subject to the requirements of this subpart addressing

- Miscellaneous process vents
- Storage vessels
- Waste water streams, and
- Equipment leaks
- The modified storage tank as proposed in this application is subject to storage vessels standards.

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63.646 Storage vessel provisions (Amended October 28, 2009)

Group 1 storage vessels are subject to the requirements of these provisions. Group 1 storage vessel is defined as a storage vessel at an existing or new source that has all the following:

	Existing source	New source
Design capacity	≥177 m ³ (46,764gal)	≥151 m ³ (39,894gal)
Vapor Pressure	≥8.3 kPa(1.2 psia)	≥3.4 kPa(0.49 psia)
HAPs	>4% wt	>2% wt

the subject tank meets the definitions of group 1 storage vessels, exceeds the capacity limit, exceeds the allowable vapor pressure for the storage content and also exceed the toxic composition limit of 4% or greater according to Tesoro MSDS. Therefore, this tank is considered a Group 1 storage vessel and is subject to the requirements of these provisions.

Group 1 storage vessels are identified in the permit by the following notation in the “Emissions and Requirements” column: HAP: (10) [40CFR 63 Subpart CC, #3A, 6-23-2003]. The facility is expected to comply with the requirement by including this subject tank as a Group 1 vessel in this report after its modification.

As discussed above, this tank is subject to 40 CFR part 60, subpart Kb. It is specified in §63.640(n)(1) that a Group 1 storage tank that is also subject to the provisions of 40 CFR part60,subpart Kb, is required to comply only with the requirements of 40 CFR part 60, subpart Kb.

National Emission Standards for Hazardous Air Pollutants (NESHAP)

40 CFR 61 Subpart FF: National Emission Standard for Benzene Waste Operations

The Tesoro Los Angeles Refinery is subject to Benzene Waste NESHAP. By existing permit condition P13.1, the facility is expected to continue to comply.

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RECOMMENDATIONS

Permit to construct/operate is recommended subject to the following conditions:

PROCESS CONDITIONS

P13.1 All devices under this process are subject to the applicable requirements of the following rules or regulations:

Contaminant	Rule	Rule/Subpart
Benzene	40CFR61, SUBPART	FF

[40CFR 61 Subpart FF, 11-12-2002]

[Processes subject to this condition : 1, 2, 3, 4, 5, 6, 8, 9, 11, 12, 15]

SYSTEM CONDITIONS

S13.7 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	1178
VOC	District Rule	1149

[RULE 1149, 7-14-1995; RULE 1178, 12-21-2001; RULE 463, 3-11-1994; RULE 463, 5-6-2005]

[Systems subject to this condition : Process 15, System 1 , 2]

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DEVICE CONDITIONS

B. Material/Fuel Type Limits

B59.9 The operator shall only use the following material(s) in this device :

Gasoline

[RULE 1303, 5-10-1996]

[Devices subject to this condition : D593]

C. Throughput or Operating Parameter Limits

C1.53The operator shall limit the throughput to no more than 608,333 barrel(s) in any one calendar month.

The operator shall measure and record the liquid volume of the tank using an automatic tank level gauging system(ATLGS). The ATLGS shall measure the tank liquid level and calculate the liquid volume using the tank strapping tables. The volume measurements shall be recorded electronically once every 15 minutes.

The operator shall calculate the throughput in barrels using the total one-way (increasing) volume movement on a monthly basis. The calculation will be based on the sum of the increasing volume readings.

The ATLGS installed shall be verified once per quarter by comparing against a manual tank level measurement. If the ATLGS differs from the manual tank level measurement by more than 1.0 inch or 0.8%, whichever is greater, the ATLGS shall be repaired and back to service within 10 days.

In the event of a failure or routine maintenance of the ATLGS, the ATLGS shall be repaired and put back into service within 10 days of the time that the ATLGS failed or was removed from service for maintenance.

While the ATLGS is being repaired or maintained, the throughput shall be determined by the hourly tank level data averaged from the previous 30 days prior to time that the ATLGS went out of service.

