# **Bay Area Air Quality Management District**

939 Ellis Street San Francisco, CA 94109 (415) 771-6000

# Final

# **MAJOR FACILITY REVIEW PERMIT**

### Issued To: Chevron Products Company Facility #A0010

Facility Address:

841 Chevron Way Richmond, CA 94802

#### Mailing Address:

Post Office Box 1272 Richmond, CA 94802

**Responsible Official Kory Judd,** Richmond Refinery Mgr. 510-242-4400 Facility Contact Juan Li, Air Team Leader 510-242-4930

Type of Facility: Primary SIC: Product: Petroleum Refinery 2911 Petroleum

BAAQMD Engineering Division Contact: Greg Solomon, PE Supervising Air Quality Engineer 415-749-4715

#### ISSUED BY THE BAY AREA AIR QUALITY MANAGEMENT DISTRICT

Signed by Jeff Mckay for Jack P. Broadbent

August 1, 2014

Jack P. Broadbent, Executive Officer/Air Pollution Control Officer

Date

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Tanks are clustered in groups to reflect similar applicable requirements. The specific sources included in each cluster are summarized below.

Table IV.F.1.1

Fixed Roof Tanks Cluster 01a

Table IV.F.1.2

Fixed Roof Tanks Cluster 01b

S-0200A, S-0204, S-0223, S-0225, S-0234, S-0290, S-0291, S-0293, S-0319, S-0397, S-0401, S-0501, S-0583, S-0900,
S-0907, S-0910, S-0957, S-0979, S-0984, S-1052,
S-1149, S-1455, S-1456, S-1468, S-1470, S-1492, S-1493, S-1523, S-1546, S-1636, S-1653, S-1679, S-1723, S-1724, S-1725,
S-1756, S-1989, S-2520, S-2540, S-3139, S-3140 (S-3140 also in Table IV.E.3.1 Sulfur Recovery), S-3142, S-3146, S-3148, S-3310
S-0917, S-0918, S-1821, S-3141, S-3160, S-3161, S-3162, S-3163, S-3164, S-3165, S-3166, S-3167, S-3168, S-3169, S-3170, S-3171, S-3172, S-3179, S-3182, S-3185, S-3186, S-3194, S-3195, S-3215, S-3216, S-5101, S-5103, S-5107, S-5108, S-5109, S-5110, S-5112, S-5113, S-5115, S-5117, S-5118, S-5119, S-5121, S-5122, S-5123, S-5126, S-5127, S-5128, S-5129, S-5130, S-5131, S-5132, S-5133, S-5134, S-5135, S-5136, S-5137, S-5138, S-5139, S-5140, S-5201, S-5202, S-5203, S-5204, S-5207, S-5208, S-5209, S-5210, S-5211, S-5212, S-5213, S-5214, S-5215, S-5216, S-5217, S-5218, S-5214, S-5214, S-5215, S-5216, S-5217, S-5228, S-5229, S-5223, S-5224, S-5227, S-5228, S-5229, S-5230, S-5230, S-5231, S-5234, S-5237, S-5240, S-5241, S-5603

Internal Floating Roof Tanks Cluster 01b:

External Floating Roof Tanks Cluster 01b:

S-0955, S-0956, S-1506, S-1451, S-1899, S-1428, S-1020, S-3132, S-3138

Table IV.F.1.3

Fixed Roof Tanks Cluster 02

S-0021, S-0660, S-6066

Table IV.F.1.4

Fixed Roof Tanks Cluster 05

S-0605 (S-0605 also in Table IV.G.1.5 Wastewater Cluster 40b), S-6200, S-6201, S-6202, S-6203, S-6204, S-6205, S-6206, S-6207, S-6208, S-6209, S-6210, S-6211, S-6212, S-6213, S-6214, S-6215, S-6216, S-6217, S-6218, S-6219 (abatement device requirements for S-6200 through S-6219 are provided in Table II-B)

Table IV.F.1.5

External Floating Roof Tanks Cluster 11

S-0232, S-0297, S-0298, S-0398, S-1292, S-1518, S-1798, S-1799, S-1843, S-1966, S-3074, S-3100

Table IV.F.1.6

Internal Floating Roof Tank Cluster 12

S-1633

Table IV.F.1.7

Fixed Roof Tanks Cluster 13

Table IV.F.1.8

External Floating Roof Tanks Cluster 16

Table IV.F.1.9

External Floating Roof Tanks Cluster 17

S-3101, S-3102, S-3129

Table IV.F.1.10

External Floating Roof Tanks Cluster 23

S-0399, S-3180, S-3189, S-3190, S-3191, S-3193, S-3196, S-3197, S-3198, S-3201, S-3202, S-3213, S-3214

Table IV.F.1.11

Internal Floating Roof Tanks Cluster 24

S-1635, S-1637, S-3229

Table IV.F.1.12

Fixed Roof Tanks Cluster 25

S-6220, S-6221, S-6222, S-6223, S-6224, S-6225, S-6226, S-6227, S-6228, S-6229, S-6230, S-6231, S-6232, S-6233, S-6234, S-6235, S-6236, S-6237, S-6238, S-6239, S-3110, S-3111 (S-3110, S-3111 also in Table IV.G.1.5 Wastewater Cluster 40b) (abatement device requirements for S-6220 through S-6239 are provided in Table II-B)

Table IV.F.1.13

External Floating Roof Tanks Cluster 26

S-0231, S-0634, S-0679, S-0953, S-0954, S-0990, S-0991, S-0992, S-1287, S-1296, S-1444, S-1459, S-1488, S-1489, S-1491, S-1504, S-1514, S-1686, S-1687, S-1688, S-3071, S-3072, S-3073, S-3075, S-3076, S-3103, S-3104, S-3105, S-3106, S-3107, S-3126, S-3128, S-3133, S-3134, S-3144

Table IV.F.1.14

Internal Floating Roof Tanks Cluster 27

S-1289, S-1645

Table IV.G.1.1

Wastewater Treatment Units Cluster 10

S-3200, S-3192

Table IV.G.1.2

Wastewater Process Drains Not Subject to QQQ Cluster 20d

Table IV.G.1.3

Wastewater Process Drains Cluster 20q

S-4235, S-4282, S-4251, S-4282A, S-4285, S-4291, S-6050, S-4356

Table IV.G.1.4

Wastewater Separator Cluster 30c

S-4148, S-4413, S-4414

Table IV.G.1.5

Wastewater Non-ERFT or IFRT Tanks Cluster 40b

S-0605, S-0610, S-3110, S-3111, S-3229

Table IV.G.1.6

Wastewater EFRT Tanks Cluster 45e

S-0231, S-0232, S-0399, S-1504, S-3126, S-3127, S-3128, S-3076, S-3144

Table IV.G.1.7

Wastewater Bioreactor Cluster 50d

S-4393

Table IV.G.1.8

Wastewater Containers Cluster 60b

S-6250, Bins, Drums, Vacuum Trucks

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Wastewater Cluster 60b (Table IV.G.1.8)	

#### A. Administrative Requirements

The permit holder shall comply with all applicable requirements in the following regulations: **BAAQMD** Regulation 1 - General Provisions and Definitions (as amended by the District Board on 7/9/08); SIP Regulation 1 - General Provisions and Definitions (as approved by EPA through 6/28/99); BAAQMD Regulation 2, Rule 1 - Permits, General Requirements (as amended by the District Board on 11/19/08); SIP Regulation 2, Rule 1 - Permits, General Requirements (as approved by EPA through 1/26/99); BAAQMD Regulation 2, Rule 2 - Permits, New Source Review (as amended by the District Board on 6/15/05); SIP Regulation 2, Rule 2 - Permits, New Source Review and Prevention of Significant Deterioration (as approved by EPA through 1/26/99); BAAQMD Regulation 2, Rule 4 - Permits, Emissions Banking (as amended by the District Board on  $\frac{12}{21}$ ); SIP Regulation 2, Rule 4 - Permits, Emissions Banking (as approved by EPA through 1/26/99); BAAQMD Regulation 2, Rule 5 - New Source Review of Toxic Air Contaminants (as adopted by the District Board on 6/15/05);

BAAQMD Regulation 2, Rule 6 - Permits, Major Facility Review (as amended by the District Board on 4/16/03); and SIP Regulation 2, Rule 6 – Permits, Major Facility Review

(as approved by EPA through 6/23/95)

#### B. Conditions to Implement Regulation 2, Rule 6, Major Facility Review

- 1. This Major Facility Review Permit was issued on August 11, 2011 and expires on August 10, 2016. The permit holder shall submit a complete application for renewal of this Major Facility Review Permit no later than February 10, 2016, and no earlier than August 10, 2015. If a complete application for renewal has not been submitted in accordance with this deadline, the facility may not operate after August 10, 2016. If the permit renewal has not been issued by August 10, 2016, but a complete application for renewal has been submitted in accordance with the above deadlines, the existing permit will continue in force until the District takes final action on the renewal application. (Regulation 2-6-307, 404.2, 407, & 409.6; MOP Volume II, Part 3, §4.2)
- 2. The permit holder shall comply with all conditions of this permit. The permit consists of this document and all appendices. Any non-compliance with the terms and conditions of this permit will constitute a violation of the law and will be grounds for enforcement action; permit termination, revocation and re-issuance, or modification; or denial of a permit renewal application. (Regulation 2-6-307; MOP Volume II, Part 3, §4.11)
- 3. In the event any enforcement action is brought as a result of a violation of any term or condition of this permit, the fact that it would have been necessary for the permittee to halt or reduce the permitted activity in order to maintain compliance with such term or condition shall not be a defense to such enforcement action. (MOP Volume II, Part 3, §4.11)
- 4. This permit may be modified, revoked, reopened and reissued, or terminated for cause.

(Regulation 2-6-307, 409.8, 415; MOP Volume II, Part 3, §4.11)

- 5. The filing of a request by the facility for a permit modification, revocation and reissuance, or termination, or the filing of a notification of planned changes or anticipated non-compliance does not stay the applicability of any permit condition. (Regulation 2-6-409.7; MOP Volume II, Part 3, §4.11)
- 6. This permit does not convey any property rights of any sort, or any exclusive privilege. (Regulation 2-6-409.7; MOP Volume II, Part 3, §4.11)
- 7. The permit holder shall supply within 30 days any information that the District requests in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. (Regulation 1-441, Regulation 2-6-409.4 & 501; MOP Volume II, Part 3, §4.11)
- 8. Any records required to be maintained pursuant to this permit that the permittee considers to contain proprietary or trade secret information shall be prominently designated as such. Copies of any such proprietary or trade secret information which are provided to the District shall be maintained by the District in a locked confidential file, provided, however, that requests from the public for the review of any such information shall be handled in accordance with the District's procedures set forth in Section 11 of the District's Administrative Code. (Regulation 2-6-419; MOP Volume II, Part 3, §4.11)
- 9. Proprietary or trade secret information provided to EPA will be subject to the requirements of 40 CFR Part 2, Subpart B Public Information, Confidentiality of Business Information. (40 CFR Part 2)
- 10. The emissions inventory submitted with the application for this Major Facility Review Permit is an estimate of actual emissions or the potential to emit for the time period stated and is included only as one means of determining applicable requirements for emission sources. It does not establish, or constitute a basis for establishing, any new emission limitations. (MOP Volume II, Part 3, §4.11)
- 11. The responsible official shall certify all documents submitted by the facility pursuant to the major facility review permit. The certification shall state that based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. A responsible official for the facility shall sign the certifications. (Regulation 2-6-409.20, MOP Volume II, Part 3, §4.11)
- 12. The permit holder is responsible for compliance, and certication of compliance, with all conditions of the permit, regardless whether it acts through employees, agents, contractors, or subcontractors. (Regulation 2-6-307)

#### C. Requirement to Pay Fees

The permit holder shall pay annual fees in accordance with District Regulation 3, including Schedule P. (Regulation 2-6-402 & 409.13, Regulation 3; MOP Volume II, Part 3, §4.12)

#### D. Inspection and Entry

Access to Facility: The permit holder shall provide reasonable access to the facility and equipment, which is subject to this permit to the APCO and/or to his or her designee. (Regulation 1-440, Regulation 2-6-409.3; MOP Volume II, Part 3, §4.14)

#### E. Records

- 1. The permit holder must provide any information, records, and reports requested or specified by the APCO. (Regulation 1-441, Regulation 2-6-409.4)
- 2. Notwithstanding the specific wording in any requirement, all records for federally enforceable requirements shall be maintained for at least five years from the date of creation of the record. (Regulation 2-6-501; MOP Volume II, Part 3, §4.7)

#### F. Monitoring Reports

Reports of all required monitoring must be submitted to the District at least once every six months, except where an applicable requirement specifies more frequent reporting. The first reporting period for this permit shall be December 1, 2003, to May 31, 2004. The second reporting period for this permit shall be June 1, 2004, to June 30, 2004. Subsequent reports shall be for the following periods: July 1st through December 31st and January 1st through June 30th. All reports are due on the last day of the month after the end of the reporting period. All instances of non-compliance shall be clearly identified in these reports. The reports shall be certified by the responsible official as true, accurate, and complete. In addition, all instances of non-compliance with the permit shall be reported in writing to the District's Compliance and Enforcement Division within 10 calendar days of the discovery of the incident. Within 30 calendar days of the discovery of any incident of non-compliance, the facility shall submit a written report including the probable cause of non-compliance and any corrective or preventative actions. The reports shall be sent to the following address:

Director of Compliance and Enforcement Bay Area Air Quality Management District 939 Ellis Street San Francisco, CA 94109 Attn: Title V Reports

(Regulation 2-6-502, MOP Volume II, Part 3, §4.7)

#### G. Compliance Certification

Compliance certifications shall be submitted annually by the responsible official of this facility to the Bay Area Air Quality Management District and to the Environmental Protection Agency. The first certification period shall be, through. The second certification period shall be, to. Subsequent certification periods will be January 1st to December 31st. All compliance certifications are due on the last day of the month after the end of the certification period. The certification must list each applicable requirement, the compliance status, whether compliance was continuous or intermittent, the method used to determine compliance, and any other specific information required by the permit. The certification should be directed to the District's Compliance and Enforcement Division at the address above, and a copy of the certification shall be sent to the Environmental Protection Agency at the following address:

Director of the Air Division USEPA, Region IX 75 Hawthorne Street San Francisco, CA 94105 Attention: Air-3

(MOP Volume II, Part 3, §4.5 and 4.15)

#### H. Emergency Provisions

- 1. The permit holder may seek relief from enforcement action in the event of a breakdown, as defined by Regulation 1-208 of the District's Rules and Regulations, by following the procedures contained in Regulations 1-431 and 1-432. The District will thereafter determine whether breakdown relief will be granted in accordance with Regulation 1-433. (MOP Volume II, Part 3, §4.8)
- 2. The permit holder may seek relief from enforcement action for a violation of any of the terms and conditions of this permit by applying to the District's Hearing Board for a variance pursuant to Health and Safety Code Section 42350. The Hearing Board will determine after notice and hearing whether variance relief should be granted in accordance with the procedures and standards set forth in Health and Safety Code Section 42350 et seq. (MOP Volume II, Part 3, §4.8)
- 3. The granting by the District of breakdown relief or the issuance by the Hearing Board of a variance will not provide relief from federal enforcement. (MOP Volume II, Part 3, §4.8)

#### I. Severability

In the event that a court or tribunal of competent jurisdiction, or by the Administrator of the EPA invalidates any provision of this permit, all remaining portions of the permit shall remain in full force and effect. (Regulation 2-6-409.5; MOP Volume II, Part 3, §4.10)

#### J. Miscellaneous Conditions

- 1. The maximum capacity and throughput limits for each source as shown in Table's II A1 and A2 are the maximum allowable capacity and throughput limits. Exceedance of either the maximum allowable capacity or the throughput limits for any source is a violation of Regulation 2, Rule 1, and Section 301. (Regulation 2-1-301)
- \*2. For grandfathered sources, the throughput limits as shown in Table II-A3 are based upon District records at the time of the MFR permit issuance. The facility must report any exceedance of these limits following the procedures in Section I.F. This reporting requirement is intended to facilitate a determination of whether a modification has occurred as defined in Regulation 2-1-234.3. The throughput limits for grandfathered sources are for reporting purposes only. Exceedance of this limit does not establish a presumption that a modification has occurred, nor does compliance with the limit establish a presumption that a modification has not occurred. (Reg. 2-1-234.3)
- \*3. The owner/operator shall notify the District in writing by fax or email no less than three calendar days in advance of any scheduled startup or shutdown of any process unit and as soon as feasible for any unscheduled startup or shutdown of a process unit, but no later than 48 hours or within the next normal business day after the unscheduled startup/shutdown. The notification shall be sent in writing by fax or email to the Director of Enforcement and Compliance. The requirement is not federally enforceable. [Regulation 2-1-403]
- 4. Where an applicable requirement allows multiple compliance options and where more than one such option is incorporated into the permit, the permit holder must maintain records indicating the selected compliance option. Such records at a minimum shall indicate when any change in options has occurred. In addition, the annual compliance certification must specifically indicate which option or options were selected during the certification period. This is in addition to any recordkeeping and reporting contained in the requirement itself.

5. When the designation in this Title V Permit of a BAAQMD rule/regulation as federally enforceable is based on inclusion in the SIP, then only the sections, portions, or versions of the BAAQMD rule/regulation included in the SIP shall be considered federally enforceable.

#### K. Accidental Release

This facility is subject to 40 CFR Part 68, Chemical Accident Prevention Provisions. The permit holder shall submit a risk management plan (RMP) by the date specified in §68.10. The permit holder shall also certify compliance with the requirements of Part 68 as part of the annual compliance certification, as required by Regulation 2, Rule 6. (40 CFR Part 68, Regulation 2, Rule 6)

### **II. EQUIPMENT**

#### Table II A 1 - Permitted Sources (New Source Review and other enforceable limits)

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

Source Number	Description	Make or Type	Model	Capacity	Annual Throughput Limits	Daily Throughput Limits	Units	Basis
S-0025	Tank	Fixed Roof	N/A	336 gal	2,520	N/A	gal	P/C# 15107
S-0679	Tank	External Floating Roof	N/A	3767K gal	1,000,000	N/A	bbl non-exempt stocks	Conditioned annual throughput, P/C# 8503
S-0870	Tank	Fixed Roof	N/A	2300 gal	4,500	N/A	bbl non- exempt stocks	condition #11208
S-0957	Tank	Fixed Roof	N/A	3272K gal	7,000,000	N/A	bbl non- exempt stocks	P/C# 11228 A/N 11886 required offsets = NSR
S-0992	Tank 992	External Floating Roof	N/A	4351K gal	6,000,000	N/A	bbl	Conditioned annual throughput (non-exempt stock), P/C# 10909
S-1296	Tank	External Floating Roof	N/A	6733K gal	3,495,000	N/A	bbl	'condition #22641
S-1489	Tank	External Floating Roof	N/A	2092K gal	2,500,000	N/A	bbl non-exempt stocks	Conditioned annual throughput (non-exempt stock), P/C# 10908
S-1514	Tank	External Floating Roof	N/A	4767K gal	3,000,000	N/A	bbl	condition #22641
S-1635	Tank	Internal Floating Roof	N/A	155K gal	2,000,000	N/A	bbl non- exempt stocks	P/C# 15671 offsets = NSR
S-1645	Tank	Internal Floating Roof	N/A	105K gal	520,000	N/A	bbl	P/C #21307 per App 8451
S-1653	Tank	Fixed Roof	N/A	1260K gal	750,000	N/A	bbl non- exempt stocks	Conditioned annual throughput (non-exempt stock), P/C# 11436 offsets

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Source Number	Description	Make or Type	Model	Capacity	Annual Throughput Limits	Daily Throughput Limits	Units	Basis
								= NSR
S-1798	Tank	External Floating Roof	N/A	6266K gal	7,200,000	N/A	bbl	Conditioned annual throughput, P/C# 13597
S-3100	Tank	External Floating Roof	N/A	19910K gal	14,000,000	N/A	bbl non- exempt stock	P/C#2238 (App.#8452)
S-3106	Tank	External Floating Roof	N/A	29MM gal	30,000,000	N/A	bbl non- exempt stock	Condition #11025
S-3110	Tank	Abated Fixed Roof	N/A	24K gal	5,000,000 (one of two surge tanks for S-3200)	N/A	bbl Desalter effluent water	App.'s# 5417 & 6035
S-3111	Tank	Abated Fixed Roof	N/A	24K gal	5,000,000 (one of two surge tanks for S-3200)	N/A	bbl Desalter effluent water	App.'s# 5417 & 6035
S-3126	Tank	External Floating Roof	N/A	553.57 K gal	50,000	N/A	bbl recovered oil	P/C# 17470 offsets = NSR design drawings submitted 1/16/4
S-3127	Tank	External Floating Roof	N/A	1992.86 Kgal	223,000	N/A	bbl	App.# 6851 P/C #23262 design drawings submitted 1/16/4
S-3133	Tank	External Floating Roof	N/A	13147K gal	15,000,000	N/A	bbl non-exempt stock	Conditioned annual throughput, P/C# 15038
S-3134	Tank	External Floating Roof	N/A	8379K gal	10,000,000	N/A	bbl non-exempt stock	Conditioned annual throughput, P/C# 13859
S-3185	Tank (previously Tank 982)	External Floating Roof	N/A	5040K gal	20,000,000	N/A	bbl non- exempt stock	Conditioned annual throughput (non-exempt stock), P/C# 11024 offsets = NSR

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Source Number	Description	Make or Type	Model	Capacity	Annual Throughput Limits	Daily Throughput Limits	Units	Basis
S-3189	Tank	External Floating Roof	N/A	8400K gal	12,000,000	N/A	bbl non-exempt stock	Conditioned annual throughput (non-exempt stock), P/C# 6660
S-3190	Tank	External Floating Roof	N/A	5698.33 K gal	7,300,000	N/A	bbl	Conditioned annual throughput, P/C# 6661 design drawings submitted 1/16/4
S-3191	Tank	External Floating Roof	N/A	5682.51K gal	2,000,000	N/A	bbl non-exempt stock	Conditioned annual throughput (non-exempt stock), P/C# 7583 design drawings submitted 1/16/4
S-3193	Tank	External Floating Roof	N/A	6663.89 K gal	9,500,000	N/A	bbl non-exempt stock	Conditioned annual throughput (non-exempt stock), P/C# 8253 design drawings submitted 1/16/4
S-3196	Tank	External Floating Roof	N/A	8400K gal	2,000,000	N/A	bbl non-exempt stock	Conditioned annual throughput (non-exempt stock), P/C# 13467
S-3197	Tank	External Floating Roof	N/A	8763.91 K gal	4,000,000	N/A	bbl limited to gasoline, sponge oil, sour water, naphtha feed, MTBE, reformate or TVP < 6.2 psia	Conditioned annual throughput, P/C# 8252 design drawings submitted 1/16/4

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Source Number	Description	Make or Type	Model	Capacity	Annual Throughput Limits	Daily Throughput Limits	Units	Basis
S-3198	Tank	External Floating Roof	N/A	2284K gal	500,000	N/A	bbl limited to toluene, jet A, distillate oil, or other petroleum TVP or toxicity less than toluene or Jet A	Conditioned annual throughput, P/C# 8715 offsets = NSR
S-3200	4 Crude Unit Desalter Water Treatment Unit	N/A	N/A		10,000,000	27,400	bbl	App.#6035
S-3201	Tank	External Floating Roof	N/A	7140K gal	7,300,000	N/A	Bbl non-exempt stock	Conditioned annual throughput (non-exempt stock), P/C#13008 CFP
S-3202	Tank	External Floating Roof	N/A	4267K gal	4,000,000	N/A	Bbl hydrocarbon stock other than methanol with a vapor pressure <8.33 psia	Conditioned annual throughput, P/C# 13364 CFP
S-3213	Tank	External Floating Roof	N/A	15,623.06 K gal	9,100,000	N/A	bbl non-exempt stock	Conditioned annual throughput (non-exempt stock), P/C# 12139 design drawings submitted 1/16/4
S-3214	Tank	External Floating Roof	N/A	5418K gal	3,000,000	N/A	bbl limited to refinery stock with TVP< or = 11.0 psia and benzene <or= 5.5%</or= 	Conditioned annual throughput (non-exempt stock), P/C# 12104
S-3225	EFR Storage Tank	External Floating Roof	N/A	4.55 MMgal	10,832,000	N/A	bbl	Condition #18702
S-3226	Sulfur Storage Tank	Fixed Roof	N/A	1.1514 MM gal	N/A	N/A	gallons	Condition #1046
S-3229	Tank	Domed External Floating Roof	N/A	4242K gal	6,000,000	38,000	bbl non-exempt stock	Condition #25037

#### Table II A 1 - Permitted Sources (New Source Review and other enforceable limits)

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

Source Number	Description	Make or Type	Model	Capacity	Annual Throughput Limits	Daily Throughput Limits	Units	Basis
S-4032	#3 Rheniformer, F101	Foster Wheeler	DWG 719- 11-H1		525,600	1,440	million Btu HHV	PTO RLOP
S-4033	#3 Rheniformer, F102	Foster Wheeler	DWG 719- 11-H3		429,240	1,176	million Btu HHV	PTO RLOP
S-4038	#4 Rheniformer, F-3550	Alcorn Combustion	HC-01403		1,635,200	4,480	million Btu HHV	Conditioned daily throughput A/N 8432. Appendix 12.22 BLOP
S-4039	#4 Rheniformer, F-3560	Alcorn Combustion	HC-01403		1,489,200	4,080	million Btu HHV	Conditioned daily throughput A/N 8432 RLOP
S-4040	#4 Rheniformer, F-3570	Alcorn Combustion	HC-01403		1,331,520	3,648	million Btu HHV	Conditioned daily throughput A/N 8432
S-4041	F-3580, #4 Rheniformer	Alcorn Combustion	HC-01403		674,520	1,848	million Btu HHV	Conditioned daily throughput A/N 8432 RLOP
S-4042	#5 Rheniformer F-550	Foster Wheeler	N/A		1,734,480	4,752	million Btu HHV	Conditioned daily throughput A/N 2193
S-4043	F-560, #5 Rheniformer	Foster Wheeler	N/A		1,130,040	3,192	million Btu HHV	Conditioned daily throughput A/N 2193
S-4044	#5 Rheniformer F-570	Foster Wheeler	N/A		683,280	1,872	million Btu HHV	Conditioned daily throughput P/C# 16686 PA#8343
S-4045	#5 Rheniformer F-580	Foster Wheeler	N/A		446,760	1,224	million Btu HHV	Conditioned daily throughput A/N 2193

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Source Number	Description	Make or Type	Model	Capacity	Annual Throughput Limits	Daily Throughput Limits	Units	Basis
S-4046	Asphalt Plant F1 H.O. Heater	Petro-Chem	N/A		236,520	648	million Btu HHV	PTO RLOP
S-4059	#1 JHT Furnace #247	Born Engineering Co.	H-265-73		1,059,960	2,904	million Btu HHV	Conditioned daily throughput A/N 2189
								RLOP
S-4060	#1 JHT Furnace #210A&B	Born Engineering Co.	H-265-73		1,261,440	3,456	million Btu HHV	Conditioned daily throughput A/N 2189
								RLOP
S-4061	#5 Naph Hydrotreater F-410	Born Engineering Co.	N/A		989,880	2,928	million Btu HHV	Conditioned daily throughput, A/N 2192 annual limit proposed in Aug 16, 2001 firing rate limit update.
S-4062	#5 Naph Hydrotreater F-447	Born Engineering Co.	N/A		1,095,000	3,960	million Btu HHV	Conditioned daily throughput, A/N 2192 annual limit proposed in Aug 16, 2001 firing rate limit update.
S-4068	VGO Desulfurizer F-1610	Petro-Chem	N/A		1,116,900	3,060	million Btu HHV	Conditioned daily throughput A/N 3461
S-4069	VGO F-1660	American Schack	N/A		481,800	1320	million Btu HHV	Furnace firing rate limit for Reg 9 rule and per Chevron's June 21, 2000 proposal as subsequently amended. Appendix 9F-1 RLOP

#### Table II A 1 - Permitted Sources (New Source Review and other enforceable limits)

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

Source Number	Description	Make or Type	Model	Capacity	Annual Throughput Limits	Daily Throughput Limits	Units	Basis
S-4070	#4 Crude Unit F- 1100a	Foster Wheeler	4800-311- 141		3,425,160	9,552	million Btu HHV	Conditioned daily thoughput P/C# 16686. Appendix 9F-2
								RLOP
S-4071	#4 Crude Unit F- 1100b	Foster Wheeler	4800-311- 141		3,547,800	9,720	million Btu HHV	Conditioned daily thoughput P/C# 16686. Appendix 9F-2
								RLOP
S-4072	#4 Crude Unit F- 1160	Foster Wheeler	4800-311- 1411X		2,943,360	8,064	million Btu HHV	Conditioned daily thoughput P/C# 16686. Appendix 9F-2
S-4107	Heat Treating	John R. Gearhart	N/A		57,816	158	Million Btu	РТО
	Furnace No. 1 Boiler Shop	Co.					HHV	RLOP
S-4129	800# Steam Boiler #1 #IPP	Riley Stoker Corp.	N/A		2,041,080	5,592	million Btu HHV	Conditioned daily throughput P/A # 19292
S-4131	Steam Boiler #3 #1PP	Riley Stoker Corp.	N/A		2,067,360	5,664	million Btu HHV	Conditioned daily throughput P/A # 19292
S-4132	Steam Boiler #4 #1PP	Riley Stoker Corp.	N/A		2,058,600	5,640	million Btu HHV	Conditioned daily throughput P/C# 16686
S-4133	Steam Boiler #5 #1PP	Riley Stoker Corp.	N/A		2,076,120	5,688	million Btu HHV	Conditioned daily throughput P/C# 16686
S-4135	Steam Boiler #7 #1PP	Babcock & Wilcox	N/A		2,382,720	6,528	million Btu HHV	Conditioned daily throughput P/A # 762
S-4152	F-100 Asphalt Solution Heater SDA Isomax	M.W. Kellog	N/A		442,380	1,212	million Btu HHV	Conditioned daily throughput P/C# 16686
S-4153	F-110 Asphalt Solution Heater SDA 150 Max	M.W. Kellog	N/A		442,380	1212	million Btu HHV	See Appendix 3B5.
								KLOI

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Source Number	Description	Make or Type	Model	Capacity	Annual Throughput Limits	Daily Throughput Limits	Units	Basis
S-4154	F-120 Asphalt Solution Heater SDA Isomax	M.W. Kellog	N/A		442,380	1,212	million Btu HHV	Conditioned daily throughput P/C# 16686
S-4155	F-135 Hot Oil Furnace	M.W. Kellog	N/A		1,830,840*	5016	million Btu LHV	PTO cond 8773
S-4156	F-320 Naphtha Vaporizer, H2 Plant Isomax	Born Engineering Co.	N/A		370,548	1,015	million Btu HHV	See Appendix 3B5.
S-4157	F-330 Naphtha Vaporizer, H2 Plant	Born Engineering Co.	MA-22		370,548	1,015	million Btu HHV	See Appendix 3B5.
S-4158	F-340 Natural Gas Heater, H2 Plant	Born Engineering Co.	N/A		366,168	1,152	million Btu HHV	RLOP Implied condition application #553/1572.
S-4159	F-410 TKC Feed Furnace TKC Isomax	Alcorn Combustion Co.	N/A		414,348	1,632	million Btu HHV	Subject to Condition 469 RLOP Conditioned daily throughput P/C# 16686
S-4160	F-420 TKC Feed Furnace TKC Isomax	Alcorn Combustion Co.	N/A		395,076	1,704	Million Btu HHV	Subject to Condition 469 RLOP Conditioned daily throughput P/C# 16686
S-4161	F-510 TKN Feed Furnace Isomax	Alcorn Combustion Co.	N/A		534,360	1,464	million Btu HHV	PTO. P/C# 16686 RLOP
S-4162	F-520 TKN Feed Furnace Isomax	Alcorn Combustion Co.	N/A		534,360	1,464	million Btu HHV	PTO. P/C# 16686 RLOP
S-4163	F-530 TKN Feed Furnace Isomax	Alcorn Combustion Co.	N/A		534,360	1,464	million Btu HHV	PTO. P/C# 16686 RLOP
S-4164	F-630 Isocracker Feed Furnace Isomax	Alcorn Combustion Co.	N/A		595,680	1,632	million Btu HHV	Conditioned daily throughput A/N

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

Source Number	Description	Make or Type	Model	Capacity	Annual Throughput Limits	Daily Throughput Limits	Units	Basis
								19295
								RLOP
S-4165	F-620 Isocracker Feed Furnace Isomax	Alcorn Combustion Co.	N/A		595,680	1,632	million Btu HHV	Conditioned daily throughput A/N 19295
								RLOP
S-4166	F-610 Isocracker Feed Furnace Isomax	Alcorn Combustion Co.	N/A		595,680	1,632	million Btu HHV	Conditioned daily throughput A/N 19295
								RLOP
S-4167	F-710 TKC Fractionator Isomax	Born Engineering Co.	N/A		1,007,400	3,480	million Btu HHV	Conditioned daily throughput A/N 2212
S-4168	F-730 Isocracker Splitter Feed Furnace Isomax	Born Engineering Co.	N/A		2,417,760	7,944	million Btu HHV	Conditioned daily throughput P/C# 16686
								RLOP
S-4169	F-731 Isocracker Reboiler Isomax	Born Engineering Co.	N/A		2,277,600	6,240	million Btu HHV	Conditioned daily throughput A/N 19295
								RLOP
S-4170	F-305 H2 Reforming Furnace, H2 Plant	Foster Wheeler	N/A			19,680	million Btu HHV	Conditioned daily throughput limit P/C# 16686 & 12.5 A/N 16392/3
S-4171	F-355 Reforming Furnace, H2 Plant	Foster Wheeler	N/A		7,183,200	19680	million Btu HHV	Condition 16686 & 12.5
								RLOP A/N 2936, 16392/3
S-4188	Polymer Furnace F-651	Born Engineering Co.	N/A		236,520	648	million Btu HHV	Furnace firing rate limit for Reg 9 rule and per Chevron's June 21, 2000 proposal as subsequently

#### Table II A 1 - Permitted Sources (New Source Review and other enforceable limits)

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Source Number	Description	Make or Type	Model	Capacity	Annual Throughput Limits	Daily Throughput Limits	Units	Basis
								amended. Appendix 9F-3 & 12.21 RLOP
S-4189	Polymer Furnace F-661	Born Engineering Co.	N/A		122,640	360	million Btu HHV	Furnace firing rate limit for Reg 9 rule and per Chevron's June 21, 2000 proposal as subsequently amended. Appendix 9F- 3 & 12.21 RLOP
S-4191	Alkane Cooling Water Tower E- 2900	Marley Cooling Tower	N/A				million gal	See appendix II (Roman), 9C-1, 12.3 & 14.1
								RLOP
S-4192	F-2170 Stack Gas Heater #1 SRU CAT Crack.	Contractor	N/A		279,444.0	765.6	million Btu HHV	original design
0.4400		Originality	N1/A		270 444 0*	7.5.6		RLOP
5-4193	Heater #2 SRU	Contractor	N/A		279,444.0*	/65.6	HHV	design RLOP
S-4194	F-2370 Tail Gas Heater #3 SRU	Contractor	N/A		491,436	1346	million Btu HHV	original design
S-4226	FGHT FCC Gasoline Hydrotreater	C.F. Braun	N/A			64,800	bbl	Condition #22641
S-4227	SRU #1 Train	Contractor	N/A		54,750	189.6	long tons	Conditon #19063
S-4228	SRU #2 Train	Contractor	N/A		54,750	179	long tons	Conditon #19063

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Source Number	Description	Make or Type	Model	Capacity	Annual Throughput Limits	Daily Throughput Limits	Units	Basis
S-4229	SRU #3 Train	Contractor	N/A		106,835.5	336	long tons	
								Conditon
								#19063
S-4233	#1 Jet	Bechtel	N/A		35,040,000	96,000	bbl	PTO
	Hydrotreater							RLOP
S-4234	No. 5 Naphtha	Bechtel	N/A		21,024,000	57,600	bbl	PTO
	Hydrotreater							RLOP
S-4235	Diesel Hydrotreater	C.F. Braun	N/A		23,652,000	64,800	bbl	PTO app.#9014 '93
S-4236	No. 4 Crude Unit	C.F. Braun	N/A			257,200	bbl	RLOP C#469
S-4238	Liquefied	Fischer	N/A		10,000,000	27,400	bbl	Data form
	Loading Rack							RLOP
S-4250	Hydrogen Manufacturing Plant	Foster Wheeler	N/A		66,102	181.1	million SCF H2 produced	Two trains, highest day. Post 79 apps justify annual limit
								RLOP, Cond # 22979 and #469
S-4252	TKN Isocracker	Bechtel	N/A		18,709,900	60,900	bbl	See Appendix 3A4, 9P-4 & 12.10
								RLOP
S-4253	TKC Plant	Bechtel	N/A		23,725,000	65,000	bbl	Implied per application #9666 '90 data form
S-4282	Penhex Isomerization Unit	Bechtel	N/A		23,725,000	65,000	bbl	See Appendix 11
								A/N 9231 BACT & CFP
S-4283	No. 4 Catalytic	Standard Oil	N/A		14,717,000	40,300	bbl	PTO
	Reformer							RLOP
S-4285	FCC Plant	Fleur Eng. Corp	N/A		29,200,000	90,000	bbl	PTO. P/C# 11066
								CFP

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Source Number	Description	Make or Type	Model	Capacity	Annual Throughput Limits	Daily Throughput Limits	Units	Basis
S-4286	Light Ends Recovery	South Western Engineering	N/A		N/A	N/A		Appendix 11.4 & 12.11 no limits per management direction, RLOP
S-4291	H2SO4 Alkylation Plant	Socal/Warner Lewis	N/A		13,140,000	36,000	bbl	Condition #14701
S-4329	RLOP Cooling Tower	Lillie Hoffman	2DF87				million gal	RLOP
S-4330	HNHF Reactor Furnace, F-1610	LUMMUS	Horizontal			328.8	million Btu HHV	RLOP
S-4331	LNHF Reactor Furnace, F-1310	LUMMUS	Horizontal			501.6	million Btu HHV	RLOP
S-4332	Hot Oil Furnace, F-1360	LUMMUS	Horizontal			1754.4	million Btu HHV	RLOP
S-4333	TKC Vacuum Furnace, F-1750	LUMMUS	Horizontal			1504.8	million Btu HHV	RLOP
S-4334	LNC Atmos Furnace, F-1200	LUMMUS	Vertical Cylinder			607.2	million Btu HHV	RLOP
S-4335	LNC Vacuum Furnace, F-1250	LUMMUS	Horizontal			595.2	million Btu HHV	RLOP
S-4336	HNC Reactor Furnace, F-1410	LUMMUS	Horizontal			600.0	million Btu HHV	RLOP
S-4337	HNC Atmos Furnace, F-1500	LUMMUS	Vertical Cylinder			739.2	million Btu HHV	RLOP
S-4338	HNC Vacuum Furnace, F-1550	LUMMUS	Horizontal			864.0	million Btu HHV	RLOP
S-4339	LNC Reactor Furnace, F-1110	LUMMUS	Horizontal			456.0	million Btu HHV	RLOP 3
S-4340	Light Neutral Hydrocracker (LNC)	N/A	N/A			16,500	bbl liquid reactor feed	RLOP
S-4341	Light Neutral Hydrofinisher (LNHF)	N/A	N/A			22,000	bbl liquid reactor feed	RLOP

#### Table II A 1 - Permitted Sources (New Source Review and other enforceable limits)

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

Source Number	Description	Make or Type	Model	Capacity	Annual Throughput Limits	Daily Throughput Limits	Units	Basis
S-4342	Heavy Neutral Hydrocracker (HNC)	N/A	N/A			26,000	bbl liquid reactor feed	RLOP
S-4343	Heavy Neutral Hydrofinisher (HNHF)	N/A	N/A			12,000	bbl liquid reactor feed	RLOP
S-4345	No 2 NH3-H2S Plant (WWT)	N/A	N/A		Permit application pending	Permit application pending	million SCF H2S produced	RLOP
S-4346	Gas Recovery Unit (GRU)	N/A	N/A		N/A	N/A		Appendix 11.5 & 12.11
								RLOP
S-4348	H2 Recovery Plant	N/A	N/A		18,250,000	50	Million SCF Feed	Application #9978
								CFP
S-4349	Furnace F-1650	N/A	N/A		144,540	396	million Btu HHV	Condition #469RLOP
S-4350	Gas Turbine with Steam Injection	ASEA Brown Bovari Turbines	N/A		15,051,300 (sum of S-4350 through S-4353)		million Btu HHV	1986 cogen application. Based on HHV. See appendix 2A7, 9F-9 & 12.16
S-4351	Heat Recovery Steam Generator	ABB	N/A		15,051,300 (sum of S-4350 through S-4353)		million Btu HHV	1986 cogen application. Based on HHV. See appendix 2A7, 9F-9 & 12.16
S-4352	Gas Turbine with Steam Injection	ASEA Brown Bovari Turbines	N/A		15,051,300 (sum of S-4350 through S-4353)		million Btu HHV	1986 cogen application. Based on HHV. See appendix 2A7, 9F-9 & 12.16
S-4353	Heat Recovery Steam Generator	ABB	N/A		15,051,300 (sum of S-4350 through S-4353)		million Btu HHV	1986 cogen application. Based on HHV. See appendix 2A7, 9F-9 & 12.16

#### Table II A 1 - Permitted Sources (New Source Review and other enforceable limits)

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

Source Number	Description	Make or Type	Model	Capacity	Annual Throughput Limits	Daily Throughput Limits	Units	Basis
S-4354	Butamer Plant	N/A	N/A			12,000 BPD	Barrels	Application #2719 Condition #18337
S-4355	Deisobutanizer Plant	N/A	N/A		14,600,000 combined/4,380,00 0 Butamer	40,000 combined/12,000 Butamer	bbl	Application #9978, Appendix 9P- 1 & 12.17
S-4356	Tertiary Amyl Methyl Ether Plant	N/A	N/A		5,475,000	15,000	bbl depentanizer feed	Application #9978 CFP
S-4360	Perc Storage Tank, V1315	N/A	N/A	2558 gallons	20,464	2558 gal	gal	Condition #C- 23765, application 15914
S-4363	Perc Storage Tank, V3592	N/A	N/A	2260 gallons	108,480	2260	gal	Condition #23773, application 15914
S-4364	Perc Storage Tank, V4091	N/A	N/A	370 gallons	91,760	370	gal	Condition #23774, application 15914
S-4365	Tank	Fixed roof	N/A	400 gallons	15,000	N/A	Gal	Condition #24452
S-4366	Tank	Fixed Roof	N/A	400 gal	10,000	N/A	Gal	Condition #24604
S-4367	Tank	Fixed Roof	N/A	400 gal	5,000	N/A	Gal	Condition #24604
S-4368	Tank	Fixed Roof	N/A	400 gal	5,000	N/A	Gal	Condition #24604
S-4369	Tank	Fixed Roof	N/A	400 gal	15,000	N/A	Gal	Condition #24604
S-4370	Tank	Fixed Roof	N/A	400 gal	4,000	N/A	Gal	Condition #24604
S-4372	Tank	Fixed Roof	N/A	400 gal	5,000	N/A	Gal	Condition #24606
S-4373	Tank	Fixed Roof	N/A	400 gal	28,000	N/A	Gal	Condition #25001
S-4374	Tank	Fixed Roof	N/A	400 gal	10,000	N/A	Gal	Condition

#### Table II A 1 - Permitted Sources (New Source Review and other enforceable limits)

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

Source Number	Description	Make or Type	Model	Capacity	Annual Throughput Limits	Daily Throughput Limits	Units	Basis
								#25479
S-4396	Sulfur Truck Loading Racks	2 Lawrence Pumps	N/A		216,330		long tons	See Appendix XII for daily limit. Annual limit based on source# 4227, 4228 & 4229. Appendix 9M- 1, 12.2 & 13.1. RLOP
S-4403	Unrefined Wax Truck Loading Rack							RLOP
S-4404	Saturated Refined Wax Truck Loading Rack							RLOP
S-4405	Heavy Oil Transloading Operation				100,000	7000	gallon	A/N 7693 condition #20863
S-4413	#2a Separator	API Oil Water Separator	N/A		4934.8* (combined throughput for S- 4413, S-4414, and S-4148)	8.35 (annual limits are different but these #s are the same as first proposed)	million gal	1987 data form & eval
S-4414	#1a Separator	API Oil Water Separator	N/A		4934.8* (combined throughput for S- 4413, S-4414, and S-4148)	16.7	Million gal	1987 data form & eval
S-4415	Asphalt Tank Truck Loading Racks		N/A		91,980,000	238,000(when A-37 is down for cleaning or repair)	gal	PTO condition #1331 and data form
S-4426	Cold Cleaner	Graymills Clean-O-Matic	N/A		100	N/A	gal	Conditioned annual throughput limit, P/C# 17527. Sporadic use, daily limit is not appropriate. Offsets = NSR

#### Table II A 1 - Permitted Sources (New Source Review and other enforceable limits)

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

Source Number	Description	Make or Type	Model	Capacity	Annual Throughput Limits	Daily Throughput Limits	Units	Basis
S-4427	Cold Cleaner	Graymills Clean-O-Matic	N/A		100	N/A	gal	Conditioned annual throughput limit, P/C# 17527. Sporadic use, daily limit is not appropriate. Offsets = NSR
S-4428	Cold Cleaner	Graymills Clean-O-Matic	N/A		100	N/A	gal	Conditioned annual throughput limit, P/C# 17527. Sporadic use, daily limit is not appropriate. Offsets = NSR
S-4429	#8 Plant	N/A	N/A		850.45	2.5	million SCF H2S produced	Per Sour Gas & SRU proposal letter dated 5/2/01. Appendix 9P- 1, P/C# 18945
S-4433	#3 H2S Plant	N/A	N/A		335.8	1.1	million SCF H2S produced	Per Sour Gas & SRU proposal letter dated 5/2/01. Appendix 9P- 1, P/C# 18945
S-4434	#4 H2S Plant	N/A	N/A		1,624.25	4.97	million SCF H2S produced	Per Sour Gas & SRU proposal letter dated 5/2/01. Appendix 9P- 1, P/C# 18945
S-4435	#5 H2S Plant	N/A	N/A		3128	8.57	million SCF H2S produced	Per Sour Gas & SRU proposal letter dated 5/2/01. Appendix 9P- 1, P/C#

#### Table II A 1 - Permitted Sources (New Source Review and other enforceable limits)

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

Source Number	Description	Make or Type	Model	Capacity	Annual Throughput Limits	Daily Throughput Limits	Units	Basis
								18945
S-4440	Jet Additive Project Fugitive Sources, at No.7 and No. 21 Pump Stations	N/A	N/A		0.718	N/A	tons of POC emissions per 365-day period	P/Condition #24671
S-4940	Tank D-4940, Chemical Additives Tank	Fixed roof	N/A	1450	7,028		Gal	P/Condition # 23001
S-6010	High Level Flare, LSFO	John Zink	STF SA365		34,711.5*	95.04	million Btu HHV	Data form used HHV
								RLOP
S-6012	V-282 South Isomax Flare	Contractor	N/A		22,301.5*	61.1	million Btu HHV	Data form used HHV
								RLOP
S-6013	North Isomax Flare V-281	Contractor	N/A		22,301.5*	61.1	million Btu HHV	Data form used HHV
								RLOP
S-6015	Refinery Waste Gas Flare	John Zink	N/A		28,900	79.2	million Btu HHV	Implied per application #17855. Appendix 9M-2 RLOP
S-6016	FCC Flare V-731	Natural Gas, Tangential, Firing, Natural Draft	N/A		40,874.16*	112	million Btu HHV	Data form used HHV CFP
S-6017	Alkane Flare	Contractor	N/A		23,049	63.1	million Btu HHV	Converted to HHV RLOP
S-6019	V-732, Alky-Poly Flare	Contractor	N/A		26,306*	72.1	million Btu HHV	times 1.0476 CFP
S-6039	Lube Flare, V-3501	48 Inch	N/A		19,053	52.2	million Btu HHV	times 1.0476
	1 0001							RLOP
S-6051	ALKY Cooling Tower	Marley	400		15,768.00	43.2	Million gal	Implied, A/N13023 , Cond #14596,
S-6125	Tank 6125	Abated Fixed Roof	N/A	600 gal	1,400	N/A	bbl non- exempt stock	Conditioned annual throughput

#### Table II A 1 - Permitted Sources (New Source Review and other enforceable limits)

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

Source Number	Description	Make or Type	Model	Capacity	Annual Throughput Limits	Daily Throughput Limits	Units	Basis
								limit (non- exempt stock), P/C# 11208
S-6200	Portable Polyethylene Storage Container	Abated Fixed Roof	N/A	6500 gal	36,000 (sum of S-6200 thru S-6219)	N/A	bbl non- exempt stock (calendar year)	Conditioned annual throughput limit (non- permit exempt stock), P/C# 10761
S-6201	Portable Polyethylene Storage Container	Abated Fixed Roof	N/A	6500 gal	36,000 (sum of S- 6200 thru S-6219)	N/A	bbl non- exempt stock (calendar year)	Conditioned annual throughput limit (non- permit exempt stock), P/C# 10761
S-6202	Portable Polyethylene Storage Container	Abated Fixed Roof	N/A	6500 gal	36,000 (sum of S-6200 thru S-6219)	N/A	bbl non- exempt stock (calendar year)	Conditioned annual throughput limit (non- permit exempt stock), P/C# 10761
S-6203	Portable Polyethylene Storage Container	Abated Fixed Roof	N/A	6500 gal	36,000 (sum of S-6200 thru S-6219)	N/A	bbl non- exempt stock (calendar year)	Conditioned annual throughput limit (non- permit exempt stock), P/C# 10761
S-6204	Portable Polyethylene Storage Container	Abated Fixed Roof	N/A	6500 gal	36,000 (sum of S-6200 thru S-6219)	N/A	bbl non- exempt stock (calendar year)	Conditioned annual throughput limit (non- permit exempt stock), P/C# 10761
S-6205	Portable Polyethylene Storage Container	Abated Fixed Roof	N/A	6500 gal	36,000 (sum of S-6200 thru S-6219)	N/A	bbl non- exempt stock (calendar year)	Conditioned annual throughput limit (non- permit exempt stock), P/C# 10761
S-6206	Portable Polyethylene	Abated Fixed Roof	N/A	6500 gal	36,000	N/A	bbl non- exempt stock	Conditioned annual

#### Table II A 1 - Permitted Sources (New Source Review and other enforceable limits)

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

Source Number	Description	Make or Type	Model	Capacity	Annual Throughput Limits	Daily Throughput Limits	Units	Basis
	Storage Container				(sum of S-6200 thru S-6219)		(calendar year)	throughput limit (non- permit exempt stock), P/C# 10761
S-6207	Portable Polyethylene Storage Container	Abated Fixed Roof	N/A	6500 gal	36,000 (sum of S-6200 thru S-6219)	N/A	bbl non- exempt stock (calendar year)	Conditioned annual throughput limit (non- permit exempt stock), P/C# 10761
S-6208	Portable Polyethylene Storage Container	Abated Fixed Roof	N/A	6500 gal	36,000 (sum of S-6200 thru S-6219)	N/A	bbl non- exempt stock (calendar year)	Conditioned annual throughput limit (non- permit exempt stock), P/C# 10761
S-6209	Portable Polyethylene Storage Container	Abated Fixed Roof	N/A	6500 gal	36,000 (sum of S-6200 thru S-6219)	N/A	bbl non- exempt stock (calendar year)	Conditioned annual throughput limit (non- permit exempt stock), P/C# 10761
S-6210	Portable Polyethylene Storage Container	Abated Fixed Roof	N/A	6500 gal	36,000 (sum of S-6200 thru S-6219)	N/A	bbl non- exempt stock (calendar year)	Conditioned annual throughput limit (non- permit exempt stock), P/C# 10761
S-6211	Portable Polyethylene Storage Container	Abated Fixed Roof	N/A	6500 gal	36,000 (sum of S-6200 thru S-6219)	N/A	bbl non- exempt stock (calendar year)	Conditioned annual throughput limit (non- permit exempt stock), P/C# 10761
S-6212	Portable Polyethylene Storage Container	Abated Fixed Roof	N/A	6500 gal	36,000 (sum of S-6200 thru S-6219)	N/A	bbl non- exempt stock (calendar year)	Conditioned annual throughput limit (non- permit exempt stock), P/C# 10761

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

Source Number	Description	Make or Type	Model	Capacity	Annual Throughput Limits	Daily Throughput Limits	Units	Basis
S-6213	Portable Polyethylene Container	Abated Fixed Roof	N/A	6500 gal	36,000 (sum of S-6200 thru S-6219)	N/A	bbl non- exempt stock (calendar year)	Conditioned annual throughput limit (non- permit exempt stock), P/C# 10761
S-6214	Portable Polyethylene Storage Container	Abated Fixed Roof	N/A	6500 gal	36,000 (sum of S-6200 thru S-6219)	N/A	bbl non- exempt stock (calendar year)	Conditioned annual throughput limit (non- permit exempt stock), P/C# 10761
S-6215	Portable Polyethylene Storage Container	Abated Fixed Roof	N/A	6500 gal	36,000 (sum of S-6200 thru S-6219)	N/A	bbl non- exempt stock (calendar year)	Conditioned annual throughput limit (non- permit exempt stock), P/C# 10761
S-6216	Portable Polyethylene Storage Container	Abated Fixed Roof	N/A	6500 gal	36,000 (sum of S-6200 thru S-6219)	N/A	bbl non- exempt stock (calendar year)	Conditioned annual throughput limit (non- permit exempt stock), P/C# 10761
S-6217	Portable Polyethylene Storage Container	Abated Fixed Roof	N/A	6500 gal	36,000 (sum of S-6200 thru S-6219)	N/A	bbl non- exempt stock (calendar year)	Conditioned annual throughput limit (non- permit exempt stock), P/C# 10761
S-6218	Portable Polyethylene Storage Container	Abated Fixed Roof	N/A	6500 gal	36,000 (sum of S-6200 thru S-6219)	N/A	bbl non- exempt stock (calendar year)	Conditioned annual throughput limit (non- permit exempt stock), P/C# 10761
S-6219	Portable Polyethylene Storage Container	Abated Fixed Roof	N/A	6500 gal	36,000 (sum of S-6200 thru S-6219)	N/A	bbl non- exempt stock (calendar year)	Conditioned annual throughput limit (non- permit exempt stock), P/C# 10761

#### Table II A 1 - Permitted Sources (New Source Review and other enforceable limits)

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

Source Number	Description	Make or Type	Model	Capacity	Annual Throughput Limits	Daily Throughput Limits	Units	Basis
S-6220	Portable Steel Storage Container	Abated Fixed Roof	N/A	21K gal	120,000 (sum of S-6220 thru S-6239)	N/A	bbl non- exempt stock (calendar year)	Conditioned annual throughput limit (non- permit exempt stock), P/C# 10761
S-6221	Portable Steel Storage Container	Abated Fixed Roof	N/A	21K gal	120,000 (sum of S-6220 thru S-6239)	N/A	bbl non- exempt stock (calendar year)	Conditioned annual throughput limit (non- permit exempt stock), P/C# 10761
S-6222	Portable Steel Storage Container	Abated Fixed Roof	N/A	21K gal	120,000 (sum of S-6220 thru S-6239)	N/A	bbl non- exempt stock (calendar year)	Conditioned annual throughput limit (non- permit exempt stock), P/C# 10761
S-6223	Portable Steel Storage Container	Abated Fixed Roof	N/A	21K gal	120,000 (sum of S-6220 thru S-6239)	N/A	bbl non- exempt stock (calendar year)	Conditioned annual throughput limit (non- permit exempt stock), P/C# 10761
S-6224	Portable Steel Storage Container	Abated Fixed Roof	N/A	21K gal	120,000 (sum of S-6220 thru S-6239)	N/A	bbl non- exempt stock (calendar year)	Conditioned annual throughput limit (non- permit exempt stock), P/C# 10761
S-6225	Portable Steel Storage Container	Abated Fixed Roof	N/A	21K gal	120,000 (sum of S-6220 thru S-6239)	N/A	bbl non- exempt stock (calendar year)	Conditioned annual throughput limit (non- permit exempt stock), P/C# 10761
S-6226	Portable Steel Storage Container	Abated Fixed Roof	N/A	21K gal	120,000 (sum of S-6220 thru S-6239)	N/A	bbl non- exempt stock (calendar year)	Conditioned annual throughput limit (non- permit exempt stock), P/C# 10761

#### Table II A 1 - Permitted Sources (New Source Review and other enforceable limits)

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

Source Number	Description	Make or Type	Model	Capacity	Annual Throughput Limits	Daily Throughput Limits	Units	Basis
S-6227	Portable Steel Storage Container	Abated Fixed Roof	N/A	21K gal	120,000 (sum of S-6220 thru S-6239)	N/A	bbl non- exempt stock (calendar year)	Conditioned annual throughput limit (non- permit exempt stock), P/C# 10761
S-6228	Portable Steel Storage Container	Abated Fixed Roof	N/A	21K gal	120,000 (sum of S-6220 thru S-6239)	N/A	bbl non- exempt stock (calendar year)	Conditioned annual throughput limit (non- permit exempt stock), P/C# 10761
S-6229	Portable Steel Storage Container	Abated Fixed Roof	N/A	21K gal	120,000 (sum of S-6220 thru S-6239)	N/A	bbl non- exempt stock (calendar year)	Conditioned annual throughput limit (non- permit exempt stock), P/C# 10761
S-6230	Portable Steel Storage Container	Abated Fixed Roof	N/A	21K gal	120,000 (sum of S-6220 thru S-6239)	N/A	bbl non- exempt stock (calendar year)	Conditioned annual throughput limit (non- permit exempt stock), P/C# 10761
S-6231	Portable Steel Storage Container	Abated Fixed Roof	N/A	21K gal	120,000 (sum of S-6220 thru S-6239)	N/A	bbl non- exempt stock (calendar year)	Conditioned annual throughput limit (non- permit exempt stock), P/C# 10761
S-6232	Portable Steel Storage Container	Abated Fixed Roof	N/A	21K gal	120,000 (sum of S-6220 thru S-6239)	N/A	bbl non- exempt stock (calendar year)	Conditioned annual throughput limit (non- permit exempt stock), P/C# 10761
S-6233	Portable Steel Storage Container	Abated Fixed Roof	N/A	21K gal	120,000 (sum of S-6220 thru S-6239)	N/A	bbl non- exempt stock (calendar year)	Conditioned annual throughput limit (non- permit exempt stock), P/C# 10761
#### Table II A 1 - Permitted Sources (New Source Review and other enforceable limits)

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

Regulation 2-1-301. All combustion sources are fired on natural gas or refinery fuel gas, except where noted in permit conditions.

Source Number	Description	Make or Type	Model	Capacity	Annual Throughput Limits	Daily Throughput Limits	Units	Basis
S-6234	Portable Steel Storage Container	Abated Fixed Roof	N/A	21K gal	120,000 (sum of S-6220 thru S-6239)	N/A	bbl non- exempt stock (calendar year)	Conditioned annual throughput limit (non- permit exempt stock), P/C# 10761
S-6235	Portable Steel Storage Container	Abated Fixed Roof	N/A	21K gal	120,000 (sum of S-6220 thru S-6239)	N/A	bbl non- exempt stock (calendar year)	Conditioned annual throughput limit (non- permit exempt stock), P/C# 10761
S-6236	Portable Steel Storage Container	Abated Fixed Roof	N/A	21K gal	120,000 (sum of S-6220 thru S-6239)	N/A	bbl non- exempt stock (calendar year)	Conditioned annual throughput limit (non- permit exempt stock), P/C# 10761
S-6237	Portable Steel Storage Container	Abated Fixed Roof	N/A	21K gal	120,000 (sum of S-6220 thru S-6239)	N/A	bbl non- exempt stock (calendar year)	Conditioned annual throughput limit (non- permit exempt stock), P/C# 10761
S-6238	Portable Steel Storage Container	Abated Fixed Roof	N/A	21K gal	120,000 (sum of S-6220 thru S-6239)	N/A	bbl non- exempt stock (calendar year)	Conditioned annual throughput limit (non- permit exempt stock), P/C# 10761
S-6239	Portable Steel Storage Container	Abated Fixed Roof	N/A	21K gal	120,000 (sum of S-6220 thru S-6239)	N/A	bbl non- exempt stock (calendar year)	Conditioned annual throughput limit (non- permit exempt stock), P/C# 10761
S-7013	SRU Stationary Standby Generator set, Diesel Engine	Cummins		750 hp	50 hr/y	N/A	hours	App#12975 Cond #22569
S-7534	Plant Protection Emergency Standby	Cummins	QSL9-G3	399 Hp	50 hrs/yr of per NFPA25	N/A	Hours	App# 16590/1 Cond #22850

#### Table II A 1 - Permitted Sources (New Source Review and other enforceable limits)

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

Regulation 2-1-301. All combustion sources are fired on natural gas or refinery fuel gas, except where noted in permit conditions.

Source Number	Description	Make or Type	Model	Capacity	Annual Throughput Limits	Daily Throughput Limits	Units	Basis
	Generator, Diesel Engine							
S-7535	Emergency Standby Fire Pump, Diesel Engine	Cummins	CFP15E- F10	479 Hp	50 hrs/yr of per NFPA25	N/A	Hours	App# 17175 Cond #22850
S-7536	Emergency Standby Fire Pump, Diesel Engine	Cummins	CFP15E- F10	479 Hp	50 hrs/yr of per NFPA25	N/A	Hours	App# 17175 Cond #22850
S-7537	Primary FCCU Pump, Diesel Engine	Deutz	BF6L914C	158 Hp	none	N/A	N/A	App# 17428 Cond #24022
S-7538	Diesel engine gen- 5H2S-1	MTU Detroit Diesel	12V4000G4 3	2328 Hp	50		Hours	Condition 22850
S-7539	Diesel Engine	Caterpillar	C-13	440 hp	50		Hours	Condition 24285 and 22850
S-7601	Inkjet Printing Operation	Domino			30 gal ink 36 gal cleanup solvent		gallon	App#11503 Cond#22266

#### Table II A 2 – Permitted Sources (Non-Grandfathers & Non-New Source Review)

Source Number	Description	Make or Type	Model	Capacity	Annual Throughput Limits	Daily Throughput Limits	Units	Basis
S-0399	Tank	External Floating Roof	N/A	4368K gal	3,500,000	N/A	bbl	Form T application #3061
S-1292	Tank	External Floating Roof	N/A	4834K gal	4,802,722	N/A	bbl	Annual Source Update 1989
S-1488	Tank	External Floating Roof	N/A	1197K gal	365,000	N/A	bbl by roof drop	Implied limit App.#31398 '86

### Table II A 2 – Permitted Sources (Non-Grandfathers & Non-New Source Review)

Source Number	Description	Make or Type	Model	Capacity	Annual Throughput Limits	Daily Throughput Limits	Units	Basis
S-1637	Tank	Internal Floating Roof	N/A	105K gal	1,750,000	N/A	bbl	App. #179 '86 Implied permit condition
S-1908	Tank 908	Abated Fixed Roof	N/A	953K gal	1,750,000	N/A	bbl	Conditioned annual throughput, P/C# 4233
S-1909	Tank	Fixed Roof	N/A	5300 gal	11,700	N/A	bbl non- exempt stock	Conditioned annual throughput (non-exempt stock), P/C# 11208
S-1911	Tank	Fixed Roof	N/A	4500 gal	9,900	N/A	bbl non- exempt stock	Conditioned annual throughput (non-exempt stock), P/C# 11208
S-2917	Tank 917	Abated Fixed Roof	N/A	49K gal	20,000	N/A	bbl	Conditioned annual throughput, P/C# 4233
S-2918	Tank 918	Abated Fixed Roof	N/A	49K gal	20,000	N/A	bbl	Conditioned annual throughput, P/C# 4233
S-2921	Tank 921	Abated Fixed Roof	N/A	9351 gal	5,000	N/A	bbl	Conditioned annual throughput, P/C# 4233
S-3075	Tank	External Floating Roof	N/A	1680K gal	520,000	N/A	bbl	See Appendix 1B1 App#28073 A/C issued Throughput used in Evaluation
S-3076	Tank	External Floating Roof	N/A	8625.51K gal	5,914,000	N/A	bbl	Form T '82design drawings submitted 1/164
S-3102	Tank	External Floating Roof	N/A	22MM gal	8,213,000	N/A	bbl non- exempt stock	Per emissions calculation & data form T from

### Table II A 2 – Permitted Sources (Non-Grandfathers & Non-New Source Review)

Source Number	Description	Make or Type	Model	Capacity	Annual Throughput Limits	Daily Throughput Limits	Units	Basis
								App.#27916 '81
S-3107	Tank	External Floating Roof	N/A	25MM gal	25,848,000	N/A	bbl non- exempt stock	App.#12635 '94 implied condition verified
S-3141	Tank	Abated Fixed Roof	N/A		216,330	N/A	long tons	App.'s 10721 & 32587, '93 & '88 A/N 9329 and C#1046
S-3144	Tank	External Floating Roof	N/A	336K gal	36,500	N/A	bbl hydrocarbon	Form T '89 & '93
S-3180	Tank	External Floating Roof	N/A	6807.87K gal	11,000,000	N/A	bbl	design drawings submitted 1/16/4 Implied permit condition (alkylate) app.#4361 '90
S-3192	Tank	Pressure Tank	N/A	2600K gal	750,952	2,057	bbl	App.# 6035
S-3220	Tank	External Floating Roof Tank	N/A	7699K gal	12,466,000	N/A	Bbl non- exempt stock	Condiiton #17553
S-4076	3 Cat Cooling Tower E-460	Fluor Prod Co	N/A				million gal	
S-4148	#13 Separator	API Separator Fresh Water	N/A		4934.8* (combined throughput for S-4413, S-4414, and S-4148)	20	million gal	Data form. 1980 PTO
S-4172	Isomax Cooling Tower E-261	Fluor Cooling Tower	N/A				million gal	
S-4173	FCC Cooling Tower E-710	Fluor Cooling Tower	N/A				million gal	
S-4187	FCC Polymer Cooling Tower E-781	Windeler Cooling Tower	N/A		2,418	7	million gal	See appendix II (Roman)
S-4237	No. 5 Rheniformer	Bechtel	N/A		10,352,000	31,000	bbl feed	6 months x2, based on a maximum of 3 regens/yrA/N 6014 RLOP
S-4251	Solvent Deasphalting (SDA) Plant	M.W. Kellog	N/A		20,440,000	56,000	bbl	App.#9163
S-4292	FCC Polymer	Socal/Warner Lewis	N/A		2,920,000	8000	bbl feed	Application #7948

### Table II A 2 – Permitted Sources (Non-Grandfathers & Non-New Source Review)

Source Number	Description	Make or Type	Model	Capacity	Annual Throughput Limits	Daily Throughput Limits	Units	Basis
	Plant							pending
S-4393	Bio-Reactor		N/A		7140	62.5	million gal	See Appendix 10.2, data form '81
S-4410	General Maintenance Paint Booth		N/A		500 coatings 55 solvents	N/A	gal	Per District data base. No daily limit. Intermittent usage only A/N 5591
S-4420	Solvent Cleaner- Machine Shop	Graymills Clean-O- Matic	N/A		200	N/A	gal	Per District database. No daily limit. Intermittent usage only A/N 31912
S-4424	Paint Booth		N/A		2500	9.8	Pounds	Condition #21165 application #8161
S-6050	MTBE Plant	NA	N/A		7,665,000	23,000	bbl C4 feed	Daily based on PTO, annual based on app. #7304, Appendix 9P-12.
S-6250	Oil Water Separator for Debru	N/A	N/A		115,500	N/A	bbl	Appendix 9M- 3 App.#25134
7501	Diesel Engine P-100B	Caterpillar	3414C	538 HP	100		Hours	Condition 20225
7507	Diesel Engine P-11	Caterpillar	3406TA16	398 HP			Hours	Condition 20225
7508	Diesel Engine P-15	Cummins	855P310	240 HP			Hours	Regulation 9-8-330
7509	Diesel Engine P-16	Cummins	855P310	240 HP			Hours	Regulation 9-8-330
7511	Diesel Engine P-3	Caterpillar	3406	482 HP			Hours	Condition 20225
7512	Diesel Engine P-3000	Detroit Diesel	70637600	269 HP			Hours	Condition 20225
7513	Diesel Engine	Caterpillar	3412	450 HP	50		Hours	Condition

### Table II A 2 – Permitted Sources (Non-Grandfathers & Non-New Source Review)

Source Number	Description	Make or Type	Model	Capacity	Annual Throughput Limits	Daily Throughput Limits	Units	Basis
	P-302A							24070
7514	Diesel Engine P-302B	Caterpillar	3412	450 HP	50		Hours	Condition 24070
7515	Diesel Engine P-351A	Caterpillar	3412	624 HP	20		Hours	Condition 20225 and 22820
7516	Diesel Engine P-351B	Caterpillar	3412	624 HP	20		Hours	Condition 20225 and 22820
7517	Diesel Engine P-361A	Detroit Diesel	80877800	163 HP			Hours	Condition 20225
7518	Diesel Engine P-361B	Detroit Diesel	80877800	163 HP			Hours	Condition 20225
7521	Diesel Engine D-1601	Cummins	A855C450	435 HP			Hours	Condition 20225
7523	IC Engine, diesel D-1603	Cummins	A855C450	435 hp	50		Hours	Condition 24070
7530	Gas Engine Admin #1	Hercules	G2300	217 HP			Hours	Regulation 9-8-330
7531	Diesel Engine Admin #2	Detroit Diesel	80637305	370 HP			Hours	Condition 20225
S-9304	Non Retail Gasoline Dispensing Facility	2 nozzles EW 4005, No trap	N/A		107,623*	294.9	bbl	7880, 18680, 22951, 24294

#### Table II A 3 – Permitted Sources (Grandfathered)

#### Table II A 3 – Permitted Sources (Grandfathered)

Source Number	Description	Make or Type	Model	Capacity	Annual Throughput Limits	Daily Throughput Limits	Units	Basis
S-0021	Tank	Fixed Roof	N/A	750 gal	30,000	N/A	gal	Conditioned annual throughput, P/C# 5270
S-0231	Tank	External Floating Roof	N/A	1260K gal	15,330	N/A	1000 gal	Form T '77
S-0232	Tank	External Floating Roof	N/A	1344K gal	268,308	N/A	bbl	See Appendix 9T-1 highest 6 month throughput times 2 (H6Mx2)
S-0297	Tank	External Floating Roof	N/A	2528K gal	5,475,000	N/A	bbl	Data form
S-0298	Tank	External Floating Roof	N/A	2486K gal	5,110,000	N/A	bbl	Data form
S-0634	Tank	External Floating Roof	N/A	2499K gal	1,900,000	N/A	Bbl	Form T, Appendix 11.1
S-0953	Tank	External Floating Roof	N/A	3717K gal	3,337,346	N/A	bbl	See Appendix 9T-1 highest 6 month throughput times 2 (H6Mx2)
S-0954	Tank	External Floating Roof	N/A	2659K gal	1,971,000	N/A	bbl	1977 data form T
S-0990	Tank	External Floating Roof	N/A	3738K gal	4,264,814	N/A	bbl	See Appendix 9T-1 highest 6 month throughput times 2 (H6Mx2)
S-0991	Tank	External Floating Roof	N/A	4549K gal	5,342,125	N/A	bbl	See Appendix 9T-1 highest 6 month throughput times 2 (H6Mx2)

#### Table II A 3 – Permitted Sources (Grandfathered)

Source Number	Description	Make or Type	Model	Capacity	Annual Throughput Limits	Daily Throughput Limits	Units	Basis
S-1287	Tank	External Floating Roof	N/A	2579K gal	1,038,000	N/A	bbl	Appendix 11.1 highest 6 month throughput times 2 (H6Mx2)
S-1289	Tank	Internal Floating Roof	N/A	1294K gal	293,185	N/A	bbl	See Appendix 9T-1 highest 6 month throughput times 2 (H6Mx2)
S-1431	Tank 907	Abated Fixed Roof	N/A	924K gal	12,264	N/A	1000 gal	Form T
S-1444	Tank	External Floating Roof	N/A	790K gal	620,500	N/A	bbl	Form T
S-1459	Tank	External Floating Roof	N/A	3163K gal	1,524,966	N/A	bbl	See Appendix 9T-1 highest 6 month throughput times 2 (H6Mx2)
S-1491	Tank	External Floating Roof	N/A	2096K gal	1,093,160	N/A	bbl	See Appendix 9T-1 highest 6 month throughput times 2 (H6Mx2)
S-1504	Tank	External Floating Roof	N/A	1373K gal	602,132	N/A	bbl	See Appendix 9T-1 highest 6 month throughput times 2 (H6Mx2)
S-1518	Tank	External Floating Roof	N/A	2764K gal	1,095,000	N/A	bbl non- exempt stocks	Form T
S-1633	Tank	Internal Floating Roof	N/A	151K gal	6,132	N/A	1000 gal	Form T
S-1686	Tank	External Floating Roof	N/A	3238K gal	15,330	N/A	1000 gal	Form T
S-1687	Tank	External Floating Roof	N/A	6329K gal		N/A	bbl	condition #21237

#### Table II A 3 – Permitted Sources (Grandfathered)

Source Number	Description	Make or Type	Model	Capacity	Annual Throughput Limits	Daily Throughput Limits	Units	Basis
S-1688	Tank	External Floating Roof	N/A	6052K gal	5,059,000	N/A	bbl	Implied permit condition from data form T '77 unable to locate app. #10313
S-1843	Tank	External Floating Roof	N/A	192.78 K gal	36,500	N/A	bbl	Data form T '77 Check App. 9099? Design drawings submitted 1/16/4
S-1966	Tank	External Floating Roof	N/A	1987K gal	767,646	N/A	bbl	highest 6 months throughput x2
S-3071	Tank	External Floating Roof	N/A	7808K gal	8,560,287	N/A	bbl	See Appendix 9T-1 highest 6 month throughput times 2 (H6Mx2)
S-3072	Tank	External Floating Roof	N/A	6493K gal		N/A	bbl	condition #21237
S-3073	Tank	External Floating Roof	N/A	4914K gal	3,991,000	N/A	bbl	Appendix 11.1 highest 6 month throughput times 2 (H6Mx2)
S-3101	Tank	External Floating Roof	N/A	19925K gal		N/A	bbl non- exempt stock	Condition #21237
S-3103	Tank	External Floating Roof	N/A	22MM gal	21,128,000	N/A	bbl non- exempt stock	Monthly data showing 6 months times 2 = annual limit for tanks and crude unit
S-3104	Tank	External Floating Roof	N/A	31MM gai	22,676,000	N/A	bbl non- exempt stock	Monthly data showing 6 months times 2 = annual limit for tanks and crude unit
S-3105	Tank	External Floating Roof	N/A	31MM gal	29,455,000	N/A	bbl non- exempt stock	Monthly data showing 6

#### Table II A 3 – Permitted Sources (Grandfathered)

Source Number	Description	Make or Type	Model	Capacity	Annual Throughput Limits	Daily Throughput Limits	Units	Basis
								months times 2 = annual limit for tanks and crude unit
S-3128	Tank	External Floating Roof	N/A	1939.58 Kgal	975,000	N/A	bbl	See Appendix 2B5 & Form T '78 design drawings submitted 1/16/4
S-3129	Tank	External Floating Roof	N/A	4502 Kgal	4,970,210	N/A	bbl	See Appendix 9T-1 highest 6 month throughput times 2 (H6Mx2)
S-3140	Tank	Abated Fixed Roof	N/A		216,330	N/A	long tons	Based on the SRU plant throughput. Source no 4227, 4228, 4229. Appendix 12.2 & 13.1
S-4073	LSFO Cooling Tower	Bechtel	N/A		13,666	37	million gal	See appendix II (Roman)
S-9321	Marine Loading Berth #1		4 loading arms		146,628( sum of 9321 through 9326)		1000 bbl	See Appendix 11.6 six months highest actual data times two
S-9322	Marine Loading Berth #2		18 gasoline/ gasohol arms		146,628( sum of 9321 through 9326)		1000 bbl	See Appendix 11.6, six months highest actual data times two
S-9323	Marine Loading Berth #3		6 gasoline/ gasohol arms		146,628( sum of 9321 through 9326)		1000 bbl	See Appendix 11.6, six months highest actual data times two
S-9324	Marine Loading Berth #4		gasoline/ gasohol arms		146,628( sum of 9321 through 9326)		1000 bbl	See Appendix 11.6, six months highest actual data times two

#### Table II A 3 – Permitted Sources (Grandfathered)

Source Number	Description	Make or Type	Model	Capacity	Annual Throughput Limits	Daily Throughput Limits	Units	Basis
S-9325	Marine Loading Berth #9		15 gasoline/ gasohol arms		146,628( sum of 9321 through 9326)		1000 bbl	See Appendix 11.6, six months highest actual data times two
S-9326	Marine Loading Berth #11		2 gasoline/ gasohol arms		146,628( sum of 9321 through 9326)		1000 bbl	See Appendix 11.6, six months highest actual data times two

### Table II B – Abatement Devices

Abatement Device Number	Description	Sources(s) Controlled	Applicable Requirement	Operating Parameters	Limit or Efficiency
A-0008	Kiln – Baghouse, Filter Building Baghouse,	S-4094	6-301		Ringelmann 1 6-310.3
	Reverse Air				0.15 grams/dscf @ 6% O <sub>2</sub>
A-0014	K-13, FCC Electrostatic Precipitator, Single Stage Electrostatic Precipitator	S-4285	6-302, 6-502	Opacity Monitor	20% Opacity Limitation for more than 3 minutes in any hour
			40 CFR 60 Subpart J 60.102(a) (2), 40 CFR 60 Subpart J 60.105(a) (1)	Opacity Monitor	30 % opacity, except for one 6 minute average opacity reading in 1 hour
			6-310		0.15 grain FP /dscf
			6-311		40 lb/hr particulate matter (PM)
			40 CFR 60 Subpart J 60.102(a) (1)		1.0 kg of PM per 1000 kg of coke burn off in catalyst generator
			Condition #11066 Item #3		92 TPY TSP
			Condition #11066 Item #7		21 lb TSP/hr, average of four source tests per calendar year
			Condition #11066 Item #15		Ammonia (NH3) injection rate shall not exceed 500 lbs/hr
			Condition #11066 Item #7a4	Inlet temperature monitor and recorder	Minimum of 550 F ESP Inlet Temp. averaged over any one-hour period
			Condition #11066 Item #7a5, Condition #11066 Item #7a3	Monitor	Average secondary current of TR shall not be less than 200 milliamps averaged over any three hour period
					or
					No more than 2 TR sets may be less than 200 milliamps averaged over any three hour period, as long as the remaining TR sets maintain an average secondary current above 296 milliamps averaged over any three hour period
A-0020	Tail Gas Unit for 2100 Plant, #1 SRU Train, Absorption and Regeneration	S-4227 S-4192	9-1-307, 1-520	SO2 CEM	250 ppmv SO2, dry, at 0% oxygen
A-0021	Tail Gas Unit for 2200 Plant, #2 SRU Train, Absorption and Regeneration	S-4228 S-4193	9-1-307, 1-520	SO2 CEM	250 ppmv SO2, dry, at 0% oxygen

Table II-B – Abatement De	vices
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Abatement Device Number	Description	Sources(s) Controlled	Applicable Requirement	Operating Parameters	Limit or Efficiency
A-0022	Tail Gas Unit for 2300 Plant, #3 SRU Train, Absorption and Regeneration	S-4229 S-4194	9-1-307, 1-520	SO2 CEM	250 ppmv SO2, dry, at 0% oxygen
A-0037	Mist Eliminator Scrubber, Fibrous Packed Scrubber – Asphalt Loading Racks	S-4415	Condition #1331		10% maximum opacity
A-0043	Sulfur Tanks and Loading Racks Vent Water Scrubber, Venturi Scrubber	S-3141 S-3140 S-4396 S-3226			
A-0065	Hydrofinisher SCR Unit (HNHF, LNHF, Hot Oil Furnace), Unclassified Abatement Device	S-4330 S-4331 S-4332	Condition #469 [6.B], [3.A]	Continuous Nox and O2 Monitor	40 ppm Nox @ 3% O2, 8 hr average.
			9-10-301, Condition #469[3.A]	Nox CEMs	Refinery-wide emissions (excluding CO Boilers): 0.033 lbs Nox/ MMBtu
			9-10-303, Condition #469[3.A]	Nox CEMs	Federal interim emissions: Refinery- wide emissions (excluding CO Boilers): 0.20 lbs Nox/MMBTU
A-0066	TKC SCR Unit; Unclassified Abatement Device, (TKC Vac Furnace, LNC)	S-4333 S-4334 S-4335	Condition #469 [6.B], [3.A]	Continuous Nox and O2 Monitor	40 ppm Nox @ 3% O2, 8 hr average.
			9-10-301, Condition #469[3.A]	Nox CEMs	Refinery-wide emissions (excluding CO Boilers): 0.033 lbs Nox/ MMBTU
			9-10-303, Condition #469[3.A]	Nox CEMs	Federal interim emissions: Refinery- wide emissions (excluding CO Boilers): 0.20 lbs Nox/ MMBTU
A-0067	HNC Hydrocracker SCR Unit, Unclassified Abatement Device	S-4336 S-4337 S-4338 S-4339	Condition #469 [6.B], [3.A]	Continuous Nox and O2 Monitor	40 ppm Nox @ 3% O2, 8 hr average.
			9-10-301, Condition #469[3.A]	Nox CEMs	Refinery-wide emissions (excluding CO Boilers): 0.033 lbs Nox/ MMBTU
			9-10-303, Condition #469[3.A]	Nox CEMs	Federal interim emissions: Refinery- wide emissions (excluding CO Boilers): 0.20 lbs Nox/ MMBTU
A-0070	Cogeneration Unit Train 1000 CO/HC Catalyst Unit, Unclassified Abatement Device	S-4350 S-4351	Condition #1162 Part 10, Part 11	Continuous CO monitors	CO reduced by 80%, NMHC reduced by 50%
A-0072	Cogeneration Unit Train 1000 SCR Unit; SCR Nox Reduction Catalyst , Unclassified Abatement Device	S-4350 S-4351	Condition #1162 Part 6	Continuous Nox monitor	Nox <10ppm @15% O2 - 3-hr average; except startup/ shutdown
			9-9-301.2 and 3, 9-9-501	Nox CEM	5 or 9 ppmv @15% O <sub>2</sub> (dry) depending on fuels used

Abatement Device Number	Description	Sources(s) Controlled	Applicable Requirement	Operating Parameters	Limit or Efficiency
			9-9-301.2 and 3		25 ppmv @15% O <sub>2</sub> (dry) for non-gaseous fuel firing during natural gas curtailment or short testing periods
			NSPS Subpart Db, 60.44b (e) refers to 60.44b(a)4 for combined cycle system	Nox CEM, fuel gas flow meters, calorimeter on fuel gas	0.2 lb/MMBtu as a 30- day rolling average
			Condition #1162, Part 18		20 ppm NH3
A-0071	Cogeneration Unit Train 2000 CO/HC Catalyst Unit, Unclassified Abatement Device	S-4352 S-4353	Condition #1162, Parts 10, 11	Continuous CO monitors	CO reduced by 80%, NMHC reduced by 50%
A-0073	Cogeneration Unit Train 2000 SCR Unit; SCR Nox Reduction Catalyst, Unclassified Abatement Device	S-4352 S-4353	Condition #1162, Part 6	Continuous Nox monitor	Nox <10 ppm @15% O2 - 3-hr average; except startup/ shutdown
			9-9-301.3, 9-9-501	Nox CEM	10.8 ppmv <sup>4</sup> @15% O <sub>2</sub> (dry) adjusted from 9 ppm Nox limit to 10.8 ppm Nox limit because of thermal efficiency (9-9-401)
			9-9-301.3		25 ppmv @15% O <sub>2</sub> (dry) for non-gaseous fuel firing during natural gas curtailment or short testing periods
			NSPS Subpart Db, 60.44b (e) refers to 60.44b(a) for combined cycle system	Nox CEM, fuel gas flow meters, calorimeter on fuel gas	0.2 lb/MMBtu as a 30- day rolling average
			Condition #1162, Part 18		20 ppm NH3
A-0094	Thermofor Kiln Stack Burner (S-4094), Direct Flame Afterburner, Stack Burner	S-4094	8-1-110.3 and condition 20791	Minimum temperature and continuous temperature monitor and recorder	At least 90% destruction of organics
A-260	Hydrogen A-Train SCR Unit (Furnace F- 305), Unclassified Abatement Device	S-4170	9-10-301	CEMs for both Nox and O2	Refinery-wide emissions (excluding CO Boilers): 0.033 lbs Nox/MMBtu
A-260	Hydrogen A-Train SCR Unit (Furnace F- 305), Unclassified Abatement Device	S-4170	9-10-303	CEMs for both Nox and O2	Federal interim emissions: (excluding CO Boilers): 0.20 lbs Nox/MMBtu

Abatement Device Number	Description	Sources(s) Controlled	Applicable Requirement	Operating Parameters	Limit or Efficiency
A-0261	Scrubber for De-aerator Vent Methanol Abatement for Hydrogen Plant "A" Train, (V-311)	S-4250	Condition #15698, 8-2	Continuously monitor: Washwater Temperature, Vent Flow, Washwater Flow	Emission < 15 lbs C/day or < 300 ppm C dry , 3- hr average water temp <90F, 3-hr average vent flow <5 Klb/hr, 3-hr average water flow >30 gal/min, water/vent flow ratio >11.6
A-0262	Scrubber/Condenser for De-aerator Vent Methanol Abatement for Hydrogen Plant (S- 4250) "B" Train (V-361)	S-4250	Condition #15698, 8-2	Continuously monitor: Washwater Temperature, Vent Flow, Washwater Flow	Emission < 15 lbs C/day or < 300 ppm C dry, 3-hr average water temp <90F, 3-hr average vent flow <5Klb/hr, 3-hr average water flow >30 gal/min, water/vent flow ratio >11.6
A-0607	Carbon Bed Feed Surge Tank Absorber Unit for S-0605 Tank (Alkane GWTU) (VOC Vapor Abatement D607 A/B), Activated Carbon/Charcoal Canisters	S-0605 S-0610	Condition #11193, 40 CFR 61 Subpart FF		Minimum VOC destruction removal efficiency 95% by concentration weight, or outlet < 500 ppmv organics, or minimum benzene destruction removal efficiency 98% by concentration weight, or 10 ppmv benzene
A-0611	Carbon Adsorber Unit, Activated Carbon Containers, D611 A/B	S-0610	Condition #11193, 40 CFR 61 Subpart FF		Minimum VOC destruction removal efficiency 95% by concentration weight, or outlet < 500 ppmv organics, or minimum benzene destruction removal efficiency 98% by concentration weight, or 10 ppmv benzene
A-0615	Carbon Canisters (2 in series)	S-0660 S-6066	Condition #11193, 40 CFR 61 Subpart FF		Minimum VOC removal destruction efficiency 95% by concentration weight, or outlet < 500 ppmv organics, or minimum benzene destruction removal efficiency 98% by concentration weight, or 10 ppmv benzene
A-0620	Thermatrix, Model ES300, Thermal Oxidizer, LPG Racks	Pumps and compressor seals S-32103	Condition #8869	Continuous temperature monitor	Minimum temperature of 1500 degrees F, Minimum VOC destruction efficiency 95% by weight

Abatement Device Number	Description	Sources(s) Controlled	Applicable Requirement	Operating Parameters	Limit or Efficiency
A-0622	Thermatrix, Model ES60H, Thermal Oxidizer, Yard DIB	Pumps and compressor seals S-32103	Condition #8869	Continuous temperature monitor, Initial Source Test	Minimum temperature of 1565 degrees F , Minimum VOC destruction efficiency 95% by weight
A-0623	Thermatrix, Model ES60H, Thermal Oxidizer, 21 PS	Pumps and compressor seals S-32103	Condition #8869	Continuous temperature monitor	Minimum temperature of 1565 degrees F, Minimum VOC destruction efficiency 95% by weight
A-0624	Thermatrix, Model ES60H, Thermal Oxidizer, 17 PS	Pumps and compressor seals S-32103	Condition #8869	Continuous temperature monitor	Minimum temperature of 1565 degrees F, Minimum VOC destruction efficiency 95% by weight
A-0627	Thermatrix, Model ES300, Thermal Oxidizer, FCC Unit (backup)	Pumps and compressor seals S-32103	Condition #8869	Continuous temperature monitor	Minimum temperature of 1500 degrees F, Minimum VOC destruction efficiency 95% by weight
A-0628	Thermatrix, Model ES300, Thermal Oxidizer, Alkylation Plant	Pumps and compressor seals S-32103	Condition #8869	Continuous temperature monitor	Minimum temperature of 1500 degrees F, Minimum VOC destruction efficiency 95% by weigh,
A-0630	DEBRU Carbon Abatement Containers for Spent Carbon Regeneration, Adsorption, Activated Carbon/Charcoal	S-6250	Condition #12842, 40 CFR 61 Subpart FF		Outlet stream VOC concentration of A-630 <10% of inlet stream organics concentration, 95% reduction of organics, or <500 ppmv at outlet, or minimum benzene destruction removal efficiency 98% by concentration weight, or 10 ppmv benzene [applies to A630/A631]
A-0631	DEBRU Carbon Abatement Containers for Spent Carbon Regeneration, Adsorption, Activated Carbon/Charcoal	S-6250	Condition #12842, 40 CFR 61 Subpart FF		Outlet stream VOC concentration of A-631 <10 ppmv methane, 95% reduction of organics, or <500 ppmv at outlet, or minimum benzene destruction removal efficiency 98% by concentration weight, or 10 ppmv benzene [applies to A630/A631]

Abatement Device Number	Description	Sources(s) Controlled	Applicable Requirement	Operating Parameters	Limit or Efficiency
A-0900	Emission Reduction Device (Thermal Oxidizer) – Marine Vapor Recovery	S-9321 S-9322 S-9323 S-9324 S-9325	Condition #4714, 8-44	Continuous temperature monitor	Incinerator exhaust temperature > 1200 degrees F, Minimum VOC destruction efficiency 95% by weight POC reduced by 95% or greater, or POC emissions < 21b/1000 bbl loaded
A-919	#21 pump station carbon				
A-3146	Vent Gas scrubber for S-3146 (Tank 3146 – Ammonia Tank), Adsorption, Activated Carbon/Charcoal	S-3146			
A-3200	Abatement 4 Crude Unit Furnace 1100B – DEBRU (See S-4071 – F1100B 4Crude Furnace). [Note: the abatement device is the firebox of the process heater (F-1100B)]	S-3110, S-3111, S-3192 [A-3200 does not abate S-3200]	Condition #4650	Continuous temperature monitor	Minimum temperature of 1000 degrees F, At least 98.5% by weight VOC abatement, POC emissions <1 lb/day, benzene emissions < 0.04 lb/day
			8-18-110		95% control efficiency or greater
			40 CFR 61 Subpart FF	Continuous temperature monitor	Reduce organics by 95 wt % OR <20 ppmv organics dry basis,3%O2 or >0.5sec residence time at >1400F
A-4241	Mist Eliminator Scrubber, Fibrous Packed Scrubber – Asphalt Loading Racks (S-4241)	S-4240, S-4241	Regulation 6-301		20% maximum opacity
A-4422	Sandblaster Dust Collector, Shaking Baghouse for Abrasive Blasting at I&E Shop		Condition #5599		
A-4429	Temporary odor control scrubber	S-4429	Condition #20330	15 – 5% aqua-ammonia solution	Aqua-ammonia solution maintained between 15 – 5%
A-6010	High Level Flare, LSFO Refinery Waste Gas Flare, (Same as S-6010/A6010)	S-4233 S-4234 S-4235 S-4236 S-4237	8-1-110.3		At least 90% destruction of organics
A-6012	Refinery Waste Gas Flare, V-282, South Isomax Flare -; Same as S-6012	S-4250 S-4251 S- 4348 S-4434 S- 4429	8-1-110.3		At least 90% destruction of organics,
A-6013	North Isomax Flare V-281, Refinery Waste Gas Flare:, (Same as S-6013/A6013)	S-4252 S-4253	8-1-110.3		At least 90% destruction of organics
A-6015	Refinery Waste Gas Flare D&R, 3MMBtu/h	S-4233, S-4234, S-4235, S-4237, S-4282, S-4283 S-4435	8-1-110.3		At least 90% destruction of organics
A-6016	FCC Flare V-731,Refinery Waste Gas Flare: , Same as S-6016	S-4285	8-1-110.3		At least 90% destruction of organics

Abatement Device Number	Description	Sources(s) Controlled	Applicable Requirement	Operating Parameters	Limit or Efficiency
A-6017	Alkane Flare, Refinery Waste Gas Flare, same as S-6017	S-4286 S-4289 S-4290 S-4291	8-1-110.3		At least 90% destruction of organics
			8-18-110		95% control efficiency or greater
A-6018	Flare Relief Drum – V780 Poly Flare, FCC (Needs equivalent Source Number)	S-4291 S-4292	8-1-110.3		At least 90% destruction of organics
A-6019	Alky-Poly Flare, Refinery Waste Gas Flare, V-732A: ; Same as S-6019	S-4291 S-4292 S- 4277 S-4228 S- 4229 S-4286 S- 4355	8-1-110.3		At least 90% destruction of organics
A-6020	K3950, Flare Gas Recovery Compressor System, Cooper/Penn. Unclassified Abatement Device	S-4233, S-4234, S-4235, S-4237, S-4282, S-4283 S-4435	8-18-110		95% control efficiency or greater
A-6039	V-3501; Lube RLOP Flare – Same as S-6039	S-4340 S-4341 S-4342 S-4343 S-4345 S-4346	8-1-110.3		At least 90% destruction of Organics
A-6046	Sandblaster Dust Collector, Simple Baghouse	S-6046			
A-6200	Two each Vapor Phase Carbon Canisters in Series for Baker/Poly Tanks, Activated Carbon/Charcoal	S-6200	Condition #10761		Control efficiency >99%, or <100 ppm outlet hydrocarbon concentration. The first carbon container shall be removed when the hydrocarbon concentration at the second monitoring point is either: greater than 10% of the hydrocarbon concentration at the first monitoring point or greater than or equal to 1000 ppmv as C1. The second carbon container shall replace the first carbon container and a fresh carbon container shall be placed in the last container position.

Abatement Device Number	Description	Sources(s) Controlled	Applicable Requirement	Operating Parameters	Limit or Efficiency
A-6201	Two each Vapor Phase Carbon Canisters in Series for Baker/Poly Tanks, Activated Carbon/Charcoal	S-6201	Condition #10761		Control efficiency >99%, or <100 ppm outlet hydrocarbon concentration.
					The first carbon container shall be removed when the hydrocarbon concentration at the second monitoring point is either: greater than 10% of the hydrocarbon concentration at the first monitoring point or greater than or equal to 1000 ppmv as C1. The second carbon container shall replace the first carbon container and a fresh carbon container shall be placed in the last container position.
A-6202	Two each Vapor Phase Carbon Canisters in Series for Baker/Poly Tanks, Activated Carbon/Charcoal	S-6202	Condition #10761		Control efficiency >99%, or <100 ppm outlet hydrocarbon concentration.
					The first carbon container shall be removed when the hydrocarbon concentration at the second monitoring point is either: greater than 10% of the hydrocarbon concentration at the first monitoring point or greater than or equal to 1000 ppmv as C1. The second carbon container shall replace the first carbon container and a fresh carbon container shall be placed in the last container position.

Abatement Device Number	Description	Sources(s) Controlled	Applicable Requirement	Operating Parameters	Limit or Efficiency
A-6203	Two each Vapor Phase Carbon Canisters in Series for Baker/Poly Tanks, Activated Carbon/Charcoal	S-6203	Condition #10761		Control efficiency >99%, or <100 ppm outlet hydrocarbon concentration.
					The first carbon container shall be removed when the hydrocarbon concentration at the second monitoring point is either: greater than 10% of the hydrocarbon concentration at the first monitoring point or greater than or equal to 1000 ppmv as C1. The second carbon container shall replace the first carbon container and a fresh carbon container shall be placed in the last container position.
A-6204	Two each Vapor Phase Carbon Canisters in Series for Baker/Poly Tanks, Activated Carbon/Charcoal	S-6204	Condition #10761		Control efficiency >99%, or <100 ppm outlet hydrocarbon concentration.
					The first carbon container shall be removed when the hydrocarbon concentration at the second monitoring point is either: greater than 10% of the hydrocarbon concentration at the first monitoring point or greater than or equal to 1000 ppmv as C1. The second carbon container shall replace the first carbon container and a fresh carbon container shall be placed in the last container position.

Abatement Device Number	Description	Sources(s) Controlled	Applicable Requirement	Operating Parameters	Limit or Efficiency
A-6205	Two each Vapor Phase Carbon Canisters in Series for Baker/Poly Tanks, Activated Carbon/Charcoal	S-6205	Condition #10761		Control efficiency >99%, or <100 ppm outlet hydrocarbon concentration.
					The first carbon container shall be removed when the hydrocarbon concentration at the second monitoring point is either: greater than 10% of the hydrocarbon concentration at the first monitoring point or greater than or equal to 1000 ppmv as C1. The second carbon container shall replace the first carbon container and a fresh carbon container shall be placed in the last container position.
A-6206	Two each Vapor Phase Carbon Canisters in Series for Baker/Poly Tanks, Activated Carbon/Charcoal	S-6206	Condition #10761		Control efficiency >99%, or <100 ppm outlet hydrocarbon concentration.
					The first carbon container shall be removed when the hydrocarbon concentration at the second monitoring point is either: greater than 10% of the hydrocarbon concentration at the first monitoring point or greater than or equal to 1000 ppmv as C1. The second carbon container shall replace the first carbon container and a fresh carbon container shall be placed in the last container position.

Abatement Device Number	Description	Sources(s) Controlled	Applicable Requirement	Operating Parameters	Limit or Efficiency
A-6207	Two each Vapor Phase Carbon Canisters in Series for Baker/Poly Tanks, Activated Carbon/Charcoal	S-6207	Condition #10761		Control efficiency >99%, or <100 ppm outlet hydrocarbon concentration.
					The first carbon container shall be removed when the hydrocarbon concentration at the second monitoring point is either: greater than 10% of the hydrocarbon concentration at the first monitoring point or greater than or equal to 1000 ppmv as C1. The second carbon container shall replace the first carbon container and a fresh carbon container shall be placed in the last container position.
A-6208	Two each Vapor Phase Carbon Canisters in Series for Baker/Poly Tanks, Activated Carbon/Charcoal	S-6208	Condition #10761		Control efficiency >99%, or <100 ppm outlet hydrocarbon concentration.
					The first carbon container shall be removed when the hydrocarbon concentration at the second monitoring point is either: greater than 10% of the hydrocarbon concentration at the first monitoring point or greater than or equal to 1000 ppmv as C1. The second carbon container shall replace the first carbon container and a fresh carbon container shall be placed in the last container position.

Abatement Device Number	Description	Sources(s) Controlled	Applicable Requirement	Operating Parameters	Limit or Efficiency
A-6209	Two each Vapor Phase Carbon Canisters in Series for Baker/Poly Tanks, Activated Carbon/Charcoal	S-6209	Condition #10761		Control efficiency >99%, or <100 ppm outlet hydrocarbon concentration.
					The first carbon container shall be removed when the hydrocarbon concentration at the second monitoring point is either: greater than 10% of the hydrocarbon concentration at the first monitoring point or greater than or equal to 1000 ppmv as C1. The second carbon container shall replace the first carbon container and a fresh carbon container shall be placed in the last container position.
A-6210	Two each Vapor Phase Carbon Canisters in Series for Baker/Poly Tanks, Activated Carbon/Charcoal	S-6210	Condition #10761		Control efficiency >99%, or <100 ppm outlet hydrocarbon concentration.
					The first carbon container shall be removed when the hydrocarbon concentration at the second monitoring point is either: greater than 10% of the hydrocarbon concentration at the first monitoring point or greater than or equal to 1000 ppmv as C1. The second carbon container shall replace the first carbon container and a fresh carbon container shall be placed in the last container position.

Abatement Device Number	Description	Sources(s) Controlled	Applicable Requirement	Operating Parameters	Limit or Efficiency
A-6211	Two each Vapor Phase Carbon Canisters in Series for Baker/Poly Tanks, Activated Carbon/Charcoal	S-6211	Condition #10761		Control efficiency >99%, or <100 ppm outlet hydrocarbon concentration.
					The first carbon container shall be removed when the hydrocarbon concentration at the second monitoring point is either: greater than 10% of the hydrocarbon concentration at the first monitoring point or greater than or equal to 1000 ppmv as C1. The second carbon container shall replace the first carbon container and a fresh carbon container shall be placed in the last container position.
A-6212	Two each Vapor Phase Carbon Canisters in Series for Baker/Poly Tanks, Activated Carbon/Charcoal	S-6212	Condition #10761		Control efficiency >99%, or <100 ppm outlet hydrocarbon concentration.
					The first carbon container shall be removed when the hydrocarbon concentration at the second monitoring point is either: greater than 10% of the hydrocarbon concentration at the first monitoring point or greater than or equal to 1000 ppmv as C1. The second carbon container shall replace the first carbon container and a fresh carbon container shall be placed in the last container position.

Abatement Device Number	Description	Sources(s) Controlled	Applicable Requirement	Operating Parameters	Limit or Efficiency
A-6213	Two each Vapor Phase Carbon Canisters in Series for Baker/Poly Tanks, Activated Carbon/Charcoal	S-6213	Condition #10761		Control efficiency >99%, or <100 ppm outlet hydrocarbon concentration.
					The first carbon container shall be removed when the hydrocarbon concentration at the second monitoring point is either: greater than 10% of the hydrocarbon concentration at the first monitoring point or greater than or equal to 1000 ppmv as C1. The second carbon container shall replace the first carbon container and a fresh carbon container shall be placed in the last container position.
A-6214	Two each Vapor Phase Carbon Canisters in Series for Baker/Poly Tanks, Activated Carbon/Charcoal	S-6214	Condition #10761		Control efficiency >99%, or <100 ppm outlet hydrocarbon concentration.
					The first carbon container shall be removed when the hydrocarbon concentration at the second monitoring point is either: greater than 10% of the hydrocarbon concentration at the first monitoring point or greater than or equal to 1000 ppmv as C1. The second carbon container shall replace the first carbon container and a fresh carbon container shall be placed in the last container position.

Abatement Device Number	Description	Sources(s) Controlled	Applicable Requirement	Operating Parameters	Limit or Efficiency
A-6215	Two each Vapor Phase Carbon Canisters in Series for Baker/Poly Tanks, Activated Carbon/Charcoal	S-6215	Condition #10761		Control efficiency >99%, or <100 ppm outlet hydrocarbon concentration.
					The first carbon container shall be removed when the hydrocarbon concentration at the second monitoring point is either: greater than 10% of the hydrocarbon concentration at the first monitoring point or greater than or equal to 1000 ppmv as C1. The second carbon container shall replace the first carbon container and a fresh carbon container shall be placed in the last container position.
A-6216	Two each Vapor Phase Carbon Canisters in Series for Baker/Poly Tanks, Activated Carbon/Charcoal	S-6216	Condition #10761		Control efficiency >99%, or <100 ppm outlet hydrocarbon concentration.
					The first carbon container shall be removed when the hydrocarbon concentration at the second monitoring point is either: greater than 10% of the hydrocarbon concentration at the first monitoring point or greater than or equal to 1000 ppmv as C1. The second carbon container shall replace the first carbon container and a fresh carbon container shall be placed in the last container position.

Abatement Device Number	Description	Sources(s) Controlled	Applicable Requirement	Operating Parameters	Limit or Efficiency
A-6217	Two each Vapor Phase Carbon Canisters in Series for Baker/Poly Tanks, Activated Carbon/Charcoal	S-6217	Condition #10761		Control efficiency >99%, or <100 ppm outlet hydrocarbon concentration.
					The first carbon container shall be removed when the hydrocarbon concentration at the second monitoring point is either: greater than 10% of the hydrocarbon concentration at the first monitoring point or greater than or equal to 1000 ppmv as C1. The second carbon container shall replace the first carbon container and a fresh carbon container shall be placed in the last container position.
A-6218	Two each Vapor Phase Carbon Canisters in Series for Baker/Poly Tanks, Activated Carbon/Charcoal	S-6218	Condition #10761		Control efficiency >99%, or <100 ppm outlet hydrocarbon concentration.
					The first carbon container shall be removed when the hydrocarbon concentration at the second monitoring point is either: greater than 10% of the hydrocarbon concentration at the first monitoring point or greater than or equal to 1000 ppmv as C1. The second carbon container shall replace the first carbon container and a fresh carbon container shall be placed in the last container position.

Abatement Device Number	Description	Sources(s) Controlled	Applicable Requirement	Operating Parameters	Limit or Efficiency
A-6219	Two each Vapor Phase Carbon Canisters in Series for Baker/Poly Tanks, Activated Carbon/Charcoal	S-6219	Condition #10761		Control efficiency >99%, or <100 ppm outlet hydrocarbon concentration.
					The first carbon container shall be removed when the hydrocarbon concentration at the second monitoring point is either: greater than 10% of the hydrocarbon concentration at the first monitoring point or greater than or equal to 1000 ppmv as C1. The second carbon container shall replace the first carbon container and a fresh carbon container shall be placed in the last container position.
A-6220	Two each Vapor Phase Carbon Canisters in Series for Baker/Poly Tanks, Activated Carbon/Charcoal	S-6220	Condition #10761		Control efficiency >99%, or <100 ppm outlet hydrocarbon concentration.
					The first carbon container shall be removed when the hydrocarbon concentration at the second monitoring point is either: greater than 10% of the hydrocarbon concentration at the first monitoring point or greater than or equal to 1000 ppmv as C1. The second carbon container shall replace the first carbon container and a fresh carbon container shall be placed in the last container position.

Abatement Device Number	Description	Sources(s) Controlled	Applicable Requirement	Operating Parameters	Limit or Efficiency
A-6221	Two each Vapor Phase Carbon Canisters in Series for Baker/Poly Tanks, Activated Carbon/Charcoal	S-6221	Condition #10761		Control efficiency >99%, or <100 ppm outlet hydrocarbon concentration.
					The first carbon container shall be removed when the hydrocarbon concentration at the second monitoring point is either: greater than 10% of the hydrocarbon concentration at the first monitoring point or greater than or equal to 1000 ppmv as C1. The second carbon container shall replace the first carbon container and a fresh carbon container shall be placed in the last container position.
A-6222	Two each Vapor Phase Carbon Canisters in Series for Baker/Poly Tanks, Activated Carbon/Charcoal	S-6222	Condition #10761		Control efficiency >99%, or <100 ppm outlet hydrocarbon concentration.
					The first carbon container shall be removed when the hydrocarbon concentration at the second monitoring point is either: greater than 10% of the hydrocarbon concentration at the first monitoring point or greater than or equal to 1000 ppmv as C1. The second carbon container shall replace the first carbon container and a fresh carbon container shall be placed in the last container position.

Abatement Device Number	Description	Sources(s) Controlled	Applicable Requirement	Operating Parameters	Limit or Efficiency
A-6223	Two each Vapor Phase Carbon Canisters in Series for Baker/Poly Tanks, Activated Carbon/Charcoal	S-6223	Condition #10761		Control efficiency >99%, or <100 ppm outlet hydrocarbon concentration.
					The first carbon container shall be removed when the hydrocarbon concentration at the second monitoring point is either: greater than 10% of the hydrocarbon concentration at the first monitoring point or greater than or equal to 1000 ppmv as C1. The second carbon container shall replace the first carbon container and a fresh carbon container shall be placed in the last container position.
A-6224	Two each Vapor Phase Carbon Canisters in Series for Baker/Poly Tanks, Activated Carbon/Charcoal	S-6224	Condition #10761		Control efficiency >99%, or <100 ppm outlet hydrocarbon concentration.
					The first carbon container shall be removed when the hydrocarbon concentration at the second monitoring point is either: greater than 10% of the hydrocarbon concentration at the first monitoring point or greater than or equal to 1000 ppmv as C1. The second carbon container shall replace the first carbon container and a fresh carbon container shall be placed in the last container position.

Abatement Device Number	Description	Sources(s) Controlled	Applicable Requirement	Operating Parameters	Limit or Efficiency
A-6225	Two each Vapor Phase Carbon Canisters in Series for Baker/Poly Tanks, Activated Carbon/Charcoal	S-6225	Condition #10761		Control efficiency >99%, or <100 ppm outlet hydrocarbon concentration.
					The first carbon container shall be removed when the hydrocarbon concentration at the second monitoring point is either: greater than 10% of the hydrocarbon concentration at the first monitoring point or greater than or equal to 1000 ppmv as C1. The second carbon container shall replace the first carbon container and a fresh carbon container shall be placed in the last container position.
A-6226	Two each Vapor Phase Carbon Canisters in Series for Baker/Poly Tanks, Activated Carbon/Charcoal	S-6226	Condition #10761		Control efficiency >99%, or <100 ppm outlet hydrocarbon concentration.
					The first carbon container shall be removed when the hydrocarbon concentration at the second monitoring point is either: greater than 10% of the hydrocarbon concentration at the first monitoring point or greater than or equal to 1000 ppmv as C1. The second carbon container shall replace the first carbon container and a fresh carbon container shall be placed in the last container position.

Abatement Device Number	Description	Sources(s) Controlled	Applicable Requirement	Operating Parameters	Limit or Efficiency
A-6227	Two each Vapor Phase Carbon Canisters in Series for Baker/Poly Tanks, Activated Carbon/Charcoal	S-6227	Condition #10761		Control efficiency >99%, or <100 ppm outlet hydrocarbon concentration.
					The first carbon container shall be removed when the hydrocarbon concentration at the second monitoring point is either: greater than 10% of the hydrocarbon concentration at the first monitoring point or greater than or equal to 1000 ppmv as C1. The second carbon container shall replace the first carbon container and a fresh carbon container shall be placed in the last container position.
A-6228	Two each Vapor Phase Carbon Canisters in Series for Baker/Poly Tanks, Activated Carbon/Charcoal	S-6228	Condition #10761		Control efficiency >99%, or <100 ppm outlet hydrocarbon concentration.
					The first carbon container shall be removed when the hydrocarbon concentration at the second monitoring point is either: greater than 10% of the hydrocarbon concentration at the first monitoring point or greater than or equal to 1000 ppmv as C1. The second carbon container shall replace the first carbon container and a fresh carbon container shall be placed in the last container position.

Abatement Device Number	Description	Sources(s) Controlled	Applicable Requirement	Operating Parameters	Limit or Efficiency
A-6229	Two each Vapor Phase Carbon Canisters in Series for Baker/Poly Tanks, Activated Carbon/Charcoal	S-6229	Condition #10761		Control efficiency >99%, or <100 ppm outlet hydrocarbon concentration.
					The first carbon container shall be removed when the hydrocarbon concentration at the second monitoring point is either: greater than 10% of the hydrocarbon concentration at the first monitoring point or greater than or equal to 1000 ppmv as C1. The second carbon container shall replace the first carbon container and a fresh carbon container shall be placed in the last container position.
A-6230	Two each Vapor Phase Carbon Canisters in Series for Baker/Poly Tanks, Activated Carbon/Charcoal	S-6230	Condition #10761		Control efficiency >99%, or <100 ppm outlet hydrocarbon concentration.
					The first carbon container shall be removed when the hydrocarbon concentration at the second monitoring point is either: greater than 10% of the hydrocarbon concentration at the first monitoring point or greater than or equal to 1000 ppmv as C1. The second carbon container shall replace the first carbon container and a fresh carbon container shall be placed in the last container position.

Abatement Device Number	Description	Sources(s) Controlled	Applicable Requirement	Operating Parameters	Limit or Efficiency
A-6231	Two each Vapor Phase Carbon Canisters in Series for Baker/Poly Tanks, Activated Carbon/Charcoal	S-6231	Condition #10761		Control efficiency >99%, or <100 ppm outlet hydrocarbon concentration.
					The first carbon container shall be removed when the hydrocarbon concentration at the second monitoring point is either: greater than 10% of the hydrocarbon concentration at the first monitoring point or greater than or equal to 1000 ppmv as C1. The second carbon container shall replace the first carbon container and a fresh carbon container shall be placed in the last container position.
A-6232	Two each Vapor Phase Carbon Canisters in Series for Baker/Poly Tanks, Activated Carbon/Charcoal	S-6232	Condition #10761		Control efficiency >99%, or <100 ppm outlet hydrocarbon concentration.
					The first carbon container shall be removed when the hydrocarbon concentration at the second monitoring point is either: greater than 10% of the hydrocarbon concentration at the first monitoring point or greater than or equal to 1000 ppmv as C1. The second carbon container shall replace the first carbon container and a fresh carbon container shall be placed in the last container position.

Abatement Device Number	Description	Sources(s) Controlled	Applicable Requirement	Operating Parameters	Limit or Efficiency
A-6233	Two each Vapor Phase Carbon Canisters in Series for Baker/Poly Tanks, Activated Carbon/Charcoal	S-6233	Condition #10761		Control efficiency >99%, or <100 ppm outlet hydrocarbon concentration.
					The first carbon container shall be removed when the hydrocarbon concentration at the second monitoring point is either: greater than 10% of the hydrocarbon concentration at the first monitoring point or greater than or equal to 1000 ppmv as C1. The second carbon container shall replace the first carbon container and a fresh carbon container shall be placed in the last container position.
A-6234	Two each Vapor Phase Carbon Canisters in Series for Baker/Poly Tanks, Activated Carbon/Charcoal	S-6234	Condition #10761		Control efficiency >99%, or <100 ppm outlet hydrocarbon concentration.
					The first carbon container shall be removed when the hydrocarbon concentration at the second monitoring point is either: greater than 10% of the hydrocarbon concentration at the first monitoring point or greater than or equal to 1000 ppmv as C1. The second carbon container shall replace the first carbon container and a fresh carbon container shall be placed in the last container position.

Abatement Device Number	Description	Sources(s) Controlled	Applicable Requirement	Operating Parameters	Limit or Efficiency
A-6235	Two each Vapor Phase Carbon Canisters in Series for Baker/Poly Tanks, Activated Carbon/Charcoal	S-6235	Condition #10761		Control efficiency >99%, or <100 ppm outlet hydrocarbon concentration.
					The first carbon container shall be removed when the hydrocarbon concentration at the second monitoring point is either: greater than 10% of the hydrocarbon concentration at the first monitoring point or greater than or equal to 1000 ppmv as C1. The second carbon container shall replace the first carbon container and a fresh carbon container shall be placed in the last container position.
A-6236	Two each Vapor Phase Carbon Canisters in Series for Baker/Poly Tanks, Activated Carbon/Charcoal	S-6236	Condition #10761		Control efficiency >99%, or <100 ppm outlet hydrocarbon concentration.
					The first carbon container shall be removed when the hydrocarbon concentration at the second monitoring point is either: greater than 10% of the hydrocarbon concentration at the first monitoring point or greater than or equal to 1000 ppmv as C1. The second carbon container shall replace the first carbon container and a fresh carbon container shall be placed in the last container position.
#### **Table II-B – Abatement Devices**

Abatement Device Number	Description	Sources(s) Controlled	Applicable Requirement	Operating Parameters	Limit or Efficiency
A-6237	Two each Vapor Phase Carbon Canisters in Series for Baker/Poly Tanks, Activated Carbon/Charcoal	S-6237	Condition #10761		Control efficiency >99%, or <100 ppm outlet hydrocarbon concentration.
					The first carbon container shall be removed when the hydrocarbon concentration at the second monitoring point is either: greater than 10% of the hydrocarbon concentration at the first monitoring point or greater than or equal to 1000 ppmv as C1. The second carbon container shall replace the first carbon container and a fresh carbon container shall be placed in the last container position.
A-6238	Two each Vapor Phase Carbon Canisters in Series for Baker/Poly Tanks, Activated Carbon/Charcoal	S-6238	Condition #10761		Control efficiency >99%, or <100 ppm outlet hydrocarbon concentration.
					The first carbon container shall be removed when the hydrocarbon concentration at the second monitoring point is either: greater than 10% of the hydrocarbon concentration at the first monitoring point or greater than or equal to 1000 ppmv as C1. The second carbon container shall replace the first carbon container and a fresh carbon container shall be placed in the last container position.

#### **Table II-B – Abatement Devices**

Abatement Device Number	Description	Sources(s) Controlled	Applicable Requirement	Operating Parameters	Limit or Efficiency
A-6239	Two each Vapor Phase Carbon Canisters in Series for Baker/Poly Tanks, Activated Carbon/Charcoal	S-6239	Condition #10761		Control efficiency >99%, or <100 ppm outlet hydrocarbon concentration.
					The first carbon container shall be removed when the hydrocarbon concentration at the second monitoring point is either: greater than 10% of the hydrocarbon concentration at the first monitoring point or greater than or equal to 1000 ppmv as C1. The second carbon container shall replace the first carbon container and a fresh carbon container shall be placed in the last container position.
A-7513	Diesel particulate filter, Johnson Matthey CRT	S-7513	17 CCR 93115		85% control efficiency or greater
A-7514	Diesel particulate filter, Johnson Matthey CRT	S-7514	17 CCR 93115		85% control efficiency or greater
A-7517	Diesel Particulate Filter, Johnson Matthey CRT	S-7517	17 CCR 93115		85% control efficiency or greater
A-7518	Diesel Particulate Filter, Johnson Matthey CRT	S-7518	17 CCR 93115		85% control efficiency or greater
A-7521	Diesel Particulate Filter, Johnson Matthey CRT	S-7521	17 CCR 93115		85% control efficiency or greater
A-7523	Diesel particulate filter, Johnson Matthey CRT	S-7523	17 CCR 93115		85% control efficiency or greater
A-7537	Diesel particulate filter	S-7537	P/C 24022		S-7537 required to be abated by A-7537 at all times of operation
A-7539	Diesel Particulate Filter, Johnson Matthey CRT	S-7539	17 CCR 93115		85% control efficiency or greater
A-32105	Two 200 # carbon drums in series abating S- 4148	S-4148	Condition 24085		10 ppmv as C4 at outlet of last bed and Control efficiency of 90% by wt. Or 298 ppmv outlet hydrocarbon concentration atnext to last bed

#### Table II C – Exempt Equipment List

Source Number	Source Code	Source Description	Proposed Annual Limit	Proposed Daily	Units	Comments
-94	C8250189	Stack Burner	NA	NA	Onits	exempt
-73	G7043471	Selective Catalytic Reduction System	NA	NA		exempt
-72	G7043471	Selective Catalytic Reduction System	NA	NA		exempt
55	T81??315	Tank 55	NA	NA		exempt Reg 2-1-123.10
200	T441?201	TANK 200A	NA	NA		exempt Reg 2-1-123.2
204	T441?315	TANK 204	NA	NA		exempt Reg 2-1-123.3
223	T441?502	TANK 223	NA	NA		exempt Reg 2-1-123.2
225	T441?502	TANK 225	NA	NA		exempt Reg 2-1-123.2
234	T441?315	TANK 234	NA	NA		exempt 2-1-123.3.10 API
290	T441?315	TANK 290	NA	NA		exempt 2-1-123.3.3 DO
291	T441?315	TANK 291	NA	NA		exempt 2-1-123.3.3 DO
293	T441?318	TANK 293	NA	NA		exempt 2-1-123.3.10 API
319	T441?315	TANK 319	NA	NA		exempt 2-1-123.3.3 DO
397	T441?318	TANK 397	NA	NA		exempt 2-1-123.3.3 Lube
398	T54?2318	TANK 398	NA	NA		exempt 2-1-123.3.3 Lube
400	T5432318	TANK 400	NA	NA		Dismantled
401	T44??239	TANK 401	NA	NA		exempt 2-1-123.3.3 DO
501	T441?239	TANK 501	NA	NA		exempt 2-1-123.3.10 API
583	T441?318	TANK 583	NA	NA		exempt 2-1-123.3.3 WAX
596	T441?432	TANK 596	NA	NA		exempt 2-1-123.3.3 WAX
610	T81??318	Tank 610: Organic Liquid Storage Tank	NA	NA		No limit. Limited by source no. 6061
660	T81??502	Tank 660: Organic Liquid Storage Tank	NA	NA		No limit. Limited by source no. 6061

Source Number	Source Code	Source Description	Proposed Annual Limit	Proposed Daily Limit	Units	Comments
750	T431?432	TANK 750	NA	NA		exempt 2-1-123.3.3 WAX
892	T42??502	Tank 892: Inorganic Chemical Storage	NA	NA		exempt 2-1-123.2 AqSol
893	T42??502	Tank 893: Water Storage Tank (No Organics)	NA	NA		exempt 2-1-123.2 AqSol
900	G5036502	Organic/Water Mixture Storage Tank	NA	NA		exempt 2-1-123.3.2 IBP
901	T42??416	Tank 901: Organic Liquid Storage Tank	NA	NA		exempt 2-1-123.3.3 Lube
902	T42??419	Tank 902: Organic Liquid Storage Tank	NA	NA		exempt 2-1-123.3.3 Lube
955	T5412052	TANK 955	NA	NA		exempt 2-1-123.3.2 IBP
956	T5412052	TANK 956	NA	NA		exempt 2-1-123.3.2 IBP
957	T44??158	Tank 957				
979	T44??315	TANK 979	NA	NA		exempt 2-1-123.3.3 DO
984	T441?315	TANK 984	NA	NA		exempt 2-1-123.3.3 DO
1020	T44??485	Tank 1020: Inorganic Chemical Storage Tank	NA	NA		exempt 2-1-123.2 AqSol
1052	T43??318	Tank 1052: Organic Liquid Storage Tank	NA	NA		exempt 2-1-123.3.3 Flash
1149	T441?239	TANK 1149	NA	NA		exempt 2-1-123.3.3 Lube
1292	T5412158	TANK 1292	NA	NA	BBL	exempt 2-1-123.3.2 IBP
1297	T63?2502	Tank 1297: Organic Storage Tank	NA	NA		exempt 2-1-123.3.2 IBP
1428	T5412239	TANK 1428	NA	NA		exempt 2-1-123.3.3 DO
1451	T5412239	TANK 1451	NA	NA		exempt 2-1-123.3.3 DO
1455	T441?318	TANK 1455	NA	NA		exempt 2-1-123.3.3 DO
1456	T441?318	TANK 1456	NA	NA		exempt 2-1-123.3.3 DO

Source Number	Source Code	Source Description	Proposed Annual Limit	Proposed Daily Limit	Units	Comments
1468	T441?419	TANK 1468	NA	NA		exempt 2-1-123.3.3 Lube
1470	T441?432	TANK 1470	NA	NA		exempt 2-1-123.3.3 WAX
1491	T5432179	TANK 1491				
1492	T441?315	TANK 1492	NA	NA		exempt 2-1-123.3.3 DO
1493	T441?315	TANK 1493	NA	NA		exempt 2-1-123.3.3 DO
1506	T54?2315	TANK 1506	NA	NA		exempt 2-1-123.3.3 DO
1507	T44??392	Tank 910	NA	NA		exempt 2-1-123.3.10 API
1546	T441?158	TANK 1546	NA	NA		exempt 2-1-123.3.3 WAX
1622	T34??160	LPG Tank, # 1622	NA	NA		exempt 2-1-123.3.1 LPG
1623	T34??052	TANK 1623 (Spherical Pressure Tank)	NA	NA		exempt 2-1-123.3.1 LPG
1634	T6412158	TANK 1634 (JET A)	NA	NA		exempt 2-1-123.3.3 Jet
1636	T441?315	TANK 1636	NA	NA		exempt 2-1-123.3.3 DO
1679	T43??318	TANK 1679	NA	NA		exempt 2-1-123.3.3 Lube
1685	T441?315	TANK 1685	NA	NA		exempt 2-1-123.3.3 DO
1723	T441?432	TANK 1723	NA	NA		exempt 2-1-123.3.3 WAX
1724	T441?432	TANK 1724	NA	NA		exempt 2-1-123.3.3 WAX
1725	T441?432	TANK 1725	NA	NA		exempt 2-1-123.3.3 WAX
1821	G5999146	Tank 1821 Fresh Sulfuric Acid Tank	NA	NA		exempt 2-1-122 2.1 H2SO4
1825	T42??201	Tank 1825	NA	NA		exempt 2-1-123.3.2 IBP
1828	T344?052	TANK 1828	NA	NA		exempt 2-1-123.3.1 LPG

Source Number	Source Code	Source Description	Proposed Annual Limit	Proposed Daily Limit	Units	Comments
1894	G5999217	Tank 1894: Phosphoric Acid Storage Tank	NA	NA		exempt 2-1-122 2.2 H3PO4
1899	T5412315	TANK 1899	NA	NA		exempt 2-1-123.3.3 DO
1910	T43??201	Tank 1910	NA	NA		exempt 2-1-123.3.2 IBP
1989	T441?419	TANK 1989	NA	NA		exempt 2-1-123.3.3 Lube
2520	T44??106	Wastewater/MEA Storage Tank	NA	NA		exempt 2-1-123.2 AqSol
2540	T44??664	Tank 2540: Organic Liquid Storage Tank	NA	NA		exempt 2-1-123.2 AqSol
2903	T42??416	Tank 903: Organic Liquid Storage Tank	NA	NA		exempt 2-1-123.3.3 Lube
3038	T34??052	TANK 3038 (Spherical Pressure Tank)	NA	NA		exempt 2-1-123.3.1 LPG
3050	T344?417	TANK 3050 SPHERE	NA	NA		exempt 2-1-123.3.1 LPG
3066	T344?052	TANK 3066	NA	NA		exempt 2-1-123.3.1 LPG
3067	T431?318	TANK 3067	NA	NA		exempt 2-1-123.3.3 WAX
3074	T54?2315	TANK 3074	NA	NA	BBL	exempt 2-1-123.3.3 DO
3132	T54?2315	Tank 3132	NA	NA		exempt 2-1-123.3.3 DO
3133	T5412158	TANK 3133	15,000,000	NA	BBL	Conditioned annual throughput, P/C # 15038
3134	T5412315	TANK 3134	10,000,000	NA	BBL	Conditioned annual throughput, P/C # 13859
3138	T5412394	TANK 3138	NA	NA		exempt 2-1-123.3.3 DO
3139	T5422394	TANK 3139	NA	NA		exempt 2-1-123.3.2 IBP
3142	T441?239	TANK 3142	NA	NA		exempt 2-1-123.2 AqSol
3145	T3H3?052	TANK 3145, Sphere	NA	NA		exempt 2-1-123.3.1 LPG

Source Number	Source Code	Source Description	Proposed Annual Limit	Proposed Daily Limit	Units	Comments
3146	T44??201	Tank 3146: 20% Aqueous Ammonia	NA	NA		exempt 2-1-123.2 AqSol
3147	T64?2485	Tank 3147: Organic Liquid Storage Tank	NA	NA		exempt 2-1-123.2 AqSol
3148	T43??485	Tank 3148: Organic Liquid Storage Tank	NA	NA		exempt 2-1-123.2 AqSol
3157	T44??419	Lube Oil Tank	NA	NA		exempt 2-1-123.3.3 Lube
3158	T44??419	Lube Oil Tank	NA	NA		exempt 2-1-123.3.3 Lube
3159	T44??419	Lube Oil Tank	NA	NA		exempt 2-1-123.3.3 Lube
3160	T44??419	Tank 3160: Organic Liquid Storage Tank	NA	NA		exempt 2-1-123.3.3 Lube
3161	T44??419	Tank Lube Oil	NA	NA		exempt 2-1-123.3.3 Lube
3162	T44??419	Tank Lube Oil	NA	NA		exempt 2-1-123.3.3 Lube
3163	T44??419	Tank Lube Oil	NA	NA		exempt 2-1-123.3.3 Lube
3164	T44??419	Tank Lube Oil	NA	NA		exempt 2-1-123.3.3 Lube
3165	T44??419	Tank Lube Oil	NA	NA		exempt 2-1-123.3.3 Lube
3166	T44??419	Tank Lube Oil	NA	NA		exempt 2-1-123.3.3 Lube
3167	T44??419	Tank Lube Oil	NA	NA		exempt 2-1-123.3.3 Lube
3168	T44??419	Tank Lube Oil	NA	NA		exempt 2-1-123.3.3 Lube
3169	T44??419	organic liquid storage tank, lube oil products	NA	NA		exempt 2-1-123.3.3 Lube
3170	T44??419	Lube Oil Tank	NA	NA		exempt 2-1-123.3.3 Lube
3171	T44??419	Lube Oil Tank	NA	NA		exempt 2-1-123.3.3 Lube
3172	T44??419	Lube Oil Tank	NA	NA		exempt 2-1-123.3.3 Lube
3179	T44??315	Tank 3179: Organic Liquid Storage Tank	NA	NA		exempt 2-1-123.3.3 DO

Source Number	Source Code	Source Description	Proposed Annual Limit	Proposed Daily Limit	Units	Comments
3182	T64?2419	Tank 3182: Organic Liquid Storage Tank	NA	NA		exempt 2-1-123.3.10 API
3186	T44??201	Gas Oil Tank	NA	NA		exempt 2-1-123.3.3 DO
3194	T54?2394	Storage Tank T-3194	NA	NA		exempt 2-1-123.3.10 API exempt 2-1-123.3.3 Flash Point
3195	T54??315	T-3195 Waxy Heavy Neutral Storage Tank	NA	NA		exempt 2-1-123.3.3 DO
3204	T42??419	Tank 3204: Organic Liquid Storage Tank	NA	NA		exempt 2-1-123.3.3 Lube
3207	T34??416	Butane Sphere: Organic Liquid Storage Tank	NA	NA		exempt 2-1-123.3.1 NG
3208	T34??417	Propane Sphere: Organic Liquid Storage Tank	NA	NA		exempt 2-1-123.3.1 NG
3211	T34??416	Sphere	NA	NA		exempt 2-1-123.3.1 LPG
3212	T34??417	Sphere	NA	NA		exempt 2-1-123.3.1 LPG
3215	T54?2315	Tank 3215: Oganic Liquid Storage Tank	NA	NA		exempt 2-1-123.3.2 IBP
3216	T44??315	Tank 3216: Organic Liquid Storage Tank	NA	NA		exempt 2-1-123.3.2 IBP
3310	T43??419	Tank 3310: Organic Liquid Storage Tank	NA	NA		exempt 2-1-123.3.3 Lube
3910	T34??160	LPG Tank; # 3910	NA	NA		exempt 2-1-123.3.1 LPG
3911	T34??160	LPG Tank, # 3911	NA	NA		exempt 2-1-123.3.1 LPG
4230	G7013419	LUBE OIL FILLING AT PACKAGE & GREASE PLANT	NA	NA		exempt 2-1-123.3.3
4239	T9812315	MAIN TANK CAR LOADING RACKS #4239	NA	NA	MBBL	ex 2-1-123.3.2 IBP
4240	T9811030	ASPHALT TANK TRUCK LOADING RACK	NA	NA	NA	ex 2-1-123.3.2 IBP
4241	T9711030	ASPHALT TANK CAR LOADING RACKS 4241	NA	NA	NA	ex 2-1-123.3.2 IBP
4315	TB8?2041	POINT ORIENT WHARF	NA	NA	NA	Abandoned. Out of service

Source Number	Source Code	Source Description	Proposed Annual Limit	Proposed Daily Limit	Units	Comments
4391	G5033300	NO. 1 OXIDATION POND	NA	NA	MMGPD	Exempt 2-1-123.2
4392	G5033300	Wetland Marsh	NA	NA	MMGPD	Exempt 2-1-123.2
4400	G5995239	Wax Melt Vesel	NA	NA	BBL	exempt 2-2-123.3.3 WAX
4403	TE8?1052	Unrefined Wax Truck Loading Rack	NA	NA		exempt
4404	TE8?1052	Saturated Refined Wax Truck Loading Rack	NA	NA		exempt
4422	G4073473	Abrasive Blasting Operating at I&E Shop	NA	NA	NA	Exempt per Reg. 2-1- 118.1
4423	G7131540	Pilot Remediation Process	NA	NA		exempt
4425	G7999146	H2 SO4 Sump	NA	NA		exempt
5101	T44??419	Tank-Marketing T-101	NA	NA		exempt 2-1-123.3.3 Lube
5103	T44??419	Tank-Marketing T-103	NA	NA		exempt 2-1-123.3.3 Lube
5105	T44??419	Tank-Marketing T-105	NA	NA		exempt 2-1-123.3.3 Lube
5107	T44??419	Tank-Marketing T-107	NA	NA		exempt 2-1-123.3.3 Lube
5108	T44??419	Tank-Marketing T-108	NA	NA		exempt 2-1-123.3.3 Lube
5109	T44??419	Tank-Marketing T-109	NA	NA		exempt 2-1-123.3.3 Lube
5110	T44??419	Tank-Marketing T-110	NA	NA		exempt 2-1-123.3.3 Lube
5112	T43??419	Tank-Marketing T-112	NA	NA		exempt 2-1-123.3.3 Lube
5113	T43??419	Tank-Marketing T-113	NA	NA		exempt 2-1-123.3.3 Lube
5115	T43??419	Tank-Marketing T-115	NA	NA		exempt 2-1-123.3.3 Lube
5117	T44??419	Tank-Marketing T-117	NA	NA		exempt 2-1-123.3.3 Lube
5118	T44??419	Tank-Marketing T-118	NA	NA		exempt 2-1-123.3.3 Lube
5119	T44??419	Tank-Marketing T-119	NA	NA		exempt 2-1-123.3.3 Lube
5121	T44??419	Tank-Marketing T-121	NA	NA		exempt 2-1-123.3.3 Lube

Source Number	Source Code	Source Description	Proposed Annual Limit	Proposed Daily Limit	Units	Comments
5122	T44??419	Tank-Marketing T-122	NA	NA		exempt 2-1-123.3.3 Lube
5123	T44??419	Tank-Marketing T-123	NA	NA		exempt 2-1-123.3.3 Lube
5125	T43??419	Tank-Marketing T-125	NA	NA		exempt 2-1-123.3.3 Lube
5126	T43??419	Tank-Marketing T-126	NA	NA		exempt 2-1-123.3.3 Lube
5127	T43??419	Tank-Marketing T-127	NA	NA		exempt 2-1-123.3.3 Lube
5128	T43??419	Tank-Marketing T-128	NA	NA		exempt 2-1-123.3.3 Lube
5129	T43??419	Tank-Marketing T-129	NA	NA		exempt 2-1-123.3.3 Lube
5130	T43??419	Tank-Marketing T-130	NA	NA		exempt 2-1-123.3.3 Lube
5131	T43??419	Tank-Marketing T-131	NA	NA		exempt 2-1-123.3.3 Lube
5132	T43??419	Tank-Marketing T-132	NA	NA		exempt 2-1-123.3.3 Lube
5133	T43??419	Tank-Marketing T-133	NA	NA		exempt 2-1-123.3.3 Lube
5134	T43??419	Tank-Marketing T-134	NA	NA		exempt 2-1-123.3.3 Lube
5135	T43??419	Tank-Marketing T-135	NA	NA		exempt 2-1-123.3.3 Lube
5136	T43??419	Tank-Marketing T-136	NA	NA		exempt 2-1-123.3.3 Lube
5137	T43??419	Tank-Marketing T-137	NA	NA		exempt 2-1-123.3.3 Lube
5138	T43??419	Tank-Marketing T-138	NA	NA		exempt 2-1-123.3.3 Lube
5139	T43??419	Tank-Marketing T-139	NA	NA		exempt 2-1-123.3.3 Lube
5140	T43??419	Tank-Marketing T-140	NA	NA		exempt 2-1-123.3.3 Lube
5201	T44??419	Tank-Marketing T-201	NA	NA		exempt 2-1-123.3.3 Lube
5202	T44??419	Tank-Marketing T-202	NA	NA		exempt 2-1-123.3.3 Lube

Source Number	Source Code	Source Description	Proposed Annual Limit	Proposed Daily Limit	Units	Comments
5203	T44??419	Tank-Marketing T-203	NA	NA		exempt 2-1-123.3.3 Lube
5204	T44??419	Tank-Marketing T-204	NA	NA		exempt 2-1-123.3.3 Lube
5205	T44??419	Tank-Marketing T-205	NA	NA		exempt 2-1-123.3.3 Lube
5206	T44??419	Tank-Marketing T-5206	NA	NA		exempt 2-1-123.3.3 Lube
5207	T44??419	Tank-Marketing T-207	NA	NA		exempt 2-1-123.3.3 Lube
5208	T44??419	Tank-Marketing T-208	NA	NA		exempt 2-1-123.3.3 Lube
5209	T44??419	Tank-Marketing T-209	NA	NA		exempt 2-1-123.3.3 Lube
5210	T44??419	Tank-Marketing T-210	NA	NA		exempt 2-1-123.3.3 Lube
5211	T44??419	Tank-Marketing T-211	NA	NA		exempt 2-1-123.3.3 Lube
5212	T44??419	Tank-Marketing T-212	NA	NA		exempt 2-1-123.3.3 Lube
5213	T44??419	Tank-Marketing T-213	NA	NA		exempt 2-1-123.3.3 Lube
5214	T44??419	Tank-Marketing T-214	NA	NA		exempt 2-1-123.3.3 Lube
5215	T44??419	Tank-Marketing T-215	NA	NA		exempt 2-1-123.3.3 Lube
5216	T43??419	Tank-Marketing T-216	NA	NA		exempt 2-1-123.3.3 Lube
5217	T43??419	Tank-Marketing T-217	NA	NA		exempt 2-1-123.3.3 Lube
5218	T43??419	Tank-Marketing T-218	NA	NA		exempt 2-1-123.3.3 Lube
5219	T43??419	Tank-Marketing T-219	NA	NA		exempt 2-1-123.3.3 Lube
5220	T43??419	Tank-Marketing T-220	NA	NA		exempt 2-1-123.3.3 Lube
5221	T43??419	Tank-Marketing T-221	NA	NA		exempt 2-1-123.3.3 Lube
5222	T43??419	Tank-Marketing T-222	NA	NA		exempt 2-1-123.3.3 Lube

Source Number	Source Code	Source Description	Proposed Annual Limit	Proposed Daily Limit	Units	Comments
5223	T43??419	Tank-Marketing T-223	NA	NA		exempt 2-1-123.3.3 Lube
5224	T43??419	Tank-Marketing T-224	NA	NA		exempt 2-1-123.3.3 Lube
5227	T43??419	Tank-Marketing T-227	NA	NA		exempt 2-1-123.3.3 Lube
5228	T43??419	Tank-Marketing T-228	NA	NA		exempt 2-1-123.3.3 Lube
5229	T44??419	Tank-Marketing T-229	NA	NA		exempt 2-1-123.3.3 Lube
5230	T43??419	Tank-Marketing T-230	NA	NA		exempt 2-1-123.3.3 Lube
5232	T43??419	Tank-Marketing T-232	NA	NA		exempt 2-1-123.3.3 Lube
5233	T43??419	Tank-Marketing T-233	NA	NA		exempt 2-1-123.3.3 Lube
5234	T43??419	Tank-Marketing T-234	NA	NA		exempt 2-1-123.3.3 Lube
5237	T43??419	Tank-Marketing T-237	NA	NA		exempt 2-1-123.3.3 Lube
5240	T43??419	Tank-Marketing T-240	NA	NA		exempt 2-1-123.3.3 Lube
5241	T43??419	Tank-Marketing T-241	NA	NA		exempt 2-1-123.3.3 Lube
5301	T43??419	Tank-Marketing T-301	NA	NA		exempt 2-1-123.3.3 Lube
5302	T43??419	Tank-Marketing T-302	NA	NA		exempt 2-1-123.3.3 Lube
5303	T43??419	Tank-Marketing T-303	NA	NA		exempt 2-1-123.3.3 Lube
5304	T43??419	Tank-Marketing T-304	NA	NA		exempt 2-1-123.3.3 Lube
5305	T43??419	Tank-Marketing T-305	NA	NA		exempt 2-1-123.3.3 Lube
5306	T43??419	Tank-Marketing T-306	NA	NA		exempt 2-1-123.3.3 Lube
5307	T43??419	Tank-Marketing T-307	NA	NA		exempt 2-1-123.3.3 Lube
5308	T43??419	Tank-Marketing T-308	NA	NA		exempt 2-1-123.3.3 Lube

Source Number	Source Code	Source Description	Proposed Annual Limit	Proposed Daily Limit	Units	Comments
5309	T43??419	Tank 5309: Organic Liquid Storage Tank	NA	NA		exempt 2-1-123.3.3 Lube
5315	T43??419	Tank 5315: Organic Liquid Storage Tank	NA	NA		exempt 2-1-123.3.3 Lube
5603	T43??419	Tank-Marketing T-603	NA	NA		exempt 2-1-123.3.3 Lube
6005	C8400189	THERMAL FLARE, F- 1001	NA	NA		Dismantled.
6005	C8400708	THERMAL FLARE, F- 1001				
6042	G7109473	Sandblaster at Machine Shop	NA	NA		Exempt per Reg. 2-1- 118.1
6043	G7109474	Gritblaster at Machine Shop	NA	NA		Exempt per Reg. 2-1- 121.1
6045	G7109473	Sandblaster at Boiler Shop	NA	NA		Exempt per Reg. 2-1- 118.1
6046	G7109473	Sandblaster at Machine Shop	NA	NA		Exempt per Reg. 2-1- 118.1
6047	G7109473	Sandblaster at Machine Shop	NA	NA		Exempt per Reg. 2-1- 118.1
6065	G5995502	Bay Area Pipeline Groundwater Treatment Facility	NA	NA	MBBL	Dismantled.
7000	G7013022	Anhydrous Ammonia Loading/Unloading	NA	NA		exempt 2-1-123.3.1 NH3
7001	G7014022	Anhydrous Ammonia Pressurized Vessel	NA	NA		exempt 2-1-123.3.1 NH3
7002	G7014022	Anhydrous Ammonia Pressurized Vessel	NA	NA		exempt 2-1-123.3.1 NH3
7003	G7014022	Anhydrous Ammonia Pressurized Vessel	NA	NA		exempt 2-1-123.3.1 NH3
7502	IC Engine					Exempt per 2-1-114.2.1
7503	IC Engine					Exempt per 2-1-114.2.1
7504	IC Engine					Exempt per 2-1-114.2.1
7505	IC Engine					Exempt per 2-1-114.2.1
9047	T42??201	Tank 6047	NA	NA		exempt 2-1-123.1 <260 gals
9203	T43??090	Tank 3203: Organic Liquid Storage Tank (GST-46)	NA	NA		exempt 2-1-123.3.2 IBP

Source Number	Source Code	Source Description	Proposed Annual Limit	Proposed Daily Limit	Units	Comments
9205	T43??419	Tank 3205: Organic Liquid Storage Tank (Delo 100)	NA	NA		exempt 2-1-123.3.2 IBP
9300	SF01A318	Graymills Cold Cleaner	NA	NA		exempt 2-1-118.7
9324	TB8??242	Marine Loading Berth #4	146,628 (sum of 9321 through 9326)	68	M BBL	See Appendix 11.6 and 15.1
32100	G9030000	Fugitive Sources – Vacuum Producing Systems	NA	NA		Exempt per PTO
32101	G9040000	Fugitive Sources – Process Vessel Depressurization	NA	NA		Exempt per PTO
32102	G9050000	Fugitive Sources – Valves and Flanges	NA	NA		Exempt per PTO
32103	G9060000	Fugitive Sources – Pumps & Compressor Seals	NA	NA		Exempt per PTO
32104	G9070000	Fugitive Sources – Pressure Relief Valves	NA	NA		Exempt per PTO
32105	G9080000	Fugitive Sources – Process Drains	NA	NA		Exempt per PTO
32110	G9010000	Process Gas (Combustion) Emissions from Flares and	NA	NA		Exempt per PTO

### **III. GENERALLY APPLICABLE REQUIREMENTS**

The permit holder shall comply with all applicable requirements, including those specified in the BAAQMD and SIP Rules and Regulations and other federal requirements cited below. These requirements apply in a general manner to the facility and/or to sources exempt from the requirement to obtain a District Permit to Operate. The District has determined that these requirements will not be violated under normal, routine operations, and that no additional periodic monitoring or reporting to demonstrate compliance is warranted. In cases where a requirement, in addition to being generally applicable, is also specifically applicable to one or more sources, the requirement and the source are also included in Section IV, Source-Specific Applicable Requirements, of this permit. This section also contains provisions that may apply to temporary sources.

The dates in parentheses in the Title column identify the versions of the regulations being cited and are, as applicable:

1. BAAQMD regulation(s): The date(s) of adoption or most recent amendment of the regulation by the District Board of Directors

2. Any federal requirement, including a version of a District regulation that has been approved into the SIP: The date(s) of adoption of BAAQMD regulation(s) have been used. However, the most recent date of EPA approval of any portion of the rule, encompassing all actions on the rule through that date of EPA approval.

The full language of SIP requirements is on EPA Region 9's website. The address is http://yosemite.epa.gov/r9/r9sips.nsf/Agency?ReadForm&count=500&state=California&cat=Bay+Area+Air+Quality+M anagement+District-Agency-Wide+Provisions.

#### NOTE:

Where there are differences between the current BAAQMD rules and the versions of the rules in the SIP, all sources must comply with both versions of the rule until US EPA has reviewed and approved the District's revision of the regulation.

**Table III – Generally Applicable Requirements** 

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)
BAAQMD Regulation 1	General Provisions and Definitions (7/9/08)	Ν
1-301	Public Nuisance (5/2/90)	N
1-400	Administrative Requirements (10/21/92)	Y
SIP Regulation 1	General Provisions and Definitions (6/28/99)	Y
BAAQMD Regulation 2, Rule 1	General Requirements ((11/19/08)	Ν
2-1-429	Federal Emissions Statement (12/21/04)	N
SIP Regulation 2-1-429	Federal Emissions Statement (4/3/95)	Y
BAAQMD Regulation 2, Rule 2	Permits, New Source Review (5/17/00)	N
SIP BAAQMD Regulation 2, Rule 3	Permits, Power Plants (3/19/82)	Y
BAAQMD Regulation 2, Rule 4	Permits, Emissions Banking (05/17/00)	Y
BAAQMD Regulation 2, Rule 5	Permits, New Source Review of Toxic Air Contaminants (6/15/05)	Ν
BAAQMD Regulation 2, Rule 6	Major Facility Review (05/02/01)	Y

#### Table III – Generally Applicable Requirements

Revision date: August 1, 2014

## III. Generally Applicable Requirements

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Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)
BAAQMD Regulation 2, Rule 9	Permits, Interchangeable Emissions Reduction Credits (04/07/99)	N
BAAQMD Regulation 3	Fees (6/5/02)	N
BAAQMD Regulation 4	Air Pollution Episode Plan (3/20/91)	N
SIP Regulation 4	Air Pollution Episode Plan (8/6/90)	Y
BAAQMD Regulation 5	Open Burning (3/6/02)	N
SIP Regulation 5	Open Burning (9/4/98)	Y
BAAQMD Regulation 6, Rule 1	Particulate Matter, General Requirements (12/5/07)	N
SIP Regulation 6	Particulate Matter and Visible Emissions (9/4/98)	Y
6-301	Ringelmann No. 1 Limitation	Y
6-303	Ringelmann No. 2 Limitation	Y
6-305	Visible Particles	Y
6-310	Particulate Weight Limitation	Y
6-311	General Operations	Y
6-401	Appearance of Emissions	Y
BAAQMD Regulation 7	Odorous Substances (3/17/82)	N
BAAQMD Regulation 8, Rule 1	Organic Compounds, General Provisions (6/15/94)	Y
BAAQMD Regulation 8, Rule 2	Organic Compounds, Miscellaneous Operations (7/20/05)	Ν
SIP Regulation 8, Rule 2	Organic Compounds – Miscellaneous Operations (3/22/95)	Y
SIP BAAQMD Regulation 8, Rule 3	Organic Compounds, Architectural Coatings (11/21/01)	Y
BAAQMD Regulation 8, Rule 4	General Solvent and Surface Coating Operations (10/16/02)	Y
BAAQMD Regulation 8, Rule 5	Organic Compounds, Storage of Organic Liquids (10/18/06)	N
SIP BAAQMD Regulation 8, Rule 5	Organic Compounds, Storage of Organic Liquids (11/27/02)	Y
BAAQMD Regulation 8, Rule 9	Organic Compounds, Vacuum Producing Systems (07/20/83)	Y
BAAQMD Regulation 8, Rule 10	Organic Compounds, Process Vessel Depressurization (7/20/83)	Y
8-10-401	Turnaround Records	Y
BAAQMD Regulation 8, Rule 15	Organic Compounds – Emulsified and Liquid Asphalts (6/1/94)	Y
BAAQMD Regulation 8, Rule 18	Organic Compounds, Equipment Leaks (1/7/98)	Y
BAAQMD Regulation 8, Rule 28	Organic Compounds, Episodic Releases From Pressure Relief Devices at Petroleum Refineries and Chemical Plants (3/18/98)	N
SIP BAAQMD Regulation 8, Rule 28	Organic Compounds, Pressure Relief Valves at Petroleum Refineries and Chemical Plants (12/9/94)	Y

## III. Generally Applicable Requirements

Table III Generally Applicable Requirements	Table III –	Generally	Applicable	Requirements
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Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)
BAAQMD Regulation 8, Rule 40	Organic Compounds - Aeration of Contaminated Soil and Removal of Underground Storage Tanks (6/15/05)	N
SIP Regulation 8, Rule 40	Organic Compounds - Aeration of Contaminated Soil and Removal of Underground Storage Tanks (4/19/01)	<u>Y</u>
BAAQMD Regulation 8, Rule 47	Organic Compounds - Air Stripping and Soil Vapor Extraction Operations (6/15/05)	N
SIP Regulation 8, Rule 47	Organic Compounds - Air Stripping and Soil Vapor Extraction Operations (4/26/95)	<u>Y</u>
BAAQMD Regulation 8, Rule 49	Organic Compounds, Aerosol Paint Products (12/20/95)	N
SIP BAAQMD Regulation 8, Rule 49	Organic Compounds, Aerosol Paint Products (3/22/95)	Y
SIP BAAQMD Regulation 8, Rule 51	Organic Compounds, Adhesive and Sealant Products (2/26/02)	Y
BAAQMD Regulation 8, Rule 51	Organic Compounds, Adhesive and Sealant Products (7/17/02)	N
BAAQMD Regulation 9, Rule 1	Inorganic Gaseous Pollutants - Sulfur Dioxide (3/15/95)	Ν
SIP Regulation 9, Rule 1	Inorganic Gaseous Pollutants - Sulfur Dioxide (6/8/99)	Y
BAAQMD Regulation 10	NSPS Incorporation by Reference, General Provisions (2/16/00)	N
BAAQMD Regulation 11, Rule 2	Hazardous Pollutants, Asbestos Demolition/Renovation and Manufacturing (10/7/98)	Ν
BAAQMD Regulation 11, Rule 12	NESHAP Incorporation by Reference, 40 CFR 61 Subpart FF Benzene Waste (1/5/94)	Ν
SIP BAAQMD Regulation 12, Rule 4	Miscellaneous Standards of Performance Sandblasting (9/2/81)	Y
BAAQMD Regulation 12, Rule 4	Miscellaneous Standards of Performance Sandblasting (7/11/90)	N
12-4-303	Performance Standards for Abrasive Blasting For Traffic Markers	Y
12-4-304	Performance Standards for Other Abrasive Blasting (7/11/90)	Ν
12-4-305	Performance Standards for Abrasives	Y
12-4-306	Certification of Abrasives	Y
12-4-308	Facility Blasting Operations (7/11/90)	Ν
SIP Regulation 12, Rule 4	Provisions No Longer in Current Rule Miscellaneous Standards of Performance Sandblasting (9/2/81)	Y
12-4-301	Ringelmann No. 1 Limitation	Y
12-4-304	Performance Standards for Other Abrasive Blasting	Y
California Health and Safety Code Section 41750 et seq.	Portable Equipment	N

## III. Generally Applicable Requirements

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)
California Health and Safety Code Section 44300 et seq.	Air Toxics "Hot Spots" Information and Assessment Act of 1987	Ν
CAC Title 17	State Provisions for Sandblasting	Ν
California Code of Regulations Title 17, Section 93115	Airborne Toxic Control Measure for Stationary Compression Ignition Engines (11/8/04)	Ν
California Health and Safety Code Title 17, Section 93116	Airborne Toxic Control Measure for Diesel Particulate Matter from Portable Engines Rated at 50 Horsepower and Greater	Ν
40 CFR Part 61, Subpart M	National Emission Standards for Hazardous Air Pollutants – National Emission Standard for Asbestos (6/19/95)	Y
Title 40 Part 68	Chemical Accident Prevention Provisions (1/31/94)	Y
EPA Regulation 40 CFR 82	Protection of Stratospheric Ozone (2/21/95)	
40 CFR 82 Subpart F 82.156	Recycling and Emissions Reductions – Required Practices (8/8/95)	Y
40 CFR 82 Subpart F 82.161	Recycling and Emissions Reductions – Technician Certification (11/9/94)	Y
40 CFR 82 Subpart F 82.166	Recycling and Emissions Reductions – Reporting and Record Keeping Provisions (8/8/95)	Y

#### **Table III – Generally Applicable Requirements**

#### IV. SOURCE-SPECIFIC APPLICABLE REQUIREMENTS

The permit holder shall comply with all applicable requirements, including those specified in the BAAQMD and SIP Rules and Regulations and other federal requirements cited below. The requirements cited in the following tables apply in a specific manner to the indicated source(s).

The dates in parentheses in the Title column identify the versions of the regulations being cited and are, as applicable:

1. BAAQMD regulation(s): The date(s) of adoption or most recent amendment of the regulation by the District Board of Directors

2. Any federal requirement, including a version of a District regulation that has been approved into the SIP: The most recent date of EPA approval of any portion of the rule, encompassing all actions on the rule through that date

The full text of each permit condition cited is included in Section VI, Permit Conditions, of this permit. The full language of SIP requirements is on EPA Region 9's website. The address is:

http://yosemite.epa.gov/r9/r9sips.nsf/Agency?ReadForm&count=500&state=California&cat= Bay+Area+Air+Quality+Management+District-Agency-Wide+Provisions.. All other text may be found in the regulations themselves.

#### Table IV.Abatement Source-specific Applicable Requirements <u>Abatement</u>

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
BAAQMD Condition 8869			
Part 1	95% destruction efficiency and minimum temperature of 1500F (applies to A620, A-627, and A-628)	Y	
Part 2	95% destruction efficiency and minimum temperature of 1565F (applies to A-622, A-623, and A-624	Y	
Part 3	Temperature and flow monitor	Y	
Part 4	Record keeping	Y	
40 CFR	General Provisions	Y	
Part 60			
Subpart A			
60.13(i)	Alternative monitoring provisions	Y	
60.18	General control device requirements	Y	
NSPS	Standards of Performance for Petroleum Refineries (6/24/08)		

#### A-0620, A-0622, A-0623, A-0624, A-0627, A-0628

# Table IV.Abatement Source-specific Applicable Requirements Abatement

A-0620, A-0622, A-0623, A-0624, A-0627, A-0628

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
40 CFR 60 Subpart J			
60.104	Standards for Sulfur Oxides: Compliance Schedule	Y	
60.104(a)(1)	Fuel gas H2S concentration limited to 230 mg/dscm (0.10 gr/dscf) except for gas burned as a result of process upset or gas burned at flares from relief valve leaks or other emergency malfunctions	Y	

 Table IV.A.1.1 Combustion (Cogeneration))

# Table IV.A.1.1 Combustion Source-specific Applicable Requirements Cogeneration

S-4350 Gas Turbine with Steam Injection Cogeneration Train 1000 and S-4351 Heat Recovery Steam Generation Train 1000 abated by A-0070 CO/HC Catalyst and A-0072 SCR Nox Reduction Catalyst, S-4352 Gas Turbine with Steam Injection Cogeneration Train 2000 and S-4353 Heat Recovery Steam Generation Train 2000 abated by A-0071 CO/HC Catalyst and A-0073 SCR Nox Reduction Catalyst

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date	
BAAQMD Regulation 1	General Provisions and Definitions (7/9/08)			
1-107	Commingled Exhaust: Standard applies to System Y			
1-520	Continuous Emission Monitoring Y			
1-520.8	Monitors pursuant to Regulation 2-1-403 Y			
1-521	Monitoring May Be required Y			
1-522	Continuous Emission Monitoring and Recordkeeping Procedures N			
1-602	Area and Continuous Monitoring Requirements	Ν		
SIP Regulation 1	PROVISIONS NO LONGER IN CURRENT RULE General Provisions and Definitions (6/28/99 {adopted 10/7/98})			
1-522	Continuous Emission Monitoring and Recordkeeping Procedures Y			
BAAQMD Regulation 2 Rule 1	Regulation 2, Rule 1 – Permits, General Requirements (11/19/08; SIP approved 1/26/99 {adopted 11/1/89}) [Applicable if Subject to CEM Monitoring by permit condition (BACT)]			
2-1-403	Permit conditions-measurement of emissions	Ν		
2-1-501	Monitors	Y		

# Table IV.A.1.1 Combustion Source-specific Applicable Requirements Cogeneration

S-4350 Gas Turbine with Steam Injection Cogeneration Train 1000 and S-4351 Heat Recovery Steam Generation Train 1000 abated by A-0070 CO/HC Catalyst and A-0072 SCR Nox Reduction Catalyst, S-4352 Gas Turbine with Steam Injection Cogeneration Train 2000 and S-4353 Heat Recovery Steam Generation Train 2000 abated by A-0071 CO/HC Catalyst and A-0073 SCR Nox Reduction Catalyst

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
SIP Regulation 2, Rule 1	PROVISIONS NO LONGER IN CURRENT RULE Permits, General Requirements (1/26/99 {adopted 11/01/89}) [Applicable if Subject to CEM Monitoring by permit condition (BACT)]		
2-1-403	Permit conditions-measurement of emissions	Y	
BAAQMD Manual of Procedures, Volume V	Continuous Emission Monitoring Policy and Procedures (1/20/82)	Y	
BAAQMD Regulation 6-1	Particulate Matter and Visible Emissions (12/05/07)		
6-1-301	Ringelmann No. 1 Limitation	Ν	
6-1-305	Visible Particles	Ν	
6-1-310	Particle Weight Limitation	Ν	
6-1-310.3	Heat Transfer Operation	Ν	
SIP	Particulate Matter and Visible Emissions (12/1	<b>19/90</b> )	
BAAQMD Regulation 6			
6-301	Ringelmann No. 1 Limitation	Y	
6-305	Visible Particles	Y	
6-310	Particle Weight Limitation	Y	
6-310.3	Heat Transfer Operation	Y	
BAAQMD Regulation 9 Rule 1	Inorganic Gaseous Pollutants – Sulfur Dioxide (3/15/95; SIP approved 6/	/9/99 {version adop	oted 5/20/92})
9-1-304	Fuel Burning (Liquid and Solid Fuels)	Y	
BAAQMD Regulation 9 Rule 9	Inorganic Gaseous Pollutants – Nitrogen Oxides from Stationary Gas Turbines (12/6/06)		
9-9-301.1	Emission Limits – General (until 1/1/2010)	Ν	
9-9-301.2	Emission Limits – General;	Ν	
9-9-301.3	Emission Limits - General; Turbines that Burn Mixtures of Fuels	Ν	
9-9-301.4	Emission Limits – General; Rebuttal Option for Alternative NOx Emission StandardLimits	Ν	
9-9-401	Efficiency Certification	Y	

# Table IV.A.1.1 Combustion Source-specific Applicable Requirements Cogeneration

S-4350 Gas Turbine with Steam Injection Cogeneration Train 1000 and S-4351 Heat Recovery Steam Generation Train 1000 abated by A-0070 CO/HC Catalyst and A-0072 SCR Nox Reduction Catalyst, S-4352 Gas Turbine with Steam Injection Cogeneration Train 2000 and S-4353 Heat Recovery Steam Generation Train 2000 abated by A-0071 CO/HC Catalyst and A-0073 SCR Nox Reduction Catalyst

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
9-9-501	Continuous Emission Monitoring and Recordkeeping(CEM)	Ν	
SIP BAAQMD Regulation 9 Rule 9	Inorganic Gaseous Pollutants – Nitrogen Oxides from Stationary Gas Turbines (9/21/94)	Y	
9-9-301	Emission Limits – General	Y	
9-9-301.3	Emission Limits	Y	
9-9-401	Efficiency Certification	Y	
9-9-501	Continuous Emission Monitoring (CEM)	Y	
BAAQMD Regulation 9 Rule 10	Inorganic Gaseous Pollutants – Nitrogen Oxides and Carbon Monoxide from Boilers, Steam Generators, and Process Heaters in Petroleum Refineries (7/17/02)		
9-10-110.3	Exemption: Waste heat recovery boilers associated with gas turbines	Y	
40 CFR Part 60	Standards of Performance for Petroleum Refineries (6/24/08)		
Subpart J			
60.104	Standards for Sulfur Oxides: Compliance Schedule	Y	
60.104(a)(1)	Fuel gas H2S concentration limited to 230 mg/dscm (0.10 gr/dscf) except for gas burned as a result of process upset or gas burned at flares from relief valve leaks or other emergency malfunctions	Y	
60.105	Monitoring of Emissions and Operations	Y	
60.105(a)(4)	Monitoring requirement for H2S (dry basis) in fuel gas prior to combustion (in lieu of separate combustion device exhaust SO2 monitors as required by 60.105(a)(3))	Y	
60.105(e)(3)	Excess $SO_2$ emission definitions for 60.7(c)	Y	
NSPS 40 CFR 60 Subpart GG	Standards of Performance for Stationary Gas Turbines (2/24/06)		
60.333	Performance Standards, SO2	Y	
60.333 (a)	SO2 Volumetric Emission Limit [option] or	Y	
60.333 (b)	Fuel Sulfur Limit [option]	Y	
60.334	Monitoring Requirements	Y	
60.334 (h,i)	Monitoring and Frequency	Y	

# Table IV.A.1.1 Combustion Source-specific Applicable Requirements Cogeneration

S-4350 Gas Turbine with Steam Injection Cogeneration Train 1000 and S-4351 Heat Recovery Steam Generation Train 1000 abated by A-0070 CO/HC Catalyst and A-0072 SCR Nox Reduction Catalyst, S-4352 Gas Turbine with Steam Injection Cogeneration Train 2000 and S-4353 Heat Recovery Steam Generation Train 2000 abated by A-0071 CO/HC Catalyst and A-0073 SCR Nox Reduction Catalyst

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
NSPS 40 CFR 60 Subpart Db	Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units [applies for our Duct Burners (i.e., Heat Recovery Steam Generator's=HRSG's S-4351 and S-4352) (1/28/09)		
60.44b(a)(4)	NOx limits for duct burner used in combined cycle system	Y	
60.44b (e)	Standard for Nitrogen Oxides	Y	
60.44b (h)	Nox Limit	Y	
60.44b (I)	Nox Limit, 30-Day Rolling Average	Y	
60.48b (h)	Not subject to requirement to install or operate Nox CEM	Y	
60.49b (a)	Notification	Y	
60.49b (d)	Records of fuel combusted	Y	
60.49b (g)	Maintain Records	Y	
60.49b (o)	Maintain Records	Y	
Condition #469	Refinery Cap (RLOP Cap Monthly Compliance Report)	Y	
Condition #1162	Permit condition parts are listed below:		
Part 1	Natural gas or LPG only (applies to S-4350 and S-4352)	Y	
Part 2	Refinery fuel gas or natural gas only (applies to S-4351 and S-4353)	Y	
Part 3	Diesel fuel < 864 gas-turbine hours/yr (applies to S-4350 and S-4352)	Y	
Part 4	Not operate when turbine not operating (applies to S-4351 and S-4353)	Y	
Part 5	Max design capacity (applies to S-4350, S-4351, S-4352, S-4353)	Y	
Part 6	Nox < 10 ppm (applies to S-4350, S-4351, S-4352, S-4352, A0072, A0073)	Y	
Part 8	Monitor fuel & steam (applies to S-4350, S-4351, S-4352, S-4353)	Y	
Part 9	Diesel S < 0.05% (applies to S-4350 and S-4352)	Y	
Part 10	Reduce CO 80%(apply to S-4350, S-4351, S-4352, S-4353, A0070, A0071)	Y	
Part 11	Reduce HC 50%(apply to S-4350, S-4351, S-4352, S-4353, A0070, A0071)	Y	
Part 12	Nox, CO, and either a O2 or a CO2 CEMS (applies to S-4350, S-4351, S-4352, S-4353).	Y	
Part 16	Maintain records (applies to S-4350, S-4351, S-4352, S-4353).	Y	
Part 18	NH3 < 20 ppm (applies to S-4350, S-4351, S-4352, S-4353).	Y	
Part 20	If exceed emissions offset(applies to S-4350, S-4351, S-4352, S-4353).	Y	
Condition 22262	Applies to S-4350 and S-4352	Y	

# Table IV.A.1.1 Combustion Source-specific Applicable Requirements Cogeneration

S-4350 Gas Turbine with Steam Injection Cogeneration Train 1000 and S-4351 Heat Recovery Steam Generation Train 1000 abated by A-0070 CO/HC Catalyst and A-0072 SCR Nox Reduction Catalyst, S-4352 Gas Turbine with Steam Injection Cogeneration Train 2000 and S-4353 Heat Recovery Steam Generation Train 2000 abated by A-0071 CO/HC Catalyst and A-0073 SCR Nox Reduction Catalyst

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
Part 1	Visible emissions inspection	Y	
Condition 22923	Sources S-4351 and S-4353 subject to NSPS subpart J	Y	
Condition #23201	Applies to S-4350 and S-4352	Y	
Part 1	Sources subject to NSPS Subparts A and J	Y	

#### Table IV.A.2.1 Combustion (Flares)

# Table IV.A.2.1 Combustion Source-specific Applicable Requirements

#### <u>Flares</u>

#### S-6010 LSFO Flare, S-6012 V-282 South Isomax Flare, S-6013 North Isomax Flare V-281, S-6015 LSFO Elevated Flare, S-6016 FCC Flare V-731, S-6017 Alkane Flare, SRU, S-6019 V-732 Alky Flare, S-6039 V-3501 Flare

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
BAAQMD Regulation 6-1	Particulate Matter and Visible Emissions (12/0	95/07)	
6-1-301	Ringelmann No. 1 Limitation	Ν	
6-1-305	Visible Particles	Ν	
6-1-310	Particle Weight Limitation	Ν	
6-1-310.3	Heat Transfer Operation	Ν	
SIP	Particulate Matter and Visible Emissions (12/19/90)	Y	
BAAQMD Regulation 6			
6-301	Ringelmann No. 1 Limitation	Y	
6-305	Visible Particles	Y	
6-310	Particulate Weight Limitation	Y	
6-311	Particulate Matter Emission Rate	Y	
6-401	Appearance of Emissions	Y	

# Table IV.A.2.1 Combustion Source-specific Applicable Requirements

#### Flares

#### S-6010 LSFO Flare, S-6012 V-282 South Isomax Flare, S-6013 North Isomax Flare V-281, S-6015 LSFO Elevated Flare, S-6016 FCC Flare V-731, S-6017 Alkane Flare, SRU, S-6019 V-732 Alky Flare, S-6039 V-3501 Flare

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
BAAQMD	Flare Monitoring at Petroleum Refineries (06/04/03)		
Regulation 12			
Rule 11			
12-11-401	Flare Data Reporting Requirements	Ν	
12-11-402	Flow Verification Report	Ν	6/4/04
12-11-501	Vent Gas Flow Monitoring	Ν	12/4/04
12-11-502	Vent Gas Composition Monitoring	Ν	
12-11-502.3	Vent Gas Composition Monitoring	Ν	03/4/04
12-11-503	Pilot Monitoring	Ν	
12-11-504	Pilot and Purge Gas Monitoring	Ν	
12-11-505	Recordkeeping Requirements	Ν	
12-11-506	General Monitoring Requirements	Ν	
12-11-506.1	Periods of Inoperation of Vent Gas Monitoring	Ν	09/4/04
12-11-507	Video Monitoring	Ν	12/4/03
BAAQMD	Flares at Petroleum Refineries (4/5/06)		
Regulation 12			
Rule 12			
12-12-301	Flare Minimization Plan Requirements	N	
12-12-401	Submission of Flare Minimization Plans	Ν	
12-12-403	Review and Approval of Flare Minimization Plans	N	
12-12-404	Update of Flare Minimization Plans	N	
12-12-405	Notification of Flaring	N	
12-12-406	Determination and Reporting of Cause	N	
12-12-408	Designation of Confidential Information	Ν	
12-12-501	Water Seal Integrity Monitoring	Ν	
40 CFR Part 60 Subpart A	General Provisions		
60.11	Compliance with standards and maintenance requirements	Y	
60.11(a)	Compliance determined by performance tests	Y	
60.11(d)	Control devices operated using good air pollution control practice	Y	

# Table IV.A.2.1 Combustion Source-specific Applicable Requirements

#### Flares

#### S-6010 LSFO Flare, S-6012 V-282 South Isomax Flare, S-6013 North Isomax Flare V-281, S-6015 LSFO Elevated Flare, S-6016 FCC Flare V-731, S-6017 Alkane Flare, SRU, S-6019 V-732 Alky Flare, S-6039 V-3501 Flare

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
40 CFR Part 60	Standards of Performance for Petroleum Refineries (6/24/08)		
Subpart J			
60.104	Standards for Sulfur Oxides: Compliance Schedule	Y	
60.104(a)(1)	Fuel gas H2S concentration limited to 230 mg/dscm (0.10 gr/dscf) except for gas burned as a result of process upset or gas burned at flares from relief valve leaks or other emergency malfunctions	Y	
60.105	Monitoring of Emissions and Operations	Y	
60.105(a)(4)	Monitoring requirement for H2S (dry basis) in fuel gas prior to combustion (in lieu of separate combustion device exhaust SO2 monitors as required by 60.105(a)(3))	Y	
60.105(e)(3)	Excess SO <sub>2</sub> emission definitions for 60.7(c)	Y	
Condition #469, part 15	The smokeless capacity of S-6015 shall not be less than 240,000 lb/hr. (Basis: RACT)	Y	
Condition #18137	Throughput Limits	Ν	
Condition #13370 Part 3	S-6016 & S-6019 flare pilots shall be fueled continuously with natural gas or refinery fuel gas. The flare will be operated only during periods of emergency upset or breakdown. Routinely vented process gases may not be flared.	Y	
Condition #13370 Part 4	S-6016 & S-6019 flaring shall be steam-assisted to prevent smoking.	Y	
Condition 18656	S-6010, S-6012, S-6013, S-6015, S-6017, S-6019, S-6039		
Part 1	Vent gas limits	Y	
Part 2	Vent gas record keeping	Y	
Part 3	Monitoring of Smoking Flares	Y	
Part 4	Procedures for inspecting flares during an event	Y	
Part 5	Visual Inspection of smoking flares	Y	
Part 6	Records of flaring events	Y	
Part 7	S-6015 and S-6039 only to be used for burning process upset gases or fuel gas due to relief valve leakage or other emergency malfunctions (40 CFR 60.104 $(a)(1)$ )	Y	
Condition 23735	Subjects all refinery flares to NSPS subparts A and J	Y	

# Table IV.A.2.1 Combustion Source-specific Applicable Requirements

#### <u>Flares</u>

#### S-6010 LSFO Flare, S-6012 V-282 South Isomax Flare, S-6013 North Isomax Flare V-281, S-6015 LSFO Elevated Flare, S-6016 FCC Flare V-731, S-6017 Alkane Flare, SRU, S-6019 V-732 Alky Flare, S-6039 V-3501 Flare

	Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
ſ	Condition #24921	Applies to S-6010 & S-6015	Ν	

Table IV.A.3.1 Combustion (Furnaces)

# Table IV.A.3.1 Combustion Source-specific Applicable Requirements

#### Furnaces for which both BAAQMD Regulation 9 Rule 10 and NSPS do not apply

#### S-4107 F-1 Heat Treating Furnace # 1 Boiler Shop (Post Weld Heat Treating Furnace), S-4192 F-2170 Tail Gas Heater #1 SRU, S-4193 F-2270 Tail Gas Heater #2 SRU, S-4194 F-2370 Tail Gas Heater #3 SRU

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
BAAQMD Regulation 1	General Provisions and Definitions (7/9/08)		
1-521	Monitoring may be required	Y	
BAAQMD Regulation 6-1	Particulate Matter and Visible Emissions (12/	05/07)	
6-1-301	Ringelmann No. 1 Limitation	Ν	
6-1-305	Visible Particles	Ν	
6-1-310	Particle Weight Limitation	Ν	
6-1-310.3	Heat Transfer Operation	N	
SIP	Particulate Matter and Visible Emissions (12/2	19/90)	
BAAQMD Regulation 6			
6-301	Ringelmann No. 1 Limitation	Y	
6-305	Visible Particles	Y	
6-310	Particle Weight Limitation	Y	
6-310.3	Heat transfer operations	Y	
Condition #469	S-4107, S-4192, S-4193, S-4194 [Refinery Cap]	Y	

Table IV.A.3.2 Combustion (Furnaces)

# Table IV.A.3.2 Combustion Source-Specific Applicable Requirements

Furnaces for which BAAQMD Regulation 9 Rule 10 and NSPS Subpart J both apply

S-4032 F-101 FCC GHT #3 Cat Furnace, S-4033 F-102 Penhex Isom #3 Cat Furnace, S-4039 F-3560 #4 Cat Furnace, S-4040 F-3570 #4 Cat Furnace, S-4041 F-3580 #4 Cat Furnace, S-4042 F-550 #5 Cat Furnace, S-4043 F-560 #5 Cat Furnace, S-4044 F-570 #5 Cat Furnace, S-4045 F-580 #5 Cat Furnace, S-4046 F-1 H.O. Heater-Asphalt Plant, S-4059 F-247 Furnace JHT MDH LSFO-W, S-4060 F-210 A&B Furnace JHT MDH LSFO-W, S-4061 F-410 #5 Naphtha Hydrotreater LSFO-W, S-4062 F-447 #5 Naphtha Hydrotreater LSFO-W, S-4068 F-1610 DHT (VGO Desulfinizer) Furnace LSFO-E, S-4069 F-1670 Aromatic Saturator (Formerly VGO F-1660) DHT Furnace LSFO-E, S-4070 F-1100A 4 Crude LSFO-E, S-4071 F-1100B 4 Crude LSFO-E, S-4072 F-1160 4 Crude LSFO-E, S-4153 F-110 Asphalt Solution Heater SDA Isomax, S-4154 F-120 Asphalt Solution Heater SDA Isomax, S-4155 F-135 Hot Oil Furnace SDA Rose DAO Solution Heater, S-4156 F-320 Naphtha Vaporizer H2 Plant Isomax, S-4157 F-330 Naphtha Vaporizer H2 Plant Isomax, S-4158 F-340 Natural Gas Heater H2 Plant Isomax, S-4162 F-520 TKN Feed Furnace Isomax, S-4163 F-530 TKN Feed Furnace Isomax, S-4164 F-630 Isocracker Feed Furnace Isomax, S-4165 F-620 Isocracker Feed Furnace Isomax, S-4166 F-610 Isocracker Feed Furnace Isomax, S-4167 F-710 TKC Fractionator Isomax, S-4330 F1610 HNHF Reactor RLOP 16 Plant abated by A-0065 SCR, S-4331 F1310 LNHF Reactor RLOP abated by A-0065 SCR, S-4332 F1360 Hot Oil Furnace RLOP abated by

A-0065 SCR, S-4333 F-1750 TKC Vacuum Furnace abated by A-0066 SCR, S-4334 F-1200 Furnace LNC Atmospheric RLOP 12 Plant abated by A-0066 SCR, S-4335 F-1250 Furnace LNC Vacuum RLOP 12 Plant abated by A-0066 SCR, S-4336 F-1410 HNC Reactor RLOP abated by A-0067 SCR, S-4337 F-1500 HNC Atmospheric RLOP abated by A-0067 SCR, S-4338 F-1550 HNC Vacuum RLOP abated by A-0067 SCR, S-4339 F-1110 LNC Reactor RLOP abated by A-0067 SCR

S-4038 F-3550 #4 Cat Furnace, S-4152 F-100 Asphalt Solution Heater SDA Isomax, S-4159 F-410 TKC Feed Furnace TKC Isomax, S-4160 F-420 TKC Feed Furnace TKC Isomax, S-4161 F-510 TKN Feed Furnace Isomax, S-4168 F-730 Isocracker Splitter Feed Isomax, S-4169 F-731 Isocracker Reboiler Isomax,

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
BAAQMD Regulation 1	General Provisions and Definitions (7/9/	08)	
1-520	Continuous Emission Monitoring [applies to all but S-4068, S-4069, S- 4154, S-4158, S-4188, S-4189]	Ν	
1-520.1	Nox CEM Required for Steam Generators with Heat Input Capacity > 250 MMBtu/Hr [applies to S-4070-S-4072]	Ν	
1-520.8	Monitors pursuant to Regulation 2-1-403 [applies to all but S-4068, S-4069, S-4154, S-4158, S-4188, S-4189]	Ν	
1-521	Monitoring May Be required	Y	

# Table IV.A.3.2 Combustion Source-Specific Applicable Requirements

#### Furnaces for which BAAQMD Regulation 9 Rule 10 and NSPS Subpart J both apply

S-4032 F-101 FCC GHT #3 Cat Furnace, S-4033 F-102 Penhex Isom #3 Cat Furnace, S-4039 F-3560 #4 Cat Furnace, S-4040 F-3570 #4 Cat Furnace, S-4041 F-3580 #4 Cat Furnace, S-4042 F-550 #5 Cat Furnace, S-4043 F-560 #5 Cat Furnace, S-4044 F-570 #5 Cat Furnace, S-4045 F-580 #5 Cat Furnace, S-4046 F-1 H.O. Heater-Asphalt Plant, S-4059 F-247 Furnace JHT MDH LSFO-W, S-4060 F-210 A&B Furnace JHT MDH LSFO-W, S-4061 F-410 #5 Naphtha Hydrotreater LSFO-W, S-4062 F-447 #5 Naphtha Hydrotreater LSFO-W, S-4068 F-1610 DHT (VGO Desulfinizer) Furnace LSFO-E, S-4069 F-1670 Aromatic Saturator (Formerly VGO F-1660) DHT Furnace LSFO-E, S-4070 F-1100A 4 Crude LSFO-E, S-4071 F-1100B 4 Crude LSFO-E, S-4072 F-1160 4 Crude LSFO-E, S-4153 F-110 Asphalt Solution Heater SDA Isomax, S-4154 F-120 Asphalt Solution Heater SDA Isomax, S-4155 F-135 Hot Oil Furnace SDA Rose DAO Solution Heater, S-4156 F-320 Naphtha Vaporizer H2 Plant Isomax, S-4157 F-330 Naphtha Vaporizer H2 Plant Isomax, S-4158 F-340 Natural Gas Heater H2 Plant Isomax, S-4162 F-520 TKN Feed Furnace Isomax, S-4163 F-530 TKN Feed Furnace Isomax, S-4164 F-630 Isocracker Feed Furnace Isomax, S-4165 F-620 Isocracker Feed Furnace Isomax, S-4166 F-610 Isocracker Feed Furnace Isomax, S-4167 F-710 TKC Fractionator Isomax, S-4330 F1610 HNHF Reactor RLOP 16 Plant abated by A-0065 SCR, S-4331 F1310 LNHF Reactor RLOP abated by A-0065 SCR, S-4332 F1360 Hot Oil Furnace RLOP abated by A-0065 SCR, S-4333 F-1750 TKC Vacuum Furnace abated by

A-0066 SCR, S-4334 F-1200 Furnace LNC Atmospheric RLOP 12 Plant abated by A-0066 SCR, S-4335 F-1250 Furnace LNC Vacuum RLOP 12 Plant abated by A-0066 SCR, S-4336 F-1410 HNC Reactor RLOP abated by A-0067 SCR, S-4337 F-1500 HNC Atmospheric RLOP abated by A-0067 SCR, S-4338 F-1550 HNC Vacuum RLOP abated by A-0067 SCR, S-4339 F-1110 LNC Reactor RLOP abated by A-0067 SCR

S-4038 F-3550 #4 Cat Furnace, S-4152 F-100 Asphalt Solution Heater SDA Isomax, S-4159 F-410 TKC Feed Furnace TKC Isomax, S-4160 F-420 TKC Feed Furnace TKC Isomax, S-4161 F-510 TKN Feed Furnace Isomax, S-4168 F-730 Isocracker Splitter Feed Isomax, S-4169 F-731 Isocracker Reboiler Isomax,

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
1-522	Continuous Emission Monitoring and Recordkeeping Procedures	N	
1-523	Parametric Monitoring and Recordkeeping Procedures [all except S-4156- S-4157]	Ν	
1-602	Area and Continuous Monitoring Requirements	N	
SIP Regulation 1	PROVISIONS NO LONGER IN CURRENT	RULE	
	General Provisions and Definitions (6/28/	<b>'99</b> )	
1-520	Continuous Emission Monitoring [applies to all but S-4068, S-4069, S-4154, S-4158, S-4188, S-4189]	Y	
1-520.1	Nox CEM Required for Steam Generators with Heat Input Capacity > 250 MMBtu/Hr [applies to S-4070-S-4072]	Y	

# Table IV.A.3.2 Combustion Source-Specific Applicable Requirements

#### Furnaces for which BAAQMD Regulation 9 Rule 10 and NSPS Subpart J both apply

S-4032 F-101 FCC GHT #3 Cat Furnace, S-4033 F-102 Penhex Isom #3 Cat Furnace, S-4039 F-3560 #4 Cat Furnace, S-4040 F-3570 #4 Cat Furnace, S-4041 F-3580 #4 Cat Furnace, S-4042 F-550 #5 Cat Furnace, S-4043 F-560 #5 Cat Furnace, S-4044 F-570 #5 Cat Furnace, S-4045 F-580 #5 Cat Furnace, S-4046 F-1 H.O. Heater-Asphalt Plant, S-4059 F-247 Furnace JHT MDH LSFO-W, S-4060 F-210 A&B Furnace JHT MDH LSFO-W, S-4061 F-410 #5 Naphtha Hydrotreater LSFO-W, S-4062 F-447 #5 Naphtha Hydrotreater LSFO-W, S-4068 F-1610 DHT (VGO Desulfinizer) Furnace LSFO-E, S-4069 F-1670 Aromatic Saturator (Formerly VGO F-1660) DHT Furnace LSFO-E, S-4070 F-1100A 4 Crude LSFO-E, S-4071 F-1100B 4 Crude LSFO-E, S-4072 F-1160 4 Crude LSFO-E, S-4153 F-110 Asphalt Solution Heater SDA Isomax, S-4154 F-120 Asphalt Solution Heater SDA Isomax, S-4155 F-135 Hot Oil Furnace SDA Rose DAO Solution Heater, S-4156 F-320 Naphtha Vaporizer H2 Plant Isomax, S-4157 F-330 Naphtha Vaporizer H2 Plant Isomax, S-4158 F-340 Natural Gas Heater H2 Plant Isomax, S-4162 F-520 TKN Feed Furnace Isomax, S-4163 F-530 TKN Feed Furnace Isomax, S-4164 F-630 Isocracker Feed Furnace Isomax, S-4165 F-620 Isocracker Feed Furnace Isomax, S-4166 F-610 Isocracker Feed Furnace Isomax, S-4167 F-710 TKC Fractionator Isomax, S-4330 F1610 HNHF Reactor RLOP 16 Plant abated by A-0065 SCR, S-4331 F1310 LNHF Reactor RLOP abated by A-0065 SCR, S-4332 F1360 Hot Oil Furnace RLOP abated by A-0065 SCR, S-4333 F-1750 TKC Vacuum Furnace abated by

A-0066 SCR, S-4334 F-1200 Furnace LNC Atmospheric RLOP 12 Plant abated by A-0066 SCR, S-4335 F-1250 Furnace LNC Vacuum RLOP 12 Plant abated by A-0066 SCR, S-4336 F-1410 HNC Reactor RLOP abated by A-0067 SCR, S-4337 F-1500 HNC Atmospheric RLOP abated by A-0067 SCR, S-4338 F-1550 HNC Vacuum RLOP abated by A-0067 SCR, S-4339 F-1110 LNC Reactor RLOP abated by A-0067 SCR

S-4038 F-3550 #4 Cat Furnace, S-4152 F-100 Asphalt Solution Heater SDA Isomax, S-4159 F-410 TKC Feed Furnace TKC Isomax, S-4160 F-420 TKC Feed Furnace TKC Isomax, S-4161 F-510 TKN Feed Furnace Isomax, S-4168 F-730 Isocracker Splitter Feed Isomax, S-4169 F-731 Isocracker Reboiler Isomax,

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
1-520.8	Monitors pursuant to Regulation 2-1-403 [applies to all but S-4068, S-4154, S-4158, S-4188, S-4189]	Y	
1-521	Monitoring May Be required	Y	
1-522	Continuous Emission Monitoring and Recordkeeping Procedures	Y	
1-523	Parametric Monitoring and Recordkeeping Procedures [all except S-4156- S-4157]	Y	
1-602	Area and Continuous Monitoring Requirements	Y	
BAAQMD Regulation 2 Rule 1	Regulation 2, Rule 1 – Permits, General Requirements (11/19/08; Sl 11/01/89})	P approved 1/26/9	9 {adopted

# Table IV.A.3.2 Combustion Source-Specific Applicable Requirements

#### Furnaces for which BAAQMD Regulation 9 Rule 10 and NSPS Subpart J both apply

S-4032 F-101 FCC GHT #3 Cat Furnace, S-4033 F-102 Penhex Isom #3 Cat Furnace, S-4039 F-3560 #4 Cat Furnace, S-4040 F-3570 #4 Cat Furnace, S-4041 F-3580 #4 Cat Furnace, S-4042 F-550 #5 Cat Furnace, S-4043 F-560 #5 Cat Furnace, S-4044 F-570 #5 Cat Furnace, S-4045 F-580 #5 Cat Furnace, S-4046 F-1 H.O. Heater-Asphalt Plant, S-4059 F-247 Furnace JHT MDH LSFO-W, S-4060 F-210 A&B Furnace JHT MDH LSFO-W, S-4061 F-410 #5 Naphtha Hydrotreater LSFO-W, S-4062 F-447 #5 Naphtha Hydrotreater LSFO-W, S-4068 F-1610 DHT (VGO Desulfinizer) Furnace LSFO-E, S-4069 F-1670 Aromatic Saturator (Formerly VGO F-1660) DHT Furnace LSFO-E, S-4070 F-1100A 4 Crude LSFO-E, S-4071 F-1100B 4 Crude LSFO-E, S-4072 F-1160 4 Crude LSFO-E, S-4153 F-110 Asphalt Solution Heater SDA Isomax, S-4154 F-120 Asphalt Solution Heater SDA Isomax, S-4155 F-135 Hot Oil Furnace SDA Rose DAO Solution Heater, S-4156 F-320 Naphtha Vaporizer H2 Plant Isomax, S-4157 F-330 Naphtha Vaporizer H2 Plant Isomax, S-4158 F-340 Natural Gas Heater H2 Plant Isomax, S-4162 F-520 TKN Feed Furnace Isomax, S-4163 F-530 TKN Feed Furnace Isomax, S-4164 F-630 Isocracker Feed Furnace Isomax, S-4165 F-620 Isocracker Feed Furnace Isomax, S-4166 F-610 Isocracker Feed Furnace Isomax, S-4167 F-710 TKC Fractionator Isomax, S-4330 F1610 HNHF Reactor RLOP 16 Plant abated by A-0065 SCR, S-4331 F1310 LNHF Reactor RLOP abated by A-0065 SCR, S-4332 F1360 Hot Oil Furnace RLOP abated by A-0065 SCR, S-4333 F-1750 TKC Vacuum Furnace abated by

A-0066 SCR, S-4334 F-1200 Furnace LNC Atmospheric RLOP 12 Plant abated by A-0066 SCR, S-4335 F-1250 Furnace LNC Vacuum RLOP 12 Plant abated by A-0066 SCR, S-4336 F-1410 HNC Reactor RLOP abated by A-0067 SCR, S-4337 F-1500 HNC Atmospheric RLOP abated by A-0067 SCR, S-4338 F-1550 HNC Vacuum RLOP abated by A-0067 SCR, S-4339 F-1110 LNC Reactor RLOP abated by A-0067 SCR

S-4038 F-3550 #4 Cat Furnace, S-4152 F-100 Asphalt Solution Heater SDA Isomax, S-4159 F-410 TKC Feed Furnace TKC Isomax, S-4160 F-420 TKC Feed Furnace TKC Isomax, S-4161 F-510 TKN Feed Furnace Isomax, S-4168 F-730 Isocracker Splitter Feed Isomax, S-4169 F-731 Isocracker Reboiler Isomax,

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
2-1-403	Permit conditions-measurement of emissions	N	
2-1-501	Monitors	Y	
SIP Regulation 2, Rule 1	PROVISIONS NO LONGER IN CURRENT RULE Permits, General Requirements (1/26/99 {adopted 11/01/89})		
2-1-403	Permit conditions-measurement of emissions	Y	
BAAQMD Regulation 6-1	Particulate Matter and Visible Emissions (12/05/07)		
6-1-301	Ringelmann No. 1 Limitation	Ν	
6-1-305	Visible Particles	Ν	

# Table IV.A.3.2 Combustion Source-Specific Applicable Requirements

#### Furnaces for which BAAQMD Regulation 9 Rule 10 and NSPS Subpart J both apply

S-4032 F-101 FCC GHT #3 Cat Furnace, S-4033 F-102 Penhex Isom #3 Cat Furnace, S-4039 F-3560 #4 Cat Furnace, S-4040 F-3570 #4 Cat Furnace, S-4041 F-3580 #4 Cat Furnace, S-4042 F-550 #5 Cat Furnace, S-4043 F-560 #5 Cat Furnace, S-4044 F-570 #5 Cat Furnace, S-4045 F-580 #5 Cat Furnace, S-4046 F-1 H.O. Heater-Asphalt Plant, S-4059 F-247 Furnace JHT MDH LSFO-W, S-4060 F-210 A&B Furnace JHT MDH LSFO-W, S-4061 F-410 #5 Naphtha Hydrotreater LSFO-W, S-4062 F-447 #5 Naphtha Hydrotreater LSFO-W, S-4068 F-1610 DHT (VGO Desulfinizer) Furnace LSFO-E, S-4069 F-1670 Aromatic Saturator (Formerly VGO F-1660) DHT Furnace LSFO-E, S-4070 F-1100A 4 Crude LSFO-E, S-4071 F-1100B 4 Crude LSFO-E, S-4072 F-1160 4 Crude LSFO-E, S-4153 F-110 Asphalt Solution Heater SDA Isomax, S-4154 F-120 Asphalt Solution Heater SDA Isomax, S-4155 F-135 Hot Oil Furnace SDA Rose DAO Solution Heater, S-4156 F-320 Naphtha Vaporizer H2 Plant Isomax, S-4157 F-330 Naphtha Vaporizer H2 Plant Isomax, S-4158 F-340 Natural Gas Heater H2 Plant Isomax, S-4162 F-520 TKN Feed Furnace Isomax, S-4163 F-530 TKN Feed Furnace Isomax, S-4164 F-630 Isocracker Feed Furnace Isomax, S-4165 F-620 Isocracker Feed Furnace Isomax, S-4166 F-610 Isocracker Feed Furnace Isomax, S-4167 F-710 TKC Fractionator Isomax, S-4330 F1610 HNHF Reactor RLOP 16 Plant abated by A-0065 SCR, S-4331 F1310 LNHF Reactor RLOP abated by A-0065 SCR, S-4332 F1360 Hot Oil Furnace RLOP abated by A-0065 SCR, S-4333 F-1750 TKC Vacuum Furnace abated by

A-0066 SCR, S-4334 F-1200 Furnace LNC Atmospheric RLOP 12 Plant abated by A-0066 SCR, S-4335 F-1250 Furnace LNC Vacuum RLOP 12 Plant abated by A-0066 SCR, S-4336 F-1410 HNC Reactor RLOP abated by A-0067 SCR, S-4337 F-1500 HNC Atmospheric RLOP abated by A-0067 SCR, S-4338 F-1550 HNC Vacuum RLOP abated by A-0067 SCR, S-4339 F-1110 LNC Reactor RLOP abated by A-0067 SCR

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Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
6-1-310	Particle Weight Limitation	N	
6-1-310.3	Heat Transfer Operation	Ν	
SIP BAAQMD Regulation 6	Particulate Matter and Visible Emissions (12/19/90)		
6-301	Ringelmann No. 1 Limitation	Y	
6-305	Visible Particles	Y	
6-310	Particle Weight Limitation	Y	
6-310.3	Heat transfer operations	Y	

# Table IV.A.3.2 Combustion Source-Specific Applicable Requirements

#### Furnaces for which BAAQMD Regulation 9 Rule 10 and NSPS Subpart J both apply

S-4032 F-101 FCC GHT #3 Cat Furnace, S-4033 F-102 Penhex Isom #3 Cat Furnace, S-4039 F-3560 #4 Cat Furnace, S-4040 F-3570 #4 Cat Furnace, S-4041 F-3580 #4 Cat Furnace, S-4042 F-550 #5 Cat Furnace, S-4043 F-560 #5 Cat Furnace, S-4044 F-570 #5 Cat Furnace, S-4045 F-580 #5 Cat Furnace, S-4046 F-1 H.O. Heater-Asphalt Plant, S-4059 F-247 Furnace JHT MDH LSFO-W, S-4060 F-210 A&B Furnace JHT MDH LSFO-W, S-4061 F-410 #5 Naphtha Hydrotreater LSFO-W, S-4062 F-447 #5 Naphtha Hydrotreater LSFO-W, S-4068 F-1610 DHT (VGO Desulfinizer) Furnace LSFO-E, S-4069 F-1670 Aromatic Saturator (Formerly VGO F-1660) DHT Furnace LSFO-E, S-4070 F-1100A 4 Crude LSFO-E, S-4071 F-1100B 4 Crude LSFO-E, S-4072 F-1160 4 Crude LSFO-E, S-4153 F-110 Asphalt Solution Heater SDA Isomax, S-4154 F-120 Asphalt Solution Heater SDA Isomax, S-4155 F-135 Hot Oil Furnace SDA Rose DAO Solution Heater, S-4156 F-320 Naphtha Vaporizer H2 Plant Isomax, S-4157 F-330 Naphtha Vaporizer H2 Plant Isomax, S-4158 F-340 Natural Gas Heater H2 Plant Isomax, S-4162 F-520 TKN Feed Furnace Isomax, S-4163 F-530 TKN Feed Furnace Isomax, S-4164 F-630 Isocracker Feed Furnace Isomax, S-4165 F-620 Isocracker Feed Furnace Isomax, S-4166 F-610 Isocracker Feed Furnace Isomax, S-4167 F-710 TKC Fractionator Isomax, S-4330 F1610 HNHF Reactor RLOP 16 Plant abated by A-0065 SCR, S-4331 F1310 LNHF Reactor RLOP abated by A-0065 SCR, S-4332 F1360 Hot Oil Furnace RLOP abated by A-0065 SCR, S-4333 F-1750 TKC Vacuum Furnace abated by

A-0066 SCR, S-4334 F-1200 Furnace LNC Atmospheric RLOP 12 Plant abated by A-0066 SCR, S-4335 F-1250 Furnace LNC Vacuum RLOP 12 Plant abated by A-0066 SCR, S-4336 F-1410 HNC Reactor RLOP abated by A-0067 SCR, S-4337 F-1500 HNC Atmospheric RLOP abated by A-0067 SCR, S-4338 F-1550 HNC Vacuum RLOP abated by A-0067 SCR, S-4339 F-1110 LNC Reactor RLOP abated by A-0067 SCR

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Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
BAAQMD Regulation 9 Rule 10	Inorganic Gaseous Pollutants – Nitrogen Oxides and Carbon Monoxide from Boilers, Steam Generators, and Process Heaters in Petroleum Refineries (7/17/02)		
9-10-301	Emission Limit for Facility, Nox: 0.033 lbs Nox/MMBTU [applies for all sources listed in this table except S-4032 and S-4033 per 9-10-112}	Ν	
9-10-301.1	Start-up/Shutdown Contribution[applies for all sources listed in this table except S-4032 and S-4033]	N	
9-10-301.2	Out-of-Service Units Contribution[applies for all sources listed in this table except S-4032 and S-4033]	N	
9-10-303	Federal Interim Facility-wide Nox emission rate limit [applies for all sources listed in this table except S-4032 and S-4033]	Y	

# Table IV.A.3.2 Combustion Source-Specific Applicable Requirements

#### Furnaces for which BAAQMD Regulation 9 Rule 10 and NSPS Subpart J both apply

S-4032 F-101 FCC GHT #3 Cat Furnace, S-4033 F-102 Penhex Isom #3 Cat Furnace, S-4039 F-3560 #4 Cat Furnace, S-4040 F-3570 #4 Cat Furnace, S-4041 F-3580 #4 Cat Furnace, S-4042 F-550 #5 Cat Furnace, S-4043 F-560 #5 Cat Furnace, S-4044 F-570 #5 Cat Furnace, S-4045 F-580 #5 Cat Furnace, S-4046 F-1 H.O. Heater-Asphalt Plant, S-4059 F-247 Furnace JHT MDH LSFO-W, S-4060 F-210 A&B Furnace JHT MDH LSFO-W, S-4061 F-410 #5 Naphtha Hydrotreater LSFO-W, S-4062 F-447 #5 Naphtha Hydrotreater LSFO-W, S-4068 F-1610 DHT (VGO Desulfinizer) Furnace LSFO-E, S-4069 F-1670 Aromatic Saturator (Formerly VGO F-1660) DHT Furnace LSFO-E, S-4070 F-1100A 4 Crude LSFO-E, S-4071 F-1100B 4 Crude LSFO-E, S-4072 F-1160 4 Crude LSFO-E, S-4153 F-110 Asphalt Solution Heater SDA Isomax, S-4154 F-120 Asphalt Solution Heater SDA Isomax, S-4155 F-135 Hot Oil Furnace SDA Rose DAO Solution Heater, S-4156 F-320 Naphtha Vaporizer H2 Plant Isomax, S-4157 F-330 Naphtha Vaporizer H2 Plant Isomax, S-4158 F-340 Natural Gas Heater H2 Plant Isomax, S-4162 F-520 TKN Feed Furnace Isomax, S-4163 F-530 TKN Feed Furnace Isomax, S-4164 F-630 Isocracker Feed Furnace Isomax, S-4165 F-620 Isocracker Feed Furnace Isomax, S-4166 F-610 Isocracker Feed Furnace Isomax, S-4167 F-710 TKC Fractionator Isomax, S-4330 F1610 HNHF Reactor RLOP 16 Plant abated by A-0065 SCR, S-4331 F1310 LNHF Reactor RLOP abated by A-0065 SCR, S-4332 F1360 Hot Oil Furnace RLOP abated by A-0065 SCR, S-4333 F-1750 TKC Vacuum Furnace abated by

A-0066 SCR, S-4334 F-1200 Furnace LNC Atmospheric RLOP 12 Plant abated by A-0066 SCR, S-4335 F-1250 Furnace LNC Vacuum RLOP 12 Plant abated by A-0066 SCR, S-4336 F-1410 HNC Reactor RLOP abated by A-0067 SCR, S-4337 F-1500 HNC Atmospheric RLOP abated by A-0067 SCR, S-4338 F-1550 HNC Vacuum RLOP abated by A-0067 SCR, S-4339 F-1110 LNC Reactor RLOP abated by A-0067 SCR

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Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
9-10-305	CO emission limit	Ν	
9-10-502	Monitoring	Y	
9-10-502.1	CEMS for Nox, CO, and O2	Y	
9-10-502.2	Fuel flowmeters	Y	
9-10-504	Recordkeeping	Y	
9-10-505	Reporting	Y	

# Table IV.A.3.2 Combustion Source-Specific Applicable Requirements

#### Furnaces for which BAAQMD Regulation 9 Rule 10 and NSPS Subpart J both apply

S-4032 F-101 FCC GHT #3 Cat Furnace, S-4033 F-102 Penhex Isom #3 Cat Furnace, S-4039 F-3560 #4 Cat Furnace, S-4040 F-3570 #4 Cat Furnace, S-4041 F-3580 #4 Cat Furnace, S-4042 F-550 #5 Cat Furnace, S-4043 F-560 #5 Cat Furnace, S-4044 F-570 #5 Cat Furnace, S-4045 F-580 #5 Cat Furnace, S-4046 F-1 H.O. Heater-Asphalt Plant, S-4059 F-247 Furnace JHT MDH LSFO-W, S-4060 F-210 A&B Furnace JHT MDH LSFO-W, S-4061 F-410 #5 Naphtha Hydrotreater LSFO-W, S-4062 F-447 #5 Naphtha Hydrotreater LSFO-W, S-4068 F-1610 DHT (VGO Desulfinizer) Furnace LSFO-E, S-4069 F-1670 Aromatic Saturator (Formerly VGO F-1660) DHT Furnace LSFO-E, S-4070 F-1100A 4 Crude LSFO-E, S-4071 F-1100B 4 Crude LSFO-E, S-4072 F-1160 4 Crude LSFO-E, S-4153 F-110 Asphalt Solution Heater SDA Isomax, S-4154 F-120 Asphalt Solution Heater SDA Isomax, S-4155 F-135 Hot Oil Furnace SDA Rose DAO Solution Heater, S-4156 F-320 Naphtha Vaporizer H2 Plant Isomax, S-4157 F-330 Naphtha Vaporizer H2 Plant Isomax, S-4158 F-340 Natural Gas Heater H2 Plant Isomax, S-4162 F-520 TKN Feed Furnace Isomax, S-4163 F-530 TKN Feed Furnace Isomax, S-4164 F-630 Isocracker Feed Furnace Isomax, S-4165 F-620 Isocracker Feed Furnace Isomax, S-4166 F-610 Isocracker Feed Furnace Isomax, S-4167 F-710 TKC Fractionator Isomax, S-4330 F1610 HNHF Reactor RLOP 16 Plant abated by A-0065 SCR, S-4331 F1310 LNHF Reactor RLOP abated by A-0065 SCR, S-4332 F1360 Hot Oil Furnace RLOP abated by A-0065 SCR, S-4333 F-1750 TKC Vacuum Furnace abated by

A-0066 SCR, S-4334 F-1200 Furnace LNC Atmospheric RLOP 12 Plant abated by A-0066 SCR, S-4335 F-1250 Furnace LNC Vacuum RLOP 12 Plant abated by A-0066 SCR, S-4336 F-1410 HNC Reactor RLOP abated by A-0067 SCR, S-4337 F-1500 HNC Atmospheric RLOP abated by A-0067 SCR, S-4338 F-1550 HNC Vacuum RLOP abated by A-0067 SCR, S-4339 F-1110 LNC Reactor RLOP abated by A-0067 SCR

S-4038 F-3550 #4 Cat Furnace, S-4152 F-100 Asphalt Solution Heater SDA Isomax, S-4159 F-410 TKC Feed Furnace TKC Isomax, S-4160 F-420 TKC Feed Furnace TKC Isomax, S-4161 F-510 TKN Feed Furnace Isomax, S-4168 F-730 Isocracker Splitter Feed Isomax, S-4169 F-731 Isocracker Reboiler Isomax,

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
NSPS 40 CFR 60 Subpart D [for \$4070, \$4071, \$4072]	Standards of Performance for Steam Generating Units [only if construct having heat capacity > 250 MMBtu/hr] (1/28	ted or modified afte //09)	r 8/17/71 AND
60.42	Standard for Particulate Matter	Y	
60.42(a)(1)	0.1 lb PM/MMBtu Limit for fossil fuel burned	Y	
60.42(a)(2)	Limit of 20% opacity except for one six-minute period per hour of not more than 27% opacity (for fossil fuel burned)	Y	
60.44	Standard for Nitrogen Oxides	Y	

# Table IV.A.3.2 Combustion Source-Specific Applicable Requirements

#### Furnaces for which BAAQMD Regulation 9 Rule 10 and NSPS Subpart J both apply

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Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
60.44(a)(1)	0.2 lb Nox/MMBtu Limit for Gaseous fossil fuel burned	Y	
60.45	Emission and Fuel Monitoring	Y	
60.45(a)	Install CEMS (including O2 CEM)	Y	
60.45(b)(3)	Install Nox CEM and comply with applicable monitoring requirements of this subpart	Y	
60.45(g)	Excess emissions and monitoring system performance (MSP) reports shall be submitted to the Administrator semi-annually by the 30 <sup>th</sup> day following the end of each six-month period.	Y	
# Table IV.A.3.2 Combustion Source-Specific Applicable Requirements

#### Furnaces for which BAAQMD Regulation 9 Rule 10 and NSPS Subpart J both apply

S-4032 F-101 FCC GHT #3 Cat Furnace, S-4033 F-102 Penhex Isom #3 Cat Furnace, S-4039 F-3560 #4 Cat Furnace, S-4040 F-3570 #4 Cat Furnace, S-4041 F-3580 #4 Cat Furnace, S-4042 F-550 #5 Cat Furnace, S-4043 F-560 #5 Cat Furnace, S-4044 F-570 #5 Cat Furnace, S-4045 F-580 #5 Cat Furnace, S-4046 F-1 H.O. Heater-Asphalt Plant, S-4059 F-247 Furnace JHT MDH LSFO-W, S-4060 F-210 A&B Furnace JHT MDH LSFO-W, S-4061 F-410 #5 Naphtha Hydrotreater LSFO-W, S-4062 F-447 #5 Naphtha Hydrotreater LSFO-W, S-4068 F-1610 DHT (VGO Desulfinizer) Furnace LSFO-E, S-4069 F-1670 Aromatic Saturator (Formerly VGO F-1660) DHT Furnace LSFO-E, S-4070 F-1100A 4 Crude LSFO-E, S-4071 F-1100B 4 Crude LSFO-E, S-4072 F-1160 4 Crude LSFO-E, S-4153 F-110 Asphalt Solution Heater SDA Isomax, S-4154 F-120 Asphalt Solution Heater SDA Isomax, S-4155 F-135 Hot Oil Furnace SDA Rose DAO Solution Heater, S-4156 F-320 Naphtha Vaporizer H2 Plant Isomax, S-4157 F-330 Naphtha Vaporizer H2 Plant Isomax, S-4158 F-340 Natural Gas Heater H2 Plant Isomax, S-4162 F-520 TKN Feed Furnace Isomax, S-4163 F-530 TKN Feed Furnace Isomax, S-4164 F-630 Isocracker Feed Furnace Isomax, S-4165 F-620 Isocracker Feed Furnace Isomax, S-4166 F-610 Isocracker Feed Furnace Isomax, S-4167 F-710 TKC Fractionator Isomax, S-4330 F1610 HNHF Reactor RLOP 16 Plant abated by A-0065 SCR, S-4331 F1310 LNHF Reactor RLOP abated by A-0065 SCR, S-4332 F1360 Hot Oil Furnace RLOP abated by A-0065 SCR, S-4333 F-1750 TKC Vacuum Furnace abated by

A-0066 SCR, S-4334 F-1200 Furnace LNC Atmospheric RLOP 12 Plant abated by A-0066 SCR, S-4335 F-1250 Furnace LNC Vacuum RLOP 12 Plant abated by A-0066 SCR, S-4336 F-1410 HNC Reactor RLOP abated by A-0067 SCR, S-4337 F-1500 HNC Atmospheric RLOP abated by A-0067 SCR, S-4338 F-1550 HNC Vacuum RLOP abated by A-0067 SCR, S-4339 F-1110 LNC Reactor RLOP abated by A-0067 SCR

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Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
<b>NSPS</b> <b>40 CFR 60</b> <b>Subpart Db</b> [for S4155]	Standards of Performance for Steam Generating Units [only if construct having heat capacity > 100 MMBtu/hr] (1/28	ted or modified afte %/09)	r 6/19/84 AND
60.44b	Standard for Nitrogen Oxides	Y	
60.44b(e)	0.1 lb Nox/MMBtu Limit for combusting natural gas with waste/byproduct (waste/byproduct definition includes refinery fuel gas)	Y	
60.44b(h)	The Nox standard applies at all times	Y	
60.44b(i)	Compliance is determined on a 30-day rolling average basis	Y	

# Table IV.A.3.2 Combustion Source-Specific Applicable Requirements

#### Furnaces for which BAAQMD Regulation 9 Rule 10 and NSPS Subpart J both apply

S-4032 F-101 FCC GHT #3 Cat Furnace, S-4033 F-102 Penhex Isom #3 Cat Furnace, S-4039 F-3560 #4 Cat Furnace, S-4040 F-3570 #4 Cat Furnace, S-4041 F-3580 #4 Cat Furnace, S-4042 F-550 #5 Cat Furnace, S-4043 F-560 #5 Cat Furnace, S-4044 F-570 #5 Cat Furnace, S-4045 F-580 #5 Cat Furnace, S-4046 F-1 H.O. Heater-Asphalt Plant, S-4059 F-247 Furnace JHT MDH LSFO-W, S-4060 F-210 A&B Furnace JHT MDH LSFO-W, S-4061 F-410 #5 Naphtha Hydrotreater LSFO-W, S-4062 F-447 #5 Naphtha Hydrotreater LSFO-W, S-4068 F-1610 DHT (VGO Desulfinizer) Furnace LSFO-E, S-4069 F-1670 Aromatic Saturator (Formerly VGO F-1660) DHT Furnace LSFO-E, S-4070 F-1100A 4 Crude LSFO-E, S-4071 F-1100B 4 Crude LSFO-E, S-4072 F-1160 4 Crude LSFO-E, S-4153 F-110 Asphalt Solution Heater SDA Isomax, S-4154 F-120 Asphalt Solution Heater SDA Isomax, S-4155 F-135 Hot Oil Furnace SDA Rose DAO Solution Heater, S-4156 F-320 Naphtha Vaporizer H2 Plant Isomax, S-4157 F-330 Naphtha Vaporizer H2 Plant Isomax, S-4158 F-340 Natural Gas Heater H2 Plant Isomax, S-4162 F-520 TKN Feed Furnace Isomax, S-4163 F-530 TKN Feed Furnace Isomax, S-4164 F-630 Isocracker Feed Furnace Isomax, S-4165 F-620 Isocracker Feed Furnace Isomax, S-4166 F-610 Isocracker Feed Furnace Isomax, S-4167 F-710 TKC Fractionator Isomax, S-4330 F1610 HNHF Reactor RLOP 16 Plant abated by A-0065 SCR, S-4331 F1310 LNHF Reactor RLOP abated by A-0065 SCR, S-4332 F1360 Hot Oil Furnace RLOP abated by A-0065 SCR, S-4333 F-1750 TKC Vacuum Furnace abated by

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Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
60.46b	Compliance and Performance Test Methods and Procedures for Particulate Matter and Nitrogen Oxides	Y	
60.46b(a)	The Nox standard applies at all times	Y	
60.48b	Emission Monitoring for Particulate Matter and Nitrogen Oxides	Y	
60.48b(b)	Install, calibrate, and operate a Nox CEM	Y	
60.48b(c)	CEM operated and data recorded during all periods of operating except for CEM breakdowns and repairs.	Y	
60.48b(d)	Use 1-hour average Nox CEM results to calculate lb Nox/MMBtu per 60.44b	Y	
60.48b(e)	Follow 60.13 to install, calibrate, and operate CEMs.	Y	

# Table IV.A.3.2 Combustion Source-Specific Applicable Requirements

#### Furnaces for which BAAQMD Regulation 9 Rule 10 and NSPS Subpart J both apply

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Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
60.48b(f)	Use standby system or Method 7 if Nox CEM downtime exceeds listed limits.	Y	
60.49b	Reporting and Recordkeeping Requirements	Y	
60.49b(c)	Alternate CEM with approval of agency	Y	
60.49b(d)	Maintain fuel records each operating day	Y	
60.49b(g)	Maintain records of listed information for each operating day.	Y	
60.49b(i)	Submit reports containing information required in 60.49b(g) for Nox CEM.	Y	
60.49b(v)	May submit quarterly electronic reports with agency approval.	Y	

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Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
60.49b(w)	Semi-annual reports due 30th day following reporting period.	Y	
NSPS 40 CFR 60 Subpart J	Standards of Performance for Petroleum Refineries (7/1/00) [Only in burning refinery-made fuel gas] (6/24/08	f installed after 6/11 )	/1973 AND
60.104	Standards for Sulfur Oxides: Compliance Schedule	Y	
60.104(a)(1)	Fuel gas H2S concentration limited to 230 mg/dscm (0.10 gr/dscf) except for gas burned as a result of process upset or gas burned at flares from relief valve leaks or other emergency malfunctions. [Effectiveness requirement for sulfur plant]	Y	
60.105	Monitoring of Emissions and Operations	Y	

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Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
60.105(a)(4)	Monitoring requirement for H2S (dry basis) in fuel gas prior to	Y	
	Combustion (in lieu of separate combustion device exhaust SO2 monitors as required by 60.105(a)(3))		
60.105(e)(3)	Excess $SO_2$ emission definitions for 60.7(c)	Y	
Condition #8773	Permit condition parts are listed below:		
Condition #8773	Permit condition parts are listed below:		
Part 1a	Nox shall not exceed 8.85 lb/hr [applies to S-4155]	Ν	
Part 1b	Time of 1 <sup>st</sup> burner lighting [applies to S-4155]	N	
Part 1c	Nox mass rate calculation method [applies to S-4155]	Ν	

# Table IV.A.3.2 Combustion Source-Specific Applicable Requirements

#### Furnaces for which BAAQMD Regulation 9 Rule 10 and NSPS Subpart J both apply

S-4032 F-101 FCC GHT #3 Cat Furnace, S-4033 F-102 Penhex Isom #3 Cat Furnace, S-4039 F-3560 #4 Cat Furnace, S-4040 F-3570 #4 Cat Furnace, S-4041 F-3580 #4 Cat Furnace, S-4042 F-550 #5 Cat Furnace, S-4043 F-560 #5 Cat Furnace, S-4044 F-570 #5 Cat Furnace, S-4045 F-580 #5 Cat Furnace, S-4046 F-1 H.O. Heater-Asphalt Plant, S-4059 F-247 Furnace JHT MDH LSFO-W, S-4060 F-210 A&B Furnace JHT MDH LSFO-W, S-4061 F-410 #5 Naphtha Hydrotreater LSFO-W, S-4062 F-447 #5 Naphtha Hydrotreater LSFO-W, S-4068 F-1610 DHT (VGO Desulfinizer) Furnace LSFO-E, S-4069 F-1670 Aromatic Saturator (Formerly VGO F-1660) DHT Furnace LSFO-E, S-4070 F-1100A 4 Crude LSFO-E, S-4071 F-1100B 4 Crude LSFO-E, S-4072 F-1160 4 Crude LSFO-E, S-4153 F-110 Asphalt Solution Heater SDA Isomax, S-4154 F-120 Asphalt Solution Heater SDA Isomax, S-4155 F-135 Hot Oil Furnace SDA Rose DAO Solution Heater, S-4156 F-320 Naphtha Vaporizer H2 Plant Isomax, S-4157 F-330 Naphtha Vaporizer H2 Plant Isomax, S-4158 F-340 Natural Gas Heater H2 Plant Isomax, S-4162 F-520 TKN Feed Furnace Isomax, S-4163 F-530 TKN Feed Furnace Isomax, S-4164 F-630 Isocracker Feed Furnace Isomax, S-4165 F-620 Isocracker Feed Furnace Isomax, S-4166 F-610 Isocracker Feed Furnace Isomax, S-4167 F-710 TKC Fractionator Isomax, S-4330 F1610 HNHF Reactor RLOP 16 Plant abated by A-0065 SCR, S-4331 F1310 LNHF Reactor RLOP abated by A-0065 SCR, S-4332 F1360 Hot Oil Furnace RLOP abated by A-0065 SCR, S-4333 F-1750 TKC Vacuum Furnace abated by

A-0066 SCR, S-4334 F-1200 Furnace LNC Atmospheric RLOP 12 Plant abated by A-0066 SCR, S-4335 F-1250 Furnace LNC Vacuum RLOP 12 Plant abated by A-0066 SCR, S-4336 F-1410 HNC Reactor RLOP abated by A-0067 SCR, S-4337 F-1500 HNC Atmospheric RLOP abated by A-0067 SCR, S-4338 F-1550 HNC Vacuum RLOP abated by A-0067 SCR, S-4339 F-1110 LNC Reactor RLOP abated by A-0067 SCR

S-4038 F-3550 #4 Cat Furnace, S-4152 F-100 Asphalt Solution Heater SDA Isomax, S-4159 F-410 TKC Feed Furnace TKC Isomax, S-4160 F-420 TKC Feed Furnace TKC Isomax, S-4161 F-510 TKN Feed Furnace Isomax, S-4168 F-730 Isocracker Splitter Feed Isomax, S-4169 F-731 Isocracker Reboiler Isomax,

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
Part 2	CO shall not exceed 50 ppmv [applies to S-4155]	Y	
Part 3	O2 & Nox CEM required [applies to S-4155]	Ν	
Part 5	Fuel gas H2S shall not exceed 50 ppm [applies to S-4155]	Y	
Part 6	Fuel use shall not exceed 209 MMBtu/Hr [applies to S-4155]	Y	
Condition #469	RLOP CAP, Monthly CME	Y	
Condition #469	S-4038-S-4041, S-4152, S-4154, S-4159-S-4171, S-4188, S-4189 [Refinery Cap]	Y	
Condition #469	Permit condition parts are listed below:		
Part 3A	Operate Nox CEM for each SCR [applies to S-4330, S-4331, S-4332, S-	Y	

# Table IV.A.3.2 Combustion Source-Specific Applicable Requirements

#### Furnaces for which BAAQMD Regulation 9 Rule 10 and NSPS Subpart J both apply

S-4032 F-101 FCC GHT #3 Cat Furnace, S-4033 F-102 Penhex Isom #3 Cat Furnace, S-4039 F-3560 #4 Cat Furnace, S-4040 F-3570 #4 Cat Furnace, S-4041 F-3580 #4 Cat Furnace, S-4042 F-550 #5 Cat Furnace, S-4043 F-560 #5 Cat Furnace, S-4044 F-570 #5 Cat Furnace, S-4045 F-580 #5 Cat Furnace, S-4046 F-1 H.O. Heater-Asphalt Plant, S-4059 F-247 Furnace JHT MDH LSFO-W, S-4060 F-210 A&B Furnace JHT MDH LSFO-W, S-4061 F-410 #5 Naphtha Hydrotreater LSFO-W, S-4062 F-447 #5 Naphtha Hydrotreater LSFO-W, S-4068 F-1610 DHT (VGO Desulfinizer) Furnace LSFO-E, S-4069 F-1670 Aromatic Saturator (Formerly VGO F-1660) DHT Furnace LSFO-E, S-4070 F-1100A 4 Crude LSFO-E, S-4071 F-1100B 4 Crude LSFO-E, S-4072 F-1160 4 Crude LSFO-E, S-4153 F-110 Asphalt Solution Heater SDA Isomax, S-4154 F-120 Asphalt Solution Heater SDA Isomax, S-4155 F-135 Hot Oil Furnace SDA Rose DAO Solution Heater, S-4156 F-320 Naphtha Vaporizer H2 Plant Isomax, S-4157 F-330 Naphtha Vaporizer H2 Plant Isomax, S-4158 F-340 Natural Gas Heater H2 Plant Isomax, S-4162 F-520 TKN Feed Furnace Isomax, S-4163 F-530 TKN Feed Furnace Isomax, S-4164 F-630 Isocracker Feed Furnace Isomax, S-4165 F-620 Isocracker Feed Furnace Isomax, S-4166 F-610 Isocracker Feed Furnace Isomax, S-4167 F-710 TKC Fractionator Isomax, S-4330 F1610 HNHF Reactor RLOP 16 Plant abated by A-0065 SCR, S-4331 F1310 LNHF Reactor RLOP abated by A-0065 SCR, S-4332 F1360 Hot Oil Furnace RLOP abated by A-0065 SCR, S-4333 F-1750 TKC Vacuum Furnace abated by

A-0066 SCR, S-4334 F-1200 Furnace LNC Atmospheric RLOP 12 Plant abated by A-0066 SCR, S-4335 F-1250 Furnace LNC Vacuum RLOP 12 Plant abated by A-0066 SCR, S-4336 F-1410 HNC Reactor RLOP abated by A-0067 SCR, S-4337 F-1500 HNC Atmospheric RLOP abated by A-0067 SCR, S-4338 F-1550 HNC Vacuum RLOP abated by A-0067 SCR, S-4339 F-1110 LNC Reactor RLOP abated by A-0067 SCR

S-4038 F-3550 #4 Cat Furnace, S-4152 F-100 Asphalt Solution Heater SDA Isomax, S-4159 F-410 TKC Feed Furnace TKC Isomax, S-4160 F-420 TKC Feed Furnace TKC Isomax, S-4161 F-510 TKN Feed Furnace Isomax, S-4168 F-730 Isocracker Splitter Feed Isomax, S-4169 F-731 Isocracker Reboiler Isomax,

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
	4333, S-4334, S-4335, S-4336, S-4337, S-4338, and S-4339]		
Part 3B	Operate O2 CEM for each SCR [applies to S-4330, S-4331, S-4332, S-4333, S-4334, S-4335, S-4336, S-4337, S-4338, and S-4339]	Y	
Part 4A	Maintain records (including fuel input rate) [applies to S-4330, S-4331, S-4332, S-4333, S-4334, S-4335, S-4336, S-4337, S-4338, and S-4339]	Y	
Part 6A	Do not burn fuel oil [applies to S-4155, S-4330, S-4331, S-4332, S-4333, S-4334, S-4335, S-4336, S-4337, S-4338, and S-4339]	Y	
Part 6B	Nox 8-hour average shall not exceed 40 ppm [applies to S-4330, S-4331, S-4332, S-4333, S-4334, S-4335, S-4336, S-4337, S-4338, S-4339, A0065, A0066, & A0067]	Y	
Part 13.1	47 MMBtu/Hr HHV Fuel Use Limit [applies to S-4159]	Y	

# Table IV.A.3.2 Combustion Source-Specific Applicable Requirements

#### Furnaces for which BAAQMD Regulation 9 Rule 10 and NSPS Subpart J both apply

S-4032 F-101 FCC GHT #3 Cat Furnace, S-4033 F-102 Penhex Isom #3 Cat Furnace, S-4039 F-3560 #4 Cat Furnace, S-4040 F-3570 #4 Cat Furnace, S-4041 F-3580 #4 Cat Furnace, S-4042 F-550 #5 Cat Furnace, S-4043 F-560 #5 Cat Furnace, S-4044 F-570 #5 Cat Furnace, S-4045 F-580 #5 Cat Furnace, S-4046 F-1 H.O. Heater-Asphalt Plant, S-4059 F-247 Furnace JHT MDH LSFO-W, S-4060 F-210 A&B Furnace JHT MDH LSFO-W, S-4061 F-410 #5 Naphtha Hydrotreater LSFO-W, S-4062 F-447 #5 Naphtha Hydrotreater LSFO-W, S-4068 F-1610 DHT (VGO Desulfinizer) Furnace LSFO-E, S-4069 F-1670 Aromatic Saturator (Formerly VGO F-1660) DHT Furnace LSFO-E, S-4070 F-1100A 4 Crude LSFO-E, S-4071 F-1100B 4 Crude LSFO-E, S-4072 F-1160 4 Crude LSFO-E, S-4153 F-110 Asphalt Solution Heater SDA Isomax, S-4154 F-120 Asphalt Solution Heater SDA Isomax, S-4155 F-135 Hot Oil Furnace SDA Rose DAO Solution Heater, S-4156 F-320 Naphtha Vaporizer H2 Plant Isomax, S-4157 F-330 Naphtha Vaporizer H2 Plant Isomax, S-4158 F-340 Natural Gas Heater H2 Plant Isomax, S-4162 F-520 TKN Feed Furnace Isomax, S-4163 F-530 TKN Feed Furnace Isomax, S-4164 F-630 Isocracker Feed Furnace Isomax, S-4165 F-620 Isocracker Feed Furnace Isomax, S-4166 F-610 Isocracker Feed Furnace Isomax, S-4167 F-710 TKC Fractionator Isomax, S-4330 F1610 HNHF Reactor RLOP 16 Plant abated by A-0065 SCR, S-4331 F1310 LNHF Reactor RLOP abated by A-0065 SCR, S-4332 F1360 Hot Oil Furnace RLOP abated by A-0065 SCR, S-4333 F-1750 TKC Vacuum Furnace abated by

A-0066 SCR, S-4334 F-1200 Furnace LNC Atmospheric RLOP 12 Plant abated by A-0066 SCR, S-4335 F-1250 Furnace LNC Vacuum RLOP 12 Plant abated by A-0066 SCR, S-4336 F-1410 HNC Reactor RLOP abated by A-0067 SCR, S-4337 F-1500 HNC Atmospheric RLOP abated by A-0067 SCR, S-4338 F-1550 HNC Vacuum RLOP abated by A-0067 SCR, S-4339 F-1110 LNC Reactor RLOP abated by A-0067 SCR

S-4038 F-3550 #4 Cat Furnace, S-4152 F-100 Asphalt Solution Heater SDA Isomax, S-4159 F-410 TKC Feed Furnace TKC Isomax, S-4160 F-420 TKC Feed Furnace TKC Isomax, S-4161 F-510 TKN Feed Furnace Isomax, S-4168 F-730 Isocracker Splitter Feed Isomax, S-4169 F-731 Isocracker Reboiler Isomax,

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
Part 13.2	45 MMBtu/Hr HHV Fuel Use Limit [applies to S-4160]	Y	
Part 13.3	Record fuel gas use monthly [applies to S-4159 and S-4160]	Y	
Condition #16679	Permit condition parts are listed below:		
Part 1	120 lb NH3/hr limit [applies for S-4170]	Ν	
Part 2	Flow restriction orifice for ammonia [applies for S-4170]	Ν	
Part 3	SCR operating when Nox emitted [applies for S-4170 and A0260]	Ν	
Part 4	Nox & O2 CEMS [applies for S-4170]	Y	
Part 5	Startup & shutdown time limits [applies for S-4170]	Y	

# Table IV.A.3.2 Combustion Source-Specific Applicable Requirements

#### Furnaces for which BAAQMD Regulation 9 Rule 10 and NSPS Subpart J both apply

S-4032 F-101 FCC GHT #3 Cat Furnace, S-4033 F-102 Penhex Isom #3 Cat Furnace, S-4039 F-3560 #4 Cat Furnace, S-4040 F-3570 #4 Cat Furnace, S-4041 F-3580 #4 Cat Furnace, S-4042 F-550 #5 Cat Furnace, S-4043 F-560 #5 Cat Furnace, S-4044 F-570 #5 Cat Furnace, S-4045 F-580 #5 Cat Furnace, S-4046 F-1 H.O. Heater-Asphalt Plant, S-4059 F-247 Furnace JHT MDH LSFO-W, S-4060 F-210 A&B Furnace JHT MDH LSFO-W, S-4061 F-410 #5 Naphtha Hydrotreater LSFO-W, S-4062 F-447 #5 Naphtha Hydrotreater LSFO-W, S-4068 F-1610 DHT (VGO Desulfinizer) Furnace LSFO-E, S-4069 F-1670 Aromatic Saturator (Formerly VGO F-1660) DHT Furnace LSFO-E, S-4070 F-1100A 4 Crude LSFO-E, S-4071 F-1100B 4 Crude LSFO-E, S-4072 F-1160 4 Crude LSFO-E, S-4153 F-110 Asphalt Solution Heater SDA Isomax, S-4154 F-120 Asphalt Solution Heater SDA Isomax, S-4155 F-135 Hot Oil Furnace SDA Rose DAO Solution Heater, S-4156 F-320 Naphtha Vaporizer H2 Plant Isomax, S-4157 F-330 Naphtha Vaporizer H2 Plant Isomax, S-4158 F-340 Natural Gas Heater H2 Plant Isomax, S-4162 F-520 TKN Feed Furnace Isomax, S-4163 F-530 TKN Feed Furnace Isomax, S-4164 F-630 Isocracker Feed Furnace Isomax, S-4165 F-620 Isocracker Feed Furnace Isomax, S-4166 F-610 Isocracker Feed Furnace Isomax, S-4167 F-710 TKC Fractionator Isomax, S-4330 F1610 HNHF Reactor RLOP 16 Plant abated by A-0065 SCR, S-4331 F1310 LNHF Reactor RLOP abated by A-0065 SCR, S-4332 F1360 Hot Oil Furnace RLOP abated by A-0065 SCR, S-4333 F-1750 TKC Vacuum Furnace abated by

A-0066 SCR, S-4334 F-1200 Furnace LNC Atmospheric RLOP 12 Plant abated by A-0066 SCR, S-4335 F-1250 Furnace LNC Vacuum RLOP 12 Plant abated by A-0066 SCR, S-4336 F-1410 HNC Reactor RLOP abated by A-0067 SCR, S-4337 F-1500 HNC Atmospheric RLOP abated by A-0067 SCR, S-4338 F-1550 HNC Vacuum RLOP abated by A-0067 SCR, S-4339 F-1110 LNC Reactor RLOP abated by A-0067 SCR

S-4038 F-3550 #4 Cat Furnace, S-4152 F-100 Asphalt Solution Heater SDA Isomax, S-4159 F-410 TKC Feed Furnace TKC Isomax, S-4160 F-420 TKC Feed Furnace TKC Isomax, S-4161 F-510 TKN Feed Furnace Isomax, S-4168 F-730 Isocracker Splitter Feed Isomax, S-4169 F-731 Isocracker Reboiler Isomax,

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
Part 5a	Metallurgical & other extension [applies for S-4170]	Y	
Part 5b	Refractory work extension [applies for S-4170]	Y	
Part 5c	Catalyst extension [applies for S-4170]	Y	
Part 6	Recordkeeping [applies for S-4170]	Y	
Condition #16686			
Part 1	Firing Limits [applies for S-4044, S-4070, S-4071, S-4072, S-4334, S-4335, S-4338, & S-4339, S-4152, S-4154, S-4159 to S-4163, S-4168, S-4170, S-4172]	Y	

# Table IV.A.3.2 Combustion Source-Specific Applicable Requirements

#### Furnaces for which BAAQMD Regulation 9 Rule 10 and NSPS Subpart J both apply

S-4032 F-101 FCC GHT #3 Cat Furnace, S-4033 F-102 Penhex Isom #3 Cat Furnace, S-4039 F-3560 #4 Cat Furnace, S-4040 F-3570 #4 Cat Furnace, S-4041 F-3580 #4 Cat Furnace, S-4042 F-550 #5 Cat Furnace, S-4043 F-560 #5 Cat Furnace, S-4044 F-570 #5 Cat Furnace, S-4045 F-580 #5 Cat Furnace, S-4046 F-1 H.O. Heater-Asphalt Plant, S-4059 F-247 Furnace JHT MDH LSFO-W, S-4060 F-210 A&B Furnace JHT MDH LSFO-W, S-4061 F-410 #5 Naphtha Hydrotreater LSFO-W, S-4062 F-447 #5 Naphtha Hydrotreater LSFO-W, S-4068 F-1610 DHT (VGO Desulfinizer) Furnace LSFO-E, S-4069 F-1670 Aromatic Saturator (Formerly VGO F-1660) DHT Furnace LSFO-E, S-4070 F-1100A 4 Crude LSFO-E, S-4071 F-1100B 4 Crude LSFO-E, S-4072 F-1160 4 Crude LSFO-E, S-4153 F-110 Asphalt Solution Heater SDA Isomax, S-4154 F-120 Asphalt Solution Heater SDA Isomax, S-4155 F-135 Hot Oil Furnace SDA Rose DAO Solution Heater, S-4156 F-320 Naphtha Vaporizer H2 Plant Isomax, S-4157 F-330 Naphtha Vaporizer H2 Plant Isomax, S-4158 F-340 Natural Gas Heater H2 Plant Isomax, S-4162 F-520 TKN Feed Furnace Isomax, S-4163 F-530 TKN Feed Furnace Isomax, S-4164 F-630 Isocracker Feed Furnace Isomax, S-4165 F-620 Isocracker Feed Furnace Isomax, S-4166 F-610 Isocracker Feed Furnace Isomax, S-4167 F-710 TKC Fractionator Isomax, S-4330 F1610 HNHF Reactor RLOP 16 Plant abated by A-0065 SCR, S-4331 F1310 LNHF Reactor RLOP abated by A-0065 SCR, S-4332 F1360 Hot Oil Furnace RLOP abated by A-0065 SCR, S-4333 F-1750 TKC Vacuum Furnace abated by

A-0066 SCR, S-4334 F-1200 Furnace LNC Atmospheric RLOP 12 Plant abated by A-0066 SCR, S-4335 F-1250 Furnace LNC Vacuum RLOP 12 Plant abated by A-0066 SCR, S-4336 F-1410 HNC Reactor RLOP abated by A-0067 SCR, S-4337 F-1500 HNC Atmospheric RLOP abated by A-0067 SCR, S-4338 F-1550 HNC Vacuum RLOP abated by A-0067 SCR, S-4339 F-1110 LNC Reactor RLOP abated by A-0067 SCR

S-4038 F-3550 #4 Cat Furnace, S-4152 F-100 Asphalt Solution Heater SDA Isomax, S-4159 F-410 TKC Feed Furnace TKC Isomax, S-4160 F-420 TKC Feed Furnace TKC Isomax, S-4161 F-510 TKN Feed Furnace Isomax, S-4168 F-730 Isocracker Splitter Feed Isomax, S-4169 F-731 Isocracker Reboiler Isomax,

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
Condition #21232	New Nox Box Conditions [effective 12/1/04]	Ν	1/1/05
Part 1	Sources subject to Regulation 9-10 (basis: Regulation 9-10- 301 & 305)	N	
Part 2	O2 monitor and recorder requirement (basis: Regulation 9- 10-502)	N	9/1/04
Part 3	Operating conditions requirements for those sources without CEM (basis: Regulation 9-10-502)	N	
Part 4	Nox box establishment requirements (basis: Regulation 9- 10-502)	N	

# Table IV.A.3.2 Combustion Source-Specific Applicable Requirements

#### Furnaces for which BAAQMD Regulation 9 Rule 10 and NSPS Subpart J both apply

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A-0066 SCR, S-4334 F-1200 Furnace LNC Atmospheric RLOP 12 Plant abated by A-0066 SCR, S-4335 F-1250 Furnace LNC Vacuum RLOP 12 Plant abated by A-0066 SCR, S-4336 F-1410 HNC Reactor RLOP abated by A-0067 SCR, S-4337 F-1500 HNC Atmospheric RLOP abated by A-0067 SCR, S-4338 F-1550 HNC Vacuum RLOP abated by A-0067 SCR, S-4339 F-1110 LNC Reactor RLOP abated by A-0067 SCR

S-4038 F-3550 #4 Cat Furnace, S-4152 F-100 Asphalt Solution Heater SDA Isomax, S-4159 F-410 TKC Feed Furnace TKC Isomax, S-4160 F-420 TKC Feed Furnace TKC Isomax, S-4161 F-510 TKN Feed Furnace Isomax, S-4168 F-730 Isocracker Splitter Feed Isomax, S-4169 F-731 Isocracker Reboiler Isomax,

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
Part 5	Nox box ranges (basis: Regulation 9-10-502)	Ν	
Part 6	Nox Box Deviations (basis: Regulation 9-10-502)	Ν	
Part 7	Source test requirements (basis: Regulation 9-10-502)	Ν	
Part 8	CO source test (basis: Regulation 9-10-502, 1-522)	Ν	
Part 9	CO results requires CEM (basis: Regulation 9-10-502, 1-522)	N	
Part 10	Source test records (basis: recordkeeping; Regulation 9-10- 504)	N	

# Table IV.A.3.2 Combustion Source-Specific Applicable Requirements

#### Furnaces for which BAAQMD Regulation 9 Rule 10 and NSPS Subpart J both apply

S-4032 F-101 FCC GHT #3 Cat Furnace, S-4033 F-102 Penhex Isom #3 Cat Furnace, S-4039 F-3560 #4 Cat Furnace, S-4040 F-3570 #4 Cat Furnace, S-4041 F-3580 #4 Cat Furnace, S-4042 F-550 #5 Cat Furnace, S-4043 F-560 #5 Cat Furnace, S-4044 F-570 #5 Cat Furnace, S-4045 F-580 #5 Cat Furnace, S-4046 F-1 H.O. Heater-Asphalt Plant, S-4059 F-247 Furnace JHT MDH LSFO-W, S-4060 F-210 A&B Furnace JHT MDH LSFO-W, S-4061 F-410 #5 Naphtha Hydrotreater LSFO-W, S-4062 F-447 #5 Naphtha Hydrotreater LSFO-W, S-4068 F-1610 DHT (VGO Desulfinizer) Furnace LSFO-E, S-4069 F-1670 Aromatic Saturator (Formerly VGO F-1660) DHT Furnace LSFO-E, S-4070 F-1100A 4 Crude LSFO-E, S-4071 F-1100B 4 Crude LSFO-E, S-4072 F-1160 4 Crude LSFO-E, S-4153 F-110 Asphalt Solution Heater SDA Isomax, S-4154 F-120 Asphalt Solution Heater SDA Isomax, S-4155 F-135 Hot Oil Furnace SDA Rose DAO Solution Heater, S-4156 F-320 Naphtha Vaporizer H2 Plant Isomax, S-4157 F-330 Naphtha Vaporizer H2 Plant Isomax, S-4158 F-340 Natural Gas Heater H2 Plant Isomax, S-4162 F-520 TKN Feed Furnace Isomax, S-4163 F-530 TKN Feed Furnace Isomax, S-4164 F-630 Isocracker Feed Furnace Isomax, S-4165 F-620 Isocracker Feed Furnace Isomax, S-4166 F-610 Isocracker Feed Furnace Isomax, S-4167 F-710 TKC Fractionator Isomax, S-4330 F1610 HNHF Reactor RLOP 16 Plant abated by A-0065 SCR, S-4331 F1310 LNHF Reactor RLOP abated by A-0065 SCR, S-4332 F1360 Hot Oil Furnace RLOP abated by A-0065 SCR, S-4333 F-1750 TKC Vacuum Furnace abated by A-0066 SCR, S-4334 F-1200 Furnace LNC Atmospheric RLOP 12 Plant abated by A-0066 SCR,