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 : D593]

C6.4 The operator shall use this equipment in such a manner that the hydrocarbon concentration being monitored, as indicated below, does not exceed 30 percent of the lower explosive limit.

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The operator shall use an explosimeter or equivalent device to monitor the hydrocarbon concentration in the vapor space above the floating roof device on a semi-annual basis.

[RULE 1178, 12-21-2001; RULE 463, 3-11-1994; RULE 463, 5-6-2005]

[Devices subject to this condition: **D593**, D610, D613, D618, D621, D630]

H. Applicable Rules

H23.1 This equipment is subject to the applicable requirements of the following rules or regulations:

Contaminant	Rule	Rule/Subpart
VOC	40CFR60, SUBPART	Kb

[40CFR 60 Subpart Kb, 10-15-2003]

[Devices subject to this condition : D469, D524, **D593**, D598, D610, D613, D630, D648, D659, D982, D1001, D1002, D1078]

E. Equipment Operation/Construction Requirements

E 336.2 The operator shall vent the vent gases from this equipment as follows:

All vent gases under normal operating shall be directed to a vapor recovery system consisting of compressors D641, D642, D643 AND OR D644, which can be operated independently to maintain a system vacuum that efficiency collects all vented gases.

This equipment shall not operated unless the vapor recovery system is in full use and has a valid permit to receive vent gases from this equipment

[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(b)(2)-Offset, 5-10-1996]

[Devices subject to this condition : D458, D459, D460, D461, D462, D466, D467, D520, D521, D526, D531, D533, D534, D544, D546, D547, D548, D550, D551, D552, D553, D554, D555, D556, D557, D558, D559, D560, D561, D562, D563, D564, D565, D566, D567, D569, D571, D572, D573, D574, D575, D576, D577, D578, D579, D589, D584, D592, **D593**, D594, D595, D596, D597, D598, D599, D600, D602, D603, D604, D606, D607, D608, D611, **D613**, D614, D615, D616, D617, D619, D620, D622, D623, D624, D625, D626, D627, D628, D631, D633, D634, D636, D637, D639, D640, D807, D808, D809, D982, D998, D1001, D1002, D1500]

K. Record Keeping/Reporting

K67.2 The operator shall keep records, in a manner approved by the District, for the following parameter(s) or item(s):

Throughput and vapor pressure of stored liquid.

[RULE 3004(a)(4)-Periodic Monitoring, 12-12-1997]

[Devices subject to this condition : D520, D521, D531, D533, D534, D543, D544, D546, D548, D549, D554, D555, D556, D558, D559, D560, D562, D563, D565, D566, D567, D568, D569, D571, D572, D573, D575, D576, D577, D578, D579, D581, D582, D583, D584, D585, D586, D587, D588, D591, D592, **D593**, D594, D596, D597, D598, D599, D603, D604, D605, D609, D611, D612, **D613**, D614, D615, D616, D617, D618, D619, D620, D621, D622, D623, D625, D626, D627, D628, D629, D631, D632, D633, D634, D635, D636, D637, D640, D647, D648, D649, D650, D651, D652, D653, D654, D655, D656, D658, D660, D1001, D1002, D1095, D1500, D1555]

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K67.15 The operator shall keep records, in a manner approved by the District, for the following parameter(s) or item(s):

- Throughput and vapor pressure of stored liquid.
- Hydrocarbon concentration measurements done in the vapor space above the floating roof of the tank.
- Other records that may be required to comply with the applicable requirements of District Rules 463, 1149 and 1178.

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

[Devices subject to this condition : **D593**, D613, D618, D621]

K171.3 The operator shall provide to the District the following items:

Final drawings and/or specifications of the internal floating roof to be installed/constructed shall be submitted to the District within 30 days after its construction

[RULE 1178, 12-21-2001]

[Devices subject to this condition: **D593**, D610, D613, D618, D621, D630]

Attachments

1.	NOV's and NC's Issued
2.	Previous Permits
3.	Emissions Calculations