A-0066 SCR, S-4334 F-1200 Furnace LNC Atmospheric RLOP 12 Plant abated by A-0066 SCR, S-4335 F-1250 Furnace LNC Vacuum RLOP 12 Plant abated by A-0066 SCR, S-4336 F-1410 HNC Reactor RLOP abated by A-0067 SCR, S-4337 F-1500 HNC Atmospheric RLOP abated by A-0067 SCR, S-4338 F-1550 HNC Vacuum RLOP abated by A-0067 SCR, S-4339 F-1110 LNC Reactor RLOP abated by A-0067 SCR

S-4038 F-3550 #4 Cat Furnace, S-4152 F-100 Asphalt Solution Heater SDA Isomax, S-4159 F-410 TKC Feed Furnace TKC Isomax, S-4160 F-420 TKC Feed Furnace TKC Isomax, S-4161 F-510 TKN Feed Furnace Isomax, S-4168 F-730 Isocracker Splitter Feed Isomax, S-4169 F-731 Isocracker Reboiler Isomax,

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
Condition 22923	Sources subject to NSPS subpart J	Y	
Condition #23201	Applies to S-4038 S-4159, S-4160, S-4161, S-4168, S-4169, S-4152, S-4170, S-4171, S-4188, S-4189, S-4070, S-4071, S-4042, S-4062, S-4068, S-4334, S-4155, S-4332, S-4338, and S-4059	Y	
Part 1	Sources subject to NSPS Subparts A and J	Y	

# Table IV.A.3.2 Combustion Source-Specific Applicable Requirements

#### Furnaces for which BAAQMD Regulation 9 Rule 10 and NSPS Subpart J both apply

S-4032 F-101 FCC GHT #3 Cat Furnace, S-4033 F-102 Penhex Isom #3 Cat Furnace, S-4039 F-3560 #4 Cat Furnace, S-4040 F-3570 #4 Cat Furnace, S-4041 F-3580 #4 Cat Furnace, S-4042 F-550 #5 Cat Furnace, S-4043 F-560 #5 Cat Furnace, S-4044 F-570 #5 Cat Furnace, S-4045 F-580 #5 Cat Furnace, S-4046 F-1 H.O. Heater-Asphalt Plant, S-4059 F-247 Furnace JHT MDH LSFO-W, S-4060 F-210 A&B Furnace JHT MDH LSFO-W, S-4061 F-410 #5 Naphtha Hydrotreater LSFO-W, S-4062 F-447 #5 Naphtha Hydrotreater LSFO-W, S-4068 F-1610 DHT (VGO Desulfinizer) Furnace LSFO-E, S-4069 F-1670 Aromatic Saturator (Formerly VGO F-1660) DHT Furnace LSFO-E, S-4070 F-1100A 4 Crude LSFO-E, S-4071 F-1100B 4 Crude LSFO-E, S-4072 F-1160 4 Crude LSFO-E, S-4153 F-110 Asphalt Solution Heater SDA Isomax, S-4154 F-120 Asphalt Solution Heater SDA Isomax, S-4155 F-135 Hot Oil Furnace SDA Rose DAO Solution Heater, S-4156 F-320 Naphtha Vaporizer H2 Plant Isomax, S-4157 F-330 Naphtha Vaporizer H2 Plant Isomax, S-4158 F-340 Natural Gas Heater H2 Plant Isomax, S-4162 F-520 TKN Feed Furnace Isomax, S-4163 F-530 TKN Feed Furnace Isomax, S-4164 F-630 Isocracker Feed Furnace Isomax, S-4165 F-620 Isocracker Feed Furnace Isomax, S-4166 F-610 Isocracker Feed Furnace Isomax, S-4167 F-710 TKC Fractionator Isomax, S-4330 F1610 HNHF Reactor RLOP 16 Plant abated by A-0065 SCR, S-4331 F1310 LNHF Reactor RLOP abated by A-0065 SCR, S-4332 F1360 Hot Oil Furnace RLOP abated by A-0065 SCR, S-4333 F-1750 TKC Vacuum Furnace abated by A-0066 SCR, S-4334 F-1200 Furnace LNC Atmospheric RLOP 12 Plant abated by A-0066 SCR,

A-0066 SCR, S-4334 F-1200 Furnace LNC Atmospheric RLOP 12 Plant abated by A-0066 SCR, S-4335 F-1250 Furnace LNC Vacuum RLOP 12 Plant abated by A-0066 SCR, S-4336 F-1410 HNC Reactor RLOP abated by A-0067 SCR, S-4337 F-1500 HNC Atmospheric RLOP abated by A-0067 SCR, S-4338 F-1550 HNC Vacuum RLOP abated by A-0067 SCR, S-4339 F-1110 LNC Reactor RLOP abated by A-0067 SCR

S-4038 F-3550 #4 Cat Furnace, S-4152 F-100 Asphalt Solution Heater SDA Isomax, S-4159 F-410 TKC Feed Furnace TKC Isomax, S-4160 F-420 TKC Feed Furnace TKC Isomax, S-4161 F-510 TKN Feed Furnace Isomax, S-4168 F-730 Isocracker Splitter Feed Isomax, S-4169 F-731 Isocracker Reboiler Isomax,

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
Condition 23872	Applies to S-4042, S-4043, S-4044, S-4045, S-4059, S-4061, S-4062, S-4070, S-4071, S-4072, S-4129, S-4132, S-4135, S-4158, S-4167, S-4159, S-4160, S-4168, S-4169, S-4170, and S-4171	Y	
Part 1	Consent decree NOx limits	Y	
Part 2	Firing rate limits for S-4170 and S-4171	Y	
Part 3	Monitoring and compliance demonstration	Y	

#### Table IV.A.3.3 Combustion (Furnaces)

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
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#### Table IV.A.3.5 Combustion (Furnaces)

# Table IV.A.3.5 Combustion Source-specific Applicable Requirements

#### Furnace for which BAAQMD Regulation 9 Rule 10 does not apply but NSPS does apply

#### S-4349 F-1650 Furnace HNC Distillation Section RLOP (BO 2000)

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
BAAQMD Regulation 1	General Provisions and Definitions (7/9/08)		
1-521	Monitoring may be required	Y	
1-522	Continuous Emission Monitoring and Recordkeeping Procedures	Ν	
1-602	Area and Continuous Monitoring Requirements	Ν	
SIP	PROVISIONS NO LONGER IN CURRENT RULE		
Regulation 1	General Provisions and Definitions (6/28/99)		
1-522	Continuous Emission Monitoring and Recordkeeping Procedures	Y	
BAAQMD Regulation 2 Rule 1	Regulation 2, Rule 1 – Permits, General Requirements (11/19/08; SIP approved 1/26/99 {adopted 11/01/89})		
2-1-403	Permit conditions-measurement of emissions	Ν	
2-1-501	Monitors	Y	
SIP Regulation	PROVISIONS NO LONGER IN CURRENT RULE		
2 Rule 1	Permits, General Requirements (1/26/99 {adopted 11/01/89})		
2-1-403	Permit conditions-measurement of emissions	Y	
BAAQMD Regulation 6-1	Particulate Matter and Visible Emissions (12/	05/07)	
6-1-301	Ringelmann No. 1 Limitation	Ν	
6-1-305	Visible Particles	Ν	
6-1-310	Particle Weight Limitation	Ν	
6-1-310.3	Heat Transfer Operation	Ν	
SIP BAAQMD Regulation 6	Particulate Matter and Visible Emissions (12/19/90)		
6-301	Ringelmann No. 1 Limitation	Y	
6-305	Visible Particles	Y	

# Table IV.A.3.5 Combustion Source-specific Applicable Requirements

#### Furnace for which BAAQMD Regulation 9 Rule 10 does not apply but NSPS does apply

### S-4349 F-1650 Furnace HNC Distillation Section RLOP (BO 2000)

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
6-310	Particle Weight Limitation	Y	
6-310.3	Heat transfer operations	Y	
NSPS 40 CFR 60 Subpart J	Standards of Performance for Petroleum Refineries (6/24/08)		
60.104	Standards for Sulfur Oxides: Compliance Schedule	Y	
60.104(a)(1)	Fuel gas H2S concentration limited to 230 mg/dscm (0.10 gr/dscf) except for gas burned as a result of process upset or gas burned at flares from relief valve leaks or other emergency malfunctions	Y	
60.105	Monitoring of Emissions and Operations	Y	
60.105(a)(4)	Monitoring requirement for H2S (dry basis) in fuel gas prior to	Y	
	Combustion (in lieu of separate combustion device exhaust SO2 monitors as required by 60.105(a)(3))		
60.105(e)(3)	Excess SO <sub>2</sub> emission definitions for 60.7(c)	Y	
Condition #469	RLOP CAP, monthly CME		
	Permit condition parts are listed below:		
Part 6 E1	Burn only natural gas or refinery fuel gas [applies for S-4349]	Y	
Part 6 E2	20 ppmv Nox limit [applies for S-4349]	Y	
Part 6 E3	50 ppmv CO limit [applies for S-4349]	Y	
Part 6 E4	Source test may meet annual compliance demonstration requirement [applies for S-4349]	Y	

Table IV.A.4.1 Combustion (Engines)

# Table IV.A.4.1 Combustion Source-specific Applicable Requirements

#### **Internal Combustion Engines**

S-7013 STANDBY GENERATOR DIESEL ENGINE, S-7501 IC ENGINE, S-7507 IC ENGINE, S-7511 IC Engine, S-7512 IC Engine, S-7513 IC Engine, S-7514 IC Engine, S-7515 IC Engine, S-7516 IC Engine, S-7517 IC Engine, S-7518 IC Engine, S-7521 IC Engine, S-7523 IC Engine, and S-7531 IC Engine, S-7534 Plant Protection Emergency Standby Generator Diesel Engine, S-7535 Standby Fire Pump Diesel Engine, S-7536 Standby Fire Pump Diesel Engine, S-7538 Diesel Engine (GEN 5H2S-1), S-7539 Diesel Engine,

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
BAAQMD Regulation 6-1	Particulate Matter and Visible Emissions (12/	05/07)	
6-1-301	Ringelmann No. 1 Limitation	Ν	
6-1-305	Visible Particles	Ν	
6-1-310	Particle Weight Limitation	Ν	
6-1-310.3	Heat Transfer Operation	Ν	
SIP	Particulate Matter and Visible Emissions (12/2	19/90)	
BAAQMD Regulation 6			
6-303	Ringelmann No. 2 Limitation	Y	
6-303.1	Engines used solely as a standby source of motive power (does not apply to S-7513, S-7514, S-7523)	Y	
6-305	Visible Particles	Y	
6-310	Particulate Weight Limitation	Y	
6-401	Appearance of Emissions	Y	
BAAQMD Regulation 9 Rule 1	Inorganic Gaseous Pollutants – Sulfur Dioxide (3/15/95; SII	P approved 5/20/92	))
9-1-301	Limitations on Ground Level Concentrations	Y	
9-1-304	Fuel Burning (Liquid and Solid Fuels)	Y	
9-1-602	Sulfur Content of Fuel	Y	
BAAQMD Regulation 9 Rule 8	Inorganic Gaseous Pollutants – Nitrogen Oxides and Carbon Monoxide from Stationary Internal Combustion Engines (7/25/07)		
9-8-110.1	Exemption (until 1/1/12), Engines < 250 hp (applies to S-7508, 7509, 7530, & 7537)	N	
9-8-110.2	Exemption, Engines $\leq$ 50 hp	N	<u>1/1/12</u>

# Table IV.A.4.1 Combustion Source-specific Applicable Requirements

#### **Internal Combustion Engines**

S-7013 STANDBY GENERATOR DIESEL ENGINE, S-7501 IC ENGINE, S-7507 IC ENGINE, S-7511 IC Engine, S-7512 IC Engine, S-7513 IC Engine, S-7514 IC Engine, S-7515 IC Engine, S-7516 IC Engine, S-7517 IC Engine, S-7518 IC Engine, S-7521 IC Engine, S-7523 IC Engine, and S-7531 IC Engine, S-7534 Plant Protection Emergency Standby Generator Diesel Engine, S-7535 Standby Fire Pump Diesel Engine, S-7536 Standby Fire Pump Diesel Engine, S-7538 Diesel Engine (GEN 5H2S-1), S-7539 Diesel Engine,

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
9-8-110.3	Exemption (until 1/1/12), Engines Fired Exclusively by Liquid Fuels	Ν	
9-8-110.5	Exemption. Emergency Standby Engines (does not apply to S-7537)	Ν	
9-8-304.1	Emission Limits – Compression-Ignited Engines, 51 to 175 hp (applies to S-7537 only)	Ν	<u>1/1/10</u>
9-8-305	Emission Limits – Delayed Compliance, Existing CI Engines, MY 1996 and Later (applies to S-7537 only)	Ν	<u>1/1/10</u>
9-8-330	Emergency Standby Engines, Hours of Operation	Ν	
9-8-330.1	For Emergency Use, Unlimited Hours	Ν	
9-8-330.2	For Reliability-Related Activities (until 1/1/12), up to 100 hr per calendar year	Ν	
9-8-330.3	For Reliability-Related Activities, up to 50 hr per calendar year, not including NFPA 25 testing hours	Ν	<u>1/1/12</u>
9-8-401	Compliance Schedule	Ν	
9-8-402	Reporting Requirements for Delayed Compliance	Ν	
9-8-501	Initial Demonstration of Compliance	Ν	
9-8-502	Recordkeeping	Ν	
9-8-503	Quarterly Demonstration of Compliance	Ν	
9-8-530	Emergency Standby and Low Usage Engines, Monitoring and Recordkeeping	Ν	
SIP BAAQMD Regulation 9 Rule 8	Inorganic Gaseous Pollutants – Nitrogen Oxides and Carbon Monoxi Combustion Engines (1/20/93)	de from Stationar	y Internal
9-8-110.2	Exemption, Engines Fired Exclusively by Liquid Fuels	Y	
17 CCR 93115 (Stationary Diesel Engine ATCM)	Airborne Toxic Control Measure for Stationary Compression Ignition Engines (10/18/07)	N	
40 CFR 60 Subpart IIII	NSPS For Stationary CI Internal Combustion Engines	Y	
40 CFR 63 Subpart ZZZZ	NESHAP For Stationary Reciprocating Internal Combustion Engines (1/18/08) (applies to S-7013 and S-7538 only)	Y	

# Table IV.A.4.1 Combustion Source-specific Applicable Requirements

#### **Internal Combustion Engines**

S-7013 STANDBY GENERATOR DIESEL ENGINE, S-7501 IC ENGINE, S-7507 IC ENGINE, S-7511 IC Engine, S-7512 IC Engine, S-7513 IC Engine, S-7514 IC Engine, S-7515 IC Engine, S-7516 IC Engine, S-7517 IC Engine, S-7518 IC Engine, S-7521 IC Engine, S-7523 IC Engine, and S-7531 IC Engine, S-7534 Plant Protection Emergency Standby Generator Diesel Engine, S-7535 Standby Fire Pump Diesel Engine, S-7536 Standby Fire Pump Diesel Engine, S-7538 Diesel Engine (GEN 5H2S-1), S-7539 Diesel Engine,

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
Condition # 20225	Applies to S-7501, S-7507 IC Engine, S-7511 IC Engine, S-7512 IC Engine, S-7515 IC Engine, S-7516 IC Engine, S-7517 IC Engine, S-7518 7523 IC Engine, S-7531 IC Engine	ine, S-7513 IC Eng IC Engine, S-7521	gine, S-7514 IC IC Engine, S-
Part 1	Hours of Operation Limit (applies to S-7501 only)	Ν	
Part 2	Hour or Fuel Meter Requirement (applies to S-7501 only)	N	
Part 3	Records (applies to S-7501 only)	N	
Part 4	Hour or Fuel Meter Requirement (applies to S-7507 IC Engine, S-7511 IC Engine, S-7512 IC Engine, S-7513 IC Engine, S-7514 IC Engine, S-7515 IC Engine, S-7516 IC Engine, S-7517 IC Engine, S-7518 IC Engine, S-7521 IC EngineS-7523 IC Engine, and S-7531 IC Engine only)	Ν	
Part 5	Records (applies to S-7507 IC Engine, S-7511 IC Engine, S-7512 IC Engine, S-7513 IC Engine, S-7514 IC Engine, S-7515 IC Engine, S-7516 IC Engine, S-7517 IC Engine, S-7518 IC Engine, S-7521 IC EngineS-7523 IC Engine, , and S-7531 IC Engine only)	Ν	
Condition 22569	Applies to S-7013		
Part 1	Hours of operation	Ν	
Part 2	Time recorder	Ν	
Part 3	Record keeping	Ν	
Part 4	California ATCM diesel requirement	N	
Condition 22820	Applies to S-7515 and S-7516	N	
Part 1	Hours of operation	N	
Part 2	Emergency Operation	N	
Part 3	Time recorder	Ν	
Part 4	Recordkeeping	Ν	
Part 5	If located within 500 ft of a School	Ν	
Condition 22850	Applies to S-7534, S-7535, S-7536, S-7538, S-7539	Ν	
Part 1	Hours of operation	Ν	
Part 2	Emergency Operation	Ν	
Part 3	Time recorder	N	

# Table IV.A.4.1 Combustion Source-specific Applicable Requirements

#### **Internal Combustion Engines**

S-7013 STANDBY GENERATOR DIESEL ENGINE, S-7501 IC ENGINE, S-7507 IC ENGINE, S-7511 IC Engine, S-7512 IC Engine, S-7513 IC Engine, S-7514 IC Engine, S-7515 IC Engine, S-7516 IC Engine, S-7517 IC Engine, S-7518 IC Engine, S-7521 IC Engine, S-7523 IC Engine, and S-7531 IC Engine, S-7534 Plant Protection Emergency Standby Generator Diesel Engine, S-7535 Standby Fire Pump Diesel Engine, S-7536 Standby Fire Pump Diesel Engine, S-7538 Diesel Engine (GEN 5H2S-1), S-7539 Diesel Engine,

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
Part 4	Recordkeeping	N	
Part 5	California ATCM diesel requirement	N	
Condtion 24022	Applies to S-7537		
Part 1	Abatement requirement -diesel particulate filter	N	
Part 2	Visual inspection	Ν	
Part 3	Permit expiration	Ν	
Part 4	Notification of shutdown	N	
Part 5	Record keeping	N	
Condition 24070	Applies to S-7513, S-7514, S-7523,	N	
Part 1	Abatement requirement -diesl particulate filter	N	
Part 2	Hours of operation	Ν	
Part 3	Emergency operation	Ν	
Part 4	Time recorder	Ν	
Part 5	Recordkeeping	Ν	
Condition 24285	Applies to S-7539	Ν	
Part 1	Abatement requirement	Ν	
Part 2	Monitoring requirement	Ν	
Part 3	Low sulfur diesel requirement	Ν	

#### Table IV.A.5.1 Combustion (Boilers)

# Table IV.A.5.1 Combustion Source-specific Applicable Requirements

#### **Boilers**

#### S-4129 800 lb. Steam Boiler No. 1, S-4131 800 lb. Steam Boiler No. 3, S-4132 800 lb. Steam Boiler No. 4, S-4133 800 lb. Steam Boiler No. 5, S-4135 800 lb. Steam Boiler No. 7

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
BAAQMD Regulation 1	General Provisions and Definitions (7/9/08)		
1-520	Continuous Emission Monitoring	Y	
1-520.8	Monitors pursuant to Regulation 2-1-403	Y	
1-521	Monitoring May Be required	Y	
1-522	Continuous Emission Monitoring and Recordkeeping Procedures	N	
1-523	Parametric Monitoring and Recordkeeping Procedures	N	
1-602	Area and Continuous Monitoring Requirements	N	
SIP Regulation 1	PROVISIONS NO LONGER IN CURRENT RULE General Provisions and Definitions (6/28/99) [adopted 10/7/98]		
1-522	Continuous Emission Monitoring and Recordkeeping Procedures	Y	
BAAQMD Regulation 2 Rule 1	Regulation 2, Rule 1 – Permits, General Requirements (11/19/08; SIP approved 1/26/99 {adopted 11/01/89}) [Applicable if Subject to CEM Monitoring, either by BAAQMD 9-9 or permit condition (BACT)]		
2-1-403	Permit conditions-measurement of emissions	N	
2-1-501	Monitors	Y	
SIP Regulation 2 Rule 1	PROVISIONS NO LONGER IN CURRENT RULE Permits, General Requirements (1/26/99 {adopted 11/01/89}) [Applicable if Subject to CEM Monitoring, either by BAAQMD 9-9 or permit condition (BACT)]		
2-1-403	Permit conditions-measurement of emissions	Y	
BAAQMD Regulation 6-1	Particulate Matter and Visible Emissions (12/0	5/07)	
6-1-301	Ringelmann No. 1 Limitation	N	
6-1-305	Visible Particles	N	
6-1-310	Particle Weight Limitation	N	
6-1-310.3	Heat Transfer Operation	N	
SIP BAAQMD Regulation 6	Particulate Matter and Visible Emissions (12/19/90)		
6-301	Ringelmann No. 1 Limitation	Y	
6-305	Visible Particles	Y	
6-310	Particle Weight Limitation	Y	

# Table IV.A.5.1 Combustion Source-specific Applicable Requirements

### **Boilers**

#### S-4129 800 lb. Steam Boiler No. 1, S-4131 800 lb. Steam Boiler No. 3, S-4132 800 lb. Steam Boiler No. 4, S-4133 800 lb. Steam Boiler No. 5, S-4135 800 lb. Steam Boiler No. 7

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
6-310.3	Heat transfer operations	Y	
BAAQMD Regulation 9 Rule 10	Inorganic Gaseous Pollutants – Nitrogen Oxides and Carbon Monoxide from Boilers, Steam Generators, and Process Heaters in Petroleum Refineries (7/17/02)		
9-10-301	Emission Limit for Facility, Nox: 0.033 lbs Nox/MMBTU	Ν	
9-10-301.1	Start-up/Shutdown Contribution	Ν	
9-10-301.2	Out-of-Service Units Contribution	Ν	
9-10-301.3	Test-firing on Non-gaseous fuel Contribution	Ν	
9-10-303	Emission Limit for Facility (Federal Requirements)	Y	
9-10-305	CO emission limit	Ν	
9-10-403	Clean-Fuel Extension Compliance Date	Ν	
9-10-502	Monitoring	Y	
9-10-502.1	CEMS for Nox, CO, and O2	Ν	
9-10-502.2	Fuel flowmeters	Y	
9-10-504	Recordkeeping	Ν	
9-10-505	Reporting	Ν	
NSPS 40 CFR 60 Subpart J	Standards of Performance for Petroleum Refineries (6/24/08)		
60.104	Standards for Sulfur Oxides: Compliance Schedule	Y	
60.104(a)(1)	Fuel gas H2S concentration limited to 230 mg/dscm (0.10 gr/dscf) except for gas burned as a result of process upset or gas burned at flares from relief valve leaks or other emergency malfunctions	Y	
60.105	Monitoring of Emissions and Operations	Y	
60.105(a)(4)	Monitoring requirement for H2S (dry basis) in fuel gas prior to	Y	
	Combustion (in lieu of separate combustion device exhaust SO2 monitors as required by 60.105(a)(3))		
60.105(e)(3)	Excess $SO_2$ emission definitions for $60.7(c)$	Y	
Condition #469	RLOP CAP, monthly CME	Y	
Condition #16686			
Part 1	Firing Limits [applies for S-4131, S-4132, S-4133]	Y	

# Table IV.A.5.1 Combustion Source-specific Applicable Requirements

### **Boilers**

#### S-4129 800 lb. Steam Boiler No. 1, S-4131 800 lb. Steam Boiler No. 3, S-4132 800 lb. Steam Boiler No. 4, S-4133 800 lb. Steam Boiler No. 5, S-4135 800 lb. Steam Boiler No. 7

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
Condition #21232	New Nox Box Conditions [effective 6/1/04]	Ν	
Part 1	Sources subject to Regulation 9-10 (basis: Regulation 9-10- 301 & 305)	N	
Part 2	O2 monitor and recorder requirement (basis: Regulation 9-10- 502)	N	
Part 3	Operating conditions requirements for those sources without CEM (basis: Regulation 9-10-502)	N	
Part 4	Nox box establishment requirements (basis: Regulation 9-10- 502)	N	
Part 5	Nox box ranges (basis: Regulation 9-10-502)	Ν	
Part 6	Nox Box Deviations (basis: Regulation 9-10-502)	Ν	
Part 7	Source test requirements (basis: Regulation 9-10-502)	Ν	
Part 8	CO source test (basis: Regulation 9-10-502, 1-522)	N	
Part 9	CO results requires CEM (basis: Regulation 9-10-502, 1-522)	N	
Part 10	Source test records (basis: recordkeeping; Regulation 9-10- 504)	N	
Condition 23872	Applies to S-4129, S-4132, and S-4135	Y	
Part 1	Consent decree NOx limits	Y	
Part 2	Firing rate limits for S-4170 and S-4171	Y	
Part 3	Monitoring and compliance demonstration	Y	

#### Table IV.B.1.1 Loading Terminals (Asphalt)

# Table IV.B.1.1 Loading Terminals Source-specific Applicable Requirements

#### Asphalt S-4240 Asphalt Tank Truck Loading Rack abated by A-4241 Mist Eliminator, S-4241 Asphalt Tank Car Loading Rack abated by A-4241 Mist Eliminator, S-4415 Asphalt Tank Truck Loading Rack abated by A-0037 Mist Eliminator

Applicable Requirement	Regulation Title or Description of Requrement	Federally Enforceable (Y/N)	Future Effective Date
BAAQMD Regulation 6-1	Particulate Matter and Visible Emissions (1	2/05/07)	
6-1-301	Ringelmann No. 1 Limitation	N	
6-1-305	Visible Particles	N	
6-1-310	Particle Weight Limitation	Ν	
6-1-310.3	Heat Transfer Operation	N	
SIP	Particulate Matter and Visible Emissions (1	2/19/90)	
BAAQMD Regulation 6			
6-301	Ringelmann No. 1 Limitation	Y	
6-305	Visible Particles	Y	
6-310	Particulate Weight Limitation	Y	
6-401	Appearance of Emissions	Y	
BAAQMD Regulation 8 Rule 15	Organic Compounds, Emulsified and Liquid Asphalts (6/1/1994)		
8-15-305	Prohibition of Manufacture and Sale	Y	
8-15-501	Records	Y	
Condition #1331	Permit condition parts are listed below:		
Part 1	Applies to S-4415: Abated by A-0037 mist eliminator except when the abatement device A-0037 is down for cleaning or repairs	Y	
Part 2	Applies to S-4415; Chevron shall not load more than 238,000 gallons of asphalt per day when the abatement device A-0037 is down for cleaning or repairs	Y	
Part 3	Daily throughput records when A-0037 is down for cleaning or repairs	Y	
Condition #469	Refinery Cap	Y	

#### Table IV.B.2.1 Loading Terminals (Gasoline)

# Table IV.B.2.1 Loading Terminals Source-specific Applicable Requirements

#### **Gasoline**

#### S-9304 Gasoline Dispensing Facility

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
BAAQMD Regulation 8 Rule 7	Organic Compounds – Gasoline Dispensing Fac	ilities (11/6/02)	
8-7-301	Phase I Requirements	Y	
8-7-301.1	Requirement for CARB Phase I System	Y	
8-7-301.2	Installation of Phase I Equipment per CARB Requirements	Y	
8-7-301.3	Submerged Fill Pipes	Y	
8-7-301.5	Maintenance of Phase I Equipment per Manufacturers Guidelines or CARB Executive Order	Y	
8-7-301.6	Leak-Free, Vapor-Tight	Y	
8-7-301.7	Poppetted Drybreaks	Y	
8-7-301.8	No Coaxial Phase 1 Systems on New and Modified Tanks	Y	
8-7-301.9	CARB-Certified Anti-Rotational Coupler or Swivel Adapter	Y	
8-7-301.10	System Vapor Recovery Rate	Y	
8-7-301.11	CARB-Certified Spill Box	Y	
8-7-301.12	Drain Valve Permanently Plugged	Y	
8-7-301.13	Phase I Vapor Recovery System - Vapor Tightness Test	Y	
8-7-302	Phase II Requirements	Y	
8-7-302.1	Requirement for CARB Certified Phase II System	Y	
8-7-302.2	Maintenance of Phase II System per CARB Requirements	Y	
8-7-302.3	Maintenance of All Equipment as Specified by Manufacturer	Y	
8-7-302.4	Repair of Defective Parts Within 7 Days	Y	
8-7-302.5	Leak-Free, Vapor-Tight	Y	
8-7-302.6	Insertion Interlocks	Y	
8-7-302.7	Built-in Vapor Check Valve	Y	
8-7-302.8	Minimum Liquid Removal Rate	Y	
8-7-302.9	Coaxial Hose	Y	
8-7-302.10	Galvanized Piping or Flexible Tubing	Y	
8-7-302.11	ORVR Compatible	Y	

# Table IV.B.2.1 Loading Terminals Source-specific Applicable Requirements

### **Gasoline**

#### S-9304 Gasoline Dispensing Facility

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
8-7-302.12	Liquid Retainment Limit	Y	
8-7-302.13	Spitting Limit	Y	
8-7-302.14	Balance Phase II Vapor Recovery System – Back Pressure Test	Y	
8-7-303	Topping Off	Y	
8-7-304	Certification Requirements	Y	
8-7-306	Prohibition of Use	Y	
8-7-307	Posting of Operating Instructions	Y	
8-7-308	Operating Practices	Y	
8-7-309	Contingent Vapor Recovery Requirements	Y	
8-7-313	Requirements for New or Modified Phase II Installations	Y	
8-7-315	Pressure Vacuum Valve Requirement, Underground Storage Tank	Y	
8-7-401	Permit Requirements, New and Modified Installations	Y	
8-7-406	Testing Requirements, New and Modified Installations	Y	
8-7-407	Periodic Testing Requirements	Y	
8-7-408	Periodic Testing Notification and Submission Requirements	Y	
8-7-501	Burden of Proof	Y	
8-7-502	Right of Access	Y	
8-7-503	Record Keeping Requirements	Y	
8-7-503.1	Gasoline Dispensed Records	Y	
8-7-503.2	Dispensing Facility Maintenance Records	Y	
8-7-503.3	Dispensing Records Retention	Y	
8-7-601	Determination of Equipment in Compliance with Dynamic Backpressure Requirements and Vapor Tight	Y	
8-7-602	Determination of Equipment in Compliance with Vapor Tightness Standards	Y	
8-7-603	Determination of Equipment in Compliance with Phase I Vapor Recovery Efficiency	Y	
8-7-604	Determination of Equipment in Compliance with Liquid Removal Requirements	Y	
8-7-606	Determination of Applicability	Y	
Condition 7880	Throughput limit	Ν	
Condition 18680	Applies to S-9304	N	

# Table IV.B.2.1 Loading Terminals Source-specific Applicable Requirements

#### **Gasoline**

#### S-9304 Gasoline Dispensing Facility

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
Condition 22951	Applies to S-9304	Ν	
Condition 24294	Applies to S-9304	Ν	
CARB State Exec. Order VR-101/201 condition 20666	Applies to S-9304	Ν	

### Table IV.B.3.1 Loading Terminals (LPG)

# Table IV.B.3.1 Loading Terminals Source-specific Applicable Requirements

### LPG

### S-4238 Liquefied Petroleum Gas Loading Rack, 15 Pumps

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
BAAQMD Regulation 8 Rule 6	Organic Compounds-Organic Liquid Bulk Terminals and Bulk	x Plants (2/2/94)	
8-6-117	Exemption, Liquified Organic Gases	Y	
8-6-503	Burden of Proof	Y	
Permit Condition 469	Refinery Cap		

#### Table IV.B.4.1 Loading Terminals (Wax)

# Table IV.B.4.1 Loading Terminals Source-specific Applicable Requirements

### Wax

#### S-4239 Main Tank Car Loading Rack S-4405 Heavy Oil Transloading Operaion -.

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
BAAQMD Regulation 8 Rule 6	Organic compounds-Organic Liquid Bulk Terminals and Bulk	: Plants (2/2/94)	
8-6-111	Low Throughput exemption (Limited exemption applies to S-4239 and S-4405)	Y	
8-6-301	CARB Certification and VOC limit 21g/cubic meter	Y	
8-6-302.1	CARB Certification and VOC limit 44 g/cubmic meter	Y	
8-6-302.2	Submerged Fill pipe, bottom filling, or a vapor loss control system	Y	
8-6-503	Burden of Proof	Y	
Condition #469	Bubble Condition	Y	
Condition 20863	Applies to S-4405	N	

#### Table IV.B.5.1 Loading Terminals (Wharf)

# Table IV.B.5.1 Loading Terminals Source-specific Applicable Requirements

#### <u>Wharf</u>

S-4315 Point Orient Wharf, S-9321 Berth #1 Long Wharf 4 Arms, S-9322 Berth #2 Long Wharf 18 Risers, S-9323 Berth #3 Long Wharf 6 Arms, S-9324 Berth #4 Long Wharf 5 Arms, S-9325 Berth #9 Long Wharf 15 Risers, S-9326 Berth #11 Long Wharf 2 Risers (S-9322, S-9323, S-9324, S-9325 abated by A-0900 Marine Vapor Recovery)

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
BAAQMD Regulation 8, Rule 44	Organic Compounds-Marine Tank Vessel Operations (12/7/05)		
8-44-301	Limitations on Marine Tank Vessel Loading and Lightering	N	
8-44-302	Limitations on Marine Tank Vessel Ballasting	Ν	
8-44-303	Limitations on Marine Tank Vessel Venting	N	

# Table IV.B.5.1 Loading Terminals Source-specific Applicable Requirements

### <u>Wharf</u>

#### S-4315 Point Orient Wharf, S-9321 Berth #1 Long Wharf 4 Arms, S-9322 Berth #2 Long Wharf 18 Risers, S-9323 Berth #3 Long Wharf 6 Arms, S-9324 Berth #4 Long Wharf 5 Arms, S-9325 Berth #9 Long Wharf 15 Risers, S-9326 Berth #11 Long Wharf 2 Risers (S-9322, S-9323, S-9324, S-9325 abated by A-0900 Marine Vapor Recovery)

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
8-44-304	Emission Control Requirements	Ν	
8-44-305	Equipment Leaks	Ν	
8-44-403	Notifications Regarding Safety/Emergency Exemption	Ν	
8-44-404	Notifications for Operations Conducted Other Than at Marine Terminals	Ν	
8-44-501	Recordkeeping	Ν	
8-44-501.1	Records for loading events	Ν	
8-44-501.2	Records for ballasting operations	Ν	
8-44-501.3	Records for venting operations	Ν	
8-44-502	Record Keeping – Marine Tank Vessels	N	
8-44-503	RRecord Keeping – Exemptions	N	
8-44-504	Burden of Proof	<u>Y</u>	
8-44-603	Leak Determinations	N	
8-44-604	Flash Point Determinations	N	
SIP BAAQMD Regulation 8 Rule 44	Organic Compounds-Marine Vessel Loading Terminal	s (1/4/89)	
8-44-301	Marine Terminal Loading Limit	Y	
8-44-301.1	Limited to 5.7 gram per cubic meter (2 lb per 1000 bbls) of organic liquid loaded, or	Y	
8-44-301.2	POC emissions reduced 95% by weight from uncontrolled conditions	Y	
8-44-302	Emission control equipment	Y	
8-44-303	Operating practice	Y	
8-44-304	Equipment Maintenance	Y	
8-44-304.1	Certified leak free, gas tight and in good working order	Y	
8-44-304.2	Loading ceases any time gas or liquid leaks are discovered	Y	
8-44-305	Ozone excess day prohibition	Y	
8-44-402	Safety/Emergency Operations	Y	

# Table IV.B.5.1 Loading Terminals Source-specific Applicable Requirements

### <u>Wharf</u>

#### S-4315 Point Orient Wharf, S-9321 Berth #1 Long Wharf 4 Arms, S-9322 Berth #2 Long Wharf 18 Risers, S-9323 Berth #3 Long Wharf 6 Arms, S-9324 Berth #4 Long Wharf 5 Arms, S-9325 Berth #9 Long Wharf 15 Risers, S-9326 Berth #11 Long Wharf 2 Risers (S-9322, S-9323, S-9324, S-9325 abated by A-0900 Marine Vapor Recovery)

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
8-44-402.1	Rule does not require act/omission in violation of Coast Guard/other rules	Y	
8-44-402.2	Rule does not prevent act/omission for vessel safety or saving life at sea	Y	
8-44-501	Record keeping	Y	
8-44-501.1	Name and location	Y	
8-44-501.2	Responsible company	Y	
8-44-501.3	Dates and times	Y	
8-44-501.4	Name, registry of the vessel loaded and legal owner	Y	
8-44-501.5	Prior cargo carried	Y	
8-44-501.6	Type, amount of liquid cargo loaded	Y	
8-44-501.7	Condition of tanks	Y	
8-44-502	Burden of proof	Y	
Condition #4714	Permit condition parts are listed below:		
Part 3	A-0900 instrumentation to monitor and record parameters	Y	
Part 6	A-0900 Vapor Recovery System exhaust temperature limit	Y	
Part 8	S-9322, S-9323, S-9324, S-9325 loading pressure limit	Y	
Part 9	A-0900 recordkeeping requirements	Y	
Condition #18137	Throughput Limits	N	
Condition # 469	Refinery Cap	Y	
Condition #23201	Applies to A-0900	Y	
Part 1	Source subjects to NSPS Subparts A and J	Y	

### Table IV.C.1.1 Process Units (Cooling Water Towers) Table IV.C.1.1 Process Units

Source-specific Applicable Requirements

### **Cooling Water Towers**

#### S-4073 LSFO, S-4076 #3 Cat, S-4172 Isomax E-261F, S-4173 FCC E-710, S-4187 FCC Polymer E-781, S-4191 SRU (Alkane) E-2900, S-4329 RLOP Cooling Tower, S-6051 ALKY CWT

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
BAAQMD Regulation 6-1	Particulate Matter and Visible Emissions (12/05/07)		
6-1-301	Ringelmann No. 1 Limitation	Ν	
6-1-305	Visible Particles	N	
6-1-310	Particle Weight Limitation	N	
6-1-310.3	Heat Transfer Operation	N	
SIP	Particulate Matter and Visible Emissions (12/1	9/90)	
BAAQMD Regulation 6			
6-301	Ringelmann No. 1 Limitation	Y	
6-305	Visible Particles	Y	
6-310	Particulate Weight Limitation	Y	
6-311	General Operations (process weight rate limitation)	Y	
6-401	Appearance of Emissions	Y	
Condition #14596	Applies to S-6051		
Part 1	Organic compound emissions from S-6051 shall not exceed 30.2 lb/day, averaged over any consecutive 12-month period.	Y	
Part 2	Total dissolved solids in the S-6051 basin shall not exceed 2000 parts per million (wt), average over any consecutive 30-day period.	Y	
Part 3	Owner /operator to install a District-approved continuous hydrocarbon analyzer and recorder to determine the hydrocarbon concentration in the cooling water. Establish an Action Level for hydrocarbon concentration and an alarm when readings exceed this value	Y	
Part 4	When an alarm in Part 3 is triggered, check S-6051 vapor space daily with District-approved LEL meter	Y	
Part 5	Respond to heat exchanger leaks in accordance with methods and time limits established in Part 5.	Y	
Part 6	Monthly test for TDS and records are required	Y	
Part 7	Owner/ operator shall use volatile organic concentration data from the continuous hydrocarbon analyzer (part 3) and the flowrate data from a district-approved flowmeters installed at district-approved sample port locations. Hydrocarbon analyzer concentration data, flowrate data, and daily emissions estimates records are required	Y	

# Table IV.C.1.1 Process Units Source-specific Applicable Requirements

#### **Cooling Water Towers**

#### S-4073 LSFO, S-4076 #3 Cat, S-4172 Isomax E-261F, S-4173 FCC E-710, S-4187 FCC Polymer E-781, S-4191 SRU (Alkane) E-2900, S-4329 RLOP Cooling Tower, S-6051 ALKY CWT

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
Part 8	Hydrocarbon analyzer data, flowmeter data, daily emissions data, date and time of all alarms, a summary of the baseline and action levels data, a description of findings and actions taken for each incident above the Action level, and all LEL measurements records are required.	Y	

#### Table IV.C.1.2 Process Units (FCC)

## Table IV.C.2.1 Process Units Source-specific Applicable Requirements

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
BAAQMD Regulation 1	General Provisions and Definitions (7/9/08)		
1-301	Public Nuisance Prohibition	N	
1-501	Sampling Facilities	Y	
1-520	Continuous Emission Monitoring	Y	
1-520.5	SO2 and opacity monitors at catalyst regenerators of FCC units	Y	
1-521	Monitoring	Y	
1-522	Continuous Emission Monitoring and Recordkeeping Procedures	N	
1-522.1	Approval of plans and specifications	Y	
1-522.2	Scheduling requirements	Y	
1-522.3	CEM performance testing	Y	
1-522.4	Reporting of inoperative CEMs	Y	
1-522.5	CEM calibration requirements	Y	
1-522.6	CEM accuracy requirements	Y	
1-522.7	Emission limit exceedance reporting requirements	N	
1-522.8	Monitoring data submittal requirements	Y	
1-522.9	Recordkeeping requirements	Y	

# Table IV.C.2.1 Process Units Source-specific Applicable Requirements

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
1-522.10	Monitors	Y	
SIP BAAQMD Regulation 1	General Provisions and Definitions (10/7/98)	Y	
1-301	Public Nuisance Prohibition	Y	
1-522	Continuous Emission Monitoring and Recordkeeping Procedures	Y	
1-522.7	Emission limit exceedance reporting requirements	Y	
BAAQMD Regulation 6-1	Particulate Matter and Visible Emissions (12/05/	07)	
6-1-301	Ringelmann No. 1 Limitation	Ν	
6-1-302	Opacity Limitation (where opacity monitor is required by the District)	Y	
6-1-304	Tube Cleaning	Y	
6-1-305	Visible Particles	Ν	
6-1-310	Particle Weight Limitation	Ν	
6-1-310.3	Heat Transfer Operation	Ν	
6-1-311	General Operations (process weight rate limitation)	Y	
6-1-401	Appearance of Emissions	Y	
6-1-501	Sampling Facilities and Instruments required (where opacity monitor is required by the District)	Y	
6-1-502	Data, Records and Reporting (where opacity monitor is required by the District)	Y	
SIP BAAQMD Regulation 6	Particulate Matter and Visible Emissions (12/19/90)		
6-301	Ringelmann No. 1 Limitation	Y	
6-302	Opacity Limitation (where opacity monitor is required by the District)	Y	
6-304	Tube Cleaning	Y	
6-305	Visible Particles	Y	
6-310	Particulate Weight Limitation	Y	
6-311	General Operations (process weight rate limitation)	Y	
6-401	Appearance of Emissions	Y	
6-501	Sampling Facilities and Instruments required (where opacity monitor is required by the District)	Y	
6-502	Data, Records and Reporting (where opacity monitor is required by the District)	Y	

# Table IV.C.2.1 Process Units Source-specific Applicable Requirements

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
BAAQMD Regulation 9 Rule 1	Inorganic Gaseous Pollutants – Sulfur Dioxide (3/15/95)		
9-1-310	Emission Limitations for Fluid Catalytic Cracking Units, Fluid Cokers, and Coke Calcining Kilns	Y	
9-1-310.1	Catalytic cracking unit emission limitation	Y	
9-1-313	Sulfur Removal Operations at Petroleum Refineries (processing more than 20,000 bbl/day of crude oil)	Y	
9-1-313.1	Crude oil sulfur content does not exceed 0.10 percent by weight, or	Y	
9-1-313.2	Operation of a sulfur removal and recovery system that removes and recovers: 95% of H2S from refinery fuel gas, 95% of H2S and ammonia from process water streams (sulfur recovery is required when a facility removes 16.5 ton/day or more of elemental sulfur).	Y	
9-1-502	Emission Monitoring Requirements (Regulations 1-520, 1-522)	Y	
SIP Regulation 9 Rule 1	Inorganic Gaseous Pollutants – Sulfur Dioxide (5/20/92) [only provisions which are different than current BAAQMD regulation are listed]	Y	
9-1-313.2	Operation of a sulfur removal and recovery system that removes and recovers: 95% of H2S from refinery fuel gas, 95% of H2S and ammonia from process water streams	Y	
40 CFR 60 Subpart J	Standards of Performance for Petroleum Refineries (6/24/08)	Y	
60.102	Standard for Particulate Matter	Y	
60.102(a)(1)	Limit on particulate matter from catalyst regenerator	Y	
60.102(a)(2)	Limit on opacity of gases from catalyst regenerator	Y	
60.103	Standard for Carbon Monoxide	Y	
60.103(a)	Limit on carbon monoxide emissions from catalyst regenerator	Y	
60.104	Standard for Sulfur Oxides	Y	
60.104(b)(2)	Limit on sulfur oxide emissions from catalyst regenerator without add-on control device, OR	Y	
60.104(b)(3)	Limit on sulfur content of fluid catalytic cracking unit feed	Y	
60.104(c)	Compliance determined daily on rolling 7-day basis	Y	
60.104I	7-day rolling average	Y	
60.105	Monitoring of Emissions and Operations	Y	
60.105(a)(1)	Continuous opacity monitoring requirement for catalyst regenerator emissions to atmosphere	Y	

# Table IV.C.2.1 Process Units Source-specific Applicable Requirements

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
60.105(a)(2)	Continuous CO concentration monitoring requirement for catalyst regenerator emissions to atmosphere	Y	
60.105(a)(2) (i)	Requirement on the span of the CO monitoring device	Y	
60.105(a)(2) (ii)	Exemption from continuous CO concentration emission monitoring	Y	
60.105 (c)	Recording requirement for coke burn-off rate	Y	
60.105 (e)(1)	Opacity excesses	Y	
60.105 (e)(2)	Carbon monoxide excesses	Y	
60.106	Test methods and procedures	Y	
60.106(b)(3)	Coke burn rate equation	Y	
60.106(I)(12)	Alternative Method for Determining Compliance		
60.107	Reporting and recordkeeping requirements.	Y	
60.108	Performance test and compliance provisions.	Y	
40 CFR 63 Subpart UUU	National Emission Standards for Hazardous Pollutants for Petroleum Refineries: Catalytic Cracking Units, Catalytic Reforming Units, and Sulfur Recovery Units (4/20/06)	Y	
63.1561	Subject to this subpart	Y	
63.1562	Parts of plants that are covered (including exemptions)	Y	
63.1563	When to comply	Y	
63.1564	Requirement for metal hap emissions for catalytic cracking units	Y	
63.1564(a)(1)	Catalytic cracking unit is subject to NSPS for PM in 60.102	Y	
63.1564(a)(3)	Operation, maintenance, and monitoring plan (OMMP)	Y	
63.1564(a)(4)	Emission and operating limit does not apply during pre-approved planned mtce	Y	
63.1564(b)(1)	Continuous monitoring systems requirement (COMS required)	Y	
63.1564(b)(5)	Initial compliance per table 5 (no new test if unit is NSPS but must certify)	Y	
63.1564(b)(6)	Submit OMMP to permit authority with NOCS	Y	
63.1564(b)(7)	Submit NOCS	Y	
63.1564(c)(1)	Demonstrate continuous compliance	Y	
63.1564(c)(2)	Maintain records documenting compliance with OMMP	Y	
63.1565	Requirements for organic hap emissions form catalytic cracking units	Y	

# Table IV.C.2.1 Process Units Source-specific Applicable Requirements

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
63.1565(a)(1)	Catalytic cracking unit is subject to NSPS for CO in 60.103	Y	
63.1565(a)(3)	Operation, maintenance, and monitoring plan (OMMP)	Y	
63.1565(a)(4)	Emission and operating limit does not apply during pre-approved planned mtce	Y	
63.1565(b)(1)	Continuous monitoring systems requirement (CO CEMS required)	Y	
63.1565(b)(1)(i )	CO CEMS not required, upon written request, if 30 days average<50 ppm CO	Y	
63.1565(b)(4)	Initial compliance per table 12 (no new test if unit is NSPS, but must certify)	Y	
63.1565(b)(5)	Submit OMMP to permit authority with NOCS	Y	
63.1565(b)(6)	Submit NOCS	Y	
63.1565(c)(1)	Demonstrate continuous compliance per tables 13 and 14	Y	
63.1565(c)(2)	Comply with OMMP procedures	Y	
63.1569	Bypass lines	Y	
63.1570	General requirements	Y	
63.1570(d)	Develop & implement a SSMP	Y	
63.1570(f)	Report all instances not in compliance with limits or work practice standards	Y	
63.1571	Initial performance test requirements	Y	
63.1572	Monitoring, installation, operation, & maintenance requirements	Y	
63.1573	Monitoring alternatives	Y	
63.1574	Notification requirements	Y	
63.1575	Reporting requirements	Y	
63.1576	Recordkeeping requirements	Y	
63.1577	General provision applicability	Y	
Condition #11066	Permit condition parts are listed below:	Y	
Part 1	FCC Feedrate [applicable to S-4285]	Y	
Part 2	POC & PM-10 Source Test [applicable to S-4285]	Y	
Part 3	Criteria Pollutant TPY limits [applicable to S-4285]	Y	
Part 4a and 4b	SO2 limits [applicable to S-4285]	Y	

# Table IV.C.2.1 Process Units Source-specific Applicable Requirements

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
Part 5a and 5b	NOx limits [applicable to S-4285]	Y	
Part 6	CO limits [applicable to S-4285]	Y	
Part 7	TSP limit/ESP energized [applicable to S-4285 and A0014]	Y	
Part 7a1	ESP rappers inspection & repair [applicable to S-4285 and A0014]	Y	
Part 7a3	Transformer Rectifier (TR) readings [applicable to S-4285 and A0014]	Y	
Part 7a4	ESP Inlet Temperature [applicable to S-4285 and A0014]	Y	
Part 7a5	TR Limits [applicable to S-4285 and A0014]	Y	
Part 7b	TSP Source Testing [applicable to S-4285 and A0014]	Y	
Part 7c	District approved monthly log [applicable to S-4285 and A0014]	Y	
Part 9	SOx, NOx, & CO CEM required [applicable to S-4285]	Y	
Part 10a	9.8 lb SOx/1000 lb coke burned limit [applicable to S-4285] (source follows this now) OR	Y	
Part 10b	Feed < 0.3 wt. Sulfur [applicable to S-4285] (source does not follow this now, but has option to)	Y	
Part 11	Recordkeeping: Daily log [applicable to S-4285]	Y	
Part 14	Start-Up 7-day grace period [applicable to S-4285]	Y	
Part 15	NH3 Injection Rate Upper Limit [applicable to S-4285]	Ν	
Condition #18655	Permit condition parts are listed below:	Y	
Part 2	Source test requirement for compliance with 6-330	Y	
Table IV.C.3.1 Process Units (Miscellaneous Process Units)

# Table IV.C.3.1 Process Units Source-specific Applicable Requirements

#### **Miscellaneous Process Units**

S-4155 F-135 Hot Oil Furnace, S-4226 FGHT FCC Gasoline Hydrotreater, S-4233 Jet Hydrotreater, S-4234 No. 5 Naphtha Hydrotreater, S-4235 Diesel Hydrotreater, (DHT), S-4236 No. 4 Crude Unit, S-4237 No. 5 Rheniformer, S-4250 Hydrogen Manufacturing, S-4251 Solvent Deasphalting Plant (SDA), S-4252 TKN Isocracker Plant, S-4253 TKC Isocracker Plant,
S-4282 Penhex Isomerization Plant, S-4283 No. 4 Catalytic Reformer, S-4286 FCC Gas Recovery Unit Light Ends Recovery GRU, S-4291 H2SO4 Alkylation Plant, S-4292 FCC Polymer Plant, S-4340 Light Neutral Hydrocracker (LNC), S-4341 Light Neutral Hydrofinisher (LNHF), S-4342 Heavy Neutral Hydrocracker (HNHC), S-4343 Heavy Neutral Hydrofinisher (HNHF), S-4346 Gas Recovery Unit (GRU RLOP), S-4348 H2 Recovery Plant (RLOP), S-4355 Alky (Yard) DIB, S-4354Butamer Plant, S-4356 Tertiary Amyl Methyl Ether Plant (TAME), S-4400 Wax Melt Vessel, S-6050 MTBE Plant

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
40 CFR 63 Subpart UUU	National Emission Standards for Hazardous Pollutants for Petroleum Refineries: Catalytic Cracking Units, Catalytic Reforming Units, and Sulfur Recovery Units (4/20/06) (applies to S- 4237, S-4283 only)	Y	
63.1561	Subject to this subpart (applies to S-4237, S-4283 only)	Y	
63.1562	Parts of plants that are covered (including exemptions) (applies to S-4237, S-4283 only)	Y	
63.1562(f)(5)	Subpart does not apply to gaseous streams routed to a fuel gas system (exempts S-4237 & S-4283 from 63.1566 because these de-pressure & purge to fuel gas)	Y	
63.1563	When to comply (applies to S-4237, S-4283 only)	Y	
63.1567	Requirements for inorganic hap emissions from catalytic reforming units (S-4237, S-4283 only)	Y	
63.1567(a)(1)	Emission limit (S-4237, S-4283 only)	Y	
63.1567(a)(1) (i)	Option 1: % reduction standard for HCl emissions (S-4237, S-4283 only) or	Y	
63.1567(a)(1) (ii)	Option 2: 30 ppmv dry HCl concentration limit corrected to 3% O2 (S-4237, S-4283 only)	Y	
63.1567(a)(2)	Site specific operating limit. Cat regen HCl exhaust gas conc< limit established during performance test (S-4237, S-4283 only)	Y	
63.1567(a)(3)	Prepare & operate in accordance with an OMMP (S-4237, S-4283 only)	Y	
63.1567(b)(2)	Conduct performance test per table 25, measure HCl in exhaust gas & establish operating limit (S-4237, S-4283 only)	Y	
63.1567(b)(3)	Establish site specific operating limit in table 23 using method in table 25 (S-4237, S-4283 only)	Y	
63.1567(b)(4)	Demonstrate initial compliance by a performance test (S-4237, S-4283 only)	Y	
63.1567(b)(5)	Submit OMM plan with NOCS (S-4237, S-4283 only)	Y	

# Table IV.C.3.1 Process Units Source-specific Applicable Requirements

#### **Miscellaneous Process Units**

S-4155 F-135 Hot Oil Furnace, S-4226 FGHT FCC Gasoline Hydrotreater, S-4233 Jet Hydrotreater, S-4234 No. 5 Naphtha Hydrotreater, S-4235 Diesel Hydrotreater, (DHT), S-4236 No. 4 Crude Unit, S-4237 No. 5 Rheniformer, S-4250 Hydrogen Manufacturing, S-4251 Solvent Deasphalting Plant (SDA), S-4252 TKN Isocracker Plant, S-4253 TKC Isocracker Plant, S-4282 Penhex Isomerization Plant, S-4283 No. 4 Catalytic Reformer, S-4286 FCC Gas Recovery Unit Light Ends Recovery GRU, S-4291 H2SO4 Alkylation Plant, S-4292 FCC Polymer Plant, S-4340 Light Neutral Hydrocracker (LNC), S-4341 Light Neutral Hydrofinisher (LNHF), S-4342 Heavy Neutral Hydrocracker (HNHC), S-4343 Heavy Neutral Hydrofinisher (HNHF), S-4346 Gas Recovery Unit (GRU RLOP), S-4348 H2 Recovery Plant (RLOP), S-4355 Alky (Yard) DIB, S-4354Butamer Plant, S-4356 Tertiary Amyl Methyl Ether Plant (TAME), S-4400 Wax Melt Vessel, S-6050 MTBE Plant

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
63.1567(b)(6)	Submit NOCS with results of initial compliance demonstration (S-4237, S-4283 only)	Y	
63.1567(c)(1)	Demonstrate continuous compliance per tables 27 & 28, (S-4237, S-4283 only)	Y	
63.1567(c)(2)	Maintain records to document OMM plan compliance (S-4237, S-4283 only)	Y	
63.1569	Bypass lines (S-4237, S-4283 only)	Y	
63.1570	General requirements (S-4237, S-4283 only)	Y	
63.1570(d)	Develop & implement a SSMP (S-4237, S-4283 only)	Y	
63.1570(e)			
63.1570(f)	Report all instances not in compliance with limits or work practis standards (S-4237, S-4283 only)	Y	
63.1570(g)	Deviation during SSM not a violation if following SSMP (S-4237, S- 4283 only)	Y	
63.1571	Initial performace test requirements (S-4237, S-4283 only)	Y	
63.1572	Monitoring, installation, operation, & maintenance requirements (S-4237, S-4283 only)	Y	
63.1573	Monitoring alternatives (S-4237, S-4283 only)	Y	
63.1574	Notification requirements (S-4237, S-4283 only)	Y	
63.1575	Reporting requirements (S-4237, S-4283 only)	Y	
63.1576	Recordkeeping requirements (S-4237, S-4283 only)	Y	
63.1577	General provision applicability (S-4237, S-4283 only)	Y	
Condition #469	Applies to S-4233, S-4234, S-4236, S-4237, S-4250, S-4252, , , , S-4283, S-4291, S-4292, S-4340, S-4341, S-4342, S-4343, S-4400	Y	
Condition #8180	Applies to S-4235.	Y	
Condition #8773	Applies to S-4251 & 4155.	Y	

# Table IV.C.3.1 Process Units Source-specific Applicable Requirements

#### **Miscellaneous Process Units**

S-4155 F-135 Hot Oil Furnace, S-4226 FGHT FCC Gasoline Hydrotreater, S-4233 Jet Hydrotreater, S-4234 No. 5 Naphtha Hydrotreater, S-4235 Diesel Hydrotreater, (DHT), S-4236 No. 4 Crude Unit, S-4237 No. 5 Rheniformer, S-4250 Hydrogen Manufacturing, S-4251 Solvent Deasphalting Plant (SDA), S-4252 TKN Isocracker Plant, S-4253 TKC Isocracker Plant, S-4282 Penhex Isomerization Plant, S-4283 No. 4 Catalytic Reformer, S-4286 FCC Gas Recovery Unit Light Ends Recovery GRU, S-4291 H2SO4 Alkylation Plant, S-4292 FCC Polymer Plant, S-4340 Light Neutral Hydrocracker (LNC), S-4341 Light Neutral Hydrofinisher (LNHF), S-4342 Heavy Neutral Hydrocracker (HNHC), S-4343 Heavy Neutral Hydrofinisher (HNHF), S-4346 Gas Recovery Unit (GRU RLOP), S-4348 H2 Recovery Plant (RLOP), S-4355 Alky (Yard) DIB, S-4354Butamer Plant, S-4356 Tertiary Amyl Methyl Ether Plant (TAME), S-4400 Wax Melt Vessel, S-6050 MTBE Plant

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
Condition #9048	Applies to S-4253.	Y	
Condition #14701	Applies to S-4282A, S-4291 S-4355, S-4356	Y	
Condition #6001	Applies to S-4286.	Y	
Condition #13369	Applies to S-4346, S-4348.	Y	
Condition #7642	Applies to S-6050.	Y	
Condition #15698	Applies to S-4250. Continuously monitor washwater temperature, vent flow and wash water flow. Emission < 15 lbs C/day or < 300 ppm C dry, 3-hr average, water temp < 90F, 3-hr average vent flow < 5 Klb/hr, 3-hr average water flow > 30 gpm, water/vent flow ratio > 11.6	Y	
Condtion #20944	Applies to S-4292	Ν	
Condition #18137	Throughput Limits	Ν	
Condition 18337	Applies to S-4354 and 4360		
Condition 22979	Applies to S-4250		
Condition 22641	Applies to S-4226		
Condition 24433	Applies S-4252, S-4253, S-4348		

## Table IV.D.1.1 Refinery (Refinery)

# Table IV.D.1.1 RefineryRefinery-wide Applicable Requirements

## **Refinery**

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
BAAQMD Regulation 1	General Provisions and Definitions (7/9/08)		
1-510	Area Monitoring	Y	
1-530	Area Monitoring Downtime	Y	
1-540	Area Monitoring Data Examination	Y	
1-542	Area Concentration Excesses	Y	
1-543	Record Maintenance	Y	
1-544	Monthly Summary	Y	
1-602	Area and Continuous Emissions Monitoring	Ν	
SIP BAAQMD Regulation 1	General Provisions and Definitions (10/7/98)	Y	
1-301	Public Nuisance Prohibition	Y	
1-522	Continuous Emission Monitoring and Recordkeeping Procedures	Y	
NSPS Title 40 Part 60 Subpart A	General Provisions		
40 CFR 60.1	Applicability	Y	
40 CFR 60.2	Definitions	Y	
40 CFR 60.3	Units and Abbreviations	Y	
40 CFR 60.4	Address	Y	
40 CFR 60.5	Determination of Construction or Modification	Y	
40 CFR 60.6	Review of Plans	Y	
40 CFR 60.7	Notification and Record Keeping	Y	
40 CFR 60.8	Performance Tests	Y	
40 CFR 60.9	Availability of Information	Y	
40 CFR 60.11	Compliance with Standards and Maintenance Requirements	Y	
40 CFR 60.12	Circumvention	Y	
40 CFR 60.13	Monitoring Requirements	Y	
40 CFR 60.14	Modification	Y	
40 CFR 60.15	Reconstructions	Y	
40 CFR 60.488	Reconstruction from NSPS Subpart VV	Y	

# Table IV.D.1.1 Refinery Refinery-wide Applicable Requirements

### <u>Refinery</u>

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
40 CFR 60.17	Incorporated by Reference	Y	
40 CFR 60.19	General Notification and Reporting Requirements	Y	
NESHAP Title 40 Part 61 Subpart A	NESHAP, General Provisions (05/16/07		
40 CFR 61.01	Lists of Pollutants and Applicability of Part 61	Y	
40 CFR 61.02	Definitions	Y	
40 CFR 61.03	Units and Abbreviations	Y	
40 CFR 61.04	Address	Y	
40 CFR 61.05	Prohibited Activities	Y	
40 CFR 61.06	Determination of Construction or Modification	Y	
40 CFR 61.07	Application for Approval of Construction or Modification	Y	
40 CFR 61.08	Approval of construction or modification	Y	
40 CFR 61.09	Notification of startup	Y	
40 CFR 61.10	Source reporting and waiver request	Y	
40 CFR 61.12	Compliance with Standards and Maintenance Requirements	Y	
40 CFR 61.13	Emission Tests and Waiver of Emission Tests	Y	
40 CFR 61.14	Monitoring Reports	Y	
40 CFR 61.15	Modification	Y	
40 CFR 61.18	Incorporation by reference	Y	
40 CFR 61.19	Circumvention	Y	
NESHAP Title 40 Part 61 Subpart FF	NESHAP, Benzene Waste Operations (12/4/03)		
40 CFR 61.340(a)	The provisions of this subpart apply to owners and operators of chemical manufacturing plants, coke by-product recovery plants, and petroleum refineries.		
40 CFR 61.342	Standards: general	Y	
40 CFR 61.342(b)	Standards: General; Facility with TAB > 10Mg/year in compliance by 4/7/93	Y	
40 CFR 61.342(c)9(c) & (c)(1))	Standards: General; Treat benzene-containing waste streams in accordance with 61.342(c)(1)(i), 61.342(c)(1)(ii) and 61.342(c)(1)(iii)	Y	
40 CFR 61.342(c)(1)(i)	Standards: General; Remove or destroy benzene in accordance with 61.348	Y	

# Table IV.D.1.1 Refinery Refinery-wide Applicable Requirements

### **Refinery**

Applicable Requirement	Regulation Title or Desc	ription of Requirement	Federally Enforceable (Y/N)	Future Effective Date
40 CFR 61.342(c)(1)(ii )	Standards: General; Comply with 61.34 operated in accordance with 61.342(c)(1	3 through 61.347 for treatment units )(i)	Y	
40 CFR 61.342(c)(1) (iii)	Standards: General; Comply with 61.34 for recycled wastes. Recycled wastes sub	3 through 61.347 for treatment units bject to 61.342(c)	Y	
40 CFR 61.342(e)	Standards: General; Alternative to 61.34	42(c) and 61.342(d)	Y	
40 CFR 61.342(e)(1)	Standards: General; Treat waste with a f content of less than 10% per 61.342(c)(1	flow-weighted annual average water	Y	
40 CFR 61.342(e)(2)	Standards: General; Treatment of waste water content of 10% or more by volume	with a flow-weighted annual average e.	Y	
40 CFR 61.342(e)(2)(i)	Benzene conent of aqueous waste must b ton/yr), as determined in 61.355(k).	be equal to or less than 6.0 Mg/yr (6.6	Y	
40 CFR 61.342(e)(2) (ii)	Standards: General; Determine 61.342(e)(2) benzene quality per		Y	
40 CFR 61.346	Standards: Individual drain systems (nee	ed to include (b)(3), (b)(4)(iv) & (b)(5)		
61.350	When is a delay of repair allowed, and when must the delayed repair be complete?	61.350 delay of repair is allowed if repair is technically impossible without a shutdown; repair to be complete by the end of the next shutdown	Y	
61.353	What are the responsibilities associated with approval of alternative technologies?	61.353 P the person requesting the alternative must show equivalency; and the Administrator must publish any approval in the Federal Register	Y	
61.354	Is monitoring required for control devices?	61.354© daily inspect the continuous monitoring devices specified herein, except as specified in 61.354(d) & (e)	Y	
	Are there control devices that do not require continuous data recorders?	61.354(d) carbon adsorption that is not regenerated on site may be monitored without a continuous recorder; or not monitored if replaced on a sufficiently frequent interval	Y	
	May alternative parameters be monitored in lieu of those specified?	61.354(e) allowed if adequacy of the alternative is demonstrated	Y	
	Are inspections required for by-pass lines in closed vent systems?	61.354(f) inspect daily if using a flow indicator or inspect monthly if using car- seal/lock-&-key	Y	

# Table IV.D.1.1 Refinery Refinery-wide Applicable Requirements

### **Refinery**

Applicable Requirement	Regulation Title or Desc	ription of Requirement	Federally Enforceable (Y/N)	Future Effective Date
	Is additional monitoring required for systems maintained at negative pressure?	61.354(g) continuously monitor the system pressure	Y	
61.355	Procedure for detecting emissions	61.355(h) per Method 21	Y	
	Procedure for performance testing of control devices	61.355(i) for 61.349(a)(2) to demonstrate compliance with reduction efficiency	Y	
61.356	How long are records to be kept?	61.356(a) keep all records	Y	
	Are records required for the design of the control equipment (e.g., control devices, floating roofs, etc.)?	61.356(d) for 61.343 – 61.347 required, keep for the life of the equipment	Y	
	Are records required documenting the performance of control devices?	61.356(f) for 61.349 required, keep for the life of the control device	Y	
	Are records required for visual inspections and repairs?	61.356(g) for 61.343 – 61.347 required only when defects are found	Y	
	Are records required for Method 21 leak inspections and repairs?	61.356(h) for 61.343 – .347, 61.349 required for each inspection	Y	
	Are records of startup/shutdown and monitoring data required for control devices?	61.356(j) for 61.349 required	Y	
	Are records of monitoring data required for systems maintained under negative pressure?	61.356(m) for 61.343 – 61.347 required	Y	
40 CFR 61.357(d)	Reporting Requirements: Facilities with waste (this citation pulls in a number of	10 Mg/yr or more total benzene in others)	Y	
NESHAP Title 40 Part 63 Subpart A	General Provisions of MACT Standar	ds (12/22/08)		
40 CFR 63.1	Applicability		Y	
40 CFR 63.2	Definitions		Y	
40 CFR 63.4	Prohibited activities and circumvention		Y	
40 CFR 63.5	Construction and Reconstruction		Y	
40 CFR 63.6	Compliance with standards and maintena	ance requirements	Y	

# Table IV.D.1.1 Refinery Refinery-wide Applicable Requirements

### **Refinery**

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
40 CFR 63.7	Performance testing requirements	Y	
40 CFR 63.8	Monitoring requirements	Y	
40 CFR 63.9	Notification requirements	Y	
40 CFR 63.10	Record keeping and reporting requirements	Y	
40 CFR 63.11	Control Device Requirements	Y	
40 CFR 63.12	State Authority and Delegations	Y	
40 CFR 63.13	Addresses of EPA Regional Offices	Y	
40 CFR 63.14	Incorporation by Reference	Y	
40 CFR 63.15	Availability of Information and confidentiality	Y	
40 CFR 63	National Emission Standards for Hazardous Air Pollutants for Source Categories: General Provisions; and Requirements for Control Technology Determinations for Major Sources in Accordance with Clean Air Act Sections, Section 112(g) and 112(j); Final Rule		
63.52	Approved process for new and existing affected sources.	Y	
63.52(a)	Sources subject to section 112(j) as of the section 112(j) deadline	Y	
63.52(a)(1)	Submit an application for Title V permit revision	Y	
63.52(e)	Permit application review	Y	
63.52(e)(1)	Submit a Part 2 MACT application meeting the requirements of 63.53(b) for Combustion Turbines	Y	
63.52(e)(1)	Submit a Part 2 MACT application meeting the requirements of 63.53(b) for Organic Liquids Distribution	Y	
63.52(e)(1)	Submit a Part 2 MACT application meeting the requirements of 63.53(b) for Site Remediation	Y	
63.52(e)(1)	Submit a Part 2 MACT application meeting the requirements of 63.53(b) for Process Heaters	Y	
63.52(e)(1)	Submit a Part 2 MACT application meeting the requirements of 63.53(b) for Reciprocating Internal Combustion Engines	Y	
63.52(e)(1)	Submit a Part 2 MACT application meeting the requirements of 63.53(b) for Process Heaters (that burn hazardous waste)	Y	
63.52(h)	Enhanced monitoring	Y	
63.52(h)(i)	MACT emission limitations	Y	

# Table IV.D.1.1 Refinery Refinery-wide Applicable Requirements

### **Refinery**

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
63.52(h)(i)(1)	Compliance with all requirements applicable to affected sources, including compliance date for affected sources	Y	
63.53	Application content for case-by-case MACT determination	Y	
63.53(a)	Part 1 MACT application	Y	
63.53(b)	Part 2 MACT application	Y	
40 CFR 63 Subpart CC	National Emission Standards for Hazardous Air Pollutants for Petroleum Refineries (06/23/03)		
63.640(a)	Applicability applies to petroleum refining process units and to related emission points.	Y	
63.640(c)	Applicability and Designation of Affected Sourc—Includes all emission points at Refinery	Y	
63.640(d)	Applicability and Designation of Affected Source-Exclusions	Y	
63.640(f)	Applicability and Designation of Affected Source-miscellaneous process vents	Y	
63.640(g)	Applicability and Designation of Affected SourceExempt Processes	Y	
63.640(h)	Applicability and Designation of Affected SourceCompliance dates	Y	
63.640(i)	Applicability and Designation of Affected Source —New petroleum refining process unit requirements	Y	
63.640(j)	Applicability and Designation of Affected Source —Changes to existing petroleum refining process units	Y	
63.640(k)	Applicability and Designation of Affected Source —Additional requirements for new or changed sources	Y	
63.640(1)	Applicability and Designation of Affected Source —Additions of equipment (i.e. process vents, storage vessels, etc) in Group 1 sources not subject to 63.640(i) or (k).	Y	
63.640(m)	Applicability and Designation of Affected Source —Changes causing Group 2 emission points to become Group 1 points	Y	
63.640(q)	For overlap of subpart CC with local or State regulations, the permitting authority for the affected source may allow consolidation of the monitoring, recordkeeping, and reporting requirements under this subpart.	Y	
63.641	Definitions: (arranged alphabetically) Group 1 wastewater stream, Group 2 wastewater stream, miscellaneous process vents (specifically does not include emissions from wastewater collection and conveyance systems).	Y	
63.642	General Standards	Y	
63.642(a)	Apply for a part 70 or part 71 operating permit	Y	
63.642(c)	Table 6 of this subpart specifies the Subpart A provisions that apply.	Y	
63.642(d)	Initial performance tests and compliance determinations shall be required only as specified in this subpart	Y	

# Table IV.D.1.1 Refinery Refinery-wide Applicable Requirements

### **Refinery**

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
63.642(e)	Keep copies of all applicable reports and records for at least 5 years, except as otherwise specified in this subpart.	Y	
63.642(f)	All reports required by this subpart shall be sent to the Administrator	Y	
63.642(i)	Existing source owners/operators shall demonstrate compliance with (g) by following procedures in (k) or by following emission averaging compliance approach in (l) for specified emission points and the procedures in (k) for other emission points.	Y	
63.642(k)	Existing source owners/operators may comply, and new sources owners/operators shall comply with the wastewater provisions in 63.647 and comply with 63.654 and is exempt from (g)	Y	
63.647(a)	Comply with 61.340-61.355 (Subpart FF). Owners/operators of Group	Y	
	1 wastewater streams shall comply with sections 61.340 to 61.355 of		
	part 61, subpart FF for each stream that meets the definition of 63.641.		
63.647(b)	Wastewater Provisions	Y	
63.647(c)	Periodic measurement of benzene concentrations	Y	
63.654(a)	Compliance with in recordkeeping in 40 CFR 61, Subpart FF	Y	
63.654(e)	Periodic Reporting and Recordkeeping Requirements	Y	
63.654(g)	Semi-Annual Reporting and Recordkeeping Requirements	Y	
63.654(h)(1)	Reports of startup, shutdown, and malfunction	Y	
63.654(h)(2)	Notifications of inspections for storage vessels	Y	
63.654(i)(1)	Records for storage vessels	Y	
63.654(i)(4)	Information required by 63.654(h)	Y	
Appendix Table 1	Hazardous Air Pollutants	Y	
Appendix Table 6	Hazardous Air Pollutants	Y	
40 CFR Part 63 Subpart GGGGG	National Emission Standards for Hazardous Air Pollutants: Site Remediation (12/22/08)		
63.7881(c)	Am I Subject to This Subpart? – Facility Wide 1 Mg/yr Exemption Recordkeeping Requirements	Y	
BAAQMD Regulation 8 Rule 5	Storage of organic liquids (10/18/06)		
8-5-117	Limited Exemption, Low Vapor Pressure	N	
SIP BAAQMD Regulation 8 Rule 5	Storage of organic liquids (11/27/02)	Y	

# Table IV.D.1.1 Refinery Refinery-wide Applicable Requirements

### <u>Refinery</u>

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
8-5-117	Low vapor pressure exemption	Y	
BAAQMD Regulation 8, Rule 10	Organic Compound – Process Vessel Depressurization (1/21/2004)		
8-10-301	Depressurization Control Options	N	
8-10-302	Opening of Process Vessels	Ν	
8-10-302.1	organic compounds cannot exceed 10,000 ppm (methane) prior to release to atmosphere	N	
8-10-302.2	Organic compound concentration of a refinery process vessel may exceed 10,000 ppm prior to release to atmosphere provided total number of such vessels during 5-year period does not exceed 10%	Ν	
8-10-401	Turnaround Records. Annual report due February 1 of each year with initial report of process vessels due 4/1/2004.	N	
8-10-501	Monitoring prior to and during process vessel opening	Y	
8-10-502	Concentration measurement meeting the accuracy requirements of EPA Method 21	Y	
8-10-503	Recordkeeping	Ν	
8-10-601	Monitoring Procedures	Ν	
SIP	Organic Compound – Process Vessel Depressurization (7/20/83)		
Regulation 8,			
Rule 10	Description of the second state of the second	V	
8-10-301	Process vessel Depressunzing.	I V	
8-10-301.1	recovery to the fuel gas system	Y	
8-10-301.2	combustion at a firebox or incinerator	Y	
8-10-301.3	combustion at a flare	Y	
8-10-301.4	containment such that emissions to atmosphere do not occur	Y	
8-10-401	Turnaround Records.	Y	
8-10-401.1	date of depressurization event	Y	
8-10-401.2	approximate vessel hydrocarbon concentration when emissions to atmosphere begin	Y	
8-10-401.3	approximate quantity of POC emissions to atmosphere	Y	

# Table IV.D.1.1 Refinery Refinery-wide Applicable Requirements

### <u>Refinery</u>

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
BAAQMD Regulation 8 Rule 18	Organic Compounds, Equipment Leaks (9/15/04)	Ν	
SIP	Organic Compounds, Equipment Leaks (11/27/02)	Y	
BAAQMD Regulation 8 Rule 18			
BAAQMD Regulation 8 Rule 40	Aeration of Contaminated Soil and Removal of Underground Storage Tanks (6/15/05) SIP approved (12/15/99)		
8-40-304	Active Storage Piles	Y	
8-40-305	Inactive Storage Piles	Y	
8-40-306	Contaminated Soil – Excavation and Removal	Y	
8-40-402	Reporting, Excavation of Contaminated Soil	Y	
BAAQMD Regulation 9 Rule 1	Sulfur Dioxide(3/15/95) SIIP approved (5/20/92)		
9-1-110	Conditional Exemption, Area Monitoring	Y	
9-1-301	Limitations on Ground Level Concentrations	Y	
9-1-501	Area Monitoring Requirements	Y	
9-1-601	Ground Level Monitoring	Y	
BAAQMD Regulation 9 Rule 2	Hydrogen Sulfide(10/6/99)	N	
9-2-110	Exemptions	Ν	
9-2-301	Limitations on Hydrogen Sulfide	Ν	
9-2-501	Area Monitoring Requirements	Ν	
9-2-601	Ground Level Monitoring	Ν	
Condition #469	Refinery CAP	Y	
Condition #20764			
Part 1	Requirement to verify the true vapor pressure, whenever the organic liquid in the tank is changed (Regulation 2-6-409.2)	Y	
Part 2	Requirement to maintain District-approved log for at least five year from date of entry (Regulation 2-6-409.2)	Y	

## Table IV.E.1.1 Sulfur Recovery (H2S Plants) Table IV E 1 1 Sol

# Table IV.E.1.1 Sulfur Recovery Source-specific Applicable Requirements

#### **H2S Plants**

#### S-4345 #18 Plant (also called #2 NH3/H2S), S-4433 #3 H2S Plant, S-4434 #4 H2S Plant, S-4435 #5 H2S Plant, S-4429 #8 Plant (also called NH3/H2S)

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
BAAQMD Regulation 9 Rule 1	Inorganic Gaseous Pollutants – Sulfur Dioxide (3/15	5/95)	
9-1-313	Sulfur Removal Operations at Petroleum Refineries (processing more than 20,000 bbl/day of crude oil)	Y	
9-1-313.2	Operation of a sulfur removal and recovery system that removes and recovers: 95% of H2S from refinery fuel gas, 95% of H2S and ammonia from process water streams (sulfur recovery is required when a facility removes 16.5 ton/day or more of elemental sulfur).	Y	
SIP Regulation 9 Rule 1	Inorganic Gaseous Pollutants – Sulfur Dioxide (5/20/92) [Only provisions which are different than current BAAQMD regulation are listed]	Y	
9-1-313.2	Operation of a sulfur removal and recovery system that removes and recovers: 95% of H2S from refinery fuel gas, 95% of H2S and ammonia from process water streams.	Y	
Condition #469	Refinery Cap (Only applies to S-4345)	Y	
Condition #18655			
Part 2	Source test requirement for 6-330	Y	
Condition 18945			
Parts 1-6	Daily and annual throughput limits	Ν	
Part 7	Record keeping	Ν	
Condition 24433	Applies to S-4435		

#### Table IV.E.2.1 Sulfur Recovery (Claus Plants)

# Table IV.E.2.1 Sulfur Recovery Source-specific Applicable Requirements

#### **Claus Plants**

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
BAAQMD Regulation 1	General Provisions and Definitions (7/9/08)	N	
1-520	Continuous Emission Monitoring [applicable in accordance with 9-1-502]	Y	
1-520.4	SO2 monitor at sulfur recovery plants emitting more than 100 lb/day SO2	Y	
1-520.8	Monitors required by Regulations 10, 12 and 2-1-403	Y	
1-522	Continuous Emission Monitoring and Recordkeeping Procedures [applicable in accordance with 9-1-502]	Y	
1-522.1	Approval of plans and specifications	Y	
1-522.2	Scheduling requirements	Y	
1-522.3	CEM performance testing	Y	
1-522.4	Reporting of inoperative CEMs	Y	
1-522.5	CEM calibration requirements	Y	
1-522.6	CEM accuracy requirements	Y	
1-522.7	Emission limit exceedance reporting requirements	Y	
1-522.8	Monitoring data submittal requirements	Y	
1-522.9	Recordkeeping requirements	Y	
SIP Regulation 1	<ul> <li>General Provisions and Definitions (10/7/98)</li> <li>[provisions of SIP are identical to current Regulation 1 for SO2 sources, but not for combustion devices]</li> </ul>		
1-522	Continuous Emission Monitoring and Recordkeeping Procedures	Y	
1-522.7	Emission limit exceedance reporting requirements	Y	
BAAQMD Regulation 6-1	Particulate Matter and Visible Emissions (12/05	5/07)	
6-1-301	Ringelmann No. 1 Limitation	Ν	
6-1-305	Visible Particles	N	
6-1-310	Particle Weight Limitation	Ν	
6-1-310.3	Heat Transfer Operation	N	
SIP BAAQMD Regulation 6	Particulate Matter and Visible Emissions (12/19/90)		

# Table IV.E.2.1 Sulfur Recovery Source-specific Applicable Requirements

### **Claus Plants**

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
6-301	Ringelmann Number 1 Limitation	Y	
6-310	Particulate Weight Limitation	Y	
6-311	General Operations (process weight rate limitation)	Y	
6-330	Sulfur Recovery Units (SO3, H2SO4 emission limitations)	Y	
6-401	Appearance of Emissions	Y	
BAAQMD Regulation 9 Rule 1	Inorganic Gaseous Pollutants – Sulfur Dioxide (3/15/95)		
9-1-307	Emission Limitations for Sulfur Recovery Plants [applies to sulfur plants which emit 100 lb/day SO2 or more]	Y	
9-1-313	Sulfur Removal Operations at Petroleum Refineries (processing more than 20,000 bbl/day of crude oil)	Y	
9-1-313.2	Operation of a sulfur removal and recovery system that removes and recovers: 95% of H2S from refinery fuel gas, 95% of H2S and ammonia from process water streams (sulfur recovery is required when a facility removes 16.5 ton/day or more of elemental sulfur).	Y	
9-1-502	Emission Monitoring Requirements (Regulations 1-520, 1-522) [if subject to 9-1-304 or 9-1-307]	Y	
SIP	Inorganic Gaseous Pollutants – Sulfur Dioxide (5/20/92)	Y	
Regulation 9 Rule 1	[Only provisions which are different than current BAAQMD regulation are listed]		
9-1-313.2	Operation of a sulfur removal and recovery system that removes and recovers: 95% of H2S from refinery fuel gas, 95% of H2S and ammonia from process water streams.	Y	
NSPS 40 CFR 60 Subpart J	Standards of Performance for Petroleum Refineries (6/24/08)		
60.104(a)(2)(i)	Limit on sulfur dioxide emissions from Claus sulfur recovery plants	Y	
60.105(a)(5)	Continuous SO2 monitoring requirement for Claus Sulfur recovery plant emissions to atmosphere	Y	
60.105(a)(5)(i)	Requirement on the span of the SO2 monitoring device	Y	
60.105(a)(5)(ii)	Methods for performance evaluations and relative accuracy audits	Y	
60.105(e)(4)(i)	Sulfur dioxide excesses	Y	
60.106	Test methods and procedure	Y	

# Table IV.E.2.1 Sulfur Recovery Source-specific Applicable Requirements

### **Claus Plants**

Applicable Requirement	Applicable Regulation Title or Description of Requirement		Future Effective Date
60.107	Reporting and recordkeeping requirements	Y	
60.108	Performance test and compliance	Y	
40 CFR 63 Subpart UUU	40 CFR 63National Emission Standards for Hazardous Pollutants for Petroleum Refineries: Catalytic Cracking Units, Catalytic Reforming Units, and Sulfur Recovery Units (4/20/06)		
63.1561	Subject to this subpart	Y	
63.1562	Parts of plants that are covered (including exemptions)	Y	
63.1563	When to comply	Y	
63.1568	Requirements for hap emissions from sulfur recovery units	Y	
63.1568(a)(1)	250 ppmv dry SO2 emission limit (@0% O2) for existing unit W/oxidation control system	Y	
63.1568(a)(3)	Prepare & operate in complian with an OMM plan	Y	
63.1568(b)(1)	SO2 and O2 CEMS required to continuously monitor complaince	Y	
63.1568(b)(5)	3.1568(b)(5) Demonstrate initial compliance: for units already NSPS, no new performance test or CEMS eval. But certify vents meet SO2 limit & CEMS performance		
63.1568(b)(6)	Submit OMM plan to permit authority with NOCS	Y	
63.1568(b)(7)	Submit NOCS	Y	
63.1568(c)(1)	Collect hourly average SO2 ppmv dry @ 0% O2. Record 12-hour average SO2 & report exceedances of the 12-hour average	Y	
63.1568(c)(2)	Comply with the OMM plan	Y	
63.1569	Bypass lines	Y	
63.1570	General requirements	Y	
63.1570(d)	Develop & implement a SSMP	Y	
63.1570(f)	Report all instances not in compliance with limits or work practice standards	Y	
63.1570(g)	Deviation during SSM not a violation if following SSMP	Y	
63.1571	Initial performance test requirements		

## Table IV.E.2.1 Sulfur Recovery Source-specific Applicable Requirements

### **Claus Plants**

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
63.1572	Monitoring, installation, operation, & maintenance requirements	Y	
63.1573	Monitoring alternatives	Y	
63.1574	Notification requirements	Y	
63.1575	Reporting requirements	Y	
63.1576	Recordkeeping requirements	Y	
63.1577	General provision applicability	Y	
Condition #469	Refinery Cap	Y	
Condition #18655.2	Annual SO3/H2SO4 Source Test	Y	
Condition #19063.1	SRU #1 Train Sulfur Throughput Limit [applies to S-4227]	Ν	
Condition #19063.2	SRU #2 Train Sulfur Throughput Limit [applies to S-4228]	Ν	
Condition #19063.3	SRU #2 Train Sulfur Throughput Limit [applies to S-4229]	Ν	
Condition #19063.4	10 ppm H2S SRU stacks limit [applies to Tail Gas Units A-20, A-21, and A-22]	Y	
Condition #19063.5	Daily log	Ν	
Condition #19063.6	Log kept onsite 5 years	Ν	
Condition 22262			
Part 2	Visible emissions monitoring	Y	

## Table IV.E.3.1 Sulfur Recovery (Sulfur Rack)

# Table IV.E.3.1 Sulfur Recovery Source-specific Applicable Requirements

#### Sulfur Racks

### S-3141, S-4396 Sulfur Loading Racks and S-3226 Sulfur Storage Tank abated by A-0043 Vent Water Scrubber

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
Condition #18137	Throughput limits	Ν	
Condition #1046 Part 1	Sulfur Storage Tank S-3141 shall be abated by A-0043 Venturi Scrubber. (Basis: cumulative increase)	Ν	
Condition #1046 Part 2	Downtime of the A-43 Scrubber shall be minimized to the extent practicable		
Condition #1046 Part 3	Owner/operator of S-3141 shall maintain records of preventive maintenance downtime	Ν	

Table IV.F.1.0 Storage Tanks

# Table IV.F.1.0 Storage Tanks Source-specific Applicable Requirements

#### **Tanks with Conditions only**

S-25, S-1894, S-1909, S-1911, S-1913, S-1914, S-1915, S-1919, S-2920, S\_2921, S-6125, S-4360 Perc Storage Tank, S-4363 Perc Storage Tank, S-4364 Perc Storage Tank, S-4365 Tri Act 1825 Chemical Tote, S-4366 TRI-ACT® 1803 and 1825 Chemical Tote, S-4367 TRI-ACT® 1803 and 1825 Chemical Tote, S-4368 TRI-ACT® 1803 and 1825 Chemical Tote, S-4369 TRI-ACT® 1803 and 1825 Chemical Tote, S-4370 Custamine® (CA-066P) Chemical Tote, S-4372 NALCO EC9085A Chemical Tote, S-4373 Corrosion Inhibitor, S-4374 Flocculent

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
Permit Condition 4233	Applies to S-1911, S-1913, S-1914, S-1915, S-1919, S-2920, S-2921		
Permit Condition 11208	Applies to S-1911, S-6125, S-1909		
Permit Condition 12580	Applies to S-1894		
Permit Condition 15107	Applies to S-25		
Permit Condition 18337	Applies to S-4360		
Permit condition 23765	Applies to S-4360		
Permit condition 23773	Applies to S-4363		
Permit condition 23774	Applies to S-4364		
Permit condition 24452	Applies to S-4365		
Permit Condition 24604	Applies to S-4366, S-4367, S-4368, S-4369, and S-4370	Ν	
Permit Condition 24606	Applies to S-4372	Ν	

# Table IV.F.1.0 Storage Tanks Source-specific Applicable Requirements

#### **Tanks with Conditions only**

S-25, S-1894, S-1909, S-1911, S-1913, S-1914, S-1915, S-1919, S-2920, S\_2921, S-6125, S-4360 Perc Storage Tank, S-4363 Perc Storage Tank, S-4364 Perc Storage Tank, S-4365 Tri Act 1825 Chemical Tote, S-4366 TRI-ACT® 1803 and 1825 Chemical Tote, S-4367 TRI-ACT® 1803 and 1825 Chemical Tote, S-4368 TRI-ACT® 1803 and 1825 Chemical Tote, S-4369 TRI-ACT® 1803 and 1825 Chemical Tote, S-4370 Custamine® (CA-066P) Chemical Tote, S-4372 NALCO EC9085A Chemical Tote, S-4373 Corrosion Inhibitor, S-4374 Flocculent

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
Permit Condition 25001	Applies to S-4373 and fugitives	N	
Permit Condition 25479	Applies to S-4374 and fugitives	N	

#### Table IV .F.1.1 Tanks (FRT's Cluster 01a)

Applicable Requirement Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
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#### Table IV.F.1.2 Tanks (FRT's Cluster 01b)

 Table IV.F.1.2 Tanks

 Source-specific Applicable Requirements

#### **Fixed Roof Tanks Cluster 01b**

S-0200A, S-0204, S-0223, S-0225, S-0234, S-0290, S-0291, S-0293, S-0319, S-0397, S-0401, S-0501, S-0583, S-0900, S-0907, S-0910, S-0957, S-0979, S-0984, S-1052, S-1149, S-1431, S-1455, S-1456, S-1468, S-1470, S-1492, S-1493, S-1546, S-1636, S-1653, S-1679, , S-1723, S-1724, S-1725, S-1908, S-1989, S-2520, S-2540, S-3139, S-3142, S-3146, S-3148, S-3310

#### **Internal Floating Roof Tanks Cluster 01b**

S-3185 External Floating Roof Tanks Cluster 01b

S-0955.	S-0956.	S-1506.	S-1451.	S-1899.	S-1428.	S-1020.	S-3132	S-3138	S-3182
0,0000	0,000	D 1000,		D 10//	,	$ \mathbf{D} = \mathbf{U} = \mathbf{U} $			

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
BAAQMD Regulation 8 Rule 5	Storage of organic liquids (10/18/06)		
8-5-117	Low Vapor Pressure Exemption < 0.5 psia	Ν	
SIP BAAQMD Regulation 8	Storage of organic liquids (11/27/02)		
SIP	Low Vapor Pressure Exemption < 0.5 psia	Y	
8-5-117		-	
Refinery MACT	NESHAP for Petroleum Refineries (6/23/03) REQUIREMENTS FOR TANKS ALSO SUBJECT TO	NSPS Kb	
63.640(n)	Which rule governs for storage vessels subject to both Refinery MACT and NSPS subpart Kb?63.640(n)(1) NSPS subpart Kb	Y	
NSPS Subpart Kb	Volatile Organic Liquid Storage Vessels (10/15/0 REQUIREMENTS FOR RECORD KEEPING ON	3) ILY	

 Table IV.F.1.2 Tanks

 Source-specific Applicable Requirements

#### Fixed Roof Tanks Cluster 01b

S-0200A, S-0204, S-0223, S-0225, S-0234, S-0290, S-0291, S-0293, S-0319, S-0397, S-0401, S-0501, S-0583, S-0900, S-0907, S-0910, S-0957, S-0979, S-0984, S-1052, S-1149, S-1431, S-1455, S-1456, S-1468, S-1470, S-1492, S-1493, S-1546, S-1636, S-1653, S-1679, , S-1723, S-1724, S-1725, S-1908, S-1989, S-2520, S-2540, S-3139, S-3142, S-3146, S-3148, S-3310

#### **Internal Floating Roof Tanks Cluster 01b**

#### S-3185 External Floating Roof Tanks Cluster 01b

Applicable Requirement	Regulation Title or D	Federally Enforceable (Y/N)	Future Effective Date	
60.116b(a)	Applicability records: Time period for keeping records of applicability determination, unless specified otherwise.	60.116b(a) keep records	Y	
60.116b(b)	Applicability records: Records of dimensions & capacity required for nonexempt tanks?	60.116b(b) required keep record readily accessible for the life of the tank	Y	
60.116b(c)	Applicability records: Additional recordkeeping requirements for certain tanks.	$\begin{array}{l} 60.116 \text{bc}) \\ \text{internal diameter & TVP of the stored} \\ \text{product, if capacity} \geq 20,000 \text{ gallons and} \\ \text{TVP} \geq 2.2, \text{ or capacity} \geq 40,000 \text{ gallons} \\ \text{and TVP} \geq 0.51 \text{ keep record as long as} \\ \text{the tank is in that service} \end{array}$	Y	
60.116b(d)	Periodic Reports: Miscellaneous additional information to report:	60.116b(d) TVP exceedances for a tank > 20,000 gallons that is normally below the TVP cutoff	Y	
60.116b(e)	True vapor pressure (TVP) determination for applicability:	60.116b(e) maximum TVP of the stored liquid, based on highest calendar month average storage temperature	Y	

 Table IV.F.1.2 Tanks

 Source-specific Applicable Requirements

#### Fixed Roof Tanks Cluster 01b

S-0200A, S-0204, S-0223, S-0225, S-0234, S-0290, S-0291, S-0293, S-0319, S-0397, S-0401, S-0501, S-0583, S-0900, S-0907, S-0910, S-0957, S-0979, S-0984, S-1052, S-1149, S-1431, S-1455, S-1456, S-1468, S-1470, S-1492, S-1493, S-1546, S-1636, S-1653, S-1679, , S-1723, S-1724, S-1725, S-1908, S-1989, S-2520, S-2540, S-3139, S-3142, S-3146, S-3148, S-3310

#### **Internal Floating Roof Tanks Cluster 01b**

#### S-3185 External Floating Roof Tanks Cluster 01b

Applicable Requirement	Regulation Title or De	escription of Requirement	Federally Enforceable (Y/N)	Future Effective Date
60.116b(f)	Special requirements for tanks storing waste mixtures:	60.116b(f) TVP determination every 6 months if: TVP < control cutoff & TVP > monitoring cutoff	Y	
60.116b(g)	Periodic Reports: Miscellaneous reporting exemptions:	60.116b(g) reporting of TVP exceedances is not required if tank is routed to a compliant control device	Y	
	Applicability determination: Miscellaneous recordkeeping exemptions:	60.116b(g) keeping record of TVP is not required if tank is routed to a compliant control device	Y	
NSPS Subpart A	]	New Source Performance Standards GENERAL PROVISIONS		
60.7(a)	Initial Notification: Is initial notification of the source's existence required?	60.7(a)(1) notification within 30 days after construction begins.	Y	
	Initial Notification: Is initial notification required if tank becomes affected only as a result of a modification?	60.7(a)(4) notification 60 days or as soon as practicable before the change	Y	

 Table IV.F.1.2 Tanks

 Source-specific Applicable Requirements

#### Fixed Roof Tanks Cluster 01b

S-0200A, S-0204, S-0223, S-0225, S-0234, S-0290, S-0291, S-0293, S-0319, S-0397, S-0401, S-0501, S-0583, S-0900, S-0907, S-0910, S-0957, S-0979, S-0984, S-1052, S-1149, S-1431, S-1455, S-1456, S-1468, S-1470, S-1492, S-1493, S-1546, S-1636, S-1653, S-1679, , S-1723, S-1724, S-1725, S-1908, S-1989, S-2520, S-2540, S-3139, S-3142, S-3146, S-3148, S-3310

#### **Internal Floating Roof Tanks Cluster 01b**

#### S-3185 External Floating Roof Tanks Cluster 01b

Applicable Requirement	Regulation Title or De	escription of Requirement	Federally Enforceable (Y/N)	Future Effective Date
60.7(f)	General recordkeeping requirements: Time period for keeping records, unless specified otherwise.	60.7(f) keep all reports & notifications	Y	
	General recordkeeping requirements: keep all reports and notification for the specified period of time.	60.7(f) required	Y	
Refinery MACT	NESHAP for Petroleum Refineries REQUIREMENTS FOR RECORD KEEPING ONLY			
63.642(e) 63.654(i)	General recordkeeping requirements: Time period for keeping records, unless specified otherwise.	63.642(e) & 63.654(i)(4) keep all other records, retrievable within 24 hr	Y	
	General recordkeeping requirements: Keep all reports and notification for the specified period of time.	63.642(e) & 63.654(i)(4) required	Y	
63.646(h) 63.9 (b)	Initial Notification: Is initial notification of the source's existence required?	63.646(h) Table 6 Ref. 63.9 (b)(2) Not required	Y	
63.646(i)	Implementation Plan	63.646(i) & 63.652(b) Not required	Y	
63.654(f) 63.652(b)	Notification of Compliance Status report:	63.654(f) later of next Periodic Report after compliance or January 15, 1999	Y	

 Table IV.F.1.2 Tanks

 Source-specific Applicable Requirements

#### Fixed Roof Tanks Cluster 01b

S-0200A, S-0204, S-0223, S-0225, S-0234, S-0290, S-0291, S-0293, S-0319, S-0397, S-0401, S-0501, S-0583, S-0900, S-0907, S-0910, S-0957, S-0979, S-0984, S-1052, S-1149, S-1431, S-1455, S-1456, S-1468, S-1470, S-1492, S-1493, S-1546, S-1636, S-1653, S-1679, , S-1723, S-1724, S-1725, S-1908, S-1989, S-2520, S-2540, S-3139, S-3142, S-3146, S-3148, S-3310

#### **Internal Floating Roof Tanks Cluster 01b**

#### S-3185 External Floating Roof Tanks Cluster 01b

Applicable Requirement	Regulation Title or D	escription of Requirement	Federally Enforceable (Y/N)	Future Effective Date
	Report determination of applicability for other individual tanks (i.e., for MACT rules, whether Group1 or Group2)?	63.654(f)(1)(i)(A) with initial Notification of Compliance Status; Jan. 15, 1999	Y	
63.654(h)	Report applicability for varying-use tanks?	63.654(h)(6)(ii) with the initial NOC Status report	Y	
	Other (initial) Reports: Report applicability for varying-use tanks?	63.654(h)(6)(ii) required with the initial Notification of Compliance Status report		
63.654(i) 63.123(a)	Applicability records: Time period for keeping records of applicability determination, unless specified otherwise.	63.654(i)(1) 63.123(a) keep record readily accessible for the service life of the tank	Y	
63.654(i) 63.646(a) 63.119(a) 63.123(a)	Applicability records: Records of dimensions & capacity required for Nonexempt tanks?	63.654(i)(1) 63.646(a)&63.119(a)(3) 63.123(a) required, keep record readily accessible for service life of the tank	Y	
	Applicability records: Additional recordkeeping requirements for certain tanks.	63.654(i)(1)(iv) determination of HAP content keep record readily accessible for service life of the tank		

 Table IV.F.1.2 Tanks

 Source-specific Applicable Requirements

#### Fixed Roof Tanks Cluster 01b

S-0200A, S-0204, S-0223, S-0225, S-0234, S-0290, S-0291, S-0293, S-0319, S-0397, S-0401, S-0501, S-0583, S-0900, S-0907, S-0910, S-0957, S-0979, S-0984, S-1052, S-1149, S-1431, S-1455, S-1456, S-1468, S-1470, S-1492, S-1493, S-1546, S-1636, S-1653, S-1679, , S-1723, S-1724, S-1725, S-1908, S-1989, S-2520, S-2540, S-3139, S-3142, S-3146, S-3148, S-3310

#### **Internal Floating Roof Tanks Cluster 01b**

#### S-3185 External Floating Roof Tanks Cluster 01b

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
Condition #1046	Applies to S-3141 and S-3226	]	
Condition # 4233	Applies to S-1908, S-2917 and S- 2918	Ν	
Condition #10967 Part 1	Applies to S-1052	Y	
Condition #10967 Part 2	Applies to S-1052	Y	
Condition #10967 Part 3	Applies to S-1052	Y	
Condition #11024	Applies to S-3185	Y	
Condition #11228	Throughput Limits	Y	
Condition #11436	Applies to S-1653	Y	
Condition #12580	Applies to S-1821	Ν	
Condition #18137	Throughput limits	Ν	

 Table IV.F.1.2 Tanks

 Source-specific Applicable Requirements

#### Fixed Roof Tanks Cluster 01b

S-0200A, S-0204, S-0223, S-0225, S-0234, S-0290, S-0291, S-0293, S-0319, S-0397, S-0401, S-0501, S-0583, S-0900, S-0907, S-0910, S-0957, S-0979, S-0984, S-1052, S-1149, S-1431, S-1455, S-1456, S-1468, S-1470, S-1492, S-1493, S-1546, S-1636, S-1653, S-1679, , S-1723, S-1724, S-1725, S-1908, S-1989, S-2520, S-2540, S-3139, S-3142, S-3146, S-3148, S-3310

#### **Internal Floating Roof Tanks Cluster 01b**

#### S-3185 External Floating Roof Tanks Cluster 01b

#### S-0955, S-0956, S-1506, S-1451, S-1899, S-1428, S-1020, S-3132, S-3138, S-3182

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
Condition 20764	Vapor pressure monitoring and recording	Y	

#### Table IV.F.1.3 Tanks (FRT's Cluster 02)

## Table IV.F.1.3 Tanks Source-specific Applicable Requirements

#### Fixed Roof Tanks Cluster 02

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
BAAQMD Regulation 8.	Organic Compounds, Storage of Organic Liquids (10/18/06)		
Rule 5			
8-5-110	Exemption due to size and age	Y	
8-5-111	Limited Exemption, Tank Removal From and Return to Service	Ν	
8-5-111.1	Limited Exemption, Notice to the APCO	Ν	

# Table IV.F.1.3 Tanks Source-specific Applicable Requirements

### Fixed Roof Tanks Cluster 02

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
8-5-111.2	Limited Exemption, Compliance before notification	Ν	
8-5-111.3	Limited Exemption, Continuous and quick filling, emptying and refilling	Ν	
8-5-111.4	Limited Exemption, Use of vapor recovery	N	
8-5-111.5	Limited Exemption, Minimization of emissions	N	
8-5-111.6	Limited Exemption, Self report if out of compliance during exemption period	Ν	
8-5-112	Limited Exemption, Preventative Maintenance and Inspection of Tanks in Operation	Ν	
8-5-112.1	Limited Exemption, Preventative Maintenance and Inspection of Tanks in Operation; Notification	N	
8-5-112.2	Limited Exemption, Preventative Maintenance and Inspection of Tanks in Operation; Tank in compliance at time of notification	N	
8-5-112.3	Limited Exemption, Preventative Maintenance and Inspection of Tanks in Operation; No product movement, Minimize emissions	N	
8-5-112.4	Limited Exemption, Preventative Maintenance and Inspection of Tanks in Operation; Not to exceed 7 days	N	
8-5-112.5	Limited Exemption, Preventative Maintenance and Inspection of Tanks in Operation; Self report if out of compliance during exemption period	N	
8-5-112.6	Limited Exemption, Preventative Maintenance and Inspection of Tanks in Operation; Keep records for each exemption	N	
8-5-119	Limited Exemption, Repair Period for Enhanced Monitoring Program	N	
8-5-301	Storage Tank Control Requirements (internal floating roof, external floating roof, or approved emission control system)	Ν	
8-5-302	Requirements for Submerged Fill Pipes	Y	
8-5-303	Requirements for Pressure Vacuum Valves	N	
8-5-303.1	Requirements for Pressure Vacuum Valves; Set pressure	N	
8-5-303.2	Requirements for Pressure Vacuum Valves; Gas tight requirement	N	
8-5-307	Requirements for Fixed Roof Tanks, Pressure Tanks, and Blanketed Tanks	Ν	
8-5-307.1	Requirements for Fixed Roof Tanks, Pressure Tanks, and Blanketed Tanks: no liquid leakage through shell	N	
8-5-328	Tank degassing requirements	N	

# Table IV.F.1.3 Tanks Source-specific Applicable Requirements

### Fixed Roof Tanks Cluster 02

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
8-5-328.1	Tank degassing requirements; Tanks > 75 cubic meters	N	
8-5-328.2	Tank degassing requirements; Ozone Excess Day Prohibition	Ν	
8-5-328.3	Tank degassing requirements; BAAQMD notification required	Ν	
8-5-331	Tank Cleaning Requirements; 90% Abatement Efficiency if Abatement Device Used	Ν	
8-5-331.1	Tank cleaning requirements; Cleaning materials properties	N	
8-5-331.2	Tank cleaning requirements; Steam cleaning prohibition	N	
8-5-331.3	Tank cleaning requirements; Steam cleaning exceptions	N	
8-5-332	Sludge Handling Requirements; applies to sludge removed from any tank that was subject to BAAQMD 8-5 at any time since it was last put in service)	N	
8-5-332.1	Sludge Handling Requirements; sludge container no leaks	Ν	
8-5-332.2	Sludge Handling Requirements; sludge container gap requirements	Ν	
8-5-403	Inspection Requirements for Pressure Relief Devices	Ν	
8-5-403.1	Inspection Requirements for Pressure Relief Devices; Pressure vacuum valve gas tight standards in 8-5-303	Ν	
8-5-411	Enhanced Monitoring Program (Optional)	Ν	
8-5-411.3	Enhanced Monitoring Program (Optional); Performance requirements	Ν	
8-5-501	Records	Ν	
8-5-501.1	Records; Type and amount of liquid, type of blanket gas, TVP- Retain 24 months	Ν	
8-5-501.3	Records; Retention	N	
8-5-501.4	Records; New pressure vacuum valve setpoints	Ν	
8-5-601	Analysis of Samples, Reid Vapor Pressure	Y	
8-5-602	Analysis of Samples, True Vapor Pressure	Y	
8-5-603	Determination of Emissions	Ν	
8-5-604	Determinations of Applicability	Y	
8-5-605	Measurement of Leak Concentration and Residual Concentrations	Ν	
8-5-605.1	Measurement of Leak Concentration and Residual Concentrations; EPA method 21 Instruments	Ν	
8-5-605.2	Measurement of Leak Concentration and Residual Concentrations; Method 21 and tank degassing residual organic concentration measurement method	N	

# Table IV.F.1.3 Tanks Source-specific Applicable Requirements

### Fixed Roof Tanks Cluster 02

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
8-5-606	Analysis of samples, Tank Cleaning Agents	N	
8-5-606.1	Analysis of samples, Tank Cleaning Agents; Initial Boiling Point	Ν	
8-5-606.2	Analysis of samples, Tank Cleaning Agents; True Vapor Pressure	Ν	
8-5-606.3	Analysis of samples, Tank Cleaning Agents; VOC	Ν	
SIP	Storage of Organic Liquids (11/27/02)		
BAAQMD			
Regulation 8,			
Rule 5			
8-5-110	Exemption due to size and age	Y	
8-5-111	Limited Exemption, Tank Removal From and Return to Service	Y	
8-5-111.1	Notice to the APCO	Y	
8-5-111.2	Compliance before notification	Y	
8-5-111.3	Continuous and quick filling, emptying and refilling	Y	
8-5-111.4	Use of vapor recovery	Y	
8-5-111.5	Minimization of emissions	Y	
8-5-111.6	Written notice of completion not required	Y	
8-5-111.7	Compliance with Section 8-5-328	Y	
8-5-112	Limited Exemption, Tanks in Operation	Y	
8-5-112.1	Notice to the APCO	Y	
8-5-112.2	Compliance and certification before commencement of work	Y	
8-5-112.3	No product movement; minimization of emissions	Y	
8-5-112.4	Exemption does not exceed 7 days	Y	
8-5-301	Storage Tank Control Requirements (internal floating roof, external	Y	
	floating roof, or approved emission control system)		
8-5-302	Requirements for Submerged Fill Pipes	Y	
8-5-303	Requirements for Pressure Vacuum Valves	Y	
8-5-328	Tank degassing requirements	Y	
8-5-328.1	Concentration of <10,000 ppm as methane after cleaning	Y	
8-5-328.2	Tank degassing when ozone excess is predicted	Y	
8-5-403	Inspection Requirements for Pressure Relief Device	Y	
8-5-404	Certification	Y	
8-5-501	Records	Y	
8-5-502	Tank Cleaning Annual Source Test Requirement	Y	

# Table IV.F.1.3 Tanks Source-specific Applicable Requirements

### Fixed Roof Tanks Cluster 02

#### S-0021, S-4940

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
8-5-503	Portable hydrocarbon detector	Y	
8-5-601	Analysis of Samples, Reid Vapor Pressure	Y	
8-5-602	Analysis of Samples, True Vapor Pressure	Y	
8-5-603	Determination of Emissions	Y	
8-5-603.1.2	Concentration of organic compounds after degassing	Y	
8-5-604	Determinations of Applicability	Y	
EPA	Exempt from all Refinery MACT, NSPS K, Ka and Kb Standards for Hydrocarbon Storage Tanks (per <10,000 gallon exemption)	Y	
Condition #18137	Throughput limits	N	
Condition # 23001	Applies to S-4940	Y	

Table IV.F.1.4 Tanks (FRT's Cluster 05)

# Table IV.F.1.4 Tanks Source-specific Applicable Requirements

### Fixed Roof Tanks Cluster 05

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
BAAQMD	Organic Compounds, Storage of Organic Liquids (10/18/06)		
Regulation 8,			
Rule 5			
8-5-110	Exemption due to size and age	Y	
8-5-111	Limited Exemption, Tank Removal From and Return to Service	Ν	
8-5-111.1	Limited Exemption, Notice to the APCO	Ν	
8-5-111.2	Limited Exemption, Compliance before notification	Ν	
8-5-111.3	Limited Exemption, Continuous and quick filling, emptying and refilling	Ν	

# Table IV.F.1.4 Tanks Source-specific Applicable Requirements

#### Fixed Roof Tanks Cluster 05

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
8-5-111.4	Limited Exemption, Use of vapor recovery	Ν	
8-5-111.5	Limited Exemption, Minimization of emissions	Ν	
8-5-111.6	Limited Exemption, Self report if out of compliance during exemption	Ν	
	period		
8-5-112	Limited Exemption, Preventative Maintenance and Inspection of Tanks in Operation	N	
8-5-112.1	Limited Exemption, Preventative Maintenance and Inspection of Tanks in Operation: Notification	Ν	
8-5-112.2	Limited Exemption, Preventative Maintenance and Inspection of Tanks in Operation; Tank in compliance at time of notification	N	
8-5-112.3	Limited Exemption, Preventative Maintenance and Inspection of Tanks in Operation; No product movement, Minimize emissions	N	
8-5-112.4	Limited Exemption, Preventative Maintenance and Inspection of Tanks in Operation; Not to exceed 7 days	N	
8-5-112.5	Limited Exemption, Preventative Maintenance and Inspection of Tanks in Operation; Self report if out of compliance during exemption period	Ν	
8-5-112.6	Limited Exemption, Preventative Maintenance and Inspection of Tanks in Operation; Keep records for each exemption	N	
8-5-118	Limited Exemption, Gas Tight Requirement for approved emission control system in 8-5-306.2 does not apply if facility is subject to BAAQMD 8-18 (only applies to S-0660 and S-6066)	Ν	
8-5-119	Limited Exemption, Repair Period for Enhanced Monitoring Program	Ν	
8-5-301	Storage Tank Control Requirements (internal floating roof, external floating roof, or approved emission control system)	Ν	
8-5-302	Requirements for Submerged Fill Pipes	Y	
8-5-303	Requirements for Pressure Vacuum Valves	Ν	
8-5-303.1	Requirements for Pressure Vacuum Valves; Set pressure	Ν	
8-5-303.2	Requirements for Pressure Vacuum Valves; Gas tight requirement	Ν	
8-5-306	Requirements for approved Emission Control System (only applies to S- 0660 and S-6066)	N	

# Table IV.F.1.4 Tanks Source-specific Applicable Requirements

#### Fixed Roof Tanks Cluster 05

Applicable Requirement	le Regulation Title or ent Description of Requirement		Future Effective Date	
8-5-306.1	Requirements for approved Emission Control System; Abatement	Ν		
	Efficiency >=95% (only applies to S-0660 and S-6066)			
8-5-307	Requirements for Fixed Roof Tanks, Pressure Tanks, and Blanketed	Ν		
	Tanks			
8-5-307.1	Requirements for Fixed Roof Tanks, Pressure Tanks, and Blanketed	Ν		
	Tanks: no liquid leakage through shell			
8-5-328	Tank degassing requirements	N		
8-5-328.1	Tank degassing requirements; Tanks > 75 cubic meters	N		
8-5-328.2	Tank degassing requirements; Ozone Excess Day Prohibition	N		
8-5-328.3	Tank degassing requirements; BAAQMD notification required	Ν		
8-5-331	Tank Cleaning Requirements; 90% Abatement Efficiency if Abatement	Ν		
	Device Used			
8-5-331.1	Tank cleaning requirements; Cleaning materials properties	Ν		
8-5-331.2	Tank cleaning requirements; Steam cleaning prohibition	Ν		
8-5-331.3	Tank cleaning requirements; Steam cleaning exceptions	N		
8-5-332	Sludge Handling Requirements; applies to sludge removed from any	Ν		
	tank that was subject to BAAQMD 8-5 at any time since it was last put			
	in service)			
8-5-332.1	Sludge Handling Requirements; sludge container no leaks	Ν		
8-5-332.2	Sludge Handling Requirements; sludge container gap requirements	Ν		
8-5-403	Inspection Requirements for Pressure Relief Devices	Ν		
8-5-403.1	Inspection Requirements for Pressure Relief Devices; Pressure vacuum	Ν		
	valve gas tight standards in 8-5-303			
8-5-404	Inspection, Abatement Efficiency Determination and Source Test	N		
	Reports (only applies to S-0660 and S-6066)			
8-5-411	Enhanced Monitoring Program (Optional)	Ν		
8-5-411.3	Enhanced Monitoring Program (Optional); Performance requirements	Ν		
8-5-501	Records	Ν		
8-5-501.1	Records; Type and amount of liquid, type of blanket gas, TVP- Retain	Ν		
	24 months			
8-5-501.3	Records; Retention	N		

# Table IV.F.1.4 Tanks Source-specific Applicable Requirements

#### Fixed Roof Tanks Cluster 05

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
8-5-501.4	Records; New pressure vacuum valve setpoints	Ν	
8-5-502	Annual Source Test Requirement (only applies to S-0660 and S-6066)	Ν	
8-5-502.1	8-5-502.1 Annual source test for approved emission control systems and abatemen		
	devices (only applies to S-0660 and S-6066)		
8-5-502.2	Tank degassing and cleaning abatement devices (only applies to S-0660 and S-6066)	Ν	
8-5-601	Analysis of Samples, Reid Vapor Pressure	Y	
8-5-602	Analysis of Samples, True Vapor Pressure	Y	
8-5-603	Determination of Emissions	Ν	
8-5-604	Determinations of Applicability	Y	
8-5-605	Measurement of Leak Concentration and Residual Concentrations	Ν	
8-5-605.1	Measurement of Leak Concentration and Residual Concentrations; EPA method 21 Instruments	Ν	
8-5-605.2	Measurement of Leak Concentration and Residual Concentrations; Method 21 and tank degassing residual organic concentration measurement method	N	
8-5-606	Analysis of samples, Tank Cleaning Agents	Ν	
8-5-606.1	Analysis of samples, Tank Cleaning Agents; Initial Boiling Point	Ν	
8-5-606.2	Analysis of samples, Tank Cleaning Agents; True Vapor Pressure	Ν	
8-5-606.3	Analysis of samples, Tank Cleaning Agents; VOC	Ν	
SIP	Storage of Organic Liquids (11/27/02)		
BAAQMD			
Regulation 8,			
Rule 5			
8-5-110	Exemption due to size and age	Y	
8-5-111	Limited Exemption, Tank Removal From and Return to Service	Y	
8-5-111.1	Notice to the APCO	Y	
8-5-111.2	Compliance before notification	Y	
8-5-111.3	Continuous and quick filling, emptying and refilling	Y	
8-5-111.4	Use of vapor recovery	Y	
8-5-111.5	Minimization of emissions	Y	

# Table IV.F.1.4 Tanks Source-specific Applicable Requirements

#### Fixed Roof Tanks Cluster 05

Applicable Requirement	cable Regulation Title or ement Description of Requirement		Future Effective Date
8-5-111.6	Written notice of completion not required	Y	
8-5-111.7	Compliance with Section 8-5-328	Y	
8-5-112	Limited Exemption, Tanks in Operation	Y	
8-5-112.1	Notice to the APCO	Y	
8-5-112.2	Compliance and certification before commencement of work	Y	
8-5-112.3	No product movement; minimization of emissions	Y	
8-5-112.4	Exemption does not exceed 7 days	Y	
8-5-301	Storage Tank Control Requirements (internal floating roof, external floating roof, or approved emission control system)	Y	
8-5-302	Requirements for Submerged Fill Pipes	Y	
8-5-303	Requirements for Pressure Vacuum Valves	Y	
8-5-306	Requirements for Approved Emission Control Systems	Y	
8-5-328	Tank degassing requirements	Y	
8-5-328.1	Concentration of <10,000 ppm as methane after cleaning	Y	
8-5-328.2	Tank degassing when ozone excess is predicted	Y	
8-5-403	Inspection Requirements for Pressure Relief Device	Y	
8-5-404	Certification	Y	
8-5-501	Records	Y	
8-5-502	Tank Cleaning Annual Source Test Requirement	Y	
8-5-503	Portable hydrocarbon detector	Y	
8-5-601	Analysis of Samples, Reid Vapor Pressure	Y	
8-5-602	Analysis of Samples, True Vapor Pressure	Y	
8-5-603	Determination of Emissions	Y	
8-5-603.1.2	Concentration of organic compounds after degassing	Y	
8-5-604	Determinations of Applicability	Y	
EPA	Exempt from all Refinery MACT, NSPS K, Ka and Kb Standards for Hydrocarbon Storage Tanks (per <10,000 gallon exemption)	Y	
	Wastewater Requirements for S-6200 through S-6219 (from Wastewater C	Cluster 60b)	

# Table IV.F.1.4 Tanks Source-specific Applicable Requirements

#### Fixed Roof Tanks Cluster 05

Applicable Requirement	Regulation Title or Description of Requirement		Federally Enforceable (Y/N)	Future Effective Date	
BAAQMD Regulation 11 Rule 12	Hazardous Pollutants – National Emi from Benzene Transfer Operations an refer to NESHAP Subpart FF below)	N			
40 cfr 63 subpart cc Refinery MACT	NESHAP for Petroleum Refineries (6/23/03) REQUIREMENTS FOR WASTEWATER STREAMS				
63.641	What is a Refinery MACT Group 1 wastewater stream?	$\begin{array}{l} 63.641\\ \text{if Total Annual Benzene} \geq 10 \text{ Mg/yr},\\ \text{then each wastewater stream with flow}\\ \text{rate} \geq 0.02 \text{ liters/min and benzene}\\ \text{concentration} \geq 10 \text{ ppmw and not exempt}\\ \text{from controls under 61 Subpart FF} \end{array}$	Y		
63.647	What does Refinery MACT require for Group 1 wastewater streams?	63.647(a) comply with 61 Subpart FF (below)	Y		
	Which definitions govern?	63.647(b) the definitions in Refinery MACT supercede those in 61 Subpart FF	Y		
	Clarification with respect to violations	63.647(c) a monitoring excursion, a failure to perform a leak inspection, or a failure to repair a leak shall constitute a violation	Y		
63.654	Which recordkeeping and reporting requirements govern?	63.654(a) recordkeeping and reporting shall be per 61 Subpart FF	Y		
NESHAP 40 CFR part 61 Subpart FF	Benzene Waste Operations (12/04/03) REQUIREMENTS FOR CONTAINERS				
61.345	When is this type of WMU subject to these requirements?	$\begin{array}{l} 61.345(a) \\ \text{when invoked by} \\ 61.342(c)(1)(ii) \\ \text{for facilities with Total Annual Benzene} \\ \geq 10 \text{ Mg/yr} \end{array}$	Y		
	Install, operate, and maintain a cover over the WMU.	61.345(a)(1) required for the container 61.345(a)(3) Container is to be located within an enclosure	Y		
## Table IV.F.1.4 Tanks Source-specific Applicable Requirements

### Fixed Roof Tanks Cluster 05

Applicable Requirement	Regulation Title or Description of Requirement		Federally Enforceable (Y/N)	Future Effective Date
	Route vapors through a closed vent system to a control device?	61.345(a)(1) Not required for container 61.345(a)(3) required for the enclosure	Y	
	The cover and all openings to operate with no detectable emissions (< 500 ppmv)?	61.345(a)(1)(i) required for the container 61.345(a)(3)(i) required for the enclosure	Y	
	Demonstrate no detectable emissions using Method 21?	61.345(a)(1)(i) required for the container 61.345(a)(3)(i) required for the enclosure	Y	
	Inspection per Method 21 required initially, and annually thereafter?	61.345(a)(1)(i) required for the container 61.345(a)(3)(i) required for the enclosure	Y	
	Each opening to be kept closed, gasketed, & latched at all times that waste is present within, except when the opening is in use?	61.345(a)(1)(ii) required for the container 61.345(a)(3) Not required for the enclosure	Y	
	Are there requirements that are unique to this type of WMU?	61.345(a)(2) Load using a submerged fill pipe	Y	
	Are there conditions for which vapors are not required to be routed to a control device?	61.345(a)(3) Not required at any time other than when the container is open while waste is being treated	Y	
	What is required for WMUs not routed to a control device?	61.345(a)(3) routing to a control device is not required for containers that are kept closed while waste is being treated	Y	
	Visual inspection initially, and quarterly thereafter, to ensure that the cover and all openings are closed & gasketed properly?	61.345(b) required for the container 61.345(b) required for the enclosure	Y	
	First attempt at repair of broken seal or gasket or other problem (including detectable emissions) to be made within 15 days?	61.345(c) required for the container 61.345(c) required for the enclosure	Y	

## Table IV.F.1.4 Tanks Source-specific Applicable Requirements

### Fixed Roof Tanks Cluster 05

Applicable Requirement	Regulation Title or Description of Requirement		Federally Enforceable (Y/N)	Future Effective Date
	Delay of repair allowed?	61.345(c) yes, for the container, per 61.350 61.345(c) yes, for the enclosure, per 61.350	Y	
61.349	Closed vent system requirements?	61.349 no detectable emissions (500 ppmv), gas- tight gauging & sampling devices, etc.	Y	
	Control device requirements?	61.349 95% efficiency or equivalent with specified monitoring, recordkeeping & reporting	Y	
	Must the closed vent system operate with no detectable emissions (< 500 ppmw)?	61.349(a)(1)(i) required	Y	
	How is leak-tightness of the closed vent system inspected?	61.349(a)(1)(i) initially & annually, per Method 21	Y	
	Must by-pass lines either have a flow indicator or be secured closed with a car-seal/lock-&-key?	61.349(a)(1)(ii) required	Y	
	Must all gauging & sampling devices be gas-tight, and closed except when in use?	61.349(a)(1)(iii) required	Y	
	Must pressure-relief devices be closed and sealed during normal operations?	61.349(a)(1)(iv) required	Y	
	What is required if the control device is an enclosed combustion unit?	61.349(a)(2)(i) reduce Total Organic Compounds $\ge 95\%$ <u>or</u> Total Organic Compound conc. $\le 20$ ppmv or minimum residence time & temperature of 0.5 sec at 760°C	Y	
	What is required if the control device is a vapor recovery unit?	61.349(a)(2)(ii) reduce Total Organic Compounds $\ge 95\%$ or benzene $\ge 98\%$	Y	
	What is required if the control device is an alternative technology?	61.349(a)(2)(iv) reduce TOC $\geq 95\%$ or benzene $\geq 98\%$ ; and approved by the Administrator	Y	
	Must the closed vent system & control device operate at all times when waste is in the WMU?	61.349(b) required, except when maintenance/repair of the WMU requires shutdown of the control device	Y	

## Table IV.F.1.4 Tanks Source-specific Applicable Requirements

### Fixed Roof Tanks Cluster 05

Applicable Requirement	Regulation Title or Description of Requirement		Federally Enforceable (Y/N)	Future Effective Date
	What is required to demonstrate compliance of a control device that is not a flare?	61.349(c) Either engineering calculations or performance tests	Y	
	Can performance tests be required for control devices?	61.349(e) perform performance tests of the control device upon the request of the Administrator	Y	
	What visual inspections are required for the closed vent system and control device?	61.349(f) inspect initially & annually for visible defects	Y	
	If defects are found during an inspection, how quickly must they be repaired?	61.349(g) first attempt within 5 days, final repair within 15 days; unless delay allowed per 61.350	Y	
	Must control devices be monitored?	61.349(h) required, per 61.354(c)	Y	
61.350	When is a delay of repair allowed, and when must the delayed repair be complete?	61.350 delay of repair is allowed if repair is technically impossible without a shutdown; repair to be complete by the end of the next shutdown	Y	
61.353	What are the responsibilities associated with approval of alternative technologies?	61.353 the person requesting the alternative must show equivalency; and the Administrator must publish any approval in the Federal Register	Y	
61.354	Is monitoring required for control devices?	61.354(c) daily inspect the continuous monitoring devices specified herein, except as specified in 61.354(d) & (e)	Y	
	Are there control devices that do not require continuous data recorders?	61.354(d) carbon adsorption that is not regenerated on site may be monitored without a continuous recorder; or not monitored if replaced on a sufficiently frequent interval	Y	
	May alternative parameters be monitored in lieu of those specified?	61.354(e) allowed if adequacy of the alternative is demonstrated	Y	

## Table IV.F.1.4 Tanks Source-specific Applicable Requirements

### Fixed Roof Tanks Cluster 05

Applicable Requirement	Regulation Title or Description of Requirement		Federally Enforceable (Y/N)	Future Effective Date
	Are inspections required for by-pass lines in closed vent systems?	61.354(f) inspect daily if using a flow indicator or inspect monthly if using car-seal/lock-&- key	Y	
	Is additional monitoring required for systems maintained at negative pressure?	61.354(g) continuously monitor the system pressure	Y	
61.355	Procedure for detecting emissions	61.355(h) per Method 21	Y	
	Procedure for performance testing of control devices	61.355(i) for 61.349(a)(2) to demonstrate compliance with reduction efficiency	Y	
61.356	How long are records to be kept?	61.356(a) keep all records	Y	
	Are records required for the design of the control equipment (e.g., control devices, floating roofs, etc.)?	61.356(d) for 61.343 – 61.347 required, keep for the life of the equipment	Y	
	Are records required documenting the performance of control devices?	61.356(f) for 61.349 required, keep for the life of the control device	Y	
	Are records required for visual inspections and repairs?	61.356(g) for 61.343 – 61.347 required only when defects are found	Y	
	Are records required for Method 21 leak inspections and repairs?	61.356(h) for 61.343 – .347, 61.349 required for each inspection	Y	
	Are records of startup/shutdown and monitoring data required for control devices?	61.356(j) for 61.349 required	Y	
	Are records of monitoring data required for systems maintained under negative pressure?	61.356(m) for 61.343 – 61.347 required	Y	
Condition #11193	Applies to S-0605		Y	
Condition #10761	Applies to S-6200 through S-6219		Y	
Condition #18137	Throughput limits		Ν	

### Table IV.F.1.5 Tanks (FRT's Cluster 11)

# Table IV.F.1.5 Tanks Source-specific Applicable Requirements

### **External Floating Roof Tanks Cluster 11**

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
BAAQMD	Organic Compounds, Storage of Organic Liquids (10/18/06)		
Regulation 8,			
Rule 5			
8-5-110	Exemption due to size and age	Y	
8-5-111	Limited Exemption, Tank Removal From and Return to Service	N	
8-5-111.1	Limited Exemption, Notice to the APCO	N	
8-5-111.2	Limited Exemption, Compliance before notification	Ν	
8-5-111.3	Limited Exemption, Continuous and quick filling, emptying and refilling	Ν	
8-5-111.4	Limited Exemption. Use of vapor recovery	N	
8-5-111.5	Limited Exemption, Minimization of emissions	N	
8-5-111.6	Limited Exemption, Self report if out of compliance during exemption period	N	
8-5-112	Limited Exemption, Preventative Maintenance and Inspection of Tanks in Operation	N	
8-5-112.1	Limited Exemption, Preventative Maintenance and Inspection of Tanks in Operation; Notification	N	
8-5-112.2	Limited Exemption, Preventative Maintenance and Inspection of Tanks in Operation; Tank in compliance at time of notification	N	
8-5-112.3	Limited Exemption, Preventative Maintenance and Inspection of Tanks in Operation; No product movement, Minimize emissions	N	
8-5-112.4	Limited Exemption, Preventative Maintenance and Inspection of Tanks in Operation; Not to exceed 7 days	N	
8-5-112.5	Limited Exemption, Preventative Maintenance and Inspection of Tanks in Operation; Self report if out of compliance during exemption period	N	
8-5-112.6	Limited Exemption, Preventative Maintenance and Inspection of Tanks in Operation; Keep records for each exemption	N	
8-5-119	Limited Exemption, Repair Period for Enhanced Monitoring Program	N	
8-5-301	Storage Tank Control Requirements (internal floating roof, external floating roof, or approved emission control system)	N	
8-5-302	Requirements for Submerged Fill Pipes	Y	

## Table IV.F.1.5 Tanks Source-specific Applicable Requirements

### **External Floating Roof Tanks Cluster 11**

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
8-5-303	Requirements for Pressure Vacuum Valves	N	
8-5-303.1	Requirements for Pressure Vacuum Valves; Set pressure	Ν	
8-5-303.2	Requirements for Pressure Vacuum Valves; Gas tight requirement	Ν	
8-5-304	Requirements for External Floating Roof Tanks	N	
8-5-320	Floating Roof Tank Fitting Requirements	N	
8-5-320.2	Openings in the floating roof except p/v valves and vacuum breaker vents	Ν	
8-5-320.3	Openings in the floating roof except floating roof legs	Ν	
8-5-320.4	Solid sampling or gauging wells and similar fixed projections	Ν	
8-5-320.5	Slotted sampling or gauging wells and similar fixed projections	Ν	
8-5-320.6	Emergency roof drain	Ν	
8-5-321	Primary seal requirements	N	
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 8-5-305.1	Y	
8-5-321.3	Metallic shoe type seals	N	
8-5-321.3.1	Geometry of shoe	N	
8-5-321.3.2	Gaps for welded tanks	N	
8-5-322	Secondary seal requirements	N	
8-5-322.1	No holes, tears, or other openings in the secondary seal	N	
8-5-322.2	Insertion of probes	N	
8-5-322.3	Gap length	N	
8-5-322.5	Gap for welded tanks with seal installed after September 4, 1985	N	
8-5-322.6	Secondary seal shall not be attached to primary seal	Ν	
8-5-328	Tank degassing requirements	N	
8-5-328.1	Tank degassing requirements; Tanks > 75 cubic meters	N	
8-5-328.2	Tank degassing requirements; Ozone Excess Day Prohibition	Ν	
8-5-328.3	Tank degassing requirements; BAAQMD notification required	N	
8-5-331	Tank Cleaning Requirements; 90% Abatement Efficiency if Abatement Device Used	Ν	
8-5-331.1	Tank cleaning requirements; Cleaning materials properties	Ν	
8-5-331.2	Tank cleaning requirements; Steam cleaning prohibition	Ν	
8-5-331.3	Tank cleaning requirements; Steam cleaning exceptions	N	

## Table IV.F.1.5 Tanks Source-specific Applicable Requirements

### **External Floating Roof Tanks Cluster 11**

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
8-5-332	Sludge Handling Requirements; applies to sludge removed from any	Ν	
	tank that was subject to BAAQMD 8-5 at any time since it was last put		
	in service)		
8-5-332.1	Sludge Handling Requirements; sludge container no leaks	N	
8-5-332.2	Sludge Handling Requirements; sludge container gap requirements	N	
8-5-401	Inspection Requirements for External Floating Roof Tanks	N	
8-5-403	Inspection Requirements for Pressure Relief Devices	Ν	
8-5-403.1	Inspection Requirements for Pressure Relief Devices; Pressure vacuum valve gas tight standards in 8-5-303	Ν	
8-5-411	Enhanced Monitoring Program (Optional)	Ν	
8-5-411.3	Enhanced Monitoring Program (Optional); Performance requirements	Ν	
8-5-501	Records	Ν	
8-5-501.1	Records; Type and amount of liquid, type of blanket gas, TVP- Retain 24 months	Ν	
8-5-501.2	Records; Internal and External Floating Roof Tanks, Seal Replacement Records- Retain 10 years	Ν	
8-5-501.3	Records; Retention	N	
8-5-501.4	Records; New pressure vacuum valve setpoints	Ν	
8-5-601	Analysis of Samples, Reid Vapor Pressure	Y	
8-5-602	Analysis of Samples, True Vapor Pressure	Y	
8-5-603	Determination of Emissions	Ν	
8-5-604	Determinations of Applicability	Y	
8-5-605	Measurement of Leak Concentration and Residual Concentrations	Ν	
8-5-605.1	Measurement of Leak Concentration and Residual Concentrations; EPA method 21 Instruments	Ν	
8-5-605.2	Measurement of Leak Concentration and Residual Concentrations; Method 21 and tank degassing residual organic concentration measurement method	Ν	
8-5-606	Analysis of samples, Tank Cleaning Agents	Ν	
8-5-606.1	Analysis of samples, Tank Cleaning Agents; Initial Boiling Point	N	
8-5-606.2	Analysis of samples, Tank Cleaning Agents; True Vapor Pressure	N	
8-5-606.3	Analysis of samples, Tank Cleaning Agents; VOC	N	

## Table IV.F.1.5 Tanks Source-specific Applicable Requirements

### **External Floating Roof Tanks Cluster 11**

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
SIP	Storage of Organic Liquids (11/27/02)		
BAAQMD			
Regulation 8,			
Rule 5			
8-5-111	Limited Exemption, Tank Removal From and Return to Service	Y	
8-5-111.1	Notice to the APCO	Y	
8-5-111.2	Compliance before notification	Y	
8-5-111.3	Continuous and quick filling, emptying and refilling	Y	
8-5-111.4	Use of vapor recovery	Y	
8-5-111.5	Minimization of emissions	Y	
8-5-111.6	Written notice of completion not required	Y	
8-5-111.7	Compliance with Section 8-5-328	Y	
8-5-112	Limited Exemption, Tanks in Operation	Y	
8-5-112.1	Notice to the APCO	Y	
8-5-112.2	Compliance and certification before commencement of work	Y	
8-5-112.3	No product movement; minimization of emissions	Y	
8-5-112.4	Exemption does not exceed 7 days	Y	
8-5-301	Storage Tank Control Requirements (internal floating roof, external	Y	
	floating roof, or approved emission control system)		
8-5-302	Requirements for Submerged Fill Pipes	Y	
8-5-303	Requirements for Pressure Vacuum Valves	Y	
8-5-304	Requirements for External Floating Roofs	Y	
8-5-320	Tank fitting requirements	Y	
8-5-320.2	Openings in the floating roof except p/v valves and vacuum breaker vents	Y	
8-5-320.3	Openings in the floating roof except floating roof legs	Y	
8-5-320.4	Solid sampling or gauging wells and similar fixed projections	Y	
8-5-320.5	Slotted sampling or gauging wells and similar fixed projections	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 8-5-305.1	Y	
8-5-321.3	Metallic shoe type seals	Y	

## Table IV.F.1.5 Tanks Source-specific Applicable Requirements

### **External Floating Roof Tanks Cluster 11**

Applicable Requirement	Regulation Title or De	escription of Requirement	Federally Enforceable (Y/N)	Future Effective Date
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 i	n the secondary seal	Y	
8-5-322.2	Insertion of probes		Y	
8-5-322.3	Gap length		Y	
8-5-322.5	Gap for welded tanks with seal inst	talled after September 4, 1985	Y	
8-5-322.6	Secondary seal shall not be attache	d to primary seal	Y	
8-5-328	Tank degassing requirements		Y	
8-5-328.1	Concentration of <10,000 ppm as r	nethane after cleaning	Y	
8-5-328.2	Tank degassing when ozone excess	s is predicted	Y	
8-5-401	Inspection Requirements for External Floating Roof Tanks		Y	
8-5-404	Certification		Y	
8-5-405	Information required		Y	
8-5-501	Records		Y	
8-5-502	Tank Cleaning Annual Source Test Requirement		Y	
8-5-503	Portable hydrocarbon detector		Y	
8-5-601	Analysis of Samples, Reid Vapor F	Pressure	Y	
8-5-602	Analysis of Samples, True Vapor F	Pressure	Y	
8-5-603	Determination of Emissions		Y	
8-5-603.1.2	Concentration of organic compoun	ds after degassing	Y	
8-5-604	Determinations of Applicability		Y	
40 cfr 63 subpart cc Refinery MACT	NES REQUIR	HAP for Petroleum Refineries (6/23/03) EMENTS FOR RECORD KEEPING ON	LY	
63.642(e) 63.654(I)	General recordkeeping requirements: Time period for keeping records, unless specified otherwise.	63.642(e) & 63.654(i)(4) keep all other records, retrievable within 24 hr	Y	
	General recordkeeping requirements: keep all reports and notification for the specified period of time.	63.642(e) & 63.654(i)(4) required	Y	
63.646(i) 63.652(b)	Implementation Plan:	63.646(i) & 63.652(b) Not required	Y	

## Table IV.F.1.5 Tanks Source-specific Applicable Requirements

### **External Floating Roof Tanks Cluster 11**

Applicable Requirement	Regulation Title or D	escription of Requirement	Federally Enforceable (Y/N)	Future Effective Date
63.654(f)	Notification of Compliance Status report:	63.654(f) later of next Periodic Report after compliance or January 15, 1999	Y	
	Report determination of applicability for other individual tanks (i.e., for MACT rules, whether Group1 or Group2)?	63.654(f)(1)(i)(A) with initial Notification of Compliance Status; Jan. 15, 1999	Y	
63.654(h)	Report applicability for varying-use tanks?	63.654(h)(6)(ii) with the initial NOC Status report	Y	
	Other (initial) Reports: Report applicability for varying-use tanks?	63.654(h)(6)(ii) required with the initial Notification of Compliance Status report	Y	
63.654(i) 63.123(a)	Applicability records: Time period for keeping records of applicability determination, unless specified otherwise.	63.654(i)(1) 63.123(a) keep record readily accessible for the service life of the tank	Y	
63.654(i) 63.646(a) 63.119(a) 63.123(a)	Applicability records: Records of dimensions & capacity required for nonexempt tanks?	63.654(i)(1) 63.646(a)&63.119(a)(3) 63.123(a) required keep record readily accessible for service life of the tank	Y	
	Applicability records: Additional recordkeeping requirements for certain tanks.	63.654(i)(1)(iv) determination of HAP content keep record readily accessible for service life of the tank	Y	
Throughput	Condition #2238	Applies to S-3100	Y	
Condition #13597	Applies to S-1798		Y	
Condition #3697	Applies to S-1799		Y	
Condition #18137	Throughput limits		N	
Condition #25144	Applies to S-1292 and fugitives		N	

### Table IV.F.1.6 Tanks (FRT's Cluster 12)

# Table IV.F.1.6 Tanks Source-specific Applicable Requirements

### **Internal Floating Roof Tanks Cluster 12**

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
BAAQMD	Organic Compounds, Storage of Organic Liquids (10/18/06)		
Regulation 8,			
Rule 5			
8-5-110	Exemption due to size and age	Y	
8-5-111	Limited Exemption, Tank Removal From and Return to Service	Ν	
8-5-111.1	Limited Exemption, Notice to the APCO	Ν	
8-5-111.2	Limited Exemption, Compliance before notification	N	
8-5-111.3	Limited Exemption, Continuous and quick filling, emptying and refilling	N	
8-5-111.4	Limited Exemption, Use of vapor recovery	N	
8-5-111.5	Limited Exemption, Minimization of emissions	N	
8-5-111.6	Limited Exemption, Self report if out of compliance during exemption period	N	
<u>8-5-112</u>	Limited Exemption, Preventative Maintenance and Inspection of Tanks in Operation	N	
8-5-112.1	Limited Exemption, Preventative Maintenance and Inspection of Tanks in Operation; Notification	N	
8-5-112.2	Limited Exemption, Preventative Maintenance and Inspection of Tanks in Operation; Tank in compliance at time of notification	N	
8-5-112.3	Limited Exemption, Preventative Maintenance and Inspection of Tanks in Operation; No product movement, Minimize emissions	N	
8-5-112.4	Limited Exemption, Preventative Maintenance and Inspection of Tanks in Operation; Not to exceed 7 days	N	
8-5-112.5	Limited Exemption, Preventative Maintenance and Inspection of Tanks in Operation; Self report if out of compliance during exemption period	N	
8-5-112.6	Limited Exemption, Preventative Maintenance and Inspection of Tanks in Operation; Keep records for each exemption	N	
8-5-119	Limited Exemption, Repair Period for Enhanced Monitoring Program	N	
8-5-301	Storage Tank Control Requirements (internal floating roof, external floating roof, or approved emission control system)	N	
8-5-302	Requirements for Submerged Fill Pipes	Y	

## Table IV.F.1.6 Tanks Source-specific Applicable Requirements

### **Internal Floating Roof Tanks Cluster 12**

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
8-5-303	Requirements for Pressure Vacuum Valves	N	
8-5-303.1	Requirements for Pressure Vacuum Valves; Set pressure	Ν	
8-5-303.2	Requirements for Pressure Vacuum Valves; Gas tight requirement	Ν	
8-5-305	Requirements for Internal Floating Roof Tanks	Ν	
8-5-328	Tank degassing requirements	Ν	
8-5-328.1	Tank degassing requirements; Tanks > 75 cubic meters	Ν	
8-5-328.2	Tank degassing requirements; Ozone Excess Day Prohibition	Ν	
8-5-328.3	Tank degassing requirements; BAAQMD notification required	Ν	
8-5-331	Tank Cleaning Requirements; 90% Abatement Efficiency if Abatement Device Used	Ν	
8-5-331.1	Tank cleaning requirements; Cleaning materials properties	N	
8-5-331.2	Tank cleaning requirements; Steam cleaning prohibition	N	
8-5-331.3	Tank cleaning requirements; Steam cleaning exceptions	N	
8-5-332	Sludge Handling Requirements; applies to sludge removed from any tank that was subject to BAAQMD 8-5 at any time since it was last put in service)	Ν	
8-5-332.1	Sludge Handling Requirements; sludge container no leaks	N	
8-5-332.2	Sludge Handling Requirements; sludge container gap requirements	N	
8-5-402	Inspection Requirements for Internal Floating Roof Tanks	N	
8-5-403	Inspection Requirements for Pressure Relief Devices	N	
8-5-403.1	Inspection Requirements for Pressure Relief Devices; Pressure vacuum valve gas tight standards in 8-5-303	N	
8-5-411	Enhanced Monitoring Program (Optional)	N	
8-5-411.3	Enhanced Monitoring Program (Optional); Performance requirements	N	
8-5-501	Records	N	
8-5-501.1	Records; Type and amount of liquid, type of blanket gas, TVP- Retain 24 months	N	
8-5-501.2	Records; Internal and External Floating Roof Tanks, Seal Replacement Records- Retain 10 years	N	
8-5-501.3	Records; Retention	Ν	
8-5-501.4	Records; New pressure vacuum valve setpoints	Ν	
8-5-502	Annual Source Test Requirement (only applies to S-0660 and S-6066)	Ν	
8-5-601	Analysis of Samples, Reid Vapor Pressure	Y	

# Table IV.F.1.6 Tanks Source-specific Applicable Requirements

### Internal Floating Roof Tanks Cluster 12

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
8-5-602	Analysis of Samples, True Vapor Pressure	Y	
8-5-603	Determination of Emissions	Ν	
8-5-604	Determinations of Applicability	Y	
8-5-605	Measurement of Leak Concentration and Residual Concentrations	Ν	
8-5-605.1	Measurement of Leak Concentration and Residual Concentrations; EPA	Ν	
	method 21 Instruments		
8-5-605.2	Measurement of Leak Concentration and Residual Concentrations;	Ν	
	Method 21 and tank degassing residual organic concentration		
	measurement method		
8-5-606	Analysis of samples, Tank Cleaning Agents	N	
8-5-606.1	Analysis of samples, Tank Cleaning Agents; Initial Boiling Point	N	
8-5-606.2	Analysis of samples, Tank Cleaning Agents; True Vapor Pressure	Ν	
8-5-606.3	Analysis of samples, Tank Cleaning Agents; VOC	Ν	
SIP	Storage of Organic Liquids (11/27/02)		
BAAQMD			
Regulation 8,			
Rule 5			
8-5-111	Limited Exemption, Tank Removal From and Return to Service	Y	
8-5-111.1	Notice to the APCO	Y	
8-5-111.2	Compliance before notification	Y	
8-5-111.3	Continuous and quick filling, emptying and refilling	Y	
8-5-111.4	Use of vapor recovery	Y	
8-5-111.5	Minimization of emissions	Y	
8-5-111.6	Written notice of completion not required	Y	
8-5-111.7	Compliance with Section 8-5-328	Y	
8-5-112	Limited Exemption, Tanks in Operation	Y	
8-5-112.1	Notice to the APCO	Y	
8-5-112.2	Compliance and certification before commencement of work	Y	
8-5-112.3	No product movement; minimization of emissions	Y	
8-5-112.4	Exemption does not exceed 7 days	Y	
8-5-301	Storage Tank Control Requirements (internal floating roof, external	Y	
	floating roof, or approved emission control system)		
8-5-305	Requirements for Internal Floating Roofs	Y	

# Table IV.F.1.6 Tanks Source-specific Applicable Requirements

### Internal Floating Roof Tanks Cluster 12

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
8-5-320	Tank fitting requirements	Y	
8-5-320.2	Openings in the floating roof except p/v valves and vacuum breaker	Y	
	vents		
8-5-320.3	Openings in the floating roof except floating roof legs	Y	
8-5-320.4	Solid sampling or gauging wells and similar fixed projections	Y	
8-5-320.5	Slotted sampling or gauging wells and similar fixed projections	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 8-5-305.1	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	Gap length	Y	
8-5-322.5	Gap for welded tanks with seal installed after September 4, 1985	Y	
8-5-322.6	Secondary seal shall not be attached to primary seal	Y	
8-5-328	Tank degassing requirements	Y	
8-5-328.1	Concentration of <10,000 ppm as methane after cleaning	Y	
8-5-328.2	Tank degassing when ozone excess is predicted	Y	
8-5-402	Inspection Requirements for Internal Floating Roof Tanks	Y	
8-5-404	Certification	Y	
8-5-405	Information required	Y	
8-5-501	Records	Y	
8-5-502	Tank Cleaning Annual Source Test Requirement	Y	
8-5-503	Portable hydrocarbon detector	Y	
8-5-601	Analysis of Samples, Reid Vapor Pressure	Y	
8-5-602	Analysis of Samples, True Vapor Pressure	Y	
8-5-603	Determination of Emissions	Y	
8-5-603.1.2	Concentration of organic compounds after degassing	Y	
8-5-604	Determinations of Applicability	Y	

## Table IV.F.1.6 Tanks Source-specific Applicable Requirements

### **Internal Floating Roof Tanks Cluster 12**

Applicable Requirement	Regulation Title or D	escription of Requirement	Federally Enforceable (Y/N)	Future Effective Date
40 cfr 63 subpart cc Refinery MACT	NES REQUIR	SHAP for Petroleum Refineries (6/23/03) REMENTS FOR RECORD KEEPING ON	ILY	
63.642(e) 63.654(i)(4)	General recordkeeping requirements: Time period for keeping records, unless specified otherwise.	63.642(e) & 63.654(i)(4) keep all other records, retrievable within 24 hr	Y	
	General recordkeeping requirements: keep all reports and notification for the specified period of time.	63.642(e) & 63.654(i)(4) required	Y	
63.646(i) 63.652(b)	Implementation Plan:	63.646(i) & 63.652(b) Not required	Y	
63.654(f)	Notification of Compliance Status report:	63.654(f) later of next Periodic Report after compliance date or January 15, 1999	Y	
	Report determination of applicability for other individual tanks (i.e., for MACT rules, whether Group1 or Group2)?	63.654(f)(1)(i)(A) with initial Notification of Compliance Status; Jan. 15, 1999	Y	
63.654(h)	Report applicability for varying-use tanks?	63.654(h)(6)(ii) with the initial NOC Status report	Y	
	Other (initial) Reports: Report applicability for varying-use tanks?	63.654(h)(6)(ii) required with the initial Notification of Compliance Status report	Y	
63.654(i) 63.123(a)	Applicability records: Time period for keeping records of applicability determination, unless specified otherwise.	63.654(i)(1) 63.123(a) keep record readily accessible for the service life of the tank	Y	
63.654(i) 63.646(a) 63.119(a) 63.123(a)	Applicability records: Records of dimensions & capacity required for nonexempt tanks?	63.654(i)(1) 63.646(a)&63.119(a)(3) 63.123(a) required keep record readily accessible for service life of the tank.	Y	
63.654(I)	Applicability records: Additional recordkeeping requirements for certain tanks.	63.654(I)(1)(iv) determination of HAP content. Keep record readily accessible for service life of the tank.	Y	
Condition #18137	Throughput limits		N	

### Table IV.F.1.7 Tanks (FRT's Cluster 13)

# Table IV.F.1.7 Tanks Source-specific Applicable Requirements

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
BAAQMD	Organic Compounds, Storage of Organic Liquids (10/18/06)		
Regulation 8,			
Rule 5			
8-5-110	Exemption due to size and age	Y	
8-5-111	Limited Exemption, Tank Removal From and Return to Service	Ν	
8-5-111.1	Limited Exemption, Notice to the APCO	Ν	
8-5-111.2	Limited Exemption, Compliance before notification	Ν	
8-5-111.3	Limited Exemption, Continuous and quick filling, emptying and	Ν	
	refilling		
8-5-111.4	Limited Exemption, Use of vapor recovery	Ν	
8-5-111.5	Limited Exemption, Minimization of emissions	Ν	
8-5-111.6	Limited Exemption, Self report if out of compliance during	Ν	
	exemption period		
8-5-112	Limited Exemption, Preventative Maintenance and Inspection of	Ν	
	Tanks in Operation		
8-5-112.1	Limited Exemption, Preventative Maintenance and Inspection of	Ν	
	Tanks in Operation; Notification		
8-5-112.2	Limited Exemption, Preventative Maintenance and Inspection of	Ν	
	Tanks in Operation; Tank in compliance at time of notification		
8-5-112.3	Limited Exemption, Preventative Maintenance and Inspection of	Ν	
	Tanks in Operation; No product movement, Minimize emissions		
8-5-112.4	Limited Exemption, Preventative Maintenance and Inspection of	Ν	
	Tanks in Operation; Not to exceed 7 days		
8-5-112.5	Limited Exemption, Preventative Maintenance and Inspection of	Ν	
	Tanks in Operation; Self report if out of compliance during exemption		
	period		
8-5-112.6	Limited Exemption, Preventative Maintenance and Inspection of	Ν	
	Tanks in Operation; Keep records for each exemption		
8-5-119	Limited Exemption, Repair Period for Enhanced Monitoring Program	Ν	
8-5-301	Storage Tank Control Requirements (internal floating roof, external	Ν	
	floating roof, or approved emission control system)		
8-5-302	Requirements for Submerged Fill Pipes	Y	
8-5-303	Requirements for Pressure Vacuum Valves	Ν	

# Table IV.F.1.7 Tanks Source-specific Applicable Requirements

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
8-5-303.1	Requirements for Pressure Vacuum Valves; Set pressure	Ν	
8-5-303.2	Requirements for Pressure Vacuum Valves; Gas tight requirement	Ν	
8-5-307	Requirements for Fixed Roof Tanks, Pressure Tanks, and Blanketed Tanks	Ν	
8-5-307.1	Requirements for Fixed Roof Tanks, Pressure Tanks, and Blanketed Tanks: no liquid leakage through shell	Ν	
8-5-328	Tank degassing requirements	Ν	
8-5-328.1	Tank degassing requirements; Tanks > 75 cubic meters	Ν	
8-5-328.2	Tank degassing requirements; Ozone Excess Day Prohibition	Ν	
8-5-328.3	Tank degassing requirements; BAAQMD notification required	Ν	
8-5-331	Tank Cleaning Requirements; 90% Abatement Efficiency if Abatement Device Used	N	
8-5-331.1	Tank cleaning requirements; Cleaning materials properties	Ν	
8-5-331.2	Tank cleaning requirements; Steam cleaning prohibition	Ν	
8-5-331.3	Tank cleaning requirements; Steam cleaning exceptions	N	
8-5-332	Sludge Handling Requirements; applies to sludge removed from any tank that was subject to BAAQMD 8-5 at any time since it was last put in service)	Ν	
8-5-332.1	Sludge Handling Requirements; sludge container no leaks	Ν	
8-5-332.2	Sludge Handling Requirements; sludge container gap requirements	Ν	
8-5-403	Inspection Requirements for Pressure Relief Devices	Ν	
8-5-403.1	Inspection Requirements for Pressure Relief Devices; Pressure vacuum valve gas tight standards in 8-5-303	Ν	
8-5-411	Enhanced Monitoring Program (Optional)	N	
8-5-411.3	Enhanced Monitoring Program (Optional); Performance requirements	N	
8-5-501	Records	N	
8-5-501.1	Records; Type and amount of liquid, type of blanket gas, TVP- Retain 24 months	N	
8-5-501.3	Records; Retention	Ν	
8-5-501.4	Records; New pressure vacuum valve setpoints	Ν	
8-5-601	Analysis of Samples, Reid Vapor Pressure	Y	
8-5-602	Analysis of Samples, True Vapor Pressure	Y	
8-5-603	Determination of Emissions	Ν	
8-5-604	Determinations of Applicability	Y	
8-5-605	Measurement of Leak Concentration and Residual Concentrations	N	

# Table IV.F.1.7 Tanks Source-specific Applicable Requirements

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
8-5-605.1	Measurement of Leak Concentration and Residual Concentrations; EPA method 21 Instruments	N	
8-5-605.2	Measurement of Leak Concentration and Residual Concentrations; Method 21 and tank degassing residual organic concentration measurement method	N	
8-5-606	Analysis of samples, Tank Cleaning Agents	Ν	
8-5-606.1	Analysis of samples, Tank Cleaning Agents; Initial Boiling Point	Ν	
8-5-606.2	Analysis of samples, Tank Cleaning Agents; True Vapor Pressure	Ν	
8-5-606.3	Analysis of samples, Tank Cleaning Agents; VOC	Ν	
SIP	Storage of Organic Liquids (11/27/02)		
BAAQMD			
<b>Regulation 8,</b>			
Rule 5			
8-5-111	Limited Exemption, Tank Removal From and Return to Service	Y	
8-5-111.1	Notice to the APCO	Y	
8-5-111.2	Compliance before notification	Y	
8-5-111.3	Continuous and quick filling, emptying and refilling	Y	
8-5-111.4	Use of vapor recovery	Y	
8-5-111.5	Minimization of emissions	Y	
8-5-111.6	Written notice of completion not required	Y	
8-5-111.7	Compliance with Section 8-5-328	Y	
8-5-112	Limited Exemption, Tanks in Operation	Y	
8-5-112.1	Notice to the APCO	Y	
8-5-112.2	Compliance and certification before commencement of work	Y	
8-5-112.3	No product movement; minimization of emissions	Y	
8-5-112.4	Exemption does not exceed 7 days	Y	
8-5-301	Storage Tank Control Requirements (internal floating roof, external floating roof, or approved emission control system)	Y	
8-5-302	Requirements for Submerged Fill Pipes	Y	
8-5-303	Requirements for Pressure Vacuum Valves	Y	
8-5-328	Tank degassing requirements	Y	
8-5-328.1	Concentration of <10,000 ppm as methane after cleaning	Y	
8-5-328.2	Tank degassing when ozone excess is predicted	Y	
8-5-403	Inspection Requirements for Pressure Relief Device	Y	
8-5-404	Certification	Y	

# Table IV.F.1.7 Tanks Source-specific Applicable Requirements

Applicable Requirement	Regulation Title or I	Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
8-5-501	Records		Y	
8-5-502	Tank Cleaning Annual Source T	Sest Requirement	Y	
8-5-503	Portable hydrocarbon detector		Y	
8-5-601	Analysis of Samples, Reid Vapo	or Pressure	Y	
8-5-602	Analysis of Samples, True Vapo	or Pressure	Y	
8-5-603	Determination of Emissions		Y	
8-5-603.1.2	Concentration of organic compo	ounds after degassing	Y	
8-5-604	Determinations of Applicability		Y	
40 cfr 63 subpart cc Refinery MACT	NE REQUI	CSHAP for Petroleum Refineries (6/23/03) REMENTS FOR RECORD KEEPING O	NLY	
63.642(e) 63.654(i)	General recordkeeping requirements: Time period for keeping records, unless specified otherwise.	63.642(e) & 63.654(i)(4) keep all other records, retrievable within 24 hours	Y	
	General recordkeeping requirements: Keep all reports and notification for the specified period of time.	63.642(e) & 63.654(i)(4) required	Y	
63.646(h) 63.9 (b)	Initial Notification: Is initial notification of the source's existence required?	63.646(h) Table 6 Ref. 63.9 (b)(2) Not required	Y	
63.646(i) 63.652(b)	Implementation Plan:	63.646(i) & 63.652(b) Not required	Y	
63.654(f)	Notification of Compliance Status report:	63.654(f) later of next Periodic Report after compliance or January 15, 1999	Y	
	Report determination of applicability for other individual tanks (i.e., for MACT rules, whether Group1 or Group2)?	63.654(f)(1)(i)(A) with initial Notification of Compliance Status; Jan. 15, 1999	Y	
63.654(h)	Report applicability for varying- use tanks?	63.654(h)(6)(ii) with the initial NOC Status report	Y	
	Other (initial) Reports: Report applicability for varying- use tanks?	63.654(h)(6)(ii) required with the initial Notification of Compliance Status report	Y	
63.654(i) 63.123(a)	Applicability records: Time period for keeping records of applicability determination, unless specified otherwise.	63.654(i)(1) 63.123(a) keep record readily accessible for the service life of the tank	Y	

# Table IV.F.1.7 Tanks Source-specific Applicable Requirements

Applicable Requirement	Regulation Title or I	Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
63.654(i) 63.646(a) 63.119(a) 63.123(a)	Applicability records: Records of dimensions & capacity required for nonexempt tanks?	63.654(i)(1) 63.646(a)&63.119(a)(3) 63.123(a) required keep record readily accessible for service life of the tank	Y	
Condition #18137	Throughput limits		Ν	

### Table IV.F.1.9 Tanks (EFRT's Cluster 17)

# Table IV.F.1.9 Tanks Source-specific Applicable Requirements

### **External Floating Roof Tanks Cluster 17**

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
BAAQMD	Organic Compounds, Storage of Organic Liquids (10/18/06)		
Regulation 8,			
Rule 5			
8-5-110	Exemption due to size and age	Y	
8-5-111	Limited Exemption, Tank Removal From and Return to Service	Ν	
8-5-111.1	Limited Exemption, Notice to the APCO	Ν	
8-5-111.2	Limited Exemption, Compliance before notification	Ν	
8-5-111.3	Limited Exemption, Continuous and quick filling, emptying and refilling	Ν	
8-5-111.4	Limited Exemption, Use of vapor recovery	Ν	
8-5-111.5	Limited Exemption, Minimization of emissions	Ν	
8-5-111.6	Limited Exemption, Self report if out of compliance during exemption period	Ν	
8-5-112	Limited Exemption, Preventative Maintenance and Inspection of Tanks in Operation	Ν	
8-5-112.1	Limited Exemption, Preventative Maintenance and Inspection of Tanks in Operation; Notification	Ν	
8-5-112.2	Limited Exemption, Preventative Maintenance and Inspection of Tanks in Operation; Tank in compliance at time of notification	Ν	
8-5-112.3	Limited Exemption, Preventative Maintenance and Inspection of Tanks in Operation; No product movement, Minimize emissions	Ν	
8-5-112.4	Limited Exemption, Preventative Maintenance and Inspection of Tanks in Operation; Not to exceed 7 days	Ν	
8-5-112.5	Limited Exemption, Preventative Maintenance and Inspection of Tanks in Operation; Self report if out of compliance during exemption period	Ν	
8-5-112.6	Limited Exemption, Preventative Maintenance and Inspection of Tanks in Operation; Keep records for each exemption	Ν	
8-5-119	Limited Exemption, Repair Period for Enhanced Monitoring Program	N	
8-5-301	Storage Tank Control Requirements (internal floating roof, external floating roof, or approved emission control system)	Ν	

# Table IV.F.1.9 Tanks Source-specific Applicable Requirements

### **External Floating Roof Tanks Cluster 17**

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
8-5-302	Requirements for Submerged Fill Pipes	Y	
8-5-303	Requirements for Pressure Vacuum Valves	Ν	
8-5-303.1	Requirements for Pressure Vacuum Valves; Set pressure	Ν	
8-5-303.2	Requirements for Pressure Vacuum Valves; Gas tight requirement	Ν	
8-5-304	Requirements for External Floating Roof Tanks	Ν	
8-5-320	Floating Roof Tank Fitting Requirements	Ν	
8-5-320.2	Openings in the floating roof except p/v valves and vacuum breaker vents	Ν	
8-5-320.3	Openings in the floating roof except floating roof legs	Ν	
8-5-320.4	Solid sampling or gauging wells and similar fixed projections	Ν	
8-5-320.5	Slotted sampling or gauging wells and similar fixed projections	N	
8-5-320.6	Emergency roof drain	Ν	
8-5-321	Primary seal requirements	Ν	
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 8-5-305.1	Y	
8-5-321.3	Metallic shoe type seals	Ν	
8-5-321.3.1	Geometry of shoe	Ν	
8-5-321.3.2	Gaps for welded tanks	Ν	
8-5-322	Secondary seal requirements	Ν	
8-5-322.1	No holes, tears, or other openings in the secondary seal	Ν	
8-5-322.2	Insertion of probes	Ν	
8-5-322.3	Gap length		
8-5-322.5	Gap for welded tanks with seal installed after September 4, 1985	Ν	
8-5-322.6	Secondary seal shall not be attached to primary seal	Ν	
8-5-328	Tank degassing requirements	Ν	
8-5-328.1	Tank degassing requirements; Tanks > 75 cubic meters	Ν	
8-5-328.2	Tank degassing requirements; Ozone Excess Day Prohibition	Ν	
8-5-328.3	Tank degassing requirements; BAAQMD notification required	Ν	
8-5-331	Tank Cleaning Requirements; 90% Abatement Efficiency if Abatement Device Used	Ν	
8-5-331.1	Tank cleaning requirements; Cleaning materials properties	Ν	
8-5-331.2	Tank cleaning requirements; Steam cleaning prohibition	Ν	
8-5-331.3	Tank cleaning requirements; Steam cleaning exceptions	N	

# Table IV.F.1.9 Tanks Source-specific Applicable Requirements

### **External Floating Roof Tanks Cluster 17**

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
8-5-332	Sludge Handling Requirements; applies to sludge removed from any	Ν	
	tank that was subject to BAAQMD 8-5 at any time since it was last		
	put in service)		
8-5-332.1	Sludge Handling Requirements; sludge container no leaks	Ν	
8-5-332.2	Sludge Handling Requirements; sludge container gap requirements	Ν	
8-5-401	Inspection Requirements for External Floating Roof Tanks	Ν	
8-5-403	Inspection Requirements for Pressure Relief Devices	Ν	
8-5-403.1	Inspection Requirements for Pressure Relief Devices; Pressure	Ν	
	vacuum valve gas tight standards in 8-5-303		
8-5-411	Enhanced Monitoring Program (Optional)	Ν	
8-5-411.3	Enhanced Monitoring Program (Optional); Performance requirements	Ν	
8-5-501	Records	Ν	
8-5-501.1	Records; Type and amount of liquid, type of blanket gas, TVP- Retain	Ν	
	24 months		
8-5-501.2	Records; Internal and External Floating Roof Tanks, Seal	Ν	
	Replacement Records- Retain 10 years		
8-5-501.3	Records; Retention	Ν	
8-5-501.4	Records; New pressure vacuum valve setpoints	Ν	
8-5-502	Annual Source Test Requirement	Ν	
8-5-601	Analysis of Samples, Reid Vapor Pressure	Y	
8-5-602	Analysis of Samples, True Vapor Pressure	Y	
8-5-603	Determination of Emissions	Ν	
8-5-604	Determinations of Applicability	Y	
8-5-605	Measurement of Leak Concentration and Residual Concentrations	Ν	
8-5-605.1	Measurement of Leak Concentration and Residual Concentrations;	Ν	
	EPA method 21 Instruments		
8-5-605.2	Measurement of Leak Concentration and Residual Concentrations;	Ν	
	Method 21 and tank degassing residual organic concentration		
	measurement method		
8-5-606	Analysis of samples, Tank Cleaning Agents	Ν	
8-5-606.1	Analysis of samples, Tank Cleaning Agents; Initial Boiling Point	Ν	
8-5-606.2	Analysis of samples, Tank Cleaning Agents; True Vapor Pressure	N	
8-5-606.3	Analysis of samples, Tank Cleaning Agents; VOC	Ν	

# Table IV.F.1.9 Tanks Source-specific Applicable Requirements

### **External Floating Roof Tanks Cluster 17**

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
SIP	Storage of Organic Liquids (11/27/02)		
BAAQMD			
Regulation 8,			
Rule 5			
8-5-111	Limited Exemption, Tank Removal From and Return to Service	Y	
8-5-111.1	Notice to the APCO	Y	
8-5-111.2	Compliance before notification	Y	
8-5-111.3	Continuous and quick filling, emptying and refilling	Y	
8-5-111.4	Use of vapor recovery	Y	
8-5-111.5	Minimization of emissions	Y	
8-5-111.6	Written notice of completion not required	Y	
8-5-111.7	Compliance with Section 8-5-328	Y	
8-5-112	Limited Exemption, Tanks in Operation	Y	
8-5-112.1	Notice to the APCO	Y	
8-5-112.2	Compliance and certification before commencement of work	Y	
8-5-112.3	No product movement; minimization of emissions	Y	
8-5-112.4	Exemption does not exceed 7 days	Y	
8-5-301	Storage Tank Control Requirements (internal floating roof, external	Y	
	floating roof, or approved emission control system)		
8-5-304	Requirements for External Floating Roofs	Y	
8-5-320	Tank fitting requirements	Y	
8-5-320.2	Openings in the floating roof except p/v valves and vacuum breaker vents	Y	
8-5-320.3	Openings in the floating roof except floating roof legs	Y	
8-5-320.4	Solid sampling or gauging wells and similar fixed projections	Y	
8-5-320.5	Slotted sampling or gauging wells and similar fixed projections	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 8-5-305.1	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	

# Table IV.F.1.9 Tanks Source-specific Applicable Requirements

### **External Floating Roof Tanks Cluster 17**

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date	
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	Gap length	Y		
8-5-322.5	Gap for welded tanks with seal installed after September 4, 1985	Y		
8-5-322.6	Secondary seal shall not be attached to primary seal	Y		
8-5-328	Tank degassing requirements	Y		
8-5-328.1	Concentration of <10,000 ppm as methane after cleaning	Y		
8-5-328.2	Tank degassing when ozone excess is predicted	Y		
8-5-401	Inspection Requirements for External Floating Roof Tanks	Y		
8-5-404	Certification	Y		
8-5-405	Information required	Y		
8-5-501	Records	Y		
8-5-502	Tank Cleaning Annual Source Test Requirement	Y		
8-5-503	Portable hydrocarbon detector	Y		
8-5-601	Analysis of Samples, Reid Vapor Pressure	Y		
8-5-602	Analysis of Samples, True Vapor Pressure	Y		
8-5-603	Determination of Emissions	Y		
8-5-603.1.2	Concentration of organic compounds after degassing	Y		
8-5-604	Determinations of Applicability	Y		
40 cfr 63 submpart cc Refinery MACT	NESHAP for Petroleum Refineries (6/23/03) REQUIREMENTS FOR TANKS ALSO SUBJECT T	O NSPS K		
63.640(n)	Which rule governs for storage vessels subject to the control63.640(n)(6) NSPS subpart K to subject to only recordkeeping under Refinery MACT?	Y		
40 cfr 60 NSPS Subpart K	Petroleum Liquids Storage Vessels (10/17/00) REQUIREMENTS FOR EXTERNAL FLOATING ROOF TANKS			
60.112(a)	EFRT operating requirements: 60.112(a)(1) When landing the floating roof on its support legs, is the tank to be emptied & either refilled or degassed ASAP?	Y		

# Table IV.F.1.9 Tanks Source-specific Applicable Requirements

### **External Floating Roof Tanks Cluster 17**

Applicable Requirement	Regulation Title or I	Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
	EFR Rim Seals: vapor-mounted primary seal: liquid-mounted primary seal: mechanical-shoe primary seal:	60.112(a)(1) OK alone OK alone OK alone	Y	
60.113(a)	Applicability records: Time period for keeping records of applicability determination, unless specified otherwise.	60.113(a) keep record as long as the tank is in that service	Y	
60.113(a) 60.113(b) 60.113(c) 60.113(d)	Applicability records: Additional recordkeeping requirements for certain tanks.	60.113(a) - (d) internal diameter & TVP of the stored product, if capacity > 40,000 gallons and TVP > 1.0 keep record as long as the tank is in that service	Y	
	True vapor pressure (TVP) determination for applicability:	60.113(b) & (c) true vapor pressure (not maximum TVP), & thus could be based on the annual average temperature	Y	
60.7(a)	Initial Notification: Is initial notification of the source's existence required?	60.7(a)(1) notification within 30 days after begin construction	Y	
	Report (document) having initially achieved compliance?	60.7(a)(3) notification of startup within 15 days, but no required to certify compliance	Y	
	Notification of Compliance Status report:	60.7(a)(3) notification within 15 days after startup	Y	
	Initial Notification: Is initial notification required if tank becomes affected only as a result of a modification?	60.7(a)(4) notification 60 days or as soon as practicable before the change	Y	
NSPS 40 cfr part 60 Subpart A		New Source Performance Standards GENERAL PROVISIONS		
60.7(f)	General recordkeeping requirements: Time period for keeping records, unless specified otherwise.	60.7(f) keep all reports & notifications	Y	
	General recordkeeping requirements: keep all reports and notification for the specified period of time.	60.7(f) required	Y	
60.14(g)	Achieve compliance for: <i>New</i> Tanks (or tanks that become affected as a result of a change or modification)?	60.14(g) up to 180 days after modifications (otherwise prior to fill)	Y	

## Table IV.F.1.9 Tanks Source-specific Applicable Requirements

### **External Floating Roof Tanks Cluster 17**

#### S-3101, S-3102, S-3129

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
Condition #18137	Throughput limits	Ν	
Condition #21237	Notification requirement for S- 1514, S-3072, and S-3101 regarding pumping and piping capacities.	N	

### Table IV.F.1.10 Tanks (EFRT's Cluster 23)

## Table IV.F.1.10 Tanks Source-specific Applicable Requirements

#### **External Floating Roof Tanks Cluster 23**

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
BAAQMD	Organic Compounds, Storage of Organic Liquids (10/18/06)		
Regulation 8,			
Rule 5			
8-5-110	Exemption due to size and age	Y	
8-5-111	Limited Exemption, Tank Removal From and Return to Service	N	
8-5-111.1	Limited Exemption, Notice to the APCO	Ν	
8-5-111.2	Limited Exemption, Compliance before notification	Ν	
8-5-111.3	Limited Exemption, Continuous and quick filling, emptying and refilling	Ν	
8-5-111.4	Limited Exemption, Use of vapor recovery	Ν	
8-5-111.5	Limited Exemption, Minimization of emissions	Ν	
8-5-111.6	Limited Exemption, Self report if out of compliance during exemption period	Ν	
8-5-112	Limited Exemption, Preventative Maintenance and Inspection of Tanks in Operation	N	
8-5-112.1	Limited Exemption, Preventative Maintenance and Inspection of Tanks in Operation; Notification	N	

## Table IV.F.1.10 Tanks Source-specific Applicable Requirements

### **External Floating Roof Tanks Cluster 23**

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
8-5-112.2	Limited Exemption, Preventative Maintenance and Inspection of Tanks	N	
	in Operation; Tank in compliance at time of notification		
8-5-112.3	Limited Exemption, Preventative Maintenance and Inspection of Tanks	Ν	
	in Operation; No product movement, Minimize emissions		
8-5-112.4	Limited Exemption, Preventative Maintenance and Inspection of Tanks	Ν	
	in Operation; Not to exceed 7 days		
8-5-112.5	Limited Exemption, Preventative Maintenance and Inspection of Tanks	Ν	
	in Operation; Self report if out of compliance during exemption period		
8-5-112.6	Limited Exemption, Preventative Maintenance and Inspection of Tanks	Ν	
	in Operation; Keep records for each exemption		
8-5-119	Limited Exemption, Repair Period for Enhanced Monitoring Program	N	
8-5-301	Storage Tank Control Requirements (internal floating roof, external	Ν	
	floating roof, or approved emission control system)		
8-5-302	Requirements for Submerged Fill Pipes	Y	
8-5-303	Requirements for Pressure Vacuum Valves	Ν	
8-5-303.1	Requirements for Pressure Vacuum Valves; Set pressure	Ν	
8-5-303.2	Requirements for Pressure Vacuum Valves; Gas tight requirement	N	
8-5-304	Requirements for External Floating Roof Tanks	N	
8-5-320	Floating Roof Tank Fitting Requirements	Ν	
8-5-320.2	Openings in the floating roof except p/v valves and vacuum breaker	N	
	vents		
8-5-320.3	Openings in the floating roof except floating roof legs	Ν	
8-5-320.4	Solid sampling or gauging wells and similar fixed projections	Ν	
8-5-320.5	Slotted sampling or gauging wells and similar fixed projections	Ν	
8-5-320.6	Emergency roof drain	N	
8-5-321	Primary seal requirements	N	
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 8-5-305.1	Y	
8-5-321.3	Metallic shoe type seals	N	
8-5-321.3.1	Geometry of shoe	N	
8-5-321.3.2	Gaps for welded tanks	N	
8-5-322	Secondary seal requirements	Ν	

## Table IV.F.1.10 Tanks Source-specific Applicable Requirements

### **External Floating Roof Tanks Cluster 23**

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
8-5-322.1	No holes, tears, or other openings in the secondary seal	Ν	
8-5-322.2	Insertion of probes	Ν	
8-5-322.3	Gap length		
8-5-322.5	Gap for welded tanks with seal installed after September 4, 1985	Ν	
8-5-322.6	Secondary seal shall not be attached to primary seal	Ν	
8-5-328	Tank degassing requirements	Ν	
8-5-328.1	Tank degassing requirements; Tanks > 75 cubic meters	Ν	
8-5-328.2	Tank degassing requirements; Ozone Excess Day Prohibition	Ν	
8-5-328.3	Tank degassing requirements; BAAQMD notification required	Ν	
8-5-331	Tank Cleaning Requirements; 90% Abatement Efficiency if Abatement Device Used	Ν	
8-5-331.1	Tank cleaning requirements; Cleaning materials properties	N	
8-5-331.2	Tank cleaning requirements; Steam cleaning prohibition	N	
8-5-331.3	Tank cleaning requirements; Steam cleaning exceptions	N	
8-5-332	Sludge Handling Requirements; applies to sludge removed from any	N	
	tank that was subject to BAAQMD 8-5 at any time since it was last put in service)		
8-5-332.1	Sludge Handling Requirements; sludge container no leaks	N	
8-5-332.2	Sludge Handling Requirements; sludge container gap requirements	N	
8-5-401	Inspection Requirements for External Floating Roof Tanks	N	
8-5-403	Inspection Requirements for Pressure Relief Devices	N	
8-5-403.1	Inspection Requirements for Pressure Relief Devices; Pressure vacuum valve gas tight standards in 8-5-303	N	
8-5-411	Enhanced Monitoring Program (Optional)	N	
8-5-411.3	Enhanced Monitoring Program (Optional); Performance requirements	N	
8-5-501	Records	N	
8-5-501.1	Records; Type and amount of liquid, type of blanket gas, TVP- Retain 24 months	N	
8-5-501.2	Records; Internal and External Floating Roof Tanks, Seal Replacement Records- Retain 10 years	N	
8-5-501.3	Records; Retention	N	
8-5-501.4	Records; New pressure vacuum valve setpoints	N	

## Table IV.F.1.10 Tanks Source-specific Applicable Requirements

### **External Floating Roof Tanks Cluster 23**

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
8-5-502	Annual Source Test Requirement	Ν	
8-5-601	Analysis of Samples, Reid Vapor Pressure	Y	
8-5-602	Analysis of Samples, True Vapor Pressure	Y	
8-5-603	Determination of Emissions	Ν	
8-5-604	Determinations of Applicability	Y	
8-5-605	Measurement of Leak Concentration and Residual Concentrations	Ν	
8-5-605.1	Measurement of Leak Concentration and Residual Concentrations; EPA method 21 Instruments	Ν	
8-5-605.2	Measurement of Leak Concentration and Residual Concentrations; Method 21 and tank degassing residual organic concentration measurement method	Ν	
8-5-606	Analysis of samples, Tank Cleaning Agents	Ν	
8-5-606.1	Analysis of samples, Tank Cleaning Agents; Initial Boiling Point	Ν	
8-5-606.2	Analysis of samples, Tank Cleaning Agents; True Vapor Pressure	Ν	
8-5-606.3	Analysis of samples, Tank Cleaning Agents; VOC	Ν	
SIP	Storage of Organic Liquids (11/27/02)		
BAAQMD			
Regulation 8,			
Rule 5			
8-5-111	Limited Exemption, Tank Removal From and Return to Service	Y	
8-5-111.1	Notice to the APCO	Y	
8-5-111.2	Compliance before notification	Y	
8-5-111.3	Continuous and quick filling, emptying and refilling	Y	
8-5-111.4	Use of vapor recovery	Y	
8-5-111.5	Minimization of emissions	Y	
8-5-111.6	Written notice of completion not required	Y	
8-5-111.7	Compliance with Section 8-5-328	Y	
8-5-112	Limited Exemption, Tanks in Operation	Y	
8-5-112.1	Notice to the APCO	Y	
8-5-112.2	Compliance and certification before commencement of work	Y	
8-5-112.3	No product movement; minimization of emissions	Y	
8-5-112.4	Exemption does not exceed 7 days	Y	

## Table IV.F.1.10 Tanks Source-specific Applicable Requirements

### **External Floating Roof Tanks Cluster 23**

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
8-5-301	Storage Tank Control Requirements (internal floating roof, external	Y	
	floating roof, or approved emission control system)		
8-5-304	Requirements for External Floating Roofs	Y	
8-5-320	Tank fitting requirements	Y	
8-5-320.2	Openings in the floating roof except p/v valves and vacuum breaker	Y	
	vents		
8-5-320.3	Openings in the floating roof except floating roof legs	Y	
8-5-320.4	Solid sampling or gauging wells and similar fixed projections	Y	
8-5-320.5	Slotted sampling or gauging wells and similar fixed projections	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 8-5-305.1	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	Gap length	Y	
8-5-322.5	Gap for welded tanks with seal installed after September 4, 1985	Y	
8-5-322.6	Secondary seal shall not be attached to primary seal	Y	
8-5-328	Tank degassing requirements	Y	
8-5-328.1	Concentration of <10,000 ppm as methane after cleaning	Y	
8-5-328.2	Tank degassing when ozone excess is predicted	Y	
8-5-401	Inspection Requirements for External Floating Roof Tanks	Y	
8-5-404	Certification	Y	
8-5-405	Information required	Y	
8-5-501	Records	Y	
8-5-502	Tank Cleaning Annual Source Test Requirement	Y	
8-5-503	Portable hydrocarbon detector	Y	
8-5-601	Analysis of Samples, Reid Vapor Pressure	Y	

## Table IV.F.1.10 Tanks Source-specific Applicable Requirements

### **External Floating Roof Tanks Cluster 23**

Applicable Requirement	Regulation Title or Description of Requirement		Federally Enforceable (Y/N)	Future Effective Date
8-5-602	Analysis of Samples, True Vapor F	Pressure	Y	
8-5-603	Determination of Emissions		Y	
8-5-603.1.2	Concentration of organic compoun	ds after degassing	Y	
8-5-604	Determinations of Applicability		Y	
40 cfr 63 subpart cc Refinery MACT	NES REQUIREMEN	HAP for Petroleum Refineries (6/23/03) NTS FOR TANKS ALSO SUBJECT TO 1	NSPS Kb	
63.640(n)	Which rule governs for storage vessels subject to both Refinery MACT and NSPS subpart Kb?	63.640(n)(1) NSPS subpart Kb	Y	
	Does Refinery MACT provide for EFR secondary seals to be pulled back or temporarily removed during NSPS Kb inspections of the primary seal?	63.640(n)(8)(i) yes	Y	
	Does Refinery MACT provide for delay of NSPS Kb seal gap measurements due to unsafe conditions?	63.640(n)(8)(ii) yes – up to 30 days, or empty the tank within 45 days	Y	
	Does Refinery MACT provide for extensions of time to perform NSPS Kb inspections of unsafe tanks?	63.640(n)(8)(iii) yes – up to 2 extensions of 30 days each	Y	
	Does Refinery MACT provide for extensions of time to repair defects found during NSPS Kb inspections?	63.640(n)(8)(iii) yes – up to 2 extensions of 30 days each	Y	
	Does Refinery MACT provide for waiving the NSPS Kb prior-request requirement for extensions of time?	63.640(n)(8)(iii) yes	Y	
	Does Refinery MACT provide for submitting NSPS Kb documentation of the need for an extension with the next semi-annual periodic report?	63.640(n)(8)(iv) yes	Y	
	Does Refinery MACT provide for submitting reports of NSPS Kb inspection failures on the semi-annual periodic report schedule?	63.640(n)(8)(v) yes	Y	
	Does Refinery MACT provide for not reporting the results of NSPS Kb inspections when there was no out-of- compliance (i.e., recordkeeping only)?	63.640(n)(8)(vi) yes	Y	

## Table IV.F.1.10 Tanks Source-specific Applicable Requirements

### **External Floating Roof Tanks Cluster 23**

Applicable Requirement	Regulation Title or Description of Requirement		Federally Enforceable (Y/N)	Future Effective Date
NSPS 40 cfr 60 Subpart Kb	Volatile REQUIREMEN	e Organic Liquid Storage Vessels (10/15/0 ITS FOR EXTERNAL FLOATING ROO	3) F TANKS	
60.112b(a)	EFR Rim Seals: vapor-mounted primary seal: liquid-mounted primary seal: mechanical-shoe primary seal:	60.112b(a)(2)(i) Not Allowed OK w/rim-mounted secondary OK w/rim-mounted secondary	Y	
	Must vapor-mounted rim seals be continuous on EFRs?	60.112b(a)(2)(i)(B) yes	Y	
	Deck openings (wells) other than for vents, drains, or legs to have covers that are kept closed except for access?	60.112b(a)(2)(ii) required	Y	
	EFR well covers to be gasketed?	60.112b(a)(2)(ii) required	Y	
	EFR vents to be gasketed?	60.112b(a)(2)(ii) required	Y	
	EFR deck openings other than for vents to project into liquid?	60.112b(a)(2)(ii) required	Y	
	EFR rim space vents to remain closed except when the pressure setting is exceeded?	60.112b(a)(2)(ii) required	Y	
	EFR auto. Bleeder vent (vacuum breaker) to be closed except when the deck is landed?	60.112b(a)(2)(ii) required	Y	
	EFR emergency roof drains to have seals covering at least 90% of the opening?	60.112b(a)(2)(ii) required	Y	
	EFR guidepole wells to have a deck cover gasket and a pole wiper?	60.112b(a)(2)(ii) guidepole requirements are specified in FR notices 65 FR 2336 (01/14/00) 65 FR 19891(04/13/00)	Y	
	EFRT unslotted guidepoles to have a gasketed cap at the top of the pole?	60.112b(a)(2)(ii) required per FR notices 65 FR 2336 (01/14/00) 65 FR 19891(04/13/00)	Y	
	EFRT slotted guidepoles to have either an internal float or a pole sleeve?	60.112b(a)(2)(ii) required per FR notices 65 FR 2336 (01/14/00) 65 FR 19891(04/13/00)	Y	

## Table IV.F.1.10 Tanks Source-specific Applicable Requirements

### **External Floating Roof Tanks Cluster 23**

Applicable Requirement	Regulation Title or Description of Requirement		Federally Enforceable (Y/N)	Future Effective Date
	EFRT operating requirements: When landing the floating roof on its support legs, is the tank to be emptied & either refilled or degassed ASAP?	60.112b(a)(2)(iii) yes	Y	
	Temporary exemption from operating requirements while the external floating roof is landed on its support legs?	60.112b(a)(2)(iii) exempt	Y	
60.113b(b)	UNSAFE CONDITIONS: Delay of EFR seal gap measurements allowed for unsafe conditions? If unable to make safe to measure, must the EFRT be emptied?	60.113b(b)(4)	Y	
	EXTENSIONS OF TIME: If EFRT is unsafe to inspect & cannot be emptied within 45 days?	60.113b(b)(4)(iii)	Y	
	Notification of Inspections: Are notifications of Inspections to demonstrate initial compliance required, for EFR seal gap measurements:	60.113b(b)(1) & (5) required notifications & reports per ongoing reports	Y	
	Seal Gap Measurements: FREQUENCY AFTER INITIAL COMPLIANCE, For the EFR Primary Seal:	60.113b(b)(1)(i) every 5 years	Y	
	Seal Gap Measurements: For new EFRTs:	60.113b(b)(1)(i) &(ii) measure gaps of both seals within 60 days after initial fill	Y	
	Seal Gap Measurements: FREQUENCY AFTER INITIAL COMPLIANCE, For the EFR Secondary Seal:	60.113b(b)(1)(ii) annually	Y	
	Seal Gap Measurements: For EFRTs returned to affected service after 1 year or more of exempt service:	60.113b(b)(1)(iii) measure gaps of both seals within 60 days	Y	
	MEASUREMENT' COND'''S: Are EFR seal gap measurements to be made with the roof floating?	60.113b(b)(2)(i) yes	Y	
	DETERMINATION OF EFR RIM- SEAL GAP AREAS: Presence of a gap determined by inserting a 1/8 in. probe?	60.113b(b)(2)(ii) yes	Y	

## Table IV.F.1.10 Tanks Source-specific Applicable Requirements

### **External Floating Roof Tanks Cluster 23**

Applicable Requirement	Regulation Title or Description of Requirement		Federally Enforceable (Y/N)	Future Effective Date
	DETERMINATION OF EFR RIM- SEAL GAP AREAS: Use probes of various widths to determine the gap area?	60.113b(b)(2)(iii) yes	Y	
	DETERMINATION OF EFR RIM- SEAL GAP AREAS: Sum the gap areas & divide by the diameter of the tank?	60.113b(b)(3) yes	Y	
	EFRT REPAIRS: Time allowed for repair of defects found during in-service inspections of EFRs: If unable to repair, empty the EFRT & remove from service?	60.113b(b)(4) make repairs within 45 days 60.113b(b)(4) yes, within 45 days	Y	
	EFR Primary Seal Gap Inspection Criteria: maximum area: maximum gap width:	60.113b(b)(4)(i) 10 in <sup>2</sup> /ft.diameter 1.5 inches	Y	
	Shall there be no holes, tears, or openings in the EFR seals?	60.113b(b)(4)(i) & (ii) yes	Y	
	Is the metallic shoe of an EFR mechanical-shoe seal required to have its bottom in the liquid and extend at least 24 in. above the liquid?	60.113b(b)(4)(i)(A) yes	Y	
	EFR Secondary Seal Gap Inspection Criteria: maximum area: maximum gap width:	60.113b(b)(4)(ii)(B) 1 in <sup>2</sup> /ft.diameter 0.5 in.	Y	
	Are EFR rim seals allowed to be pulled back or temporarily removed during inspection?	60.113b(b)(4)(ii)(B)	Y	
	EXTENSIONS OF TIME: If EFRT defects cannot be repaired & the tank cannot be emptied within 45 days?	60.113b(b)(4)(iii) 1 extension of 30 days, if needed	Y	
	Periodic Reports: EFR report to include a prior request for 30-day extension, w/ documentation of need?	60.113b(b)(4)(iii) required	Y	
	Periodic Reports: Additional information to be included if an extension is utilized for an EFR:	60.113b(b)(4)(iii) document the reason for the extension	Y	

## Table IV.F.1.10 Tanks Source-specific Applicable Requirements

### **External Floating Roof Tanks Cluster 23**

Applicable Requirement	Regulation Title or Description of Requirement		Federally Enforceable (Y/N)	Future Effective Date
	Notification of Inspections: Is 30-day notice required prior to EFR seal gap measurements?	60.113b(b)(5) required	Y	
	EFR Internal Inspections: up-close visual inspection of the floating roof, seals, & fittings:	60.113b(b)(6) each time the tank is emptied & degassed	Y	
	Notification of Inspections: Are notifications of inspections to demonstrate initial compliance required, For EFR internal inspections:	60.113b(b)(6) internal inspection not required for initial compliance	Y	
	EFRT REPAIRS: Repair of defects if the tank is empty?	60.113b(b)(6)(i) prior to refilling	Y	
	Notification of Inspections: Is 30-day notice required for internal inspections of EFRTs (i.e., prior to filling or refilling); but a 7-day verbal notice acceptable if the event is unplanned?	60.113b(b)(6)(ii) required	Y	
60.115b	Record keeping for inspections: keep inspection reports as specified	60.115b keep records	Y	
60.115b(b)	EFRT report to include:	60.115b(b)(1) description of control equipment	Y	
	Periodic Reports: Report EFR seal gap inspections if there was no out-of- compliance?	60.115b(b)(2) required within 60 days of inspection	Y	
	Records of EFR inspection reports:	60.115b(b)(3) EFR seal gap measurements	Y	
	Periodic Reports: Report EFR seal gap inspections when there is out-of-compliance?	60.115b(b)(4) required within 30 days of inspection	Y	
	Periodic Reports: Report of EFR inspection failures to include:	60.115b(b)(4) date of inspection, internal diameter of tank, description of failure, & date of repair or emptying	Y	
60.116b(a)	Applicability records: Time period for keeping records of applicability determination, unless specified otherwise.	60.116b(a) keep records	Y	
# Table IV.F.1.10 Tanks Source-specific Applicable Requirements

#### **External Floating Roof Tanks Cluster 23**

# S-0399, S-3180, S-3189, S-3190, S-3191, S-3193, S-3196, S-3197, S-3198, S-3201, S-3202, S-3213, S-3213, S-3214, S-3225

Applicable Requirement	Regulation Title or Description of Requirement		Federally Enforceable (Y/N)	Future Effective Date
60.116b(b)	Applicability records: Records of dimensions & capacity required for nonexempt tanks?	60.116b(b) required keep records readily accessible for the life of the tank	Y	
60.116b(c)	Applicability records: Additional recordkeeping requirements for certain tanks.	$\begin{array}{l} 60.116b(c) \\ \text{internal diameter & TVP of the stored} \\ \text{product, if capacity} \geq 20,000 \text{ gallons and} \\ \text{TVP} \geq 2.2, \text{ or capacity} \geq 40,000 \text{ gallons} \\ \text{and TVP} \geq 0.51 \text{ keep record as long as} \\ \text{the tank is in that service} \end{array}$	Y	
60.116b(e)	True vapor pressure (TVP) determination for applicability:	60.116b(e) maximum TVP of the stored liquid, based on highest calendar month average storage temperature	Y	
NSPS Subpart A		New Source Performance Standards GENERAL PROVISIONS		
60.7(a)	Initial Notification: Is initial notification of the source's existence required?	60.7(a)(1) notification within 30 days after beginning construction.	Y	
60.7(a) 60.115b	Report (document) having initially achieved compliance?	60.7(a)(3) 60.115b(a)(1) & (b)(1) within 15 days after initial fill	Y	
	Notification of Compliance Status report:	60.7(a)(3) [cf. 60.115b(a)(1)&(b)(1)] notification within 15 days after startup	Y	
	Initial Notification: Is initial notification required if tank becomes affected only as a result of a modification?	60.7(a)(4) notification 60 days or as soon as practicable before the change	Y	
60.7(f)	General recordkeeping requirements: Time period for keeping records, unless specified otherwise.	60.7(f) keep all reports & notifications	Y	
	General recordkeeping requirements: keep all reports and notification for the specified period of time.	60.7(f) required	Y	
60.14(g)	Achieve compliance for: New Tanks (or tanks that become affected as a result of a change or modification)?	60.14(g) up to 180 days after modifications (otherwise prior to fill)	Y	
Condition 2856	Applies to S-399		Ν	
Condition #6660	Applies to S-3189		Y	

# Table IV.F.1.10 Tanks Source-specific Applicable Requirements

#### **External Floating Roof Tanks Cluster 23**

# S-0399, S-3180, S-3189, S-3190, S-3191, S-3193, S-3196, S-3197, S-3198, S-3201, S-3202, S-3213, S-3214, S-3225

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
Condition #6661	Applies to S-3190	Y	
Condition #7583	Applies to S-3191	Y	
Condition #8253	Applies to S-3193	Y	
Condition #13467	Applies to S-3196	Y	
Condition #8252	Applies to S-3197	Y	
Condition #8715	Applies to S-3198	Y	
Condition #13364	Applies to S-3202	Y	
Condition #13008	Applies to S-3201	Y	
Condition #12139	Applies to S-3213	Y	
Condition #12104	Applies to S-3214	Y	
Condition #18137	Throughput limits	Ν	
Condition #18702	Throughput limits	Y	

### Table IV.F.1.11 Tanks (IFRT's Cluster 24)

# Table IV.F.1.11 Tanks Source-specific Applicable Requirements

#### **Internal Floating Roof Tanks Cluster 24**

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
BAAQMD	Organic Compounds, Storage of Organic Liquids (10/18/06)		
Regulation 8,			
Rule 5			
8-5-110	Exemption due to size and age	Y	
8-5-111	Limited Exemption, Tank Removal From and Return to Service	Ν	
8-5-111.1	Limited Exemption, Notice to the APCO	Ν	
8-5-111.2	Limited Exemption, Compliance before notification	Ν	
8-5-111.3	Limited Exemption, Continuous and quick filling, emptying and refilling	Ν	
8-5-111.4	Limited Exemption, Use of vapor recovery	N	
8-5-111.5	Limited Exemption, Minimization of emissions	N	
8-5-111.6	Limited Exemption, Self report if out of compliance during exemption period	N	
8-5-112	Limited Exemption, Preventative Maintenance and Inspection of Tanks	N	
8-5-112.1	Limited Exemption, Preventative Maintenance and Inspection of Tanks in Operation; Notification	N	
8-5-112.2	Limited Exemption, Preventative Maintenance and Inspection of Tanks in Operation; Tank in compliance at time of notification	N	
8-5-112.3	Limited Exemption, Preventative Maintenance and Inspection of Tanks in Operation; No product movement, Minimize emissions	N	
8-5-112.4	Limited Exemption, Preventative Maintenance and Inspection of Tanks in Operation; Not to exceed 7 days	N	
8-5-112.5	Limited Exemption, Preventative Maintenance and Inspection of Tanks in Operation; Self report if out of compliance during exemption period	N	
8-5-112.6	Limited Exemption, Preventative Maintenance and Inspection of Tanks in Operation; Keep records for each exemption	N	
8-5-119	Limited Exemption, Repair Period for Enhanced Monitoring Program	Ν	
8-5-301	Storage Tank Control Requirements (internal floating roof, external floating roof, or approved emission control system)	N	

# Table IV.F.1.11 Tanks Source-specific Applicable Requirements

#### **Internal Floating Roof Tanks Cluster 24**

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
8-5-302	Requirements for Submerged Fill Pipes	Y	
8-5-303	Requirements for Pressure Vacuum Valves	Ν	
8-5-303.1	Requirements for Pressure Vacuum Valves; Set pressure	Ν	
8-5-303.2	Requirements for Pressure Vacuum Valves; Gas tight requirement	Ν	
8-5-305	Requirements for Internal Floating Roof Tanks	Ν	
8-5-320	Floating Roof Tank Fitting Requirements	Ν	
8-5-320.2	Openings in the floating roof except p/v valves and vacuum breaker vents	N	
8-5-320.3	Openings in the floating roof except floating roof legs	N	
8-5-320.4	Solid sampling or gauging wells and similar fixed projections	N	
8-5-320.5	Slotted sampling or gauging wells and similar fixed projections	Ν	
8-5-320.6	Emergency roof drain	N	
8-5-321	Primary seal requirements	Ν	
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 8-5-305.1	Y	
8-5-321.3	Metallic shoe type seals	Ν	
8-5-321.3.1	Geometry of shoe	Ν	
8-5-321.3.2	Gaps for welded tanks	Ν	
8-5-322	Secondary seal requirements	Ν	
8-5-322.1	No holes, tears, or other openings in the secondary seal	Ν	
8-5-322.2	Insertion of probes	Ν	
8-5-322.3	Gap length	Ν	
8-5-322.5	Gap for welded tanks with seal installed after September 4, 1985	N	
8-5-322.6	Secondary seal shall not be attached to primary seal	N	
8-5-328	Tank degassing requirements	N	
8-5-328.1	Tank degassing requirements; Tanks > 75 cubic meters	N	
8-5-328.2	Tank degassing requirements; Ozone Excess Day Prohibition	N	
8-5-328.3	Tank degassing requirements; BAAQMD notification required	N	
8-5-331	Tank Cleaning Requirements; 90% Abatement Efficiency if Abatement Device Used	Ν	
8-5-331.1	Tank cleaning requirements; Cleaning materials properties	N	
8-5-331.2	Tank cleaning requirements; Steam cleaning prohibition	N	
8-5-331.3	Tank cleaning requirements; Steam cleaning exceptions	N	

# Table IV.F.1.11 Tanks Source-specific Applicable Requirements

#### **Internal Floating Roof Tanks Cluster 24**

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
8-5-332	Sludge Handling Requirements; applies to sludge removed from any	Ν	
	tank that was subject to BAAQMD 8-5 at any time since it was last put		
	in service)		
8-5-332.1	Sludge Handling Requirements; sludge container no leaks	Ν	
8-5-332.2	Sludge Handling Requirements; sludge container gap requirements	Ν	
8-5-402	Inspection Requirements for Internal Floating Roof Tanks	Ν	
8-5-403	Inspection Requirements for Pressure Relief Devices	Ν	
8-5-403.1	Inspection Requirements for Pressure Relief Devices; Pressure vacuum valve gas tight standards in 8-5-303	Ν	
8-5-411	Enhanced Monitoring Program (Optional)	Ν	
8-5-411.3	Enhanced Monitoring Program (Optional); Performance requirements	Ν	
8-5-501	Records	Ν	
8-5-501.1	Records; Type and amount of liquid, type of blanket gas, TVP- Retain 24 months	Ν	
8-5-501.2	Records; Internal and External Floating Roof Tanks, Seal Replacement	Ν	
0.5.501.2	Records- Retain 10 years	N	
8-5-501.3	Records; Retention	N	
8-5-501.4	Records; New pressure vacuum valve setpoints	N	
8-5-601	Analysis of Samples, Reid Vapor Pressure	Y	
8-5-602	Analysis of Samples, True vapor Pressure	Y	
8-5-603	Determination of Emissions	N	
8-5-604	Determinations of Applicability	Y	
8-5-605	Measurement of Leak Concentration and Residual Concentrations	N	
8-5-605.1	measurement of Leak Concentration and Residual Concentrations; EPA method 21 Instruments	N	
8-5-605.2	Measurement of Leak Concentration and Residual Concentrations; Method 21 and tank degassing residual organic concentration measurement method	Ν	
8-5-606	Analysis of samples, Tank Cleaning Agents	Ν	
8-5-606.1	Analysis of samples, Tank Cleaning Agents; Initial Boiling Point	N	
8-5-606.2	Analysis of samples, Tank Cleaning Agents; True Vapor Pressure	Ν	
8-5-606.3	Analysis of samples, Tank Cleaning Agents; VOC	N	

# Table IV.F.1.11 Tanks Source-specific Applicable Requirements

#### **Internal Floating Roof Tanks Cluster 24**

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
SIP	Storage of Organic Liquids (11/27/02)		
BAAQMD			
Regulation 8,			
Rule 5			
8-5-111	Limited Exemption, Tank Removal From and Return to Service	Y	
8-5-111.1	Notice to the APCO	Y	
8-5-111.2	Compliance before notification	Y	
8-5-111.3	Continuous and quick filling, emptying and refilling	Y	
8-5-111.4	Use of vapor recovery	Y	
8-5-111.5	Minimization of emissions	Y	
8-5-111.6	Written notice of completion not required	Y	
8-5-111.7	Compliance with Section 8-5-328	Y	
8-5-112	Limited Exemption, Tanks in Operation	Y	
8-5-112.1	Notice to the APCO	Y	
8-5-112.2	Compliance and certification before commencement of work	Y	
8-5-112.3	No product movement; minimization of emissions	Y	
8-5-112.4	Exemption does not exceed 7 days	Y	
8-5-301	Storage Tank Control Requirements (internal floating roof, external	Y	
	floating roof, or approved emission control system)		
8-5-305	Requirements for Internal Floating Roofs	Y	
8-5-320	Tank fitting requirements	Y	
8-5-320.2	Openings in the floating roof except p/v valves and vacuum breaker vents	Y	
8-5-320.3	Openings in the floating roof except floating roof legs	Y	
8-5-320.4	Solid sampling or gauging wells and similar fixed projections	Y	
8-5-320.5	Slotted sampling or gauging wells and similar fixed projections	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 8-5-305.1	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	

# Table IV.F.1.11 Tanks Source-specific Applicable Requirements

#### **Internal Floating Roof Tanks Cluster 24**

Applicable Requirement	Regulation Title or D	escription of Requirement	Federally Enforceable (Y/N)	Future Effective Date
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	Gap length		Y	
8-5-322.5	Gap for welded tanks with seal ins	stalled after September 4, 1985	Y	
8-5-322.6	Secondary seal shall not be attached	ed to primary seal	Y	
8-5-328	Tank cleaning requirements		Y	
8-5-328.1	Concentration of <10,000 ppm as	methane after cleaning	Y	
8-5-328.2	Tank degassing when ozone exces	s is predicted	Y	
8-5-402	Inspection Requirements for Intern	nal Floating Roof Tanks	Y	
8-5-404	Certification		Y	
8-5-405	Information required		Y	
8-5-501	Records		Y	
8-5-502	Tank Cleaning Annual Source Test Requirement		Y	
8-5-503	Portable hydrocarbon detector		Y	
8-5-601	Analysis of Samples, Reid Vapor Pressure		Y	
8-5-602	Analysis of Samples, True Vapor Pressure		Y	
8-5-603	Determination of Emissions		Y	
8-5-603.1.2	Concentration of organic compounds after degassing		Y	
8-5-604	Determinations of Applicability		Y	
40 cfr 63 subpart cc Refinery MACT	NESHAP for Petroleum Refineries (6/23/03) REOUIREMENTS FOR TANKS ALSO SUBJECT TO NSPS Kb			
63.640(n)	Which rule governs for storage vessels subject to both Refinery MACT and NSPS subpart Kb?	63.640(n)(1) NSPS subpart Kb	Y	
	Does Refinery MACT provide for EFR secondary seals to be pulled back or temporarily removed during NSPS Kb inspections of the primary seal?	63.640(n)(8)(i) yes	Y	
	Does Refinery MACT provide for delay of NSPS Kb seal gap measurements due to unsafe conditions?	63.640(n)(8)(ii) yes – up to 30 days, or empty the tank within 45 days	Y	

# Table IV.F.1.11 Tanks Source-specific Applicable Requirements

#### **Internal Floating Roof Tanks Cluster 24**

Applicable Requirement	Regulation Title or De	escription of Requirement	Federally Enforceable (Y/N)	Future Effective Date
	Does Refinery MACT provide for extensions of time to perform NSPS Kb inspections of unsafe tanks?	63.640(n)(8)(iii) yes – up to 2 extensions of 30 days each	Y	
	Does Refinery MACT provide for extensions of time to repair defects found during NSPS Kb inspections?	63.640(n)(8)(iii) yes – up to 2 extensions of 30 days each	Y	
	Does Refinery MACT provide for waiving the NSPS Kb prior-request requirement for extensions of time?	63.640(n)(8)(iii) yes	Y	
	Does Refinery MACT provide for submitting NSPS Kb documentation of the need for an extension with the next semi-annual periodic report?	63.640(n)(8)(iv) yes	Y	
	Does Refinery MACT provide for submitting reports of NSPS Kb inspection failures on the semi-annual periodic report schedule?	63.640(n)(8)(v) yes	Y	
	Does Refinery MACT provide for not reporting the results of NSPS Kb inspections when there was no out-of- compliance (i.e., recordkeeping only)?	63.640(n)(8)(vi) yes	Y	
NSPS 40 cfr 60 Subpart Kb	Volatile	e Organic Liquid Storage Vessels (10/15/03	3) 5 m - Nave	
60.112b(a)	IFRT operating requirements: When landing the floating roof on its support legs, is the tank to be emptied & either refilled or degassed ASAP?	60.112b(a)(1)(i) yes	Y Y	
	Temporary exemption from operating requirements while the internal floating roof is landed on its support legs?	60.112b(a)(1)(i) exempt	Y	
	IFR Rim Seals: vapor-mounted primary seal: liquid-mounted primary seal: mechanical-shoe primary seal:	60.112b(a)(1)(ii) OK w/rim-mounted secondary OK alone OK alone	Y	
	Must IFR vapor-mounted rim seals be continuous?	60.112b(a)(1)(ii)(B) required	Y	
	IFR deck openings other than for vents to project into liquid?	60.112b(a)(1)(iii) required	Y	
	Deck openings (wells) other than for vents, drains, or legs to have covers that are kept closed except for access?	60.112b(a)(1)(iv) required	Y	

# Table IV.F.1.11 Tanks Source-specific Applicable Requirements

#### **Internal Floating Roof Tanks Cluster 24**

Applicable Requirement	Regulation Title or De	escription of Requirement	Federally Enforceable (Y/N)	Future Effective Date
	IFR access hatch & gauge float well covers to be bolted closed?	60.112b(a)(1)(iv) required	Y	
	IFR well covers to be gasketed?	60.112b(a)(1)(iv) & (ix) required	Y	
	IFRT unslotted guidepoles to have a gasketed cap at the top of the pole?	60.112b(a)(1)(iv) required per FR notices 65 FR 2336 (01/14/00) 65 FR 19891(04/13/00)	Y	
	IFRT slotted guidepoles to have a deck cover gasket and pole wiper, and either an internal float or a pole sleeve?	60.112b(a)(1)(iv) required per FR notices 65 FR 2336 (01/14/00) 65 FR 19891(04/13/00)	Y	
	IFR auto. Bleeder vent (vacuum breaker) to be closed except when the deck is landed?	60.112b(a)(1)(v) required	Y	
	IFR vents to be gasketed?	60.112b(a)(1)(v) & (vi) required	Y	
	IFR rim space vents to remain closed except when the pressure setting is exceeded?	60.112b(a)(1)(vi) required	Y	
	IFR sample penetration to be a sample well with a slit-fabric seal over 90% of the opening?	60.112b(a)(1)(vii) required	Y	
	IFR guidepole & column wells allowed a flexible-fabric sleeve seal or a gasketed cover?	60.112b(a)(1)(viii) OK for columns	Y	
60.113b(a)	IFR/CFR Internal Inspections: (up close visual inspection of the floating roof, seals, & fittings):	60.113b(a)(1) & (4) prior to initial fill, then every 10 years, include each emptying/degassing	Y	
	Notification of Inspections: Are notifications of inspections to demonstrate initial compliance required, For IFR/CFR internal inspections:	60.113b(a)(1) & (5) required- notifications & reports per ongoing reports	Y	
	Shall there be no holes, tears, or openings in the IFR seals?	60.113b(a)(1), (2), &(4) required	Y	
	Is there to be no liquid on the internal floating roof?	60.113b(a)(2) required	Y	
	Tank Top Visual Inspections (of IFR/CFR from manways and hatches of the fixed roof):	60.113b(a)(2) annually after initial fill	Y	

# Table IV.F.1.11 Tanks Source-specific Applicable Requirements

#### **Internal Floating Roof Tanks Cluster 24**

Applicable Requirement	Regulation Title or Do	escription of Requirement	Federally Enforceable (Y/N)	Future Effective Date
	IFRT/CFRT REPAIRS: Time allowed for repair of defects found during in-service inspections:	60.113b(a)(2) make repairs within 45 days	Y	
	IFRT/CFRT REPAIRS: If unable to repair, empty the tank & remove from service?	60.113b(a)(2) yes, within 45 days	Y	
	EXTENSIONS OF TIME: If defects cannot be repaired & the IFRT/CFRT cannot be emptied within 45 days?	60.113b(a)(2) 1 extension of 30 days, if needed	Y	
	Periodic Reports: IFR/CFR report to include prior request for 30-day extension, w/ documentation of need?	60.113b(a)(2) required	Y	
	Periodic Reports: Additional information to be included if an extension is utilized for an IFR/CFR:	60.113b(a)(2) document the reason for the extension	Y	
	OPTION: Does this rule allow an internal inspection every 5 years to replace both inspections noted above, if the IFR/CFR is equipped with a sec. Seal?	60.113b(a)(3) & (4) yes	Y	
	IFRT/CFRT REPAIRS: Repair of defects if the tank is empty?	60.113b(a)(4) prior to refilling	Y	
	Notification of Inspections: Is 30-day notice required for internal inspections of IFRTs (i.e., prior to filling or refilling); but a 7-day verbal notice acceptable if the event is unplanned?	60.113b(a)(5) required	Y	
60.115b	Record keeping for inspections: keep inspection reports as specified	60.115b keep records	Y	
60.115b(a)	IFRT/CFRT report to include:	60.115b(a)(1) description of control equipment	Y	
	Records of IFR & CFR inspection reports:	60.115b(a)(2) all IFR inspections	Y	
	Periodic Reports: Report of IFR/CFR inspections that find out-of-compliance?	60.115b(a)(3) & (4) required within 30 days for in-service inspections (not required for out-of- service inspections)	Y	

# Table IV.F.1.11 Tanks Source-specific Applicable Requirements

#### **Internal Floating Roof Tanks Cluster 24**

Applicable Requirement	Regulation Title or Do	escription of Requirement	Federally Enforceable (Y/N)	Future Effective Date
	Periodic Reports: Report of IFR/CFR inspection failures to include:	60.115b(a)(3) & (4) date of inspection, internal diameter of tank, description of failure, & date of repair or emptying	Y	
60.116b(a)	Applicability records: Time period for keeping records of applicability determination, unless specified otherwise.	60.116b(a) keep records	Y	
60.116b(b)	Applicability records: Records of dimensions & capacity required for nonexempt tanks?	60.116b(b) required keep record readily accessible for the life of the tank	Y	
60.116b(c)	Applicability records: Additional recordkeeping requirements for certain tanks.	$\begin{array}{l} 60.116b(c) \\ internal diameter & TVP of the stored \\ product, if capacity \geq (20,000 gallons) \\ 75 cubic meters and TVP \geq (2.2 psia) 5.0 \\ kPa , or capacity \geq (40,000 gallons) 151 \\ cubic meters and TVP \geq (0.51 psia) 3.5 \\ kPa . Keep record as long as the tank is \\ in that service. \end{array}$	Y	
60.116b(e)	True vapor pressure (TVP) determination for applicability:	60.116b(e) maximum TVP of the stored liquid, based on highest calendar month average storage temperature	Y	
NSPS 40 cfr 60 Subpart A	]	New Source Performance Standards GENERAL PROVISIONS		
60.7(a)	Initial Notification: Is initial notification of the source's existence required?	60.7(a)(1) notification within 30 days after begin construction	Y	
	Report (document) having initially achieved compliance?	60.7(a)(3) 60.115b(a)(1) & (b)(1) within 15 days after initial fill	Y	
	Notification of Compliance Status report:	60.7(a)(3) [cf. 60.115b(a)(1)&(b)(1)] notification within 15 days after startup	Y	
	Initial Notification: Is initial notification required if tank becomes affected only as a result of a modification?	60.7(a)(4) notification 60 days or as soon as practicable before the change	Y	
60.7(f)	General recordkeeping requirements: Time period for keeping records, unless specified otherwise.	60.7(f) keep all reports & notifications	Y	
	General recordkeeping requirements: keep all reports and notification for the specified period of time.	60.7(f) required	Y	

# Table IV.F.1.11 Tanks Source-specific Applicable Requirements

#### **Internal Floating Roof Tanks Cluster 24**

#### S-1635, S-1637, S-3229

Applicable Requirement	Regulation Title or Desc	cription of Requirement	Federally Enforceable (Y/N)	Future Effective Date
60.14(g)	Achieve compliance for: New tanks (or tanks that become affected as a result of a change or modification)?	60.14(g) up to 180 days after modifications (otherwise prior to fill)	Y	
Condition #15671	Applies to S-1635		Y	
Condition 1069	Applies to S-1637		Ν	
Condition #18137	Throughput limits		Ν	
Condition #25037	Applies to S-3229 and fugitives		Y	

#### Table IV.F.1.12 Tanks (FRT's Cluster 25)

# Table IV.F.1.12 Tanks Source-specific Applicable Requirements

#### Fixed Roof Tanks Cluster 25

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
BAAQMD	Organic Compounds, Storage of Organic Liquids (10/18/06)		
Regulation 8,			
Rule 5			
8-5-110	Exemption due to size and age	Y	
8-5-111	Limited Exemption, Tank Removal From and Return to Service	Ν	
8-5-111.1	Limited Exemption, Notice to the APCO	Ν	
8-5-111.2	Limited Exemption, Compliance before notification	Ν	
8-5-111.3	Limited Exemption, Continuous and quick filling, emptying and refilling	Ν	
8-5-111.4	Limited Exemption, Use of vapor recovery	Ν	
8-5-111.5	Limited Exemption, Minimization of emissions	Ν	

# Table IV.F.1.12 Tanks Source-specific Applicable Requirements

#### Fixed Roof Tanks Cluster 25

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
8-5-111.6	Limited Exemption, Self report if out of compliance during exemption	Ν	
	period		
8-5-112	Limited Exemption, Preventative Maintenance and Inspection of Tanks in	Ν	
	Operation		
8-5-112.1	Limited Exemption, Preventative Maintenance and Inspection of Tanks in	Ν	
0.5.110.0		N	
8-5-112.2	Limited Exemption, Preventative Maintenance and Inspection of Tanks in Operation: Tank in compliance at time of notification	IN	
8 5 112 3	Limited Examption Proventative Maintenance and Inspection of Tanks in	N	
8-5-112.5	Operation; No product movement, Minimize emissions	IN	
8-5-112.4	Limited Exemption, Preventative Maintenance and Inspection of Tanks in	Ν	
	Operation; Not to exceed 7 days		
8-5-112.5	Limited Exemption, Preventative Maintenance and Inspection of Tanks in	Ν	
	Operation; Self report if out of compliance during exemption period		
8-5-112.6	Limited Exemption, Preventative Maintenance and Inspection of Tanks in	Ν	
	Operation; Keep records for each exemption		
8-5-118	Limited Exemption, Gas Tight Requirement for approved emission	Ν	
	control system in 8-5-306.2 does not apply if facility is subject to		
	BAAQMD 8-18		
8-5-119	Limited Exemption, Repair Period for Enhanced Monitoring Program	Ν	
8-5-301	Storage Tank Control Requirements (internal floating roof, external	Ν	
	floating roof, or approved emission control system)		
8-5-302	Requirements for Submerged Fill Pipes	Y	
8-5-303	Requirements for Pressure Vacuum Valves	Ν	
8-5-303.1	Requirements for Pressure Vacuum Valves; Set pressure	Ν	
8-5-303.2	Requirements for Pressure Vacuum Valves; Gas tight requirement	Ν	
8-5-306	Requirements for approved Emission Control System	Ν	
8-5-306.1	Requirements for approved Emission Control System; Abatement	Ν	
	Efficiency >=95%		
8-5-307	Requirements for Fixed Roof Tanks, Pressure Tanks, and Blanketed Tanks	Ν	

# Table IV.F.1.12 Tanks Source-specific Applicable Requirements

#### Fixed Roof Tanks Cluster 25

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
8-5-307.1	Requirements for Fixed Roof Tanks, Pressure Tanks, and Blanketed	N	
	Tanks: no liquid leakage through shell		
8-5-328	Tank degassing requirements	Ν	
8-5-328.1	Tank degassing requirements; Tanks > 75 cubic meters	Ν	
8-5-328.2	Tank degassing requirements; Ozone Excess Day Prohibition	N	
8-5-328.3	Tank degassing requirements; BAAQMD notification required	Ν	
8-5-331	Tank Cleaning Requirements; 90% Abatement Efficiency if Abatement Device Used	Ν	
8-5-331.1	Tank cleaning requirements; Cleaning materials properties	Ν	
8-5-331.2	Tank cleaning requirements; Steam cleaning prohibition	Ν	
8-5-331.3	Tank cleaning requirements; Steam cleaning exceptions	Ν	
8-5-332	Sludge Handling Requirements; applies to sludge removed from any tank that was subject to BAAOMD 8-5 at any time since it was last put in	Ν	
	service)		
8-5-332.1	Sludge Handling Requirements; sludge container no leaks	N	
8-5-332.2	Sludge Handling Requirements; sludge container gap requirements	Ν	
8-5-403	Inspection Requirements for Pressure Relief Devices	Ν	
8-5-403.1	Inspection Requirements for Pressure Relief Devices; Pressure vacuum	Ν	
	valve gas tight standards in 8-5-303		
8-5-404	Inspection, Abatement Efficiency Determination and Source Test Reports	Ν	
8-5-411	Enhanced Monitoring Program (Optional)	Ν	
8-5-411.3	Enhanced Monitoring Program (Optional); Performance requirements	N	
8-5-501	Records	N	
8-5-501.1	Records; Type and amount of liquid, type of blanket gas, TVP- Retain 24 months	Ν	
8-5-501.3	Records; Retention	Ν	
8-5-501.4	Records; New pressure vacuum valve setpoints	Ν	
8-5-502	Annual Source Test Requirement	Ν	
8-5-502.1	Annual source test for approved emission control systems and abatement devices	N	
8-5-502.2	Tank degassing and cleaning abatement devices	Ν	

# Table IV.F.1.12 Tanks Source-specific Applicable Requirements

#### Fixed Roof Tanks Cluster 25

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
8-5-601	Analysis of Samples, Reid Vapor Pressure	Y	
8-5-602	Analysis of Samples, True Vapor Pressure	Y	
8-5-603	Determination of Emissions	Ν	
8-5-604	Determinations of Applicability	Y	
8-5-605	Measurement of Leak Concentration and Residual Concentrations	N	
8-5-605.1	Measurement of Leak Concentration and Residual Concentrations; EPA	Ν	
	method 21 Instruments		
8-5-605.2	Measurement of Leak Concentration and Residual Concentrations;	N	
	Method 21 and tank degassing residual organic concentration		
	measurement method		
8-5-606	Analysis of samples, Tank Cleaning Agents	N	
8-5-606.1	Analysis of samples, Tank Cleaning Agents; Initial Boiling Point	N	
8-5-606.2	Analysis of samples, Tank Cleaning Agents; True Vapor Pressure	N	
8-5-606.3	Analysis of samples, Tank Cleaning Agents; VOC	N	
SIP	Storage of Organic Liquids (11/27/02)		
BAAQMD			
Regulation 8,			
Rule 5			
8-5-111	Limited Exemption, Tank Removal From and Return to Service	Y	
8-5-111.1	Notice to the APCO	Y	
8-5-111.2	Compliance before notification	Y	
8-5-111.3	Continuous and quick filling, emptying and refilling	Y	
8-5-111.4	Use of vapor recovery	Y	
8-5-111.5	Minimization of emissions	Y	
8-5-111.6	Written notice of completion not required	Y	
8-5-111.7	Compliance with Section 8-5-328	Y	
8-5-112	Limited Exemption, Tanks in Operation	Y	
8-5-112.1	Notice to the APCO	Y	
8-5-112.2	Compliance and certification before commencement of work	Y	
8-5-112.3	No product movement; minimization of emissions	Y	
8-5-112.4	Exemption does not exceed 7 days	Y	

# Table IV.F.1.12 Tanks Source-specific Applicable Requirements

#### Fixed Roof Tanks Cluster 25

Applicable Requirement	Regulation Title or Descrip	Federally Enforceable (Y/N)	Future Effective Date	
8-5-301	Storage Tank Control Requirements (int	ternal floating roof, external	Y	
	floating roof, or approved emission cont	trol system)		
8-5-302	Requirements for Submerged Fill Pipes		Y	
8-5-303	Requirements for Pressure Vacuum Valv	ves	Y	
8-5-328	Tank degassing requirements		Y	
8-5-328.1	Concentration of <10,000 ppm as metha	ne after cleaning	Y	
8-5-328.2	Tank degassing when ozone excess is pr	redicted	Y	
8-5-403	Inspection requirements for pressure reli	ief devices	Y	
8-5-404	Certification		Y	
8-5-501	Records		Y	
8-5-502	Tank Cleaning Annual Source Test Requirement		Y	
8-5-503	Portable hydrocarbon detector		Y	
8-5-601	Analysis of Samples, Reid Vapor Pressure		Y	
8-5-602	Analysis of Samples, True Vapor Pressure		Y	
8-5-603	Determination of Emissions		Y	
8-5-603.1.2	Concentration of organic compounds after degassing		Y	
8-5-604	Determinations of Applicability		Y	
40 cfr 63 subpart cc Refinery MACT	NESHAP REQUIREMENTS F	for Petroleum Refineries (6/23/03) FOR TANKS ALSO SUBJECT TO N	SPS Kb	
63.640(n)	Which rule governs for storage vessels subject to both Refinery MACT and NSPS subpart Kb?63.6 NSP	i40(n)(1) S subpart Kb	Y	
NSPS 40 cfr 60 Subpart Kb	Volatile Organic Liquid Storage Vessels (10/15/03) REQUIREMENTS FOR FIXED ROOF TANK-CONTROL DEVICE			
60.112b(a)	Closed vent system60.1Performance requirements:no d	12b(a)(3)(i) letectable emissions (i.e., < 500 ppm)	Y	
	Control device60.1Performance requirements:at let	12b(a)(3)(ii) ast 95% efficient, or a flare per 60.18	Y	
	Control device (flare)60.1Compliance demonstration:flare(c)	12b(a)(3)(ii) to be designed as specified in 60.18	Y	

# Table IV.F.1.12 Tanks Source-specific Applicable Requirements

#### Fixed Roof Tanks Cluster 25

Applicable Requirement	Regulation Title or I	Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
60.113b(c)	Control device (other than flare) Compliance demonstration:	60.113b(c)(1) operating plan, efficiency demonstration & parameter(s) to be monitored	Y	
	Other (initial) Reports: For control device other-than flare?	60.113b(c)(1) submit operating plan for approval, with the initial notification	Y	
	Control device (other than flare) Operating requirements:	60.113b(c)(2) operate and monitor per the plan	Y	
60.113b(d)	Control device (flare) Operating requirements:	60.113b(d) operate per general control device requirements in 60.18 (e) & (f)	Y	
60.115b	Record keeping for inspections: keep inspection reports as specified	60.115b keep records	Y	
60.115b(c)	Record keeping for tanks routed to a control device other than a flare:	60.115b(c) operating plan & records of parametric monitoring data	Y	
60.115b(d)	Other (initial) Reports: For a flare?	60.115b(d)(1) submit results of compliance demonstration within 6 months of start-up	Y	
	Record keeping for tanks routed to a flare:	60.115b(d)(2) periods of operation in which the pilot flame is absent	Y	
	Periodic Reports: Tanks routed to a flare:	60.115b(d)(3) semiannual reports of all periods in which the pilot flame was absent	Y	
60.116b(a)	Applicability records: Time period for keeping records of applicability determination, unless specified otherwise.	60.116b(a) keep records	Y	
60.116b(b)	Applicability records: Records of dimensions & capacity required for nonexempt tanks?	60.116b(b) required keep record readily accessible for the life of the tank.	Y	
60.116b(c)	Applicability records: Additional recordkeeping requirements for certain tanks.	60.116b(c) internal diameter & TVP of the stored product, if capacity $\geq$ (20,000 gallons) 75 cubic meters and TVP $\geq$ (2.2 psia) 5.0 kPa , or capacity $\geq$ (40,000 gallons) 151 cubic meters and TVP $\geq$ (0.51 psia) 3.5 kPa . Keep record as long as the tank is in that service.	Y	

# Table IV.F.1.12 Tanks Source-specific Applicable Requirements

#### Fixed Roof Tanks Cluster 25

Applicable Requirement	Regulation Title or D	Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
60.116b(e)	True vapor pressure (TVP) determination for applicability:	60.116b(e) maximum TVP of the stored liquid, based on highest calendar month average storage temperature	Y	
60.116b(g)	Applicability determination: Miscellaneous recordkeeping exemptions:	60.116b(g) keeping record of TVP is not required if tank is routed to a compliant control device	Y	
NSPS 40 cfr 60 Subpart A	:	New Source Performance Standards GENERAL PROVISIONS		
60.7(a)	Initial Notification: Is initial notification of the source's existence required?	60.7(a)(1) notification within 30 days after begin construction	Y	
	Report (document) having initially achieved compliance?	60.7(a)(3) 60.115b(a)(1) & (b)(1) within 15 days after initial fill	Y	
	Notification of Compliance Status report:	60.7(a)(3) [cf. 60.115b(a)(1)&(b)(1)] notification within 15 days after startup	Y	
	Initial Notification: Is initial notification required if tank becomes affected only as a result of a modification?	60.7(a)(4) notification 60 days or as soon as practicable before the change	Y	
60.7(f)	General recordkeeping requirements: Time period for keeping records, unless specified otherwise.	60.7(f) keep all reports & notifications	Y	
	General recordkeeping requirements: keep all reports and notification for the specified period of time.	60.7(f) required	Y	
60.14(g)	Achieve compliance for: New Tanks (or tanks that become affected as a result of a change or modification)?	60.14(g) up to 180 days after modifications (otherwise prior to fill)	Y	
	Wastewater Requirements for S	-6220 through S-6239 (from Wastewater Clu	ster 60b)	
BAAQMD Regulation 11 Rule 12	Hazardous Pollutants – National Emi from Benzene Transfer Operations as refer to NESHAP Subpart FF below)	ission Standards for Benzene Emissions nd Benzene Waste Operations (7/18/90,	N	

# Table IV.F.1.12 Tanks Source-specific Applicable Requirements

#### Fixed Roof Tanks Cluster 25

Applicable Requirement	Regulation Title or D	escription of Requirement	Federally Enforceable (Y/N)	Future Effective Date
40 cfr 63 submpart cc Refinery MACT	NESHAP for Petroleum Refineries (6 REQUIREMENTS FOR WASTEWA	Y		
63.641	What is a Refinery MACT Group 1 wastewater stream?	$\begin{array}{l} 63.641\\ \text{if Total Annual Benzene} \geq 10 \text{ Mg/yr, then}\\ \text{each wastewater stream with flow rate} \geq \\ 0.02 \text{ liters/min and benzene concentration}\\ \geq 10 \text{ ppmw and not exempt from controls}\\ \text{under 61 Subpart FF} \end{array}$	Y	
63.647	What does Refinery MACT require for Group 1 wastewater streams?	63.647(a) comply with 61 Subpart FF (below)	Y	
	Which definitions govern?	63.647(b) the definitions in Refinery MACT supercede those in 61 Subpart FF	Y	
	Clarification with respect to violations	63.647(c) a monitoring excursion, a failure to perform a leak inspection, or a failure to repair a leak shall constitute a violation	Y	
63.654	Which recordkeeping and reporting requirements govern?	63.654(a) recordkeeping and reporting shall be per 61 Subpart FF	Y	
NESHAP 40 cfr 61 Subpart FF	Benzene Waste Operations (12/04/03) REQUIREMENTS FOR CONTAINERS		Y	
61.345	When is this type of WMU subject to these requirements?	$\begin{array}{l} 61.345(a) \\ \text{when invoked by} \\ 61.342(c)(1)(\text{ii}) \text{ for facilities with total} \\ \text{annual Benzene} \geq 10 \text{ Mg/yr} \end{array}$	Y	
	Install, operate, and maintain a cover over the WMU.	61.345(a)(1) required for the container 61.345(a)(3) Container is to be located within an enclosure	Y	
	Route vapors through a closed vent system to a control device?	61.345(a)(1) Not required for container 61.345(a)(3) required for the enclosure	Y	
	The cover and all openings to operate with no detectable emissions (< 500 ppmv)?	61.345(a)(1)(i) required for the container 61.345(a)(3)(i) required for the enclosure	Y	

# Table IV.F.1.12 Tanks Source-specific Applicable Requirements

#### Fixed Roof Tanks Cluster 25

Applicable Requirement	Regulation Title or Do	escription of Requirement	Federally Enforceable (Y/N)	Future Effective Date
	Demonstrate no detectable emissions using Method 21?	61.345(a)(1)(i) required for the container 61.345(a)(3)(i) required for the enclosure	Y	
	Inspection per Method 21 required initially, and annually thereafter?	61.345(a)(1)(i) required for the container 61.345(a)(3)(i) required for the enclosure	Y	
	Each opening to be kept closed, gasketed, & latched at all times that waste is present within, except when the opening is in use?	61.345(a)(1)(ii) required for the container 61.345(a)(3) Not required for the enclosure	Y	
	Are there requirements that are unique to this type of WMU?	61.345(a)(2) Load using a submerged fill pipe	Y	
	Are there conditions for which vapors are not required to be routed to a control device?	61.345(a)(3) Not required at any time other than when the container is open while waste is being treated	Y	
	What is required for WMUs not routed to a control device?	61.345(a)(3) routing to a control device is not required for containers that are kept closed while waste is being treated	Y	
	Visual inspection initially, and quarterly thereafter, to ensure that the cover and all openings are closed & gasketed properly?	61.345(b) required for the container 61.345(b) required for the enclosure	Y	
	First attempt at repair of broken seal or gasket or other problem (including detectable emissions) to be made within 15 days?	61.345(c) required for the container 61.345(c) required for the enclosure	Y	
	Delay of repair allowed?	61.345(c) yes, for the container, per 61.350 61.345(c) yes, for the enclosure, per 61.350	Y	
61.349	Closed vent system requirements?	61.349 no detectable emissions (500 ppmv), gas- tight gauging & sampling devices, etc.	Y	
	Control device requirements?	61.349 95% efficiency or equivalent with specified monitoring, recordkeeping & reporting	Y	

# Table IV.F.1.12 Tanks Source-specific Applicable Requirements

#### Fixed Roof Tanks Cluster 25

Applicable Requirement	Regulation Title or Description of Requirement		Federally Enforceable (Y/N)	Future Effective Date
	Must the closed vent system operate with no detectable emissions (< 500 ppmw)?	61.349(a)(1)(i) required	Y	
	How is leak-tightness of the closed vent system inspected?	61.349(a)(1)(i) initially & annually, per Method 21	Y	
	Must all gauging & sampling devices be gas-tight, and closed except when in use?	61.349(a)(1)(iii) required	Y	
	Must pressure-relief devices be closed and sealed during normal operations?	61.349(a)(1)(iv) required	Y	
	What is required if the control device is an enclosed combustion unit?	$\begin{array}{l} 61.349(a)(2)(i)\\ \text{reduce Total Organic Compounds} \geq 95\%\\ \underline{\text{or Total Organic Compound conc.}} \geq 20\\ \text{ppmv or minimum residence time }\&\\ \text{temperature of } 0.5 \text{ sec at } 760^{\circ}\text{C} \end{array}$	Y	
	What is required if the control device is a vapor recovery unit?	61.349(a)(2)(ii) reduce Total Organic Compounds $\ge 95\%$ or benzene $\ge 98\%$	Y	
	Must the closed vent system & control device operate at all times when waste is in the WMU?	61.349(b) s required, except when maintenance/repair of the WMU requires shutdown of the control device	Y	
	What is required to demonstrate compliance of a control device that is not a flare?	61.349(c) either engineering calculations or performance tests	Y	
	Can performance tests be required for control devices?	61.349(e) perform performance tests of the control device upon the request of the Administrator	Y	
	What visual inspections are required for the closed vent system and control device?	61.349(f) inspect initially & annually for visible defects	Y	
	If defects are found during an inspection, how quickly must they be repaired?	61.349(g) first attempt within 5 days, final repair within 15 days; unless delay allowed per 61.350	Y	
	Must control devices be monitored?	61.349(h) required, per 61.354(c)	Y	

# Table IV.F.1.12 Tanks Source-specific Applicable Requirements

#### Fixed Roof Tanks Cluster 25

Applicable Requirement	Regulation Title or D	escription of Requirement	Federally Enforceable (Y/N)	Future Effective Date
61.350	When is a delay of repair allowed, and when must the delayed repair be complete?	61.350 delay of repair is allowed if repair is technically impossible without a shutdown; repair to be complete by the end of the next shutdown	Y	
61.353	What are the responsibilities associated with approval of alternative technologies?	61.353 the person requesting the alternative must show equivalency; and the Administrator must publish any approval in the Federal Register	Y	
61.354	Is monitoring required for control devices?	61.354(c) daily inspect the continuous monitoring devices specified herein, except as specified in 61.354(d) & (e)	Y	
	Are there control devices that do not require continuous data recorders?	61.354(d) carbon adsorption that is not regenerated on site may be monitored without a continuous recorder; or not monitored if replaced on a sufficiently frequent interval	Y	
	May alternative parameters be monitored in lieu of those specified?	61.354(e) allowed if adequacy of the alternative is demonstrated	Y	
	Are inspections required for by-pass lines in closed vent systems?	61.354(f) inspect daily if using a flow indicator or inspect monthly if using car-seal/lock-&- key	Y	
	Is additional monitoring required for systems maintained at negative pressure?	61.354(g) continuously monitor the system pressure	Y	
61.355	Procedure for detecting emissions	61.355(h) per Method 21	Y	
	Procedure for performance testing of control devices	61.355(i) for 61.349(a)(2) to demonstrate compliance with reduction efficiency	Y	
61.356	How long are records to be kept?	61.356(a) keep all records	Y	
	Are records required for the design of the control equipment (e.g., control devices, floating roofs, etc.)?	61.356(d) for 61.343 – 61.347 required, keep for the life of the equipment	Y	

# Table IV.F.1.12 Tanks Source-specific Applicable Requirements

#### Fixed Roof Tanks Cluster 25

#### S-6220, S-6221, S-6222, S-6223, S-6224, S-6225, S-6226, S-6227, S-6228, S-6229, S-6230, S-6231, S-6232, S-6233, S-6234, S-6235, S-6236, S-6237, S-6238, S-6239, S-3110, S-3111 (S-3110 & S-3111 in Table IV.G.1.5) (Abatement device requirements for S-6220 through S-6239 are provided in Table II-B)

Applicable Requirement	Regulation Title or Do	Federally Enforceable (Y/N)	Future Effective Date	
	Are records required documenting the performance of control devices?	61.356(f) for 61.349 required keep for the life of the control device	Y	
	Are records required for visual inspections and repairs?	61.356(g) for 61.343 – 61.347 required only when defects are found	Y	
	Are records required for Method 21 leak inspections and repairs?	61.356(h) for 61.343 – .347, 61.349 required for each inspection	Y	
	Are records of startup/shutdown and monitoring data required for control devices?	61.356(j) for 61.349 required	Y	
	Are records of monitoring data required for systems maintained under negative pressure?	61.356(m) for 61.343 – 61.347 required	Y	
Condition #10761	Applies to S-6220 through S-6239		Y	
Condition #18137	Throughput limits		N	

#### Table IV.F.1.13 Tanks (EFRT's Cluster 26)

## Table IV.F.1.13 Tanks Source-specific Applicable Requirements

#### **External Floating Roof Tanks Cluster 26**

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
BAAQMD	Organic Compounds, Storage of Organic Liquids (10/18/06)		
Regulation 8,			
Rule 5			

# Table IV.F.1.13 Tanks Source-specific Applicable Requirements

#### **External Floating Roof Tanks Cluster 26**

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
8-5-110	Exemption due to size and age	Y	
8-5-111	Limited Exemption, Tank Removal From and Return to Service	Ν	
8-5-111.1	Limited Exemption, Notice to the APCO	Ν	
8-5-111.2	Limited Exemption, Compliance before notification	Ν	
8-5-111.3	Limited Exemption, Continuous and quick filling, emptying and refilling	Ν	
8-5-111.4	Limited Exemption, Use of vapor recovery	N	
8-5-111.5	Limited Exemption, Minimization of emissions	Ν	
8-5-111.6	Limited Exemption, Self report if out of compliance during exemption period	Ν	
8-5-112	Limited Exemption, Preventative Maintenance and Inspection of Tanks in Operation	N	
8-5-112.1	Limited Exemption, Preventative Maintenance and Inspection of Tanks in Operation; Notification	Ν	
8-5-112.2	Limited Exemption, Preventative Maintenance and Inspection of Tanks in Operation; Tank in compliance at time of notification	Ν	
8-5-112.3	Limited Exemption, Preventative Maintenance and Inspection of Tanks in Operation; No product movement, Minimize emissions	N	
8-5-112.4	Limited Exemption, Preventative Maintenance and Inspection of Tanks in Operation; Not to exceed 7 days	N	
8-5-112.5	Limited Exemption, Preventative Maintenance and Inspection of Tanks in Operation; Self report if out of compliance during exemption period	N	
8-5-112.6	Limited Exemption, Preventative Maintenance and Inspection of Tanks in Operation; Keep records for each exemption	N	
8-5-119	Limited Exemption, Repair Period for Enhanced Monitoring Program	N	
8-5-301	Storage Tank Control Requirements (internal floating roof, external floating roof, or approved emission control system)	N	
8-5-302	Requirements for Submerged Fill Pipes	Y	
8-5-303	Requirements for Pressure Vacuum Valves	Ν	
8-5-303.1	Requirements for Pressure Vacuum Valves; Set pressure	Ν	
8-5-303.2	Requirements for Pressure Vacuum Valves; Gas tight requirement	Ν	
8-5-304	Requirements for External Floating Roof Tanks	Ν	

# Table IV.F.1.13 Tanks Source-specific Applicable Requirements

#### **External Floating Roof Tanks Cluster 26**

Applicable Requirement	Regulation Title or Description of Requirement		Future Effective Date
8-5-320	Floating Roof Tank Fitting Requirements	Ν	
8-5-320.2	Openings in the floating roof except p/v valves and vacuum breaker	Ν	
	vents		
8-5-320.3	Openings in the floating roof except floating roof legs	N	
8-5-320.4	Solid sampling or gauging wells and similar fixed projections	N	
8-5-320.5	Slotted sampling or gauging wells and similar fixed projections	N	
8-5-320.6	Emergency roof drain	N	
8-5-321	Primary seal requirements	N	
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 8-5-305.1	Y	
8-5-321.3	Metallic shoe type seals	Ν	
8-5-321.3.1	Geometry of shoe	Ν	
8-5-321.3.2	Gaps for welded tanks	Ν	
8-5-322	Secondary seal requirements	Ν	
8-5-322.1	No holes, tears, or other openings in the secondary seal	Ν	
8-5-322.2	Insertion of probes	Ν	
8-5-322.3	Gap length		
8-5-322.5	Gap for welded tanks with seal installed after September 4, 1985	Ν	
8-5-322.6	Secondary seal shall not be attached to primary seal	Ν	
8-5-328	Tank degassing requirements	N	
8-5-328.1	Tank degassing requirements; Tanks > 75 cubic meters	N	
8-5-328.2	Tank degassing requirements; Ozone Excess Day Prohibition	N	
8-5-328.3	Tank degassing requirements; BAAQMD notification required	N	
8-5-331	Tank Cleaning Requirements; 90% Abatement Efficiency if Abatement Device Used	Ν	
8-5-331.1	Tank cleaning requirements; Cleaning materials properties	N	
8-5-331.2	Tank cleaning requirements; Steam cleaning prohibition	Ν	
8-5-331.3	Tank cleaning requirements; Steam cleaning exceptions	N	
8-5-332	Sludge Handling Requirements; applies to sludge removed from any tank that was subject to BAAQMD 8-5 at any time since it was last put	N	
8-5-332.1	in service) Sludge Handling Requirements; sludge container no leaks	N	

# Table IV.F.1.13 Tanks Source-specific Applicable Requirements

#### **External Floating Roof Tanks Cluster 26**

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
8-5-332.2	Sludge Handling Requirements; sludge container gap requirements	Ν	
8-5-401	Inspection Requirements for External Floating Roof Tanks	Ν	
8-5-403	Inspection Requirements for Pressure Relief Devices	Ν	
8-5-403.1	Inspection Requirements for Pressure Relief Devices; Pressure vacuum valve gas tight standards in 8-5-303	Ν	
8-5-411	Enhanced Monitoring Program (Optional)	Ν	
8-5-411.3	Enhanced Monitoring Program (Optional); Performance requirements	Ν	
8-5-501	Records	Ν	
8-5-501.1	Records; Type and amount of liquid, type of blanket gas, TVP- Retain 24 months	Ν	
8-5-501.2	Records; Internal and External Floating Roof Tanks, Seal Replacement Records- Retain 10 years	Ν	
8-5-501.3	Records; Retention	Ν	
8-5-501.4	Records; New pressure vacuum valve setpoints	Ν	
8-5-502	Annual Source Test Requirement	Ν	
8-5-502.1	Annual source test for approved emission control systems and abatement devices	Ν	
8-5-502.2	Tank degassing and cleaning abatement devices	Ν	
8-5-601	Analysis of Samples, Reid Vapor Pressure	Y	
8-5-602	Analysis of Samples, True Vapor Pressure	Y	
8-5-603	Determination of Emissions	Ν	
8-5-604	Determinations of Applicability	Y	
8-5-605	Measurement of Leak Concentration and Residual Concentrations	Ν	
8-5-605.1	Measurement of Leak Concentration and Residual Concentrations; EPA method 21 Instruments	Ν	
8-5-605.2	Measurement of Leak Concentration and Residual Concentrations; Method 21 and tank degassing residual organic concentration measurement method	Ν	
8-5-606	Analysis of samples, Tank Cleaning Agents	Ν	
8-5-606.1	Analysis of samples, Tank Cleaning Agents; Initial Boiling Point	Ν	
8-5-606.2	Analysis of samples, Tank Cleaning Agents; True Vapor Pressure	Ν	
8-5-606.3	Analysis of samples, Tank Cleaning Agents; VOC	Ν	

# Table IV.F.1.13 Tanks Source-specific Applicable Requirements

#### **External Floating Roof Tanks Cluster 26**

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
SIP	Storage of Organic Liquids (11/27/02)		
BAAQMD			
Regulation 8,			
Rule 5			
8-5-111	Limited Exemption, Tank Removal From and Return to Service	Y	
8-5-111.1	Notice to the APCO	Y	
8-5-111.2	Compliance before notification	Y	
8-5-111.3	Continuous and quick filling, emptying and refilling	Y	
8-5-111.4	Use of vapor recovery	Y	
8-5-111.5	Minimization of emissions	Y	
8-5-111.6	Written notice of completion not required	Y	
8-5-111.7	Compliance with Section 8-5-328	Y	
8-5-112	Limited Exemption, Tanks in Operation	Y	
8-5-112.1	Notice to the APCO	Y	
8-5-112.2	Compliance and certification before commencement of work	Y	
8-5-112.3	No product movement; minimization of emissions	Y	
8-5-112.4	Exemption does not exceed 7 days	Y	
8-5-301	Storage Tank Control Requirements (internal floating roof, external	Y	
	floating roof, or approved emission control system)		
8-5-304	Requirements for External Floating Roofs	Y	
8-5-320	Tank fitting requirements	Y	
8-5-320.2	Openings in the floating roof except p/v valves and vacuum breaker vents	Y	
8-5-320.3	Openings in the floating roof except floating roof legs	Y	
8-5-320.4	Solid sampling or gauging wells and similar fixed projections	Y	
8-5-320.5	Slotted sampling or gauging wells and similar fixed projections	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 8-5-305.1	Y	
8-5-321.3	Metallic shoe type seals	Y	
8-5-321.3.1	Geometry of shoe	Y	

# Table IV.F.1.13 Tanks Source-specific Applicable Requirements

#### **External Floating Roof Tanks Cluster 26**

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
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	Gap length	Y	
8-5-322.5	Gap for welded tanks with seal installed after September 4, 1985	Y	
8-5-322.6	Secondary seal shall not be attached to primary seal	Y	
8-5-328	Tank degassing requirements	Y	
8-5-328.1	Concentration of <10,000 ppm as methane after cleaning	Y	
8-5-328.2	Tank degassing when ozone excess is predicted	Y	
8-5-401	Inspection Requirements for External Floating Roof Tanks	Y	
8-5-404	Certification	Y	
8-5-405	Information required	Y	
8-5-501	Records	Y	
8-5-502	Tank Cleaning Annual Source Test Requirement	Y	
8-5-503	Portable hydrocarbon detector	Y	
8-5-601	Analysis of Samples, Reid Vapor Pressure	Y	
8-5-602	Analysis of Samples, True Vapor Pressure	Y	
8-5-603	Determination of Emissions	Y	
8-5-603.1.2	Concentration of organic compounds after degassing	Y	
8-5-604	Determinations of Applicability	Y	
40 CFR 63 Subpart CC Refinery MACT	NESHAP for Petroleum Refineries (6/23/03) REQUIREMENTS FOR EXTERNAL FLOATING ROO	OF TANKS	
63.642(e) 63.654(i)	General recordkeeping requirements: Time period for keeping records, unless specified otherwise.63.642(e) & 63.654(i)(4) keep all other records, retrievable within 24 hr	Y	
	General recordkeeping requirements:63.642(e) & 63.654(i)(4)keep all reports and notification for the specified period of time.required	Y	

# Table IV.F.1.13 Tanks Source-specific Applicable Requirements

#### **External Floating Roof Tanks Cluster 26**

Applicable Requirement	Regulation Title or Description of Requirement		Federally Enforceable (Y/N)	Future Effective Date
63.646(a) 63.119(c)	EFR Rim Seals: vapor-mounted primary seal: liquid-mounted primary seal: mechanical-shoe primary seal:	63.646(a) 63.119(c)(1)(i) – (1)(iii) Not Allowed OK w/rim-mounted secondary OK w/rim-mounted secondary	Y	
	Must vapor-mounted rim seals be continuous on EFRs?	63.646(a) 63.119(c)(1)(iii) yes	Y	
63.646(a) 63.119(c) 63.120(b	Are EFR rim seals allowed to be pulled back or temporarily removed during inspection?	63.646(a) 63.119(c)(1)(iii) 63.120(b)(4) yes	Y	
	EFRT operating requirements: When landing the floating roof on its support legs, is the tank to be emptied & either refilled or degassed ASAP?	63.646(a) 63.119(c)(3) & (c)(4) yes	Y	
	Temporary exemption from operating requirements while the external floating roof is landed on its support legs?	63.646(a) 63.119(c)(3) exempt	Y	
	EFR Internal Inspections: up-close visual inspection of the floating roof, seals, & fittings:	63.646(a) & 63.120(b) each time the tank is emptied & degassed	Y	
	EXTENSIONS OF TIME: If EFRT is unsafe to inspect & cannot be emptied within 45 days	63.646(a) & 63.120(b) up to 2 extensions of 30 days each, if needed	Y	
	Notification of Inspections: Are notifications of Inspections to demonstrate initial compliance required, For EFR seal gap measurements:	63.646(a) 63.120(b)(1) & (9) required- notifications & reports per ongoing reports	Y	
	Seal Gap Measurements: FREQUENCY AFTER INITIAL COMPLIANCE, For the EFR Primary Seal:	63.646(a) 63.120(b)(1)(i) every 5 years	Y	
	Seal Gap Measurements: For existing EFRTs in compliance by the compliance date:	63.646(a) 63.120(b)(1)(i) & (iii) measure gaps of both seals prior to the compliance date	Y	
	Seal Gap Measurements: For new EFRTs:	63.646(a) 63.120(b)(1)(i) & (iii) measure gaps of both seals prior to initial fill	Y	

# Table IV.F.1.13 Tanks Source-specific Applicable Requirements

#### **External Floating Roof Tanks Cluster 26**

Applicable Requirement	Regulation Title or Descr	Federally Enforceable (Y/N)	Future Effective Date	
	Seal Gap Measurements: For affected EFRTs with a mechanical- shoe or liquid-mounted primary-only rim seal, prior to installing a sec. Seal; PRIOR TO COMPLIANCE: UPON COMPLIANCE:	63.646(a) 63.120(b)(1)(ii) annual primary seal gap measurements 63.646(a) 63.120(b)(1)(ii) measure gaps of both seals within 90 days	Y	
	Seal Gap Measurements: FREQUENCY AFTER INITIAL COMPLIANCE, For the EFR Secondary Seal:	63.646(a) 63.120(b)(1)(iii) annually	Y	
	Seal Gap Measurements: For EFRTs returned to affected service after 1 yr or more of exempt service:	63.646(a) 63.120(b)(1)(iv) measure gaps of both seals within 90 days	Y	
	MEASUREMEN' COND'''S: Are EFR seal gap measurements to be made with the roof floating?	63.646(a) 63.120(b)(2)(i) yes	Y	
	DETERMINATION OF EFR RIM- SEAL GAP AREAS: Presence of a gap determined by inserting a 1/8 in. probe?	63.646(a) 63.120(b)(2)(ii) yes	Y	
	DETERMINATION OF EFR RIM- SEAL GAP AREAS: Use probes of various widths to determine the gap area?	63.646(a) 63.120(b)(2)(iii) yes	Y	
	DETERMINATION OF EFR RIM- SEAL GAP AREAS: Sum the gap areas & divide by the diameter of the tank?	63.646(a) 63.120(b)(3) & (4) yes	Y	
	EFR Primary Seal Gap Inspection Criteria: Maximum area: Maximum gap width:	63.646(a) 63.120(b)(3) 10 in <sup>2</sup> /ft.diameter 1.5 inches	Y	
	EFR Secondary Seal Gap Inspection Criteria: Maximum area: Maximum gap width:	63.646(a) 63.120(b)(4) 1 in <sup>2</sup> /ft. diameter 0.5 inches	Y	
	Is the metallic shoe of an EFR mechanical-shoe seal required to have its bottom in the liquid and extend at least 24 in. above the liquid?	63.646(a) 63.120(b)(5)(i) Yes	Y	

# Table IV.F.1.13 Tanks Source-specific Applicable Requirements

#### **External Floating Roof Tanks Cluster 26**

Applicable Requirement	Regulation Title or Description of Requirement		Federally Enforceable (Y/N)	Future Effective Date
	Shall there be no holes, tears, or openings in the EFR seals?	63.646(a) 63.120(b)(5)(ii) & (6)(ii) yes	Y	
	UNSAFE CONDITIONS: Delay of EFR seal gap measurements allowed for unsafe conditions? If unable to make safe to measure, must the EFRT be emptied?	63.646(a) 63.120(b)(7)(i) up to 30 additional days 63.120(b)(7)(ii) yes, within 45 days of determining unsafe	Y	
	EFRT REPAIRS: Time allowed for repair of defects found during in-service inspections of EFRs: If unable to repair, empty the EFRT & remove from service?	63.646(a) 63.120(b)(8) make repairs within 45 days 63.120(b)(8) yes, within 45 days	Y	
	EXTENSIONS OF TIME: If EFRT defects cannot be repaired & the tank cannot be emptied within 45 days?	63.646(a) 63.120(b)(8) up to 2 extensions of 30 days each, if needed	Y	
	Notification of Inspections: Are notifications of Inspections to demonstrate initial compliance required, For EFR internal inspections:	63.646(a) 63.120(b)(10) internal inspections not required for initial compliance	Y	
	EFRT REPAIRS: Repair of defects if the tank is empty?	63.646(a) 63.120(b)(10)(i) prior to refilling	Y	
63.646(c)	EFR well covers to be gasketed?	63.646(c) not required at existing sources	Y	
	EFR vents to be gasketed?	63.646(c) not required at existing sources	Y	
	EFR deck openings other than for vents to project into liquid?	63.646(c) not required at existing sources	Y	
	EFR access hatch & gauge float well covers to be bolted closed?	63.646(c) not required at existing sources	Y	
	EFR emergency roof drains to have seals covering at least 90% of the opening?	63.646(c) not required at existing sources	Y	
	EFR guidepole wells to have a deck cover gasket and a pole wiper?	63.646(c) not required at existing sources	Y	
	EFRT unslotted guidepoles to have a gasketed cap at the top of the pole?	63.646(c) not required at existing sources	Y	
	EFRT slotted guidepoles to have either an internal float or a pole sleeve?	63.646(c) not required at existing sources	Y	

# Table IV.F.1.13 Tanks Source-specific Applicable Requirements

#### **External Floating Roof Tanks Cluster 26**

Applicable Requirement	e Regulation Title or Description of Requirement		Federally Enforceable (Y/N)	Future Effective Date
63.646(f)	Deck openings (wells) other than for vents, drains, or legs to have covers that are kept closed except for access?	63.646(f)(1) required	Y	
	EFR rim space vents to remain closed except when the pressure setting is exceeded?	63.646(f)(2) required	Y	
	EFR auto. Bleeder vent (vacuum breaker) to be closed except when the deck is landed?	63.646(f)(3) required	Y	
63.646(i) 63.652(b)	Implementation Plan:	63.646(i) & 63.652(b) Not required	Y	
63.646(l) 63.654(h)	Notification of Inspections: Is the State or local authority allowed to waive the notification requirements?	63.646(l) 63.654(h)(2)(i)(c)&(ii) yes	Y	
63.654(f)	Report (document) having initially achieved compliance?	63.654(f) later of next Periodic Report after achieving compliance or 1/15/99	Y	
	Notification of Compliance Status report:	63.654(f) later of next Periodic Report after compliance or January 15, 1999	Y	
	Report determination of applicability for other individual tanks (i.e., for MACT rules, whether Group1 or Group2)?	63.654(f)(1)(i)(A) with initial Notification of Compliance Status; Jan. 15, 1999	Y	
	EFRT report to include:	63.654(f)(1)(i)(A) Group determinations, actual or anticipated date of compliance; if already in compliance, description of controls	Y	
63.654(g)	Report of periodic inspections, etc. AFTER documenting initial compliance?	63.654(g) begin Sept 13, 1999 then semiannual	Y	
	Periodic Reports: Report of EFR inspection failures to include:	63.654(g)(2) - (4) date of inspection, internal diameter of tank, description of failure, & date of repair or emptying	Y	
	Periodic Reports: EFR report to include a prior request for 30-day extension, w/ documentation of need?	63.654(-)(2) - (4) prior request is not required	Y	
	Periodic Reports: Additional information to be included if an extension is utilized for an EFR:	63.654(g)(2)(i) 63.654(g)(3)(ii) document the reason for the extension	Y	

# Table IV.F.1.13 Tanks Source-specific Applicable Requirements

#### **External Floating Roof Tanks Cluster 26**

Applicable Requirement	Regulation Title or Description of Requirement		Federally Enforceable (Y/N)	Future Effective Date
	Periodic Reports: Report EFR seal gap Inspections if there was No out-of-compliance?	63.654(g)(3)(i) Not required	Y	
	Periodic Reports: Report EFR seal gap Inspections when there Is out-of-compliance?	63.654(g)(3)(i) required within 60 days after each semiannual period	Y	
63.654(h) 63.646(a) 63.120(b)	Notification of Inspections: Is 30-day notice required for internal inspections of EFRTs (i.e., prior to filling or refilling); but a 7- day verbal notice acceptable if the event is unplanned?	63.654(h)(2)(i) 63.646(a) 63.120(b)(10) required	Y	
	Notification of Inspections: Is 30-day notice required prior to EFR seal gap measurements?	63.654(h)(2)(ii) 63.646(a) 63.120(b)(9) required	Y	
	Report applicability for varying-use tanks?	63.654(h)(6)(ii) with the initial NOC Status report	Y	
	Other (initial) Reports: Report applicability for varying-use tanks?	63.654(h)(6)(ii) required with the initial Notification of Compliance Status report	Y	
63.654(i) 63.123(a)	Applicability records: Time period for keeping records of applicability determination, unless specified otherwise.	63.654(i)(1) 63.123(a) keep record readily accessible for the service life of the tank	Y	
63.654(i) 63.646(a) 63.119(a) 63.123(a)	Applicability records: Records of dimensions & capacity required for nonexempt tanks?	63.654(i)(1) 63.646(a)&63.119(a)(3) 63.123(a) required keep record readily accessible for service life of the tank	Y	
63.654(i) 63.123(c) 63.654(d) 63.123(e)	Record keeping for inspections: Keep inspection reports as specified	63.654(i)(1) 63.123(c) – (e) all inspections	Y	
	Records of EFR inspection reports:	63.654(i)(1) 63.123(d) all inspections	Y	
63.654(i) 63.123 (g)	Record keeping for delayed repairs: When utilizing a delay of repair provision, keep documentation of the reason for the delay.	63.654(i)(1) 63.123 (g) required	Y	

# Table IV.F.1.13 Tanks Source-specific Applicable Requirements

#### **External Floating Roof Tanks Cluster 26**

Applicable Requirement	Regulation Title or Description of Requirement		Federally Enforceable (Y/N)	Future Effective Date
	Applicability records: Additional recordkeeping requirements for certain tanks.	63.654(i)(1)(iv) determination of HAP content keep record readily accessible for service life of the tank	Y	
Condition #8503	Applies to S-0679		Y	
Condition #10908	Applies to S-1489		Y	
Condition #10909	Applies to S-0992		Y	
Condition #11025	Applies to S-3106		Y	
Condition #17470	Applies to S-3126		Y	
Condition #15038	Applies to S-3133		Y	
Condition #13859	Applies to S-3134		Y	
Condition #18137	Throughput limits		Ν	
Condition #21237	Notification requirement for S-1514, 3072, and S-3101 regarding pumping and piping capacities.		N	
Condition #22641	Applies to S-1296, S-1514		N	

#### Table IV.F.1.14 Tanks (IFRT's Cluster 27)

# Table IV.F.1.14 Tanks Source-specific Applicable Requirements

#### **Internal Floating Roof Tanks Cluster 27**

#### S-1289, S-1645

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
BAAQMD	Organic Compounds, Storage of Organic Liquids (10/18/06)		
Regulation 8,			
Rule 5			
8-5-110	Exemption due to size and age	Y	
8-5-111	Limited Exemption, Tank Removal From and Return to Service	N	
8-5-111.1	Limited Exemption, Notice to the APCO	Ν	
8-5-111.2	Limited Exemption, Compliance before notification	Ν	
8-5-111.3	Limited Exemption, Continuous and quick filling, emptying and refilling	N	
8-5-111.4	Limited Exemption, Use of vapor recovery	Ν	
8-5-111.5	Limited Exemption, Minimization of emissions	Ν	
8-5-111.6	Limited Exemption, Self report if out of compliance during exemption	Ν	
	period		
8-5-112	Limited Exemption, Preventative Maintenance and Inspection of Tanks	Ν	
	in Operation		
8-5-112.1	Limited Exemption, Preventative Maintenance and Inspection of Tanks	Ν	
	in Operation; Notification		
8-5-112.2	Limited Exemption, Preventative Maintenance and Inspection of Tanks	Ν	
	in Operation; Tank in compliance at time of notification		
8-5-112.3	Limited Exemption, Preventative Maintenance and Inspection of Tanks	Ν	
	in Operation; No product movement, Minimize emissions		
8-5-112.4	Limited Exemption, Preventative Maintenance and Inspection of Tanks	Ν	
	in Operation; Not to exceed 7 days		
8-5-112.5	Limited Exemption, Preventative Maintenance and Inspection of Tanks	Ν	
	in Operation; Self report if out of compliance during exemption period		
8-5-112.6	Limited Exemption, Preventative Maintenance and Inspection of Tanks	Ν	
	in Operation; Keep records for each exemption		
8-5-119	Limited Exemption, Repair Period for Enhanced Monitoring Program	N	
8-5-301	Storage Tank Control Requirements (internal floating roof, external	Ν	
	floating roof, or approved emission control system)		
8-5-302	Requirements for Submerged Fill Pipes	Y	
8-5-303	Requirements for Pressure Vacuum Valves	Ν	

# Table IV.F.1.14 Tanks Source-specific Applicable Requirements

#### **Internal Floating Roof Tanks Cluster 27**

#### S-1289, S-1645

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
8-5-303.1	Requirements for Pressure Vacuum Valves; Set pressure	Ν	
8-5-303.2	Requirements for Pressure Vacuum Valves; Gas tight requirement	Ν	
8-5-305	Requirements for Internal Floating Roof Tanks	Ν	
8-5-320	Floating Roof Tank Fitting Requirements	Ν	
8-5-320.2	Openings in the floating roof except p/v valves and vacuum breaker vents	Ν	
8-5-320.3	Openings in the floating roof except floating roof legs	Ν	
8-5-320.4	Solid sampling or gauging wells and similar fixed projections	N	
8-5-320.5	Slotted sampling or gauging wells and similar fixed projections	N	
8-5-320.6	Emergency roof drain	Ν	
8-5-321	Primary seal requirements	Ν	
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 8-5-305.1	Y	
8-5-321.3	Metallic shoe type seals	Ν	
8-5-321.3.1	Geometry of shoe	Ν	
8-5-321.3.2	Gaps for welded tanks	Ν	
8-5-322	Secondary seal requirements	Ν	
8-5-322.1	No holes, tears, or other openings in the secondary seal	N	
8-5-322.2	Insertion of probes	Ν	
8-5-322.3	Gap length		
8-5-322.5	Gap for welded tanks with seal installed after September 4, 1985	N	
8-5-322.6	Secondary seal shall not be attached to primary seal	Ν	
8-5-328	Tank degassing requirements	Ν	
8-5-328.1	Tank degassing requirements; Tanks > 75 cubic meters	Ν	
8-5-328.2	Tank degassing requirements; Ozone Excess Day Prohibition	Ν	
8-5-328.3	Tank degassing requirements; BAAQMD notification required	Ν	
8-5-331	Tank Cleaning Requirements; 90% Abatement Efficiency if Abatement	Ν	
	Device Used		
8-5-331.1	Tank cleaning requirements; Cleaning materials properties	N	
8-5-331.2	Tank cleaning requirements; Steam cleaning prohibition	Ν	
8-5-331.3	Tank cleaning requirements; Steam cleaning exceptions	Ν	
# Table IV.F.1.14 Tanks Source-specific Applicable Requirements

## **Internal Floating Roof Tanks Cluster 27**

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
8-5-332	Sludge Handling Requirements; applies to sludge removed from any	Ν	
	tank that was subject to BAAQMD 8-5 at any time since it was last put		
	in service)		
8-5-332.1	Sludge Handling Requirements; sludge container no leaks	Ν	
8-5-332.2	Sludge Handling Requirements; sludge container gap requirements	Ν	
8-5-402	Inspection Requirements for Internal Floating Roof Tanks	Ν	
8-5-403	Inspection Requirements for Pressure Relief Devices	Ν	
8-5-403.1	Inspection Requirements for Pressure Relief Devices; Pressure vacuum	Ν	
	valve gas tight standards in 8-5-303		
8-5-411	Enhanced Monitoring Program (Optional)	Ν	
8-5-411.3	Enhanced Monitoring Program (Optional); Performance requirements	Ν	
8-5-501	Records	Ν	
8-5-501.1	Records; Type and amount of liquid, type of blanket gas, TVP- Retain	Ν	
	24 months		
8-5-501.2	Records; Internal and External Floating Roof Tanks, Seal Replacement	Ν	
	Records- Retain 10 years		
8-5-501.3	Records; Retention	Ν	
8-5-501.4	Records; New pressure vacuum valve setpoints	Ν	
8-5-502	Annual Source Test Requirement	Ν	
8-5-502.1	Annual source test for approved emission control systems and abatement devices	Ν	
8-5-502.2	Tank degassing and cleaning abatement devices	Ν	
8-5-601	Analysis of Samples, Reid Vapor Pressure	Y	
8-5-602	Analysis of Samples, True Vapor Pressure	Y	
8-5-603	Determination of Emissions	Ν	
8-5-604	Determinations of Applicability	Y	
8-5-605	Measurement of Leak Concentration and Residual Concentrations	Ν	
8-5-605.1	Measurement of Leak Concentration and Residual Concentrations; EPA	Ν	
	method 21 Instruments		
8-5-605.2	Measurement of Leak Concentration and Residual Concentrations;	Ν	
	Method 21 and tank degassing residual organic concentration		
	measurement method		
8-5-606	Analysis of samples, Tank Cleaning Agents	Ν	
8-5-606.1	Analysis of samples, Tank Cleaning Agents; Initial Boiling Point	Ν	

# Table IV.F.1.14 Tanks Source-specific Applicable Requirements

## **Internal Floating Roof Tanks Cluster 27**

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
8-5-606.2	Analysis of samples, Tank Cleaning Agents; True Vapor Pressure	Ν	
8-5-606.3	Analysis of samples, Tank Cleaning Agents; VOC	Ν	
SIP	Storage of Organic Liquids (11/27/02)		
BAAQMD			
Regulation 8,			
Rule 5			
8-5-111	Limited Exemption, Tank Removal From and Return to Service	Y	
8-5-111.1	Notice to the APCO	Y	
8-5-111.2	Compliance before notification	Y	
8-5-111.3	Continuous and quick filling, emptying and refilling	Y	
8-5-111.4	Use of vapor recovery	Y	
8-5-111.5	Minimization of emissions	Y	
8-5-111.6	Written notice of completion not required	Y	
8-5-111.7	Compliance with Section 8-5-328	Y	
8-5-112	Limited Exemption, Tanks in Operation	Y	
8-5-112.1	Notice to the APCO	Y	
8-5-112.2	Compliance and certification before commencement of work	Y	
8-5-112.3	No product movement; minimization of emissions	Y	
8-5-112.4	Exemption does not exceed 7 days	Y	
8-5-301	Storage Tank Control Requirements (internal floating roof, external floating roof, or approved emission control system)	Y	
8-5-305	Requirements for Internal Floating Roofs	Y	
8-5-320	Tank fitting requirements	Y	
8-5-320.2	Openings in the floating roof except p/v valves and vacuum breaker vents	Y	
8-5-320.3	Openings in the floating roof except floating roof legs	Y	
8-5-320.4	Solid sampling or gauging wells and similar fixed projections	Y	
8-5-320.5	Slotted sampling or gauging wells and similar fixed projections	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 8-5-305.1	Y	
8-5-321.3	Metallic shoe type seals	Y	

# Table IV.F.1.14 Tanks Source-specific Applicable Requirements

## **Internal Floating Roof Tanks Cluster 27**

Applicable Requirement	Regulation Title or Descr	iption of Requirement	Federally Enforceable (Y/N)	Future Effective Date
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	he secondary seal	Y	
8-5-322.2	Insertion of probes		Y	
8-5-322.3	Gap length		Y	
8-5-322.5	Gap for welded tanks with seal installe	ed after September 4, 1985	Y	
8-5-322.6	Secondary seal shall not be attached to	o primary seal	Y	
8-5-328	Tank degassing requirements		Y	
8-5-328.1	Concentration of <10,000 ppm as met	hane after cleaning	Y	
8-5-328.2	Tank degassing when ozone excess is	predicted	Y	
8-5-402	Inspection Requirements for Internal I	Floating Roof Tanks	Y	
8-5-404	Certification		Y	
8-5-405	Information required		Y	
8-5-501	Records		Y	
8-5-502	Tank Cleaning Annual Source Test Re	equirement	Y	
8-5-503	Portable hydrocarbon detector		Y	
8-5-601	Analysis of Samples, Reid Vapor Pres	ssure	Y	
8-5-602	Analysis of Samples, True Vapor Pres	ssure	Y	
8-5-603	Determination of Emissions		Y	
8-5-603.1.2	Concentration of organic compounds a	after degassing	Y	
8-5-604	Determinations of Applicability		Y	
40 CFR 63 Subpart CC Refinery MACT	NESHA REQUIREMENTS	P for Petroleum Refineries (6/23/03) FOR INTERNAL FLOATING ROOI	F TANKS	
63.642(e) 63.654(i)	General recordkeeping requirements:63Time period for keeping records,keunless specified otherwise.re	3.642(e) & 63.654(i)(4) eep all other records, trievable within 24 hr	Y	
	General recordkeeping requirements: 63 keep all reports and notification for the specified period of time.	3.642(e) & 63.654(I)(4) equired	Y	
63.646(a) 63.119(b)	IFRT operating requirements:63When landing the floating roof on its63support legs, is the tank to be emptiedye& either refilled or degassed ASAP?	3.646(a) 3.119(b)(1) & (b)(2) 28	Y	

# Table IV.F.1.14 Tanks Source-specific Applicable Requirements

## **Internal Floating Roof Tanks Cluster 27**

Applicable Requirement	Regulation Title or De	escription of Requirement	Federally Enforceable (Y/N)	Future Effective Date
	Temporary exemption from operating requirements while the internal floating roof is landed on its support legs?	63.646(a) 63.119(b)(1) exempt	Y	
	IFR Rim Seals: vapor-mounted primary seal: liquid-mounted primary seal: mechanical-shoe primary seal:	63.646(a) 63.119(b)(3)(i) – (3)(iii) OK w/rim-mounted secondary OK alone OK alone	Y	
	Must IFR vapor-mounted rim seals be continuous?	63.646(a) 63.119(b)(3)(iii) required	Y	
63.646(a) 63.120(a)	Tank Top Visual Inspections (of IFR/CFR from manways and hatches of the fixed roof):	63.646(a) & 63.120(a) annually after initial fill or compliance	Y	
	IFR/CFR Internal Inspections: (up close visual inspection of the floating roof, seals, & fittings):	63.646(a) & 63.120(a) at least every 10 years, including each emptying/degassing	Y	
	Notification of Inspections: Are notifications of inspections to demonstrate initial compliance required, For IFR/CFR internal inspections:	63.646(a) 63.120(a)(2)(ii) & (3) internal inspection not required for initial compliance	Y	
	OPTION: Does this rule allow an internal inspection every 5 years to replace both inspections noted above, if the IFR/CFR is equipped with a sec. Seal?	63.646(a) 63.120(a)(3)(i) yes	Y	
	Is there to be no liquid on the internal floating roof?	63.646(a) 63.120(a)(4) required	Y	
	Are there to be no IFR rim seal gaps that are visible from the tank top?	63.646(a) 63.120(a)(4) required	Y	
	Shall there be no holes, tears, or openings in the IFR seals?	63.646(a) 63.120(a)(4) & (7) required	Y	
	IFRT/CFRT REPAIRS: Time allowed for repair of defects found during in-service inspections:	63.646(a) 63.120(a)(4) make repairs within 45 days	Y	
	IFRT/CFRT REPAIRS: If unable to repair, empty the tank & remove from service?	63.646(a) 63.120(a)(4) yes, within 45 days	Y	

# Table IV.F.1.14 Tanks Source-specific Applicable Requirements

## **Internal Floating Roof Tanks Cluster 27**

Applicable Requirement	Regulation Title or De	escription of Requirement	Federally Enforceable (Y/N)	Future Effective Date
	EXTENSIONS OF TIME: If defects cannot be repaired & the IFRT/CFRT cannot be emptied within 45 days?	63.646(a) 63.120(a)(4) up to 2 extensions of 30 days each, if needed	Y	
	IFRT/CFRT REPAIRS: Repair of defects if the tank is empty?	63.646(a) 63.120(a)(7) prior to refilling	Y	
63.646(c)	IFR well covers to be gasketed?	63.646(c) not required at existing sources	Y	
	IFR vents to be gasketed?	63.646(c) not required at existing sources	Y	
	IFR deck openings other than for vents to project into liquid?	63.646(c) not required at existing sources	Y	
	IFR access hatch & gauge float well covers to be bolted closed?	63.646(c) not required at existing sources	Y	
	IFR guidepole & column wells allowed a flexible-fabric sleeve seal or a gasketed cover?	63.646(c) not applicable at existing sources	Y	
	IFRT unslotted guidepoles to have a gasketed cap at the top of the pole?	63.646(c) not required at existing sources	Y	
	IFRT slotted guidepoles to have a deck cover gasket and pole wiper, and either an internal float or a pole sleeve?	63.646(c) not required at existing sources	Y	
63.646(f)	Deck openings (wells) other than for vents, drains, or legs to have covers that are kept closed except for access?	63.646(f)(1) required	Y	
	IFR rim space vents to remain closed except when the pressure setting is exceeded?	63.646(f)(2) required	Y	
	IFR Auto. Bleeder vent (vacuum breaker) to be closed except when the deck is landed?	63.646(f)(3) required	Y	
63.646(i) 63.652(b)	Implementation Plan:	63.646(i) & 63.652(b) not required	Y	
63.646(l) 63.654(h)	Notification of Inspections: Is the State or local authority allowed to waive the notification requirements?	63.646(l) 63.654(h)(2)(i)(c)&(ii) yes	Y	
63.654(f)	Report (document) having initially achieved compliance?	63.654(f) later of next Periodic Report after achieving compliance or 1/15/99	Y	

# Table IV.F.1.14 Tanks Source-specific Applicable Requirements

## **Internal Floating Roof Tanks Cluster 27**

Applicable Requirement	Regulation Title or De	escription of Requirement	Federally Enforceable (Y/N)	Future Effective Date
	Notification of Compliance Status report:	63.654(f) later of next Periodic Report after compliance or January 15, 1999	Y	
	Report determination of applicability for other individual tanks (i.e., for MACT rules, whether Group1 or Group2)?	63.654(f)(1)(i)(A) with initial Notification of Compliance Status; Jan. 15, 1999	Y	
	IFRT/CFRT report to include:	63.654(f)(1)(i)(A) Group determinations, actual or anticipated date of compliance; if already in compliance, description of controls	Y	
63.654(g)	Report of periodic inspections, etc. AFTER documenting initial compliance?	63.654(g) begin Sept 13, 1999, then semiannual	Y	
	Periodic Reports: Report of IFR/CFR inspections that find out-of-compliance?	63.654(g)(2) – (4) required within 60 days after each semiannual period	Y	
	Periodic Reports: Report of IFR/CFR inspection failures to include:	63.654(g)(2) - (4) date of inspection, internal diameter of tank, description of failure, & date of repair or emptying	Y	
	Periodic Reports: IFR/CFR report to include prior request for 30-day extension, w/ documentation of need?	63.654(g)(2) – (4) prior request is not required	Y	
	Periodic Reports: Additional information to be included if an extension is utilized for an IFR/CFR:	63.654(g)(2)(i) 63.654(g)(3)(ii) document the reason for the extension	Y	
63.654(h) 63.646(a) 63.120(a)	Notification of Inspections: Is 30-day notice required for internal inspections of IFRTs (i.e., prior to filling or refilling); but a 7-day verbal notice acceptable if the event is unplanned?	63.654(h)(2)(i) 63.646(a) 63.120(a)(5)&(6) required	Y	
	Report applicability for varying-use tanks?	63.654(h)(6)(ii) with the initial NOC Status report	Y	
	Other (initial) Reports: Report applicability for varying-use tanks?	63.654(h)(6)(ii) required with the initial Notification of Compliance Status report	Y	
63.654(i) 63.123(a)	Applicability records: Time period for keeping records of applicability determination, unless specified otherwise.	63.654(i)(1) 63.123(a) keep record readily accessible for the service life of the tank	Y	

# Table IV.F.1.14 Tanks Source-specific Applicable Requirements

## **Internal Floating Roof Tanks Cluster 27**

#### S-1289, S-1645

Applicable Requirement	Regulation Title or D	escription of Requirement	Federally Enforceable (Y/N)	Future Effective Date
63.654(i) 63.646(a) 63.119(a) 63.123(a)	Applicability records: Records of dimensions & capacity required for nonexempt tanks?	63.654(i)(1) 63.646(a)&63.119(a)(3) 63.123(a) required keep record readily accessible for service life of the tank	Y	
63.654(i) 63.123(c) 63.654(d) 63.123(e)	Record keeping for inspections: keep inspection reports as specified	63.654(i)(1) 63.123(c) – (e) all inspections	Y	
	Records of IFR & CFR inspection reports:	63.654(i)(1) 63.123(c) & (e) all inspections	Y	
63.654(i) 63.123 (g)	Record keeping for delayed repairs: When utilizing a delay of repair provision, keep documentation of the reason for the delay.	63.654(i)(1) 63.123 (g) required	Y	
	Applicability records: Additional recordkeeping requirements for certain tanks.	63.654(i)(1)(iv) determination of HAP content keep record readily accessible for service life of the tank	Y	
Condition #21307	Applies to S-1645			
Condition #18137	Throughput limits		N	

#### Table IV.G.1.1 Tanks (Treatment Unit Cluster 10)

# Table IV.G.1.1 Wastewater Source-specific Applicable Requirements

#### **Treatment Unit Cluster 10**

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
BAAQMD Regulation 11 Rule 12	Hazardous Pollutants – National Emission Standards for Benzene Emissions from Benzene Transfer Operations and Benzene Waste Operations (7/18/90, refer to NESHAP Subpart FF below)	N	
40 CFR 63 Subpart CC Refinery MACT	NESHAP for Petroleum Refineries (6/23/03) REQUIREMENTS FOR WASTEWATER STREA	MS	

# Table IV.G.1.1 Wastewater Source-specific Applicable Requirements

## **Treatment Unit Cluster 10**

Applicable Requirement	Regulation Title or De	escription of Requirement	Federally Enforceable (Y/N)	Future Effective Date
63.641	What is a Refinery MACT Group 1 wastewater stream?	63.641 if Total Annual Benzene $\geq 10$ Mg/yr, then each wastewater stream with flow rate $\geq 0.02$ liters/min and_benzene concentration $\geq 10$ ppmw and not exempt from controls under 61 Subpart FF	Y	
63.647	What does Refinery MACT require for Group 1 wastewater streams?	63.647(a) comply with 61 Subpart FF (below)	Y	
	Which definitions govern?	63.647(b) the definitions in Refinery MACT supercede those in 61 Subpart FF	Y	
	Clarification with respect to violations	63.647(c) a monitoring excursion, a failure to perform a leak inspection, or a failure to repair a leak shall constitute a violation	Y	
63.654	Which recordkeeping and reporting requirements govern?	63.654(a) recordkeeping and reporting shall be per 61 Subpart FF	Y	
NESHAP 40 CFR part 61 Subpart FF	E REQUIR	Benzene Waste Operations (12/04/03) EMENTS FOR TREATMENT PROCES	SES	
61.349	Must the closed vent system operate with no detectable emissions (< 500 ppmw)?	61.349(a)(1)(i) required	Y	
	How is leak-tightness of the closed vent system inspected?	61.349(a)(1)(i) initially & annually, per Method 21	Y	
	Must all gauging & sampling devices be gas-tight, and closed except when in use?	61.349(a)(1)(iii) required	Y	
	Must pressure-relief devices be closed and sealed during normal operations?	61.349(a)(1)(iv) required	Y	
	What is required if the control device is an enclosed combustion unit?	$\begin{array}{l} 61.349(a)(2)(i)\\ reduce Total Organic Compounds \geq 95\%\\ \underline{or} Total Organic Compound conc. \leq 20\\ ppmv or minimum residence time & temperature of 0.5 sec at 760°C \end{array}$	Y	
	What is required if the control device is a vapor recovery unit?	61.349(a)(2)(ii) reduce Total Organic Compounds $\ge 95\%$ or benzene $\ge 98\%$	Y	

# Table IV.G.1.1 Wastewater Source-specific Applicable Requirements

## **Treatment Unit Cluster 10**

Applicable Requirement	Regulation Title or Do	escription of Requirement	Federally Enforceable (Y/N)	Future Effective Date
	Must the closed vent system & control device operate at all times when waste is in the WMU?	61.349(b) required, except when maintenance/repair of the Waste Management Unit requires shutdown of the control device	Y	
	What is required to demonstrate compliance of a control device that is not a flare?	61.349(c) either engineering calculations or performance tests	Y	
	Can performance tests be required for control devices?	61.349(e) perform performance tests of the control device upon the request of the Administrator	Y	
	What visual inspections are required for the closed vent system and control device?	61.349(f) inspect initially & annually for visible defects	Y	
	If defects are found during an inspection, how quickly must they be repaired?	61.349(g) first attempt within 5 days, final repair within 15 days; unless delay allowed per 61.350	Y	
	Must control devices be monitored?	61.349(h) required, per 61.354(c)	Y	
61.354	What monitoring is required for the waste streams exiting the treatment process?	61.354(a) monthly sampling to measure the exiting benzene concentration or continuous parametric monitoring; except for streams controlled under certain other rules per 61.348(d)	Y	
	Is monitoring required for control devices?	61.354(c) daily inspect the continuous monitoring devices specified herein, except as specified in 61.354(d) & (e)	Y	
61.355	How is the total annual benzene quantity from facility waste (Total Annual Benzene) determined?	61.355(a) – (c) as specified herein	Y	
	Procedure for performance testing of treatment processes	61.355(e) for 61.348(a)(1)(ii) to demonstrate compliance w/ 99% benzene removal	Y	
	Procedure for performance testing of treatment processes	61.355(f) for 61.348(a)(1)(iii) to demonstrate compliance with 99% benzene destruction by combustion	Y	
	Procedure for performance testing of a wastewater treatment system	61.355(g) for 61.348(b) to demonstrate compliance with requirements for combined waste streams	Y	

# Table IV.G.1.1 Wastewater Source-specific Applicable Requirements

## **Treatment Unit Cluster 10**

Applicable Requirement	Regulation Title or De	escription of Requirement	Federally Enforceable (Y/N)	Future Effective Date
	Procedure for determining specified benzene quantity (Benzene Quantity)	61.355(k) for 61.342(e) to demonstrate compliance w/ benzene mass limit	Y	
61.356	How long are records to be kept?	61.356(a) keep all records	Y	
	Are records required for each waste stream, whether controlled or not?	61.356(b) required, identifying whether controlled	Y	
	Are records required for units exempt from controls due to low concentration of pollutants?	61.356(b)(1) required	Y	
	Are records required for other waste streams that may be exempt from treatment and controls on the basis of low flow rate or other mass limits?	61.356(b)(1), b(4) – (6) required, including Benzene Quantity determination and other characteristics to document exemptions from controls	Y	
	Are records required for wastes shipped off-site for treatment?	61.356(c) for 61.342(f) required	Y	
	Are records required for the design of the control equipment (e.g., control devices, floating roofs, etc.)?	61.356(d) for 61.343 – 61.347 required, keep for the life of the equipment	Y	
	Are records required documenting the performance of treatment processes?	61.356(e) for 61.348 required, keep for the life of the Waste Management Unit	Y	
	Are records required documenting the performance of control devices?	61.356(f) for 61.349 required, keep for the life of the control device	Y	
	Are records required for visual inspections and repairs?	61.356(g) for 61.343 – 61.347 required only when defects are found	Y	
	Are records required for Method 21 leak inspections and repairs?	61.356(h) for 61.343 – .347, 61.349 required for each inspection	Y	
	Are records of startup/shutdown and monitoring data required for WMUs?	61.356(i) for 61.348 required for each Waste Management Unit used to meet benzene treatment requirements	Y	
	Are records of startup/shutdown and monitoring data required for control devices?	61.356(j) for 61.349 required	Y	
	Are records of monitoring data required for systems maintained under negative pressure?	61.356(m) for 61.343 – 61.347 required	Y	

# Table IV.G.1.1 Wastewater Source-specific Applicable Requirements

## **Treatment Unit Cluster 10**

Applicable Requirement	Regulation Title or	Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
Condition #4650	Permit conditions as follows:			
Part 5	Applies to S-3200/A-3200	A3200 minimum temp of 1000 F with continuous temperature monitoring		
Part 6	Applies to S-3200/A-3200	A-3200 vent gas to be vented into flame zone at all times		
Part 7	Applies to S-3200/A-3200	S-3200 continuous flow monitor/recorder		
Part 8	Applies to S-3200/A-3200	S-3200 continuous pressure monitor/recorder		
Part 9	Applies to S-3200/A-3200	S-3200 pump concentration limit 100 ppm	Y	
Part 10	Applies to S-3200/A-3200	Pump seals with water seal flush systems as specified	Y	
Part 11	Applies to S-3200/A-3200	S-3200 quarterly inspection and maintenance pumps and valves	Y	
Part 12	Applies to S-3200/A-3200	S-3200 maintain records	Y	
Part 13	Applies to S-3200/A-3200	S-3200 initial source test	Y	
Part 14	Applies to S-3200/A-3200	S-3200 source test requirement	Y	
Part 15	Applies to S-3200/A-3200	S-3200 source test acceptance	Y	
Part 16	Applies to S-3200/A-3200 and S- 3192	keepings-3200 fugitive count- final	Y	
Condition #18137	Throughput limits		Ν	

## Table IV.G.1.2 Wastewater (Process Drains Cluster 20d)

# Table IV.G.1.2 Wastewater Source-specific Applicable Requirements

## **Process Drains Cluster 20d**

## **Process Drains Not Subject to QQQ**

Applicable Requirement	Regulation Title or Description of Requirement		Federally Enforceable (Y/N)	Future Effective Date
BAAQMD Regulation 8 Rule 8	Organic Compounds-WASTEV	WATER COLLECTION AND SEPARAT	ION SYSTEMS	(9/15/04)
8-8-112	Exemption, Wastewater Critical Organic Compound Concentration Or Temperature		Ν	
8-8-308	Standards for Junction Box		Y	
8-8-312	Controlled Wastewater Collection Syste	m Components at Petroleum Refineries	Ν	
8-8-313	Uncontrolled wastewater collection syst comply with 8-8-313.1 or 8-8-313.2.	em components at petroleum refineries;	Ν	
8-8-313.1	Uncontrolled Wastewater Collection System Components at Petroleum Refineries; Equip each uncontrolled wastewater collection system component with water seal or equivalent, minimize any uncontrolled collection system component that is not vapor tight.		N	
8-8-313.2	Uncontrolled Wastewater Collection System Components at Petroleum Refineries; Inspection and Maintenance Plan Option		N	
8-8-314	New Wastewater Collection System Components at Petroleum Refineries; equip new components with water seal or equivalent control		Ν	
8-8-501	API Separator or Air Flotation Bypassed	1 Wastewater Records	Ν	
8-8-502	Wastewater Critical Organic Compound	Concentration Or Temperature Records	Ν	
8-8-505	Records for Wastewater Collection Syst	em Components at Petroleum Refineries	Ν	
SIP				
BAAQMD Regulation 8 Rule 8	Organic Compounds-V	WASTEWATER (OIL-WATER) SEPARA	ATORS (6/15/94	)
8-8-112 8-8- 210 8-8-502	Exemption from controls for low concentration of pollutants (records are required)	112, 210 & 502 junction boxes, oil-water separators, DAFs, and any channel, pond, trench or basin between the oil-water separator and the DAF are exempt from controls [but records are required] if < 1.0 ppmv critical organic compound concentration (as defined at 8-8-210) [this exemption does not apply to sludge dewatering units or to slop oil vessels]	Y	

# Table IV.G.1.2 Wastewater Source-specific Applicable Requirements

### Process Drains Cluster 20d

### **Process Drains Not Subject to QQQ**

Applicable Requirement	Regulation Title or De	escription of Requirement	Federally Enforceable (Y/N)	Future Effective Date
	Exemption from controls for low wastewater temperature (records are required)	112, 210 & 502 junction boxes, oil-water separators, DAFs, and any channel, pond, trench or basin between the oil-water separator and the DAF are exempt from controls [but records are required] if temperature of influent wastewater < 20 C (68 F) [this exemption does not apply to sludge dewatering units or to slop oil vessels]	Y	
8-8-501 8-8- 502	How long are records to be kept?	501 & 502 keep all records	Y	
	Are records required for units exempt from controls due to low concentration of pollutants?	502 for 112 required	Y	
	Are records required for units exempt from controls due to low temperature of the influent wastewater?	502 for 112 required	Y	
8-8-308	Standards for Junction Boxes Any junction box equipped with solid, gasketed fixed cover, or a solid manhole cover. Openings are allowed if the total open area is below 12.6 in2, and vent pipes at least 3 ft in length		Y	
BAAQMD Regulation 11 Rule 12	Hazardous Pollutants – National Emis from Benzene Transfer Operations an refer to NESHAP Subpart FF below)	ssion Standards for Benzene Emissions d Benzene Waste Operations (7/18/90,	N	
40 cfr 63 subpart cc Refinery MACT	NES REQUIR	HAP for Petroleum Refineries (6/23/03) EMENTS FOR WASTEWATER STREA	MS	
63.641	What is a Refinery MACT Group 1 wastewater stream?	$\begin{array}{l} 63.641 \\ \text{if Total Annual Benzene} \geq 10 \text{ Mg/yr}, \text{ then} \\ \text{each wastewater stream with flow rate} \geq \\ 0.02 \text{ liters/min and benzene concentration} \\ \geq 10 \text{ ppmw and not exempt from controls} \\ \text{under 61 Subpart FF} \end{array}$	Y	
63.647	What does Refinery MACT require for Group 1 wastewater streams?	63.647(a) comply with 61 Subpart FF (below)	Y	
	Which definitions govern?	63.647(b) the definitions in Refinery MACT supercede those in 61 Subpart FF	Y	

# Table IV.G.1.2 Wastewater Source-specific Applicable Requirements

#### Process Drains Cluster 20d

#### **Process Drains Not Subject to QQQ**

Applicable Requirement	Regulation Title or Description of Requirement		Federally Enforceable (Y/N)	Future Effective Date
	Clarification with respect to violations	63.647(c) a monitoring excursion, a failure to perform a leak inspection, or a failure to repair a leak shall constitute a violation	Y	
63.654	Which recordkeeping and reporting requirements govern?	63.654(a) recordkeeping and reporting shall be per 61 Subpart FF	Y	
NESHAP 40 CFR 61 Subpart FF	Benzene Waste Operations INDIVIDUAL DRAIN SYSTEMS exempt FROM CONTROLS There are no 61 Subpart FF requirements related to control of air emissions for WMUs that are exempt from controls. [There are record keeping, reporting, and in some cases monitoring requirements for the waste stream(s) received by this WMU, but these requirements are addressed within the scope of Cluster 10 – Treatment Processes.]		Y	

 Table IV.G.1.3 Wastewater (Process Drains Cluster 20q)

## Table IV.G.1.3 Wastewater

## Source-specific Applicable Requirements

#### **Process Drains Cluster 20q**

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
BAAQMD Regulation 8 Rule 8	Organic Compounds–WASTEWATER COLLECTION AND SEPARATION S	YSTEMS (9/15/(	)4)
8-8-112	Exemption, Wastewater Critical Organic Compound Concentration Or Temperature	Ν	
8-8-308	Standards for Junction Box	Y	
8-8-312	Controlled Wastewater Collection System Components at Petroleum Refineries	N	
8-8-313	Uncontrolled wastewater collection system components at petroleum refineries; comply with 8-8-313.1 or 8-8-313.2.	N	

# Table IV.G.1.3 Wastewater Source-specific Applicable Requirements

## **Process Drains Cluster 20q**

Applicable Requirement	Regulation Title or Description of Rec	juirement	Federally Enforceable (Y/N)	Future Effective Date
8-8-313.1	Uncontrolled Wastewater Collection System Co Equip each uncontrolled wastewater collection s equivalent, minimize any uncontrolled collectio vapor tight.	omponents at Petroleum Refineries; system component with water seal or n system component that is not	Ν	
8-8-313.2	Uncontrolled Wastewater Collection System Co Inspection and Maintenance Plan Option	omponents at Petroleum Refineries;	N	
8-8-314	New Wastewater Collection System Componen new components with water seal or equivalent c	ts at Petroleum Refineries; equip control	N	
8-8-501	API Separator or Air Flotation Bypassed Waste	water Records	Ν	
8-8-502	Wastewater Critical Organic Compound Concer	ntration Or Temperature Records	Ν	
8-8-505	Records for Wastewater Collection System Con	nponents at Petroleum Refineries	Ν	
SIP BAAQMD Regulation 8 Rule 8	Organic Compounds-WASTEWATER (OIL-WATER) SEPARATORS (6/15/94)			
8-8-112 8-8- 210 8-8-502	Exemption from controls for low concentration of pollutants (records are required)	112, 210 & 502 junction boxes, oil-water separators, DAFs, and any channel, pond, trench or basin between the oil-water separator and the DAF are exempt from controls [but records are required] if < 1.0 ppmv critical organic compound concentration (as defined at 8-8- 210) [this exemption does not apply to sludge dewatering units or to slop oil vessels]	Y	
	Exemption from controls for low wastewater temperature (records are required)	112, 210 & 502 junction boxes, oil-water separators, DAFs, and any channel, pond, trench or basin between the oil-water separator and the DAF are exempt from controls [but records are required] if temperature of influent wastewater < 20 C (68 F) [this exemption does not apply to sludge dewatering units or to slop oil vessels]	Y	
8-8-501 8-8- 502	How long are records to be kept?	501 & 502 Keep all records	Y	
	Are records required for units exempt from controls due to low concentration of pollutants?	502 for 112 required	Y	

# Table IV.G.1.3 Wastewater Source-specific Applicable Requirements

### **Process Drains Cluster 20q**

Applicable Requirement	Regulation Title or Description of Req	uirement	Federally Enforceable (Y/N)	Future Effective Date
	Are records required for units exempt from controls due to low temperature of the influent wastewater?	502 for 112 required	Y	
8-8-308	Standards for Junction Boxes		Y	
	Any junction box equipped with solid, gasketed fixed cover, or a solid manhole cover. Openings are allowed if the total open area is below 12.6 in2, and vent pipes at least 3 ft in length			
BAAQMD Regulation 10	Standards of Performance for New Stationary Sources (2/16/00, refer to NSPS Subpart QQQ below)		Y	
BAAQMD Regulation 11 Rule 12	Hazardous Pollutants – National Emission St from Benzene Transfer Operations and Benz refer to NESHAP Subpart FF below)	Ν		
40 cfr 63 subpart cc Refinery MACT	NESHAP fo REQUIREMENT	r Petroleum Refineries (6/23/03) IS FOR WASTEWATER STREAN	MS	
63.641	What is a Refinery MACT Group 1 wastewater stream?	$\begin{array}{l} 63.641\\ \text{if Total Annual Benzene} \geq 10\\ \text{Mg/yr, then each wastewater}\\ \text{stream with flow rate} \geq 0.02\\ \text{liters/min and benzene}\\ \text{concentration} \geq 10 \text{ ppmw and not}\\ \text{exempt from controls under 61}\\ \text{Subpart FF} \end{array}$	Y	
63.647	What does Refinery MACT require for Group 1 wastewater streams?	63.647(a) comply with 61 Subpart FF (below)	Y	
	Which definitions govern?	63.647(b) the definitions in Refinery MACT supercede those in 61 Subpart FF	Y	
	Clarification with respect to violations	63.647(c) a monitoring excursion, a failure to perform a leak inspection, or a failure to repair a leak shall constitute a violation	Y	
63.654	Which recordkeeping and reporting requirements govern?	63.654(a) recordkeeping and reporting shall be per 61 Subpart FF	Y	

# Table IV.G.1.3 Wastewater Source-specific Applicable Requirements

## **Process Drains Cluster 20q**

Applicable Requirement	Regulation Title or Description of Re	quirement	Federally Enforceable (Y/N)	Future Effective Date
NESHAP Subpart FF	Benzene Waste Operations INDIVIDUAL DRAIN SYSTEMS exempt FROM CONTROLS There are no 61 Subpart FF requirements related to control of air emissions for WMUs that are exempt from controls. [There are record keeping, reporting, and in some cases monitoring requirements for the waste stream(s) received by this WMU, but these requirements are addressed within the scope of Cluster 10 – Treatment Processes.]		Y	
NSPS 40 CFR 60 Subpart QQQ	Petroleun REQUIREMENTS FOI Requirements shown are for compliance	<b>5(10/17/00)</b> ompliance with 60	).693-1.	
60.692-1	Where are the requirements for controlling air emissions specified?	60.692-1(a) affected facilities shall comply with the specified control requirements or alternatives [specified in 60.692-1 to 60.692-5 and 60.693-1 to 60.693-2]	Y	
	When is this type of WMU subject to these requirements?	60.692-1(a) At all times except during startup, shutdown, or malfunction	Y	
	How is compliance determined?	60.692-1(b) compliance will be determined by review of records, reports, test results, & inspections	Y	
60.692-2	What are the requirements of the alternative?	60.692-2 Drains must have a water seal; Junction Boxes must be covered & any vent pipe $\geq 3$ ft long & $\leq 4$ in. diameter; and Sewer Lines must be covered or enclosed; and all are subject to visual inspections initially and at specified intervals thereafter, with first efforts at repair within 15 days, except drains within 24 hr	Y	
60.692-6	When is a delay of repair allowed, and when must the delayed repair be complete?	60.692-6 Delay of repair is allowed if repair is technically impossible without a shutdown; repair to be complete by the end of the next shutdown [records required per 60.697(e)]	Y	

# Table IV.G.1.3 Wastewater Source-specific Applicable Requirements

### **Process Drains Cluster 20q**

Applicable Requirement	Regulation Title or Description of Requirement		Federally Enforceable (Y/N)	Future Effective Date
60.692-7	When must facilities achieve compliance?	60.692-7 & 60.14(g)	Y	
		Up to 180 days after modifications, unless delayed to avoid shutdown (otherwise prior to initial startup)		
60.696	What initial inspections are required?	60.696(a) visually inspect prior to initial use	Y	
60.697	How long are records to be kept?	60.697(a) keep all records	Y	
	Are records required for visual inspections and repairs?	60.697(b) & (g) required only when defects are found	Y	
	Are records required for delay of repair?	60.697(e) required, with signature	Y	
	Are records required for the design of the control equipment (e.g., control devices, floating roofs, etc.)?	60.697(f) required, keep for the life of the equipment	Y	
60.698	Is an initial facility status report required?	60.698(b) required, within 60 days after startup	Y	
	What additional reports are required for facilities subject to controls?	60.698(b) & (c) semiannual certification that all inspections have been performed, with documentation of corrective actions and monitoring excursions	Y	
	What additional reports are required for facilities subject to controls?	60.698(e) notification & documentation, if compliance is delayed per 60.692- 7	Y	

### Table IV.G.1.4 Wastewater (Separator Cluster 30c)

# Table IV.G.1.4 Wastewater Source-specific Applicable Requirements

## Separator Cluster 30c

## S-4148 #13 Separator, S-4413 #2A Separator, S-4414 #1A Separator, (S-6250 in Table IV.G.1.8)

Applicable Requirement	Regulation Title or De	scription of Requirement	Federally Enforceable (Y/N)	Future Effective Date
SIP BAAQMD Regulation 8 Rule 8	Organic Compounds–WASTEWATER (OIL-WATER) SEPARATORS REQUIREMENTS FOR OIL-WATER SEPARATORS (6/15/94)			
8-8-114 8-8- 501	Wastewater stream allowed to bypass treatment	114 & 501 wastewater is allowed to bypass the oil- water separator & DAF on days that are not ozone excess days [but records are required]	Y	
8-8-302	Are there conditions for which vapors are not required to be routed to a control device?	302.4 if equipped with a fixed cover that meets certain criteria, then routing to a control device is not required	Y	
	What is required for WMUs not routed to a control device?	302.4 if capacity is $\geq$ 300 gal/min then routing to a control device is not required if the fixed cover has no leaks > 1,000 ppm, subject to semiannual inspections	Y	
8-8-303	Install, operate, and maintain a cover over the WMU.	303 required	Y	
	The cover and all openings to operate with no detectable emissions (< 500 ppmv)?	303 required	Y	
	Each opening to be kept closed, gasketed, & latched at all times that waste is present within, except when the opening is in use?	303 required	Y	
	Must all gauging & sampling devices be gas-tight, and closed except when in use?	303 required	Y	
8-8-313	Uncontrolled wastewater collection system components at petroleum refineries		Ν	
8-8-501	Are records required for bypassed wastewater?	501 for 114 required	Y	
8-8-501	How long are records to be kept?	501 keep all records	Y	
8-8-503	Are records required for visual inspections and repairs?	503 required for each inspection	Y	

# Table IV.G.1.4 Wastewater Source-specific Applicable Requirements

### Separator Cluster 30c

## S-4148 #13 Separator, S-4413 #2A Separator, S-4414 #1A Separator, (S-6250 in Table IV.G.1.8)

Applicable Requirement	Regulation Title or D	escription of Requirement	Federally Enforceable (Y/N)	Future Effective Date
	Are records required for Method 21 leal inspections and repairs?	k 503 required for each inspection	Y	
8-8-504 8-8- 603	Procedure for detecting emissions	504 & 603 per Method 21	Y	
8-8-602	What is required to demonstrate compliance of a control device that is not a flare?	602 measurement of emissions	Y	
	Can performance tests be required for control devices?	602 frequency of testing is not specified	Y	
8-8-603 8-8- 504	Demonstrate no detectable emissions using Method 21?	603 & 504 required	Y	
BAAQMD Regulation 8 Rule 8	Organic Compour REQUIREME	nds-WASTEWATER (OIL-WATER) SEI ENTS FOR OIL-WATER SEPARATORS	PARATORS (9/15/04)	
8-8-114	Exemption, Bypassed Oil-Water Separa	Exemption, Bypassed Oil-Water Separator or Air flotation Influent		
8-8-301	Standards for Wastewater Separators Greater than 760 Liters per Day and Smaller than 18.9 Liters per Second		Y	
8-8-302.3	Standards for Wastewater Separators Larger than or Equal to 18.9 Liters per Second: A vapor-tight fixed cover with organic compound vapor recovery, or system that has combined collection & destruction efficiency of at least 95%, by weight. Inspection/access hatches shall be closed except for inspection, maintenance, or wastewater sampling.		Y	
8-8-302.6	Standards for Wastewater Separators Larger than or Equal to 18.9 Liters per Second: Roof seals, fixed covers, access doors and other openings shall be inspected initially and semiannually thereafter to ensure that they are vapor tight. Non vapor tight leaks shall be minimized within 24 hours and repaired within 7 days.		N	
8-8-303	Gauging and Sampling Devices		Y	
8-8-312	Controlled Wastewater Collection Syste	em Components at Petroleum Refineries	Ν	
8-8-313	Uncontrolled wastewater collection syst comply with 8-8-313.1 or 8-8-313.2.	tem components at petroleum refineries;	Ν	
8-8-313.1	Uncontrolled Wastewater Collection System Components at Petroleum Refineries; Equip each uncontrolled wastewater collection system component with water seal or equivalent, minimize any uncontrolled collection system component that is not vapor tight.		N	
8-8-313.2	Uncontrolled Wastewater Collection Sy Inspection and Maintenance Plan Option	stem Components at Petroleum Refineries; n	N	
8-8-314	New Wastewater Collection System Co new components with water seal or equ	mponents at Petroleum Refineries; equip ivalent control	Ν	
8-8-501	API Separator or Air Flotation Bypasse	d Wastewater Records	Ν	

# Table IV.G.1.4 Wastewater Source-specific Applicable Requirements

### Separator Cluster 30c

## S-4148 #13 Separator, S-4413 #2A Separator, S-4414 #1A Separator, (S-6250 in Table IV.G.1.8)

Applicable Requirement	Regulation Title or D	escription of Requirement	Federally Enforceable (Y/N)	Future Effective Date
8-8-503	Inspection and Repair Records		Y	
8-8-504	Portable Hydrocarbon Detector		Y	
8-8-505	Records for Wastewater Collection Systematics	tem Components at Petroleum Refineries	Ν	
8-8-602	Determination of Emissions		Ν	
8-8-603	Inspection Procedures		Ν	
BAAQMD Regulation 11 Rule 12	Hazardous Pollutants – National Emission Standards for Benzene Emissions from Benzene Transfer Operations and Benzene Waste Operations (7/18/90, refer to NESHAP Subpart FF below)		N	
40 cfr 63 subpart cc Refinery MACT	NES REQUIR	MS		
63.641	What is a Refinery MACT Group 1 wastewater stream?	$\begin{array}{l} 63.641\\ \text{if Total Annual Benzene} \geq 10 \text{ Mg/yr, then}\\ \text{each wastewater stream with flow rate} \geq \\ 0.02 \text{ liters/min } \underline{\text{and}} \text{ benzene concentration}\\ \geq 10 \text{ ppmw } \underline{\text{and}} \text{ not exempt from controls}\\ \text{under 61 Subpart FF} \end{array}$	Y	
63.647	What does Refinery MACT require for Group 1 wastewater streams?	63.647(a) comply with 61 Subpart FF (below)	Y	
	Which definitions govern?	63.647(b) the definitions in Refinery MACT supercede those in 61 Subpart FF	Y	
	Clarification with respect to violations	63.647(c) a monitoring excursion, a failure to perform a leak inspection, or a failure to repair a leak shall constitute a violation	Y	
63.654	Which recordkeeping and reporting requirements govern?	63.654(a) recordkeeping and reporting shall be per 61 Subpart FF	Y	
NESHAP 40 CFR 61 Subpart FF	Benzene Waste Operations (12/04/03) OIL-WATER SEPARATORS EXEMPT FROM CONTROLS There are no 61 Subpart FF requirements related to control of air emissions for WMUs that are exempt from controls. [There are record keeping, reporting, and in some cases monitoring requirements for the waste stream(s) received by this WMU, but these requirements are addressed within the scope of Cluster 10 – Treatment Processes.]			
Condition #18137	Applies to S-4148, S-4413, S-4414		Ν	
Condition 24085	Applies to S-4148 and A-32105		Ν	

## Table IV.G.1.5 Wastewater (Non-EFRT or IFRT Tanks Cluster 40b) Table IV.G.1.5 Wastewater Source-specific Applicable Requirements

#### Non-EFRT or IFRT Tanks Cluster 40b S-3229

Applicable Requirement	Regulation Title or De	escription of Requirement	Federally Enforceable (Y/N)	Future Effective Date
BAAQMD Regulation 8 Rule 8	Organic Compounds-WASTEWATE	rganic Compounds–WASTEWATER COLLECTION AND SEPARATION		
8-8-112	Exemption, Wastewater Critical Organic	c Compound Concentration Or Temperature	Ν	
8-8-114	Exemption, Bypassed Oil-Water Separa	tor or Air flotation Influent	Y	
8-8-501	API Separator or Air Flotation Bypassed	d Wastewater Records	N	
8-8-502	Wastewater Critical Organic Compound	Concentration Or Temperature Records	N	
SIP				
BAAQMD Regulation 8 Rule 8	Organic Compounds-	WASTEWATER (OIL-WATER) SEPARA	ATORS(6/15/94	4)
8-8-112	Exemption, Wastewater Critical Organic Compound Concentration And/Or Temperature		Y	
8-8-501	API Separator or Air Flotation Bypassed	d Wastewater Records	Y	
8-8-502	Wastewater Critical Organic Compound Concentration And/Or Temperature Records		Y	
BAAQMD Regulation 11 Rule 12	Hazardous Pollutants – National Emission Standards for Benzene Emissions from Benzene Transfer Operations and Benzene Waste Operations (7/18/90, refer to NESHAP Subpart FF below)		N	
40 CFR 63 subpart cc Refinery MACT	NESHAP for Petroleum Refineries (6/23/03) REQUIREMENTS FOR WASTEWATER STREAMS			
63.641	What is a Refinery MACT Group 1 wastewater stream?	$\begin{array}{l} 63.641\\ \text{if Total Annual Benzene} \geq 10 \text{ Mg/yr, then}\\ \text{each wastewater stream with flow rate} \geq \\ 0.02 \text{ liters/min and_benzene concentration}\\ \geq 10 \text{ ppmw and_not exempt from controls}\\ \text{under 61 Subpart FF} \end{array}$	Y	
63.647	What does Refinery MACT require for Group 1 wastewater streams?	63.647(a) comply with 61 Subpart FF (below)	Y	
	Which definitions govern?	63.647(b) the definitions in Refinery MACT supercede those in 61 Subpart FF	Y	

# Table IV.G.1.5 Wastewater Source-specific Applicable Requirements

### Non-EFRT or IFRT Tanks Cluster 40b S-3229

Applicable Requirement	Regulation Title or De	escription of Requirement	Federally Enforceable (Y/N)	Future Effective Date
	Clarification with respect to violations	63.647(c) a monitoring excursion, a failure to perform a leak inspection, or a failure to repair a leak shall constitute a violation	Y	
63.654	Which recordkeeping and reporting requirements govern?	63.654(a) recordkeeping and reporting shall be per 61 Subpart FF	Y	
NESHAP 40 CFR 61 Subpart FF	E	Benzene Waste Operations (12/04/03) REQUIREMENTS FOR TANKS		
61.343	When is this type of WMU subject to these requirements?	$\begin{array}{l} 61.343(a) \\ \text{when invoked by} \\ 61.342(c)(1)(ii) \\ \text{for facilities with Total Annual Benzene} \\ 10 \ \text{Mg/yr} \end{array}$	Y	
	If not exempt from the control device requirements, are there alternative provisions for compliance?	61.343(a) Comply with 61.351	Y	
	Install, operate, and maintain a cover over the WMU.	61.343(a)(1) required (fixed roof)	Y	
	Route vapors through a closed vent system to a control device?	61.343(a)(1) required	Y	
	The cover and all openings to operate with no detectable emissions (< 500 ppmv)?	61.343(a)(1)(i)(A) required	Y	
	Demonstrate no detectable emissions using Method 21?	61.343(a)(1)(i)(A) required	Y	
	Inspection per Method 21 required initially, and annually thereafter?	61.343(a)(1)(i)(A) required	Y	
	Each opening to be kept closed, gasketed, & latched at all times that waste is present within, except when the opening is in use?	61.343(a)(1)(i)(B) required	Y	
	Visual inspection initially, and quarterly thereafter, to ensure that the cover and all openings are closed & gasketed properly?	61.343(c) required	Y	

# Table IV.G.1.5 Wastewater Source-specific Applicable Requirements

### Non-EFRT or IFRT Tanks Cluster 40b S-3229

Applicable Requirement	Regulation Title or De	escription of Requirement	Federally Enforceable (Y/N)	Future Effective Date
	First attempt at repair of broken seal or gasket or other problem (including detectable emissions) to be made within 15 days?	61.343(d) 45 days allowed	Y	
	Delay of repair allowed?	61.343(d) yes, per 61.350	Y	
61.349	Closed vent system requirements?	61.349 no detectable emissions (500 ppmv), gas- tight gauging & sampling devices, etc.	Y	
	Control device requirements?	61.349 95% efficiency or equivalent with specified monitoring, recordkeeping & reporting	Y	
	Must the closed vent system operate with no detectable emissions (< 500 ppmw)?	61.349(a)(1)(i) required	Y	
	How is leak-tightness of the closed vent system inspected?	61.349(a)(1)(i) initially & annually, per Method 21	Y	
	Must all gauging & sampling devices be gas-tight, and closed except when in use?	61.349(a)(1)(iii) required	Y	
	What is required if the control device is an enclosed combustion unit?	$\begin{array}{l} 61.349(a)(2)(i)\\ \text{reduce Total Organic Compounds} \geq 95\%\\ \underline{or} \text{ Total Organic Compound conc.} \leq 20\\ \text{ppmv or minimum residence time \&}\\ \text{temperature of } 0.5 \text{ sec at } 760^{\circ}\text{C} \end{array}$	Y	
	What is required if the control device is a vapor recovery unit?	$\begin{array}{l} 61.349(a)(2)(ii)\\ reduce Total Organic Compounds \geq 95\%\\ or benzene \geq 98\% \mbox{ or comply with limit}\\ of 500 \mbox{ ppmv VOC or 10 \mbox{ ppmv benzene} \end{array}$	Y	
	Must pressure-relief devices be closed and sealed during normal operations?	61.349(a)(1)(iv) required	Y	
	What is required if the control device is an enclosed combustion unit?	61.349(a)(2)(i) reduce TOC $\geq 95\%$ or TOC conc. $\leq 20$ ppmv or minutes residence time & temperature of 0.5 sec at 760°C	Y	
	What is required if the control device is a vapor recovery unit?	$61.349(a)(2)(ii)$ reduce TOC $\geq 95\%$ or benzene $\geq 98\%$	Y	

# Table IV.G.1.5 Wastewater Source-specific Applicable Requirements

### Non-EFRT or IFRT Tanks Cluster 40b S-3229

Applicable Requirement	Regulation Title or Description of Requirement		Federally Enforceable (Y/N)	Future Effective Date
	Must the closed vent system & control device operate at all times when waste is in the WMU?	61.349(b) s required, except when maintenance/repair of the WMU requires shutdown of the control device	Y	
	What is required to demonstrate compliance of a control device that is not a flare?	61.349(c) performance tests	Y	
	Can performance tests be required for control devices?	61.349(e) perform performance tests of the control device upon the request of the Administrator	Y	
	What visual inspections are required for the closed vent system and control device?	61.349(f) inspect initially & annually for visible defects	Y	
	If defects are found during an inspection, how quickly must they be repaired?	61.349(g) first attempt within 5 days, final repair within 15 days; unless delay allowed per 61.350	Y	
	Must control devices be monitored?	61.349(h) required, per 61.354(c)	Y	
61.350	When is a delay of repair allowed, and when must the delayed repair be complete?	61.350 delay of repair is allowed if repair is technically impossible without a shutdown; repair to be complete by the end of the next shutdown	Y	
61.353	What are the responsibilities associated with approval of alternative technologies?	61.353 the person requesting the alternative must show equivalency; and the Administrator must publish any approval in the Federal Register	Y	
61.354	Is monitoring required for control devices?	61.354(c) daily inspect the continuous monitoring devices specified herein, except as specified in 61.354(d) & (e)	Y	
	Are there control devices that do not require continuous data recorders?	61.354(d) carbon adsorption that is not regenerated on site may be monitored without a continuous recorder; or not monitored if replaced on a sufficiently frequent interval	Y	
	May alternative parameters be monitored in lieu of those specified?	61.354(e) allowed if adequacy of the alternative is demonstrated	Y	

# Table IV.G.1.5 Wastewater Source-specific Applicable Requirements

### Non-EFRT or IFRT Tanks Cluster 40b S-3229

Applicable Requirement	Regulation Title or De	escription of Requirement	Federally Enforceable (Y/N)	Future Effective Date
	Are inspections required for by-pass lines in closed vent systems?	61.354(f) inspect daily if using a flow indicator <u>or</u> inspect monthly if using car-seal/lock-&- key	Y	
	Is additional monitoring required for systems maintained at negative pressure?	61.354(g) continuously monitor the system pressure	Y	
61.355	Procedure for detecting emissions	61.355(h) per Method 21	Y	
	Procedure for performance testing of control devices	61.355(i) for 61.349(a)(2) to demonstrate compliance with reduction efficiency	Y	
61.356	How long are records to be kept?	61.356(a) keep all records	Y	
	Are records required for the design of the control equipment (e.g., control devices, floating roofs, etc.)?	61.356(d) for 61.343 – 61.347 required, keep for the life of the equipment	Y	
	Are records required documenting the performance of control devices?	61.356(f) for 61.349 required, keep for the life of the control device	Y	
	Are records required for visual inspections and repairs?	61.356(g) for 61.343 – 61.347 required only when defects are found	Y	
	Are records required for Method 21 leak inspections and repairs?	c 61.356(h) for 61.343 – .347, 61.349 required for each inspection	Y	
	Are records of startup/shutdown and monitoring data required for control devices?	61.356(j) for 61.349 required	Y	
	Are records of monitoring data required for systems maintained under negative pressure?	61.356(m) for 61.343 – 61.347 required	Y	
61.357	What additional reports are required for facilities subject to controls?	61.357(e) for 61.351 or 61.352, notification [per 61.07 or 61.10] of intent to use the specified alternative	Y	
Condition #4650	Permit conditions as follows:			
Part 1 and 5	Applies to S-3192	S-3192 POC emissions abated by A3200 by at least 98.5%	Y	

# Table IV.G.1.5 Wastewater Source-specific Applicable Requirements

### Non-EFRT or IFRT Tanks Cluster 40b S-3229

Applicable Requirement	Regulation Title or De	escription of Requirement	Federally Enforceable (Y/N)	Future Effective Date
Part 2 and 6	Applies to S-3192	S-3192 POC combined emissions not to exceed 1.0 lb/day	Y	
Part 3 and 7	Applies to S-3192	S-3192 Benzene combined emissions not to exceed 0.04 lbs/day	Y	
Part 4 and 8	Applies to S-3192	S-3192 Benzene combined liquid concentration not to exceed 1% (wt) (10000 ppm)	Y	
Condition #4650	Permit conditions as follows:		Y	
Part 1 and 5	Applies to S-3110 and S-3111; pertaining to tanks in Permit Condition; that pertaining to A-3200 is included in S-3200 /A-3200	POC Emissions abated by 98.5% or more	Y	
Part 2 and 6	Applies to S-3110 and S-3111; pertaining to tanks in Permit Condition; that pertaining to A-3200 is included in S-3200 /A-3200	Abated POC emissions combined < 1.0 lb/day	Y	
Part 3 and 7	Applies to S-3110 and S-3111; pertaining to tanks in Permit Condition; that pertaining to A-3200 is included in S-3200 /A-3200	Abated Benzene emissions combined <. 04 lb/day	Y	
Part 4 and 8	Applies to S-3110 and S-3111; pertaining to tanks in Permit Condition; that pertaining to A-3200 is included in S-3200/A-3200	Benzene liquid concentration < 1.0 wt.	Y	
Condition #18137	Throughput Limits for S-3110, S-3111		N	
Condition #25037	Applies to S-3229 and fugitives		Y	

## Table IV.G.1.6 Wastewater (FRT's TanksCluster 45e)

# Table IV.G.1.6 Wastewater Source-specific Applicable Requirements

## EFRT Tanks Cluster 45e

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
BAAQMD	Organic Compounds, Storage of Organic Liquids (10/18/06)		
Regulation 8,			
Rule 5			
8-5-110	Exemption due to size and age	Y	
8-5-111	Limited Exemption, Tank Removal From and Return to Service	Ν	
8-5-111.1	Limited Exemption, Notice to the APCO	Ν	
8-5-111.2	Limited Exemption, Compliance before notification	Ν	
8-5-111.3	Limited Exemption, Continuous and quick filling, emptying and refilling	Ν	
8-5-111.4	Limited Exemption, Use of vapor recovery	Ν	
8-5-111.5	Limited Exemption, Minimization of emissions	Ν	
8-5-111.6	Limited Exemption, Self report if out of compliance during exemption period	Ν	
8-5-112	Limited Exemption, Preventative Maintenance and Inspection of Tanks in Operation	N	
8-5-112.1	Limited Exemption, Preventative Maintenance and Inspection of Tanks in Operation; Notification	N	
8-5-112.2	Limited Exemption, Preventative Maintenance and Inspection of Tanks in Operation; Tank in compliance at time of notification	N	
8-5-112.3	Limited Exemption, Preventative Maintenance and Inspection of Tanks in Operation; No product movement, Minimize emissions	N	
8-5-112.4	Limited Exemption, Preventative Maintenance and Inspection of Tanks in Operation; Not to exceed 7 days	Ν	
8-5-112.5	Limited Exemption, Preventative Maintenance and Inspection of Tanks in Operation; Self report if out of compliance during exemption period	N	
8-5-112.6	Limited Exemption, Preventative Maintenance and Inspection of Tanks in Operation; Keep records for each exemption	N	
8-5-118	Limited Exemption, Gas Tight Requirement for approved emission control system in 8-5-306.2 does not apply if facility is subject to BAAQMD 8-18	Ν	
8-5-119	Limited Exemption, Repair Period for Enhanced Monitoring Program	Ν	

# Table IV.G.1.6 Wastewater Source-specific Applicable Requirements

## EFRT Tanks Cluster 45e

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
8-5-301	Storage Tank Control Requirements (internal floating roof, external	Ν	
	floating roof, or approved emission control system)		
8-5-302	Requirements for Submerged Fill Pipes	Y	
8-5-303	Requirements for Pressure Vacuum Valves	Ν	
8-5-303.1	Requirements for Pressure Vacuum Valves; Set pressure	Ν	
8-5-303.2	Requirements for Pressure Vacuum Valves; Gas tight requirement	Ν	
8-5-306	Requirements for approved Emission Control System (only applies to S-0660 and S-6066)	Ν	
8-5-306.1	Requirements for approved Emission Control System; Abatement Efficiency >=95%	Ν	
8-5-307	Requirements for Fixed Roof Tanks, Pressure Tanks, and Blanketed Tanks	Ν	
8-5-307.1	Requirements for Fixed Roof Tanks, Pressure Tanks, and Blanketed Tanks: no liquid leakage through shell	N	
8-5-328	Tank degassing requirements	Ν	
8-5-328.1	Tank degassing requirements; Tanks > 75 cubic meters	Ν	
8-5-328.2	Tank degassing requirements; Ozone Excess Day Prohibition	Ν	
8-5-328.3	Tank degassing requirements; BAAQMD notification required	Ν	
8-5-331	Tank Cleaning Requirements; 90% Abatement Efficiency if Abatement Device Used	Ν	
8-5-331.1	Tank cleaning requirements; Cleaning materials properties	Ν	
8-5-331.2	Tank cleaning requirements; Steam cleaning prohibition	Ν	
8-5-331.3	Tank cleaning requirements; Steam cleaning exceptions	Ν	
8-5-332	Sludge Handling Requirements; applies to sludge removed from any tank that was subject to BAAQMD 8-5 at any time since it was last put in service)	Ν	
8-5-332.1	Sludge Handling Requirements; sludge container no leaks	Ν	
8-5-332.2	Sludge Handling Requirements; sludge container gap requirements	Ν	
8-5-403	Inspection Requirements for Pressure Relief Devices	Ν	
8-5-403.1	Inspection Requirements for Pressure Relief Devices; Pressure vacuum valve gas tight standards in 8-5-303	Ν	
8-5-404	Inspection, Abatement Efficiency Determination and Source Test Reports	Ν	
8-5-411	Enhanced Monitoring Program (Optional)	Ν	

# Table IV.G.1.6 Wastewater Source-specific Applicable Requirements

## EFRT Tanks Cluster 45e

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
8-5-411.3	Enhanced Monitoring Program (Optional); Performance requirements	Ν	
8-5-501	Records	Ν	
8-5-501.1	Records; Type and amount of liquid, type of blanket gas, TVP- Retain	Ν	
	24 months		
8-5-501.3	Records; Retention	N	
8-5-501.4	Records; New pressure vacuum valve setpoints	N	
8-5-502	Annual Source Test Requirement	N	
8-5-502.1	Annual source test for approved emission control systems and abatement devices	Ν	
8-5-502.2	Tank degassing and cleaning abatement devices	Ν	
8-5-601	Analysis of Samples, Reid Vapor Pressure	Y	
8-5-602	Analysis of Samples, True Vapor Pressure	Y	
8-5-603	Determination of Emissions	Ν	
8-5-604	Determinations of Applicability	Y	
8-5-605	Measurement of Leak Concentration and Residual Concentrations	Ν	
8-5-605.1	Measurement of Leak Concentration and Residual Concentrations; EPA method 21 Instruments	Ν	
8-5-605.2	Measurement of Leak Concentration and Residual Concentrations; Method 21 and tank degassing residual organic concentration measurement method	Ν	
8-5-606	Analysis of samples, Tank Cleaning Agents	N	
8-5-606.1	Analysis of samples, Tank Cleaning Agents; Initial Boiling Point	N	
8-5-606.2	Analysis of samples, Tank Cleaning Agents; True Vapor Pressure	N	
8-5-606.3	Analysis of samples, Tank Cleaning Agents; VOC	Ν	
SIP BAAQMD Regulation 8 Rule 5	Organic Comp-unds – STORAGE OF ORGANIC LIQUIDS. REQUIRE FLOATING ROOF TANKS(11/27/02)	MENTS FOR EX	FERNAL
8-5-111	EFRT operating requirements:111When landing the floating roof on its support legs, is the tank to be emptied & either refilled or degassed ASAP?111upper legs is the tank to be tank cleaning, or repairs, & requires written notice	Y	

# Table IV.G.1.6 Wastewater Source-specific Applicable Requirements

## EFRT Tanks Cluster 45e

Applicable Requirement	Regulation Title or D	escription of Requirement	Federally Enforceable (Y/N)	Future Effective Date
	Notification of Inspections: Is 30-day notice required for internal inspections of EFRTs (i.e., prior to filling or refilling); but a 7-day verbal notice acceptable if the event is unplanned?	111.1 not required, but 3-day notice is required prior to removing tank from service	Y	
8-5-112	Are EFR rim seals allowed to be pulled back or temporarily removed during inspection?	112 yes, 7-day time limit	Y	
	Notification of Inspections: Are notifications of inspections to demonstrate initial compliance required, For EFR seal gap measurements:	112.4 7-day notice required prior to secondary seal replacement; no other notifications specified pertaining to seals	Y	
8-5-320 8-5- 321	EFR Rim Seals: vapor-mounted primary seal: liquid-mounted primary seal: mechanical-shoe primary seal:	321 Not Allowed 321.4, 320.1 OK w/rim- mounted secondary 321.3, 320.1 OK w/rim- mounted secondary	Y	
8-5-320	EFR deck openings other than for vents to project into liquid?	320.2.1, 4.1 & 5.1 required	Y	
	EFR vents to be gasketed?	320.2.2 required	Y	
	Deck openings (wells) other than for vents, drains, or legs to have covers that are kept closed except for access?	320.2.2 & 4.2 maximum gap = 1/8 in. (& drains not exempt)	Y	
	EFR well covers to be gasketed?	320.2.2 & 4.2 required	Y	
	EFR rim space vents to remain closed except when the pressure setting is exceeded?	320.3 required	Y	
	EFR Auto. Bleeder vent (vacuum breaker) to be closed except when the deck is landed?	320.3 required	Y	
	EFR guidepole wells to have a deck cover gasket and a pole wiper?	320.5.2 required	Y	
	EFRT slotted guidepoles to have either an internal float or a pole sleeve?	320.5.2 required	Y	
	EFR emergency roof drains to have seals covering at least 90% of the opening?	320.6 required	Y	

# Table IV.G.1.6 Wastewater Source-specific Applicable Requirements

## EFRT Tanks Cluster 45e

Applicable Requirement	Regulation Title or D	escription of Requirement	Federally Enforceable (Y/N)	Future Effective Date
8-5-321 8-5- 322	DETERMINATION OF EFR RIM-SEAL GAP AREAS: Sum the gap areas & divide by the diameter of the tank?	321 & 322 different procedure, limiting the % of circumference over which the gap can be exceeded	Y	
	UNSAFE CONDITIONS: Delay of EFR seal gap measurements allowed for unsafe conditions? If unable to make safe to measure, must the EFRT be emptied?	321 & 322 321 & 322	Y	
	Shall there be no holes, tears, or openings in the EFR seals?	321.1 & 322.1 yes	Y	
	Is the metallic shoe of an EFR mechanical-shoe seal required to have its bottom in the liquid and extend at least 24 in. above the liquid?	321.3 yes	Y	
	EFR Primary Seal Gap Inspection Criteria: maximum area: maximum gap width:	321.3 & 321 0.5 - 2.5 in.	Y	
8-5-322	EFR Secondary Seal Gap Inspection Criteria: maximum area: maximum gap width:	322 ≤ 5% w/gap > 0.02 in. 0.06 in.	Y	
8-5-328 8-5- 329	Temporary exemption from operating requirements while the external floating roof is landed on its support legs?	328 & 329 exempt per 111, but 328 & 329 impose restrictions on tank cleaning & on activities commenced on excess ozone days	Y	
8-5-401	Seal Gap Measurements: FREQUENCY AFTER INITIAL COMPLIANCE, For the EFR Primary Seal:	401 every 5 years	Y	
8-5-402	Seal Gap Measurements: FREQUENCY AFTER INITIAL COMPLIANCE, For the EFR Secondary Seal:	402 annually	Y	
	EFR Internal Inspections: up-close visual inspection of the floating roof, seals, & fittings:	402 at the same schedule as the secondary seal	Y	
8-5-404	Seal Gap Measurements: For new EFRTs:	404 submit certification of seal gap measurements upon installation	Y	

# Table IV.G.1.6 Wastewater Source-specific Applicable Requirements

## EFRT Tanks Cluster 45e

Applicable Requirement	Regulation Title or I	Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
	Notification of Compliance Status report:	404 certification to be submitted upon installation for floating-roof rim seals	Y	
	EFRT report to include:	404 seal gap measurements	Y	
	Periodic Reports: Miscellaneous additional information to report:	404.3 annual certification of tank degassing equipment	Y	
8-5-405	Periodic Reports: Report EFR seal gap inspections if there was no out-of-compliance?	405 required (at same frequency as the measurements, but does not specify how promptly; but 404.2.1 specifies that interval between certification of annual secondary seal inspections shall not exceed 15 months)	Y	
	Periodic Reports: Report EFR seal gap inspections when there is out-of-compliance?	405 required (at same frequency as the measurements, but does not specify how promptly; but 404.2.1 specifies that interval between certification of annual secondary seal inspections shall not exceed 15 months)	Y	
	Periodic Reports: Report of EFR inspection failures to include:	405 date of inspection, actual seal gap data, & determination of compliance	Y	
8-5-501	Applicability records: Additional recordkeeping requirements for certain tanks.	501 type of liquid stored & its TVP, for all nonexempt tanks	Y	
8-5-602	True vapor pressure (TVP) determination for applicability:	602 or 604 based on maximum (instantaneous) tank storage temperature	Y	
SIP BAAQMD Regulation 8 Rule 8	Organic Compounds–WASTEW	/ATER (OIL-WATER) Collection and SE	PARATOR Syetm	es (6/15/94)
8-8-305	Slop oil vessels shall be equipped with a solid, gasketed, fixed cover with no cracks greater than 0.125 inches or an organic compound vapor recovery system with combined collection and destruction efficiency of at least 70%, by weight		Y	
BAAQMD Regulation 8 Rule 8	Organic Compounds-WASTEW	ATER (OIL-WATER) Collection and SE	PARATOR Syetme	es(9/15/04)

# Table IV.G.1.6 Wastewater Source-specific Applicable Requirements

### EFRT Tanks Cluster 45e

Applicable Requirement	Regulation Title or D	escription of Requirement	Federally Enforceable (Y/N)	Future Effective Date
8-8-305	Slop oil vessels shall be equipped with cracks greater than 0.125 inches or an system with combined collection and weight	h a solid, gasketed, fixed cover with no organic compound vapor recovery destruction efficiency of at least 70%, by	Y	
8-8-503	nspection and Repair Records		Y	
8-8-505	Records for Wastewater Collection Sys	stem Components at Petroleum Refineries	Ν	
BAAQMD Regulation 11 Rule 12	Hazardous Pollutants – National Emission Standards for Benzene Emissions from Benzene Transfer Operations and Benzene Waste Operations (7/18/90, refer to NESHAP Subpart FF below)		Ν	
NSPS 40 CFR 60 Subpart Kb	Volatil REQUIREMEN	e Organic Liquid Storage Vessels (10/15/0 NTS FOR EXTERNAL FLOATING ROO	03) DF TANKS	
60.112b(a)	EFR Rim Seals: vapor-mounted primary seal: liquid-mounted primary seal: mechanical-shoe primary seal:	60.112b(a)(2)(i) Not Allowed OK w/rim-mounted secondary OK w/rim-mounted secondary	Y	
	Must vapor-mounted rim seals be continuous on EFRs?	60.112b(a)(2)(i)(B) yes	Y	
	Deck openings (wells) other than for vents, drains, or legs to have covers that are kept closed except for access?	60.112b(a)(2)(ii) required	Y	
	EFR well covers to be gasketed?	60.112b(a)(2)(ii) required	Y	
	EFR vents to be gasketed?	60.112b(a)(2)(ii) required	Y	
	EFR deck openings other than for vents to project into liquid?	60.112b(a)(2)(ii) required	Y	
	EFR rim space vents to remain closed except when the pressure setting is exceeded?	60.112b(a)(2)(ii) required	Y	
	EFR Auto. Bleeder vent (vacuum breaker) to be closed except when the deck is landed?	60.112b(a)(2)(ii) required	Y	
	EFR emergency roof drains to have seals covering at least 90% of the opening?	60.112b(a)(2)(ii) required	Y	
	EFR guidepole wells to have a deck cover gasket and a pole wiper?	60.112b(a)(2)(ii) guidepole requirements are specified in FR notices 65 FR 2336 (01/14/00) 65 FR 19891(04/13/00)	Y	

# Table IV.G.1.6 Wastewater Source-specific Applicable Requirements

## EFRT Tanks Cluster 45e

Applicable Requirement	Regulation Title or Description of Requirement		Federally Enforceable (Y/N)	Future Effective Date
	EFRT unslotted guidepoles to have a gasketed cap at the top of the pole?	60.112b(a)(2)(ii) required per FR notices 65 FR 2336 (01/14/00) 65 FR 19891(04/13/00)	Y	
	EFRT slotted guidepoles to have either an internal float or a pole sleeve?	60.112b(a)(2)(ii) required per FR notices 65 FR 2336 (01/14/00) 65 FR 19891(04/13/00)	Y	
	EFRT operating requirements: When landing the floating roof on its support legs, is the tank to be emptied & either refilled or degassed ASAP?	60.112b(a)(2)(iii) yes	Y	
	Temporary exemption from operating requirements while the external floating roof is landed on its support legs?	60.112b(a)(2)(iii) exempt	Y	
60.113b(b)	UNSAFE CONDITIONS: Delay of EFR seal gap measurements allowed for unsafe conditions? If unable to make safe to measure, must the EFRT be emptied?	60.113b(b)(1) 60.113b(b)(1)	Y	
	EXTENSIONS OF TIME: If EFRT is unsafe to inspect & cannot be emptied within 45 days?	60.113b(b)(1)	Y	
	Notification of Inspections: Are notifications of inspections to demonstrate initial compliance required, For EFR seal gap measurements:	60.113b(b)(1) & (5) required notifications & reports per Ongoing Reports	Y	
	Seal Gap Measurements: FREQUENCY AFTER INITIAL COMPLIANCE, For the EFR Primary Seal:	60.113b(b)(1)(i) every 5 years	Y	
	Seal Gap Measurements: For new EFRTs:	60.113b(b)(1)(i) &(ii) measure gaps of both seals within 60 days after initial fill	Y	
	Seal Gap Measurements: FREQUENCY AFTER INITIAL COMPLIANCE, For the EFR Secondary Seal:	60.113b(b)(1)(ii) annually	Y	

# Table IV.G.1.6 Wastewater Source-specific Applicable Requirements

## EFRT Tanks Cluster 45e

Applicable Requirement	Regulation Title or Description of Requirement		Federally Enforceable (Y/N)	Future Effective Date
	Seal Gap Measurements: For EFRTs returned to affected service after 1 yr or more of exempt service:	60.113b(b)(1)(iii) measure gaps of both seals within 60 days	Y	
	MEASUREMEN' COND'''S: Are EFR seal gap measurements to be made with the roof floating?	60.113b(b)(2)(i) yes	Y	
	DETERMINATION OF EFR RIM- SEAL GAP AREAS: Presence of a gap determined by inserting a 1/8 in. probe?	60.113b(b)(2)(ii) yes	Y	
	DETERMINATION OF EFR RIM- SEAL GAP AREAS: Use probes of various widths to determine the gap area?	60.113b(b)(2)(iii) yes	Y	
	DETERMINATION OF EFR RIM- SEAL GAP AREAS: Sum the gap areas & divide by the diameter of the tank?	60.113b(b)(3) yes	Y	
	EFRT REPAIRS: Time allowed for repair of defects found during in-service inspections of EFRs: If unable to repair, empty the EFRT & remove from service?	60.113b(b)(4) make repairs within 45 days 60.113b(b)(4) yes, within 45 days	Y	
	EFR Primary Seal Gap Inspection Criteria: maximum area: maximum gap width:	60.113b(b)(4)(i) 10 in <sup>2</sup> /ft.diam. 1.5 in.	Y	
	Shall there be no holes, tears, or openings in the EFR seals?	60.113b(b)(4)(i) & (ii) yes	Y	
	Is the metallic shoe of an EFR mechanical-shoe seal required to have its bottom in the liquid and extend at least 24 in. above the liquid?	60.113b(b)(4)(i)(A) yes	Y	
	EFR Secondary Seal Gap Inspection Criteria: maximum area: maximum gap width:	60.113b(b)(4)(ii)(B) 1 in <sup>2</sup> /ft.diameter 0.5 in.	Y	
	Are EFR rim seals allowed to be pulled back or temporarily removed during inspection?	60.113b(b)(4)(ii)(B)	Y	
# Table IV.G.1.6 Wastewater Source-specific Applicable Requirements

### EFRT Tanks Cluster 45e

Applicable Requirement	Regulation Title or Description of Requirement		Federally Enforceable (Y/N)	Future Effective Date
	EXTENSIONS OF TIME: If EFRT defects cannot be repaired & the tank cannot be emptied within 45 days?	60.113b(b)(4)(iii) 1 extension of 30 days, if needed	Y	
	Periodic Reports: EFR report to include a prior request for 30-day extension, w/ documentation of need?	60.113b(b)(4)(iii) required	Y	
	Periodic Reports: Additional information to be included if an extension is utilized for an EFR:	60.113b(b)(4)(iii) document the reason for the extension	Y	
	Notification of Inspections: Is 30-day notice required prior to EFR seal gap Measurements?	60.113b(b)(5) required	Y	
	EFR Internal Inspections: up-close visual inspection of the floating roof, seals, & fittings:	60.113b(b)(6) each time the tank is emptied & degassed	Y	
	Notification of Inspections: Are notifications of inspections to demonstrate initial compliance required, For EFR internal inspections:	60.113b(b)(6) internal inspections not required for initial compliance	Y	
	EFRT REPAIRS: Repair of defects if the tank is empty?	60.113b(b)(6)(i) prior to refilling	Y	
	Notification of Inspections: Is 30-day notice required for internal inspections of EFRTs (i.e., prior to filling or refilling); but a 7-day verbal notice acceptable if the event is unplanned?	60.113b(b)(6)(ii) required	Y	
60.115b	Recordkeeping for inspections: Keep inspection reports as specified	60.115b keep records	Y	
60.115b(b)	EFRT report to include:	60.115b(b)(1) description of control equipment	Y	
	Periodic Reports: Report EFR seal gap inspections if there was no out-of-compliance?	60.115b(b)(2) required within 60 days of inspection	Y	
	Records of EFR inspection reports:	60.115b(b)(3) EFR seal gap measurements	Y	
	Periodic Reports: Report EFR seal gap inspections when there is out-of-compliance?	60.115b(b)(4) required within 30 days of inspection	Y	

# Table IV.G.1.6 Wastewater Source-specific Applicable Requirements

### EFRT Tanks Cluster 45e

Applicable Requirement	Regulation Title or Description of Requirement		Federally Enforceable (Y/N)	Future Effective Date
	Periodic Reports: Report of EFR inspection failures to include:	60.115b(b)(4) date of inspection, internal diameter of tank, description of failure, & date of repair or emptying	Y	
60.116b(a)	Applicability records: Time period for keeping records of applicability determination, unless specified otherwise.	60.116b(a) keep records	Y	
60.116b(b)	Applicability records: Records of dimensions & capacity required for nonexempt tanks?	60.116b(b) required, keep record readily accessible for the life of the tank	Y	
60.116b(c)	Applicability records: Additional recordkeeping requirements for certain tanks.	$\begin{array}{l} 60.116b(c) \\ internal diameter & TVP of the stored \\ product, if capacity \geq (20,000 gallons) \\ 75 cubic meters and TVP \geq (2.2 psia) 5.0 \\ kPa, or capacity \geq (40,000 gallons) 151 \\ cubic meters and TVP \geq (0.51 psia) 3.5 \\ kPa. Keep record as long as the tank is \\ in that service \end{array}$	Y	
60.116b(e)	True vapor pressure (TVP) determination for applicability:	60.116b(e) maximum TVP of the stored liquid, based on highest calendar month average storage temperature	Y	
NSPS40 cfr 60 Subpart A		New Source Performance Standards GENERAL PROVISIONS		
60.7(a)	Initial Notification: Is initial notification of the source's existence required?	60.7(a)(1) notification within 30 days after begin construction	Y	
	Report (document) having initially achieved compliance?	60.7(a)(3) 60.115b(a)(1) & (b)(1) within 15 days after initial fill	Y	
	Notification of Compliance Status report:	60.7(a)(3) [cf. 60.115b(a)(1)&(b)(1)] notification within 15 days after startup	Y	
	Initial Notification: Is initial notification required if tank becomes affected only as a result of a modification?	60.7(a)(4) notification 60 days or as soon as practicable before the change	Y	
60.7(f)	General recordkeeping requirements: Time period for keeping records, unless specified otherwise.	60.7(f) keep all reports & notifications	Y	

# Table IV.G.1.6 Wastewater Source-specific Applicable Requirements

### EFRT Tanks Cluster 45e

Applicable Requirement	Regulation Title or Description of Requirement		Federally Enforceable (Y/N)	Future Effective Date
	General recordkeeping requirements: keep all reports and notification for the specified period of time.	60.7(f) required	Y	
60.14(g)	Achieve compliance for: New Tanks (or tanks that become affected as a result of a change or modification)?	60.14(g) up to 180 days after modifications (otherwise prior to fill)	Y	
40 cfr 63 subpart cc Refinery MACT	NESHAP for Petroleum Refineries (6/23/03) REQUIREMENTS FOR WASTEWATER STREAMS			
63.641	What is a Refinery MACT Group 1 wastewater stream?	$\begin{array}{l} 63.641\\ \text{if Total Annual Benzene} \geq 10 \text{ Mg/yr},\\ \text{then each wastewater stream with flow}\\ \text{rate} \geq 0.02 \text{ liters/min and benzene}\\ \text{concentration} \geq 10 \text{ ppmw and not}\\ \text{exempt from controls under 61 Subpart}\\ FF \end{array}$	Y	
	Which provisions apply to wastewater tanks?	63.641 wastewater tanks are not storage vessels, but are subject to the wastewater provisions	Y	
63.647	What does Refinery MACT require for Group 1 wastewater streams?	63.647(a) comply with 61 Subpart FF (below)	Y	
	Which definitions govern?	63.647(b) the definitions in Refinery MACT supercede those in 61 Subpart FF	Y	
	Clarification with respect to violations	63.647(c) a monitoring excursion, a failure to perform a leak inspection, or a failure to repair a leak shall constitute a violation	Y	
63.654	Which recordkeeping and reporting requirements govern?	63.654(a) recordkeeping and reporting shall be per 61 Subpart FF	Y	
NESHAP 40 cfr 61 Subpart FF		Benzene Waste Operations (12/04/03) REQUIREMENTS FOR TANKS		
61.343	When is this type of WMU subject to these requirements?	61.343(a) when invoked by 61.342(c)(1)(ii) for facilities with Total Annual Benzene $\geq 10$ Mg/yr	Y	
	If not exempt from the control device requirements, are there alternative provisions for compliance?	61.343(a) Comply with 61.351	Y	

# Table IV.G.1.6 Wastewater Source-specific Applicable Requirements

### EFRT Tanks Cluster 45e

Applicable Requirement	Regulation Title or D	escription of Requirement	Federally Enforceable (Y/N)	Future Effective Date
61.351	What are the requirements of the alternative?	61.351 Floating roof or equivalent, in compliance with NSPS Subpart Kb	Y	
61.356	How long are records to be kept?	61.356(a) keep all records	Y	
	Are records required for the design of the control equipment (e.g., control devices, floating roofs, etc.)?	61.356(d) for 61.343 – 61.347 required, keep for the life of the equipment	Y	
	Are records required for floating roofs used as alternative control equipment in tanks?	61.356(k) for 61.351 required as per 60.115b [NSPS subpart Kb]	Y	
61.357	What additional reports are required for facilities subject to controls?	61.357(e) for 61.351 or 61.352, notification [per 61.07 or 61.10] of intent to use the specified alternative	Y	
	What additional reports are required for facilities subject to controls?	61.357(f)} for 61.351, reports for floating roofs as per 60.115b [NSPS Kb]	Y	
Condition #18137	Throughput limits		N	
Condition #23262	Applies to S-3127		N	
Part 1	Throughput		N	
Part 2	Vapor Pressure Limit		N	
Part 3	Benzene Limit		Ν	
Part 4	Sampling of Vapor Pressure and Benzene		N	
Part 5	Heating limitation		Ν	
Part 6	Recordkeeping		Ν	

### Table IV.G.1.7 Wastewater (Bioreactor Cluster 50d)

# Table IV.G.1.7 Wastewater Source-specific Applicable Requirements

### **Bioreactor Cluster 50d**

### S-4393 Bioreactor

Applicable Requirement	Regulation Title or D	escription of Requirement	Federally Enforceable (Y/N)	Future Effective Date
BAAQMD Regulation 8 Rule 8	Organic Compounds-WASTEWATE	R COLLECTION AND SEPARATION S	YSTEMS (9/15/	/04)
8-8-112	Exemption, Wastewater Critical Organi	c Compound Concentration or Temperature	Ν	
8-8-113	Secondary wastewater treatment process definition 8-8-206 and 8-8-216 are exen 308.	Secondary wastewater treatment processes or stormwater sewer systems that meet definition 8-8-206 and 8-8-216 are exemption from Sections 8-8-301, 302, 306, and 308.		
8-8-501	API Separator or Air Flotation Bypassed	d Wastewater Records	Y	
8-8-502	Wastewater Critical Organic Compound	l Concentration or Temperature Records	Ν	
8-8-505	Records for Wastewater Collection Syst	em Components at Petroleum Refineries	N	
SIP				
BAAQMD Regulation 8 Rule 8	Organic Compounds-WASTEWATE	CR (OIL-WATER) SEPARATORS(6/15/94	l)	
8-8-112	Exemption, Wastewater Critical Organi	Y		
8-8-113	Secondary wastewater treatment processes or stormwater sewer systems that meet definition 8-8-206 and 8-8-216 are exemption from Sections 8-8-301, 302, 306, and 308.		Y	
8-8-502	Wastewater Critical Organic Compound Concentration or Temperature Records		Y	
BAAQMD Regulation 11 Rule 12	Hazardous Pollutants – National Emi from Benzene Transfer Operations ar refer to NESHAP Subpart FF below)	N		
40 cfr 63 subpart cc Refinery MACT	NES REQUIR	SHAP for Petroleum Refineries (6/23/03) EMENTS FOR WASTEWATER STREA	MS	<u> </u>
63.641	What is a Refinery MACT Group 1 wastewater stream?	$\begin{array}{l} 63.641\\ \text{if Total Annual Benzene} \geq 10 \text{ Mg/yr, then}\\ \text{each wastewater stream with flow rate} \geq \\ 0.02 \text{ liters/min and benzene concentration}\\ \geq 10 \text{ ppmw and not exempt from controls}\\ \text{under 61 Subpart FF} \end{array}$	Y	
63.647	What does Refinery MACT require for Group 1 wastewater streams?	63.647(a) comply with 61 Subpart FF (below)	Y	
	Which definitions govern?	63.647(b) the definitions in Refinery MACT supercede those in 61 Subpart FF	Y	

# Table IV.G.1.7 Wastewater Source-specific Applicable Requirements

#### **Bioreactor Cluster 50d**

#### S-4393 Bioreactor

Applicable Requirement	Regulation Title or D	escription of Requirement	Federally Enforceable (Y/N)	Future Effective Date
	Clarification with respect to violations	63.647(c) a monitoring excursion, a failure to perform a leak inspection, or a failure to repair a leak shall constitute a violation	Y	
63.654	Which recordkeeping and reporting requirements govern?	63.654(a) recordkeeping and reporting shall be per 61 Subpart FF	Y	
NESHAP 40 cfr 61 Subpart FF	Benzene Waste Operations (12/04/03) SURFACE IMPOUNDMENTS exempt FROM CONTROLS There are no 61 Subpart FF requirements related to control of air emissions for WMUs that are exempt from controls. [There are record keeping, reporting, and in some cases monitoring requirements for the waste stream(s) received by this WMU, but these requirements are addressed within the scope of Cluster 10 – Treatment Processes.]		Y	
Condition #18137	Throughput limit for S-4393		N	
Condition #15698, part 11	Applies to S-4393		Y	

#### Table IVG.1.8 Wastewater (Containers Cluster 60b)

### Table IV.G.1.8 Wastewater Source-specific Applicable Requirements

#### **Containers (Portable Wastewater Handling Units) Cluster 60b**

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
BAAQMD Regulation 8 Rule 8	Organic Compounds–WASTEWATER COLLECTION AND SEPARATION S	YSTEMS (9/15/	04)
8-8-112	Exemption, Wastewater Critical Organic Compound Concentration Or Temperature	Ν	
8-8-114	Exemption, Bypassed Oil-Water Separator or Air flotation Influent	Y	
8-8-501	API Separator or Air Flotation Bypassed Wastewater Records	Ν	

# Table IV.G.1.8 Wastewater Source-specific Applicable Requirements

### Containers (Portable Wastewater Handling Units) Cluster 60b

Applicable Requirement	Regulation Title or De	escription of Requirement	Federally Enforceable (Y/N)	Future Effective Date
8-8-502	Wastewater Critical Organic Compound	Wastewater Critical Organic Compound Concentration Or Temperature Records		
8-8-505	Records for Wastewater Collection Syst	em Components at Petroleum Refineries	N	
SIP				
BAAQMD Regulation 8 Rule 8	Organic Compounds-1	WASTEWATER (OIL-WATER) SEPARA	ATORS (6/15/94	)
8-8-112	Exemption, Wastewater Critical Organic	c Compound Concentration or Temperature	Y	
8-8-502	Wastewater Critical Organic Compound	Concentration or Temperature Records	Y	
BAAQMD Regulation 11 Rule 12	Hazardous Pollutants – National Emission Standards for Benzene Emissions from Benzene Transfer Operations and Benzene Waste Operations (7/18/90, refer to NESHAP Subpart FF below)		N	
40 cfr 63 subpart cc Refinery MACT	NESHAP for Petroleum Refineries (6/23/03) REQUIREMENTS FOR WASTEWATER STREAMS			
63.641	What is a Refinery MACT Group 1 wastewater stream?	$\begin{array}{l} 63.641 \\ \text{if Total Annual Benzene} \geq 10 \text{ Mg/yr, then} \\ \text{each wastewater stream with flow rate} \geq \\ 0.02 \text{ liters/min and benzene concentration} \\ \geq 10 \text{ ppmw and not exempt from controls} \\ \text{under 61 Subpart FF} \end{array}$	Y	
63.647	What does Refinery MACT require for Group 1 wastewater streams?	63.647(a) comply with 61 Subpart FF (below)	Y	
	Which definitions govern?	63.647(b) the definitions in Refinery MACT supercede those in 61 Subpart FF	Y	
	Clarification with respect to violations	63.647(c) a monitoring excursion, a failure to perform a leak inspection, or a failure to repair a leak shall constitute a violation	Y	
63.654	Which recordkeeping and reporting requirements govern?	63.654(a) recordkeeping and reporting shall be per 61 Subpart FF	Y	
NESHAP 40 cfr 61 Subpart FF	Benzene Waste Opera	ationsREQUIREMENTS FOR CONTAIN	ERS (12/04/03)	
61.345	When is this type of WMU subject to these requirements?	61.345(a) when invoked by 61.342(c)(1)(ii) for facilities with Total Annual Benzene ≥ 10 Mg/yr	Y	

# Table IV.G.1.8 Wastewater Source-specific Applicable Requirements

### Containers (Portable Wastewater Handling Units) Cluster 60b

Applicable Requirement	Regulation Title or De	scription of Requirement	Federally Enforceable (Y/N)	Future Effective Date
	Install, operate, and maintain a cover over the WMU.	61.345(a)(1) required for the container 61.345(a)(3) Container is to be located within an enclosure	Y	
	Route vapors through a closed vent system to a control device?	61.345(a)(1) Not required for container 61.345(a)(3) required for the enclosure	Y	
	The cover and all openings to operate with no detectable emissions (< 500 ppmv)?	61.345(a)(1)(i) required for the container 61.345(a)(3)(i) required for the enclosure	Y	
	Demonstrate no detectable emissions using Method 21?	61.345(a)(1)(i) required for the container 61.345(a)(3)(i) required for the enclosure	Y	
	Inspection per Method 21 required initially, and annually thereafter?	61.345(a)(1)(i) required for the container 61.345(a)(3)(i)required for the enclosure	Y	
	Each opening to be kept closed, gasketed, & latched at all times that waste is present within, except when the opening is in use?	61.345(a)(1)(ii)required for the container61.345(a)(3)Not required for the enclosure	Y	
	Are there requirements that are unique to this type of WMU?	61.345(a)(2) Load using a submerged fill pipe	Y	
	Are there conditions for which vapors are not required to be routed to a control device?	61.345(a)(3) Not required at any time other than when the container is open while waste is being treated	Y	
	What is required for WMUs not routed to a control device?	61.345(a)(3) routing to a control device is not required for containers that are kept closed while waste is being treated	Y	
	Visual inspection initially, and quarterly thereafter, to ensure that the cover and all openings are closed & gasketed properly?	61.345(b) required for the container 61.345(b) required for the enclosure	Y	
	First attempt at repair of broken seal or gasket or other problem (including detectable emissions) to be made within 15 days?	61.345(c) required for the container 61.345(c) required for the enclosure	Y	

# Table IV.G.1.8 Wastewater Source-specific Applicable Requirements

### Containers (Portable Wastewater Handling Units) Cluster 60b

Applicable Requirement	Regulation Title or De	scription of Requirement	Federally Enforceable (Y/N)	Future Effective Date
	Delay of repair allowed?	61.345(c) yes, for the container, per 61.350 61.345(c) yes, for the enclosure, per 61.350	Y	
61.349	Closed vent system requirements?	61.349 no detectable emissions (500 ppmv), gas-tight gauging & sampling devices, etc.	Y	
	Control device requirements?	61.349 95% efficiency or equivalent with specified monitoring, recordkeeping & reporting	Y	
	Must the closed vent system operate with no detectable emissions (< 500 ppmw)?	61.349(a)(1)(i) required	Y	
	How is leak-tightness of the closed vent system inspected?	61.349(a)(1)(i) initially & annually, per Method 21	Y	
	Must all gauging & sampling devices be gas-tight, and closed except when in use?	61.349(a)(1)(iii) required	Y	
	Must pressure-relief devices be closed and sealed during normal operations?	61.349(a)(1)(iv) required	Y	
	What is required if the control device is an alternative technology?	61.349(a)(2)(i)&(ii) refer to section in regulation	Y	
	Must the closed vent system & control device operate at all times when waste is in the WMU?	61.349(b) required, except when maintenance/repair of the WMU requires shutdown of the control device	Y	
	What is required to demonstrate compliance of a control device that is not a flare?	61.349(c) either engineering calculations or performance tests	Y	
	Can performance tests be required for control devices?	61.349(e) perform performance tests of the control device upon the request of the Administrator	Y	
	What visual inspections are required for the closed vent system and control device?	61.349(f) inspect initially & annually for visible defects	Y	
	If defects are found during an inspection, how quickly must they be repaired?	61.349(g) first attempt within 5 days final repair within 15 days; unless delay allowed per 61.350	Y	

# Table IV.G.1.8 Wastewater Source-specific Applicable Requirements

### Containers (Portable Wastewater Handling Units) Cluster 60b

Applicable Requirement	Regulation Title or Description of Requirement		Federally Enforceable (Y/N)	Future Effective Date
	Must control devices be monitored?	61.349(h) required, per 61.354(c)	Y	
61.350	When is a delay of repair allowed, and when must the delayed repair be complete?	61.350 delay of repair is allowed if repair is technically impossible without a shutdown; repair to be complete by the end of the next shutdown	Y	
61.353	What are the responsibilities associated with approval of alternative technologies?	61.353 the person requesting the alternative must show equivalency; and the Administrator must publish any approval in the Federal Register	Y	
61.354	Is monitoring required for control devices?	61.354(c) daily inspect the continuous monitoring devices specified herein, except as specified in 61.354(d) & (e)	Y	
	Are there control devices that do not require continuous data recorders?	61.354(d) carbon adsorption that is not regenerated on site may be monitored without a continuous recorder; or not monitored if replaced on a sufficiently frequent interval	Y	
	May alternative parameters be monitored in lieu of those specified?	61.354(e) allowed if adequacy of the alternative is demonstrated	Y	
	Are inspections required for by-pass lines in closed vent systems?	61.354(f) inspect daily if using a flow indicator <u>or</u> inspect monthly if using car-seal/lock-&- key	Y	
61.355	Procedure for detecting emissions	61.355(h) per Method 21	Y	
	Procedure for performance testing of control devices	61.355(i) for 61.349(a)(2) to demonstrate compliance with reduction efficiency	Y	
61.356	How long are records to be kept?	61.356(a) keep all records	Y	
	Are records required for the design of the control equipment (e.g., control devices, floating roofs, etc.)?	61.356(d) for 61.343 – 61.347 required, keep for the life of the equipment	Y	
	Are records required documenting the performance of control devices?	61.356(f) for 61.349 required, keep for the life of the control device	Y	

# Table IV.G.1.8 Wastewater Source-specific Applicable Requirements

### Containers (Portable Wastewater Handling Units) Cluster 60b

Applicable Requirement	Regulation Title or De	scription of Requirement	Federally Enforceable (Y/N)	Future Effective Date
	Are records required for visual inspections and repairs?	61.356(g) for 61.343 – 61.347 required only when defects are found	Y	
	Are records required for Method 21 leak inspections and repairs?	61.356(h) for 61.343 – .347, 61.349 required for each inspection	Y	
	Are records of startup/shutdown and monitoring data required for control devices?	61.356(j) for 61.349 required	Y	
	Are records of monitoring data required for systems maintained under negative pressure?	61.356(m) for 61.343 – 61.347 required	Y	
Condition #12842	Permit condition applies as follows:			
Part 1	Applies to S-6250 abated by A0630 and A0631	S-6250 vented to abatement at all times	Y	
Part 2	Applies to S-6250 abated by A0630 and A0631	A-0630 Carbon Replacement Requirement	Y	
Part 3	Applies to S-6250 abated by A0630 and A0631	A-0631 Carbon Replacement Requirement	Y	
Part 4	Applies to S-6250 abated by A0630 and A0631	Limits apply to non-methane HC emissions	Y	
Part 5	Applies to S-6250 abated by A0630 and A0631	Carbon Monitoring Requirement	Y	
Part 6	Applies to S-6250 abated by A0630 and A0631	Recordkeeping for carbon life	Y	
Part 7	Applies to S-6250 abated by A0630 and A0631	Record keeping	Y	
Part 8	Applies to S-6250 abated by A-0630 and A-0631	Recordkeeping	Y	
Condition #18137	Throughput Limit for S-6250		Ν	

### Table IV.H.1.1 VOC (Cold Cleaners)

# Table IV.H.1.1 VOC SourcesSource-specific Applicable Requirements

### **Cold Cleaners**

### S-4420 (Exempt), S-4426, S-4427, S-4428

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
BAAQMD Regulation 8 Rule 1	Organic Compounds – General Provisions (6/15/	94)	
8-1-320	Surface Preparation, Clean-up, Coating, Ink, Paint Removal	Y	
8-1-321	Closed Containers for Spent or Fresh Organic Solvents	Y	
8-1-322	Spray Equipment Cleanup Limitation	Y	
BAAQMD Regulation 8 Rule 16	Organic Compounds – Solvent Cleaning Operations (1	10/16/02)	
8-16-118	Limited Exemption, Compounds with Low Volatility	Y	
8-16-303	Cold Cleaner Requirements	Y	
8-16-303.1	General Operating Requirements	Y	
8-16-303.1.1	Maintain Proper Working Order	Y	
8-16-303.1.2	Leak Repair Requirement	Y	
8-16-303.1.3	Solvent Storage or Disposal – Evaporation Prevention	Y	
8-16-303.1.4	Waste Solvent Disposal	Y	
8-16-303.1.4(a)	Covered Containers for Waste Solvent Awaiting Pick-up	Y	
8-16-303.1.5	Solvent Evaporation Minimization Devices shall not be Removed	Y	
8-16-303.1.6	Solvent Spray Requirements	Y	
8-16-303.2	Cold Cleaner Operating Requirements	Y	
8-16-303.2.1	Solvent shall be Drained from Cleaned Parts	Y	
8-16-303.2.2	Solvent Agitation	Y	
8-16-303.2.3	Solvent Cleaning of Porous or Absorbent Materials is Prohibited	Y	
8-16-303.3	Cold Cleaner General Equipment Requirements	Y	
8-16-303.3.1	Container	Y	
8-16-303.3.2	Solvent Evaporation Reduction for Idle Equipment	Y	
8-16-303.3.3	Used Solvent Returned to Container	Y	
8-16-303.3.4	Label Stating Operating Requirements	Y	
8-16-501	Solvent Records	Y	
Condition #17527	Applies to S-4426 S-4427, S-4428		
Part 1	High IBP (> 248 F) solvent restriction	Y	

# Table IV.H.1.1 VOC Sources Source-specific Applicable Requirements

### **Cold Cleaners**

#### S-4420 (Exempt), S-4426, S-4427, S-4428

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
Part 2	Annual solvent throughput limit	Y	
Part 3	Recordkeeping requirement	Y	
Condition #18137	Throughput Limits	Ν	

# Table IV.H.2.1 VOC Sources (Fugitive Components Applicability Matrix) Table IV.H.2.1 VOC Sources Source-specific Applicable Requirements

Process Unit	BAAQMD Regulation 8-28	BAAQMD Regulation 8-18	NSPS Part 60, Subpart GGG; BAAQMD Regulation 10-59	NSPS Part 60, Subpart VV; BAAQMD Regulation 10-52	NESHAP Part 61, Subpart J	NESHAP Part 61,Subpart FF; BAAQMD Regulation 11-12	NESHAP Part 61, Subpart V; BAAQMD Regulation 11-7	NESHAP Part 63, Subpart CC	BAAQMD Condition #8869
101-FCC Reactor		х	Х	х				х	х
102-MTBE Plant		х	X	Х				х	
104-FCC Gas Recovery Unit		X	X	X				X	
105-FCC H2S Removal		х							X
106-FCC Caustic Treating		х						х	X
107-FCC CO Boiler and Misc		x							X
108-DeIsobutanizer		х	Х	х				х	х
110-Propylene Polymer		X							
120-Pole Yard Tanks		X			x applicable components– only – Benzene service		x applicable components– only – Benzene service	x	

# Table IV.H.2.1 VOC Sources Source-specific Applicable Requirements

Process Unit	BAAQMD Regulation 8-28	BAAQMD Regulation 8-18	NSPS Part 60, Subpart GGG; BAAQMD Regulation 10-59	NSPS Part 60, Subpart VV; BAAQMD Regulation 10-52	NESHAP Part 61, Subpart J	NESHAP Part 61,Subpart FF; BAAQMD Regulation 11-12	NESHAP Part 61, Subpart V; BAAQMD Regulation 11-7	NESHAP Part 63, Subpart CC	BAAQMD Condition #8869
121-LPG Spheres & Racks		x							
127-Sulfur Recovery Unit		x							
135/136 C5 SHU/TAME Plant		X	х	х				х	x
137-H2SO4 Alkylation – new		х	х	х				x	x
305-Boiler Shop Furnace		х							
401-Solvent Deasphalting (SDA)		x	X	х				x	
402-H2 Mfg. Plant A & B Train		x							
403-TKC Reaction/Distillation		x	X	X				x	
404-TKN Reaction		x						x	
405-IsoCracking Reaction		x						x	
406-Iso Distillation/Gas Recovery		X						х	
407-NH3-H2S Recovery		х							
408-Isomax H2 Booster	X	x							
409-Isomax Tar Stripper		x							
410-Misc Utilities		x							
412-4 H2S Plant		x							
413-Flare Gas Recovery		x							
414-RLOP LNC Plant		х						x	
415-RLOP LNC Distillation Section		x	X	X				x	
416-RLOP LNHF Plant		X						X	

# Table IV.H.2.1 VOC Sources Source-specific Applicable Requirements

Process Unit	BAAQMD Regulation 8-28	BAAQMD Regulation 8-18	NSPS Part 60, Subpart GGG; BAAQMD Regulation 10-59	NSPS Part 60, Subpart VV; BAAQMD Regulation 10-52	NESHAP Part 61, Subpart J	NESHAP Part 61,Subpart FF; BAAQMD Regulation 11-12	NESHAP Part 61, Subpart V; BAAQMD Regulation 11-7	NESHAP Part 63, Subpart CC	BAAQMD Condition #8869
417-RLOP HNC Plant		x						X	
418-RLOP HNC Distillation Section		х						x	
419-RLOP HNHF Plant		х	X	х				x	
420-RLOP LNHF Distillation Section		х	х	х				x	
421-RLOP No 2 NH3- H2S Removal		х	х	х				x	
422-RLOP Gas Recovery Unit		x	X	х				x	
423-H2 Recovery Unit		x	x	x					x
425-RLOP Flares		x							
429-H2S Mfg. Plant B Train		х							
708-Wax Rerun		x						x	
710-No 2 Wax Deoiler	x	x						x	
712-Thermofor Kiln		x							
906-No 4 Rheniformer		x			x applicable components- only – Benzene service		x applicable components- only – Benzene service	x	
950-Jet Hydrotreater		x						x	
951-Naphtha Hydrotreater		x			x applicable components– only – Benzene service		x applicable components– only – Benzene service	x	
952-No 5 Rheniformer		х						x	
953-No 5 H2S & Flare Gas Recovery		x							
954-LSFO H2 Booster		x							

# Table IV.H.2.1 VOC Sources Source-specific Applicable Requirements

Process Unit	BAAQMD Regulation 8-28	BAAQMD Regulation 8-18	NSPS Part 60, Subpart GGG; BAAQMD Regulation 10-59	NSPS Part 60, Subpart VV; BAAQMD Regulation 10-52	NESHAP Part 61, Subpart J	NESHAP Part 61,Subpart FF; BAAQMD Regulation 11-12	NESHAP Part 61, Subpart V; BAAQMD Regulation 11-7	NESHAP Part 63, Subpart CC	BAAQMD Condition #8869
955-No 4 Crude Unit	X	X			x applicable components– only – Benzene service	x applicable components only-FF service	x applicable components– only – Benzene service	x	
956-Diesel Hydrotreater		x	X	x				х	
957-LSFO Utilities		х						x	
962-Penhex Isomerization		X	x	x	x applicable components– only – Benzene service		x applicable components– only – Benzene service	x	x
966-Naphtha Splitter		x	X	x				x	
967-Reformate Splitter		X	x	x	x applicable components– only – Benzene service		x applicable components- only – Benzene service	x	
969-Caustic Scrubber		x	x	x					
1001-Util Gen	X					x applicable components only-FF service			
1002-No 1 Power Plant	х	x							
1007-Cogen 1000 Train		x							
1008-Cogen 2000 Train		x							
1010-Cogen Utilities		x							
1603-No 1 Pump Station		x						x	
1604- Office & Main Tank Area, 2 & 7 Pump Station		X						x	

# Table IV.H.2.1 VOC Sources Source-specific Applicable Requirements

Process Unit	BAAQMD Regulation 8-28	BAAQMD Regulation 8-18	NSPS Part 60, Subpart GGG; BAAQMD Regulation 10-59	NSPS Part 60, Subpart VV; BAAQMD Regulation 10-52	NESHAP Part 61, Subpart J	NESHAP Part 61,Subpart FF; BAAQMD Regulation 11-12	NESHAP Part 61, Subpart V; BAAQMD Regulation 11-7	NESHAP Part 63, Subpart CC	BAAQMD Condition #8869
1611-RPH – Shore Tank Area	x	x						X	
1615-RPH-Ethyl Plant		x						x	
1617-RPH-General		x						x	
1618-RPH-21 Pump Station		x						x	
1619-RPH- 21A Pump Station		x						x	
1620-RPH-SP Hill, 13 Pump Station		x						x	
1621-RPH-SPMain Tank Field/Ethyl Roads		X						x	
1622-RPH-W. Main/Bldg., 18 Pump Station		X						x	
1624-RPH- Ethyl/Standard Roads, 17 Pump Station	x	x						x	
1626-CPH-Quarry Tanks, 8 Pump Station		x						x	
1627-CPH-Separators, 24 Pump Station		x						x	
1440- Jet Additive Project Fugitive Source, at No.7 and No.21 Pump Station		x							

### Table IV.H.2.1 VOC Sources (Fugitive Components)

# Table IV.H.2.1 VOC Sources Source-specific Applicable Requirements

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
BAAQMD Regulation 8 Rule 18	Organic Compounds-Equipment Leaks (09/15,	/04)	
8-18-100	General/Applicability	Y	
8-18-200	Definitions	Y	
8-18-301	General Standard	Y	
8-18-302	Valves	Ν	
8-18-303	Pumps and compressors	Ν	
8-18-304	Connections	Ν	
8-18-305	Pressure relief devices	Y	
8-18-306	Non-repairable equipment	Ν	
8-18-307	Liquid Leaks	Y	
8-18-308	Alternate compliance	Y	
8-18-401	Inspection	Ν	
8-18-402	Identification	Y	
8-18-403	Visual inspection schedule	Y	
8-18-404	Alternate inspection schedule	Y	
8-18-405	Alternate emission reduction plan	Y	
8-18-406	Interim Compliance	Y	
8-18-501	Portable Hydrocarbon Detector	Y	
8-18-502	Records	Y	
SIP Regulation 8 Rule 18	Organic Compounds-Equipment Leaks (11/27/02)		
8-18-302	Valves	Y	
8-18-303	Pumps and compressors	Y	
8-18-304	Connections	Y	
8-18-306	Non-repairable equipment	Y	
8-18-401	Inspection	Y	
BAAQMD Regulation 8 Rule 28	Episodic Releases From Pressure Relief Devices at Petroleum Refineries and Chemical Plants (12/21/05)	Ν	
8-28-100	General/Applicability	N	

# Table IV.H.2.1 VOC Sources Source-specific Applicable Requirements

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
8-28-302	Pressure Relief Devices at New or Modified Sources at Petroleum Refineries	Ν	
8-28-303	Pressure Relief Devices at Existing Sources at Petroleum Refineries	Ν	
8-28-304	Repeat Rel-ases - Pressure Relief Devices at Petroleum Refineries	Y	
8-28-401	Reporting at Petroleum Refineries and Chemical Plants	Ν	
8-28-402	Inspection	Ν	
8-28-404	Identification	Ν	
8-28-405	Process Safety Requirments	N	
SIP Regulation 8 Rule 28	Pressure Relief Valves at Petroleum Refineries and Chemica	l Plants (3/18/98)	
8-28-100	General/Applicability	Y	
8-28-302	Pressure Relief Devices at New or Modified Sources at Petroleum Refineries	Y	
8-28-303	Pressure Relief Devices at Existing Sources at Petroleum Refineries	Y	
8-28-304	Repeat Releases – Pressure Relief Devices at Petroleum Refineries	Y	
8-28-401	Reporting	Y	
8-28-402	Inspection	Y	
8-28-403	Records	Y	
8-28-404	Identification	Y	
8-28-405	Prevention Measures Procedures	Y	
NSPS Part 60 Subpart GGG; BAAQMD Regulation 10-59	Standards of Performance for Equipment Leaks of VOC in Petroleum Ref Construction, Reconstruction, or Modification Commenced After 1/4/83 a 11/7/06(6/2/08); BAAQMD Standards of Performance for New Stationary Sources (4/19/89)	fineries for which nd on or Before ))	
40 CFR 60.590	Applicability	Y	
60.592	Subject to provisions of Part 60, Subpart VV	Y	
60.593	Exceptions	Y	
BAAQMD Regulation 10-59	Incorporates by reference 40 CFR 60 Subpart GGG	Y	

# Table IV.H.2.1 VOC Sources Source-specific Applicable Requirements

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
NSPS Part 60 Subpart QQQ; BAAOMD	Standards of Performance for VOC Emission From Petroleum Refinery Wastewater Systems (10/17/00);	Y	
Regulation 10 Rule 69	<b>BAAQMD Standards of Performance for New Stationary Sources</b> (12/20/95) [see Wastewater Cluster 20q for QQQ exemption requirements]		
BAAQMD Regulation 10 Rule 69	Incorporates by reference 40 CFR 60 Subpart QQQ	Y	
60.692-1	Standards: General	Y	
60.692-2	Standards: Individual drain systems	Y	
60.692-3	Standards: Oil water separators	Y	
60.692-4	Standards: Aggregate facilities	Y	
60.692-5	Standards: Control vent systems and control devices	Y	
60.692-6	Standards: Delay of repair	Y	
60.692-7	Standards: Delay of compliance	Y	
60.693-1	Alternative standards for individual drain systems	Y	
60.693-2	Alternative standards for oil water separators	Y	
NSPS Part 60 Subpart VV; BAAQMD Regulation 10 Rule 52	Standards of Performance for Equipment Leaks of VOC In The Synthetic Manufacturing Industry For Which Construction, Reconstruction, Or Mo 1/5/81 and on or Before 11/7/06 (Fugitive Emission Sources) (6/2/08); BAAQMD Standards of Performance for New Stationary Se	Organic Chemical dification Commen ources (12/20/95)	ls nced After
60.480	Applicability	Y	
60.482-1	General Standards	Y	
60.482-2	Pump Standards:		
60.482-2(a)(1)	Monthly monitoring of each pump, except for 60.482-1(c) and (f), 60.482-2(d), (e), or (f)	Y	
60.482-2(a)(2)	Weekly visual inspection of each pump, except for 60.482-1(f)	Y	
60.482-2(b)	Air measurement >10,000 ppm or dripping liquid indicates leak	Y	
60.482 –2 (c)	Pump leak repair period	Y	
60.482-2(d)	Requirements for Dual-Mechanical seal pump	Y	
60.482-2(e)	No detectable emission designation: <500 ppm	Y	
60.482-2(f)	Requirements for Closed Vent Systems	Y	
60.482-3	Compressor Standards	Y	
60.482-4	Requirements for Pressure Relief Devices in gas/vapor service	Y	
60.482-4(a)	Pressure relief valve (gas/vapor) < 500 ppm above background	Y	
60.482-5	Requirements for Sampling connection systems	Y	

# Table IV.H.2.1 VOC Sources Source-specific Applicable Requirements

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
60.482-6	Requirements for Open-ended valves or lines	Y	
60.482-7	Valve Standards:		
60.482-7(b) and (c)	Air measurement >10,000 ppm or dripping liquid indicates leak	Y	
60.482-7(a)-(c)	Monitor monthly unless 2 successive months <10,000 ppm, then monitor first month of each quarter. If leak >10,000 ppm is detected, resume monthly monitoring	Y	
60.482–7 (d)	Valve leak repair period	Y	
60.482-7(e)	Methods for first attempts or minimizing valve leaks	Y	
60.482-7(f)	Designated no-emissions (<500 ppm) valves with no external actuating mechanisms in contact with process fluid, may revert to annual monitoring, or that requested by the Administrator	Y	
60.482-7(g)	Allows relief from 60.482.7(a) monitoring if designated as unsafe-to- monitor. BAAQMD Regulation 8-18 does not allow this relief.	Y	
60.482-8	Pumps and Valves in heavy liquid service, pressure relief devices in light and heavy liquid service and connectors, follow one of the procedures if evidence of a potential leak is found:	Y	
60.482-8(a)(1)	Monitor equipment within 5 days of detection and comply with 60.482-8(b) through (d); or	Y	
60.482-8(a)(2)	Eliminate the visual, audible, olfactory, or other indication of a potential leak within 5 calendar days of detection.	Y	
60.482-9(b)	Repair may be delayed for isolated equipment	Y	
60.482-9(c)	Delay of repair for valves is only allowed under certain circumstances	Y	
60.482-9(d)(1)	Only dual-mechanical seal pumps qualify for delay of repair	Y	
60.482-9(d)(2)	Pump leaks must be repaired as soon as practicable, but within 6 months after the leak was detected	Y	
60.482-10	Requirements for Closed-vent systems and control devices	Y	
60.482-10(c)	Combustion devices VOC $\geq$ 95% destruction efficiency or an exit concentration of 20 ppmvd @ 3% O2 (whichever is less stringent), or residence time $\geq$ 0.75 seconds and $\geq$ 816°C	Y	
60.482-10(g)	Closed-vent systems leak $\geq$ 500 ppm and visible leak indication. First attempt to repair leak (visible or >= 500 ppm) within 5 days, repair complete within 15 days, except as allowed for in 60.482-10(h)	Y	
60.483-1 60.483-2 8-18-404.1	If a process unit has 5 consecutive quarters with <2% of valves leaking at >10,000 ppm, then any individual valve which measures <100 ppm for 5 consecutive quarters may be monitored annually	Y	
60.484	Equivalence of means of emission limitation	Y	
60.485	Test Methods and Procedures	Y	
60.486	Record Keeping	Y	

# Table IV.H.2.1 VOC Sources Source-specific Applicable Requirements

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
60.487	Reporting	Y	
BAAQMD Regulation 10 Rule 52	Incorporates by reference 40 CFR 60 Subpart VV	Y	
NESHAP 40 CFR Part 61 Subpart J	National Emission Standards for Equipment Leaks (Fugitive Emission S	ources) of Benzene	(12/14/00)
61.110	Applicability	Y	
61.112	Subject to provisions of Part 61, Subpart V	Y	
NESHAP Part 61 Subpart FF; BAAQMD Regulation 11 Rule 12	National Emission Standard for Benzene Waste Operatio BAAQMD National Emission Standard for Benzene Emissions from Benzene Benzene Waste Operations (7/18/90)	ons (12/04/03); zene Transfer Ope	rations and
61.340	Applicability	Y	
61.349	Standards: Closed vent systems and control devices	Y	
61.349(a)	Closed vent system and control device used to comply with standards of this subpart shall be properly designed, installed, operated, and maintained.	Y	
61.349(a)(1)(i)	Closed vent system designed to operate with no detectable emissions (<500 ppm).	Y	
61.349(a)(1)(iii)	All gauging and sampling devices shall be gas-tight except when gauging or sampling is taking place.	Y	
61.349(a)(1)(iv)	For each closed-vent system, one or more devices which vent directly to the atmosphere may be used on the closed-vent system provided each device remains in a closed, sealed position during normal operations, except when the device needs to open to prevent physical damage or permanent deformation of the closed-vent system resulting from malfunction of the unit.	Y	
61.349(b)	Closed vent system anc control device used to comply with this subpart shall be operated at all times when waste is placed in the WMU vented to the control device except when maintenance or repair of the WMU cannot be compled without a shutdown.	Y	
61.349(c)	Demonstration of compliance for control devices, other than flares	Y	
61.349(d)	Demonstration of compliance for flares	Y	
61.349(e)	Adminstrator may request demonstration of control device at any time	Y	
61.349(f)	Each closed-vent system and control device shall be visually inspected quarterly.	Y	
61.349(g)	If visible defects are observed, repair within 5 calendar days, as soon as practicable, but not later than 15 calendar days.	Y	
61.356(h)	Recordkeeping	Y	
61.357 (d)(6)	The owner/operator shall submit quarterly a certification that all of the required inspections have been carried out.	Y	

# Table IV.H.2.1 VOC Sources Source-specific Applicable Requirements

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
BAAQMD Regulation 11 Rule 12	Incorporates by reference 40 CFR 61 Subpart FF	N	
NESHAP 40 CFR Part 61 Subpart V; BAAQMD Regulation 11 Rule 7	National Emission Standards for Equipment Leaks (Fugitive Emiss Hazardous Pollutants: Benzene (5/15/85)	ion Sources) (12/14	4/00);
40 CFR 61.240	Applicability: VHAP service	Y	
61.242-1	General Standards	Y	
61.242-2	Pump Standards		
61.242-2(a)(1)	Monthly monitoring of each pump, except for 61.242-2(d), (e), or (f)	Y	
61.242-2(a)(2)	Weekly visual inspection of each pump, except for (e), (f), or (g)	Y	
61.242-2(b)	Air measurement >10,000 ppm or dripping liquid indicates leak	Y	
61.242-2 (c)	Pump leak repair period	Y	
61.242-2(d)	Requirements for Dual-Mechanical seal pump	Y	
61.242-2(e)	No detectable emission designation: <500 ppm	Y	
61.242-2(f)	Requirements for Closed Vent Systems	Y	
61.242-2(g)	If unsafe to monitor sites, monitor as frequently as practicable.	Y	
61.242-2(h)	Monthly visual inspections for un-manned sites	Y	
61.242-3	Compressor Standards	Y	
61.242-4	Requirements for Pressure Relief Devices in gas/vapor service	Y	
61.242-4(a)	Pressure relief valve (gas/vapor) leak $\geq$ 500 ppm above background	Y	
61.242-5	Requirements for Sampling connecting systems	Y	
61.242-6	Requirements for Open-ended valves or lines	Y	
61.242-7	Valve Standards		
61.242-7(a)-(c)	Monitor monthly unless 2 successive months <10,000 ppm, then monitor first month of each quarter. If leak >10,000 ppm is detected, resume monthly monitoring	Y	
61.242-7(b) and (c)	(b) If an instrument reading of 10,000 ppm or greater is measured, a leak is detected.	Y	
	(c)(1) Any valve for which a leak is not detected for 2 successive months may be monitored the first month of every quarter, beginning with the next quarter, until a leak is detected.		
61.242-7(d)	First attempt at repair	Y	
61.242-7(e)	Methods for first attempts or minimizing valve leaks	Y	

# Table IV.H.2.1 VOC Sources Source-specific Applicable Requirements

Applicable Requirement	cable ementRegulation Title or Description of RequirementFederally Enforceable (Y/N)		Future Effective Date
61.242-7(f)	Designated no-emissions (<500 ppm) valves with no external actuating mechanisms in contact with process fluid, may revert to annual monitoring, or that requested by the Administrator	Y	
61.242-7(g)	Allows relief from 61.242.7(a) monitoring if designated as unsafe-to-monitor	Y	
61.242-8	Pressure Relief Devices in liquid service and Flanges and other Connectors follow either one of the following procedures if evidence of a potential leak is found:	Y	
61.242-8(a)(1)	Monitor equipment within 5 days of detection and comply with 61.242-8(b) through (d); or	Y	
60.242-8(a)(2)	Eliminate the visual, audible, olfactory, or other indication of a potential leak.	Y	
61.242-9	Product accumulator vessels shall be equipped with a closed-vent system and control device	Y	
61.242-10(b)	Repair may be delayed for isolated equipment	Y	
61.242-10(c)	Delay of repair for valves is only allowed under certain circumstances	Y	
61.242-10(d)(1)	Only dual-mechanical seal pumps qualify for delay of repair	Y	
61.242-10(d)(2)	242-10(d)(2) Pump leaks must be repaired within 6 months		
61.242-11	Requirements for closed-vent systems and control devices	Y	
61.242-11(c)	Combustion devices VHAP $\geq$ 95% destruction efficiency or to an exist concentration of 20 ppmvd @ 3% O2, whichever is less stringent, or residence time $\geq$ 0.50 seconds and $\geq$ 760°C	Y	
61.242-11(f)	Inspection frequencies	Y	
61.242-11(g)	Closed-vent systems leak > 500 ppm and visible leak indication. First attempt to repair leak (visible or > 500 ppm) within 5 days, repair complete within 15 days, except as allowed for in $60.482-10(h)$	Y	
61.243-1, 61.243-2, and BAAQMD 8-18-404.1	If a process unit has 5 consecutive quarters with <2% of valves leaking at >10,000 ppm, then any individual valve which measures <100 ppm for 5 consecutive quarters may be monitored annually	Y	
61.245	Test Methods and Procedures	Y	
61.246	Recordkeeping	Y	
61.247	Reporting	Y	
BAAQMD Regulation 11 Rule 7	Hazardous Pollutants: Benzene (5/15/85)		
11-7-100	General/Applicability	Ν	
11-7-301	Equipment marking	Ν	
11-7-302	Pump Standards	Ν	
11-7-303	Compressor Standards	Ν	
11-7-304	Pressure Relief Devices in Gas/Vapor Service Standards	Ν	

# Table IV.H.2.1 VOC SourcesSource-specific Applicable Requirements

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
11-7-305	Sampling Connecting System Standards	Ν	
11-7-306	Open-ended Valve Standards	Ν	
11-7-307	Valve Standards	N	
11-7-308	Pressure Relief Devices in Liquid Service, Flanges and Other Connector Standards	N	
11-7-309	Product Accumulator Vessel Standards	N	
11-7-310	Delay of Repair Limitations	N	
11-7-311	Closed Vent Systems and Control Device Standards	N	
11-7-312	Alternative Standards for Valves in Benzene Service	N	
11-7-313	Alternative Standards for Valves – Skip Period Leak Detection and Repair	Ν	
11-7-314	Alternative Means of Emission Limitation	N	
11-7-601	Monitoring shall be conducted as specified in 40 CFR 61 and the Manual of Procedures	N	
NESHAP 40 CFR Part 63 Subpart CC	National Emission Standards for Hazardous Air Pollutants from Petr	oleum Refineries (	6/23/03)
63.640(a)	Applicability	Y	
63.642(e)	Keep records for 5 years	Y	
63.648(a)	Equipment leak standards. Comply with 40 CFR 60, Subpart VV	Y	
63.648(b)	Use of monitoring data from prior to 8/18/95 to qualify for less stringent monitoring frequency	Y	
63.648(c)	Alternate requirements	Y	
63.648(d)	New sources	Y	
63.648(e)	Reciprocating pumps in heavy liquid service	Y	
63.648(f)	Reciprocating pumps in light liquid service	Y	
63.648(g)	Compressors in hydrogen service	Y	
63.648(h)	Records	Y	
63.648(i)	Reciprocating compressors exemption	Y	
63.649	Alternate means of emission limitation	Y	
63.654(d)	Recordkeeping and reporting	Y	
Condition #8869	Applies to S-32103	Y	
Condition #23201	Applies to A-620, A-622, A-623, A-624, A-627, and A-628	Y	
Part 1	Sources subject to NSPS Subparts A and J	Y	
Condition #24433	Applies to S-4252, S-4253, S-4348, S-4435	Ν	

# Table IV.H.2.1 VOC Sources Source-specific Applicable Requirements

### **Fugitive Components**

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
Condition #24671	Applies to S-4440	Ν	

### Table IV.H.31. VOC Sources (Paint Booth)

# Table IV.H.3.1 VOC Sources Source-specific Applicable Requirements

#### Paint Booth and Printers

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
BAAQMD Regulation 8 Rule 1	Organic Compounds – General Provisions (11/4	/98)	
8-1-320	Storage and Disposal of Solvent Impregnated Cloth or Paper	Y	
8-1-321	Closed Containers for Spent or Fresh Organic Solvents	Y	
8-1-322	Spray Equipment Cleanup Limitation	Y	
BAAQMD Regulation 8 Rule 4	Organic Compounds – General Solvent and Surface Coating Operations (10/16/02)		
8-4-302	Solvents and Surface Coating Requirements	Y	
8-4-302.1	Emissions less than 5 tons per year	Y	
8-4-302.2	Abatement > 85% (> 90% for incineration)	Y	
8-4-302.3	$VOC \le 3.5 \text{ lb/gal}$	Y	
8-4-312	Solvent Evaporation Loss Minimization	Y	
8-4-312.1	Storage and Disposal of Solvent Impregnated Cloth or Paper	Y	
8-4-312.2	No Organic Compounds for Cleanup of Spray Equipment Unless Controls are Used	Y	
8-4-312.3	Closed Containers for Spent or Fresh Organic Solvents	Y	
8-4-313	Surface Preparation Standards	Y	
8-4-501	Recordkeeping	Y	
8-4-501.1	Maintain Data Necessary to Evaluate Compliance	Y	
8-4-501.2	Annual Records of Coating Applied	Y	
8-4-501.3	Daily Recording of Key System Operating Parameters	Y	
8-4-501.4	Monthly Usage Records of 8-4-302.3 Coatings and Cleaning Solvents	Y	
8-4-501.5	Records Retention	Y	

# Table IV.H.3.1 VOC SourcesSource-specific Applicable Requirements

### Paint Booth and Printers

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
BAAQMD	Organic Compounds – Surface Coating of Miscellaneous Metal Parts	and Products (10/	16/02)
Regulation 8 Rule 19	(not applicable to S-7601)		
8-19-110	Exemption, Low usage Coatings	Y	
8-19-302	Coating VOC Limits	Y	
8-19-302.1	Baked Coating	Y	
8-19-302.2	Air-Dried Coating	Y	
8-19-307	Prohibition of Specification	Y	
8-19-312	Specialty Coating VOC Limits	Y	
8-19-312.1 through 312.13	Specific Baked and Air-Dried VOC content limits	Y	
8-19-313	Spray Application Equipment Limitations	Y	
8-19-313.1	HVLP Spray; or	Y	
8-19-313.2	Electrostatic Spray; or	Y	
8-19-313.3	Detailing Gun; or	Y	
8-19-313.4	Other Method Approved in Writing by the APCO	Y	
8-19-320	Solvent Evaporative Loss Minimization	Y	
8-19-320.1	Storage and Disposal of Solvent Impregnated Cloth or Paper	Y	
8-19-320.2	No Organic Compounds for Cleanup of Spray Equipment unless Controls are Used	Y	
8-19-320.3	Closed Containers for Coatings or Solvents Not in Use	Y	
8-19-321	Surface Preparation Standards	Y	
8-19-407	Specialty Coating Petition	Y	
8-19-501	Records	Y	
8-19-501.1	Maintain Data Necessary to Evaluate Compliance	Y	
8-19-501.2	Weekly Coating Usage Records	Y	
8-19-501.3	Daily Recording of Key System Operating Parameters	Y	
8-19-501.4	Monthly Cleaning Solvent Records	Y	
8-19-501.5	Records Retention	Y	
BAAQMD Regulation 8 Rule 31	Organic Compounds – Surface Coating of Plastic Parts and Products (10/16/02) ( not applicable to S-7601)		
8-31-111	Exemption, Low usage coatings	Y	

# Table IV.H.3.1 VOC Sources Source-specific Applicable Requirements

### **Paint Booth and Printers**

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
8-31-302	General VOC Limit	Y	
8-31-306	Flexible Coating VOC Limits	Y	
8-31-307	Prohibition of Specification	Y	
8-31-309	Specialty Coating VOC Limits	Y	
8-31-310	Spray Application Equipment Limitations	Y	
8-31-310.1	HVLP Spray; or	Y	
8-31-310.2	Electrostatic Spray; or	Y	
8-31-310.3	Detailing Gun; or	Y	
8-31-310.4	Other Method Approved in Writing by the APCO	Y	
8-31-320	Solvent Evaporative Loss Minimization	Y	
8-31-320.1	Storage and Disposal of Solvent Impregnated Cloth or Paper	Y	
8-31-320.2	No Organic Compounds for Cleanup of Spray Equipment Unless Controls are Used	Y	
8-31-320.3	Closed Containers for Coatings or Solvents Not in Use	Y	
8-31-321	Surface Preparation Standards	Y	
8-31-401	Extreme Performance Coating Petition	Y	
8-31-501	Records	Y	
8-31-501.1	Maintain Data Necessary to Evaluate Compliance	Y	
8-31-501.2	Weekly Coating Usage Records	Y	
8-31-501.3	Daily Recording of Key System Operating Parameters	Y	
8-31-501.4	Monthly Cleaning Solvent Records	Y	
8-31-501.5	Records Retention	Y	
BAAQMD Regulation 8 Rule 32	Organic Compounds – Wood Products Coating (06/19/96) ( not applicable to S-7601)		
8-32-111	Exemption, Small coating operations	Y	
8-32-119	Limited Exemption, Extreme Environmental Conditions	Y	
8-32-301	Spray Application Equipment Limitations	Y	
8-32-302	General Wood Product Limits	N	
8-32-302.1	High Solids Coatings	N	
8-32-302.2	Low Solids Coatings	N	
8-32-303	Furniture, Custom Cabinetry and Custom Architectural Millwork Limits	N	

# Table IV.H.3.1 VOC Sources Source-specific Applicable Requirements

### **Paint Booth and Printers**

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
8-32-303.1	High Solids Coatings	N	
8-32-303.2	Low Solids Coatings	N	
8-32-305	Prohibition of Specification	Y	
8-32-307	Alternative Compliance, Section 8-32-302	N	
8-32-320	Solvent Evaporative Loss Minimization	Y	
8-32-320.1	Storage and Disposal of Solvent Impregnated Cloth or Paper	Y	
8-32-320.2	Closed Containers for Fresh or Spent Solvent	Y	
8-32-320.3	No Organic Compounds for Cleanup of Spray Equipment Unless Controls are Used	Y	
8-32-320.4	Closed Containers for Stripper, Coating, Adhesive, Catalyst or Thinner	Y	
8-32-403	Extreme Environmental Conditions Petition	N	
8-32-404	Alternative Compliance Petition and Approval	N	
8-32-501	Records	Ν	
8-32-501.1	Maintain Data Necessary to Evaluate Compliance	N	
8-32-501.2	Daily Coating Usage Records	Y	
8-32-501.3	Daily Recording of Key System Operating Parameters	Ν	
8-32-501.4	Records Retention	Y	
SIP Regulation 8 Rule 32	Organic Compounds – Wood Products Coating (12/20/95) (not applicable to S-7601)		
8-32-303	General Wood Products Limits	Y	
8-32-303.1	High Solids Coatings	Y	
8-32-303.2	Low Solids Coatings	Y	
8-32-304	Furniture and Custom Architectural Millwork Limits	Y	
8-32-304.1	High Solids Coatings	Y	
8-32-304.2	Low Solids Coatings	Y	
8-32-402	Progress Report	Y	
8-32-501	Recordkeeping Requirements	Y	
8-32-501.1	Maintain Data Necessary to Evaluate Compliance	Y	
8-32-501.3	Daily Recording of Key System Operating Parameters	Y	
8-32-503	Custom Architectural Millwork Recordkeeping Requirements	Y	
Condition #5640	Permit condition applies as follows:	•	

# Table IV.H.3.1 VOC Sources Source-specific Applicable Requirements

### Paint Booth and Printers

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
Part 1	Annual coating usage limit	Y	
Part 2	Hexavalent chrome coating brush application requirement	Ν	
Part 3	Annual clean-up solvent usage limit.	Y	
Part 4	Recordkeeping requirements	Y	
Condition #21165	Permit condition applies as follows: to S-4424		
Part 1	Annual POC emission limit	Ν	
Part 2	Daily POC emission limit	Ν	
Part 3	Toxic emission limit	Ν	
Part 4	Recordkeeping requirements	Y	
Condition # 22266	Permit condition applies to S-7601		
Part 1	Annual ink usage limit	Ν	
Part 2	Annual Cleaning solvent usage limit	Ν	
Part 3	Record keeping requirements	Y	

### V. SCHEDULE OF COMPLIANCE

The permit holder shall comply with all applicable requirements cited in this permit. The permit holder shall also comply with applicable requirements that become effective during the term of this permit on a timely basis.

Any condition that is preceded by an asterisk is not federally enforceable.

Compliance with the throughput limit listed in Table II for S-3100

### VI. PERMIT CONDITIONS

#### Condition #469

For S-4038 to S-4046, S-4059 to S-4062, S-4068 to S-4072, S-4093 to S-4094, S-4107, S-4117 to S-4119, S-4127, S-4132, S-4135, S-4153, S-4154, S-4156, S-4157, S-4159, S-4160, S-4161, S-4162, S-4163 to S-4169, S-4171, S-4180, S-4188, S-4189, S-4191 to S-4194, S-4227 to S-4230, S-4233, S-4234, S-4236 to S-4240, S-4250, S-4252, S-4283, S-4315, S-4330 to S-4343, S-4345, S-4349, S-4396, S-4400, S-4402 to S-4404, S-6005, S-6010, S-6012, S-6013, S-6015 to S-6017, S-6019, S-6039, S-6089:

### **CHEVRON REFINERY CAP "BUBBLE" PERMIT CONDITION**

### APPLICATION #27797

### Last Revised per A/N 19972, 8/1/98

All criteria pollutant emissions from A-54 (Application #19972) shall be included in the cap calculation**The basis of this refinery-wide cap condition is ""Bubble"**. Per Appendix J, of Authority to Construct Number 27797, the following are excluded from the Refinery baseline: Coal liquefaction Pilot Plant (Chevron Research), FCC, Nitric Acid Plant, Fugitive emissions from existing process units (except as used to adjust the monthly and yearly emission limits for process units shutdown, valves, pump and compressor seals, cooling towers, and drains), tankage, S-4155 SDA Furnace

CHEVRON REFINERY CAP PERMIT CONDITIONS APPLICATION #27797 LAST REVISED 7/2/97, A/N 16876 Revised per A/N 19972, A/N 4134

#### 1. Emission Limitations

Listed below are calendar year emission limits for the refinery only and for refinery and wharf activity taken together. If the yearly limit for any pollutant is exceeded, the applicable requirements of Section 2.A shall apply. However, if in a given calendar year, any of the limits of Section 1.A are exceeded, such excess shall be allowed so long as it is offset in that calendar year by a compensatory reduction in wharf emissions at a ratio of 2:1 in the limit for the same pollutant in Section 1.B.

Β.

Wharf and Refinery:

A. Refinery only:

Particulates	281.1 ton/yr	Particulates	326.0 ton/yr
Hydrocarbons	326.3 ton/yr	Hydrocarbons	391.1 ton/yr
Nox	1516.01 ton/yr	Nox	1921.01 ton/yr
SO2	392.0 ton/yr	SO2	918.0 ton/yr
CO	723.5 ton/yr	CO	773.5 ton/yr

The hydrocarbon emission limitation in Section 1.B may be exceeded only to the extent that lightering emissions may exceed 24.1 ton/yr. In the event that lightering emissions do exceed 24.1 ton/yr, this ton/yr limitation shall only be increased by 1 ton/yr for each ton of lightering emissions in excess of 24.1 ton/yr. However, in no event shall such increased lightering emissions cause the ton/yr hydrocarbon limit to be increased by more than 5.7 ton/yr. Credit for reductions in the annual limit for hydrocarbons in Section 1.B (which could be applied against excess hydrocarbon emissions above the limitations in Section 1.A) shall only be allowed to the extent that annual wharf and refinery hydrocarbon are less than 391.1 tons/yr.

C. Listed below are the maximum calendar month emission limits for refinery activity. These limits provide a mechanism, which will allow Chevron in any given month to offset certain limited increases in refinery emissions, above the refinery component of the maximum baseline month, by achieving in that same month actual reductions in emissions from wharf activity, below the wharf component of the maximum baseline month, at a ratio of 2:1. Thus, these limits will vary slightly from month to month in accordance with the formula set forth below. This formula consists of two numbers for each pollutant of concern: a fixed baseline number (which is equivalent to the emissions attributable to refinery operations in the maximum baseline month in Chevron''s 3-year baseline) plus a factor, which varies with the actual emissions, associated with wharf activity during a given month. The fixed component in the factor for each pollutant is the maximum baseline month in Chevron''s 3-year baseline, and the variable ""awe"" represents the actual wharf emissions for the month in question. As ""awe"" increases, the factor (and hence Chevron''s ability to have monthly emissions from the refinery in a given month which exceed the refinery component of the maximum baseline month) will decrease. This factor shall be disregarded if less than zero. If the monthly limit for any pollutant, as determined by this formula, is exceeded, the applicable requirements of Section 2.B shall apply.

Refinery only:

	Baseline	Factor
Particulates	32.8 + (4.0 - ""	awe"")/2 ton/mo.
Hydrocarbons	31.2 + (6.4 - ""	awe"")/2 ton/mo.
NOx	539.2 + (37.1 -	"awe"")/2 ton/mo.
SO2	155.5 + (53.8 -	"awe"")/2 ton/mo.
CO	125.6 + (4.2 - "	"awe"")/2 ton/mo.

D. Listed below are calendar month emission limits applicable to the refinery only, which if exceeded, shall trigger the offset requirements of Section 2.C.

Refinery only:

Particulates	27.5 ton/mo
Hydrocarbons	31.1 ton/mo
NOx	538.2 ton/mo
SO2	75.5 ton/mo
CO	113.6 ton/mo

E. If, at the end of any calendar month, the total emissions accumulated so far in that calendar year exceed the permitted calendar year emissions set forth in Section 1.B prorated to the number of months elapsed so far that year plus the amounts set forth below, the informational requirements of Section 2.D shall apply.

Wharf and Refinery together:

Particulates	29.9 tons
Hydrocarbons	35.9 tons
NOx	563.8 tons
SO2	84.1 tons
CO	70.9 tons

- F. The limits set forth in Sections 1.A, 1.B, and 1.C above are legal limits which are never to be exceeded. Accordingly, in the event that any such limit ever is exceeded, Chevron shall be immediately subject to the applicable sanctions in Section 2 below. However, these limits may be adjusted upward or downward pursuant to the provisions of Section 9 below.
- 2. Alternative Emission Limitations

The following conditions apply when the emission limits set forth in Section 1 above are exceeded.

- A. If any of the annual emission limits of Section 1.A or 1.B are exceeded, the following conditions shall apply:
  - i. Chevron shall install and maintain on a permanent basis abatement equipment (or shall implement on a permanent basis such other abatement measures or techniques which will achieve equivalent emission reductions), as specified in the Environmental Management Plan or as approved by the Air Pollution Control Officer, to control emissions of the pollutant of concern so as to offset the excess at a ratio of 2:1 (i.e. for every ton per year by which the applicable limit is exceeded, the hardware to be installed or other measures to be taken shall achieve a permanent emission reduction of 2 tons per year);
  - ii. The refinery shall not process more than 303,000 barrels of crude oil per stream day, or more than 257,000 barrels of crude oil per day averaged over any one calendar month until the emission reductions required under Section 2.A.i are achieved; and
  - iii. The permitted annual emission limit for the pollutant of concern shall be reduced by the amount by which said limit was exceeded on a prorated calendar monthly basis, until the emission reductions required under Section 2.A.i above are achieved.

- B. If any of the monthly maximum emission limits of Section 1.C are exceeded, the following conditions shall apply:
  - i. The excess shall be charged against the permitted annual limit in Section 1.A above which is applicable to that pollutant by twice the amount by which the limit in Section 1.C is exceeded; provided, however, that if such monthly excess occurs during December, then, to the extent that such excess cannot be charged as provided above without causing the annual limit to be exceeded, it shall be charged once against the current calendar year and once against the following calendar year;
  - ii Chevron shall either (a) install and maintain on a permanent basis abatement equipment (or shall implement on a permanent basis such other abatement measures or techniques which will achieve equivalent emission reductions) as specified in the Environmental Management Plan, or as approved by the Air Pollution Control Officer, to control emissions of the pollutant of concern so as to offset the excess at a ratio of 2:1 (i.e., for every ton per month by which the applicable limit is exceeded, the hardware to be installed or other measures to be taken shall achieve a permanent emission reduction of 2 tons per month); or (b) take such other abatement measures approved by the Air Pollution Control Officer which will prevent a recurrence of the type of incident which caused the excess; and
  - iii Chevron shall not process more than 303,000 barrels of crude oil per stream day, or more than 257,000 barrels of crude oil per stream day averaged over any one calendar month until the emission reductions or other abatement measures required under Section 2.B.ii above are achieved or taken.
- C. If any of the emission limits set forth in Section 1.D are exceeded, then the excess shall be charged against the permitted annual limit in Section 1.A above which is applicable to that pollutant by twice the amount by which the limit in Section 1.D is exceeded; provided, however, that if such monthly excess occurs in December, then, to the extent that such excess cannot be charged as provided above, without causing the annual limit to be exceeded, it shall be charged once against the current calendar year and once against the following calendar year. However, this provision shall only apply when the sanctions set forth in Section 2.B above are not triggered.
- D. If the emission limits of Section 1.E are exceeded, Chevron shall inform the District in writing within 30 days of the end of the calendar month as to what steps outlined in the Environmental Management Plan it will take to assure that the annual limits in Sections 1.A and 1.B will be met.
- E. After the District has determined that an excess of any of the limits set forth in Sections 1.A through 1.D has occurred, Chevron shall, within 90 days, submit to the District a plan detailing how this excess will be mitigated. If a short term control measure specified in the Environmental Management Plan is used to mitigate the excess, this measure must be implemented and the required reduction achieved by the end of the following calendar year. If abatement equipment is installed, a compliance plan must be submitted within the above mentioned 90 day period detailing all of the following:
  - 1. How the reduction will be achieved;
  - 2. When the permit application will be submitted;
  - 3. When the on site construction will be completed; and
  - 4. When excess will be paid back (these excesses must be paid back by the end of the calendar year following the year in which abatement equipment was installed, or longer period as approved by the APCO.
- F. Reductions of reactive hydrocarbons may be used to offset increases in NOx at a ratio of 1:1, provided that Chevron demonstrates to the satisfaction of the Air Pollution Control Officer that the increased NOx emissions will not cause or contribute to an excess of any ambient air quality standard for NO2 at the point of maximum ground level impact

- G. If Chevron is subject to any of the requirements of Sections 2.A through 2.D, and Chevron fails to comply with any such requirement, each and every day on which any such failure occurs shall constitute a distinct and separate violation of the conditions of this permit, and shall subject Chevron to any and all appropriate sanctions provided by law.
- H. In the event that Chevron installs abatement equipment to achieve 2:1 offsets on a permanent basis (or takes measures which will achieve equivalent permanent emission reductions) pursuant to Section 2.B.ii (a) above, any such emission reductions shall be credited towards emission reductions which may be required under Section 2.A.i above for that same calendar year. In other words, if Chevron exceeds one of the maximum calendar month emission limits set forth in Section 1.C, and takes corrective action in accordance with Section 2.B.ii (a), but if after the end of the calendar year in which that violation took place, staff determines that Chevron also exceeded one or both of the calendar year emission limits for that same pollutant, then Chevron shall not be required to install additional abatement equipment or implement additional measures to achieve permanent emission reductions due to that violation of the calendar year limit or limits, and will not be considered in violation of such calendar year limit or limits, so long as the violation of the calendar year limit or limits is not greater than the violation of the monthly limit which was the subject of corrective action.

#### 3. Monitoring

The following monitoring instruments listed shall be installed, calibrated, maintained and operated by Chevron in accordance with the District's Manual of Procedures.

- A. An instrument to continuously monitor nitrogen oxide emissions in the flue gas from each SCR unit.
- B. An instrument to continuously monitor the percentage of oxygen in the flue gas from each SCR Unit.
- C. Such other instruments as listed in Appendix A, which the APCO may at future date deem necessary to calculate emissions from the refinery. Such instruments need not be installed until the APCO so informs Chevron in writing.
- 4. Reporting and Record Keeping

The following conditions will document Chevron's emissions on a monthly basis, in addition to satisfying the requirements of Regulation 10-1-402 of District regulations.

- A. Chevron shall maintain a file containing all measurements, records, charts and other data which are required to be collected pursuant to the various provisions of this Permit to Operate, as well as all other data and calculations necessary to determine actual emissions from all refinery and wharf operations. This file shall include, but not be limited to: the data collected from all instack monitoring instruments, the records on fuel input rates, and the records of crude oil. Actual emissions from all units at the refinery which are included under the limits set forth in Section 1 above shall be calculated in accordance with Appendix A through N. This material shall be kept available for District inspection for a period of at least 2 years following the date on which such measurements, records or data are made or recorded.
- B. Chevron shall make a monthly report to the District, within 30 days after the end of each month, which shall include but need not be limited to the following information:
  - 1. Crude oil processed
  - 2. EFOB of each fuel burned
  - 3. Number and vessel class
  - 4. Lightering

#### Emissions

5. Process Unit Design

The owner/operator shall not exceed the throughput limits below. The following process unit design rates reflect the design and specifications outlined in the permit application and were used to calculate allowable emissions from the modified refinery:

UNIT	DESIGN PROCESS RATE
Light Neutral Hydrocracker(S-4340)	16,500 BPOD
Light Neutral Hydrofinisher(S-4341)	22,000 BPOD
Heavy Neutral Hydrocracker(S-4342)	26,000 BPOD
Heavy Neutral Hydrofinisher(S-4343)	12,000 BPOD
TKC Unit (Changed from 52K BGY 3/1/95)	65,000 BPOD

These units shall be designed and built to the above specifications, and annual/daily emissions caused by these units shall not exceed the amount that would be produced if the unit were operated at no more than the above design process rates for a calendar year/day.

#### 6. Combustion

- A. Fuel oil shall not be burned at the refinery.
- B. Except during start-ups and shutdowns and other low firing rate modes (i.e., when the flue gas entering the SCR units is below 572 F), the nitrogen oxides in the flue gases form the three new SCR units shall not exceed 40 ppm as NOx corrected to 3% oxygen averaged over any 8 hour period.
- C. Deleted on August 10, 1993 (by Mr. John Swanson).
- D. The P.A. Plant incinerator outlet temperature shall not be less than 1380 F averaged over 3 hours when the PA reactors have orthoxylene feed in.
- E. Furnaces F-1650 (S-4349), F-1610 (S-4330), F-1310 (S-4331), F-1750 (S-4333), F-1360 (S-4332), F-1200 (S-4334), F-1250 (S-4335), F-1410 (S-4336), F-1500 (S-4337), F-1550 (S-4338), and F-1110 (S-4339) shall not exceed a combined fired duty of 337.5 million BTU/HR (HHV) averaged over either any calendar day or averaged over any consecutive 12 month period. The owner/operator of these furnaces shall not exceed the individual daily enforceable limits in the table below:

Source		Enforceable Limit	Used for
	Frnace	MMBtu/day (HHV)	Fees MMBtu/h (HHV)
<b>S-4330</b>	F-1610	328.8	13.7
S-4331	F-1310	501.6	20.9
S-4332	F-1360	1754.4	73.1
S-4333	F-1750	1504.8	62.7
S-4334	F-1200	607.2	25.3
S-4335	F-1250	595.2	24.8
S-4336	F-1410	600.0	25.0
S-4337	F-1500	739.2	30.8
S-4338	F-1550	864.0	36.0
S-4339	F-1110	456.0	19.0
S-4349	F-1650	396.0	16.5

The firing rate limits used above are expressed in terms of Higher Heating Value (HHV). When using Appendix 1 of Permit Condition 469 to estimate emissions, firing rates must be converted to Lower Heating Value (LHV). Firing rates in LHV are calculated by dividing the corresponding firing rate in HHV by 1.1.
Additional conditions for F-1650 (S-4349): [Added by B. Young on 7/2/97, A/N 16876]

- E1. Furnace F-1650 (S-4349) shall burn only natural gas or refinery fuel gas. The burners shall not be modified to burn liquid fuels without first obtaining a new Authority to Construct from the District.
- E2. The owner/operator of Furnace F-1650 (S-4349), a natural draft furnace, shall not emit from S-4349 nitrogen oxide emissions, as NO2, that exceed 20 ppmv, dry, corrected to 3 % oxygen, averaged over 3 hours. This emission limit shall not apply during startup and shutdown as defined below (basis: cumulative increase).
- E3. The owner/operator of Furnace F-1650 (S-4349), a natural draft furnace, shall not emit from S-4349 carbon monoxide monoxide emissions that exceed 50 ppmv, dry, corrected to 3 % oxygen, averaged over 8 hours. This emission limit shall not apply during startup and shutdown as defined below (basis: cumulative increase).
  For S-4349, startup shall mean that period of time during which a process heater is put into normal operation from an inactive status by following a prescribed series of separate steps or operations. The startup may not exceed 6 hours. Shutdown shall mean that period of time during which a process heater is taken out of service from a normal operating mode to an inactive status by following a prescribed series of separate steps of operations. The shutdown may not exceed 6 hours. Regulation 2-1-403).
- E4. In order to demonstrate compliance with Conditions E2 and E3, the owner/operator of S-4349 shall perform a District approved source test within 60 days of startup and at least one source test each calendar year thereafter, in accordance with the District's Manual of Procedures. Source tests on S-4349 performed by the District may be used to meet the annual compliance demonstration requirement. For any non-District performed source test on S-4349, the permit holder shall notify the Manager of the DistrictÆs Source Test Section at least seven days prior to the test, to provide the District staff the option of observing the testing. Within 45 days of test completion, a comprehensive report of the test results shall be submitted to the Manager of the DistrictÆs Source Test Section 2-1-403).
- 7. Access
  - A .The APCO or his representatives and the U. S. Environmental Protection Agency shall have access to any portion of the refinery or wharf operations to conduct source tests or inspections in accordance with Section 1-440 of the District's Rules and Regulations, and the provisions of the Clean Air Act.
  - B. The APCO or his representatives and the U. S. Environmental Protection Agency shall have the right to inspect and audit: (a) all records which are required to be maintained by Section 4 above; and (b) any other records in the applicant's possession which may indicate the nature or quantity of emissions from refinery and wharf operations, in accordance with Section 1-441 of the District Rules and Regulations, which Chevron deems to include materials that constitute trade secrets or proprietary data or information shall be designated as such and shall be treated as such in accordance with applicable statutes and regulations.

#### 8. Enforcement

Violation by Chevron, its officers, employees or representatives of any of the conditions set forth in this conditional permit shall subject Chevron to enforcement action under Chapter 4 of Part 4 of Division 26 of the California Health and Safety Code, and to enforcement action by the U.S. Environmental Protection Agency pursuant to the Clean Air Act (42 U.S.C. Sec. 7401 et seq.). As appropriate, each and every such violation shall be deemed to be discrete and separate violation with respect to which the District will be entitled to take legal action.

#### 9. Miscellaneous

- A. The following process units, including all furnaces and equipment shall be shut down within 90 days after feed is introduced to all of the new process units 1, 5, 8, and 12 listed in the Authority to Construct.
  - 1. #1 RPM Plant
  - 2. #2 RPM Plant
  - 3. #1 Lube Rerun Plant
  - 4. #2 Lube Rerun Plant
- B. Nothing in the above conditions shall be construed to permit termination of the existing conditions of the Number 4 LSFO crude unit.
- C. All equipment, facilities, and systems installed or used pursuant to, or to achieve compliance with the terms and conditions of, this conditional permit shall at all times be maintained in good working order and be operated with due regard for the goal of complying with the terms and conditions of this permit and with all applicable District regulations.
- D. Nothing in these conditions shall be construed to allow the violation of any law or any rule or regulation of the Bay Area Air Quality Management District, the State of California or the United States Environmental Protection Agency.
- E. In the event of changes in District regulations which may require actual reductions in the amount of emissions which would otherwise be allowed under the terms of this conditional permit to be emitted by any emission point covered by this permit, Chevron shall be required to reduce the annual limits set forth in Section 1 above by an amount equivalent to what would be required under any such rule change.
- F. Any emission reductions which Chevron may be required to undertake in accordance with Section 2 above, or any emission offsets (or other emission reductions) which Chevron may obtain to assure that the emission limits set forth in Section 1 are complied with shall not be eligible to be credited as emission reductions for purposes of calculating "cumulative increases", and shall not be eligible to be ""banked" in accordance with the District's New Source Review Rule. Similarly, any emission increases which may occur from existing units at the refinery and/or wharf shall not be charged as emission increases for the purposes of calculating "cumulative increases" so long as Chevron complies with all applicable limits set forth in Section 1. However, any emission reductions in the refinery and wharf which Chevron obtains on a permanent and enforceable basis in accordance with the rules and regulations of the District, above and beyond those reductions required by this conditional permit, may be credited or banked, and the applicable limits or the applicable emission factor in Appendix 1 shall be adjusted accordingly; in the event that Chevron does apply to bank or credit any such emission reductions, the quantity of these emissions to be credited or banked shall be addressed at the time of such application.
- G. Chevron may elect with the concurrence of the APCO, that any new facilities or modifications which may in the future be proposed to be built by Chevron within the boundaries of the Richmond Refinery and which will be subject to the District's New Source Review requirements, will also be subject to the limitations in this conditional permit. If Chevron so elects, and the APCO concurs, the baseline emissions for such new facilities or modifications shall be the limits set forth in Section 1 above, rather than actual emissions after the baseline period of 1978-80 (which period was used as the basis for issuance of this permit), and such new facilities or modifications shall be included as part of the refinery and wharf facilities subject to the overall limitations in Section 1 above. Emission changes at the refinery and wharf which are not covered by this permit shall be accumulated in accordance with the District's permitting regulations, for purposes of calculating net "cumulative increases" or decreases; provided, however, that Chevron may incorporate at its option any such net cumulative increase or decrease within the appropriate limits set forth in Section 1 above. In such event, the applicable limits in Section 1 above shall be increased or reduced, as the case may be, by an amount equivalent to the net cumulative increase or decrease being transferred.

- H. The emission limits set forth in Section 1 above include an adjustment to account for fugitive emissions from the new facilities covered by this permit. In the event that the actual numbers of valves, pumps, flanges, process drains, and compressors for this project are other than were assumed in the analysis set forth in the permit application, the appropriate emission limits shall be adjusted accordingly.
- I. The terms and conditions of this permit shall become applicable on the first day of the month following the month when feed is first introduced into the Light Neutral Hydrocracking Unit or the Heavy Neutral Hydrocracking Unit; and for purposes of Chevron's operations during the first calendar year in which this Permit to Operate is effective, the emission limits set forth in Sections 1.A and 1.B shall be prorated to, and shall only apply during, those months of that year including and subsequent to the month in which this Permit to Operate is issued.
- J. Any adjustments to the emission limits in Section 1, which result from the operation of the other provisions of this permit, shall be calculated in accordance with the Appendices.
- K. Emissions in excess of applicable emission limitations resulting from breakdowns, malfunctions, or other causes for which a variance is granted by the Hearing Board, or for which the Air Pollution Control Officer grants relief in accordance with Section 1-112 of the District's Rules and Regulations, may be excluded by the Hearing Board or Air Pollution Control Officer, as appropriate, from those emission totals which are counted towards compliance with the limits set forth in Section 1 above; provided, however, that this provision shall not excuse Chevron from the obligation to report to the District pursuant to Section 4.B above the actual emissions from the emission points covered by this permit during the period covered by any such relief.
- 10. Severability

The provisions of this conditional Authority to Construct are intended to be severable, and, if any individual condition or provision hereof is held to be invalid by order of any court of competent jurisdiction, or for any other reason, the remainder of this conditional Authority to Construct shall not be affected hereby.

11. Environmental Management Plan (modified 7/2/97 B. Young)

Sixty days prior to start-up of any one new or modified unit, an initial Environmental Management Plan (EMP) shall be submitted to the District for review and comment by the APCO. This plan will detail how the application will make permanent emissions reductions to the facility if needed. This plan will explain the various control techniques available and to what sources they are most applicable in order to obtain permanent offsets. The purpose of this plan is to expedite any installation of abatement equipment if it is ever required. This plan shall be very extensive, outlining all of the control options and the source to which they are most applicable in order to provide offsets. Short term control strategies shall also be summarized. Included in this summary shall be a shutting down of certain sources, lowering or curtailing operational levels and fuel switching. Certain maximum reductions should be stated for each control strategy.

The EMP shall be updated and resubmitted at the APCO''s request, but at no more than once per calendar year. If a control strategy outline in the EMP is used to meet one of the monthly limits set forth in Section 1 above, the EMP should be revised to reflect the use of such a strategy and resubmitted by Chevron to the District for review and comment by the APCO. To the extent that any EMP submittal contains confidential information, such information shall be afforded the protection provided by applicable laws, rules, and regulation. Once the APCO has reviewed an EMP submittal, the District staffÆs comments and recommendations on it shall be forwarded to Chevron as expeditious as practicable. Within 30 days after its receipt of such comments and recommendations or (2) indicate which comments and recommendations Chevron did not include in its EMP revisions together with a detailed explanation as to why each comment and recommendation was not adopted or included in the EMP itself.

Additional conditions for S-4159 and S-4160, Plant 10 (2/17/93):

- 1. Fuel usage at the F-410 furnace (S-4159) shall not exceed 43 MMBtu/hr averaged over any consecutive 12 month period.
- 2. Fuel usage at the F-420 furnace (S-4160) shall not exceed 41 MMBtu/hr averaged over any consecutive 12 month period.
- 3. To confirm compliance with conditions #1 and #2, records of fuel usage at S-4159 and S-4160 shall be recorded in a District-approved log, summarized on a monthly basis, and made available for District inspection for a period of 24 months from the date on which a record is made.

Additional conditions for S-6015, Plant 10 (12/2/97):

For S-6015, Thermal Flare:

- 1. The smokeless capacity of S-6015, Thermal Flare, shall not be less than 240,000 pounds per hour. (Reasonably Available Control Technology)
- 2. To confirm compliance with Condition #1, prior to the start-up of S-6015, Chevron shall submit to the District a signed letter from the vendor of S-6015 that specifies the smokeless capacity of the flare in pounds per hour. (Reasonably Available Control Technology)

#### **APPENDICES FOR CONDITION #469**

Appendix A	-	Lists new instrumentation to be installed to monitor fuel and/or emissions.
Appendix B	-	Details how to calculate future emissions from combustion sources (compressor engines, boilers,
		furnaces, blanketing, flares).
Appendix C	-	Details how to calculate future emissions from other organic sources (product loading, oil water
		separator).
Appendix D	-	Details how to calculate future emissions from other CO sources (phthalic anhydride plant).
Appendix E	-	Details how to calculate future emissions from other sulfur oxide sources (sulfur recovery units).
Appendix F	-	Future emissions from miscellaneous combustion sources (asphalt plant).
Appendix G	-	Wharf calculation assumptions and fuel consumption tables.
Appendix H	-	Details how to calculate future marine loading emissions and combustion emissions.
Appendix I	-	Listing of all emission factors used.
Appendix J	-	Exclusions from Refinery Baseline.
Appendix K	-	Listing of all fugitive emission sources from the lube oil project.
Appendix L	-	Copy of the products burned statement.
Appendix M	-	Copy of P.A. Plant pumping record report and operating record.
Appendix N	-	Method of Calculation when there is instrument down time.

#### APPENDIX A NEW INSTRUMENTATION

Chevron shall install, calibrate and maintain the following monitoring instrumentation:

- 1. One instrument to continuously monitor nitrogen oxide emissions in the flue gas from each SCR Unit.
- 2. One instrument to continuously monitor the percentage of oxygen in the flue gas from each SCRUnit.
- 3. One instrument to continuously monitor the volume of fuel gas to each new furnace.

NOTE: The flue gas volumetric flow rate will be calculated from 2 and 3 above.

- 4. One flow meter to monitor Alkane compressor natural gas consumption.
- 5. One flow meter to monitor natural gas blanketing at Alkane.
- 6. Instruments to monitor CO from each new furnace.

#### APPENDIX B COMBUSTION EMISSIONS

Outlined below are the methods by which future emissions will be calculated for compressors, boilers, furnaces, blanketing and flares.

Compressors

#### The flow meters in Table I shall be used to monitor fuel to compressors:

TABLE I			
FUEL TO COMPRESSORS			

Refinery	Meter	Meter	
Area	Name	Description	Units
UTIL	G116	Natural Gas to Inert Gas Compressors	SCF/HR
LUB/LPD	G532	Utilities, Natural Gas to Lube Oil Div.	SCF/D
3CAT	G520	V-116 to Compressor Engine	SCF/HR
2CAT	G164Y	Natural Gas Header to Reformer	SCF/D
ALKANE	NEW	Natural Gas to Alkane Compressors	

To calculate emissions:

Convert all values to SCF/D.

The conversion factor to BTU/SCF will vary monthly, as reported by PG&E.

Refer to the appropriate emission factors in Appendix I, Section A-4. NOTE: Alkane Plant emission estimates were based on compressor horsepower to determine three-year baseline fuel consumption. Actual meter readings may warrant baseline adjustments.

#### Boilers

Fuel Oil

The following entries in the Products Burned Statement shall be used to monitor fuel oil to boilers:

- 1. S.O. #103 No. 1 Power Plant (EFOB/MO)
- 2. S.O. #150 No. 2 Steam Plant (EFOB/MO)
- 3. S.O. #811 Cat. Steam Plant (EFOB/MO)

The grand total on the Product Burned Statement shall be determined from daily tank gauge readings from the following tanks:

- 1. T-241
- 2. T-242

Fuel oil burned at No. 2 Steam Plant and Cat. Steam Plant shall be allocated at the rate of 6 EFOB/Day/Burner, and 60 EFOB/Day, respectively. Fuel oil allocated to No. 1 Power Plant shall be determined by subtracting the allocations to No. 2 Steam Plant, Cat. Steam Plant and furnace allocations (Section 3a) from the grand total. (Account S.O. #843, FCC CO Boiler, shall also be used in fuel oil balance, although this account will normally be zero.)

To calculate emissions:

- 1. The conversion to EFOB will vary daily as determined by the API Gravity Meter on the fuel oil system.
- 2. Assume 6,000,000 net BTU/EFOB.
- 3. Refer to the appropriate emission factors in Appendix I, Section A-1.
- Fuel Gas

The following entries in the Products Burned Statement shall be used to monitor fuel gas to boilers:

- 1. S.O. #103 No. 1 Power Plant (EFOB/MO)
- 2. S.O. #811 Boiler Plant (EFOB/MO)
- 3. S.O. #150 No. 2 Steam Plant (EFOB/MO)

These entries shall be determined from the flow meters in Table II.

Refinery	Meter	Meter	
Area	Name	Description	Units
No. 1 PP	G115	Emergency Natural Gas to No. 1 PP	SCF/D
CAT Stm	G125	Process & Natural Gas to Boiler House	SCF/D
No. 2 Stm	G162	Fuel Gas to No. 2 Steam Plant	SCF/HR
No. 1 PP	G54	Fuel Gas to No. 1 PP	SCF/D

#### TABLE II

To calculate emissions:

- 1. Convert all values to SCF/D.
- 2. The conversion factor to EFOB will vary daily, as determined by the specific gravity analysis on each fuel gas system.
- 3. Refer to the appropriate emission factors in Appendix I, Section A-2-d. The SO2 emission factor shall be based on the H2S content in the fuel gas, which will be determined by the monthly average PPM of three continuous monitors in the fuel gas system (calculated monthly).

Assume 6,000,000 net BTU/EFOB.

Furnaces

Fuel Oil

The following entries in the Products Burned Statement shall be used to monitor fuel oil to furnaces:

- 1. S.O. #210 Asphalt Plant
- 2. S.O. #281 #4 Crude Unit
- 3. S.O. #282 Mid Distillate Hydrofiner
- 4. S.O. #270 #4 Cat. Reformer
- 5. S.O. #285 #5 Catalytic Reformer
- 6. S.O. #286 Vacuum Gas Oil Unit
- 7. S.O. #309 #11-1 Battery
- 8. S.O. #810 Prop-Polymer Unit
- 9. S.O. #303 #3 Battery

- 10. S.O. #848 Isomax General
- 11. S.O. #857 TKN-Iso Unit
- 12. S.O. #415 Phenol Treating
- 13. S.O. #306 #10 Battery
- 14. S.O. #310 #11-2 Battery
- 15. S.O. #853 SDA Unit
- 16. S.O. #326 Resid. Stripper

These entries shall be determined from daily tank gauge readings for the following tanks:

T-241
 T-242
 T-907
 T-908

Also, fuel oil burned at these unit furnaces shall be allocated at the rate of 6 EFOB/Day/Burner. A monthly Refinery fuel oil balance shall be made to verify allocations with tank gauge readings.

To calculate emissions:

1. Assume 6,000,000 net BTU/EFOB Refer to the appropriate emission factors in Appendix I, Section A-1.

Fuel Gas

Existing Furnaces

Refer to the "Grand Total" on the Products Burned Statement. Subtract from this value the following:

- 1. Billings S.O. #3000 (total material & supply).
- 2. Compressors Amount in Section B-1 above.
- 3. Blanketing Amount in Section B-4.
- 4. Flares 1,033 EFOB/month, a constant (total for all flares).
- 5. Boilers Amount in Section B-2-b above.
- 6. CO Boiler S.O. #843 on Products Burned Statement.
- 7. FCC Unit S.O. #840 on Products Burned Statement.
- 8. New RLOP Furnaces & RLOP Gas Blanketing- Hard charge meter.
- 9. Coal Liquifaction Hard charge meter.
- 10. Coal Liquifaction Fuel gas consumed in H2 plant to produce H2.

To calculate emissions:

1. Convert the value to SCF/D.

The conversion to BTU/SCF will change daily.

Refer to the appropriate emission factors in Appendix I, Section A-2. The SO2 emission factor shall be based on the H2S content in the fuel gas, which will be determined by the monthly average PPM of the three continuous monitors in the fuel gas system.

#### New Furnaces

Ten new flow meters shall be installed to determine the amount of fuel gas being directed to the new furnaces. Emission calculations for TSP and organics will be the same as for existing furnaces (AP-42 emission factors).

Emission for NOx shall be determined by monitoring the fuel gas rate and percent 02 to determine a volumetric flow. Knowing the flow and ppm NOx, emissions can be determined.

The SO2 emission factor shall be based on this H2S content in the fuel gas, which will be determined by the monthly average PPM of the three continuous monitors in the fuel gas system.

CO emissions shall be determined from the CO monitor (at the outlet to each furnace) and volumetric flow.

#### Naphtha

Refer to S.O. #281 on the Products Burner Statement for Naptha burned at No. 4 Crude Unit. This entry shall be determined from the following flow meters:

Refinery Area	RefineryMeterMeterAreaNameDescription		Units
1. LSFO	G552	#4 Crude Unit, E-1181 Naphtha to STG	MBBL/Day
2. LSFO	G553	Utilities Fuel Naphtha Make-up to V-3211	BBL/Day

To calculate emissions:

- 1. Assume 4,935,000 net BTU/BBL.
- 2. Refer to the appropriate emission factors in Appendix I, Section A-3.
- 3. Blanketing

The flow meters in Table III shall be used to meter natural gas to tanks:

Refinery Area	Meter Name	Meter Description	Units
	1 (unit	Description	C mus
CRACKING	G528Y	Tank Blanketing to Petrolite Hill	
CRACKING	G301	Natural Gas Blanketing to Poleyard Tkg.	SCF/D
ALKANE	NEW	Natural Gas Blanketing at Alkane	

To calculate emissions:

- 1. Convert this result to SCF/D.
- 2. This value is used as necessary in Section 3-B of this Appendix.

NOTE: Emissions for Alkane gas blanketing were determined using accounting estimates for three-year baseline gas use.

#### Flares

This value will remain constant at 1,033 EFOB/Month (total for all flares). The basis for this constant was determined in a refinery study for natural gas conservation.

To calculate emissions:

1. Convert this result to SCF/D.

Refer to the appropriate emission factors in Appendix I,

Section A-2. The SO2 emission factor shall be based on the H2S content in the fuel gas, which will be determined by the monthly average PPM of the three continuous monitors in the fuel gas system.

NOTE: Isomax Flare Gas Recovery: Emissions reduction from the Isomax Flare Gas Recovery System will be determined in a future study. The resulting credits may be added to the Refinery baseline emissions.

#### APPENDIX C OTHER ORGANIC EMISSIONS

Product Loading

Hydrocarbon loading emissions from Refinery operations shall be calculated as follows: Transfer Invoices for the loading of the following products into tank trucks, rail cars, and 55 gallon drums shall be used as the basis for calculating emissions.

1.	HSFO	13.	DIESEL
2.	LSFO	14.	MOGAS
3.	JET-A	15.	AV. GAS 80 & 100
4.	RPM	16.	SOLVENTS
5.	JP-4	17.	THINNERS
6.	WHITE GAS	18.	ACETONE
7.	DELO	19.	PHENOL
8.	OTHER LUBES	20.	A. O. C5
9.	WHITE OIL	21.	A. O. C6-7
10.	GREASE	22.	A. O. C6-9
11.	ASPHALT	23.	A. O. C8-9
12.	WAX	24.	OTHER CHEMICALS
		25.	AUTO DIESEL

The emissions will be calculated by multiplying the quantities loaded as shown on the Transfer Invoices by the appropriate emission factor shown in Appendix I, Section C.

#### Oil-Water Separator Desalter Water

The emissions from this source is based on crude oil throughput. The crude oil throughput each month comes from the Refinery Stock Balance Sheet. Crude oil is received by pipeline, ship, rail car, and tank truck. All receipts are calculated by tank gauging and transfer invoices. The crude oil throughput is calculated by totaling all of the monthly receipts and adjusting the total by any changes in the monthly final tankage inventory.

Emissions are calculated as follows:

Total the crude oil throughput.

Assume desalter water is 5% of crude oil throughput.

Calculated amount of desalter water used and multiply by the appropriate emission factor in Appendix I, Section B.

# APPENDIX D OTHER CO EMISSIONS

Phthalic Anhydride Plant Incinerator

The CO emissions from the Phthalic Anhydride Plant CO Boiler shall be calculated from the following data:

- 1. PA Plant feed rate recorded on the P.A. Plant Pumping Record Report. This feed rate shall be calculated from daily tank gauge reading on tanks 1970 and 1971.
- 2. The F-3 incinerator/boiler operating temperature shall be recorded each shift on the Daily Operating Record. The temperature shall be obtained from TI-501.
- 3. The PA Plant operating hours shall be recorded on the Daily Stock Control Record.

The CO emissions shall be calculated by dividing the monthly total feed by the number of operating hours per month to obtain the plant feed rate. A monthly average operating temperature shall be calculated from the shift values when the PA reactors have orthoxylene feed in. The CO emissions shall then be calculated using the attached graph labeled "Figure B-2, Incinerator (F-3) at the existing PA Plant."

# APPENDIX D ATTACHMENT FIGURE B-2



# APPENDIX E OTHER SULFUR OXIDE EMISSIONS

Sulfur Recovery Units

The emissions from the Sulfur Recovery Units will continue to be monitored by the existing in-stack monitors. The following items will be monitored for each SRU:

- 1. Stack gas PPM SO2
- 2. Stack flow rate
- 3. Stack temperature
- 4. SO2 analyzer range
- 5. SO2 analyzer status

This data will be processed by the existing multi-programmer, 6940B, and calculator, 9825A. A daily printout shall be made for each SRU showing average ppm SO2 concentration and pounds per day of SO2 emissions.

# APPENDIX F MISCELLANEOUS COMBUSTION EMISSIONS

#### Asphalt Plant Blowing Operation

The emissions from the asphalt blowing operation will be based on the total monthly sales of each of the following asphalt products as indicated on the Transfer Invoices for these products:

- 1. Roofers Shingle Saturant
- 2. Roofers Shingle Coating
- 3. FG #1 and LAM #1
- 4. FG #2 (Fiberglass 2A)
- 5. Laminating Asphalt
- 6. Tab Adhesive
- 7. Roofers Flux
- 8. Roofers Cut-Back #3
- 9. Chevron Utility Coating
- 10. Chevron Asphalt Coating
- 11. Asbestos Roof Coating Base
- 12. Bridgedeck Membrane

The emissions will be calculated by multiplying the tons of each product sold by the appropriate emission factor as shown in Appendix I, Section D.

# APPENDIX G WHARF CALCULATION ASSUMPTIONS & FUEL CONSUMPTION TABLES

The fuel consumed is based on those values listed in Tables I, II, III, and IV. Emission factors to be used are referenced in Appendix I, Table E. The following assumptions are used:

#### APPENDIX G

# TABLE I. MOTOR SHIPFUEL CONSUMPTION FOR VARIOUS OPERATIONS

	Maneuver (Transit)	Hote	ling	Heating for Minas Crude	Discharging
	(Diesel)	(Fuel Oil)	(Diesel)	(Fuel Oil)	(Fuel Oil)
Motor Ship Size	Gal/hr	Gal/hr	Gal/hr	Gal/hr/MBBL	Gal/MBBL
<20 MDWT	105	42	21	-	30
20-29 MDWT	236	42	21	-	30
30-39 MDWT	289	42	21	-	30
40-49 MDWT	341	42	21	-	30
50-59 MDWT	354	42	21	-	30
60-69 MDWT	394	84	42	-	30
70-79 MDWT	394	84	42	-	30
80-89 MDWT	459	84	42	-	30
90-99 MDWT	459	84	42	-	30
100-109 MDWT	551	84	42	-	30
110-119 MDWT	551	84	42	-	30
120-129 MDWT	551	84	42	0.25*	30
130-139 MDWT	551	84	42	0.25*	30
140-149 MDWT	656	126	63	0.25*	30

\*Fuel consumed for heating Minas included for entire time in Bay Area except when ship leaves Wharf (last three hours transit time).

# APPENDIX G

TABLE II. 5FUEL CONSUMPTION FOR	STEAM SHIPS DR VARIOUS OP	ERATIONS
Monouron	Hotoling	Hasting for

	(Transit) (Fuel Oil)	Hoteling 100% (Eucl Oil)	Heating for Minas Crude (Fuel Oil)	Discharging (Fuel Oil)
Steam Ship Size	Gal/hr	Gal/hr	Gal/hr/MBBL	Gal/MBBL
<20 MDWT	210	42	-	30
20-29 MDWT	341	42	-	30
30-39 MDWT	394	42	-	30
40-49 MDWT	459	42	-	30
50-59 MDWT	551	42	-	30
60-69 MDWT	630	84	-	30
70-79 MDWT	630	84	-	30
80-89 MDWT	761	84	-	30
90-99 MDWT	761	84	-	30
100-109 MDWT	840	84	-	30
110-119 MDWT	840	84	-	30
120-129 MDWT	840	84	-	30
130-139 MDWT	840	84	-	30
140-149 MDWT	906	126	-	30
150 MDWT (Dejumboized)	906	126	0.25*	30
174 MDWT	906	126	-	30
190 MDWT	906	126	-	30

\*Fuel consumed for heating Minas included for entire time in Bay Area except when leaving Wharf (three hours transit time).

#### APPENDIX G

# TABLE III. SPECIAL SHIPSFUEL CONSUMPTION FOR VARIOUS OPERATIONS

	Maneuver			
	(Transit)	Hoteling	Discharging	
	(Diesel)	100% Diesel	(Diesel)	
Ship	Gal/hr	Gal/hr	Gal/hr/MBBL	Comments
Exxon Galvaston (Tug	190	42	30	Use tug assist
permanently attached to				emission factors
barge)				
Gas Turbines	341	42	30	
Barges	See tug assist fuel	0	30	Use tug assist
	consumption table			emission factors

#### APPENDIX G

# TABLE IV. TUG ASSISTFUEL CONSUMPTION FOR VARIOUS OPERATIONS

Fuel Consumed (Diesel (Gal/hr)

	(Diesel
Fug Assist for Ship $\leq$ 50 MDWT	65.56
Fug Assist for Ship > 50 MDWT	131.12
Fug Assist for Barge $\leq 100$ MBBLS	65.56
Fug Assist for Barge > 100 MBBLS	131.12

#### HARF MODEL ASSUMPTIONS AND/OR ESTIMATES:

- 1. Tug assist times are fixed for each vessel movement.
- 2. Assumed composition of Marine Fuel:

Fuel oil (or residuum)	=	$2.0 \le \%$ Sulfur, 0.43 $\le \%$ Nitrogen, $18^\circ$ API
Marine Diesel	=	0.5 w % Sulfur, 0.08 w % Nitrogen, 35° API
Tug Diesel	=	0.50 w % Sulfur, 35° API

3. Hoteling emissions from ships at wharfs calculated from actual wharf time.

Hoteling emissions from vessels away from wharfs are not counted except when lightering. Mother ship can only lighter to one ship or barge at a time. Turbo electric ships fuel use equals same-sized steam ship fuel use. Emissions from ballasting not included. Emission from tank cleaning not included.

# **APPENDIX H**

# DETAILS HOW TO CALCULATE FUTURE MARINE LOADING EMISSIONS & COMBUSTION EMISSIONS

Details how to calculate future marine loading emissions and combustion emissions.

**Combustion Emissions** 

# Tug Assist Emissions

Tug (lbs)	Assist Emissions = pollutant/call)	Tug Assist Time (hrs/call)	F	Fuel Consumption (Table IV) (gal/hr) (Appen. G)	x	Factor (Appen. I, Table E) (lb/gal)
		Tug Ass	sist Time	Per Call		
		Barge		6 hrs	-	
		Tanker		4 hrs		
		Lighter Barge		4 hrs		
		Lighter Tanker		4 hrs		
		(Add 1 hr if vessel	went to F	t. Orient Wharf)		
<u>Transit I</u>	Emissions (Ships	Only)				
		Transit		Fuel Consumptio	n	Factor
Tran	sit Emissions =	Time	х	(Appen. G Tables	I,	x (Appen. I, Table E)
(lbs)	pollutant/call)	(hrs/call)		II, III, gal/hr)		(lb/gal)
	Transit Time Per Call					
		Tanker		6 hrs		
		Lighter Tanker		4 hrs		
		(Add 1 hr if v	essel wer	nt to Pt. Orient Wha	rf)	
Hoteling	Emissions (Shi	ns Only)				
1101011112		Hotel		Fuel Consumpti	ion	Factor
Hote	1 Emissions =	Time	x	(Appen, G. Tab	les	x (Appen, I, Table E)
(lbs	pollutant/call)	(hrs)		I, II, III, gal/h	r)	(lb/gal)
Hote	l Time = Dock hrs +	Lightered	l Quantity er Rate (l	$\frac{y (bbls)}{bbls/hr} + 2 hrs$		
*Bra	cketed calculation ind	cluded only if ship w	as a light	er ship or mother sl	nip.	
** <u>L</u> i	ghter Rates	5 1	U	1	1	
1.	Crude lighter rate =	25 Mbbls/hr				
2.	If other than crude:					
	a. 25 Mbbls/hr if	lighter vessel				
	is >29 MDWT	Ship				
	or >50 Mbbl b	arge				
	b. 5 Mbbls/hr if	lighter vessel				
	1s ≤29 MDWT	ship				
	or $\leq 50$ Mbbl b	barge				

# Emissions (Discharge Only)

Emissic	ons (Discharge Only)				
	Pump Emissions = (lbs pollutant/call)	Pumped Quantity (Mbbls)	X	30 gal. Fuel consumed x Mbbls pumped	Factor (Appen. I, Table E, lb/gal)
Minas (	Crude Heating Emission	<u>.s</u>			
	Minas Heating Emissions = (lbs pollutant/call)	Minas Discharged (Mbbls)	x	Dock Time + 3 hrs (hrs)	
	х	.25 gal Mbbl hr	x	Factor (Appen. I, Table E) (F.O. Hoteling Factor) (lbs/al	

Loading or Lightering Volatile Organic Emissions

Loading or Lightering Emissions = Quantity Loaded x (Appen. I, Table F) (lbs HC) (Mbbls) (lbs HC/Mbbl)

# APPENDIX I

#### **REFINERY EMISSION FACTORS**

EMISSION FACTORS

(General factors. Where monitors are available, actual values will be used as stated in Appendix B.)

A.	Fuel		Pollutant				
	(# of Pollu Billion Ne	tant/	TCD	NMHC	Nov	SOv	CO
1	Engl Oil		151	TUMILE	TOA	BOA	
1.		llana	56	7	470	515 0	25
	a. Dol		50	7	470	515.2	55 25
2	D. Fur	naces	56	1	358.4	515.2	35
2.	Fuel Gas	E.	10	2	52.2	27	20.0
	a. Nev	w Furnaces	10	3	52.3	27	39.8
			10		1-0	(160 ppm H2S)	
	b. Exi	sting Furnaces	10	3	170	3.88	17
				_		(23 ppm)	
	c. Fla	res (Pilot)	10	3	170	3.88	17
	d. Boi	ilers					
	<25	50 x 10 BTU/Hr	10	3	300	3.88	17
3.	Naphtha		12.2	5.2	196.6	12.51	25
4.	Natural Ga	IS					
	a. Inte	ernal Comb. Eng.	10	105	3400	0.6	430
В.	Fugitive						
1.	Valves (#/	day/valve)	-	-	-	-	-
	HC Vapor		-	1.416	-	-	-
	Light Liqu	id RVP>5	-	0.576	-	-	-
	Heavy Liq	uid RVP<5	-	0.012	-	-	-
2.	Pump Seal	s (#/day/seal)					
	a. Me	chanical					
	Lig	ht Liquid RVP>5	-	6.0	-	-	-
	Hea	avy Liquid RVP>5	-	1.104	-	-	-
	b. Pac	king					
	Lig	ht Liquid RVP>5	-	10.0	-	-	-
	Hea	avy Liquid RVP>5	-	1.84	-	-	-
3.	Compresso	or Seals					
	(#/day/seal	l)	-				
	H2>50%		-	2.64	-	-	-
	HC Vapor		-	33.6	-	-	-
4.	Cooling To	owers					
	(#/m gal)		-	0.7	-	-	-
5.	Separators	(#/m gal)	-	0.2	-	-	-
6.	Drains (#/o	dav/drain)	-	1.68	-	-	-
		,					

# C. Refinery Product Loading

Product	# of Organics/M Gal Loaded
HSFO	0.03
LSFO	0.03
JET A	0.04
RPM	0.03
JP-4	4.00
WHITE GAS (W/V.R.)	0.60
WHITE GAS (W/O V.R.)	6.00
DELO	0.03
OTHER LUBES	0.03
WHITE OIL	0.03
GREASE	0.0003
ASPHALT (W/V.R.)	0.003
WAX	0.0003
DIESEL	0.03
MOGAS (W V.R.)	0.60
MOGAS (W/O V.R.)	6.00
AV. GAS 80 (W V.R.)	0.60
AV. GAS 80 (W/O V.R.)	6.00
SOLV. & THINNERS	4.00
ACETONE (W/V.R.)	0.60
PHENOL (W/V.R.)	0.004
A.O. C5	6.00
A.O. C6-7	6.00
A.O. C6-9	6.00
A.O. C8-9	0.04
OTHER CHEMICALS	0.03
AV. GAS 100 (W/V.R.)	0.60
AV. GAS 100 (W/O V.R.)	6.00
AUTO DSL.	0.03

Note: Unless otherwise stated, product emission factors are for loading without vapor recovery.

#### D. Asphalt Blowing

	Airblown Asphalt	A Fa	.P. 42 Em ctor for Ai	ission <sup>1</sup> irblown	En	nission Fac	ctor for <sup>2</sup>
Asphalt Product	Content (%)	1	Asphalt (lt	o/ton)	Th	is Product	(lb/ton)
		CO	Partics	Organics	CO	Partics	Organics
Roofers Shingle Saturant	100.	3.66	.58	.65	3.66	.58	.65
Roofers Shingle Coating	100.	3.66	.58	.65	3.66	.58	.65
FG #1 and LAM #1	100.	3.66	.58	.65	3.66	.58	.65
FG #2 (Fiberglass 2A)	100.	3.66	.58	.65	3.66	.58	.65
Laminating Asphalt	100.	3.66	.58	.65	3.66	.58	.65
Tab, Adhesive	100.	3.66	.58	.65	3.66	.58	.65
Roofers Flux	8.	3.66	.58	.65	.29	.046	.052
Roofers Cut-Back, #3	50.	3.66	.58	.65	1.83	.29	.33
Chevron Utility Coating	50.	3.66	.58	.65	1.83	.29	.33
Chevron Asphalt Coating	50.	3.66	.58	.65	1.83	.29	.33
Asbestos Roof Coating Base	50.	3.66	.58	.65	1.83	.29	.33
Bridgedeck Membrane	1.	3.66	.58	.65	0.37	.0058	.0065

<sup>1</sup>A.P. 42 Factors for controlled asphalt roofing manufacturing, asphalt blowing operation (12/77 edition).

<sup>2</sup>Product emission factor equals A.P. 42 factor multiplied by fraction of air-blown asphalt in the asphalt product.

E. Ship Combustion (# of Pollutant/M gal of fuel)

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Operation	Р	0	NOx	SOx	СО
1. Steam Ship					
Maneuvering	19	3.1	48.2	315.3	2.62
Hoteling	19	3.1	20.9	315.3	2.62
Pumping	19	3.1	48.2	315.3	2.62
2. Motor Ship					
Maneuvering	20	32.8	367	70.1	56.9
Hoteling-Diesel	20	32.8	367	70.1	56.9
Pumping	19	3.1	48.2	315.3	2.62
Hoteling-Fuel Oil	19	3.1	20.9	315.3	2.62
3. Gas Turbines					
Maneuvering	11	4.17	71.8	70.1	31.2
Hoteling-Diesel	11	4.17	71.8	70.1	31.2
Pumping	11	4.17	71.8	70.1	31.2
4. Barges & Tugs					
All	25	13	571.2	70.1	56.9

#### APPENDIX I TABLE F HYDROCARBON EMISSIONS FROM ONLOADING OF CRUDE OIL OR PRODUCTS

_	Commodity	Hydrocarbon Emissions (lbs/MBBLs of Commodity)
1.	Crude Oil	71.4 (Barges) 42.0 (Vessels)
2.	Gasoline, Naphtha, Orthoxylene, Benzene, Cumene, BA-3, BA-1	168.0 (Barges) 101.0 (Vessels)
3.	Jet, Diesel, TKN, Mixed Cutter, Alkane	0.21
4.	Fuel oil, Bunker, Lubes, Charge Stock, Gas Oil Resid, 8 cut, Palc, Polymers	0.0017

(Note: Deep draft barges greater than 40 feet tank depth will use the hydrocarbon emission factors for "vessels" above.)

# APPENDIX JEXCLUSIONS FROM REFINERY BASELINE

The following are excluded from the Refinery baseline:

- 1. Coal Liquefaction Pilot Plant (Chevron Research)
- 2. FCC
- 3. Nitric Acid Plant

Fugitive emissions from existing process units (except as used to adjust the monthly and yearly emission limits for process units' shutdown).

Valves

Pump and compressor seals

Cooling towers

Drains

Tankage

#### APPENDIX K FUGITIVE EMISSION SOURCES FROM LUBE OIL PROJECT

The following quantities of pumps, valves, compressors, and drains were used to determine the emission limits in Section VII of the Engineering Evaluation. After start-up of the project, emission limits will be adjusted as necessary per Section VII-9H of the evaluation.

1.	Valves (>2 inch diameter)	
	H2 Service (>50%)	250 ea.
	HC Vapor Service	635 ea.
	Light HC Liquid (RVP >0.5)	1050 ea.
	Heavy HC Liquid (RVP <0.5)	435 ea.
	Pump Seals	
	1.RVP>0.5	
	Mechanical	35 ea.
	Packing	1 ea.
2.	RVP <0.5	
	Mechanical	33 ea.
	Packing	4 ea.
3.	Compressor Seals	
	H2 Service (>50%)	17 ea.
	HC Service	11 ea.
4.	Drains	
	All Service	227 ea.

#### APPENDIX L PRODUCTS BURNED STATEMENT

Attached is a copy of the products burned statement on which monthly fuel usages to combustion sources are recorded.

#### APPENDIX M Copy of P.A. Plant pumping record report and operating record.

Attached is a copy of the P.A. Plant pumping record report and operating record.

#### APPENDIX N METHOD OF CALCULATION WHEN THERE IS INSTRUMENT DOWNTIME

Instrument downtime (including, but not limited to, instack monitors and other instruments whose readings are used to calculate emissions) caused by malfunction, upset, breakdown, repair, maintenance, or failure where such instrument downtime exceeds a continuous 24-hour period shall be handled as follows for purposes of calculating emissions: Emissions from the previous valid calendar day (or other relevant period) and by feed and/or product made. The emissions during the time period when the monitor is down shall be rationed according to feed rate and/or products made changes. The Air Pollution Control Officer reserves the right to source test during any monitor downtime period.

#### Condition 1046

#### (Revised under Application 9329 in May 2004)

1. The owner/operator shall not operate sulfur storage tanks S-3141 and S-3226 unless they are abated by the properly maintained and properly operated A-43 and A-44 Venturi Scrubbers at all times of operation, except during preventative maintenance at A-43 and A-44 scrubbers and/or during the American Petroleum Institute (API) internal inspections of the pressure vessels, which are expected to be conducted once every ten years at scrubbers A-43 and A-44.

(basis: cumulative increase)

2. The owner/operator shall minimize downtime of theA-43 and A-44 scrubbers to the extent practicable, and shall minimize emissions from S-3141 and S-3226 to the extent practicable during periods of preventative maintenance and/or during periods hen API inspections are conducted. Additionally, liquid transfers into S-3141 and S-3226 shall be minimized during periods of preventative maintenance and/or API inspections. In no event shall preventative maintenance downtime and/or API inspection and subsequent repair exceed 612 hours in any consecutive 365-day period.

(basis: cumulative increase)

3. The owner/operator of S-3141 and S-3226 shall maintain records of preventative maintenancedowntime and/or API inspections to confirm compliance with above conditions. These recordsshall be kept on site for at least 60 months from the date of entry.

(basis: cumulative increase)

#### COND# 1069

#### S-1637, Application #8294

- 1. The owner/operator of S-1637 shall ensure that the concentration of organic vapor in the vapor spaceabove the internal floating roof not exceed 30% of its lower explosive limit (LEL). (cum inc)
- 2. The owner/operator of S-1637 shall conduct quarterly visual seal inspections and measure the concentration (%LEL) of the vapor space above the internal floating roof beneath each view port (3) with an explosimeter. (cum inc)
- 3. The owner/operator of S-1637 shall maintain a district approved quarterly log of the LEL for each material stored, all concentration measurements (from each view port), and record of each visual seal inspection. This log shall be retained on site for at least 5 years from the date of entry and be made available to district staff upon request. (2-1-403)
- 4. If the owner/operator determines that S-1637 is in violation of these conditions or applicable rule(s) during the quarterly inspections, the owner/operator shall submit a written report to the APCO within 120 hours of the determination of non-compliance, indicating corrective actions taken to achieve compliance. (2-1-403)

#### Condition #1162

For S – 4350 TO S-4353:

1. The Brown Boveri Gas Turbines, Sources S-4350 & S-4352 shall be fired on natural gas or LPG only except as allowed below:

In the event of an interruption of natural gas supply, the Gas Turbines may be fired on diesel fuel subject to the limitations given in part #3 and all other applicable parts listed.

Chevron shall submit a written report to the District within 10 days of the start of any PERIOD OF DIESEL FUEL USE detailing the circumstances of the service curtailment.

Chevron may perform backup fuel system testing on each Gas Turbine (S-4350 and S-4352) using low sulfur diesel fuel up to once per calendar month and once per year after scheduled annual shutdowns, provided that each testing event does not last longer than 1.5 hours, no more than two tests are performed per day, and no more than 130 bbls of fuel per event are consumed. Total testing time shall not exceed 39 hours per year and total fuel consumption shall not exceed 3380 bbls.

Chevron shall total the amount of hours required for the backup fuel system testing of S-4350 and S-4352, and this amount shall count against the total hours specified in part 3 below.

(basis: BACT)

- 2. The Heat Recovery Steam Generator (HRSG) Burners (S-4351, S-4353, S-4345) shall be fired on refinery fuel gas or natural gas exclusively. (basis: BACT)
- 3. The use of diesel fuel shall not exceed 864 gas turbine hours per year for the facility, where gas turbine hours are calculated by adding together the hours on diesel for each turbine. (basis: BACT)
- 4. Each HRSG burner set shall not be operated during periods when the upstream Gas Turbine is not firing fuel. (basis: BACT)
- 5. The maximum design capacity for the cogeneration facility will be 13683,000 MMBTU/yr (Brown Boveri). Calculations will be based on the lower heating values of the fuels. During any calendar year in which actual operation exceeds that level, reductions in emissions must be made elsewhere in the refinery in order to meet the refinery emission limits. In addition, the annual refinery and refinery-plus-wharf emission caps for NOx and NMHC will be reduced for only that year by 10% of the annual emissions resulting from firing above design rate. (basis: BACT)
- 6. The emissions of oxides of nitrogen (NOx) from each emission point shall not exceed 10 ppmdv at 15% oxygen, averaged over any 3-hour period, except during periods of startup and shutdown that shall not exceed two hours and one-half hour respectively. (basis: BACT)
- 7. A Selective Catalytic Reduction (SCR) system, capable of achieving the NOx limit specified in part #6, shall be installed in the HRSG. (basis: BACT)
- 8. Chevron shall install and operate a continuous system to monitor and record the fuel consumption and the ratio of steam injected to fuel fired in each Gas Turbine in accordance with District Regulation 10. (basis: Regulation 10)
- 9. Only diesel fuel with a maximum sulfur content of .05% (by weight) shall be used. All diesel fuel documents certifying sulfur content shall be made available to the district upon request. (basis: BACT)
- 10. The Oxidizing Catalyst (A70, A71, A72) shall reduce CO emissions from the gas turbines and HRSG Burners by at least 80% (by weight). (basis: BACT)
- 11. The Oxidizing Catalyst (A70, A71, A72) shall reduce NHMC emissions from the Gas Turbines and HRSG Burners by at least 50% (by weight). (basis: BACT)

- 12. Chevron shall install, calibrate and operate District approved continuous monitors for NOx, carbon monoxide, and either oxygen or carbon dioxide at each emission point. Records shall be kept on file for five years and made available to the District upon request. (basis: BACT)
- 13. Deleted.
- 14. Chevron shall provide stack sampling ports and platforms, the location of which shall be subject to the approval of the District. (basis: BACT)
- 15. Deleted.
- 16. Chevron shall maintain appropriate records for the last five years of operation (i.e. fuel usage rates, Gas Turbine load levels, hours of operation, ratio of steam injected to fuel fired, etc.) to verify compliance with all listed permit conditions. The cogeneration project's non-fugitive emissions shall be included within the refinery emission cap. Chevron's computer monitoring of emissions shall be changed to include these emissions. (basis: BACT)
- 17. Deleted
- 18. \*The total emissions of ammonia from the Gas Turbines and HRSG Burners shall not exceed 20 ppm, averaged over a three hour period. (basis: toxics)
- 19. \*The stack from the cogeneration facility shall be constructed to a height above ground-level of 41.9 meters or the ground level impact of the pollutants at the project site shall be mitigated. (basis: toxics)
- 20. If for any reason, diesel fuel is fired and actual NOx or hydrocarbon emissions exceed the emissions levels which were offset initially (Tables 4-1a and 4-1b), then Chevron shall reduce the annual """"refinery cap"""" and """"refinery and wharf cap"""" for NOx and NMHC for that year only by 10% of the annual emissions resulting from firing above the previously offset rate. This reduction will result in the required offset ratio of 1.1:1 for NOx and NMHC being provided. Additional offsets for TSP, SO2, and CO, if needed, shall be provided by phasing down or shutting down other pieces of equipment under the cap such that the cap itself is not exceeded. This reduction will result in the required offset ratio of 1:1 for TSP, SO2 and CO being provided. (basis: offsets)

#### Condition #1331

For S-4415:

- \*1. The asphalt loading rack S-4415 shall not be operated unless it is vented to A-37 mist eliminator except when A-37 is down for cleaning. (basis: cumulative increase)
- 2. When the abatement device A-37 is down for cleaning or repairs, Chevron shall not load more than 238,000 gallons of asphalt per day. (basis: cumulative increase)
- 3. When the abatement device A-37 is down for cleaning or repairs, Chevron shall maintain a District approved record of the daily throughput. This information shall be kept for at least five years and be made available to District representatives upon request. (basis: cumulative increase)

Condition# 2238 Plant 10, Application #8452 For S-3100 at Plant 10:

1. The owner/operator of S-3100 shall not exceed 14,000,000 barrels of crude oil throughput during any consecutive twelve-month period. The owner/operator may store materials other than crude oil provided that the owner/operator demonstrates that there is no increase in emissions and the toxic emissions will not exceed the respective toxic trigger levels. (BACT)

- 2. The owner/operator shall maintain a zero gap seal between the tank shell and the tank's dual seals. (Basis: Regulation 8, Rule 5/BACT)
- 3. The owner/operator of S-3100 shall only store materials with a vapor pressure that shall not exceed 11.0 psia. The concentration of benzene of materials stored shall not exceed 2.0 wt.%. (BACT/Toxics)
- 4. The owner/operator of S-3100 shall maintain records of storage tank throughput, type, benzene weight percentage, storage vapor pressure, and all inspection records. These records shall be summarized on a monthly basis, and may be in the form of computer generated data, which is available to District personnel on short notice (rather than actual paper copies of throughput data). These records shall be kept on file for a minimum of 5 years. (BACT)
- 5. The owner/operator shall control S-3100 by a liquid-mounted primary mechanical seal and a zero-gap secondary wiper seal. There shall be no ungasketed roof fittings. Except for roof legs, each roof fitting shall be of the design, which yields the minimum roof fitting losses. The following list indicates the type of control required for a variety of typical roof fittings. Control techniques for roof fittings not included in this list shall be subject to District approval, prior to installing the roof on the tank. (BACT/TBACT)

Fitting Type	Control Technique
Access hatch	Bolted cover, gasketed
Guide pole/Well	Slotted with a pole sleeve
(amended per AN 8452)	that projects below liquid surface, a zero-gap pole
-	wiper, and a exterior flexible barrier/cover that
	covers all of theslots
Gauge float well	Bolted cover, gasketed
Gauge hatch/Sample well	Weighted mechanical actuation, gasketed
Vacuum breaker	Weighted mechanical actuation, gasketed
Roof drain	Roof drain does not drain water into product
Roof leg	Adjustable, with vapor seal boot
Rim vent	Weighted mechanical actuation, Gasketed

Note: The owner/operator of S-3100 shall have the exterior flexible barrier/cover installed by 2/4/04. (BACT)

The owner/operator of S-3100 shall inspect the exterior flexible barrier/cover to determine that it is functioning properly and has no holes or leaks at least twice per calendar year at 4 to 8 month intervals. (BACT)

#### COND# 2856

#### Plant 10, Application #10401

#### For S-399 at Plant 10:

- 1. The owner/operator of S-399 shall not exceed 3,500,000 barrels of material throughput duringany consecutive twelve-month period. (cum inc) The owner/operator of S-399 shall only storematerials with a vapor pressure that shall not exceed 10.0 psia and the annual average vaporpressure shall not to exceed 7.0 psia. (cum inc)
- 2. The owner/operator of S-399 shall maintain a district approved monthly log of all storage tank throughput, type, storage vapor pressure, annual average material vapor pressure and all inspection records. These records shall be kept on site for at least 5 years from the date of entry and be madeavailable to District staff upon request. (2-1-403)

#### **Condition #3697 For S – 1799:**

- 1. Throughput at S-1799 shall not exceed 7,200,000 Bbls. During any consecutive 12 month period. (basis: cumulative increase)
- 2. Deleted.
- 3. S-1799 shall store only gasoline, Penhex, Reformate, Crude Oil, Jet A, any material which is exempt from District permitting requirements (as long as the storage of this exempt material has been properly reported to the District), or any other petroleum hydrocarbon material with a vapor pressure (TVP) less than Penhex (8.0 @ 70F) and toxicity less than Reformate (8.1% Benzene by weight). (basis: cumulative increase)
- 4. The owner/operator of S-1799 shall maintain records of the storage tank throughput in order to confirm compliance with part #1. These records shall be summarized on a monthly basis, and may be in the form of computer generated data which that are available to District personnel on short notice (rather than actual paper copies of throughput data). These records shall be kept on file for a minimum of 5 years."" (basis: cumulative increase)

#### Condition #4233 For S-1908 S-1911, S-1913, S-1914, S-1915, S-1919, S-2917, S-2918, S-2920, S-2921:

\*1. The annual throughput for the following sources shall not exceed the amount listed as follows:

	U	
-Sources 19	913, 1914	225,000 bbl/yr ea
-Sources 29	17 & 2918	20,000 bbl/yr ea.
-Source 190	18	1,750,000 bbl/yr
-Source 191	5	1,000,000 bbl/yr
-Source 191	9	500,000 bbl/yr
-Source 292	20	150,000 bbl/yr
-Source 292	21	5,000 bbl/yr

(basis: cumulative increase)

- \*2. Water scrubbers abating all the asphalt storage tanks, shall be maintained in good working condition and operated at all times. (basis: cumulative increase)
- \*3. The owner/operator of S-1908, S-1911, S-1913, S-1914, S-1915, S-1919, S-2917, S-2918, S-2920, and S-2921 shall maintain records of the storage tank throughput in order to confirm compliance with part #1. These records shall be summarized on a monthly basis, and may be in the form of computer generated that is available to District personnel on short notice (rather than actual paper copies of throughput data). These records shall be kept on file for a minimum of 5 years."" (basis: cumulative increase)

#### Condition #4650 For S – 3110, S-3111, S-3192, S-3200:

Pertaining to Tanks only:

Pertaining to DEBRU Operations:

- 1. 1.POC emissions from S-3110, S-3111, and S-3192 shall be abated by at least 98.5% (wt) by the A-3200 furnace F-1100B incinerator. (Note: 6/17/91 Source Test: 99.7%) (< 1 ppm) abatement (basis: BACT)
- 2. Abated POC emissions from S-3110, S-3111, and S-3192 combined shall not exceed 1.0 lb/day. (Note: 6/17/91 Source Test: < 1.0 lbs/day) (basis: BACT)
- 3. \*Abated benzene emissions from S-3110, S-3111, and S-3192 combined shall not exceed 0.04 lb/day. (Note: 6/17/91 Source Test: 0.333 lbs/day) (basis: toxics)

- 4. \*The benzene liquid concentration in S-3111, and S-3192 shall not exceed 1% (wt) (10,000 ppm) at any time. (Note: 12/19/90 Source Test: 1800 ppm Bz at Carbon inlet.) (basis: toxics)
- 5. The A-3200 furnace shall be maintained a minimum operating temperature of 1000 F as measured at the roof of the radiant section. The owner/operator of S-3200 shall install and maintain a continuous temperature monitor/recorder in order to demonstrate compliance with this condition. Thermowell monitor and Chevmon used to verify compliance. (basis: BACT)
- 6. The A-3200 vent gas shall be exhausted directly into the gas burner flames in F-1100B. No vent gas shall exhaust into an unlit burner. The fuel oil burner system used for the A-3200 vent gas shall be properly installed, properly maintained, and in good operating order such that no bypassing or leaking of vent gas occurs outside of the F-1100B gas burner flame pattern. (basis: BACT)
- 7. The S-3200 DEBRU system shall contain a continuous flow monitor/recorder on both the nitrogen purge gas stream and the vent gas stream to the A-3200 abatement device in order to demonstrate that all vent and purge gasses are flowing to A-3200. Continuous monitoring of the set-point for the vent gas and nitrogen purge gas control valves will be adequate to demonstrate compliance with this condition. (basis: BACT and cumulative increase)
- 8. The S-3200 DEBRU shall have a continuous pressure monitor/recorder in order to confirm that no unintended leaks, depressurizations, or bypasses to atmosphere occur.
  - A. Any bypass of the A-3200 F-1100B furnace, other than venting from a properly operating pressure relief valve, shall be considered a violation of District regulations and shall be reported to District Enforcement staff per the District's breakdown or emergency variance procedures.
  - B. Venting from any properly operating pressure relief valve in the S-3200 system shall be reported in writing to the District within 14 days of the venting event. (basis: BACT)
- 9. The organic concentration measured at all new pump seals associated with the S-3200 Desalter Effluent Treatment Unit shall not exceed 100 ppm measured as methane one centimeter from the source. (basis: BACT)
- 10. All new pump seals associated with S-3200 shall have water seal flush systems which operate at a higher pressure than the process side of the pump seal and prevent process leaks to atmosphere. (basis: BACT)
- 11. The owner/operator of S-3110, S-3111, S-3192, and S-3200 shall maintain appropriate records to confirm compliance with parts 5, 7, and 8. (basis: BACT and cumulative increase)
- 12. Deleted.
- 13. Deleted.
- 14. Deleted.

#### Condition #4714 For S – 9321 TO S-9325:

- 1. Deleted.
- 2. Owner/Operator shall perform necessary source tests to establish a specific range of combustion zone temperature which will ensure that the emissions of precursor organic compounds are reduced at least 95% by weight from uncontrolled conditions or the emissions do not exceed 2 lbs per 1000 barrels loaded. (basis: 8-44)
- 3. Owner/Operator shall install instrumentation to and record the following:
  - A. Static pressure in the marine tank vessel,
  - B. oxidizer exhaust temperature,

- C. Hydrocarbons and flow to determine mass emissions or a concentration measurement alone if owner/operator can demonstrate to the satisfaction of the APCO that a concentration alone ssurance of compliance, or
- D. Any other device that verifies compliance, with prior approval from the APCO for 'he purposes of Chevron Refinery''s Bubble Permit # 27797, hydrocarbon emissions charged to the emission cap will be the emissions recorded by the continuous hydrocarbon monitor. If the monitor is not operating, owner/operator shall calculate uncontrolled emissions as specified in Bubble Permit # 27797 and use a 95% (by weight) reduction factor to determine controlled emissions. The need for the hydrocarbon analyzer will be reviewed by the APCO prior to reissuance of the initial permit to operate. (basis: 8-44)
- 4. Deleted.
- 5. Owner/Operator shall not load or permit the loading of a regulated organic liquid into a marine tank vessel within the District whenever the marine vapor recovery system is not fully operational. The vapor recovery system must be maintained to be leak free, gas tight and in good working order. For "the purposes" of this condition, ""operational"" shall mean the system is achieving the reductions required by Part No (basis: Rule 8, Rule 44)
- 6. The vapor recovery system shall be operated such that the temperature of the exhaust from the incinerator is greater than 1200oF after startup (basis: 8-44)
- 7. Deleted
- 8. Owner/Operator shall not exceed a loading pressure greater than 80% of the lowest relief valve set pressure of the vessel being loaded. 8-44)
- 9. All maintenance records required for the vapor recovery system at this facility, which are subject to Regulation 8, Rule 44, shall be kept on site for five years and made available to the District upon request. (basis: -8-44)

#### Condition #5270 For S – 21: S-21, QCD Recovered Tank 21Tk:

- 1. The total throughput for S-21 shall not exceed 30,000 gallons in any consecutive 12 month period. (basis: (basis: cumulative increase)
- 2. The owner/operator of S-21 shall maintain records of throughput in a District approved log to demonstrate compliance with Part #1. These records shall be kept on-site and made available for District inspection for a period of 60 months from the date on which the record is made. (basis: cumulative increase)

#### **Condition #5640 For S – 4410:**

- 1. The total quantity of coatings applied at S-4410 Maintenance Spray Booth shall not exceed 500 gallons in any consecutive twelve month period. (basis: (cumulative increase)
- 2. \*All coatings containing hexavalent chromium shall be applied with a brush at S-4410. (basis: toxics)
- 3. The total quantity of cleanup solvent used at S-4410 shall not exceed 55 gallons in any consecutive 12 month period. (basis: (cumulative increase)
- 4. The owner/operator of S-4410 shall maintain written records of coating and solvent usage on a monthly basis to verify compliance with parts #1 and #3. These records shall be retained on-site for a minimum of five years from the date of entry and made available to District personnel upon request. (basis: cumulative increase and toxics)

#### **Condition #6001 For S – 4286:**

- 1. Completed.
- 2. All new pressure relief valves associated with this project shall be vented to the refinery flare recovery system. (basis: BACT)

#### Condition# 5599

The Abrasive Blasting Cabinet (S-4422) shall be vented to the properly operated and properly maintained dust collector (A-4422).

#### **Condition #6660 For S – 3189:**

- 1. The individual tank throughput at S-3189 shall not exceed 12,000,000 barrels of non-permit exempt stock during any consecutive 12 month period. (basis: (cumulative increase)
- 2. S-3189 shall store only gasoline components, jet fuel components, diesel, or other petroleum hydrocarbon material with a vapor pressure (TVP) less than or equal to 11.0 psia, and a benzene content less than or equal to 9.9% by weight. In addition, all other toxic air contaminant emissions, not including benzene, shall not exceed their respective risk screening trigger levels (compliance with this term has been determined through District Air Toxics Division assessment at the time of permit evaluation) (basis: cumulative increase and toxics).
- 3. The owner/operator of S-3189 shall maintain records of the storage tank throughput, type, and TVP in order to confirm compliance with the above conditions. These records shall be summarized on a monthly basis, and may be in the form of computer generated data that is available to District personnel on short notice (rather than actual paper copies of throughput data). These records shall be kept on file for a minimum of 5 years. (basis: cumulative increase, toxics)

#### **Condition #6661 For S – 3190:**

- 1. Total hydrocarbon throughput for S-3190 shall not exceed 7,300,000 barrels in any consecutive 12 month period. (basis: cumulative increase)
- 2. S-3190 shall store only MTBE, Jet "A", or any other District approved POC material which has a vapor pressure that is no higher than the vapor pressure of MTBE (6.5 psia) and is no more toxic than MTBE (based upon District established toxics screening thresholds). The owner/operator of S-3190 shall submit a written notification (X-Form) to the District within 30 days after storing any new products other than MTBE and Jet "A" in S-3190. (basis: cumulative increase and toxics)
- 3. The owner/operator of S-3190 shall maintain records of storage tank throughput in order to confirm compliance with Part #1. These records shall be summarized on a monthly basis, and may be in the form of computer generated data that is available to District personnel on short notice (rather than actual paper copies of throughput data). These records shall be kept on file for a minimum of 5 years. (basis: cumulative increase)
- 4. All new valves shall be either live loaded packing design, bellows sealed, diaphragm type, or other approved equipment design. All new flanges shall use graphitic gaskets or other District approved equivalent design. (Per correspondence w/ J. Adkins, valve criteria designated herein "oes not apply to valves < 2 inches.)"" (basis: BACT)

#### Condition **#7583** For S – 3191:

- 1. The total throughput for S-3191 Storage Tank shall not exceed 2,000,000 Bbls of non-exempt stock in any consecutive 12 month period. (basis: cumulative increase)
- 2. Deleted.
- 3. S-3191 may store any liquid provided the storage vapor pressure of MTBE, any MTBE mixture, or any non-toxic liquid shall not exceed 10.95 psia. The storage vapor pressure of any other material shall not exceed 6.2 psia and shall not have a greater toxicity than Avgas. (basis: cumulative increase and toxics)
- 4. The owner/operator of S-3191 shall maintain records of the storage tank throughput and type of stock in order to confirm compliance with parts #1 and #2. These records shall be summarized on a monthly basis, and may be in the form of computer generated data that is available to District personnel on short notice (rather than actual paper copies of throughput data). These records shall be kept on file for a minimum of five years. (basis: cumulative increase and toxics)

#### Condition #7642 For S – 3181, S-6050, S-6052:

For S-6050 (MTBE plant) at Plant 10

- 1. There shall be no venting of hydrocarbons from S-6050 except as provided for in District Regulations regarding routine shutdown procedures and/or during upset conditions. All process vents shall be directed to a flare gas recovery system. (basis: BACT)
- 2. Deleted.
- 3. Deleted.
- 4. Throughput of methanol at S-3181 shall not exceed 620,000 barrels per year. (basis: (cumulative increase)
- 5. Amount of Methanol imported to S-3181 by railcar shall not exceed 33,000 barrels (approximately 60 railcars) per year. (basis: cumulative increase)

For S-6052 (Methanol loading Racks) at Plant 10 (Construction Cancelled):

1. Methanol unloading arms at S-6052 shall incorporate dry-break connections to minimize fugitive emissions associated with connection and disconnection. There shall be no visible drip or leakage from the dry-break connections. (basis: BACT)

#### COND# 7880

#### S-9304

Pursuant to BAAQMD Toxic Section policy, this facility's annual throughput shall not exceed 500,000 gallons in any consecutive 12 month period.

#### Condition #8180

For fugitive emissions a, Plant 10

- 1. All fugitive emission components shall comply with the requirements of Regulations 8-18 or the following leak rates whichever is more stringent. Concentrations are expressed as methane measured at 1 cm from the component. (basis: BACT)
- 2. The following type of fugitive emission components, or District-approved equivalent technology, shall be utilized for all new components installed at S-4235

Single mechanical seal
Flexible graphite packing
Live-loaded or flexible graphite packing
Graphite gasket
Graphite gasket
High pressure oil seal

(basis: BACT)

#### Condition #8252 For S-3197 at Plant 10:

- 1. Throughput at S-3197 shall not exceed 4,000,000 barrels during any consecutive twelve-month period. (basis: BACT)
- 2. Deleted.
- 3. S-3197 shall only store gasoline, sponge oil, sour water, naphtha feed, MTBE, Reformate, any material which is exempt from District permitting requirements (as long as the storage 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 Reformate (8.1% benzene by weight). (basis: cumulative increase and toxics)
- 4. The owner/operator of S-3197 shall maintain records of storage tank throughput in order to confirm compliance with Part #1. These records shall be summarized on a monthly basis, and may be in the form of computer generated data that is available to District personnel on short notice (rather than actual paper copies of throughput data). These records shall be kept on file for a minimum of 5 years. (basis: BACT)

#### Condition #8253 For S – 3193:

- 1. Throughput at S-3193 shall not exceed 9,500,000 bbls. During any consecutive 12 month period. (basis: cumulative increase)
- 2. Deleted.
- 3. S-3193 shall store only gasoline, gasoline components, MTBE, Reformate, any material that is exempt from District permitting requirements (as long as the storage of this exempt material has been properly reported to the District), or any other petroleum hydrocarbon material with a toxicity less than Reformate (8.1% Benzene by weight). The vapor pressure of liquids stored in S-3193 shall not exceed 10.95 psia (basis: cumulative increase and toxics)
- 4. The owner/operator of S-32193 shall properly install a guidepole sleeve as an interim measure and shall ultimately install an unslotted guidepole at S-3193 (or other emission control device approved by the APCO) according to District Variance proceeding, Docket #2721. (basis: cumulative increase)

5. The owner/operator of S-3193 shall maintain records of the storage tank throughput in order to confirm compliance with part #1. These records shall be summarized on a monthly basis, and may be in the form of computer generated that is available to District personnel on short notice (rather than actual paper copies of throughput data). These records shall be kept on file for a minimum of 5 years. (basis: cumulative increase and toxics)

#### **Condition #8503 For S – 679:**

- 1. Throughput of jet fuel components at S-679 shall not exceed 1,000,000 bbls during any consecutive 12 month period. (Basis: cumulative increase)
- 2. Deleted.
- 3. S-679 shall only store jet fuel components or any material, which is exempt from District permitting requirements (as long as the storage of this exempt material has been properly reported to the District). The vapor pressure of Jet fuel components stored at S-679 shall not exceed 3.2 psia (TVP). (Basis: cumulative increase)
- 4. The owner/operator of S-679 shall maintain records of storage tank throughput in order to confirm compliance with part #1. These reports shall be summarized on monthly basis, and may be in the form of computer generated data that is available to District personnel on short notice (rather than actual paper copies of throughput data). These records shall be kept on file for a minimum of 5 years. (Basis: cumulative increase)

#### Condition #8715 For S-3198:

- 1. Total Liquid Throughput (regulated stock only) for S-3198 shall not exceed 500,000 Bbls in any 12 month consecutive period. (basis: cumulative increase)
- 2. Only Toluene, Jet A, Distillate Oil, exempt materials as defined in BAAQMD Regulation 2 Rule 1, or any material deemed by District staff to be equivalent to Toluene or Jet A with regard to toxicity and vapor pressure shall be stored in S-3198. (basis: cumulative increase)
- 3. The owner/operator of S-3198 shall maintain written records of the throughput and type of each liquid stored at S-3198 in a District approved log. These records shall remain on-site for a minimum of five years from the date of entry and made available to district representatives on request. (basis: cumulative increase)

Condition# 8773 For fugitive emissions at S-4251, Plant 10:

- 1. All light-liquid pumps at S-4251 shall have their shaft seals vented to at least one of the following furnaces S-4152, S-4153, S-4154, or S-4155. Any furnace to which pump seals are vented shall be properly operated and maintained at all times that the pumps are operating. Vent gas shall be exhausted directly into a gas burner flame and shall not exhaust into an unlit burner. The seal vent system shall be equipped with continuous flow monitors in order to demonstrate that all vent gases are flowing to an operating furnace. Sections of the vent system may be temporarily shutdown for repair or maintenance while the pumps are in service as long as the pumps and other fugitive components that are normally abated by the vent system comply with the requirements of Regulation 8-18. These temporary shutdowns for repair and maintenance shall not exceed 14 days in any consecutive 12 month period. The owner/operator shall monitor the fugitive components for compliance with Regulation 8-18 within 24 hours of repair or maintenance period commencing. The owner/operator shall operate non-leaking pumps if available during these periods of maintenance and repair of the vent gas system. (cum inc)
- 2. All pressure relief valves at S-4251 shall be vented to a flare gas recovery system. (cum inc)

#### For S-4155, Plant 10:

1. The NOx emitted from S-4155 shall not exceed 8.85 lb/hour (averaged over any rolling 3-hour period). This NOx emissions limit shall not apply to S-4155 during the startup or shutdown period of S-4155. For S-4155, startup periods shall last no more than 36 hours after the first burner is lit. For S-4155, the shutdown period shall begin 12 hours before the last burner is extinguished. (cum inc)

The time of first burner lighting and last burner extinguishment shall be determined based on the NOx CEM data and/or continuous hourly fuel flow data of S-4155. The first NOx reading recorded by the properly operating CEM after S-4155 is cold started from zero fuel flow, will be considered the point at which startup has begun. The time of last burner extinguishment (the end of the shutdown period) will be considered the time when the fuel flow to S-4155 is zero.

The NOx mass rate shall be calculated as follows based on the concentration (ppm NOx, corrected to 3% O2, dry) as measured by the CEM and the firing rate (BTU/hr) based on the fuel gas meter for S-4155: lb NOx/hour = [ppm NOx](1 lb-mole/386 scf)(46 lb NO2/lb-mole NO2)(0.01077 dscf flue gas/BTU)[million BTU/hour]

- 2. The concentration of CO emitted from S-4155 shall not exceed 50 ppmv corrected to 3% O2, dry. Compliance with this CO limit shall be based on the average of three 30-minute test runs as specified in BAAQMD Source Test Procedure ST-6. (BACT)
- 3. S-4155 shall be equipped with a District-approved O2 monitor and a District-approved continuous NOx monitor.
- 4. To confirm compliance with the NOx and CO limits in conditions #1 and #2, respectively, and to verify the accuracy of the NOx monitor required by condition #3, the owner/operator of S-4155 shall conduct a source test within 60 days of start-up after the physical modification of the equipment. The District Source Test Manager shall approve the source test procedures as well as the installation and location of testing ports, instrumentation, and platforms. After the above approval is received, the owner/operator shall notify the District Permit Services Division and the District Source Test Manager at least two weeks prior to performing any source test. Source test results shall be submitted to the District Source Test Section and the Permit Services Division within 45 days of completing the test. (cum inc, BACT)
- 5. The concentration of H2S in the fuel gas at S-4155 shall not exceed 50 ppm averaged over any 24-hour period. To confirm compliance with this condition, either S-4155 or the fuel gas mix drum supplying fuel gas to S-4155 shall be equipped with a continuous H2S monitor, and this information shall be made available for District inspection for a period of 24 months from the date on which a record is made. (BACT)
- 6. Fuel usage at S-4155 shall not exceed 209 MMBtu/hr on an annual average basis. To confirm compliance with this condition, records of fuel usage at S-4155 shall be recorded in a District-approved log, summarized on a monthly basis, and made available for District inspection for a period of 24 months from the date on which a record is made. (BACT)

#### Condition #8869 For S-32103:

- 1. The owner/operator of A-620, A-627, and A-628 Thermal Oxidizers (Model ES-300) shall maintain each at a minimum VOC destruction efficiency of 95% by weight. The owner/operator shall operate each A-620, A-627, and A-628 (Model ES-300) at a minimum temperature of 1500 deg F. (basis: BACT, 40 CFR 60.482-10 (c), 40 CFR 60.692-5 (a), and 40 CFR 61.242-11 (c))
- 2. The owner/operator of A-622 through 624 Thermal Oxidizers (Model ES-60H) shall maintain each at a minimum VOC destruction efficiency of 95% by weight. The owner/operator shall operate each A- 622 through 624 (Model ES-60H) at a minimum temperature of 1565 deg F. (basis: BACT, 40 CFR 60.482-10 (c), 40 CFR 60.692-5 (a), and 40 CFR 61.242-11 (c))

- 3. The owner/operator of each Thermal Oxidizer (A-620, A-622, A-623, A624, A-627, and A-628) shall have a continuous temperature monitor. Each pump duct shall be equipped with a continuous flow monitor. (basis: BACT)
- 4. The owner/operator shall monitor twice daily and record in a District approved log the temperature of each of the thermal oxidizers (A- 620, A-622, A-623, A-624, A-627, and A-628). These records shall be kept on site and made available for District inspection upon request for a period of 60 months from the date of entry. (basis: BACT)

#### Condition #9048 For S-4253:

For fugitive emissions at S-4253:

- 1. All new flanges installed at S-4253 shall be equipped with graphite-based gaskets, metal ring joints, or District-approved equivalent technology. (basis: BACT)
- 2. All new valves at S-4253 shall be live-loaded or graphitic-packed valves or District approved equivalent technology. (basis: BACT)
- 3. All new pressure relief valves at S-4253 shall be vented to a flare gas recovery system.
- 4. All new pumps at S-4253 shall have single mechanical seals or District-approved equivalent technology. (basis: BACT
- 5. The increase in fugitive POC emissions from S-4253 as a result of this modification shall not exceed 11.65 lb/day. The owner/operator of S-4253 shall submit a revised pump, valve, flange, and PSV count within 30 days of startup in order to confirm compliance with this limit. If the increase in fugitive POC emissions from S-4253, calculated in accordance with District procedures, is not equal to 11.65 lb/day, then the District may adjust the change in the cumulative increase attributed to this permit application before the issuance of the permit to operate. (basis: cumulative increase)

Additional Conditions for S-4159 (TKC F-410 Furnace) & S-4160 (TKC F-420 Furnace) under RLOP Permit

Condition #10	160					
For	S-90	S-285	S-697	S-942	S-1342	S-1614
	S-98	S-286	S-698	S-945	S-1430	S-1615
	S-172	S-579	S-877	S-946	S-1457	S-1629
	S-179	S-580	S-881	S-985	S-1483	S-1630
	S-189	S-614	S-903	S-986	S-1484	S-1631
	S-199	S-618	S-904	S-987	S-1536	S-1740
	S-233	S-622	S-906	S-1022	S-1537	S-1741
	S-247	S-633	S-911	S-1023	S-1606	S-1982
	S-248	S-693	S-919	S-1054	S-1607	S-263
	S-694	S-923	S-1069	S-1608	S-3011	S-281
	S-695	S-925	S-1277	S-1609	S-3059	S-282
	S-696	S-940	S-4243	#11-2 Battery, includ	ing S-4005 F-101	and
	S-4307 F-102		S-4260	#1 deoiler Portions of S-32102 and S-32103: 1A		
	rectifie	r, 4 rectifier,	PERCO swe K	-4 compressor.		

Per District Regulation 2-4-302.1, use of this Banking

1. Certificate shall be restricted to offsetting emissions in the petroleum industry. (basis: Rule 2-4-302.1)

2. This Banking Certificate shall be cancelled if any of the following equipment is ever operated in the Bay Area Air Basin:S-4243 #11-2 Battery, including S-4005 F-101 and

S-4307 F-102

S-4260 #1 deoiler

Portions of S-32102 and S-32103: 1A rectifier, 4 rectifier, PERCO sweeteners, 4 compressor.

Storage Tan	iks:				
S-90	S-285	S-697	S-942	S-134	S-1614
S-98	S-286	S-698	S-945	S-1430	S-1615
S-172	S-579	S-877	S-946	S-1457	S-1629
S-179	S-580	S-881	S-985	S-1483	S-1630
S-189	S-614	S-903	S-986	S-1484	S-1631
S-199	S-618	S-904	S-987	S-1536	S-1740
S-233	S-622	S-906	S-1022	S-1537	S-1741
S-247	S-633	S-911	S-1023	S-1606	S-1982
S-248	S-693	S-919	S-1054	S-1607	S-263
S-694	S-923	S-1069	S-1608	S-3011	S-281
S-695	S-925	S-1277	S-1609	S-3059	S-282
S-696	S-940				

(basis: Regulation 2, Rule 4)

#### Condition #10761 For S-6200 TO S-6239:

- 1. Storage Tanks S-6200 through S-6219 shall be assigned to any portable polyethylene storage tank of approximately 150 barrels capacity. One source number may be assigned to many different tanks over a period of time, but may only be assigned to one tank at any given time. The total "non-permit exempt" liquid throughput for Storage tanks S-6200 through S-6219 shall not exceed 36,000 barrels per calendar year. Each source number shall not store "non-permit exempt" material for more than 180 days during any calendar year. (basis: cumulative increase)
- 2. Storage Tanks S-6220 through S-6239 shall be assigned to any portable steel storage tank of approximately 500 barrels capacity. One source number may be assigned to many different tanks over a period of time, but may only be assigned to one tank at any given time. The total "non-permit exempt" liquid throughput for Storage tanks S-6220 through S-6239 shall not exceed 120,000 barrels per calendar year. Each source number shall not store "non-permit exempt" material for more than 180 days during any calendar year. (basis: cumulative increase)
- 3. Storage tanks S-6200-S-6239 may store any material provided the true vapor pressure is less than 11 psia, and the benzene concentration is less than or equal to that of Reformate. (basis: cumulative increase and toxics)
- 4. Portable Polyethylene Storage Tanks S-6200-S-6219 shall not store materials with a true vapor pressure above 4.0 psia, unless the tank is abated by at least one of the Carbon Adsorption Systems A-6200 through A-6239. (basis: cumulative increase)
- 5. Portable Steel Storage Tanks S-6220-S-6239 shall not store materials with a true vapor pressure above 1.5 psia, unless the tank is abated by at least one of the Carbon Adsorption Systems A-6200 through A-6239. (basis: cumulative increase)
- 6. Carbon Adsorption Systems A-6200 through A-6239 used to comply with Parts 4 or 5 shall each consist
of at least two approximately 200 pound carbon canisters arranged in series. (basis: cumulative increase)

- 7. Carbon Adsorption Systems A-6200 A-6239 used to comply with Parts 4 and 5 shall each be monitored for concentration at three sample points on a daily basis. This monitoring frequency may be reduced once the breakthrough time is determined for a given material and type of storage tank. One monitoring point shall be placed prior to the first carbon container; the second monitoring point shall be between the first and second carbon containers; the third monitoring point shall be placed after the last carbon container. (basis: cumulative increase)
- 8. Carbon Adsorption Systems A-6200-A-6239 shall each maintain a minimum control efficiency of 99% by complying with the following: If the reading at the monitoring point after the last canister is greater than 100 ppm as C1, then each of the carbon containers must be immediately replaced with a container of fresh carbon (basis: BACT)
- 9. The monitoring of each Carbon Adsorption System A6200-A6239 used to comply with Parts 4 and 5 shall be conducted with an OVA/FID (flame ionization detector) monitor or District approved alternate monitor. Monitoring shall occur while the tank is breathing out, preferably while the tank is being loaded at more than 90% of the tank's maximum loading rate. If the tank is not likely to breathe out during the day, monitoring shall be conducted between the hours of 10:00 am and 2:00 pm. (basis: cumulative increase)
- 10. The first carbon container shall be removed when the hydrocarbon concentration at the second monitoring point is either: greater than 10% of the hydrocarbon concentration at the first monitoring point or greater than or equal to 1000 ppmv as C1. The second carbon container shall replace the first carbon container and a fresh carbon container shall be placed in the last container position. (basis: cumulative increase)
- 11. To demonstrate compliance with the above conditions, the owner/operator of Storage Tanks S-6200-S-6239 shall either maintain the following records at a central refinery location in a District Approved log, or shall be able to generate these records on short notice:
  - A. The types of "non-permit exempt" materials stored and dates that the materials were stored in a given tank.
  - B. The total daily throughput of "non-permit exempt" material stored, summarized on a monthly basis.
  - C. If the emissions from a tank are not abated by a Carbon Adsorption System, the true vapor pressure of any "non-permit exempt" material must be measured and recorded on the day the tank is filled.
  - D. The date that each carbon container was taken out of service.

(basis: cumulative increase)

12. The operator shall maintain a file containing all measurements, records and other data that are required to be collected pursuant to the various provisions of this conditional A/C/PTO. All measurements, records and data required to be maintained by the applicant shall be retained at least five years following the date the data is recorded."" (basis: cumulative increase, toxics)

### Condition #10908 For S-1489:

- 1. Throughput at S-1489 shall not exceed 2,500,000 barrels of non-exempt stock during any consecutive 12month period. (basis: (cumulative increase)
- 2. Deleted
- 3. The storage vapor pressure of any mixture stored in S-1489 shall not exceed 6.2 psia. The concentration of benzene of material stored shall not exceed 4.9 vol%. (basis: cumulative increase and toxics)

4. The owner/operator of S-1489 shall maintain records of storage tank throughput, type, and storage vapor pressure in order to confirm compliance with Part 1. These records shall be summarized on a monthly basis, and may be in the of computer generated data which is available to District personnel on short notice (rather than actual paper copies of throughput data). These records shall be kept on file for a minimum of five years. (basis: cumulative increase)

### Condition #10909 For S-992:

- 1. Throughput at S-992 shall not exceed 6,000,000 Bbls of non-exempt stock in any consecutive 12month period. (basis: cumulative increase.
- 2. Deleted.
- 3. The storage vapor pressure of any mixture stored in S-992 shall not exceed 9.0 psia. The concentration of benzene of materials stored shall not exceed 4.9 vol%. (basis: toxics and cumulative increase)
- 4. The owner/operator of S-992 shall maintain records of storage tank throughput, type, and storage vapor pressure in order to confirm compliance with Part 1. These records shall be summarized on a monthly basis, and may be in the of computer generated data which is available to District personnel on short notice (rather than actual paper copies of throughput data). These records shall be kept on file for a minimum of five years.

### Condition #10967 For S – 1052:

- 1. Total diesel fuel additive throughput at S-1052 shall not exceed 46,000 gallons (1095 Bbls) during any consecutive 12-month period. (basis: cumulative increase BACT)
- 2. S-1052 may store the fuel additives 2-ethylhexyl nitrate, Nalco Flomor 5375 Cold Pour Improver, or Dupont Corrosion Inhibitor DCI #4A, or any other fuel additive provided the storage vapor pressure does not exceed that specified in BAAQMD Regulation 8, Rule 5 § 117 (TVP< 0.5 psia), and S-1052's emissions do not exceed the levels that trigger a District Toxic risk Screen. (basis: Regulation 8, Rule 5 and toxics)
- 3. The owner/operator of S-1052 shall maintain monthly records of fuel additive throughput in a District approved log. These records shall be retained on site for a minimum of five years from the date of entry and made available to District personnel upon request. (basis: cumulative increase, Regulation 8, Rule 5, toxics)

### Condition #11024 For S-3185:

- \*1. Throughput at S-3185 shall not exceed 20,000,000 Bbls of non-exempt stock during any consecutive 12 month period. (basis: cumulative increase)
- 2. Deleted.
- \*3. The storage vapor pressure of any mixture stored in S-3185 shall not exceed 0.30 psia. The concentration of benzene of materials stored shall not exceed 0.1 vol%. (basis: cumulative increase and toxics)
- \*4. The owner/operator of S-3185 shall maintain records of storage tank throughput, type, and storage vapor pressure in order to confirm compliance with Part 1. These records shall be summarized on a monthly basis, and may be in the of computer generated data which is available to District personnel on short notice (rather than actual paper copies of throughput data). These records shall be kepton file for a minimum of five years. (basis: cumulative increase and toxics)

#### Condition # 11025 Plant 10, Application #7919 For S-3106 at Plant 10:

- 1. The owner/operator of S-3106 shall not exceed 30,000,000 barrels of crude oil throughput during any consecutive twelve-month period. The owner/operator may store materials other than crude oil provided that the owner/operator demonstrates that there is no increase in emissions and the toxic emissions will not exceed the respective toxic trigger levels. (BACT)
- 2. The owner/operator shall maintain a zero gap seal between the tank shell and the tank's dual seals. (Basis: Regulation 8, Rule 5/BACT)
- 3. The owner/operator of S-3106 shall only store materials with a vapor pressure that shall not exceed 11.0 psia. The concentration of benzene of materials stored shall not exceed 2.0 wt.%. (BACT/Toxics)
- 4. The owner/operator of S-3106 shall maintain records of storage tank throughput, type, benzene weight percentage, storage vapor pressure, and all inspection records. These records shall be summarized on a monthly basis, and may be in the form of computer generated data, which is available to District personnel on short notice (rather than actual paper copies of throughput data). These records shall be kept on file for a minimum of 5 years. (BACT)
- 5. The owner/operator shall control S-3106 by a liquid-mounted primary mechanical seal and a zero-gap secondary wiper seal. There shall be no ungasketed roof fittings. Except for roof legs, each roof fitting shall be of the design, which yields the minimum roof fitting losses (per EPA Compilation of Air Pollution Emission Factors, AP-42, Supplement E, Section 12.3.2, Table 12.3-11). The following list indicates the type of control required for a variety of typical roof fittings. Control techniques for roof fittings not included in this list shall be subject to District approval, prior to installing the roof on the tank. (BACT/TBACT)

Fitting Type Access hatch	Control Technique Bolted cover, gasketed
Guide pole/Well	Slotted with a pole sleeve
(amended per AN 7919)	that projects below liquid surface, a zero-gap pole wiper,
	and a exterior flexible barrier/cover that covers all of the
	slots
Gauge float well	Bolted cover, gasketed
Gauge hatch/Sample well	Weighted mechanical actuation, gasketed
Vacuum breaker	Weighted mechanical actuation, gasketed
Roof drain	Roof drain does not drain water into product
Roof leg	Adjustable, with vapor seal boot
Rim vent	Weighted mechanical actuation, Gasketed

6. The owner/operator of S-3106 shall inspect the exterior flexible barrier/cover to determine that it is functioning properly and has no holes or leaks at least twice per calendar year at 4 to 8 month intervals. (BACT)

### Condition #11066 For S-4285:

- 1. Feed rate to the FCC reactor S-4285 shall not exceed 80,000 BPD averaged over any calendar year, nor 90,000 BPD over any calendar day. (basis: 2-1-301)
- 2. The owner/operator shall conduct a District approved source test on every fifteenth day that S-4285 throughput exceeds 80 MBPD, and annually thereafter. The test shall analyze for POC and PM10. The District shall review and revise the frequency of the source testing of S-4285 at the time of annual permit renewal based on the result sof previous tests. (basis: BACT)

3a. SO2, NOx, CO, POC, PM10 emissions shall not exceed the following limits in any- consecutive 12 month period

SOx – 2199.4 tpy; NOx-- 1504.7 tpy; CO- - 258.4 tpy; POC – 6.1 tpy; PM10 – 92 tpy

The emission baseline used in this permit condition are only applicable for the purpose of limiting emissions to pre-project (non-modified) levels and are not necessarily acceptable for the purposes of emissions banking per Regulation 2, Rule 4. (basis: offsets exemption)

- 3.b The owner/operator of S-4285 catalyst regenerator shall not exceed 1 pound of PM emissions per 1000 pounds of coke burn-off as determined by EPA Method 5B or 5F. PM emissions during startup, shutdown or malfunction shall not be used in determining compliance with this limit, provided that good air pollution control practices to minimize PM emissions are implemented during such periods. The FCCU Catalyst Regenerator shall comply with the applicable requirements of NSPS subparts A and J for PM. (NSPS Subparts A and J, Consent Decree case No. 03-04650, 6/27/05)
- 3c. The owner/operator of S-4285 catalyst regenerator shall not exceed 30% opacity (6-minute average basis). Opacity during startup, shutdown or malfunction shall not be used in determining compliance with this limit, provided that good air pollution control practices to minimize opacity are implemented during such periods. The FCCU Catalyst Regenerator shall comply with the applicable requirements of NSPS Subparts A and J for opacity. (NSPS Subparts A and J. Consent Decree case No. 03- 04650, 6/27/05)
- 4.a. The concentration of SO2 emitted from S-4285 shall not exceed 330 ppmv/24 hour, corrected to 3% O2. (basis: BACT)
- 4.b. The owner/operator of S-4285 shall not exceed 25 ppmvd SO2 @ 0% O2 on a 365 day rolling average and 50 ppmvd SO2 @ 0% O2 on a 7 day rolling average(effective 10/31/06). SO2 emissions during startup, shutdown, or malfunction shall not be used in determining compliance with this 7 day rolling average SO2 emission limit, provided that good air pollution control practices to minimize SO2 emissions are implemented during these periods. (basis: consent decree case # 03-04650, date: 6/27/05)
- 5.a. The concentration of NOx emitted at S-4285 shall not exceed 220 ppmv/24 hour, or 180 ppmv/30 day, or 150 ppmv/year, corrected to 3% O2. (basis: BACT)
- 5.b. The owner/operator of S-4285 shall not exceed 20 ppmvd NOx @ 0% O2 on a 365 day rolling average basis and 40 ppmvd NOx @ 0% O2 on a 7 day rolling average basis (effective 6/27/05). NOx emissions during startup, shutdown or malfunction shall not be used in determining compliance with this 7 day rolling average NOx emission limit, provided that good air pollution control practices to minimize NOx emissions are implemented during these periods. (basis: consent decree case # 03-04650, date: 6/27/05)
- 6a. The concentration of CO emitted from S-4285 shall not exceed 67 ppmv/30 day, or 50 ppmv/year, corrected to 3% O2, dry. (basis: BACT)
- 6b. The owner/operator of S-4285 shall not exceed 500 ppmv CO corrected to 0% O2, on a 1-hour average basis. CO emissions during startup, shutdown or malfunction shall not be used in determining compliance with this limit, provided that good air pollution control practices to minimize CO emissions are implemented during such periods. The FCCU Catalyst Regenerator shall comply with the applicable requirements of NSPS Subparts A and J for CO. (NSPS Subparts J, Consent Decree case No. 03-04650, 6/27/05)

- 6c. The owner/operator of S-4285 shall not exceed 100 ppmv CO corrected to 0% O2, on a rolling 365day average basis. (Consent Decree case No. 03- 04650, Section D.26, 6/27/05)
- 7A. The TSP emitted from S-4285 after abatement shall not exceed 21 lbs/hr, averaged over any consecutive 365 day period using the time weighted average of all District-accepted third party and District performed source tests conducted on S-4285. District accepted third party tests shall be defined as those tests that meet all of the criteria in 7b. (basis: BACT)

To demonstrate compliance with the 21 lb/hr emission limit, owner/operator shall calculate the time weighted average of all District accepted third party and District performed particulate source tests conducted on S-4285 over the 365 day period preceding the most recent source test. Within 45 days of test completion, owner/operator shall calculate the time weighted average and submit the calculation with comprehensive report of the test results to the District's Source Test Manager for review. The calculation shall be done using the following procedure:

The start of the calculation period shall be the source test date that is closest to 365 consecutive days and at least 345 days back from the current test date.

All District-accepted and District performed source tests that occur from the start of the calculation period shall be included in the time weighted average.

The time-weighted average of all included test results is calculated by summing the average test results from each time interval, then multiplying each average by the period of that interval, then dividing by the sum of all intervals in the calculation period.

See equation 1 below: Rave= summation of i=1 to i=f-1 (ti\*((Ri+Ri+1)/2))

Summation of I=1 to I=f-1 (ti)

Rave = time weighted average of test results R1 = results from first included source test Ri = results from source test i

Rf = results from most recent source test

ti = time interval between included source tests Ri and Ri+1, days

The electrostatic precipitator (ESP) abating S-4285 shall be fully charged at all times of operation, except during periods of maintenance or servicing. The ESP abating S-4285 shall be properly maintained and kept in good working order. This shall include the following:

- (A1) Inspect each ESP rapper at least once per day. Inspection shall consist of visual inspection of the rapper control settings and status lights. Individual rappers found to out of service should be identified and appropriate repairs performed on the rappers. Owner/operator shall repair rappers that fail due to temporary short circuit or circuit overload that blow a fuse within 2 working days of ID. Owner/operator shall repair working rapper that fail due to an electric/electronic part within 30 days of ID. These dates may be adjusted upon approval of the District New Source Review Manager. (basis: BACT)
- (A2) A hopper level indicator of alarm on each ESP hopper in order to prevent overfilling of the hoppers. (basis: BACT)
- (A3) Monitor and record Transformer Rectifier (TR) set secondary current readings on a daily basis. (basis: BACT)
- (A4) Install a temperature monitor and recorder at the inlet to the ESP. The inlet temperature of the ESP shall be maintained at a minimum of 550F averaged over any one hour period. An alarm shall be set in such a manner as to indicate temperature excursions below 550F.(basis: BACT)

(A5) The average secondary current of any TR set shall not be less than 200 milliamps averaged over any 3 hour period, or the secondary current of up to 2 TR sets may be less than 200 milliamps, averaged over any three hour period, as long as the remaining TR sets maintain an average secondary current above 296 milliamps averaged over any three hour period. An alarm shall be set in such a manner as to indicate secondary excursions below 200 milliamps. (Condition altered in Application #18188 dated 2/25/98 to allow for 2 TR sets to be below 200 milliamps)

The parametric conditions in condition #11066 may be adjusted administratively, if Districtapproved source test data demonstrate to the satisfaction of the APCO that alternate parametric conditions are necessary for or capable of maintaining compliance with an emission limit of 21.0 lbs/hr TSP as determined by US EPA method 5b, or other District approved equivalent. (basis: BACT)

- 7B. The average yearly TSP emissions rate of S-4285 shall be determined by US EPA method 5b. The owner/operator of S-4285 shall hire a 3<sup>rd</sup> party source testing firm to perform at least 4 source tests per calendar year to determine the hourly TSP emission rate of S-4285. Each source test shall be performed in accordance with the District's MOP. The owner/operator of S-4285 shall notify the District source Test manager and the Permit Services Division at least 7 days prior to the test, to provide the District staff the option of observing the test. Within 45 days of test completion, a comprehensive report of the test results shall be submitted to the District's Source Test Manager for review and disposition. The District may choose to perform any of the tests in place of the private contractor. At least one test shall be performed on every January 15, April 15, July 15, and October 15. These dates may be adjusted by not more than 10 working days upon approval of the District Source Test Manager. If this source test window partially or completely overlaps a plant shutdown and its 7-day startup period, the source test shall be conducted within 14 days of plant startup.(basis: BACT)
- To demonstrate compliance with 7a and 7b, the owner/operator of S-4285 shall maintain in a District approved log,updated monthly, all of the following:
  TSP emission source test results on S-4285, lbs/hr.
  The number of days between each source test.
  Calculated time weighted average TSP emissions in lbs/hr, for each source test conducted.
  Daily rapper inspection records indicating working condition and repairs.
  The number of broken rapper ceramic failures found during turnarounds.
  Daily ESP TR set secondary current readings; and
  ESP inlet temperature records.(basis: BACT)
- 8. The owner/operator of S-4285 shall conduct a District approved source test within 30 days of startup to verify the accuracy of the SOx, NOx, CO, O2 monitors, and also measure the POC and TSP. (basis: BACT)
- 9. The owner/operator of S-4285 shall continuously monitor and record SOx, NOx, and CO emissions from the FCCU regenerator outlet measuring only regenerator flue gas. Any new CEMs shall be reviewed and pre-approved by the District source Test Manager. (basis: BACT)
- 10. In addition to the above conditions, the owner/operator shall comply with either of the following and calculated in accordance to 40 CFR 60.106:
  - (A) Maintain emission at or below 9.8 lbs of sulfur dioxide per 1000 lb of coke burn off, averaged over a 7 day rolling basis. The FCCU Catalyst Regenerator shall comply with the applicable requirements of NSPS Subparts A and J for SO2. (NSPS Supart J, Consent Decree case No. 03-04650, 6/27/05)
  - (B) Process in FCC fresh feed that has a total sulfur content no greater than 0.30% by weight, averaged over a 7 day rolling basis. (basis: 40 CFR 60.106)

- 11. The owner/operator of S-4285 shall maintain a daily log of all SOx, NOx, and-CO emissions, lb SOx/1000 lb coke burn 7 day rolling-average, total sulfur content in feed 7 day rolling average, total throughput, and source test data. This log shall be available to District staff upon request. (basis: BACT)
- 12. The owner/operator shall source test for heavy metals and PAHs within 90 days of startup. (basis: BACT)
- 13. The owner/operator of S-4285 shall shut down S-15 Steam Generator upon startup of S4285. (basis: BACT)
- 14. The owner/operator of S-4285 will not be required to meet the emission limits contained in parts 4 7 for a period of 30 days after initial startup, or 7 days after any subsequent startups. (basis: BACT)
- \*15. Ammonia injected to pre treat flue gas feed into A0014 ESP shall not exceed 500 lbs/hr." (basis: toxics)
- 16. With respect to the O2 CEMS required(Section A.15, B.20, and D.29 of consent decree) to correct emission measurements form S-4285, in lieu of the audit points specified in 40 CFR Part 60 Appendix F Section 5.1.2, the owner/operator may audit the O2 CEMs at 20-30% and 50-60% of the actual O2 CEMs span value. (Consent Decree case No.03-04650, 6/27/05)

### Condition #11208 For S-870, S-1909, S-1911, S-6125:

#### For S-870 at Plant 10

- 1. Throughput at S-870 shall not exceed 4,500 barrels of non-exempt stock during any consecutive twelvemonth period. (basis: cumulative increase)
- 2. The storage vapor pressure of any mixture stored in S-870 shall not exceed 0.40 psia. (basis: cumulative increase)
- 3. S-870 may store the fuel additives DCI-4a, DMD-2, and AO-735, or any other fuel additive provided that the storage vapor pressure does not exceed the limit specified in Part #2 and the fuel additive is stored in quantities that do not trigger a District Toxic Risk Screen. (basis: cumulative increase and toxics)
- 4. The owner/operator of S-870 shall maintain records of storage tank throughput, type, and storage vapor pressure in order to confirm compliance with Parts #1, #2, and #3. These records shall be summarized on a monthly basis, and may be in the form of computer generated data that is available to District personnel on short notice (rather than actual paper copies of throughput data). These records shall be kept on file for a minimum of 5 years. (basis: cumulative increase and toxics)

### For S-1911 at Plant 10:

- 1. Throughput at S-1911 shall not exceed 9,900 barrels of non-exempt stock during any consecutive twelvemonth period. (basis: (cumulative increase)
- 2. The storage vapor pressure of any mixture stored in S-1911 shall not exceed 0.40 psia.. (basis: (cumulative increase)
- 3. S-1911 may store the fuel additives DCI-4a, DMD-2, and AO-735, or any other fuel additive provided that the storage vapor pressure does not exceed the limit specified in Part #2 and the fuel additive is stored in quantities that do not trigger a District Toxic Risk Screen. (basis: cumulative increase and toxics)

4. The owner/operator of S-1911 shall maintain records of storage tank throughput, type, and storage vapor pressure in order to confirm compliance with Parts #1, #2, and #3. These records shall be summarized on a monthly basis, and may be in the form of computer generated data that is available to District personnel on short notice (rather than actual paper copies of throughput data). These records shall be kept on file for a minimum of 52 years. (basis: cumulative increase and toxics)

### For S-6125 at Plant 10

- 1. Throughput at S-6125 shall not exceed 1,400 barrels of non-exempt stock during any consecutive twelvemonth period. (basis: cumulative increase)
- 2. The storage vapor pressure of any mixture stored in S-6125 shall not exceed 0.40 psia (basis: cumulative increase)
- 3. S-6125 may store the fuel additives DCI-4a, DMD-2, and AO-735, or any other fuel additive provided that the storage vapor pressure does not exceed the limit specified in Part #2 and the fuel additive is stored in quantities that do not trigger a District Toxic Risk Screen. (basis: cumulative increase and toxics)
- 4. The owner/operator of S-6125 shall maintain records of storage tank throughput, type, and storage vapor pressure in order to confirm compliance with Parts #1, #2, and #3. These records shall be summarized on a monthly basis, and may be in the form of computer generated data that is available to District personnel on short notice (rather than actual paper copies of throughput data). These records shall be kept on file for a minimum of 5 years. (basis: cumulative increase and toxics)

## For S-1909 at Plant 10:

- 1. Throughput at S-1909 shall not exceed 11,700 barrels of non-exempt stock during any consecutive twelve-month period. (basis: (cumulative increase).
- 2. The storage vapor pressure of any mixture stored in S-1909 shall not exceed 0.40 psia. (basis: (cumulative increase)
- 3. S-1909 may store the fuel additives DCI-4a, DMD-2, andAO-735, or any other fuel additive provided that the storage vapor pressure does not exceed the limit specified in Part #2 and the fuel additive is stored in quantities that do not trigger a District Toxic Risk Screen. (basis: cumulative increase and toxics).

The owner/operator of S-1909 shall maintain records of storage tank throughput, type, and storage vapor pressure in order to confirm compliance with Parts #1, #2, and #3. These records shall be summarized on a monthly basis, and may be in the form of computer generated data that is available to District personnel on short notice (rather than actual paper copies of throughput data). These records shall be kept on file for a minimum of 52 years. (basis: cumulative increase and toxics)

### Condition #11228 For S – 957:

For S-957, Tank 957 - Fixed Roof Tank, 3272K gal, Iron brown, Jet ""A"" fuel, 120 ft diameter

- 1. Except for Jet "'A'", only a material exempt from permits per Regulation 2-1-123.3 shall be stored in S-957. (basis: offsets/cumulative increase)
- 2. The total Jet "'A'" throughput for S-957 shall not exceed 7.011 million barrels during any consecutive 12month period. (basis: offsets/cumulative increase)
- 3. S-957's thoughput of material exempt from permits per Regulation 2-1-123.3 shall be limited so that its emissions will not exceed 15 pounds per day.

- 4. In order to demonstrate compliance with the above conditions, the owner/operator of S-957 shall maintain the following records in District approved log. These records may be in the form of computer generated data. These records shall be kept on site and made available for District inspection for a period of 60 months from the date that the record was made. (basis: cumulative increase)
  - (a) The type of all materials stored and the dates that the materials were stored.
  - (b) The total daily throughput of each materialstored, summarized on a monthly basis.

#### Condition #11436 For S-1653:

- 1. Throughput at 1653 shall not exceed 750,000 Bbls of non-exempt stock for a calendar year. (basis: cumulative increase)
- 2. S-1653 may store jet fuel, jet line wash, diesel, diesel line wash, mixtures of jet and diesel, or any material exempt from permitting per regulation 2-1-123.3. (basis: cumulative increase)
- 3. The material stored in S-1653 shall not have a vapor pressure greater than 0.5 psia (basis: cumulative increase)
- 4. In order to demonstrate compliance with parts #1 and #2, the owner/operator of S-1653 shall maintain records of the following records in a District approved log. (Jet fuel, Jet line wash, diesel line wash or any mixture of jet and diesel shall be assumed to be non-exempt and count toward the throughput limit in part #1 unless it is exempt per Regulation 2-1-123.3. Pure diesel shall not count toward the throughput limit in part #1 since it is exempt per Regulation 2-1-123.3.) These records shall be summarized on a monthly basis, and may be in the form of computer generated data that is available to District personnel on short notice (rather than actual paper copies of throughput data). These records shall be kept on site for a minimum of 5 years from the date the record was made.
  - (a) The type of all materials stored and ede the materials were stored.
  - (b) The total daily throughput of each material stored, summarized on a monthly basis."" (basis: Cumulative increase)

### Condition #12104 For S-3214:

- 1. Total throughput for the external floating roof tank (S-3214) shall not exceed 3,000,000 Bbls during any 12 consecutive month period. (basis: cumulative increase)
- 2. Only refinery stock meeting all of the following requirements shall be stored in S-3214:
  - (a) True vapor pressure less than or equal to 11.0 psia
  - (b) Benzene Content less than or equal to 5.5% wt
  - (c) Toxic air contaminant emissions not exceeding their respective BAAQMD risk screening trigger levels. (basis: cumulative increase and toxics)
- 3. To demonstrate compliance with the above conditions, the following records shall be kept onsite and made available for District inspection for a period of 60 months from date on which the record is made:
  - (a) The Material stored.
  - (b) The true vapor pressure of the material
  - (c) The benzene content of the material.
  - (d) The monthly throughput.

(basis: cumulative increase and toxics)

- 4. Chevron shall provide Emission Reduction Credits in the amount of 3.28 TPY of POC for this project (Application #14518). The credits shall be provided to the District at least 30 days prior to the date of Plant #10's annual permit renewal. (Done 4/17/95, along with 3189Tk, and 3213Tk) (basis: offsets)
  - Note 1. Tank 3214 (S-3214) shall be controlled by a metallic shoe primary seal that extends below the liquid surface, and a zero gap secondary seal. There shall be no ungasketed roof fittings. Except for the roof legs, each roof fitting shall be of the design that yields the minimum roof fitting losses (per EPA Compilation of Air Emission Factors, AP-42, Supplement E, Section 13.3.2,

Table 12.3-11). The following list indicates the type of control required for a variety of typical roof fittings. Control techniques for roof fittings not included in this list shall be subject to District approval, prior to installing the roof on the tank:

Fitting Type	Control Technique
Access Hatch	Bolted cover, gasketed
Guide pole/Well	Solid, OR Slotted with controls per API 2517
	Addendum (See note 1) "Enviroseal" meets this control
	requirement for a slotted well.
Gauge Float well	Gasketed
Gauge Hatch/Sample Well	Weighted Mechanical Actuation, gasketed
Roof Drain	Roof drain does not drain water into product
Roof Leg	Adjustable, with vapor seal boots
Rim Vent	Weighted mechanical actuation, gasketed

- Note 1 Slotted guide Pole Control Configuration, per addendum to API Publication 2517, May 1994, shall include the following components: (CAPITALs indicate configuration/approval of Ultracheck "Enviroseal" System)
  - (a) Sliding Cover
  - (b) Well Gasket
  - (c) Pole sleeve with pole wiper approximately 6 inches above sliding cover, OR NON-PERMEABLE FABRIC SKIRT FUNCTIONING AS A POLE SLEEVE, or District approved equivalent
  - (d) Float with float wiper approximately 1 inch above sliding cover, OR ALTERNATELY A FLOAT WITH MULTIPLE WIPERS.–(basis: BACT)

### Condition #12139 For S – 3213:

- 1. Total throughput of non-permit exempt stocks for the external floating roof tank (S-3213) shall not exceed 9,100,000 Bbls during any 12 consecutive month period. (basis: (cumulative increase)
- 2. Only refinery stock meeting all of the following requirements shall be stored in S-3214:
  - (a) true vapor pressure less than 11.0 psia
  - (b) benzene content less than 5.5% wt
  - (c) toxic air contaminant emissions not exceeding their respective BAAQMD risk screening trigger levels. (basis: cumulative increase and toxics)
- 3. To demonstrate compliance with the above conditions, the following records shall be kept onsite and made available for District inspection for a period of 60 months from date on which the record is made:
  - (a) The material stored.
  - (b) The true vapor pressure of the material.
  - (c) The benzene content of the material.
  - (d). The monthly throughput. (basis: cumulative increase and toxics)
- 4. Chevron shall provide Emission Reduction Credits in the amount of 4.72 TPY of POC for this project (Application #14448). The credits shall be provided to the District at least 30 days prior to the date of Plant #10's annual 1995 (for the year 95-96) permit renewal. (Done 4/17/95, along with 3189Tk, and 3214Tk). (basis: offsets)
- 5. Deleted.

6. Tank 3213 (S-3213) shall be controlled by a metallic shoe primary seal that extends below the liquid surface, and a zero gap secondary seal. There shall be no ungasketed roof fittings. Except for the roof legs, each roof fitting shall be of the design that yields the minimum roof fitting losses (per EPA Compilation of Air Emission Factors, AP-42, Supplement E, Section 13.3.2, Table 12.3-11). The following list indicates the type of control required for a variety of typical roof fittings. Control techniques for roof fittings not included in this list shall be subject to District approval, prior to installing the roof on the tank:

Fitting Type	Control Technique
Access Hatch	Bolted cover, gasketed
Guidepole/Well	Solid, OR Slotted with controls per API 2517
	Addendum (See note 1) Ultracheck "Enviroseal" meets
	this control requirement for a slotted well.
Gauge Float well	Gasketed
Gauge Hatch/Sample Well	Weighted Mechanical Actuation, gasketed
Roof Drain	Roof drain does not drain water into product
Roof Leg	Adjustable, with vapor seal boots
Rim Vent	Weighted mechanical actuation, gasketed
Slotted guide Dole Control Config	uration per addendum to ADI Dublication 2517 May

- Note 1 : Slotted guide Pole Control Configuration, per addendum to API Publication 2517, May 1994, shall include the following components: (CAPITALs indicate configuration/approval of Ultracheck "Enviroseal" System)
  - (a.) Sliding Cover
  - (b.) Well Gasket

Pole sleeve with pole wiper approximately 6 inches above sliding cover, OR NON-PERMEABLE FABRIC SKIRT FUNCTIONING AS A POLE SLEEVE, or District approved equivalent Float with float wiper approximately 1 inch above sliding cover, OR ALTERNATELY A FLOAT WITH MULTIPLE WIPERS.""(basis: BACT)

### Condition #12177 For S-3139

 This Banking Certificate shall be cancelled if any of the following equipment (S-3139) is ever used to store non-permit exempt stock in the Bay Area Air Basin : S-"139, Storage Tank T-3139 – 199087 gals."" (basis: Regulation 2, Rule 4)

### Condition #12580 For S-1821 and S-1894:

#### Application # 14858, Condition #12580 and #18137 for S-1821 & S-1894: For S-1821 and 1894, sulfuric acid and phosphoric acid storage tanks at Plant #10:

\*1. The owner/operator of these sources shall not store in these sources any non-permit exempt liquids, except sulfuric acid in S-1821, and phosphoric acid in S-1894<sup>\*\*\*</sup> (basis: toxics)

#### Condition # 12842 For S-6250:

- 1. S-6250 Oil Water Separator shall be vented at all times to at least two 1800 pound activated carbon vessels arranged in series. (basis: cumulative increase)
- 2. A-630 Carbon shall be replaced by A-631 carbon upon the detection of 10% of the inlet stream concentration to the carbon bed as measured by a flame ionization detector (OVA-FID) or other method approved in writing by the APCO. A-631 shall then be replaced by unspent carbon. (basis: cumulative increase)
- 3. A-631 Carbon shall be changed out with unspent carbon upon detection of breakthrough or 10 ppmv as C1 as measured with a flame ionization detector (OVA-FID) or other method approved in writing by the APCO. (basis: cumulative increase)

- 4. The limits set forth in Parts # 2 and # 3 shall apply to non-methane hydrocarbon emissions. To determine the presence of methane in the exhaust stream, a reading shall be taken with and without a carbon filter tip fitted on the OVA-FID probe. Concentrations measured with the carbon filter tip in place shall be considered methane for the purpose of these permit conditions. (basis: cumulative increase)
- 5. The operator of this source shall monitor with a FID or other method approved in writing by the APCO at the following locations:
  - A. At the exhaust of S-6250; the inlet to A-630.
  - B. At the exhaust of A-630; the inlet to A-631.
  - C. At the outlet of A-631.

(basis: cumulative increase)

- 6. These monitor readings shall be recorded in a monitoring log at the time they are taken. The monitoring results shall be used to:
  - A. Calculate the time of predicted breakthrough of organics after carbon adsorption to maintain compliance with part 3.
  - B. Estimate the frequency of carbon change out necessary to maintain compliance with part2.
  - C. To maintain compliance with parts 2 and 3 the monitoring shall be conducted once during each 24 hour period of operation. At least one monitoring event shall take place during each period when S-6250 is in service. The operator of this source may propose for District review, based on actual measurements taken at the site during operation of the source, that the monitoring schedule be changed based on the decline in organic emissions and/or the demonstrated breakthrough rates of the carbon vessels. Written approval by the District must be received by the applicant prior to a change to the monitoring schedule. (basis: cumulative increase)
- 7. The operator of this source shall maintain the following information in a District approved log for each month of operation of the source:
  - (a) The hours of operation.
  - (b) Each monitor reading or analysis result for the day of operation they are taken.
  - (c) The calculation of organic breakthrough from the carbon beds. The number of carbon beds removed from service.

Any exceedance of parts 2 and/or 3 shall be reported to the Permits Division with the log as well as the corrective action taken. In addition, an exceedance of parts 2 and/or 3 shall be submitted to the District Enforcement Section at the time it occurs. The submittal shall detail the corrective action taken and shall include the data showing the exceedance as well at the time of occurrence. (basis: cumulative increase)

8. The operator shall maintain a file containing all measurements, records and other data that are required to be collected pursuant to the various provisions of this conditional Authority to Construct/Permit to Operate. All measurements, records and data required to be maintained by the applicant shall be retained for at least five years following the date the data is recorded. (basis: cumulative increase)

### Condition# 13008 For S-3201, Whole Alkylate Storage Tank, 170,500 BBL, at Plant #10:

- 1. Total throughput of non-permit exempt stocks for the external floating roof tank (S-3201) shall not exceed 7,300,000 barrels during any consecutive 12 month period.(basis: (cumulative increase)
- 2. The owner/operator of S-3201 may store refinery petroleum hydrocarbon stocks other than alkylate as long as the true vapor pressure is 6.0 psia or less and the toxic risk from the tank does not increase. (basis: cumulative increase and toxics)

- 3. To demonstrate compliance with the above conditions, the following records shall be kept on site and made available for District inspection for a period of 60 months from the date on which a record is made.
  - (a.) The material stored
  - (b.) The true vapor pressure of the material
  - (c.) The monthly throughput

(basis: cumulative increase and toxics)

- 4. Deleted.
- 5. S-3201 shall be controlled by a liquid-mounted primary mechanical seal and a zero-gap secondary wiper seal. There shall be no ungasketed roof fittings. Except for roof legs, each roof fitting shall be of the design that yields the minimum roof fitting losses (per EPA Compilation of Air Pollution Emission Factors, AP-42, Supplement E, Section 12.3.2, Table 12.3-11). The following list indicates the type of control required for a variety of typical roof fittings. Control techniques for roof fittings not included in this list shall be subject to District approval, prior to installing the roof on the tank.

shall be subject to District approval,	prior to motaling the roor on the tant.
Fitting Type	Control Technique
Access hatch	Bolted cover, gasketed
Guide pole/Well	Solid, or Slotted with controls per API 2517 Addendum
	(See Note 1below)
Gauge float well	Gasketed
Gauge hatch/Samplewell	Weighted mechanical actuation, gasketed
Vacuum breaker	Weighted mechanical actuation, gasketed
Roof drain	Roof drain does not drain water into product
Roof leg	Adjustable, with vapor seal boot
Rim vent	Weighted mechanical actuation, gasketed

- Note 1:Slotted Guide Pole Control Configuration, per Addendum to API Publication 2517, May 1994, shall include the following components:
  - A. Sliding cover
  - B. Well gasket;
  - C. Pole sleeve with pole wiper approximately 6 inches above sliding cover, or nonpermeable fabric skirt functioning as a pole sleeve, or District approved equivalent;
  - D. Float with float wiper approximately 1inch above the sliding cover, or alternately a float with multiple wipers. (basis: BACT)

## Condition #13364 For S – 3202: S-3202 Tank Methanol Storage Tank

Deleted.

## COND# 13364

Operation of S-3202 Methanol Storage Tank, 150,000 BBL, is subject to the following conditions:

- 1. The owner/operator of S-3202 shall not exceed 4,000,000 barrels throughput of non-exempt stock in any consecutive 12 month period. (BACT)
- 2. The owner/operator may store petroleum hydrocarbon stocks other than methanol as long as the true vapor pressure is 8.33 psia or less and emissions of toxic compounds do not exceed any risk screening trigger level. (BACT)
- 3. The owner/operator of S-3202 shall not store any materials with a benzene concentration that exceeds 8.1% by weight. In order to demonstrate compliance with this condition the owner/operator shall conduct quarterly tests to determine the benzene concentration. The owner/operator of S-3202 may use specification sheets when available instead of quarterly testing. (toxics)

4. The owner/operator of S-3202 external floating roof tank shall be equipped with a metallic shoe primary seal that extends below the liquid surface and a zero-gap secondary seal. There shall be no ungasketed roof fittings. Except for roof legs, each roof fitting shall be of the design, which yields the minimum roof fitting losses. The following list indicates the type of control required for a variety of typical roof fittings. Control techniques for roof fittings not included in this list shall be subject to District approval. (BACT)

Fitting Type	Control Technique
Access hatch	Bolted cover, gasketed
Guide pole/Well	unslotted guide pole, gasketed sliding cover with wiper; or slotted with a liner from the top of the well to below the roof when landed on its legs
Gauge float well	Bolted cover, gasketed
Gauge hatch/Sample well	Weighted mechanical actuation, gasketed
Vacuum breaker	Weighted mechanical actuation, gasketed
Roof drain	Roof drain does not drain water into product
Roof leg	Fixed; or Adjustable, with vapor seal boot, or gasket between roof leg and leg sleeve
Rim vent	Weighted mechanical actuation, gasketed

5. The owner/operator of S-3202 shall maintain a district approved log of all throughput, vapor pressure, and either specification sheets or quarterly tests for benzene concentrations for all materials stored in S-3202. This log shall be kept on site for at least 5 years from the date of entry and be made available to districtstaff upon request. (record keeping)

## Condition #13366 For S – 3207:

S-3207 Tank FCC Heavy Gasoline Tank

- 1. Throughput for non-exempt stocks shall not exceed 900,000,000 Bbls in any consecutive 12 month period. (basis: cumulative increase)
- 2. The owner/operator of S-3207 may store petroleum hydrocarbon stocks other than FCC Heavy Gasoline as long as the True Vapor Pressure is 6.2 psia or less, and the toxic risk from the tank does not increase. (basis: cumulative increase and toxics)
- 3. All gauge wells shall have no slot above the liquid level. All guide poles with organic liquids in them shall have floats with wiper seals."" (basis: cumulative increase)

### Condition #13369 For S – 4282, S-4346, S-4348, S-4355, S-4357, S-4358: Conditions on Fugitive Emissions

Operation of new or modified equipment in the following plants:

- 1. Butamer Section of DIB/Butamer Plant (S-4355
- 2. C4 Treating Plant (S-4357)
- 3. FCC Gasoline Hydrotreater (S-4358)
- 4. Hydrogen Recovery Plant Modernization (S-4348)
- 5. Gas Recovery Unit (S-4346)

shall be subject to the following conditions:

- 1. The owner/operator shall use flanges equipped with graphite-based gaskets (Teflon-based gaskets for acid service), metal ring joints, or District approved equivalent technology. (basis: BACT)
- 2. For valves that are 2 inches or less and on process streams with greater than 2 wt% benzene, the owner/operator shall wherever feasible (but no less than 95% of these valves) use bellows-sealed valves or District-approved equivalent technology. All other valves shall be live-loaded or graphitic-packed valves (Teflon/graphitic packed valves for acid service), or District-approved equivalent technology. (basis: BACT and toxics)
- 3. For all light-liquid pumps and compressors, the owner/operator shall have their shaft seals vented to a District-approved abatement device that achieves a minimum of 95% VOC destruction efficiency or District approved equivalent technology. (basis: BACT)
- 4. For all heavy liquid pumps, the owner/operator shall use double mechanical seals or District approved equivalent technology. (basis: BACT)
- 5. The owner/operator shall vent all pressure relief valves in non-exempt hydrocarbon service to a `flare gas recovery system. (basis: BACT)
- 6. For all process drains, the owner/operator shall use the ""p-trap"" design or District approved equivalent technology. (basis: BACT)
- 7. The owner/operator shall inspect fugitive sources with greater than 10 wt% benzene on a monthly basis per NESHAP 40 CFR 61. Other non-exempt valves, pump seals, and compressor seals shall be inspected on a quarterly schedule per District Regulation 8, Rules 18 and 25. (basis: NESHAP 40 CFR 61 and Regulation 8, Rules 18 and 25)
- 8. Valves and flanges shall be subject to a 100 ppm leak detection limit. Pump seals and compressor seals shall be subject to a 500 ppm leak detection limit. [basis: Regulation 8, Rule 18]
- 9. The total fugitive POC emissions increase as a result of the entire Reformulated Gasoline Project and FCC Modernization Project (Application No. 18240) shall not exceed 76.4 tons per year. The owner/operator shall submit a revised pump, compressor, valve, flange, and pressure relief valve count within 60 days of start-up in order to confirm compliance with this limit. If the total fugitive POC emissions increase, calculated in accordance with District procedures, is not equal to 76.4 tons per year, then the District will adjust the change in cumulative increase attributed to this permit application'. (basis: cumulative increase)

### Condition #13370

3. S-6016 & S-6019 flare pilots shall be fueled continuously with natural gas or refinery fuel gas. The flare will be operated only during periods of emergency upset or breakdown. Routinely vented process gases may not be flared. (basis: cumulative increase)

4. S-6016 & S-6019 flaring shall be steam-assisted to prevent smoking. (basis: Regulation 2-1-403)

### Condition #13467 For S – 3196:

- 1. Throughput at S-3196 shall not exceed 2,000,000 bbls. During any consecutive month period. (basis: cumulative increase)
- 2. S-3196 shall only store only petroleum stocks or mixtures with a vapor pressure not to exceed 10.95 psia and benzene content not to exceed 9 wt%, or any other stock that is exempt from District permitting requirements. (basis: cumulative increase and toxics)

3. The owner/operator of S-3196 shall maintain records of the storage tank throughput in order to confirm compliance with part #1. These records shall be summarized on a monthly basis, and may be in the form of computer generated data that is available to District personnel on short notice (rather than actual paper copies of throughput data). These records shall be kept on file for a minimum of 5 years."" (basis: cumulative increase and toxics)

### Condition #13597 For S-1798 at Plant 10:

- 1. Throughput at S-1798 shall not exceed 7,200,000 barrels during any consecutive twelve-month period. (basis: (cumulative increase)
- 2. Deleted.
- 3. S-1798 shall only store gasoline, Penhex, Reformate, Jet A, any material that is exempt from District permitting requirements (as long as the storage of this exempt material has been properly reported to the District), or any other petroleum hydrocarbon material with a vapor pressure less than Penhex (8.0 psia at 70 deg F) and toxicity less than Reformate (8.1% benzene by weight). (basis: cumulative increase and toxics)
- 4. The owner/operator of S-1798 shall maintain records of storage tank throughput in order to confirm compliance with Part #1. These records shall be summarized on a monthly basis, and may be in the form of computer generated data that is available to District personnel on short notice (rather than actual paper copies of throughput data). These records shall be kept on file for a minimum of 5 years. (basis: cumulative increase and toxics)

### Condition # 13859 For S – 3134 and 4292:

- 1. Total throughput of non-exempt stocks for the external floating roof tank (S-3134) shall not exceed 10,000,000 Bbls of Jet fuel, gasoline components, or any other petroleum hydrocarbon material with a vapor pressure (true) less than or equal to 11.0 psia, and benzene content less than or equal to 4.1% by weight during any consecutive 12 month period. (basis: Rule 2-1-234) (basis: cumulative increase and toxics)
- 2. To demonstrate compliance with Parts #1, the following records shall be kept, on a monthly basis, on site and made available for District inspection for a period of 60 months from the date on which the record is made:
  - A. the material stored,
  - B. the vapor pressure and benzene content of the material stored,
  - C. the total monthly throughput of material subject to Part #1.

(basis: toxics, cumulative increase)""

### Condition # 14596 For S – 6051:

### Prior to completion of work authoried under application # 13023:

- 1. Organic compound emissions from S-6051 shall not exceed 23.7 lb/day, averaged over any consecutive 30day period. (basis: (cumulative increase)
- 2. Total dissolved solids in the S-6051 basin shall not exceed 2000 parts per million (wt), average over any consecutive 30-day period. (basis: (cumulative increase)
- 3. In order to demonstrate compliance with both condition numbers 1 and 2, the owner/operator of S-6051 shall conduct district approved monthly tests on the cooling water for both POC and TDS. The owner/operator of S-6051 shall maintain a district approved monthly log of all test data. This log shall be kept on site for at least 5 years from the date of entry and be made available to district staff upon request. (Recordkeeping)

### COND# 14596

## Chevron USA Products Company; plant 10 Conditions for S-6051, Alky CWT

- 1. POC emissions from S-6051 shall not exceed 30.2 lb/day, averaged over any consecutive 12- month period. (cumulative increase/offsets)
- 2. Total dissolved solids in S-6051 basin shall not exceed 2000 parts per million (wt), averaged over any consecutive 30 day period. (cumulative increase)
- 3. The owner/operator shall install a District- approved continuous hydrocarbon analyzer and recorder to determine the hydrocarbon concentration in the cooling water in Alky Cooling Water Tower (S-6051). The purpose of this analyzer is to serve as an early warning/detection device to indicate a possible heat exchanger leak of process fluid into the cooling water system and to determine compliance with part 1. The analyzer will provide baseline data, which will be statistically evaluated to determine an Action Level. Any hydrocarbon reading above the Action Level will trigger an alarm. The implementation of this permit condition shall be subject to the approval of the district upon startup of the cooling tower. (BACT)
- 4. Once the alarm is triggered, the owner/operator shall also measure, with a district-approved LEL monitor, the concentration of hydrocarbons in the S-6051 Cooling Tower vapor space as a percent of the lower explosive limit (LEL) once each calendar day while the hydrocarbon reading remains above the Action level. (BACT)
- 5. The owner/operator of S-6051 shall either repair any leaking heat exchanger, remove the leaking heat exchanger, or otherwise remove the source of the leak within 15 days of detection of the leak as identified by the alarm set at the Action level. If the owner/operator identifies the source of a leak to be E-1404, E-1421, or E-1220 located in the Alkylation Unit (S-4291), or E-400 located in the Yard Deisobutanizer (S-4355), the owner/operator of S-6051 shall remove the leaking heat exchanger from service, or otherwise eliminate the source of the leak, within 30 calendar days or less from the alarm trigger date. If the concentration of hydrocarbons in the cooling tower vapor space exceeds 10 percent of LEL, the owner/operator shall remove the leaking heat exchanger from service, or otherwise eliminate the source of the leaking heat exchanger from service, or otherwise eliminate the source of the leaking heat exchanger from service, or otherwise eliminate the source of the leaking heat exchanger from service, or otherwise eliminate the source of the leaking heat exchanger from service, or otherwise eliminate the source of the leaking heat exchanger from service, or otherwise eliminate the source of the leaking heat exchanger from service, or otherwise eliminate the source of the leak as soon as practicable, but within 15 days or less of exceeding the 10 percent of LEL limit. (BACT)
- 6. In order to demonstrate compliance with part 2, the owner/operator of S-6051 shall conduct district approved monthly tests on the cooling water for TDS. The owner/operator of S-6051 shall maintain a district approved monthly log of all test data. This log shall be kept on site for at least 5 years from the date of entry and be made available to district staff upon request. (Record keeping)
- 7. In order to demonstrate compliance with part 1, the owner/operator of S-6051 shall use volatile organic concentration data from the continuous hydrocarbon analyzer from part 3 and the flowrate data from district-approved flowmeters installed at district-approved sample port locations. The owner/operator of S-6051 shall maintain a district-approved daily log of all hydrocarbon analyzer concentration data, flowrate data, and daily emissions estimates. This log shall be kept on site for at least 5 years from the date of entry and be made available to district staff upon request. (1-523, BACT, Record keeping)
- 8. The owner/operator of S-6051 shall maintain a district approved daily log of all hydrocarbon analyzer data, flowmeter data, daily emissions data, date and time of all alarms, a summary of the baseline and action levels data, a description of findings and actions taken for each incident above the Action level, and all LEL measurements. This log shall be kept on site for at least 5 years from the date of entry and be made available to district staff upon request. (Record keeping)

## Condition #14701 For S – 4291 and S-4356:

Operation of new or modified equipment in the following plants

- 1. Alkylation Plant (S-4291)
- 2. Deisobutanizer Section of the DIB/Butamer Plant (S-4355)
- 3. TAME Plant (S-4356)
- 4. Aromatics Saturation Unit (S-4282)

[The C4 Treating Plant, FCC, FCC Gasoline Hydrotreater, and the Hydrogen Recovery Plant Modernization have not yet been constructed/modified. These sources have been deleted from this part and are subject to Condition #13369, Application No. 18240) shall be subject to the following conditions:

- 1. The owner/operator shall use flanges equipped with graphite- based gaskets (Teflon-based gaskets for acid service), metal ring joints, or District-approved equivalent technology. (basis: BACT)
- 2. For valves that are 2 inches or less and are on process streams with greater than 2 wt% benzene, the owner/operator shall wherever feasible (but no less than 95% of these valves) use bellows-sealed valves or District-approved equivalent technology. All other valves shall be live-loaded or graphitic-packed valves (Teflon/graphitic packed valves for acid service), or District approved equivalent technology. (basis: BACT and toxics)
- 3. For all light-liquid pumps and compressors, the owner/operator shall have their shaft seals vented to a District-approved abatement device that achieves a minimum of 95% VOC destruction efficiency or District approved equivalent technology. (basis: BACT)
- 4. For all heavy liquid pumps, the owner/operator shall use double mechanical seals or District-approved equivalent technology. (basis: BACT)
- 5. The owner/operator shall vent all pressure relief valves in non-exempt hydrocarbon service to a flare gas recovery system. (basis: BACT)
- 6. For all process drains, the owner/operator shall use the "'p-trap"" design or District-approved equivalent technology. (basis: BACT)
- 7. The owner/operator shall inspect fugitive sources with greater than 10 wt% benzene on a monthly basis per NESHAP 40 CFR 61. Other non-exempt valves, pump seals, and compressor seals shall be inspected on a quarterly schedule per District Regulations 8-18 and 8-25. (basis: NESHAP 40 CFR 61 and Rule 8-18)
- 8. Valves and flanges shall be subject to a 100 ppm leak detection limit. Pump seals and compressor seals shall be subject to a 500 ppm leak detection limit [Basis: Regulation 8, Rule 18]
- 9. Deleted
- 10. The total throughput at S-4291 shall not exceed 36,000 barrels per calendar day. (basis: (cumulative increase)
- 11. The owner/operator of S-4291 shall maintain a district approved daily log of all throughput at S-4291. This log shall be kept on site for at least five years from the date of entry and be made available to district staff upon request. (basis: cumulative increase)

### Condition #15038 For S – 3133:

- 1. Total throughput of non-exempt stocks for the external floating roof tank 3133 (S-3133) shall not exceed 15,000,000 MBbls during any consecutive 12 month period. S-3133 shall store jet fuel, gasoline components, or any other petroleum hydrocarbon material with a vapor pressure (TVP) less than or equal to 11.0 psia, and a benzene content less than or equal to 4.1% by weight. In addition, all other toxic air contaminant emissions, not including benzene, shall not exceed their respective risk screening trigger levels. (basis: BACT and Rule 2-1-234)
- 2. The owner/operator of S3189 shall maintain records the storage tank throughput, type, and TVP in order to confirm compliance with condition 1. These records shall be summarized on a monthly basis, and may be in the form of computer generated data that is available to District personnel on short notice (rather than actual paper copies of throughput data). These records shall be kept on file for a minimum of 5 years. (basis: BACT and toxics)
- 3. To meet the requirements of section 2-2-302, Chevron shall provide to the District Emission Reduction Credits in the amount of 6.16 tons POC per year at least 30 days prior to the date of the 1998 annual permit renewal. ((basis: Regulation 2-2-302)

### **Condition # 15107 For S – 25:**

- 1. The total volume of Automate Blue 8 or Unisol 7 stored in Storage Tank S-25 shall not exceed 60 barrels (2520 gallons) during any consecutive 12 month period (basis: cumulative increase).
- 2. The owner/operator of S-25 shall only store materials with a true vapor pressure not to exceed 0.5 psia. (basis: 8-5-117, and cumulative increase)
- 3. In order to demonstrate compliance with the above conditions, Chevron shall maintain the following records in a District-approved log. These records shall be kept on site and made available for District inspection for a period of 5 years from the date that the record was made.
  - a. The purchase records that show the amount of Automate Blue 8 or Unisol 7 purchased per month used at S-25. The purchased amount shall be considered to be equal to the volume of Automate Blue 8 or Unisol 7 stored. The owner/operator of S-25 shall also maintain records of the vapor pressures the materials used.

### Condition #15671 For S – 1635:

- 1. Total throughput for non-exempt stocks for S-1635, internal floating roof tank, shall not exceed 2,000,000 barrels in any consecutive 12 calendar month period. (Basis: Cumulative Increase)
- 2. The Permit Holder may store petroleum hydrocarbon stocks other than gasoline as long as the true vapor pressure is 8.3 psia or less, the concentration of benzene is 5.5 weight % or less, and the toxic risk from the tank does not increase. (Basis: toxics risk screen)
- 3. The Permit Holder shall maintain records of the storage tank throughput in order to confirm compliance with part 1 above. These records may be in the form of computer generated reports that are available to District personnel on short notice (rather than actual paper copies of throughput data). (Basis: Cumulative Increase)
- 4. To demonstrate compliance with the above conditions, the following records shall be kept on site and made available for District inspection for a period of 5 years from the date on which a record is made.
  - A. The material stored
  - B. The true vapor pressure of the material
  - C. The benzene weight percent
  - D. The monthly throughput

(Basis: Cumulative Increase and toxics risk screen)

### 5. Deleted.

6. S-1635 shall be controlled by a liquid-mounted primary mechanical seal and a zero-gap secondary wiper seal. There shall be no ungasketed roof fittings. Except for roof legs, each roof fitting shall be of the design that yields the minimum roof fitting losses (per EPA Compilation of Air Pollution Emission Factors, AP-42, Supplement E, Section 12.3.2, Table 12.3-11). The following list indicates the type of control required for a variety of typical roof fittings. Control techniques for roof fittings not included in this list shall be subject to District approval, prior to installing the roof on the tank.

Fitting Type	Control Technique
Access hatch	Bolted cover, gasketed
Guide pole/Well	Solid, or Slotted with controls per API 2517 Addendum (See Note 1 below)
Gauge float well Gauge hatch/Sample well	Bolted cover, gasketed Weighted mechanical actuation, gasketed
Vacuum breaker	Weighted mechanical actuation, gasketed
Roof drain	Roof drain does not drain water into product
Roof leg	Adjustable, with vapor seal boot
Rim vent	Weighted mechanical actuation, gasketed

- Note 1: Slotted Guide Pole Control Configuration, per Addendum to API Publication 2517, May 1994, shall include the following components:
  - a. Sliding cover;
  - b. Well gasket;
  - c. Pole sleeve with pole wiper approximately 6 inches above sliding cover, or non-permeable fabric skirt functioning as a pole sleeve, or District approved equivalent; (Basis: Regulation 8, Rule 5)
- 7. Chevron shall provide ERCs in the amount of 0.88 tpy of POC for this project to replace their S-1635 storage tank (appl #18516) The credits shall be provided to the District at least 30 days prior to the date of Plant 10's annual permit renewal. (Basis: Emission Offsets) Emission reduction credits were provided on 5/4/99 from Banking Certificate #579.

### Condition # 15698 Conditions for A-261, A-262, and S-4393: Conditions for A-261 and A-262: P10 A/N 18960

- 1. The owner/operator of A-261 and A-262 shall not exceed a washwater temperature of 90 degrees Fahrenheit during any consecutive 3-hour period. The owner/operator of A-261 and A-262 shall not exceed 6.6 pounds per day of organic compound emissions (measured as C1) combined from the vents of both A-261 and A-262. (cumulative increase and Regulation 8, Rule 2, cumulative increase)
- 2. Each Hydrogen Plant De-Aerator Vent shall not have a vent flow above 5000 pounds per hour during any 3-hour averaging period. (Basis: Regulation 8, Rule 2)
- 3. Washwater flow in each scrubber (A-261 and A-262) shall not average less than 30 gallons per minute during any 3-hour averaging period. (Basis: Regulation 8, Rule 2)

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- 4. For each scrubber (A-261 and A-262), the ratio of washwater to De-aerator vent flow shall not be less than 11.6 gallon/minute for each 1000 pounds/hour of De-aerator vent flow during any 3-hour averaging period. (Basis: Regulation 8, Rule 2)
- 5. The parametric condition limits above shall not apply during the 72 hour periods preceding and following any Hydrogen Plant shutdown. (Basis: Regulation 2-1-403)
- 6. These parametric limits may be adjusted administratively, if District-approved data demonstrate to the satisfaction of the APCO that alternative parametric conditions are necessary for or capable of maintaining compliance with the emission limits of Regulation 8, Rule 2 as determined by the designated method, or by a District-approved equivalent. (Basis: Regulation 8, Rule 2)
- 7. The owner/operator of A-261 and/or A-262, water scrubbers, shall abate the emissions from the Hydrogen Plant De-Aerator vents, whenever they are emitting methanol. One scrubber may be used to abate the De-Aerator vents from both the Hydrogen Plant Trains unless the temperature of the washwater exceeds 80 degrees Fahrenheit, during which time both scrubbers shall be used unless only one train is in operation, in which case one scrubber shall be required. (Basis: Regulation 8, Rule 2,cumulative increase)
- 8. To determine compliance with Regulation 8-2-301 and part 1, the owner/operator of A-261 and A-262 shall conduct district approved source test on each scrubber vent annually in the month of September. The test method shall be the test method specified in Regulation 8, Rule 2, or a District-approved equivalent.

Compliance with the 15 lb/day organics emission limit of Regulation 8-2-301 shall be determined based on the sum of the average source tested emission rate from the scrubber vent plus the District-approved calculated scrubber drain emission rate of 8.3 lb/day organics (as carbon) or an alternate District-approved scrubber drain emission rate that is less than 8.3 lb/day organics (as carbon). (basis: Regulation 8, Rule 2)

The Permit Holder shall notify the Manager of the District's Source Test Section at least seven days prior to the test, to provide the District staff the option of observing the testing. Within 45 days of test completion, a comprehensive report of the test results shall be submitted to the Manager of the District's Source Test Section for review and disposition. (Basis: Regulation 2-1-403 and Regulation 8, Rule 2)

- 9. To demonstrate compliance with the above conditions, Permit Holder shall keep the following records on site and made available for District staff for a period of 5 years from the date on which a record is made. These records may be in the form of computer generated reports which are available to District personnel on short notice (rather than actual paper copies of throughput data). The parametric measurements mentioned above, 3-hour average temperature records, the hours and date of any Hydrogen Plant shutdowns, district- approved emissions data and calculations in pounds per day (as C1), and all source test records. (Basis: Regulation 8, Rule 2, cumulative increase, recordkeeping)
- 10. Chevron shall provide Emission Reduction Credits in the amount of 1.39 tons per year of Precursor Organic Compounds for this project to install their Hydrogen Plant De-Aerator Vents (Permit Application Number 18529). The credits shall be provided to the District at least 30 days prior to the date of Plant #10''s annual plant permit renewal. (Basis: Emission Offsets)

### Conditions for S-4393

- Upon receipt of a violation notice of Regulation 1-301, Standard for Public Nuisance, or Regulation 7, Odorous Substances, resulting from operation of S-4393, Bioreactor, the Air Pollution Control Officer may require the Permit Holder to:
  - A. Make a concerted effort to identify and correct the cause of the violation in as prompt a manner as possible.
  - B. Add deodorant to reduce the nuisance or odors from S-4393.
  - C. Optimize the bioreactor aeration flowrate to minimize the nuisance or odors from S-4393.

(Basis: Regulations 1-301, 7-301, 7-302, 7-303)

### **Condition #16679 For S – 4170:**

Conditions for A-260 Selective Catalytic Reduction (SCR) System for abatement of: S-4170 F-305 Furnace, 820 MMBtu/hour, at Hydrogen Plant A-Train:

- 1. Ammonia emissions from Source 4170, Hydrogen Reforming A Train Furnace F-305, shall not exceed 120 pounds per Hour (Basis: toxic risk screen).
- 2. To ensure compliance with Part 1, a flow restriction orifice shall be installed in the ammonia injection system to limit ammonia flow to below 120 pounds per hour. (basis: toxic risk screen)
- 3. A-260, SCR System, shall be properly operated and properly maintained and shall abate the emissions from Source 4170, whenever Source 4170 is emitting NOx. (Basis: Regulation 9, Rule 10)
- 4. Chevron shall install, calibrate, maintain, and operate a District-approved continuous emission monitor and recorder for NOx and O2 from the stack of Source 4170, Furnace F-305. (Basis: Regulation 2, Rule 1, Section 403)
- 5. Start-up and shutdown of Source S-4170 shall be limited to a maximum of 20 hours under normal conditions. Upon approval by the District, the start-up or shutdown period may be extended to a period no to exceed 72 hours for the following situations:
  - A. The start-up or shutdown has been proceeding continuously, and Chevron has been increasing or decreasing temperatures at a rate limited by metallurgy or other physical constraints prescribed in their start-up/shutdown procedure.
  - B. Start-up following installation or replacement of refractory lining.
  - C. Start-up following initial catalyst pre-sulfiding following catalyst replacement or catalyst regeneration.

(Basis: Regulation 2, Rule 1, Section 403)

- 6. To demonstrate compliance with the above conditions, the owner/operator shall keep the following records on site and made available for District inspection for a period of 5 years from the date on which a record is made.
  - (a.) All source test records
  - (b.) The date, time, and duration of any start-up, shutdown or malfunction in the operation of A-260, SCR System. (Basis: Regulation 9, Rule 10, Section 504)

#### Condition# 16686

### Chevron Richmond Refinery (Plant #10) Condition Added 09/02/99

Each combustion source listed below shall not exceed its indicated maximum firing rate (higher heating value), expressed in the units of million BTU per day (MMBTU/day). These firing rates are sustainable maximum firing rates. The sustainable hourly firing rates, used for billing purposes, are established by dividing the maximum daily firing rates by 24 hours.

		Enforceable	Used
	Furnace #/	Limit,	for Fees,
Source	Source Description	MMBTU/day	MMBTU/hr
4044	F-570 #5 Rheniformer	1872	78
4070	F-1100A #4 Crude Unit	9552	398
4071	F-1100B #4 Crude Unit	9720	405
4072	F-1160 #4 Crude Unit	8064	336
4131	Blr #3 800# Steam Boiler	5664	236
4132	Blr #4 800# Steam Boiler	5640	235
4133	Blr #5 800# Steam Boiler	5688	237
4152	F-100 Asphalt Soln. Htr.	1212	50.5
4154	F-120 Asphalt Soln. Htr.	1212	50.5
4159	F-410 TKC Feed Furnace	1632	68
4160	F-420 TKC Feed Furnace	1704	71
4161	F-510 TKN Feed Furnace	1464	61
4162	F-520 TKN Feed Furnace	1464	61
4163	F-530 TKN Feed Furnace	1464	61
4168	F-730 Isomax Furnace	7944	331
4170	F-305 Reform Furn. H2 plt.	19680	820
4171	F-355 Reform Furn. H2 plt.	19680	820
4334	F-1200 LNC Atmos Furnace	607.2	25.3
4335	F-1250 LNC Vacuum Furnace	595.2	24.8
4338	F-1550 HNC Vacuum Furnace	864	36
4339	F-1110 LNC Reactor Furnace	456	19

### Condition # 17470 For S – 3126:

- 1. Total crude oil throughput at S-3126 shall not exceed 50, 000 barrels in any consecutive 12-month period. This condition applies when desalter effluent is stored in S-3126 and shall be determined by tank roof movement measured by a tank level gauging system. (basis: cumulative increase)
- 2. Total naphtha throughput at S-3126 shall not exceed 365,000 barrels in any consecutive 12-month period. This throughput shall be determined by tank roof movement measured by a tank level gauging system. (basis: cumulative increase)
- 3. The owner/operator of S-3126 shall maintain a district approved monthly log of all material throughput at S-3126. This log shall be kept on site for at least 5 years from the date of entry and made available to district staff upon request. (basis: cumulative increase)

### Condition #17527 For S – 4426 to S-4428:

- 1. S-4426, S-4427, and S-4428 shall only use solvents with a high initial boiling point (>248F). (basis: Regulation 8, Rule 16, Section 118)
- 2. Each S-4426, S-4427, and S-4428 shall each not exceed 100 gallons of solvent in any consecutive 12 month period. (basis: cumulative increase)
- 3. The owner/operator of S-4426, S-4427, and S-4428 shall maintain a district approved monthly log of all solvent usage at S-4426, S-4427, and S-4428. This log shall be kept on site for at least five years from the date of entry and be made available to district staff upon request. (basis: cumulative increase)

### Condition # 17553 For S – 3220:

- 1. Total throughput at S-3220 shall not exceed 12,466,000 barrels in any consecutive 12 month period. (basis: cumulative increase)
- 2. This throughput shall be determined by tank roof movement measured by a district approved tank level gauging system. (basis: cumulative increase)
- 3. The owner/operator of S-3220 shall maintain a district approved monthly log of all material throughput at S-3220. This log shall be kept on site for at least 5 years from the date of entry and made available to district staff upon request. (basis: cumulative increase)

### Condition #18137

For all sources without explicit throughput limiting conditions:

- \*1. For grandfathered sources, the throughput limits as shown in Table II-A3 are based upon District records at the time of the MFR permit issuance. The facility must report any exceedance of these limits following the procedures in Section I.F. This reporting requirement is intended to facilitate a determination of whether a modification has occurred as defined in Regulation 2-1-234.3. The throughput limits for grandfathered sources are for reporting purposes only. Exceedance of this limit does not establish a presumption that a modification has occurred, nor does compliance with the limit establish a presumption that a modification has not occurred. (Basis: Reg. 2-1-234.3)
- \*2. To demonstrate compliance with the above conditions, the Owner/Operator shall maintain monthly records on site, and make available for District inspectors, for a period of 5 years from the date of entry. (Basis: Section 2-1-234.3)

## COND# 18337

- 1. The S-4354 Butamer Plant throughput shall not exceed 12,000 barrels per operating day. (cum inc)
- 2. deleted per application 15914/5.
- 3. All fugitive components associated with sources S-4354 and S-4360 shall comply with 40 CFR Part 60 Subpart VV. (NSPS)
- 4. The owner/operator of S-4354 shall maintain a district approved daily log for S-4354 and monthly summary for S-4354 of all throughput at S-4354. This log shall be kept on site for at least 5 years from the date of entry and made available to district staff upon request. (record keeping)

### Condition # 18655

Chevron Products Company; Plant #A0010; Conditions for S-4227, S-4228, and S-4229:

- 1. Permit Holder shall conduct an annual source test to demonstrate compliance with District regulation 9-1-313.2.
- Owner/Operator shall conduct an annual SO<sub>3</sub>/H<sub>2</sub>SO<sub>4</sub> source test to demonstrate compliance with Regulation 6- 330. (basis: Regulation 2-6-503)

### Condition# 18656 For Sources S-6010, S-6012, S-6013, S-6015, 6017, S-6019, S-6039:

Conditions for monitoring for correctly designed and operating flares: Effective 1/1/05.

- 1 The owner/operator shall not flare more than the following limits of vent gas, as defined in Regulation
  - 12-11-210, at the following sources: S-6012 381,040 #//hr S-6013 817,512 #/hr S-6015 878,900 #/hr S-6017 3497 #/hr S-6039 710,390 #/hr S-6016 1,440,800 #/hr S-6019 783,300 #/hr S-6010 878,900 #/hr. (basis: Regulation 8-1-110.3; 2-1-403)
- 2. In order to demonstrate compliance with Part 1 of this condition, the owner/operator shall record on an hourly basis the pounds of vent gas flared at each S-6010, 6012, 6013, 6015, 6016, 6017, 6019, and 6039 Flares. The owner/operator shall maintain these records for a period of five years from the date of entry and make sure records are available for the APCO upon request. (basis: Regulation 8-1- 110.3; 2-6-409.2; 2-6-501)

Conditions for monitoring smoking flares::

- 3. For the purposes of these conditions, a flaring event is defined as a flow rate of vent gas flared in any consecutive 15 minutes period that continuously exceeds 330 standard cubic feet per minute (scfm). If during a flaring event, the vent gas flow rate drops below 330 scfm and then increases above 330 scfm within 30 minutes, that shall still be considered a single flaring event, rather than two separate events. For each flaring event during daylight hours (between sunrise and sunset), the owner/operator shall inspect the flare within 15 minutes of determining the flaring event, and within 30 minutes of the last inspection thereafter, using video monitoring or visible inspection following the procedure described in Part 4 of this condition. (basis: Regulation 2-6-409.2)
- 4. The owner/operator shall use the following procedure for the initial inspection and each 30-minute inspection of a flaring event.
  - A. If the owner/operator can determine that there are no visible emissions using video monitoring, then no further monitoring is necessary for that particular inspection.
  - B. If the owner/operator cannot determine that there are no visible emissions using video monitoring, the owner/operator shall conduct a visual inspection outdoors using either:
    - i. EPA Reference Method 9; or
    - ii. Survey the flare by selecting a position that enables a clear view of the flare at least 15 feet, but not more than 0.25 miles, from the emission source, where the sun is not directly in the observer's eyes.

- C. If a visible emission is observed, the owner/operator shall continue to monitor the flare for at least 3 minutes, or until there are no visible emissions, whichever is shorter.
- D. The owner/operator shall repeat the inspection procedure for the duration of the flaring event, or until a violation is documented in accordance with Part 5. After a violation is documented, no further inspections are required until the beginning of a new calendar day. (basis: Regulation 6-301, 2-1-403)
- 5. The owner/operator shall comply with one of the following requirements if visual inspection is used: If EPA Method 9 is used, the owner/operator shall comply with Regulation 6-301 when operating the flare. If the procedure of 4.b.ii is used, the owner/operator shall not operate a flare that has visible emissions for three consecutive minutes. (basis: Regulation 2-6-403)
- 6. The owner/operator shall keep records of all flaring events, as defined in Part 3. The owner/operator shall include in the records the name of the person performing the visible emissions check, whether video monitoring or visual inspection (EPA Method 9 or visual inspection procedure of Part 4 of this condition) was used, the results of each inspection, and whether any violation of this condition (using visual inspection procedure in Part 4 of this condition) or Regulation 6-301 occurred (using EPA Method 9). (basis: Regulation 2-6-501; 2-6-409.2)

Conditions for ensuring flare is only used for upset gases (to be exempt from NSPS SO<sub>2</sub> limitation and monitoring)

7. The owner/operator shall operate S-6015 and S-6039 Flares to burn only process upset gases as defined by 60.101(e) or fuel gas as defined by 60.101(d) that is released to it as a result of relief valve leakage or other emergency malfunctions. (basis: 60.104(a)(1); Regulation 2-1-403)

### Condition 18680 for source S-9304

1. The Phil Tite EVR Phase I Vapor Recovery System, including all associated plumbing and components, shall be operated and maintained in accordance with the most recent version of California Air Resources Board (CARB) Executive Order VR-101. Section 41954(f) of the California Health and Safety Code prohibits the sale, offering for sale, or installation of any vapor control system unless the system has been certified by the state board.2. The owner or operator shall conduct and pass a Rotatable Adaptor Torque Test (CARB Test Procedure TP201.1B) and either a Drop Tube/Drain Valve Assembly Leak Test (TP201.1C) or, if operating drop tube overfill prevention devices ("flapper valves"), a Drop Tube Overfill Prevention Device and Spill Container Drain Valve Leak Test (TP201.1D) at least once in each 36- month period. Measured leak rates of each component shall not exceed the levels specified in VR-101.

The applicant shall notify Source Test by email at gdfnotice@baaqmd.gov or by FAX at (510) 758-3087, at least 48 hours prior to any testing required for permitting. Test results for all performance tests shall be submitted within fifteen (15) days of testing. Start-up tests results submitted to the District must include the application number and the GDF number. (For annual test results submitted to the District, enter "Annual" in lieu of the application number.) Test results may be submitted by email (gdfresults@baaqmd.gov), FAX (510) 758-3087) or mail (BAAQMD Source Test Section, Attention Hiroshi Doi, 939 Ellis Street, San Francisco CA 94109).

### Condition #18702 For Source S-3225:

- 1. Total throughput at S-3225 shall not exceed 10,832,000 barrels in any consecutive 12 month period. (BACT)
- 2. Total benzene concentration at S-3225 shall not exceed 4% by weight. A sample shall be taken to determine the benzene concentration whenever the tank stores either gasoline or aviation fuel. (toxics)

3. The owner/operator of S-3225 shall maintain a district approved monthly log of all material throughput at S-3225 and the benzene concentration of gasoline and aviation fuel. This log shall be kept on site for at least 5 years from the date of entry and made available to district staff upon request. (cumulative increase and toxics)

### Condition #18945 For Sources S-4345, S-4429, S-4433, S-4434, and S-4435:

- 1. The owner/operator of S-4433 shall not exceed 1.1 MM scfd total H2S produced in any calendar day and 0.92 MM scfd averaged over any consecutive 12 month period. (cum inc)
- 2. The owner/operator of S-4434 shall not exceed 4.97 MM scfd total H2S produced in any calendar day and 4.45 MM scfd averaged over any consecutive 12 month period. (cum inc)
- 3. The owner/operator of S-4435 shall not exceed 8.57 MM scfd total H2S produced in any calendar day and 8.57 MM scfd averaged over any consecutive 12 month period. (cum inc)
- 4. The owner/operator of S-4429 shall not exceed 2.5 MM scfd total H2S produced in any calendar day and 2.33 MM scfd averaged over any consecutive 12 month period. (cum inc)
- 5. The owner/operator of S-4345 shall not exceed 195 gpm total feedrate based on a one hour averaging time. (cum inc)
- 6. The owner/operator of S-4345 shall not exceed 1.81 MM scfd total H2S produced in any calendar day. (cum inc)
- 7. The owner/operator of S-4429, S-4433, S-4434, S-4435, and S-4345 shall maintain a district approved daily log of all H2S production and feedrates at S-4429, S-4433, S-4434, S-4435, and S-4345 in order to demonstrate compliance with conditions #1 through 6. This log shall be kept on site for 5 years from the date of entry and be made available to district staff upon request. (record keeping)

### Condition #19063 For Sources S-4227, S-4228, and S-4229:

- 1. The total sulfur produced at S-4227 shall not exceed 189.6 long tons in any calendar day and 150 long tons averaged over any consecutive 12 month period. (cumulative increase)
- 2. The total sulfur produced at S-4228 shall not exceed 179.0 long tons in any calendar day and 150 long tons averaged over any consecutive 12 month period. (cumulative increase)
- 3. The total sulfur produced at S-4229 shall not exceed 336 long tons in any calendar day and 292.7 long tons averaged over any consecutive 12 month period. (cumulative increase)
- 4a. H2S emissions from each of the tail gas units A-20, A-21, and A-22 shall each not exceed 10 ppmv. (CEQA/BACT)
- 4b. The owner/operator of each tail gas units A- 20, A-21 and A-22 shall not exceed 250 ppmv SO2, corrected to 0% O2 on a 12-hour basis except during periods of startup, shutdown or malfunction of the SRP or SRU, or during malfunction of the TGU. The sulfur Recovery Plants shall be affected facilities under Subpart J and shall comply with all applicable provisions of Subparts A and J. (NSPS Subpart J, Consent Decree case No. 03-04650, 6/27/05)
- 5. The owner/operator of S-4227, S-4228, and S-4229 shall maintain a district approved daily log with monthly summaries of all sulfur production at each S-4227, S-4228, and S-4229 in order to demonstrate compliance with parts 1 through 4. (cumulative increase)
- 6. This log shall be kept on site for 5 years from the date of entry and be made available to district staff upon request. (cumulative increase)

### Condition #19425 For Source S-990:

- 1. Total throughput at S-990 shall not exceed 5,801,400 barrels in any consecutive 2 month period. (BACT)
- 2. The consecutive 12 month average vapor pressure of all materials stored in S-990 shall not exceed 8.33 psia. (BACT)
- 3. S-990 shall have no ungasketed roof penetrations, no slotted guide pole unless equipped with float and wiper seals or equivalent, and no adjustable roof legs unless fitted with vapor seal boots or equivalent. (BACT)
- 4. The owner/operator of S-990 shall maintain a district approved monthly log of all material /throughput and material vapor pressure at S-990. This log shall be kept on site for at least 5 years from the date of entry and made available to district staff upon request. (BACT)

### Condition# 20225 S-7501

1. Hours of Operation: The owner/operator shall operate S-7501 only to mitigate emergency conditions or for reliability-related activities. Operating while mitigating emergency conditions is unlimited. Operating for reliability-related activities is limited to 100 hours per any calendar year. [Basis: Regulation 9-8-330]

"Emergency Conditions" is defined as any of the following:

- (a.) Loss of regular natural gas supply.
- (b.) Failure of regular electric power supply.
- (c.) Flood mitigation.
- (d.) Sewage overflow mitigation.
- (e.) Fire.
- (f.) Failure of a primary motor, but only for such time as needed to repair or replace the primary motor. [Basis: Regulation 9-8-231]

"Reliability-related activities" is defined as any of the following:

- (a.) Operation of an emergency standby engine to test its ability to perform for an emergency use, or
- (b.) Operation of an emergency standby engine during maintenance of a primary motor. [Basis: Regulation 9-8-232]
- 2. The owner/operator shall equip the emergency standby engine(s) with either:
  - (a.) Non-resettable totalizing meter that measures the hours of operation for the engine; or
  - (b.) A non-resettable fuel usage meter, the maximum hourly fuel rate shall be used to convert fuel usage to hours of operation. [Basis: Regulation 9-8-530]
- 3. Records: The owner/operator shall maintain the following monthly records in a District-approved log for at least 2 years and shall make the log available for District inspection upon request:
  - (a.) Hours of operation (total).
  - (b.) Hours of operation (emergency).
  - (c.) For each emergency, the nature of the emergency condition.
  - (d.) Fuel usage for engine(s) if a non-resettable fuel usage meter is utilized. [Basis: Regulations 9-8-530 and 1-441]

## S-7507, S-7511, S-7512, S-7515, S-7516, S-7517, S-7518, S-7521, and S-7531

- 2. In order to demonstrate compliance with the above condition, the owner/operator of S-7507, S-7511, S-7512, S-7515, S-7516, S-7517, S-7518, S-7521, and S-7531 shall maintain records of hours of operation in a District- approved log. These records shall be kept on site, summarized on a monthly basis, and made available for District inspection for a period of 5 years from the date on which a record is made. (Basis: Recordkeeping Reg 9-8-530)
- 3. The owner/operator shall ensure that S-7507, S-7511, S-7512, S-7515, S-7516, S-7517, S-7518, S-7521, and S-7531 do not emit, for a period or periods aggregating more than three minutes in any hour, a visible emission that is as dark or darker than No. 2 on the Ringelmann Chart, or of such opacity as to obscure an observer's view to an equivalent or greater degree, nor shall said emission, as perceived by an opacity sensing device in good working order, where such device is required by District regulations, be equal to or greater than 40% opacity.(Basis: Reg 6-303)
- 4. In order to demonstrate compliance with theabove condition, the owner/operator of S-7507, S-7510, S-7511, S-7512, S-7515, S-7516, S-7517, S- 7518, S-7520, S-7521, S-7522, S-7524, S-7525, S- 7528, and S-7531 shall maintain records of hours of operation in a District- approved log. These records shall be kept on site, summarized on a monthly basis, and made available for District inspection for a period of 5 years from the date on which a record is made. (Basis: Recordkeeping Reg 9-8-530) 5. The owner/operator shall ensure that S-7507, S-7510, S-7511, S-7512, S-7515, S-7516, S-7517, S- 7518, S-7520, S-7521, S-7522, S-7524, S-7525, S-7528, and S-7531 do not emit, for a period or periods aggregating more than three minutes in any hour, a visible emission that is as dark or darker than No. 2 on the Ringelmann Chart, or of such opacity as to obscure an observer's view to an equivalent or greater degree, nor shall said emission, as perceived by an opacity sensing device in good working order, where such device is required by District regulations, be equal to or greater than 40% opacity.(Basis: Reg 6-303)

## COND# 20330 -

- 1. The owner/operator shall only operate A-4429 while S-4429 is shut down with the exception of initial testing. (cum inc)
- 2. The owner/operator shall maintain a minimum fresh aqua-ammonia solution strength of 15% and shall change out the aqua-ammonia solution when itsstrength reaches 5%. (cum inc)
- 3. The owner/operator of A-4429 shall check the aqua- ammonia solution strength at least once every 12 hours. (cum inc)
- 4. The owner/operator of A-4429 shall send the exhaust of A-4429 to the refinery's relief gas system. (cum inc)
- 5. The owner/operator of A-4429 shall keep a district approved daily log of the measured aqua-ammonia solution strength. This log shall be kept on site for at least 5 years from the date of entry and be made able to district staff upon request. (record keeping)

### Condition# 20764 For Refinery:

This condition applies to tanks that are exempt from Regulation 8, Rule 5, Storage of Organic Liquids, due to the exemption in Regulation 8-5-117 for storage of organic liquids with a true vapor pressure of less than or equal to 25.8 mm Hg (0.5 psia).

- 1. Whenever the type of organic liquid in the tank is changed, the owner/operator shall verify that the true vapor pressure at the storage temperature is less than or equal to 25.8 mm Hg (0.5 psia). The owner/operator shall use Lab Method 28 from Volume III of the District''s Manual of Procedures, Determination of the Vapor Pressure of Organic Liquids from Storage Tanks. For materials listed in Table 1 of Regulation 8 Rule 5, the owner/operator may use Table 1 to determine vapor pressure, rather than Lab Method 28. If the results are above 25.8 mm Hg (0.5 psia), the owner/operator shall report non-compliance in accordance with Standard Condition I.F and shall submit an application to the District for a new permit to operate for the tank as quickly as possible. (Basis: Regulations 8-5-117 & 2-6-409.2)
- 2. The results of the testing shall be maintained in a District-approved log for at least five years from the date of the record, and shall be made available to District staff upon request. (Basis: Regulation 2-6-409.2)

### Condition# 20791 A-94 abating S-4094

- 1. The owner/operator of A-94 shall properly maintain and properly operate A-94 at all times of operation of S-4094. (cum inc)
- 2. The owner/operator of A-94 shall maintain a minimum operating temperature of 1400F at all times of operation of S-4094. (cum inc)
- 3. The owner/operator of A-94 shall continuously monitor and record the operating temperature of A-94. (2-6-409.2)

The owner/operator of A-94 shall maintain a district approved log of all continuous temperature monitoring records. This log shall be retained on site for at least 5 years from the date of entry and be made available to district staff upon request. (2-6-409.2)

## COND# 20863

### Application #07693

- 1. The owner/operator of S-4405 shall not exceed 100,000 gallons heavy oil throughput in any consecutive 12 month period. (cum inc)
- 2. The owner/operator of S-4405 shall not exceed7,000 gallons heavy oil throughput in anyconsecutive 24 hour period. (cum inc)
- 3. The owner/operator of S-4405 may handle other petroleum hydrocarbon stocks as long as the true vapor pressure does not exceed 1.13 psia and emissions of toxic compounds do not exceed any respective trigger levels. (cum inc)
- 4. The owner/operator of S-4405 shall not handle any material with a benzene concentration greaterthan 3% by weight. The owner/operator of S-4405 shall measure the benzene concentration of the materialcontained in each tank car, prior to unloading in order to determine compliance with this condition. (toxics)
- 5. The owner/operator of S-4405 shall not exceed 0.17 pounds of organic compounds per 1000 gallons of organic liquid loaded. (8-6-301)

- 6. The owner/operator of S-4405 shall properly maintain and properly operate the A-4405 Vapor Balance System at all times of operation of S- 4405. (cum inc)
- 7. A/C startup condition deleted. (4/7/4)
- 8. The owner/operator of S-4405 shall maintain a district approved daily log of all material throughput, benzene concentration, and vapor pressure of all materials handled and all source test data at S-4405. This log shall be kept on site for at least 5 years from the date of entry and be made available to district staff upon request. (8-6-501)

### Condition# 20944 Application #7948

- 1. The owner/operator of S-4292 shall not exceed 8000 barrels throughput in any calendar day as measured by the reactor feed meter. (cum inc)
- 2. The owner/operator of S-4292 shall not exceed 2,920,000 barrels throughput in any consecutive 12 month period as measured by the reactor feed meter. (cum inc)
- 3. The owner/operator of S-4292 shall maintain a district approved daily log of all throughput at S-4292 with monthly summaries. This log shall be kept on site for at least five years from the date of entry and be made available to district staff upon request. (2-6-501)Condition# 21165 Application 8161, S-4424
- 1. The owner/operator of S-4424 shall not exceed 2500 pounds of POC emissions in any consecutive 12 month period. (cum inc)
- 2. The owner/operator of S-4424 shall not exceed 9.8 pounds POC in any calendar day. (cum inc)
- 3. The owner/operator of S-4424 shall not exceed any toxic trigger level listed in Table 2-1-316. (2-1-316)
- 4. The owner/operator of S-4424 shall maintain a district approved daily log of all POC emissions with monthly summaries, monthly toxic compound emissions, and MSDS's of all materials used This log shall be kept on site for at least five years from the date of entry and be made available to district staff upon request. (2-1-403)

Condition# 21232 -

Effective 1/1/05 COND# 21232

Regulation 9-10 Refinery-Wide Compliance

Affected

\*1. The following sources are subject to the refinery-wide NOx emission rate and CO concentration limits in Regulation 9-10: (9-10-301 & 305)

CEM			CEM
S# Description (Y/N,EF)	S#	Descriptic	on (Y/N,EF)
S-4038 F-3550 Y	S-4158	F-340	Ν
S-4039 F-3560 Y	S-4159	F-410	Y
S-4040 F-3570 Y	S-4160	F-420	Y
S-4041 F-3580 Y	S-4161	F-510	Y
S-4042 F-550 Y	S-4162	F-520	Y
S-4043 F-560 Y	S-4163	F-530	Y
S-4044 F-570 Y	S-4164	F-630	Y
S-4045 F-580 Y	S-4165	F-620	Y
S-4059 F-247 Y	S-4166	F-610	Y
S-4060 F-210A/B Y	S-4167	F-710	Y
S-4061 F-410 Y	S-4168	F-730	Y
S-4062 F-447 Y	S-4169	F-731	Y
S-4068 F-1610 N	S-4170	F-305	Y
S-4069 F-1660 N	S-4171	F-355	Y
S-4070 F-1100A Y	S-4188	F-651	Ν
S-4071 F-1100B Y	S-4189	F-661	Ν
S-4072 F-1160 Y	S-4330	F-1610	Y
S-4129 Blr #1 Y	S-4331	F-1310	Y
S-4131 Blr #3 Y	S-4332	F-1360	Y
S-4132 Blr #4 Y	S-4333	F-1750	Y
S-4133 Blr #5 Y	S-4334	F-1200	Y
S-4135 Blr #7 Y	S-4335	F-1250	Y
S-4152 F-100 Y	S-4336	F-1410	Y
S-4154 F-120 N	S-4337	F-1500	Y
S-4155 F-135 Y	S-4338	F-1550	Y
S-4156 F-320 N	S-4339	F-1110	Y
S-4158 F-340 N			

Monitoring Device Installation

\*2. The owner/operator of each source listed in Part 1 shall properly install, properly maintain, and properly operate an O2 monitor and recorder. This Part shall be effective September 1, 2004. (Reg.9-10-502)

### NOx Box Overview

- \*3. The owner/operator shall operate each source listed in Part 1, which does not have a NOx CEM within specified ranges of operating conditions (firing rate and oxygen content) as detailed in Part 5. The ranges shall be established by utilizing data from district-approved source tests. (Reg. 9-10-502)
  - 1. The NOx Box for units with a maximum firing rate of 25 MMBH or more shall be established using the procedures in Part 4.
  - 2. The NOx Box for units with a maximum firing rate less than 25MMBH shall be established as aollows: High-fire shall be the maximum rated capacity. Low-fire shall be 20% of the maximum rated capacity. There shall be no maximum or minimum O2.

### NOx Box Establishment

- \*4. The owner/operator shall establish the initial NOx box for each source subject to Part 3 by June 1, 2004. The NOx Box may consist of two operating ranges in order to allow for operating flexibility and to encourage emission minimization during standard operation. (9-10-502) The procedure for establishing the NOx box is
  - a. Conduct district approved source tests for NOx and CO, while varying the oxygen concentration and firing rate over the desired operating ranges for the furnace;
  - b. etermine the minimum and maximum oxygen concentrations and firing rates for thedesired operating ranges (Note that the minimum O2 at low-fire may be different than the minimum O2 at high-fire. The same is true for the maximum O2). The owner/operator shall also verify the accuracy of the O2 monitor on an annual basis.
  - c. Determine the highest NOx emission factor (lb/Mmbtu) over the preferred operating ranges while maintaining CO concentration below 200 ppm; the owner/operator may choose to use a higher NOx emission factor than tested.
  - d. Plot the points representing the desired operating ranges on a graph. The resulting polygon(s) are the NOx Box, which represents the allowable operating range(s) for the furnace under which the NOx emission factor from part 5a is deemed to be valid.
    - 1) The NOx Box can represent/utilize either one or two emission factors.
    - 2) The NOx Box for each emission factor can be represented either as a 4- or 5-sided polygon The NOx box is the area within the 4- or 5-sided polygon formed by connecting the source test parameters that lie about the perimeter of successful approved source tests. The source test parameters forming the corners of the NOx box are listed in Part 5.
  - e. Upon establishment of each NOx Box, the owner/operator shall prepare a graphical representation of the box. The representation shall be made available on-site for APCO review upon request. The box shall also be submitted to the BAAQMD with permit amendments.

### NOx Box Limits

\*5A. Except as provided in part 5B & C, the owner/ operator shall operate each source within the NOx Box ranges listed below at all times of operation. This part shall not apply to any source that has a properly operated and properly installed NOx CEM. (9-10-502)

NOx Box ranges

Source No.: S-4154 Emission Factor: 0.035 lb/MMBtu Firing rate MMBtu/h, HHV: O2% 18.9, 1.5 18.7, 4.6 7.9, 5.9 7.4, 5.2 7.3, 3.7 14, 1.3 Source No.: S-4158 Emission Factor: 0.035 lb/MMBtu Firing rate MMBtu/h, HHV: O2% 29, 1.7 43.71, 1.73 45.31, 5.62 15, 4.6 17, 3.4 48.0, 3.28 Source No.: S-4188 Emission Factor: 0.25 lb/MMBtu Firing rate MMBtu/h, HHV: O2% 11.9, 3.2 4.8, 5.4 13.73, 10.31 27, 4.9 22.3, 4 Source No.: S-4189 Emission Factor: 0.25 lb/MMBtu Firing rate MMBtu/h, HHV: O2% 3,25 3,0 15,0 15,25 Source No.: S-4068 Emission Factor: 0.14 lb/MMBtu Firing rate MMBtu/h, HHV: O2% 56.79, 3.7 65, 9.5 27, 9.5 23.5, 3.59 Source No: S-4069 Emission factor: 0.045 lb/MMBtu Firing rate MMBtu/h, HHV: O2% 14.10, 2.18 13.86, 8.17 26.16, 1.85 27.98, 6.52

S-4156 is Not in service The limits listed above are based on a calendar day averaging period for both firing rate and O2%.

- 5B) Part 5A. does not apply to low firing rate conditions (i.e., firing rate less than or equal to 20% of the unit's rated capacity) during startup or shutdown periods or periods of curtailed operation (ex. during heater idling, refractory dryout, etc.) lasting 5 days or less. During these conditions the means for determining compliance with the refinery wide limit shall be accomplished using the method described in 9-10-301.2 (i.e. units out of service & 30-day averaging data).
- 5C) Part 5A. does not apply during any source test required or permitted by this condition. (Reg. 9-10- 502). See Part 7 for the consequences of source test results that exceed the emission factors in Part 5.

#### NOx Box Deviations

#### \*6. NOx Box Deviations (9-10-502)

- 1) The owner/operator may deviate from the NOx Box (either the firing rate or oxygen limit) provided that the owner/operator conducts a district approved source test which reasonably replicates the past operation outside of the established ranges. The source test representing the new conditions shall be conducted no later than the next regularly scheduled source test period, or within eight months, whichever is sooner. The source test results will establish whether the source was operating outside of the emission factor utilized for the source. The source test results shall be submitted to the district source test manager within 45 days of the test. The owner/operator may request, and the APCO may grant, an extension of 15 days for submittal of results. As necessary, a permit amendment shall be submitted.
  - 1. Source Test <= Emission Factor If the results of this source test do not exceed the higher NOx emission factor in Part 5, or the CO limit in Part 9, the unit will not be considered to be in violation during this period for operating out of the "box."
    - a. The facility may submit an accelerated permit program permit application to request an administrative change of the permit condition to adjust the NOx Box operating range(s), based on the new test data.
  - 2. Source Test > Emission Factor If the results of this source test exceed the permitted emission concentrations or emission rates then the actions described below must be followed:
    - a. Utilizing measured emission concentration or rate, the owner/operator shall perform an assessment, retroactive to the date of the previous source test, of compliance with Section 9-10-301. The unit will be considered to have been in violation of 9-10-301 for each day the facility was operated in excess of the refinery wide limit.
    - b. The facility may submit a permit application to request an alteration of the permit condition to change the NOx emission factor and/or adjust the operating range, based on the new test data.
- 2) Reporting The owner/operator must report conditions outside of box within 96 hours of occurrence.

Periodic Source Testing for Sources w/o NOx CEM

- \*7. For each source subject to Part 3, the owner/operator shall conduct source tests at the schedule listed below. The source tests are performed in order to measure NOx, CO, and O2 at the as-found firing rate, or at conditions reasonably specified by the APCO. The source test results shall be submitted to the district source test manager within 45 days of the test. The owner/operator may request, and the APCO may grant, an extension of 15 days for submittal of results. (Reg.9-10-502)
  - a) Source Testing Schedule
    - Heater < 25 MMBtu/hr One source test per consecutive 12 month period. The time interval between source tests shall not exceed 16 months.
    - 2. Heaters =/> 25 MMBtu/hr

Two source tests per consecutive 12 month period. The time interval between source tests shall not exceed 8 months and not be less than 5 months apart. The source test results shall be submitted to the district source test manager within 45 days of the test. (Reg.9-10-502)

b) Source Test Results > NOx Box

**Emission Factor** 

If the results of any source test under this part exceed the permitted concentrations or emission rates the owner/operator shall follow the requirements of Part 6A2 If the owner/operator chooses not to submit an application to revise the emission factor, the owner/operator shall conduct another Part 7 source test, at the same conditions,

within 90 days of the initial test.

Periodic Source Testing for Sources w/ NOx CEM

\*8. For each source listed in Part 1 with a NOx CEM installed, the owner/operator shall conduct semiannual district approved CO source tests at as- found conditions. The time interval between source tests shall not exceed 8 months. District conducted CO emission tests associated with District- conducted NOx CEM field accuracy tests may be substituted for the CO semi-annual source tests.

### CO Exceedance & CEM Installation

\*9. For any source listed in Part 1 with a maximum firing limit greater than 25 MMBtu/h for which any two source test results over any consecutive five year period are greater than or equal to 200 ppmv CO at 3% O2, owner/operator shall properly install, properly maintain, and properly operate a CEM to continuously measure CO and O2. The owner/operator shall install the CEM within the time period allowed in the District's Manual of Procedures. (Reg.9-10-502, 1-522)

### Recordkeeping

\*10. In addition to records required by 9-10-504, the facility must maintain records of all source tests conducted to demonstrate compliance with Parts number 1 and 5. These records shall be kept on site for at least five years from the date of entry in a District approved log and be made available to District staff upon request. (record keeping & 9-10-504)

NOx Box Policy

Rev. 2, Updated 9/30/03
#### Condition# 21237

\*1. Until a throughput limit is established, the owner/operator of S-1514, 3072, and S-3101 shall notify the district in writing of any proposed increases in piping and/or pumping associated with S-1514, S-3072, and/or S-3101. This notification shall also apply to any new materials to be handled by S-1514, S-3072, and/or S-3101. This notification shall occur at least 30 days prior to any of the above-mentioned work being performed. (2-1-234)

#### COND# 21815

 The owner/operator of S-4159 and S-4160 shall properly install and operate in-stack NOx and O2 CEMs in order to demonstrate compliance with Regulation 9-10 and Condition #21232. The installation shall occur in accordance with the timetable outlined in the District Manual of Procedures (MOP) Volume V. The owner/operator's receipt of the Authority to Construct shall serve as the district notification that these CEMs are required, which initiates the installation schedule in the District MOP Volume V. (9-10)

#### COND# 21307 Plant 10, Application #8451 For S-1645 at Plant 10:

- 1. The owner/operator of S-1645 shall not exceed 520,000 barrels of material throughput during any consecutive twelve-month period. (cum inc)
- 2. The owner/operator of S-1645 shall only store materials with a vapor pressure that shall not exceed 5.8 psia. The concentration of benzene in materials stored shall not exceed 2.0 wt.%. (cum inc/Toxics)
- 3. The owner/operator of S-1645 shall maintain a district approved monthly log of all storage tank throughput, type, benzene weight percentage, storage vapor pressure, and all inspection records. These records shall be kept on site for at least 5 years from the date of entry and be made available to District staff upon request. (2-1-403)

#### COND# 22262

#### Plant 10, sources 4350, 4352, 4227-9

- 1. The owner/operator of S-4350 and S-4352 shall conduct a visible emissions inspection after every 1 million gallons of diesel combusted, to be counted cumulatively over a five year period. If a visible emissions are detected, the owner/operator of S-4350 and S-4352 shall complete a method 9 evaluation within the 3 working days, or during the next scheduled operating period if the unit ceases firing on diesel fuel within the 3 working day time frame. (6-301)
- The owner/operator of S-4227, S-4228, and S- 4229 shall monitor and record on a monthly basis the visible emissions from S-4227, S- 4228, and S-4229 to demonstrate compliance with Regulation 6-301. These records shall be kept for a period of at least 5 years from the date of entry and shall be made available to district staff upon request. (6-301)

#### COND# 22266 -

#### Plant 10, App 11503, S-7601

- 1. he owner/operator of S-7601 shall not exceed 30 gallons of ink usage in any consecutive 12 month period. (cum inc)
- 2. The owner/operator of S-7601 shall not exceed 36 gallons of cleanup solvent in any consecutive 12 month period. (cum inc)

3. The owner/operator of S-7601 shall maintain a district approved monthly log of all ink and solvent usage at S- 7601. This log shall be kept on site for at least five years from the date of entry and be made available to district staff upon request. (8-4-501)

#### COND# 22569 PERMIT CONDITIONS S-7013 SRU Stationary Standby Generator Set: Diesel Engine; Make: Cummins; Model: QSX15-G9; Rated Horsepower:750 HP

1. The owner or operator shall operate each emergency standby engine only for the following purposes: to mitigate emergency conditions, for emission testing to demonstrate compliance with a District, state or Federal emission limit, or for reliability-related activities (maintenance and other testing, but excluding emission testing). Operating while mitigating emergency conditions or while emission testing to show compliance with District, state or Federal emission limits does not have an annual hourly limit. Operating for reliability-related activities is limited to 50 hours per year per emergency standby engine.

(Basis: "Stationary Diesel Engine ATCM" section 93115, title 17, CA Code of Regulations, subsection (e)(2)(A)(3)

2. The owner/operator shall operate each emergency standby engine only when a non-resettable totalizing meter (with a minimum display capability of 9,999 hours) that measures the hours of operation for the engine is installed and properly maintained.

(Basis: "Stationary Diesel Engine ATCM" section 93115, title 17, CA Code of Regulations, subsection (e)(4)(G)(1)

- 3. Records: The owner/operator shall maintain the following monthly records in a District-approved log for at least 36 months from the date of entry. For Title V facilities, the following monthly records shall be maintained for 5 years. Log entries shall be retained on-site, either at a central location or at the engine's locations, and made immediately available to the District staff upon request.
  - a. Hours of operation for reliability-related activities (maintenance and testing).
  - b. Hours of operation for emission testing to show compliance with emission limits.
  - c. Hours of operation (emergency).
  - d. For each emergency, the nature of the emergency condition.
  - e. Fuel usage for engine(s).

(Basis: "Stationary Diesel Engine ATCM" section 93115, title 17, CA Code of Regulations, Regulation 1-441)

- 4. The owner or operator shall not operate each stationary emergency standby diesel-fueled engine for nonemergency use, including maintenance and testing, during the following periods:
  - a. Whenever there is a school sponsored activity (if the engine is located on school grounds)
  - b. Between 7:30 a.m. and 3:30 p.m. on days when school is in session (if the engine is located within 500 feet of school grounds).

(Basis: "Stationary Diesel Engine ATCM" section 93115, title 17, CA Code of Regulations, subsection (e)(2)(A)(1)

#### COND# 22641

#### Plant 10, Application 10729, S-1296, S-1514, S-4226

- 1. The owner/operator of S-1296 shall not exceed 3,495,000 barrels of material throughput during any consecutive 12 month period. (cumulative increase)
- 2. The owner/operator of S-1296 shall only store materials with a vapor pressure that shall not exceed 4.1 psia. The concentration of benzene in materials stored at S-1296 shall not exceed 2.75% by weight. (toxics, 2-5)
- 3. The owner/operator of S-1514 shall not exceed 3,000,000 barrels of material throughput during any consecutive 12 month period. (cumulative increase)
- 4. The owner/operator of S-1514 shall only store materials with a vapor pressure that shall not exceed 9.8 psia. The concentration of benzene in materials stored at S-1514 shall not exceed 2.75% by weight. (toxics, 2-5)
- 5. The owner/operator of S-4226 shall not exceed 64,800 barrels of material throughput during any calendar day. (cumulative increase)
- 6. The owner/operator of S-4226 shall only divert feed from S-4235 during periods when S-4235 is shut down. At no time shall the feed from S-4226 be diverted to S-4235. The throughput during the shut down of S-4235 shall not exceed the lower throughput limit of either S-4235 or S- 4226. (cumulative increase)
- 7. The owner/operator of S-1296 and S-1514 shall maintain a district approved monthly log of all storage tank throughput, type, benzene weight percentage, storage vapor pressure, and all inspection records. The owner/operator of S-4226 shall maintain a district approved daily log of all material throughput. These records shall be kept on site for at least 5 years from the date of entry and be made available to district staff upon request. (2-1-403)

#### COND# 22820

- The owner/operator shall not exceed 20 hours per year per engine for reliability-related testing. [Basis: "Stationary Diesel Engine ATCM" section 93115,title 17, CA Code of Regulations, subsection93115.6 (b)(3)(A)(1)(a)]
- 2. The owner/operator shall operate each emergency standby engine only for the following purposes: to mitigate emergency conditions, for emission testing to demonstrate compliance with a District, State or Federal emission limit, or for reliability-related activities (maintenance and other testing, but excluding emission testing). Operating while mitigating emergency conditions or while emission testing to show compliance with District, State or Federal emission limits is not limited. [Basis: "Stationary Diesel Engine ATCM" section 93115, title 17, CA Code of Regulations, subsection 93115.6 (b)(3)(A)(1)(a)]
- 3. The owner/operator shall operate each emergency standby engine only when a non-resettable totalizing meter (with a minimum display capability of 9,999 hours) that measures the hours of operation for the engine is installed, operated and properly maintained. [Basis: "Stationary Diesel Engine ATCM" section 93115, title 17, CA Code of Regulations, subsection 93115.10 (e)(1)]

- 4. Records: The owner/operator shall maintain the following monthly records in a District-approved log for at least 36 months from the date of entry (60 months if the facility has been issued a Title V Major Facility Review Permit or a Synthetic Minor Operating Permit). Log entries shall be retained on-site, either at a central location or at the engine's location, and made immediately available to the District staff upon request.
  - a. Hours of operation for reliability-related activities (maintenance and testing).
  - b. Hours of operation for emission testing to show compliance with emission limits.
  - c. Hours of operation (emergency).
  - d. For each emergency, the nature of the emergencycondition.
  - e. Fuel usage for each engine(s).

[Basis: "Stationary Diesel Engine ATCM" section 93115, title 17, CA Code of Regulations, subsection 93115.10 (g) (or, Regulation 2-6-501)]

- 5. At School and Near-School Operation: If the emergency standby engine is located on school grounds or within 500 feet of any school grounds, the following requirements shall apply: The owner/operator shall not operate each stationary emergency standby diesel-fueled engine for non-emergency use, including maintenance and testing, during the following periods:
  - a. Whenever there is a school sponsored activity (if the engine is located on school grounds)
  - b. Between 7:30 a.m. and 3:30 p.m. on days when school is in session. "School" or "School Grounds" means any public or private school used for the purposes of the education of more than 12 children in kindergarten or any of grades 1 to 12, inclusive, but does not include any private school in which education is primarily conducted in a private home(s). "School" or "School Grounds" includes any building or structure, playground, athletic field, or other areas of school property but does not include unimproved school property. [Basis: "Stationary Diesel Engine ATCM" section 93115, title 17, CA Code of Regulations, subsection 93115.6 (b)(2)]

## COND# 22850

Plant 10 S-7534 S-7535, S-7536 application #'s 17175/6 and 16590/1 S-7539 application 19075/4-S-7538 application 18091/2

- 1. The owner/operator shall not exceed 50 hours per year per engine for reliability-related testing. [Basis: "Stationary Diesel Engine ATCM" section 93115, title 17, CA Code of Regulations, subsection (e)(2)(A)(3) or (e)(2)(B)(3)]
- 2. The owner/operator shall operate each emergency standby engine only for the following purposes: to mitigate emergency conditions, for emission testing to demonstrate compliance with a District, State or Federal emission limit, or for reliability-related activities (maintenance and other testing, but excluding emission testing). Operating while mitigating emergency conditions or while emission testing to show compliance with District, State or Federal emission limits is not limited. [Basis: "Stationary Diesel Engine ATCM" section 93115, title 17, CA Code of Regulations, subsection(e)(2)(A)(3) or (e)(2)(B)(3)]
- 3. The owner/operator shall operate each emergency standby engine only when a non-resettable totalizing meter (with a minimum display capability of 9,999 hours) that measures the hours of operation for the engine is installed, operated and properly maintained.

[Basis: "Stationary Diesel Engine ATCM" section 93115, title 17, CA Code of Regulations, subsection(e)(4)(G)(1)]

- 4. Records: The owner/operator shall maintain the following monthly records in a District-approved log for at least 36 months from the date of entry (60 months if the facility has been issued a Title V Major Facility Review Permit or a Synthetic Minor Operating Permit). Log entries shall be retained on-site, either at a central location or at the engine's location, and made immediately available to the District staff upon request.
  - a. Hours of operation for reliability-related activities (maintenance and testing).
  - b. Hours of operation for emission testing to show compliance with emission limits.
  - c. Hours of operation (emergency).
  - d. For each emergency, the nature of the emergency condition.
  - e. Fuel usage for each engine(s).

[Basis: "Stationary Diesel Engine ATCM" section 93115, title 17, CA Code of Regulations, subsection (e)(4)(I), (or, Regulation 2-6-501)]

- 5. At School and Near-School Operation: If the emergency standby engine is located on school grounds or within 500 feet of any school grounds, the following requirements shall apply: The owner/operator shall not operate each stationary emergency standby diesel-fueled engine for non-emergency use, including maintenance and testing, during the following periods:
  - a. Whenever there is a school sponsored activity (if the engine is located on school grounds)
  - b. Between 7:30 a.m. and 3:30 p.m. on days when school is in session. "School" or "School Grounds" means any public or private school used for the purposes of the education of more than 12 children in kindergarten or any of grades 1 to 12, inclusive, but does not include any private school in which education is primarily conducted in a private home(s). "School" or "School Grounds" includes any building or structure, playground, athletic field, or other areas of school property but does not include unimproved school property.

[Basis: "Stationary Diesel Engine ATCM" section 93115, title 17, CA Code of Regulations, subsection (e)(2)(A)(1)] or (e)(2)(B)(2)]

## COND# 22923

## Application 13012/13610, P10

1. The owner/operator shall consider the sources listed below as affected facilities under NSPS Subpart J, for fuel gas combustion devices.(Consent Decree case No. 03-04650, 6/27/05)

S-4032 F-101, FCC GHT #3 Cat Furnace S-4033 F-102. Penhex Isom #3 Cat Furnace S-4039 F-3560, #4 Cat Furnace S-4040 F-3570, #4 Cat Furnace S-4041 F-3580, #4 Cat Furnace S-4043 F-560, #5 Cat Furnace S-4044 F-570, #5 Cat Furnace S-4045 F-580, #5 Cat Furnace S-4046 F-1 HO Heater-Asphalt Plant S-4060 F-210A & B, Furnace JHT MDH, LSFO-W S-4061 F-410, NHT Furnace S-4069 F1670, Aromatic Saturator, LSFO-E S-4072 F-1160, 4 Crude, LSFO-E S-4129 800 lb Steam Boiler No.1 S-4131 800 lb Steam Boiler No.3 S-4132 800 lb Steam Boiler No.4 S-4133 800 lb Steam Boiler No.5 S-4135 800 lb Steam Boiler No.7 S-4153 F-110, Asphalt Solution Heater, SDA, Isomax S-4154 F-120, Asphalt Solution Heater, SDA, Isomax S-4156 F-320, Naphtha Vaporizer, H2 Plant, Isomax S-4157 F-330, Naphtha Vaporizer, H2 Plant, Isomax S-4158 F-340, Natural Gas Heater, H2 Plant, Isomax S-4162 F-520, TKN Feed Furnace, Isomax S-4163 F-530, TKN Feed Furnace, Isomax S-4164 F-630. Isocracker Feed Furnace, Isomax S-4165 F-620, Isocracker Feed Furnace, Isomax S-4166 F-610, Isocracker Feed Furnace, Isomax S-4167 F-710, TKC Fractionator, Isomax S-4330 F-1610, HNHF Reactor RLOP 16 Plant S-4331 F-1310, LNHF Reactor RLOP S-4333 F-1750, TKC Vacuum Furnace S-4335 F-1250, Furance LNC Vacuum RLOP 12 Plant S-4336 F-1410, HNC Reactor RLOP S-4337 F-1500, HNC Atmospheric RLOP S-4339 F-1110. LNC Reactor RLOP S-4349 F-1650, Furnace HNC Distillation Section RLOP (BO 2000) S-4351 Heat Recovery Steam Generator for Cogen Gas Turbine S-4353 Heat Recovery Steam Generator for Cogen Gas Turbine

## Condition 22951 for source S-9304

## Permit Conditions for Healy EVR Phase II System w/o ISD per CARB E.O. VR-201

- 1) The Healy EVR Phase II Vapor Recovery System without ISD, including all asociated underground plumbing, shall be installed, operated, and maintained in accordance with the most recent revision of the California Air Resources Board (CARB) Executive Order VR-201. Section 41954(f) of the California Health and Safety Code prohibits the sale, offering for sale, or installation of any vapor control system unless the system has been certified by the state board.
- 2) The owner/operator of the facility shall maintain records in accordance with the following requirements. Records shall be maintained on site and made available for inspection for a period of 24 months from the date the record is made. Monthly throughput of gasoline pumped, summarized on an annual basis. All scheduled maintenance activities required under E.O. VR-201, Exhibit 2, Figure 2B-11
- 3) All applicable components shall be maintained to be leak free and vapor tight. Leak Free, as per BAAQMD (District) Regulation 8-7-203, is a liquid leak of no greater than three drops per minute. Vapor Tight as defined in District Manual of Procedures, Volume IV, ST-30.
  - 3) The Healy EVR Phase II system shall be capable of demonstrating on-going compliance with the vapor integrity requirements of CARB Executive Order VR-201. The owner or operator shall conduct and pass the following tests at least once in each 12-month period following successful completion of start-up testing. Tests shall be conducted using the referenced test methods:
    - a) Vapor-to-Liquid Test in accordance with E.O. VR-201, Exhibit 5. The vapor-to-liquid ratio shall be between 0.95 and 1.15 when measured at dispensing rates between 6 and 10 gallons per minute.
    - b) Healy Clean Air Separator Static Pressure Performance test in accordance with E.O. VR- 201, Ex. 4.
    - c) Static Pressure Performance Test, in accordance with CARB Test Procedure TP-201.3 (3/17/99). If the tank size is 500 gallons or less, the test shall be performed on an empty tank.
- 5) The applicant shall notify Source Test by email at gdfnotice@baaqmd.gov or by FAX at (510) 758-3087, at least 48 hours prior to any testing required for permitting. Test results for all performance tests shall be submitted within fifteen (15) days of testing. Start-up tests results submitted to the District must include the application number and the GDF number. (For annual test results submitted to the District, enter "Annual" in lieu of the application number.) Test results may be submitted by email (gdfresults@baaqmd.gov), FAX (510) 758-3087) or mail (BAAQMD Source Test Section, Attention Hiroshi Doi, 939 Ellis Street, San Francisco CA 94109).
- 6) The maximum length of the coaxial hose assembly, including breakaway, swivels, and whip hoses, shall be twenty (20) feet. The maximum allowable length of hose which may be in contact with the top of the island block or the ground shall be six (6) inches.
- 7) The dispensing rate shall not exceed ten (10.0) gallons per minute (gpm), nor be less than six (6.0) gpm with the trigger at the highest setting. Compliance with this condition shall be verified with only one nozzle in operation per product supply pump.
- 8) All ball valves shall be positioned for normal operation as shown in E.O. VR-201, Ex. 2, Figs. 2B- 5 through 2B-9 except when necessary for testing
- 9) The Healy EVR Phase II Vapor Recovery System without ISD shall be maintained in accordance with the System Operating Manual approved by CARB.

10) No dispensing shall be allowed when a vapor collection pump is disabled for maintenance or for any other reason. Only those nozzles affected by

the disabled vapor collection pump are subject to this condition.

- 11) Permanent access to vacuum assist equipment shall be provided for the purpose of inspection and/or testing.
- 12) The Healy EVR Phase II Vapor Recovery System without ISD shall be retrofitted with ISD controls as required by CARB.

## COND# 22979 P10, S-4250, A/N 10158

- 1. The owner/operator of S-4250 shall not exceed 66,102 MMSCF of hydrogen produced in any consecutive 12 month period. (cumulative increase)
- 2. The owner/operator of S-4250 shall notexceed 181.1 MMSCF of hydrogen produced on any calendar day. (cumulative increase)
- 3. The owner/operator of S-4250 shall maintain a district approved daily log of hydrogen produced with monthly summaries. This log shall be kept onsite for at least five years from the date of entry and be made available to district staff upon request. (record keeping)

## COND# 23001 APPLICATION 14096; Chevron; PLANT 10 CONDITIONS FOR S-4940

- 1. The owner/operator of S-4940 shall not exceed 7,028 gallons of NALCO TRI-ACT 1800 throughput during any twelve-month period. The owner operator may store materials other than NALCO TRI-ACT 1800 provided that the owner/operator demonstrates by submitting to the District a Data Form X, an MSDS, and a demonstration that there is no increase in emissions and the toxic emissions will not exceed the respective toxic trigger levels in Rule 2-5 (Basis: cumulative increase, Rule 2-5)
- 2. The owner/operator shall only store materials with a vapor pressure that shall not exceed 0.73 psia. (Basis: cumulative increase)
- 3. The owner/operator of S-4940 shall maintain records of storage tank throughput, type, storage vapor pressure and all inspection records. These records shall be summarized on a monthly basis, and may be in the form of computer-generated data, which is available to District personnel on short notice (rather than actual paper copies of throughput data). These records shall be kept on file for a minimum of 5 years. (Basis: Cumulative Increase, Rule 2-5)

## COND# 23201 Application 14307/14308, P10

1. The owner/operator shall consider the sources listed below as affected facilities under NSPS Subparts A and J, for fuel gas combustion devices, including provisions of the approved Alternative Monitoring Program (AMP) for each source (Consent Decree case No. 03-04650, 6/27/05)

> S-4070 F-1100A, 4 Crude S-4071 F-1100B, 4 Crude S-4038 F-3550, #4 Cat Furnace S-4042 F-550, #5 Rheniformer S-4062 F-447. 5 NHT Furnace S-4068 F-1610, DHT Furnace S-4059 F-247, JHT Furnace S-4159 F-410, TKC Furnace S-4160 F-420, TKC Furnace S-4161 F-510, TKN/Isomax S-4168 F-730. TKN/Isomax S-4169 F-731, TKN/Isomax S-4152 F-100, SDA S-4155 F-135, SDA S-4170 F-305, H2A S-4171 F-355, H2B S-4188 F-651, Poly S-4189 F-661, Poly S-4334 F-1200, LNC S-4332 F-1360. LNHF S-4338 F-1550, HNC S-4350 Cogen Gas Turbine S-4352 Cogen Gas Turbine A-620 LPG Racks Plant Thermal Oxidizer A-622 Yard DIB Thermal Oxidizer A-623 21 Pump Station Thermal Oxidizer A-624 17 Pump Station Thermal Oxidizer A-627 FCCU Thermal Oxidizer A-628 Alky Plant Thermal Oxidizer

A-900 Marine Vapor Recovery Thermal Oxidizer

### COND# 23262

In addition to requirements of Regulation 8, Rule 5, the owner/operator shall comply with the following permit conditions for Source 3127 (S-3127, Tank 3127, External Floating Roof Tank).

1. The owner/operator shall not exceed a throughput of 223,000 barrels of recovered oil in any consecutive 12-month period. [Cumulative Increase]

- 2. Unless this tank is operated under Part 5 below, the owner/operator shall only store materials with a maximum vapor pressure of 2.5 psia. [Cumulative Increase]
- 3. The owner/operator shall not allow the total benzene concentration content of the material stored to exceed 0.38% by weight. [Regulation 2, Rule 5]
- 4. To demonstrate compliance with Part 2 and 3, the owner/operator shall analyze material stored on a quarterly basis for vapor pressure and benzene content. [Cumulative Increase]
- 5. The owner/operator is allowed to heat the contents of the tank under the following conditions:
  - a. The number of heating events shall not exceed three (3) is any rolling 12-month period,
  - b. The maximum temperature of the contents in the tank shall not exceed 150 degrees Fahrenheit,
  - c. The temperature of the tank shall be monitored while the tank is heated, and
  - d. The time allowed for heating the contents of the tank shall not exceed 21 consecutive days from the event start date. An event is counted when heat is applied to the tank. [Cumulative Increase]
- 6. The owner/operator shall maintain the following records:
  - a. Monthly throughput of all material,
  - b. The total throughput of all material for each 12-month period,
  - c. All vapor pressure and benzene analyses results including the date the analyses were made,
  - d. The start date and stop date when the tank contents are heated, and
  - e. The peak temperature when the contents of the tank are heated. Records shall be kept on site for at least 5 years from the date of entry and made available to District staff upon request. [Recordkeeping]

#### COND# 23735

# Effective December 13, 2006 for S-6012, S-6013, S-6015, S-6016, S-6017, S-6019, and S-6039 and October 25, 2007 for S-6010, The owner/operator of the following affected facilities/sources under NSPS Subpart J:

S-6010 LSFO Flare S-6012 V-282 SOUTH ISOMAX FLARE S-6013 North Isomax Flare V-281 S-6015 Refinery Waste Gas Flare (New D&R) S-6016 FCC Flare V-731 S-6017 ALKANE FLARE S-6019 V-732, Alky-Poly Flare S-6039 Lube Flare, V-3501

Shall comply with all applicable provisions of both NSPS Subparts A and J for flares (Consent Decree case No. 03-04650, 6/27/05)

#### COND# 23765 For S-4360 at Plant 10:

- The owner/operator of S-4360 (V-1315) shall notexceed 20,464 gallons in any consecutive 12-month period and 2558 gallons in anyconsecutive 24-hour period for S-4360 when the two carbon canisters in series (A-4360) isinstalled.
   [Basis: Cumulative increase]
- The owner/operator shall only use S-4360 for storage and handling of perchloroethylene (perc), and S-4360 shall be nitrogen blanketed at all times. [Basis: Cumulative increase]

- 3. The owner/operator shall vent S-4360 to the refinery relief gas system at all times of operation, except during loading operations when S-4360 is abated by the two carbon canisters in series (A-4360). [Basis: Cumulative increase]
- 4. The owner/operator of S-4360 shall monitor with a photo-ionization detector (PID), or other method preapproved in writing by the Air Pollution Control Officer (APCO) at the following locations:
  - a. At the inlet to the first carbon vessel in series of A-4360.b. At the inlet to the last carbon vessel in series of A-4360.
  - c. At the outlet of the carbon vessel that is last in series prior to venting to the atmosphere of A-4360.

The owner/operator shall calibrate the PID for perchloroethylene. Concentrations measured shall be considered perchloroethylene for the

purposes of these permit conditions

- 5. The owner/operator shall maintain a District- approved monthly log of all monitoring data at the time taken. The monitoring results shall be used to estimate the frequency of Carbon change- out necessary to maintain compliance with part numbers 6 and 7, and shall be conducted during each filling/loading cycle. If any periods between each filling/loading cycle are more than 30 days, the owner/operator shall monitor at least once every 30 days. The owner/operator may request for District review, based on actual measurements taken at the site during operation of the source, that the monitoring schedule be changed based on the decline in organic emissions and/or the demonstrated breakthrough rates of the carbon vessels. Written approval by the District's Engineering Division shall be received by the owner/operator prior to a change to the monitoring schedule.
- 6. The owner/operator of A-4360 shall immediately change the second to last Carbon vessel with unspent Carbon upon breakthrough, defined as the detection at its outlet of the higher of the following:
  - a. 10 % of the inlet stream concentration to the vessel, or
  - b. 100 ppmv. [Basis: Cumulative increase]
- 7. The owner/operator of A-4360 shall not exceed 100 ppmv at the outlet of the last carbon vessel. The owner/operator shall cease venting S-4360 to A-4360, immediately upon detection of 100 ppmv at the outlet of the last carbon vessel, and shall vent immediately to the refinery relief gas system. The owner/operator shall not use A-4360 until the last carbon vessel has been changed out with fresh carbon. [Basis: Cumulative increase]
- 8. The owner/operator of S-4360 shall maintain the following records for each month of operation of the source:
  - a. The date and amount of time of each loading operation and the amount loaded.
  - b. Each monitor reading or analysis result for the day of operation that the readings aretaken.
  - c. The number of Carbon beds removed and installed from service.
    - The owner/operator shall maintain in the district- approved monthly log all measurements, records, and data required above. This log shall be retained on site for at least five years from the date of entry and be made available to district staff upon request. [Basis: Reg. 2-6-501]

#### COND# 23773

#### For S-4363 at Plant 10:

- The owner/operator of S-4363 (V-3592) shall not exceed 108,480 gallons in any consecutive 12- month period and 2260 gallons in any consecutive 24-hour period for S-4363 when the two carbon canisters in series (A-4363) is installed.
   [Basis: Cumulative increase]
  - The owner/operator shall only use S-4363 for storage and handling of perchloroethylene (perc), and S-4363 shall be nitrogen blanketed at all times. [Basis: Cumulative increase]
- 3. The owner/operator shall vent S-4363 to the refinery relief gas system at all times of operation, except during loading operations when S-4363 is abated by the two carbon canisters in series (A-4363). [Basis: Cumulative increase]
- 4. The owner/operator of S-4363 shall monitor with a photo-ionization detector (PID), or other method preapproved in writing by the Air Pollution Control Officer (APCO) at the following locations:
  - a. At the inlet to the first carbon vessel in series of A-4363.
  - b. At the inlet to the last carbon vessel in series of A-4363.

c. At the outlet of the carbon vessel that is last in series prior to venting to the atmosphere of A-4363. The owner/operator shall calibrate the PID forperchloroethylene. Concentrations measured shall beconsidered perchloroethylene for the purposes of these permit conditions.

- 5. The owner/operator shall maintain a District- approved monthly log of all monitoring data at the time taken. The monitoring results shall be used to estimate the frequency of Carbon change- out necessary to maintain compliance with part numbers 6 and 7, and shall be conducted during each filling/loading cycle. If any periods between each filling/loading cycle are more than 30 days, the owner/operator shall monitor at least once every 30 days. The owner/operator may request for District review, based on actual measurements taken at the site during operation of the source, that the monitoring schedule be changed based on the decline in organic emissions and/or the demonstrated breakthrough rates of the carbon vessels. Written approval by the District's Engineering Division shall be received by the owner/operator prior to a change to the monitoring schedule.
- 6. The owner/operator of A-4363 shall immediately change the second to last Carbon vessel with unspent Carbon upon breakthrough, defined as the detection at its outlet of the higher of the following: a.10 % of the inlet stream concentration to the vessel, or b.100 ppmv. [Basis: Cumulative increase]
- 7. he owner/operator of A-4363 shall not exceed 100 ppmv at the outlet of the last carbon vessel. The owner/operator shall cease venting S-4363 to A-4363, immediately upon detection of 100 ppmv at the outlet of the last carbon vessel, and shall vent immediately to the refinery relief gas system. The owner/operator shall not use A-4363 until the last carbon vessel has been changed out with fresh carbon. [Basis: Cumulative increase]
- 8. The owner/operator of S-4363 shall maintain the following records for each month of operation of the source:
  - a. The date and amount of time of each loading operation and the amount loaded.
  - b. Each monitor reading or analysis result for the day of operation that the readings are taken.
  - c. The number of Carbon beds removed and installed from service. The owner/operator shall maintain in the district- approved monthly log all measurements, records, and data required above. This log shall be retained on site for at least five years from the date of entry and be made available to district staff upon request. [Basis: Reg. 2-6-501]

#### COND# 23774

### For S-4364 at Plant 10:

- 1. The owner/operator of S-4364 (V-4091) shall not exceed 91,760 gallons in any consecutive 12- month period and 370 gallons in any consecutive 24-hour period for S-4364. [Basis: Cumulative Increase]
- 2. The owner/operator shall only use S-4364 for storage and handling of perchloroethylene (perc), and S-4364 shall be nitrogen blanketed at all times. [Basis: Cumulative increas
- 3. The owner/operator shall vent S-4364 to the refinery relief gas system at all times of operation, except during loading operations when S-4364 is abated by the two carbon canisters in series (A-4364). [Basis: Cumulative increase]
- 4. The owner/operator of S-4364 shall monitor with a photo-ionization detector (PID), or other method preapproved in writing by the Air Pollution Control Officer (APCO) at the following locations:
  - a. At the inlet to the first carbon vessel in series of A-4364.
  - b. At the inlet to the last carbon vessel in series of A-4364.
  - c. At the outlet of the carbon vessel that is last in series prior to venting to the atmosphere of A-4364.

The owner/operator shall calibrate the PID for perchloroethylene. Concentrations measured shall be considered perchloroethylene for the purposes of these permit conditions.

- 5. The owner/operator shall maintain a District- approved monthly log of all monitoring data at the time taken. The monitoring results shall be used to estimate the frequency of Carbon change- out necessary to maintain compliance with part numbers 6 and 7, nd shall be conducted during each filling/loading cycle. If any periods between each filling/loading cycle are more than 30 days, the owner/operator shall monitor at least once every 30 days. The owner/operator may request for District review, based on actual measurements taken at the site during operation of the source, that the monitoring schedule be changed based on the decline in organic emissions and/or the demonstrated breakthrough rates of the carbon vessels. Written approval by the District's Engineering Division shall be received by the owner/operator prior to a change to the monitoring schedule.
- 6. The owner/operator of A-4364 shall immediately change the second to last Carbon vessel with unspent Carbon upon breakthrough, defined as the detection at its outlet of the higher of the following:
  - a. 10 % of the inlet stream concentration to the vessel, or
  - b. 100 ppmv.
  - [Basis: Cumulative increase]
- 7. The owner/operator of A-4364 shall not exceed 100 ppmv at the outlet of the last carbon vessel. The owner/operator shall cease venting S-4364 to A-4364, immediately upon detection of 100 ppmv at the outlet of the last carbon vessel, and shall vent immediately to the refinery relief gas system. The owner/operator shall not use A-4364 until the last carbon vessel has been changed out with fresh carbon. [Basis: Cumulative increase]
- 8. The owner/operator of S-4364 shall maintain the following records for each month of operation of the source:
  - a. The date and amount of time of each loading operation and the amount loaded.
  - b. Each monitor reading or analysis result for the day of operation that the readings are taken.
  - c. The number of Carbon beds removed and installed from service. The owner/operator shall maintain in the district- approved monthly log all measurements, records, and data required above. This log shall be retained on site for at least five years from the date of entry and be made available to district staff upon request. [Basis: Reg. 2-6-501]

#### COND# 23872

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The owner/operator of the following affected facilities/sources under Consent Decree No. C 03- 04650 (CRB) shall comply with the NOx limits,

monitoring requirements and emission calculation requirements set forth below.

- 1. The consecutive 365-day average NOx emission rates from the sources listed below shall not exceed the corresponding emission rate limits.
- 2. For each source S-4170 and S-4171 (F-305 and F- 355) the daily maximum firing rate shall be 19,680 million BTU (HHV). The annual maximum firing rate for each of these units shall be 7,183,200 million BTU (HHV).
- 3. Effective June 30, 2007 the owner/operator shall collect monitoring data for compliance with the limits listed below. The owner/operator shall use CEMs data or source test data to calculate emission rates for compliance determinations.

		NOx Limit	Monitoring
Source #	Source Description	(lb/MMBtu)	Туре
S-4042	#5 RHENIFORMER F550 w/36 Ultra	0.040	CEMS
	Low NOx Burners		
S-4043	F560, #5 RHENIFORMER	0.040	CEMS
S-4044	#5 RHENIF F570	0.040	CEMS
S-4045	#5 RHENIF F580	0.040	CEMS
S-4059	#1 JHT Furnace #247	0.060	CEMS
S-4061	<b>#5 NAPH HYDROTREATER F410</b>	0.068	CEMS
S-4062	<b>#5 NAPH HYDROTREATER F447</b>	0.068	CEMS
S-4070	#4 CRUDE UNIT F 1100A	0.026	CEMS
S-4071	#4 CRUDE UNIT F1100B	0.027	CEMS
S-4072	#4 CRUDE UNIT F1160	0.029	CEMS
S-4129	800# STM BLR #1 #IPP	0.033	CEMS
S-4132	800# STM BLR #4 #1 PP	0.031	CEMS
S-4135	800# STM BLR #7 #1 PP	0.033	CEMS
S-4158	Hydrogen Plant Preheat Furnace	0.035	Source
	F-340 Testing		
S-4159	F410 TKC FEED FURNACE TKC	0.035	CEMS
	ISOMAX		
S-4160	F420 TKC FEED FURNACE TKC	0.035	CEMS
	ISOMAX		
S-4167	F-710 TKC FRACTIONATOR	0.040	CEMS
	ISOMAX		
S-4168	F-730 ISOCRACKER SPLITTER FEED	0.034	CEMS
	FURNACE ISOMAX w/Ultra Low NOX		
	Burners		
S-4169	F-731 ISOCRACKER REBOILER	0.033	CEMS
	SOMAX w/Ultra Low NOX Burners		
S-4170	F305 REFORMING FURNACE, H2	0.021	CEMS
	PLANT		
S-4171	F355 REFORMING FURNACE, H2	0.023	CEMS
	PLANT		

(basis: Consent Decree Case No. C 03-04650 CRB, 6/29/2005)

#### COND# 24022

- 1. The owner/operator shall operate S-7537 only when abated by A-7537, Catalyzed Diesel Particulate Filter, in accordance with manufacture's specifications. [Basis: Diesel Engine ATCM] Within 60 days and each 60 day period thereafter during which S-7537 operates for at least 72 cumulative hours, the owner/operator shall visually inspect the exhaust system of S-7537 with the engine running to ensure that there are no exhaust leaks upstream of the catalyzed diesel particulate filter. [Basis: Cumulative increase, Toxic risk screen, Diesel Engine ATCM]
- 2. This permit shall expire 30 days after the shutdown of the FCC unit, or January 1, 2011, whichever is earlier. The owner/operator shall cease operation of S-7537 upon expiration of this permit. [Basis: BACT, Cumulative increase, Toxic risk screen]The owner/operator shall notify the Director of Compliance and Enforcement or designee upon shutdown of S-7537 in compliance with Part 3 [Basis: Notification]
- 3. The owner/operator shall maintain the following records for S-7537:
  - a. Document the manufacturer's recommended procedures for performing catalyzed diesel particulate filter maintenance, including the minimum inlet temperature to the catalytic particulate filter;
  - b. Date, time and reason for any catalyzed diesel particulate filter maintenance;
  - c. Date and results of visual inspection for exhaust system leaks;
  - d. Monthly fuel usage for engine; and
  - e. Records shall be kept at least for 5 years from the date of entry and be available for inspection upon request. [Basis: Recordkeeping]

#### COND# 24070

- 1. The owner/operator shall abate S-7513, S-7514, S-7523, and S-7526 (emergency standby engines) by the properly maintained and operated A-7513, A-7514, A-7523, and A-7526 (diesel particulate filters), respectively, during all periods of operation. [Basis: "ATCM for Stationary Compression Ignition Engines" Section 93115.6(b)(3), title 17, CA Code of Regulations]
- The owner/operator of S-7513, S-7514, S-7523, and S-7526 shall not exceed 50 hours per year per engine for reliability-related testing. [Basis: "ATCM for Stationary Compression Ignition Engines" Section 93115.6(b)(3), title 17, CA Code of Regulations]
- 3. The owner/operator of S-7513, S-7514, S-7523, and S-7526 shall operate each emergency standby engine only for the following purposes: to mitigate emergency conditions, for emission testing to demonstrate compliance with a District, state or Federal emission limit, or for reliability-related activities (maintenance and other testing, but excluding emission testing). Operating hours while mitigating emergency conditions or while emission testing to show compliance with District, state or Federal emission limits is not limited. [Basis: "ATCM for Stationary Compression Ignition Engines" Section 93115.6(b)(3), title 17, CA Code of Regulations]
- 4. The owner/operator of S-7513, S-7514, S-7523, and S-7526 shall install and maintain the following monitoring equipment at each emergency standby engine;
  - A non-resettable hour meter with a minimum display capability of 9,999 hours; [Basis: "ATCM for Stationary Compression Ignition Engines" Section 93115.10(e), title 17, CA Code of Regulations]

- 5. Records: The owner/operator of S-7513, S-7514, S-7523, and S-7526 shall maintain the following monthly records in a District-approved log for at least 60 months from the date of entry. Log entries shall be retained on-site, either at a central location or at the engine's location, and made immediately available to the District staff upon request.
  - a. Hours of operation for reliability-related activities (maintenance and testing).
  - b. Hours of operation for emission testing to show compliance with emission limits.
  - c. Hours of operation (emergency).
  - d. For each emergency, the nature of the emergency condition.
  - e. Fuel usage for each engine(s).

[Basis: "ATCM for Stationary Compression Ignition Engines" Section 93115.10(g), title 17, CA Code of Regulations (or, District Regulation 2-6-501)]

#### COND# 24085

#### Conditions for A-32105 Carbon Adsorbers, Calgon VAPOR PAC, 2 drums, 200 lb ea. Abating S-4148 Application # 17446, Plant # 10

- 1. The owner/operator shall vent Source S-4148 at all times to Abatement device A-32105, two (200 lb minimum capacity) activated carbon vessels arranged in series. (Basis: Cumulative Increase)
- 2. The owner/operator of this source shall monitor with a photo-ionization detector (PID), flame-ionization detector (FID), or other method approved in writing by the Air Pollution Control Officer at the following locations:
  - a. At the inlet to the second to last carbon vessel in series.
  - b. At the inlet to the last carbon vessel in series.
  - c. At the outlet of the carbon vessel that is last in series prior to venting to the atmosphere. When using an FID to monitor breakthrough, readings may be taken with and without a carbon filter tip fitted on the FID probe. Concentrations measured with the carbon filter tip in place shall be considered methane for the purposes of these permit conditions.

### (Basis: Cumulative Increase)

3. The owner/operator shall record these monitor readings in a monitoring log at the time they are taken. The monitoring results shall be used to estimate the frequency of carbon change-out necessary to maintain compliance with conditions number 4 and 5, and shall be conducted on a weekly basis. The owner/operator of this source may propose for District review, based on actual measurements taken at the site during operation of the source, that the monitoring schedule be changed based on the decline in organic emissions and/or the demonstrated breakthrough rates of the carbon vessels. Written approval by the District's Permit Services Division must be received by the owner/operator prior to a change to the monitoring schedule.

(Basis: Cumulative Increase)

- 4. The owner/operator shall change out the second to last carbon vessel with unspent carbon upon breakthrough, defined as the detection at its outlet of the higher of the following:
  - a. 10 % of the inlet stream concentration to the Carbon vessel.
  - b. 298 ppmv or greater (measured as C4).

(Basis: Cumulative Increase)

- 5. a. The owner/operator shall change out the last carbon vessel with unspent carbon upon detection at its outlet of 10 ppmv or greater (measured as C4).
  - b. The owner/operator of S-4148 shall not exceed a flowrate of 70 cfm at the exhaust of A-32105. the flowrate shall be determined by a district approved method. At the time of issuance of application 22794, the flowrate will be determined on an hourly basis using the change in level of S-4148 to estimate the volumetric flowrate.

(Basis: Cumulative Increase)

- 6. The owner/operator of this source shall maintain the following records for each month of operation of the source:
  - a. The hours and times of operation.
  - b. Each monitor reading or analysis result for the day of operation they are taken.
  - c. The number of carbon beds removed from service.
  - d. Flowrate measurement information including all the information necessary to determine the flowrate.

All measurements, records and data required to be maintained by the owner/operator shall be retained and made available for inspection by the District for at least five years [Note: This is five years for Title V facilities] following the date the data is recorded. (Basis:

Cumulative Increase)

7. The owner/operator shall report any non-compliance with parts 4 and/or 5 to the Director of the Compliance & Enforcement Division at the time that it is discovered. The submittal shall detail the corrective action taken and shall include the data showing the exceedance as well at the time of occurrence. (Basis: Cumulative Increase)

#### Condition 24285 P10 A/N 19074 S-7539

- 1. The owner/operator of S-7539 shall abate S- 7539 (emergency standby engine) by the properly maintained and operated A-7539 (diesel particulate filter) during all periods of operation. [Basis: "ATCM for Stationary Compression Ignition Engines" Section 93115.6(a)(3), title 17, CA Code of Regulations]
- 2. The owner/operator of S-7539 shall install and maintain a backpressure monitor that notifies the owner or operator when the high backpressure limit of the engine is approached at S-7539. The owner/operator shall maintain records of any corrective action taken after the backpressure monitor has notified the owner or operator that the high backpressure limit of the engine is approached in a District-approved log for at least 60 months from the date of entry. [Basis: "ATCM for Stationary Compression Ignition Engines" Section 93115.10(e), title 17, CA Code of Regulations; 40 CFR 60.4214(c)]
- 3. The owner/operator of S-7539 shall use only ultra low sulfur diesel fuel in the S-7539 engine. (cumulative increase)

#### Condition 24294 for source S-9304

1. The Healy EVR Phase II Vapor Recovery System without ISD, including all associated underground plumbing, shall be installed, operated, and maintained in accordance with the most recent revision of the California Air Resources Board (CARB) Executive Order VR-201. Section 41954(f) of the California Health and Safety Code prohibits the sale, offering for sale, or installation of any vapor control system unless the system has been certified by the state board.

2. Only CARB-certified EVR Phase I vapor recovery systems shall be used in conjunction with the Healy EVR Phase II Vapor Recovery System without ISD.

- 3. The owner/operator of the facility shall maintain records in accordance with the following requirements. Records shall be maintained on site and made available for inspection for a period of 24 months from the date the record is made.
  - a. Monthly throughput of gasoline pumped, summarized on an annual basis
  - b. A record of all testing and maintenance as required by E.O. VR-201, Exhibit 2. The records shall include the maintenance or test date, repair date to correct test failure, maintenance or test performed, affiliation, telephone number, name and Certified Technician Identification Number of individual conducting maintenance or test.
- 4. All applicable components shall be maintained to be leak free and vapor tight. Leak Free, as per BAAQMD (District) Regulation 8-7-203, is a liquid leak of no greater than three drops per minute. Vapor Tight as defined in District Manual of Procedures, Volume IV, ST- 30.
- 5. Start-up notification: applicant must contact the assigned Permit Engineer, listed in the correspondence section of this letter, by phone, by fax [(415) 749- 4949], or in writing at least three days before the initial operation of the equipment is to take place. Operation includes any start-up of the source for testing or other purposes. Operation of equipment without notification being submitted to the District, may result in enforcement action. Please do not send start-up notifications to the Air Pollution Control Officer.
- 6. The following performance test shall be successfully conducted at least ten (10) days, but no more than thirty (30) days after start-up. For the purpose of compliance with this Condition, all tests shall be conducted after back-filling, paving, and installation of all required Phase I and Phase II components:
  - a. Vapor-to-Liquid Test in accordance with E. O. VR-201, Exhibit 5. The vapor-to-liquid ratio shall be between 0.95 and 1.15 when measured at dispensing rates between 6 and 10 gallons per minute. NOTE: For start up testing ONLY, two gallons of liquid gasoline must be introduced down each dispenser riser prior to the test.
  - b. Healy Clean Air Separator Static Pressure Performance test in accordance with E.O. VR-201, Ex. 4.
  - c. Static Pressure Performance Test, in accordance with CARB Test Procedure TP-201.3 (3/17/99). If the tank size is 500 gallons or less, the test shall be performed on an empty tank.
  - d. Nozzle Bag Test on all nozzles in accordance with E.O. VR-201, Ex. 7.
- 7. The Healy EVR Phase II system without ISD shall be capable of demonstrating on-going compliance with the vapor integrity requirements of CARB Executive Order VR- 201. The owner or operator shall conduct and pass a Static Pressure Decay Test, a Vapor-to-Liquid Test, a Healy Clean Air Separator Static Pressure Performance test and Nozzle Bag Tests on all nozzles at least once in each 12-month period following successful completion of start-up testing. Tests shall be conducted using the above referenced test methods.
- 8. The applicant shall notify Source Test by email at gdfnotice@baaqmd.gov or by FAX at (510) 758-3087, at least 48 hours prior to any testing required for permitting. Test results for all performance tests shall be submitted in a District-approved format within thirty days of testing. Start-up tests results submitted to the District must include the application number and the GDF number. (For annual test results submitted to the District, enter "Annual" in lieu of the application number.) Test results may be submitted by email (gdfresults@baaqmd.gov), FAX (510) 758-3087) or mail (BAAQMD Source Test Section, Attention Hiroshi Doi, 939 Ellis Street, San Francisco CA 94109).

- 9. The maximum length of the coaxial hose assembly, including breakaway, swivels, and whip hoses, shall be twenty (20) feet. The maximum allowable length of hose which may be in contact with the top of the island block or the ground shall be six (6) inches.
- 10. The dispensing rate shall not exceed ten (10.0) gallons per minute (gpm), nor be less than six (6.0) gpm with the trigger at the highest setting. Compliance with this condition shall be verified with only one nozzle in operation per product supply pump.
- 11. The Healy Clean Air Separator (HCAS) shall be located no more than 100 feet from the tank vent lines. The line connecting the HCAS shall slope down towards the vent lines at a minimum of 1/8" per linear foot. The Air Breather Assembly shall be a minimum of 12 feet above grade.
- 12. All ball valves shall be positioned for normal operation as shown in E.O. VR-201, Ex. 2 except when necessary for testing and maintenance.
- 13. The Healy EVR Phase II Vapor Recovery System without ISD shall be installed, operated, and maintained in accordance with the System Operating Manual approved by CARB.
- 14. No dispensing shall be allowed when a vapor collection pump is disabled for maintenance or for any other reason. Only those nozzles affected by the disabled vapor collection pump are subject to this condition.
- 15. Regardless of proposed work, all vapor return and vent lines shall be a minimum nominal internal diameter of 2 inches from the dispensers or vent stacks to the first manifold. All lines after the first manifold and back to the underground storage tanks shall have a minimum internal diameter of 3 inches. All lines shall slope down towards the lowest octane tank at a minimum of 1/8 inch per linear foot. Condensate traps or knock-out pots are prohibited.
- 16. For projects involving addition, replacement, or removal of more than 50% of the vapor return piping, the vapor return lines shall be manifolded below grade at the tanks. This is in addition to any manifolds at the dispensers or on the vent lines.
- 17. Each vent pipe shall be equipped with a CARB certified pressure/vacuum relief valve as required by the applicable Phase I E.O.. Plumbing may be manifolded to reduce the number of relief valves needed. The District recommends that vents be manifolded to a single relief valve whenever possible.
- 18. The inner diameter of the connector between the dispenser and the vapor return piping riser shall be 1".
- 19. The Healy EVR Phase II Vapor Recovery System without ISD shall be retrofitted with ISD controls as required by CARB.

Condition 24433

Application 14486 Plant 10 Sources 4252, 4253, 4348, 4435

- 1. For the sour gas pipeline upgrade project at or between S-4252, S-4253, S-4348, and S-4435, the Owner/Operator shall provide the District's Engineering Division with a final count of all fugitive components and each component's unique permanent identification codes in Application 14486. Chevron provided the final count on Sept. 23, 2009. The owner/operator has been permitted to install the following fugitive components:
  - 219 valves in hydrocarbon service;
  - 6 pressure relief valves in hydrocarbon service;
  - 190 flanges in hydrocarbon service;
  - 279 connectors (not flanges) in hydrocarbon service;
  - 77 valves in stripped water service;
  - 2 pump in stripped water service;
  - 75 flanges in stripped water service;
  - 89 connectors (not flanges) in stripped water service.

[Basis: Cumulative Increase, offsets, Regulation 2-5]

- 2. Deleted. (Chevron has provided 2.248 TPY of POC offset credits.)
- 3. The Owner/Operator shall as part of the sour gas pipeline upgrade project install only the following types of valves in hydrocarbon service: (1) bellows sealed, (2) live loaded, (3) graphitic packed, (4) quarter-turn (e.g., ball valves or plug valves), or equivalent as determined by the APCO.

[Basis: BACT]

4. The Owner/Operator shall comply with a leak standard of 100 ppm of TOC (measured as C1) at any valves installed as part of the sour gas pipeline upgrade project in hydrocarbon service unless the Owner/Operator complies with the applicable minimization and repair provisions contained in Regulation 8-18.

[Basis: BACT, Regulation 8 Rule 18]

5. The Owner/Operator shall install graphitic-based gaskets, metal ring joints, or equivalent technology as determined by the APCO on all flanges or connectors installed as part of the sour gas pipeline upgrade project in hydrocarbon service.

[Basis: BACT]

6. The Owner/Operator shall comply with a leak standard of 100 ppm of TOC (measured as C1) at any flanges and/or connectors installed as part of the sour gas pipeline upgrade project in hydrocarbon service unless the Owner/Operator complies with the applicable minimization and repair provisions contained in Regulation 8-18.

[Basis: BACT, Regulation 8 Rule 18]

- The Owner/Operator shall vent all pressure relief devices installed as part of the sour gas pipeline upgrade project in hydrocarbon service to a flare gas recovery system with a recovery and/or destruction efficiency of at least 98% by weight.
   [Basis: BACT]
- 8. The Owner/Operator shall conduct inspections of fugitive components installed as part of the sour gas pipeline upgrade project in hydrocarbon service in accordance with the frequency below:

Valves: Quarterly Connectors (Not Flanges): Biannual Flanges: Biannual [Basis: BACT, Regulations 8 Rule 18]

- 9. The Owner/Operator shall not exceed 1.732 tons of POC emissions per consecutive 365-day period measured as C1 from for all fugitive components installed as part of the sour gas pipeline upgrade project in hydrocarbon service. Compliance with this provision shall be verified quarterly using methods described in part 10. The results shall be submitted to the District within 30 days of the close of each calendar quarter after the completion of the sour gas pipeline upgrade project or the District's issuance of the Permit to Operate for Application 14486. [Basis: Cumulative Increase, offsets]
- 10. If none of the fugitive components installed as part of the sour gas pipeline upgrade project in hydrocarbon service are leaking at a rate equal to or greater than 10,000 ppm of TOC (measured as C1) in any calendar quarter, no further verification and no submittal of the results shall be required. For any calendar quarter in which one or more of these components is leaking at a rate equal to or greater than 10,000 ppm of TOC (measured as C1), the Owner/Operator shall calculate and submit a report of fugitive emissions from all sour gas pipeline upgrade project fugitive components in hydrocarbon service utilizing District approved methods for the consecutive 12 month period ending with this quarter. For leaking components the owner/operator shall use the modified trapezoidal method and LeakDAS as documented within the application 12842 or other method pre-approved by the District. The Owner/Operator shall include emissions estimates from all sour gas pipeline upgrade project fugitive components in hydrocarbon service regardless of the component Rule 8-18 repair status in order to demonstrate compliance with part 9.

[Basis: Cumulative Increase, BACT, Offsets]

11. The Owner/Operator shall keep a District-approved monthly log of fugitive component counts of the sour gas pipeline upgrade project, each component's unique permanent identification codes, monitoring results, and any annual emissions estimates required per parts 9 and 10 for at least five years from date of entry. The log shall be retained on site and made available to district staff upon request. [Basis: cumulative increase, offsets, recordkeeping]

#### Condition 24452 Plant 10 Application 20760 S-4365

- 1. The owner/operator of S-4365 shall not exceed 15,000 gallons of Tri-Act 1825 in any consecutive 12 month period. (cum inc)
- 2. The owner/operator of S-4365 shall only store materials with a true vapor pressure not to exceed 0.5 psia. (8-5-117 and cum inc)
- 3. The owner/operator of S-4365 may change formulations of chemicals described in this permit condition subject to district approval, provided that the owner/operator demonstrates that the source

will not be modified per 2-1-234, there will be no increase in emissions, and that the emissions of toxic air contaminants will not equal or exceed the chronic trigger levels specified in Regulation 2-5. (2-1-301, 2-5)

4. The owner/operator of S-4365 shall maintain a district approved monthly log of all material throughput and vapor pressure at S-4365. This log shall be kept on site for at least 5 years from the date of entry and made available to district staff upon request. (record keeping)

#### Condition 24604 Plant 10 Application 22277 S-4366 - S-4370

- 1. The owner/operator of S-4366 shall not exceed a total of 10,000 gallons of Tri-Act 1803 and 1825 combined in any consecutive 12 month period. (cum inc)
- 2. The owner/operator of S-4367 shall not exceed a total of 5000 gallons of Tri-Act 1803 and 1825 combined in any consecutive 12 month period. (cum inc)
- 3. The owner/operator of S-4368 shall not exceed a total of 5000 gallons of Tri-Act 1803 and 1825 combined in any consecutive 12 month period. (cum inc)
- 4. The owner/operator of S-4369 shall not exceed a total of 15,000 gallons of Tri-Act 1803 and 1825 combined in any consecutive 12 month period. (cum inc)
- 5. The owner/operator of S-4370 shall not exceed a total of 4000 gallons of Custamine in any consecutive 12 month period. (cum inc)
- 6. The owner/operator of S-4366 through S-4370 shall only store materials with a true vapor pressure not to exceed 0.5 psia. (8-5-117 and cum inc)
- 7. The owner/operator of S-4366 through S-4370 may change formulations of chemicals described in this permit condition subject to district approval, provided that the owner/operator demonstrates that the source will not be modified per 2-1-234, there will be no increase in emissions, and that the emissions of toxic air contaminants will not equal or exceed the chronic trigger levels specified in Regulation 2-5. (2-1-301, 2-5)
- 8. The owner/operator S-4366 through S-4370 shall maintain a district approved monthly log of all material throughput and vapor pressure at each S-4366 through S-4370 in order to demonstrate compliance with parts 1 through 7. This log shall be kept on site for at least 5 years from the date of entry and made available to district staff upon request. (record keeping)

#### Condition 24606 Plant 10 Application 21677 S-4372

- 1. The owner/operator of S-4372 shall not exceed a total of 5000 gallons of NALCO EC9085A in any consecutive 12 month period. (cum inc)
- 2. The owner/operator of S-4372 shall only store materials with a true vapor pressure not to exceed 0.5 psia. (8-5-117 and cum inc)

3. The owner/operator of S-4372 shall maintain a district approved monthly log of all material throughput and vapor pressure at S-4372 in order to demonstrate compliance with parts 1 through 2. This log shall be kept on site for at least 5 years from the date of entry and made available to district staff upon request. (record keeping)

#### Condition 25001 Plant 10 Application 21677 S-4373

- 1. The owner/operator of S-4373 shall not exceed a total of 28,000 gallons of Corrosion inhibitor in any consecutive 12 month period. (cum inc)
- 2. The owner/operator of S-4373 shall only store materials with a true vapor pressure not to exceed 0.5 psia. (8-5-117 and cum inc)
- 3. The owner/operator of S-4373 may change the chemicals described in application 22916 subject to district approval, provided that the owner/operator demonstrates to the satisfaction of the district that the source will not be modified per 2-1-234, there will be no increase in emissions, and the emissions of toxic air contaminants will not equal or exceed any trigger levels specified in Regulation 2.5. (2-1-301, 2-5)
- 4. The owner/operator of S-4373 shall maintain a district approved monthly log of all material throughput, the date in which throughput is added and the amount added, material safety and data sheets for material stored, and vapor pressure of material stored at S-4373 in order to demonstrate compliance with parts 1 through 3. This log shall be kept on site for at least 5 years from the date of entry and made available to district staff upon request. (record keeping)

S-4373 Chemical Tote- Fugitive component conditions For the purposes of these permit conditions hydrocarbon service is as defined in the Renewal Project Permit Condition #24136

5. Within 30 days of District's issuance of the Permit to Operate for Application 22916, the Owner/Operator shall provide the District's Engineering Division with a final count of all fugitive components and each component's unique permanent identification codes in this project. The owner/operator has been permitted to install the following fugitive components:
28 valves in hydrocarbon service;
18 flanges in hydrocarbon service;
2 pumps in hydrocarbon service;
98 connectors in hydrocarbon service;
4 DSV(in hydrocarbon comping. The final count and identification codes provided on 8/8/11. [Decided context]

4 PSVs in hydrocarbon service. The final count and identification codes provided on 8/8/11. [Basis: Cumulative Increase, offsets, Regulation 2-5]

6. If any of the fugitive component counts exceed the count stated in Part 5, the plant's cumulative emissions for the project shall be adjusted, subject to APCO approval, 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 21 days after submittal of the final POC fugitive count. If the component count increase triggers any additional regulatory review, the owner/Operator shall submit an application to address the increased emissions. The Owner/Operator submitted 0.677 tons per year of POC offset credits corresponding to the fugitive component counts in Part 5. If the actual component count is less than the predicted, the total emissions in Part 11 may be adjusted accordingly, subject to APCO approval, and all emission offsets applied by the owner/operator

in excess of the fully offset permitted total POC emissions may be credited back to the owner/operator upon approval by the APCO. [Basis: offsets]

- 7. The Owner/Operator of S-4373 shall install only the following types of components:
  - a. For valves in hydrocarbon service: (1) bellows sealed, (2) live loaded, (3) graphitic packed, (4) quarter-turn (e.g., ball valves or plug valves), or equivalent as determined by the APCO.
  - b. For flanges in hydrocarbon service: graphitic-based gaskets, metal ring joints, or equivalent technology as determined by the APCO.
  - c. For pumps in hydrocarbon service: double mechanical seal with barrier fluid, or equivalent as determined by the APCO. [Basis: cumulative increase]
- 8. The Owner/Operator shall comply with a leak standard of 100 ppm of TOC (measured as C1) at any valves, flanges, connectors, and/or PSVs installed as part of the application 22916 in hydrocarbon service unless the Owner/Operator complies with the applicable minimization and repair provisions contained in Regulation 8-18. [Basis: cumulative increase, Regulation 8 Rule 18]
- 9. The owner/operator of S-4373 fugitive components shall not exceed 500.0 ppm of TOC (measured as C1) at any of the pumps installed as part of application 22916 in hydrocarbon service unless the Owner/Operator complies with the applicable minimization and repair provisions contained in Regulation 8-18. [cumulative increase, offsets, Regulation 8-18]
- 10. The Owner/Operator shall conduct inspections of fugitive components installed as part of application 22916 in hydrocarbon service in accordance with the frequency below:
   Pumps: Quarterly
   Valves: Quarterly
   PSV's: Quarterly
   Flanges: Biannual
   Connectors: Biannual [Basis: cumulative increase, Regulations 8 Rule 18]
- 11. The Owner/Operator shall not exceed 0.589 tons of POC emissions per consecutive 365-day period measured as C1 from for all fugitive components installed as part of application 22916 in hydrocarbon service. Compliance with this provision shall be verified quarterly using methods described in part 12. The results shall be submitted to the District within 30 days of the close of each calendar quarter after the District's issuance of the Permit to Operate for Application 22916.[Basis: Cumulative Increase, offsets]
- If all of the fugitive components installed as part of application 22916 in hydrocarbon service are 12. leaking at a rate less than 5000 ppm of TOC (measured as C1) in any calendar quarter, no further verification and no submittal of the results shall be required. If any of the fugitive components installed as part of application 22916 in hydrocarbon service are leaking at a rate equal to or greater than 5,000 ppm of TOC (measured as C1) in any calendar quarter, the owner/operator shall conduct an annual emissions estimate in order to demonstrate compliance with part 11 and shall submit the results to the district within 30 days of the annual emissions calculation. For any calendar quarter in which one or more of these components is leaking at a rate equal to or greater than 10,000 ppm of TOC (measured as C1), the Owner/Operator shall calculate and submit a report of fugitive emissions from all S-4373 fugitive components in hydrocarbon service utilizing District approved methods for the consecutive 12 month period ending with this quarter in order to demonstrate compliance with part 11. This calculation shall continue each quarter until there is not a quarter containing a pegged leaker. For leaking components the owner/operator shall use the modified trapezoidal method and LeakDAS as documented within the application 12842 or other method pre-approved by the District. The Owner/Operator shall include emissions estimates from all fugitive components included in part 5 (application 22916) in

hydrocarbon service regardless of the component Rule 8-18 repair status in order to demonstrate compliance with part 11. [Basis: Cumulative Increase, Offsets]

13. The Owner/Operator shall keep a District-approved monthly log of fugitive component counts installed as part of application 22916 and each component's unique permanent identification codes per part 5, monitoring results, and any annual emissions estimates required per parts 11 and 12 for at least five years from date of entry. The log shall be retained on site and made available to district staff upon request.[Basis: offsets, recordkeeping]

#### Condition 24671 Plant 10 Application 21980 S-4440

Jet Additives Project Fugitive Components For the purposes of these permit conditions hydrocarbon service is as defined in the Renewal Project Permit Condition #24136.

1. Within 30 days of District's issuance of the Permit to Operate for Application 21980 or the completion of the Jet Additives Project, the Owner/Operator shall provide the District's Engineering Division with a final count of all fugitive components and each component's unique permanent identification codes in this project. The owner/Operator has been permitted to install the following fugitive components:

87 valves in hydrocarbon service;87 flanges in hydrocarbon service;165 connectors in hydrocarbon service;4 pumps in hydrocarbon service;Information submitted 10/22/10.

[Basis: Cumulative Increase, offsets, Regulation 2-5]

- 2. If any of the fugitive component counts exceed a count stated in Part 1, the plant's cumulative emissions for the project shall be adjusted, subject to APCO approval, 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 21 days after submittal of the final POC fugitive count. The Owner/Operator submitted 0.826 tons per year of POC offset credits corresponding to the component counts in Part 1. If the actual component count is less than the predicted, the total emissions in Part 2 may be adjusted accordingly, subject to APCO approval, and all emission offsets applied by the owner/operator in excess of the fully offset permitted total POC emissions may be credited back to the owner/operator upon approval by the APCO. [Basis: offsets] adjusted per 10/22/10 submittal
- 3. The Owner/Operator shall as part of the Jet Additives Project install only the following types of valves in hydrocarbon service: (1) bellows sealed, (2) live loaded, (3) graphitic packed, (4) quarter-turn (e.g., ball valves or plug valves), or equivalent as determined by the APCO. [Basis: BACT]
- 4. The Owner/Operator shall comply with a leak standard of 100 ppm of TOC (measured as C1) at any valves installed as part of the Jet Additives Project in hydrocarbon service unless the Owner/Operator complies with the applicable minimization and repair provisions contained in Regulation 8-18. [Basis: BACT, Regulation 8 Rule 18]
- 5. The Owner/Operator shall install graphitic-based gaskets, metal ring joints, or equivalent technology as determined by the APCO on all flanges or connectors installed as part of the Jet Additives Project in hydrocarbon service. [Basis: BACT]

- 6. The Owner/Operator shall comply with a leak standard of 100 ppm of TOC (measured as C1) at any flanges and/or connectors installed as part of the Jet Additives Project in hydrocarbon service unless the Owner/Operator complies with the applicable minimization and repair provisions contained in Regulation 8-18.[Basis: BACT, Regulation 8 Rule 18]
- 7. The owner/operator of Jet Additives Project fugitive components shall not exceed 100.0 ppm of TOC (measured as C1) at any of the pumps installed as part of the Jet Additives Project in hydrocarbon service unless the Owner/Operator complies with the applicable minimization and repair provisions contained in Regulation 8-18. [cumulative increase, offsets, Regulation 8-18]
- 8. The Owner/Operator shall conduct inspections of fugitive components installed as part of the Jet Additives Project in hydrocarbon service in accordance with the frequency below: Pumps: Quarterly Valves: Quarterly Connectors (Not Flanges): Biannual Flanges: Biannual

[Basis: BACT, Regulations 8 Rule 18]

- 9. The Owner/Operator shall not exceed 0.718 tons of POC emissions per consecutive 365-day period measured as C1 from for all fugitive components installed as part of the Jet Additives Projectin hydrocarbon service. Compliance with this provision shall be verified quarterly using methods described in part 10. The results shall be submitted to the District within 30 days of the close of each calendar quarter after the completion of the Jet Additives Project or the District's issuance of the Permit to Operate for Application 21980.[Basis: Cumulative Increase, offsets]
- 10. If all of the fugitive components installed as part of the Jet Additives Project in hydrocarbon service are leaking at a rate less than 5000 ppm of TOC (measured as C1) in any calendar quarter, no further verification and no submittal of the results shall be required. If any of the fugitive components installed as part of the Jet Additives Project in hydrocarbon service are leaking at a rate equal to or greater than 5,000 ppm of TOC (measured as C1) in any calendar quarter, the owner/operator shall conduct an annual emissions estimate in order to demonstrate compliance with part 9 and shall submit the results to the district within 30 days of the annual emissions calculation. For any calendar quarter in which one or more of these components is leaking at a rate equal to or greater than 10,000 ppm of TOC (measured as C1), the Owner/Operator shall calculate and submit a report of fugitive emissions from all Jet Additives Project fugitive components in hydrocarbon service utilizing District approved methods for the consecutive 12 month period ending with this quarter. This calculation shall continue each quarter until there is not a quarter containing a pegged leaker. For leaking components the owner/operator shall use the modified trapezoidal method and LeakDAS as documented within the application 12842 or other method pre-approved by the District. The Owner/Operator shall include emissions estimates from all Jet Additives Project fugitive components in hydrocarbon service regardless of the component Rule 8-18 repair status in order to demonstrate compliance with part 9. [Basis: Cumulative Increase, BACT, Offsets]
- 11. The Owner/Operator shall keep a District-approved monthly log of fugitive component counts of the Jet Additives Project, each component's unique permanent identification codes, monitoring results, and any annual emissions estimates required per parts 9 and 10 for at least five years from date of entry. The log shall be retained on site and made available to district staff upon request.[Basis: offsets, recordkeeping]

<u>Condition 24921</u> <u>Plant 10 Application 22634</u> <u>S-6015</u>

- 1. a. The owner/operator of S-6010 and/or S-6015 shall not exceed a total combined vent gas flow of 170,000 pounds per hour (averaged over any consecutive 60-minute period) during startups and shutdowns of any sources vented to S-6010 and/or S-6015. (Basis: cumulative increase, 12-12)
  - b. The owner/operator of S-6010 and/or S-6015 shall not exceed a total combined vent gas flow of 878,900 pounds per hour (averaged over any consecutive 60-minute period) during emergency malfunctions. (Basis: cumulative increase, 12-12).
- 2. The owner/operator of S-6015 shall only use S-6015 when S-6010 approaches [Note:"approaches" only applies for first year only and not to exceed to be established after first year.] its smokeless capacity of approximately 170,000 pounds per hour. A future enforceable limit for this part shall be determined in the first year of operation using the methodology presented below. For the first 12 months of operation after the issuance of this permit, the owner/operator of S-6015 shall maintain and determine the future enforceable water seal levels for S-6015 required in order to maximize S-6010 smokeless flaring operation prior to the start of flaring by S-6015 during all relief events including emergency malfunction, unit startup and shutdown. During the first 12-month period of initial operation, the water seal level for S-6015 shall only operate within the following District-approved range (30" - 70"). Within 30 days of the end of the 12-month period above, the owner/operator of S-6015 shall submit a permit application to the District for review/approval to establish the water seal levels of S-6015 as permit conditions that correspond to the maximization of the smokeless capacity of S-6010. The permit application shall include, at a minimum, the proposed water seal levels at S-6015 and the corresponding vent gas flow rates, along with the basis for the proposed values. [Note: If it is determined that S-6015 is needed for startup/shutdown more than represented in the application, then offsets may be required for the startup/shutdown emissions of S-6015.] (Basis: cumulative increase)
- 3. The total combined vent gas flow limit of S-6010 and S-6015 contained in Part 1b shall not apply during major power outages. For the purpose of this condition, a major power outage is defined as any time when both: (a) all of Chevron's Cogens are non-operational and (b) power supply from the utility is also unavailable. During a major power outage, the owner/operator of S-6015 shall not exceed 878,900 pounds per hour of vent gas (averaged over any consecutive 60-minute period). (Basis: cumulative increase, Rule 12-12)
- 4. The owner/operator of S-6015 shall use S-6015 as the main Flare in the South Yard only when S-6010 is down for maintenance. Only during these periods of maintenance of S-6010 shall part 2 above not apply. (Basis: cumulative increase, Rule 12-12)
- 5. The owner/operator of S-6015 shall comply with a smokeless capacity for S-6015 of at least 240,000 pounds per hour of vent gas. (Basis: cumulative increase)
- 6. The owner/operator of S-6015 shall not exceed 500 standard cubic feet per hour of natural gas for flare pilots. The owner/operator of S-6015 shall not exceed 2000 standard cubic feet per hour of natural gas for combined flare pilot and purge. The owner/operator of S-6015 shall use only natural gas for pilot and purge. (cumulative increase)
- 7. The owner/operator of S-6015 shall use steam powered air aspiration at all times that vent gas is being sent to S-6015. (Basis: cumulative increase)
- 8. The owner/operator of S-6015 shall design S-6015 to maintain a hydrocarbon and carbon monoxide destruction efficiency of at least 98%, on a mass basis. (Basis: cumulative increase)
- 9. The owner/operator of S-6015 shall comply with the monitoring, recordkeeping and reporting requirements for the flare as required in Regulations 12-11 and/or 12-12. The owner/operator of S-6015

shall properly install, maintain, and operate the following District-approved monitors; including, but not limited to: a vent gas flow meter (which measures volumetric and mass flow, velocity, molecular weight, temperature and pressure, and hydrocarbon emissions), total sulfur monitor, video monitoring, and a vent gas sampling system. The owner/operator shall maintain records of the lower heating value (BTU/scf) of the vented gas for each flaring event. The owner/operator of S-6015 shall properly install, maintain, and operate the pilot and purge monitoring as required in Sections 12-11-503 and 12-11-504 in order to demonstrate compliance with parts 6. (Basis: Rule 12-11 and recordkeeping)

- 10. The owner/operator of S-6015 shall maintain a district-approved monthly log in order to demonstration compliance with all parts above, including, but not limited to dates of all process unit startups/shutdowns, malfunctions, major power outages, start and end dates of maintenance of S-6010, water seal levels at S-6015 and corresponding vent gas flow rates in pounds per hour. This log shall be kept on site for at least 5 years from the date of entry and be made available to district staff upon request. (Basis: Rule 12-11 and recordkeeping)
- 11. The owner/operator of S-6015 shall operate the flare in accordance with the District-approved Flare Minimization Plan (FMP) for the Chevron Richmond Refinery. (Basis: Regulation 12-12)

S-6015 D&R Flare Project - Fugitive component conditions - For the purposes of these permit conditions hydrocarbon service is as defined in the Renewal Project Permit Condition #24136

12. Within 30 days of District's issuance of the Permit to Operate for Application 22634 or the Startup of S-6015, the Owner/Operator shall provide the District's Engineering Division with a final count of all fugitive components and each component's unique permanent identification codes in this project. The owner/operator has been permitted to install the following fugitive components:
70 valves in hydrocarbon service;
85 flanges in hydrocarbon service;
12 pumps in hydrocarbon service;
3 PSVs in hydrocarbon service.

[Basis: Cumulative Increase, offsets, Regulation 2-5]

- 13. If any of the fugitive component counts exceed the count stated in Part 12, the plant's cumulative emissions for the project shall be adjusted, subject to APCO approval, 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 21 days after submittal of the final POC fugitive count. If the component count increase triggers any additional regulatory review, the owner/Operator shall submit an application to address the increased emissions. The Owner/Operator submitted 0.750 tons per year of POC offset credits corresponding to the component counts in Part 12. If the actual component count is less than the predicted, the total emissions in Part 13 may be adjusted accordingly, subject to APCO approval, and all emission offsets applied by the owner/operator upon approval by the APCO. [Basis: offsets]
- 14. The Owner/Operator shall as part of the S-6015 D&R Flare Project install only the following types of valves in hydrocarbon service: (1) bellows sealed, (2) live loaded, (3) graphitic packed, (4) quarter-turn (e.g., ball valves or plug valves), or equivalent as determined by the APCO. [Basis: cumulative increase]
- 15. The Owner/Operator shall comply with a leak standard of 100 ppm of TOC (measured as C1) at any valves installed as part of the application 22634 in hydrocarbon service unless the Owner/Operator complies with the applicable minimization and repair provisions contained in Regulation 8-18.

[Basis: cumulative increase, Regulation 8 Rule 18]

- 16. The Owner/Operator shall install graphitic-based gaskets, metal ring joints, or equivalent technology as determined by the APCO on all flanges or connectors installed as part of the S-6015 D&R Flare Project in hydrocarbon service. [Basis: cumulative increase]
- 17. The Owner/Operator shall comply with a leak standard of 100 ppm of TOC (measured as C1) at any flanges and/or connectors installed as part of application 22634 in hydrocarbon service unless the Owner/Operator complies with the applicable minimization and repair provisions contained in Regulation 8-18. [Basis: cumulative increase, offsets, Regulation 8 Rule 18]
- 18. The owner/operator of S-6015 fugitive components shall not exceed 500.0 ppm of TOC (measured as C1) at any of the pumps installed as part of application 22634 in hydrocarbon service unless the Owner/Operator complies with the applicable minimization and repair provisions contained in Regulation 8-18. [cumulative increase, offsets, Regulation 8-18]
- 19. The Owner/Operator shall conduct inspections of fugitive components installed as part of application 22634 in hydrocarbon service in accordance with the frequency below: Pumps: Quarterly Valves: Quarterly <u>Connectors (Not Flanges): Biannual Flanges:</u> <u>Biannual</u> [Basis: cumulative increase, Regulations 8 Rule 18]
- 20. The Owner/Operator shall not exceed 0.649 tons of POC emissions per consecutive 365-day period measured as C1 from for all fugitive components installed as part of application 22634 in hydrocarbon service. Compliance with this provision shall be verified quarterly using methods described in part 21. The results shall be submitted to the District within 30 days of the close of each calendar quarter after the District's issuance of the Permit to Operate for Application 22634. [Basis: Cumulative Increase, offsets]
- If all of the fugitive components installed as part of application 22634 in hydrocarbon service are 21. leaking at a rate less than 5000 ppm of TOC (measured as C1) in any calendar quarter, no further verification and no submittal of the results shall be required. If any of the fugitive components installed as part of application 22634 in hydrocarbon service are leaking at a rate equal to or greater than 5,000 ppm of TOC (measured as C1) in any calendar quarter, the owner/operator shall conduct an annual emissions estimate in order to demonstrate compliance with part 20 and shall submit the results to the district within 30 days of the annual emissions calculation. For any calendar quarter in which one or more of these components is leaking at a rate equal to or greater than 10,000 ppm of TOC (measured as C1), the Owner/Operator shall calculate and submit a report of fugitive emissions from all S-6015 D&R Flare Project fugitive components in hydrocarbon service utilizing District approved methods for the consecutive 12 month period ending with this quarter. This calculation shall continue each quarter until there is not a quarter containing a pegged leaker. For leaking components the owner/operator shall use the modified trapezoidal method and LeakDAS as documented within the application 12842 or other method pre-approved by the District. The Owner/Operator shall include emissions estimates from all D&R Flare Project fugitive components in hydrocarbon service regardless of the component Rule 8-18 repair status in order to demonstrate compliance with part 9. [Basis: Cumulative Increase, Offsets]
- 22. The Owner/Operator shall keep a District-approved monthly log of fugitive component counts installed as part of application 22634, each component's unique permanent identification codes, monitoring results, and any annual emissions estimates required per parts 20 and 21 for at least five years from date

of entry. The log shall be retained on site and made available to district staff upon request. [Basis: offsets, recordkeeping]

#### Condition 25037 Plant 10 Application 22722 S-3229

- 1. The owner/operator of S-3229 shall not exceed 6,000,000 barrels of recovered oil in any consecutive 12 month period. (cumulative increase)
- 2. The owner/operator of S-3229 shall not exceed 38,000 barrels of recovered oil in any calendar day. If the owner/operator of S-3229 exceeds 38,000 barrels of recovered oil in any calendar day, the owner/operator shall conduct a district -approved emissions calculation, within 7 days of the exceeding 38,000 barrels, in order to demonstrate that VOC emissions did not exceed the maximum permitted amount of 16.4 pounds per day. The calculation shall use the actual measured throughput, operating temperature, true vapor pressure and permitted fittings as contained in part 5. (cumulative increase)
- 3. The owner/operator of S-3229 shall only store materials with a true vapor pressure not to exceed 10.3 psia. (cumulative increase)
- 4. The owner/operator of S-3229 shall store materials as recovered oil or any other petroleum hydrocarbon material that complies with these conditions and with a benzene content not to exceed 2% by weight, an ethylbenzene content not to exceed 2% by weight, and a naphthalene content not to exceed 2% by weight. In addition all other toxic air contaminant emissions shall not exceed the respective risk screening trigger levels contained in Regulation 2-5. The owner/operator of S-3229 shall sample the contents of the tank on a quarterly basis in order to demonstrate compliance with this part. (2-5)
- 5. The owner/operator shall control organic emissions from S-3229 by a liquid-mounted primary mechanical seal and a zero-gap secondary wiper seal. There shall be no ungasketed roof fittings. Except for roof legs, each roof fitting shall be of the design, which yields the minimum roof fitting losses. The following list indicates the type of control required for a variety of typical roof fittings.

Control techniques for roof fittings not included in this list shall be subject to prior District approval, prior to installing the roof on the tank. (BACT)

Fitting Type	Control Technique
Access hatch	Bolted cover, gasketed
Guide pole/Well	Slotted with a pole sleeve That projects below liquid surface a zero-gap pole wiper and gasketed sliding cover w/ float
Gauge float well	Bolted cover, gasketed.
Gauge hatch/Sample well	Weighted mechanical actuation, gasketed
Vacuum breaker	Weighted mechanical

	actuation, gasketed
Roof drain	none
Roof leg	Adjustable, w/vapor seal boot.
Rim vent	Weighted mechanical actuation, gasketed (BACT).

- The owner/operator of S-3229 shall properly install and properly operate a district approved dome on S-6. 3229 that further controls organic emissions. (CEQA and BACT)
- 7. The owner/operator of S-3229 shall be equipped with a temperature measuring device with a set point temperature of no more than 180F at S-3229. The owner/operator shall sample the tank prior to heating above 120F in order to demonstrate compliance with part 3. (cumulative increase)

S-3229 Recovered Oil Tank- Fugitive component conditions - For the purposes of these permit conditions hydrocarbon service is as defined in the Renewal Project Permit Condition #24136.

8. Within 30 days of District's issuance of the Permit to Operate for Application 22722, the Owner/Operator shall provide the District's Engineering Division with a final count of all fugitive components and each component's unique permanent identification codes in this project. The owner/operator has been permitted to install the following fugitive components:

135 valves in hydrocarbon service; 98 flanges in hydrocarbon service; 4 pumps in hydrocarbon service; 3 PRDs in hydrocarbon service. [Basis: Cumulative Increase, offsets, Regulation 2-5]

- 9. If any of the fugitive component counts exceed the count stated in Part 8, the plant's cumulative emissions for the project shall be adjusted, subject to APCO approval, 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 21 days after submittal of the final POC fugitive count. If the component count increase triggers any additional regulatory review, the owner/operator shall submit an application to address the increased emissions. The Owner/Operator submitted 0.808 tons per year of POC offset credits corresponding to the fugitive component counts in Part 8. If the actual component count is less than the predicted, the total emissions in Part 13 may be adjusted accordingly, subject to APCO approval, and all emission offsets applied by the owner/operator in excess of the fully offset permitted total POC emissions may be credited back to the owner/operator upon approval by the APCO. [Basis: offsets]
- 10. The Owner/Operator of S-3229 shall install only the following types of fugitive components: a.
  - for valves in hydrocarbon service:
    - bellows sealed 1)
    - 2) live loaded
    - 3) graphitic packed
    - quarter-turn (e.g., ball valves or plug valves), or equivalent as determined by the APCO. 4)
  - For flanges in hydrocarbon service: graphitic-based gaskets, metal ring joints, or equivalent b. technology as determined by the APCO.
  - For pumps in hydrocarbon service: double mechanical seal with barrier fluid, or equivalent as c. determined by the APCO. This control technology requirement does not apply to the <sup>3</sup>/<sub>4</sub> HP selfcontained gear sample pump.

- d. For pressure relief devices: the three thermal relief valves shall vent back into the tank. [Basis: BACT, cumulative increase]
- 11. The Owner/Operator shall comply with a leak standard of 100 ppm of TOC (measured as C1) at any pumps, valves, flanges, and/or PRDs installed as part of the application 22722 in hydrocarbon service, unless the Owner/Operator complies with the applicable minimization and repair provisions contained in Regulation 8-18. [Basis: BACT, cumulative increase, Regulation 8 Rule 18, CEQA]
- 12. The Owner/Operator shall conduct inspections of fugitive components installed as part of application 22722 in hydrocarbon service in accordance with the frequency below:

Pumps: Quarterly Valves: Quarterly PRD's: Quarterly Flanges: Biannual Flanges: Biannual [Basis:BACT, cumulative increase, Regulations 8 Rule 18]

- 13. The Owner/Operator shall not exceed 0.702 tons of POC emissions per consecutive 365-day period measured as C1 from for all fugitive components installed as part of application 22722 in hydrocarbon service. Compliance with this provision shall be verified quarterly using methods described in part 14. The results shall be submitted to the District within 30 days of the close of each calendar quarter after the District's issuance of the Permit to Operate for Application 22722.[Basis: Cumulative Increase, offsets]
- If all of the fugitive components installed as part of application 22722 in hydrocarbon service are 14. leaking at a rate less than 5000 ppm of TOC (measured as C1) in any calendar quarter, no further verification and no submittal of the results shall be required. If any of the fugitive components installed as part of application 22722 in hydrocarbon service are leaking at a rate equal to or greater than 5,000 ppm of TOC (measured as C1) in any calendar quarter, the owner/operator shall conduct an annual emissions estimate in order to demonstrate compliance with part 13 and shall submit the results to the district within 30 days of the annual emissions calculation. For any calendar quarter in which one or more of these components is leaking at a rate equal to or greater than 10,000 ppm of TOC (measured as C1), the Owner/Operator shall calculate and submit a report of fugitive emissions from all S-3229 fugitive components in hydrocarbon service utilizing District approved methods for the consecutive 12 month period ending with this quarter in order to demonstrate compliance with part 13. This calculation shall continue each quarter, until there is not a quarter containing a pegged leaker (10,000 ppm or greater). For leaking components the owner/operator shall use the modified trapezoidal method and LeakDAS as documented within the application 12842 or other method pre-approved by the District. The Owner/Operator shall include emissions estimates from all application 22722 fugitive components in hydrocarbon service regardless of the component Rule 8-18 repair status in order to demonstrate compliance with part 9. [Basis: Cumulative Increase, Offsets]
- 15. The Owner/Operator shall keep a District-approved log of fugitive component counts installed as part of application 22722, each component's unique permanent identification codes, monitoring results, and any annual emissions estimates required per parts 13 and 14 for at least five years from date of entry. The log shall be retained on site and made available to district staff upon request.[Basis: offsets, recordkeeping]
- 16. The owner/operator of S-3229 shall maintain a district approved daily log with monthly summaries of all material throughput including emissions calculations as required per part 2, HAP concentrations per part 4, temperature, and vapor pressure at S-3229 in order to demonstrate compliance with parts 1

through 3. This log shall be kept on site for at least 5 years from the date of entry and made available to district staff upon request. (recordkeeping)

#### Condition 25144 Plant 10 Application 23423 S-1292

- 1. The owner/operator of S-1292 shall not exceed 4,802,722 barrels throughput of JP-8, Jet A or similar initial boiling point range stock that complies with parts 2, 3 and 4 of this condition during any consecutive 12-month period. The owner/operator shall comply with the applicable provisions of Regulation 8-5 for all stock changes. If the tank is returned to only diesel service or other exempt stock per District Regulation 2-1-123, the throughput limit shall not apply after testing of the material from the top layer of the material in the tank demonstrates per Regulation 8-5-606.1 that the owner/operator meets the requirements of the exemption. (cumulative increase)
- 2. The owner/operator of S-1292 shall store only JP-8, Jet A, or similar jet fuel with an initial boiling point range that complies with both the limits in parts 3 and 4, or exempt stock. If the owner/operator stores materials other than JP-8 and Jet A and with similar boiling point range stock, the owner/operator of S-1292 shall demonstrate to the satisfaction of the APCO that there will be no increase in any TAC/HAP emissions above the trigger levels contained in District Regulation 2, Rule 5. (cumulative increase, 2-5)
- 3. The owner/operator of S-1292 shall monitor the initial boiling point (IBP), at a minimum, on a weekly basis, unless there has not been any material added and/or removed since the last sample, and the IBP shall be maintained at a minimum of 290 degrees F on a monthly average basis and 302 degrees F on any consecutive 12 month average basis. The owner/operator of S-1292 shall not store materials with an IBP less than 275F. (cumulative increase)
- 4. The owner/operator of S-1292 shall not exceed a true vapor pressure (TVP) of 0.8 psia. The owner/operator of S-1292 shall measure the true vapor pressure at a minimum on a monthly basis and additionally shall measure the true vapor pressure each time the type of stock stored in the tank is changed. The owner/operator shall not exceed an average true vapor pressure of 0.5 psia on a monthly average basis. (cumulative increase, 8-5)
- 5. When the owner/operator of S-1292 is storing JP8, Jet A or similar material, the owner/operator of S-1292 shall comply with all applicable requirements of Reg. 8-5 as if S-1292 was storing a material with a true vapor pressure greater than 0.5 psia. (cumulative increase, 8-5)
- 6. The owner/operator of S-1292 shall tag, inspect, and include in Chevrons LDAR program all fugitive components associated with S-1292 for compliance with Reg. 8-18 including the provisions contained within section 8-18-400. (8-18)
- 7. The owner/operator of S-1292 shall maintain records of the daily tank throughput, a minimum of monthly records of contents and all lab results to confirm compliance with parts 1 through 6. These records may be in the form of computer generated data that shall be made available to District personnel upon request. These records shall be kept on file for a minimum of 5 years from the date of entry. (Record keeping, 8-5-501)

#### Condition 25479 Plant 10 Application 23069 S-4374

- 1. The owner/operator of S-4374 shall not exceed a total of 10,000 gallons of Flocculent in any consecutive 12 month period. (cum inc)
- 2. The owner/operator of S-4374 shall only store materials with a true vapor pressure not to exceed 0.5 psia. (8-5-117 and cum inc)

- 3. The owner/operator of S-4374 may change the chemicals described in application 23069 provided that the owner/operator demonstrates that there will be no increase in emissions (32 pounds POC in any consecutive 12 month period) and the emissions of toxic air contaminants will not equal or exceed any trigger levels specified in Regulation 2-5. (2-1-301, 2-5)
- 4. The owner/operator of S-4374 shall maintain a district approved monthly log of all material throughput, material safety data sheets for material stored, and vapor pressure of material stored at S-4374 in order to demonstrate compliance with parts 1 through 3 including emissions calculations in order to demonstrate compliance with part 3. This log shall be kept on site for at least 5 years from the date of entry and made available to district staff upon request. (record keeping)

S-4374 Chemical Tote- Fugitive component conditions For the purposes of these permit conditions hydrocarbon service is as defined in the Renewal Project Permit Condition #24136

- 5. Within 30 days of District's issuance of the Permit to Operate for Application 23069, the Owner/Operator shall provide the District's Engineering Division with a final count of all fugitive components and each component's unique permanent identification codes in this project. The owner/operator has been permitted to install the following fugitive components:
  - 6 valves in hydrocarbon service;
  - 2 flanges in hydrocarbon service;
  - 2 pumps in hydrocarbon service;
  - 14 connectors in hydrocarbon service. [Basis:
  - Cumulative Increase, offsets, Regulation 2-5]
- 6. If any of the fugitive component counts exceed the count stated in Part 5, the plant's cumulative emissions for the project shall be adjusted, subject to APCO approval, 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 21 days after submittal of the final POC fugitive count. If the component count increase triggers any additional regulatory review, the owner/operator shall submit an application to address the increased emissions. The Owner/Operator submitted 0.589 tons per year of POC offset credits corresponding to the fugitive component count is less than the predicted, the total emissions in Part 11 may be adjusted accordingly, subject to APCO approval, and all emission offsets applied by the owner/operator in excess of the fully offset permitted total POC emissions may be credited back to the owner/operator upon approval by the APCO. [Basis: offsets]
- 7. The Owner/Operator of S-4374 shall install only the following types of components:
  - a. For valves in hydrocarbon service: (1) bellows sealed, (2) live loaded, (3) graphitic packed, (4) quarter-turn (e.g., ball valves or plug valves), or equivalent as determined by the APCO.
  - b. For flanges in hydrocarbon service: graphitic-based gaskets, metal ring joints, or equivalent technology as determined by the APCO.
  - c. For pumps in hydrocarbon service: double mechanical seal with barrier fluid, or equivalent as determined by the APCO. [Basis: cumulative increase]
- 8. The Owner/Operator shall comply with a leak standard of 100 ppm of TOC (measured as C1) at any valves, flanges, and/or connectors installed as part of the application 23069 in hydrocarbon service unless the Owner/Operator complies with the applicable minimization and repair provisions contained in Regulation 8-18. [Basis: cumulative increase, Regulation 8 Rule 18]
- 9. The owner/operator of S-4374 fugitive components shall not exceed 500.0 ppm of TOC (measured as C1) at any of the pumps installed as part of application 23069 in hydrocarbon service unless the

Owner/Operator complies with the applicable minimization and repair provisions contained in Regulation 8-18. [cumulative increase, offsets, Regulation 8-18]

- 10. The Owner/Operator shall conduct inspections of fugitive components installed as part of application 23069 in hydrocarbon service in accordance with the frequency below:
   Pumps: Quarterly
   Valves: Quarterly
   Connectors: annual
   Flanges: annual [Basis: cumulative increase, Regulations 8 Rule 18]
- 11. The Owner/Operator shall not exceed 0.512 tons of POC emissions per consecutive 365-day period measured as C1 from for all fugitive components installed as part of application 23069 in hydrocarbon service. Compliance with this provision shall be verified quarterly using methods described in part 12. The results shall be submitted to the District within 30 days of the close of each calendar quarter after the District's issuance of the Permit to Operate for Application 23069 as required by part 12. [Basis: Cumulative Increase, offsets]
- 12. If all of the fugitive components installed as part of application 23069 in hydrocarbon service are leaking at a rate less than 5000 ppm of TOC (measured as C1) in any calendar quarter, no further verification and no submittal of the results shall be required. If any of the fugitive components installed as part of application 23069 in hydrocarbon service are leaking at a rate equal to or greater than 5,000 ppm of TOC (measured as C1) in any calendar quarter, the owner/operator shall conduct an annual emissions estimate in order to demonstrate compliance with part 11 and shall submit the results to the district within 30 days of the annual emissions calculation. For any calendar quarter in which one or more of these components is leaking at a rate equal to or greater than 10,000 ppm of TOC (measured as C1), the Owner/Operator shall calculate and submit a report of fugitive emissions from all S-4374 fugitive components in hydrocarbon service utilizing District approved methods for the consecutive 12 month period ending with this quarter in order to demonstrate compliance with part 11. This calculation shall continue each quarter until there is not a quarter containing a pegged leaker. For leaking components the owner/operator shall use the modified trapezoidal method and LeakDAS as documented within the application 12842 (Renewal Project) or other method pre-approved by the District. The Owner/Operator shall include emissions estimates from all fugitive components included in part 5 (application 23069) in hydrocarbon service regardless of the component Rule 8-18 repair status in order to demonstrate compliance with part 11. [Basis:Cumulative Increase, Offsets]
- 13. The Owner/Operator shall keep a District-approved monthly log of fugitive component counts installed as part of application 23069 and each component's unique permanent identification codes per part 5, monitoring results, and any annual emissions estimates required per parts 11 and 12 for at least five years from date of entry. The log shall be retained on site and made available to district staff upon request. [Basis: offsets, recordkeeping]
## VII. APPLICABLE LIMITS AND COMPLIANCE MONITORING REQUIREMENTS

This section has been included to summarize the applicable emission limits contained in Section IV, Source-specific Applicable Requirements, of this permit. The following tables show the relationship between each emission limit and the associated compliance monitoring provisions, if any. The monitoring frequency column indicates whether periodic (P) or continuous (C) monitoring is required. For periodic monitoring, the frequency of the monitoring has also been shown using the following codes: annual (A), quarterly (Q), monthly (M), weekly (W), daily (D), or on an event basis (E). No monitoring (N) has been required if the current applicable rule or regulation does not require monitoring, and the operation is unlikely to deviate from the applicable emission limit based upon the nature of the operation.

This section is only a summary of the limits and monitoring requirements. In the case of a conflict with any requirement in Sections I-VI, the preceding sections take precedence over Section VII.

## Table VII – Abatement (Devices not in Source Tables)

## Table VII – Abatement Applicable Limits and Compliance Monitoring Requirements

## <u>Abatement Devices (In Table II-B, but not included in Table IV)</u> A-0094, A-0620, A-0622, A-0623, A-0624, A-0627, A-0628, A-0917, A-919, A-0921, A-0920, A-

0922

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type					
A-0094 Thermor Kiln Stack Burner												
POC	8-1-110.3	Y		Abatement of emissions >90% of organic carbon for exemption	condition 20791	C	Temperature monitor					
POC	Condition 20791	Ν		minimum temperature requirement	condition 20791	С	Temperature monitor					
A-0414, A-0620, A-0622, A-0623, A-0624, A-0627, A-0628 Thermal Oxidizers												
POC	Condition # 8869 Part s1 and 2	Y		Minimum temperature of 1500 and 1565 degrees F, minimum VOC destruction efficiency 95% by weight	Condition #8869 Part 3	С	Temperature monitor					
H2S	60.104(a)(1) Condition #23201	Y		H2S in fuel gas burned ≤ 230 mg/dscm (0.1 gr/dscf), EXCEPT process upset gases or emergency malfunctions	60.105(a)(3) or 60.105(a)(4) or 60.13(i) Condition #23201	C or P(per alternate monitoring plan)	Records SO2/O2 or H2S					
			A-0917, A	-919, A-0921, A-0920, A-0922 Ca	arbon Drums							
POC	40 CFR 61 FF	Y		95% by weight or greater reduction in total organics, or < 500 ppmv total organics in outlet stream, or minimum benzene destruction removal efficiency 98% by concentration weight, or 10 ppmv benzene	40 CFR 61 FF	С	OVA/FID monitoring or portabl G/C monitoring					

## Table VII.A.1.1 Combustion (Cogeneration)

# Table VII.A.1.1 Combustion Applicable Limits and Compliance Monitoring Requirements

### **Cogeneration**

S-4350 Gas Turbine with Steam Injection Cogeneration Train 1000 and S-4351 Heat Recovery Steam Generation Train 1000 abated by A-0070 CO/HC Catalyst and A-0072 SCR NOx Reduction Catalyst, S-4352 Gas Turbine with Steam Injection Cogeneration Train 2000 and S-4353 Heat Recovery Steam Generation Train 2000 abated by A-0071 CO/HC Catalyst and A-0073 SCR NOx Reduction Catalyst

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
NOx	BAAQMD 9-9-301.1.3 and SIP 9-9- 301.3 adjustment pending per 9-9-401.2.2.2	Y		10.8 ppmv @15% O <sub>2</sub> (dry)	BAAQMD and SIP 9-9-501	С	NOx CEM
NOx	BAAQMD 9-9-301.3	N		5 or 9 ppmv @ 15% O2 (dry) depending on fuel use	BAAQMD 9-9- 501	С	NOx CEM
NOx	BAAQMD 9-9-301.1.3 & SIP 9-9- 301.3	Y		25 ppmv @15% O <sub>2</sub> (dry) for non- gaseous fuel firing during natural gas curtailment or short testing periods	BAAQMD and SIP 9-9-501	С	NOx CEM
NOx	NSPS 40 cfr 60 Subpart Db, 60.44b (a)(4)(i)	Y		0.20 lb/MMBtu	Condition #1162 Part 8, 12	С	NOx CEM, fuel gas flow meters, calorimeter on fuel gas
NOx	Condition #1162 Part 12	Y		10 ppmv NOx at 15% O2, averaged over any 3- hour period, except during periods of startup and shutdown that shall not exceed two hours and one-half hour respectively	Condition #1162 Part 12	С	NOx CEM and O2 or CO2 CEM
СО	Condition #1162 Part 10	Y		> 80% CO reduction	Condition #1162 Part 12	С	CO CEM and O2 or CO2 CEM
POC	Condition #1162 Part 11	Y		> 50% reduction of VOC	Condition #1162 Part 12	С	CO CEM
Sulfur Oxides	9-1-304	Y		Fuel burning (liquid and solid fuels)	9-1-502, 1-520 & 1-522	С	Fuel Analysis
Opacity	SIP 6-301 BAAQMD 6-1-301	Y		Ringelmann No. 1 for no more than 3 minutes/hour	SIP 6-601 BAAQMD 6-1-601 condition 22262 part 2	P/M	Visual inspection

## Table VII.A.1.1 Combustion Applicable Limits and Compliance Monitoring Requirements

## **Cogeneration**

S-4350 Gas Turbine with Steam Injection Cogeneration Train 1000 and S-4351 Heat Recovery Steam Generation Train 1000 abated by A-0070 CO/HC Catalyst and A-0072 SCR NOx Reduction Catalyst, S-4352 Gas Turbine with Steam Injection Cogeneration Train 2000 and S-4353 Heat Recovery Steam Generation Train 2000 abated by A-0071 CO/HC Catalyst and A-0073 SCR NOx Reduction Catalyst

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
FP	SIP 6-305 BAAQMD 6-1-305	Y		Visible Particulates	SIP 6-601 BAAQMD 6-1- 601	P/E	Visual Inspection
	SIP 6-310 BAAQMD 6-1-310	Y		0.15 grain/dscf	condition 22262 part 1	P/E	Visual inspection
Total sulfur in fuel	NSPS 40 cfr 60 Subpart GG, 60.333 (b)	Y		0.8 % total sulfur in fuel by weight	NSPS 40 cfr 60 Subpart GG, 60.334 (h)(3) 40 CFR 60 Subpart GG 60.334(i)(3)(i)(A, B)	None if gaseous fuel meets 40 CFR 60.331(u) natural gas definition. P/A For LPG fuel	Fuel analysis (natural gas exempt)
Sulfur in diesel	Condition #1162 Part 9	Y		0.05% sulfur by weight	Condition #1162 part 9	P/E	Diesel fuel documents
H2S	40 CFR, Subpart J, 60.104(a) (1) and Condition #23201	Y		Fuel gas H2S concentration limited to 230 mg/dscm (0.10 gr/dscf) except for gas burned as a result of process upset or gas burned at flares from relief valve leaks or other emergency malfunctions	40 CFR 60.105(a)(4) and Condition #23201	С	H2S analyzer
NH3	Condition #1162 Part 18	Y		20 ppm NH3	BAAQMD 2-6- 409.2.2	P/A	source test

### Table VII.A.2.1 Combustion (Flares)

# Table VII.A.2.1 Combustion Applicable Limits and Compliance Monitoring Requirements

### Flares

#### S-6010 LSFO Flare, S-6012 V-282 South Isomax Flare, S-6013 North Isomax Flare, S-6015 LSFO Elevated Flare, S-6016 FCC Flare V-731, S-6017 Alkane Flare, SRU S-6019 Alky-Poly Flare, S-6039 Flare V-3501

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
Opacity	SIP 6-301 BAAQM D 6-1-301	Y		Ringelmann No. 1 for no more than 3 minutes/hour	SIP 6-601 BAAQMD 6-1- 601	P/E	Visual inspection, flowmeter and record keeping
					Condition 18656 part 4		
Opacity	Condition #18656 part 7	N		Applies to S-6015 and S-6039. This flare shall only combust process upset gasses or fuel that is released to the flare as a result of relief valve leakage, or other emergency malfunctions. Visible for no more than 5 minutes in any two hours.	Condition 18656 Part 6	P/E	Records
FP	SIP 6-305 BAAQM D 6-1-305	Y		Visible Particulates	SIP 6-601 BAAQMD 6-1- 601	P/E	Visual Inspection
FP	SIP 6-310 BAAQM D 6-1-310	Y		0.15 grain/dscf	condition 18656 parts 3, 4, 5	P/E	Visual inspection
FP	SIP 6-311 BAAQM D 6-1-311	Y		emissions based on process weight rate (lb/hour)	condition 18656 parts 3, 4, 5 1	P/E	Visual inspection
	Condition #469, #24921 part 5	Y		Smokeless capacity of S-6015 shall not be less than 240,000 lbs/hr	None	N	N/A
Through-put Limit	Condition #18137	Ν		See Table IIA	Condition #18137 Part 2	P/M	Recordkeeping

# Table VII.A.2.1 Combustion Applicable Limits and Compliance Monitoring Requirements

## Flares

#### S-6010 LSFO Flare, S-6012 V-282 South Isomax Flare, S-6013 North Isomax Flare, S-6015 LSFO Elevated Flare, S-6016 FCC Flare V-731, S-6017 Alkane Flare, SRU S-6019 Alky-Poly Flare, S-6039 Flare V-3501

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
Other		Ν			BAAQMD	С	Flow Rate
Monitoring vent gas flow					Regulation 12- 11-501 &		
					12-11-505		
vent gas		Ν			BAAQMD	P/E	Composition
composition					Regulation		
					12-11-502.1 &		
					12-11-505		
vent gas		Ν			BAAQMD	P/E	Composition
composition					Regulation		
					12-11-502.3 &		
					12-11-505		
Presence	12-11-503	Ν		The flare must be equipped	BAAQMD	P/C	Flame
Flame			with a monitoring device to detect the presence of a	Regulation		Detector	
				pilot flame.	12-11-503 &		
					12-11-505		
		Ν		None	12-12-501	С	Record water seal pressure and water level
	Condition	Ν		purge and pilot gas flow	BAAQMD	P/C	Purge and
	#13370			measurements	Regulation		pilot Gas Flow Rate
					12-11-504 &		110 W Rute
					12-11-505		
		Ν			BAAQMD	P/C	1 frame per
					Regulation 12-11-507		minute image video recording

# Table VII.A.2.1 Combustion Applicable Limits and Compliance Monitoring Requirements

## Flares

#### S-6010 LSFO Flare, S-6012 V-282 South Isomax Flare, S-6013 North Isomax Flare, S-6015 LSFO Elevated Flare, S-6016 FCC Flare V-731, S-6017 Alkane Flare, SRU S-6019 Alky-Poly Flare, S-6039 Flare V-3501

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
		N	(if any >1E6 SCF/24- hr vent gas flared)		BAAQMD Regulation 12- 11-507	P/C	1 frame per minute image video recording
Vent gas flow	Condition #24921 part 1	Ν		Total combined vent gas flow of S-6010 and/or S-6015 is limited to 170,000lb in any consectuve 60 min during startups and shutdowns of sources vented to S-6010 and/or S-6015 and 878,900lb/hr during emergency malfunctions	Condition #24921 part 1, BAAQMD Regulation 12-11- 501	P/E	Flow rate
Vent gas flow	Condition #24921 part 3	N		Total combined vent gas flow limit of sources vented to S- 6015 is 878,900lb/hr during a major power outage	Condition #24921 part 3, BAAQMD Regulation 12-11- 501	P/E	Flow Rate
Purge and pilot gas flow	Condition #24921 part 6	N		The flow rate of S-6015's flare pilots is limited to 500 SCF/hr of natural gas. Combined flow rate of S-6015's flare pilot and purge is limited to 2000 SCF/hr of natural gas.	Condition #25921 part 6, BAAQMD Regulation 12-11- 504 & 12-11-505	P/C	Purge and pilot gas flow rate
Air Aspiration	Condition #24921 part 7	N		Steam powered air aspiration must be used at all times that vent gas is sent to S-6015	N/A	N/A	N/A
Destruction Efficiency	Condition #24921 part 8	N		Maintain HC and CO destruction efficiency of at least 98% on a mass basis	Condition #24921 part 8	P/C/E	design
	Condition #24921 part 9 and part 10	Ν		See permit condition available in Section VI	#24921 part 9 & part 10	P/M	Recordkeeping

# Table VII.A.2.1 Combustion Applicable Limits and Compliance Monitoring Requirements

### Flares

#### S-6010 LSFO Flare, S-6012 V-282 South Isomax Flare, S-6013 North Isomax Flare, S-6015 LSFO Elevated Flare, S-6016 FCC Flare V-731, S-6017 Alkane Flare, SRU S-6019 Alky-Poly Flare, S-6039 Flare V-3501

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
Fugitiive	Condition #24921 parts 12- 20	Ν		Fugitive emissions from S- 6015 are to comply with a leak standard of 100ppm TOC at any valves, flanges, and connectors; a maximum of 500ppm TOC at any pumps; and 0.649 tons of POC in any consecutive 365-day period. Full permit conditions available in Section VI.	BAAQMD Regulation 8-18-302 through 8-18-304, Condition #24921 part 20 8-18-304	P/M/Q	Recordkeeping

### Table VII.A.3.1 Combustion furnaces)

# Table VII.A.3.1 Combustion Applicable Limits and Compliance Monitoring Requirements

### **Furnaces for which both BAAQMD Regulation 9 Rule 10 and NSPS do not apply**

#### S-4107 F-1 Heat Treating Furnace # 1 Boiler Shop (Post Weld Heat Treating Furnace), S-4192 F-2170 Tail Gas Heater #1 SRU, S-4193 F-2270 Tail Gas Heater #2 SRU, S-4194 F-2370 Tail Gas Heater #3 SRU

Type of Citation of FE Future Limit Monitoring Monitoring Monitoring Limit Limit Y/N Effective Requirement Frequency Туре Date Citation (P/C/N)Opacity SIP 6-301 Y Ringelmann No. 1 for no SIP 6-601 Ν None BAAQMD BAAQMD 6-1more than 3 minutes/hour 6-1-301 601 FP SIP 6-305 Visible Particulates SIP 6-601 P/E Visual Y BAAQMD BAAQMD 6-1-Inspection 6-1-305 601 SIP 6-310 Y 0.15 grain/dscf None Ν None BAAQMD 6-1-310 SIP 6-310.3 0.15 grain/dscf @ 6% O2 Υ None Ν None BAAQMD 6-1-310.3

Table VII.A.3.2 Combustion (Furnaces)

 Table VII.A.3.2 Combustion

 Applicable Limits and Compliance Monitoring Requirements

#### Furnaces for which BAAQMD Regulation 9 Rule 10 and NSPS Subpart J both apply

S-4032 F-101 FCC GHT #3 Cat Furnace, S-4033 F-102 Penhex Isom #3 Cat Furnace, S-4039 F-3560 #4 Cat Furnace, S-4040 F-3570 #4 Cat Furnace, S-4041 F-3580 #4 Cat Furnace, S-4042 F-550 #5 Cat Furnace, S-4043 F-560 #5 Cat Furnace, S-4044 F-570 #5 Cat Furnace, S-4045 F-580 #5 Cat Furnace, S-4046 F-1 H.O. Heater-Asphalt Plant, S-4059 F-247 Furnace JHT MDH LSFO-W, S-4060 F-210 A&B Furnace JHT MDH LSFO-W, S-4061 F-410 #5 Naphtha Hydrotreater LSFO-W, S-4062 F-447 #5 Naphtha Hydrotreater LSFO-W, S-4068 F-1610, DHT (old VGO) Furnace LSFO-E, S-4069 F-1670 Aromatic Saturator (Formerly VGO F-1660) DHT Furnace LSFO-E, S-4070 F-1100A 4 Crude LSFO-E, S-4071 F-1100B 4 Crude LSFO-E, S-4072 F-1160 4 Crude LSFO-E, S-4153 F-110 Asphalt Solution Heater SDA Isomax, S-4154 F-120 Asphalt Solution Heater SDA Isomax, S-4155 F-135 Hot Oil Furnace SDA Rose DAO Solution Heater, S-4156 F-320 Naphtha Vaporizer H2 Plant Isomax, S-4157 F-330 Naphtha Vaporizer H2 Plant, Isomax, S-4158 F-340 Natural Gas Heater H2 Plant, Isomax, S-4162 F-520 TKN Feed Furnace Isomax, S-4163 F-530 TKN Feed Furnace Isomax, S-4164 F-630 Isocracker Feed Furnace Isomax, S-4165 F-620 Isocracker Feed Furnace Isomax, S-4166 F-610 Isocracker Feed Furnace Isomax, S-4167 F-710 TKC Fractionator Isomax, S-4330 F1610 HNHF Reactor RLOP 16 Plant abated by A-0065 SCR, S-4331 F-1310 LNHF Reactor RLOP abated by A-0065 SCR, S-4332 F1360 Hot Oil Furnace RLOP abated by A-0065 SCR, S-4333 F-1750 TKC Vacuum Furnace abated by A-0066 SCR, S-4334 F-1200 Furnace LNC Atmos. RLOP 12 Plant abated by A-0066 SCR, S-4335 F-1250 Furnace LNC Vac. RLOP 12 Plant abated by A-0066 SCR, S-4336 F-1410 HNC Reactor RLOP abated by A-0067 SCR, S-4337 F-1500 HNC Atmos. RLOP abated by A-0067 SCR, S-4338 F-1550, HNC Vac. RLOP abated by A-0067 SCR, S-4339 F-1110

LNC Reactor RLOP abated by A-0067 SCR

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
NOx	9-10-301	Ν	7/1/02	Refinery-wide emissions (excluding CO Boilers) 0.033 lbs NOx/ MMBTU	Conditions: #21232 (applies to all but S-4154, S-4158, S-4188, S-4189, S-4068, S-4069) condition #16679 part 4 S-41709-10-502	С	СЕМ

 Table VII.A.3.2 Combustion

 Applicable Limits and Compliance Monitoring Requirements

#### Furnaces for which BAAQMD Regulation 9 Rule 10 and NSPS Subpart J both apply

S-4032 F-101 FCC GHT #3 Cat Furnace, S-4033 F-102 Penhex Isom #3 Cat Furnace, S-4039 F-3560 #4 Cat Furnace, S-4040 F-3570 #4 Cat Furnace, S-4041 F-3580 #4 Cat Furnace, S-4042 F-550 #5 Cat Furnace, S-4043 F-560 #5 Cat Furnace, S-4044 F-570 #5 Cat Furnace, S-4045
F-580 #5 Cat Furnace, S-4046 F-1 H.O. Heater-Asphalt Plant, S-4059 F-247 Furnace JHT MDH LSFO-W, S-4060 F-210 A&B Furnace JHT MDH LSFO-W, S-4061 F-410 #5 Naphtha Hydrotreater LSFO-W, S-4062 F-447 #5 Naphtha Hydrotreater LSFO-W, S-4068 F-1610, DHT (old VGO) Furnace LSFO-E, S-4069 F-1670 Aromatic Saturator (Formerly VGO F-1660) DHT Furnace LSFO-E, S-4070 F-1100A 4
Crude LSFO-E, S-4071 F-1100B 4 Crude LSFO-E, S-4072 F-1160 4 Crude LSFO-E, S-4153 F-110 Asphalt Solution Heater SDA Isomax, S-4154 F-120 Asphalt Solution Heater SDA Isomax, S-4155 F-135 Hot Oil Furnace SDA Rose DAO Solution Heater, S-4156 F-320 Naphtha Vaporizer H2 Plant Isomax,

S-4157 F-330 Naphtha Vaporizer H2 Plant, Isomax, S-4158 F-340 Natural Gas Heater H2 Plant, Isomax, S-4162 F-520 TKN Feed Furnace Isomax, S-4163 F-530 TKN Feed Furnace Isomax, S-4164 F-630
Isocracker Feed Furnace Isomax, S-4165 F-620 Isocracker Feed Furnace Isomax, S-4166 F-610 Isocracker Feed Furnace Isomax, S-4167 F-710 TKC Fractionator Isomax, S-4330 F1610 HNHF Reactor RLOP 16
Plant abated by A-0065 SCR, S-4331 F-1310 LNHF Reactor RLOP abated by A-0065 SCR, S-4332 F1360
Hot Oil Furnace RLOP abated by A-0065 SCR, S-4333 F-1750 TKC Vacuum Furnace abated by A-0066
SCR, S-4334 F-1200 Furnace LNC Atmos. RLOP 12 Plant abated by A-0066 SCR, S-4335 F-1250 Furnace LNC Vac. RLOP 12 Plant abated by

A-0066 SCR, S-4336 F-1410 HNC Reactor RLOP abated by A-0067 SCR, S-4337 F-1500 HNC Atmos. RLOP abated by A-0067 SCR, S-4338 F-1550, HNC Vac. RLOP abated by A-0067 SCR, S-4339 F-1110 LNC Reactor RLOP abated by A-0067 SCR

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
NOx	9-10-301	N		Refinery-wide emissions (excluding CO Boilers) 0.033 lbs NOx/ MMBTU	#21232 parts 4, 5, 6, 7 applies to S-4154, S-4158, S-4188, S-4189, S-4068, S-4069	P/semi-annual	Source testing
NOx	9-10-301	Ν		Refinery-wide emissions (excluding CO Boilers) 0.033 lbs NOx/ MMBTU	#8773 Part 3 S-4155 #469 Part 3.A S-4330, S-4331, S-4332, S-4333, S-4334, S-4335, S-4336, S-4337, S-4338, S-4339	С	CEMs

 Table VII.A.3.2 Combustion

 Applicable Limits and Compliance Monitoring Requirements

#### Furnaces for which BAAQMD Regulation 9 Rule 10 and NSPS Subpart J both apply

S-4032 F-101 FCC GHT #3 Cat Furnace, S-4033 F-102 Penhex Isom #3 Cat Furnace, S-4039 F-3560 #4 Cat Furnace, S-4040 F-3570 #4 Cat Furnace, S-4041 F-3580 #4 Cat Furnace, S-4042 F-550 #5 Cat Furnace, S-4043 F-560 #5 Cat Furnace, S-4044 F-570 #5 Cat Furnace, S-4045 F-580 #5 Cat Furnace, S-4046 F-1 H.O. Heater-Asphalt Plant, S-4059 F-247 Furnace JHT MDH LSFO-W, S-4060 F-210 A&B Furnace JHT MDH LSFO-W, S-4061 F-410 #5 Naphtha Hydrotreater LSFO-W, S-4062 F-447 #5 Naphtha Hydrotreater LSFO-W, S-4068 F-1610, DHT (old VGO) Furnace LSFO-E, S-4069 F-1670 Aromatic Saturator (Formerly VGO F-1660) DHT Furnace LSFO-E, S-4070 F-1100A 4 Crude LSFO-E, S-4071 F-1100B 4 Crude LSFO-E, S-4072 F-1160 4 Crude LSFO-E, S-4153 F-110 Asphalt Solution Heater SDA Isomax, S-4154 F-120 Asphalt Solution Heater SDA Isomax, S-4155 F-135 Hot Oil Furnace SDA Rose DAO Solution Heater, S-4156 F-320 Naphtha Vaporizer H2 Plant Isomax, S-4157 F-330 Naphtha Vaporizer H2 Plant, Isomax, S-4158 F-340 Natural Gas Heater H2 Plant, Isomax, S-4162 F-520 TKN Feed Furnace Isomax, S-4163 F-530 TKN Feed Furnace Isomax, S-4164 F-630 Isocracker Feed Furnace Isomax, S-4165 F-620 Isocracker Feed Furnace Isomax, S-4166 F-610 Isocracker Feed Furnace Isomax, S-4167 F-710 TKC Fractionator Isomax, S-4330 F1610 HNHF Reactor RLOP 16 Plant abated by A-0065 SCR, S-4331 F-1310 LNHF Reactor RLOP abated by A-0065 SCR, S-4332 F1360 Hot Oil Furnace RLOP abated by A-0065 SCR, S-4333 F-1750 TKC Vacuum Furnace abated by A-0066 SCR, S-4334 F-1200 Furnace LNC Atmos, RLOP 12 Plant abated by A-0066 SCR, S-4335 F-1250 Furnace LNC Vac. RLOP 12 Plant abated by A-0066 SCR, S-4336 F-1410 HNC Reactor RLOP abated by A-0067 SCR, S-4337 F-1500 HNC Atmos. RLOP abated by A-0067 SCR, S-4338 F-1550, HNC Vac. RLOP abated by A-0067 SCR, S-4339 F-1110

by A-0067 SCR, S-4338 F-1550, HNC Vac. RLOP abated by A-0067 SCR, S-4339 F LNC Reactor RLOP abated by A-0067 SCR

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
NOx	9-10-303	Y		Federal interim emissions Refinery-wide emissions (excluding CO Boilers) 0.20 lbs NOx/MMBTU	#21232 (applies to all but S-4154, S-4158, S-4188, S-4189, S-4068, S-4069) #16679 Part 4 S-4170 9-10-502	С	СЕМ

 Table VII.A.3.2 Combustion

 Applicable Limits and Compliance Monitoring Requirements

#### Furnaces for which BAAQMD Regulation 9 Rule 10 and NSPS Subpart J both apply

S-4032 F-101 FCC GHT #3 Cat Furnace, S-4033 F-102 Penhex Isom #3 Cat Furnace, S-4039 F-3560 #4 Cat Furnace, S-4040 F-3570 #4 Cat Furnace, S-4041 F-3580 #4 Cat Furnace, S-4042 F-550 #5 Cat Furnace, S-4043 F-560 #5 Cat Furnace, S-4044 F-570 #5 Cat Furnace, S-4045
F-580 #5 Cat Furnace, S-4046 F-1 H.O. Heater-Asphalt Plant, S-4059 F-247 Furnace JHT MDH LSFO-W, S-4060 F-210 A&B Furnace JHT MDH LSFO-W, S-4061 F-410 #5 Naphtha Hydrotreater LSFO-W, S-4062 F-447 #5 Naphtha Hydrotreater LSFO-W, S-4068 F-1610, DHT (old VGO) Furnace LSFO-E, S-4069 F-1670 Aromatic Saturator (Formerly VGO F-1660) DHT Furnace LSFO-E, S-4070 F-1100A 4
Crude LSFO-E, S-4071 F-1100B 4 Crude LSFO-E, S-4072 F-1160 4 Crude LSFO-E, S-4153 F-110 Asphalt Solution Heater SDA Isomax, S-4154 F-120 Asphalt Solution Heater SDA Isomax, S-4155 F-135 Hot Oil

Furnace SDA Rose DAO Solution Heater, S-4156 F-320 Naphtha Vaporizer H2 Plant Isomax, S-4157 F-330 Naphtha Vaporizer H2 Plant, Isomax, S-4158 F-340 Natural Gas Heater H2 Plant, Isomax,

S-4162 F-520 TKN Feed Furnace Isomax, S-4163 F-530 TKN Feed Furnace Isomax, S-4164 F-630 Isocracker Feed Furnace Isomax, S-4165 F-620 Isocracker Feed Furnace Isomax, S-4166 F-610 Isocracker Feed Furnace Isomax, S-4167 F-710 TKC Fractionator Isomax, S-4330 F1610 HNHF Reactor RLOP 16 Plant abated by A-0065 SCR, S-4331 F-1310 LNHF Reactor RLOP abated by A-0065 SCR, S-4332 F1360 Hot Oil Furnace RLOP abated by A-0065 SCR, S-4333 F-1750 TKC Vacuum Furnace abated by A-0066 SCR, S-4334 F-1200 Furnace LNC Atmos. RLOP 12 Plant abated by A-0066 SCR, S-4335 F-1250 Furnace LNC Vac. RLOP 12 Plant abated by

A-0066 SCR, S-4336 F-1410 HNC Reactor RLOP abated by A-0067 SCR, S-4337 F-1500 HNC Atmos. RLOP abated by A-0067 SCR, S-4338 F-1550, HNC Vac. RLOP abated by A-0067 SCR, S-4339 F-1110 LNC Reactor RLOP abated by A-0067 SCR

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
NOx	9-10-303	Y		Federal interim emissions refinery-wide emissions (excluding CO Boilers) 0.20 lbs NOx/MMBTU	#8773 Part 3 S-4155 #469 Part 3.A S-4330, S-4331, S-4332, S-4333, S-4334, S-4335, S-4336, S-4337, S-4338, S-4339	С	CEMs
NOx	9-10-303	Y		Federal interim emissions refinery-wide emissions (excluding CO Boilers) 0.20 lbs NOx/MMBTU	#21232 (applies to S- 4154, S-4158, S- 4188, S-4189, S- 4068, S-4069 9-10-502	P semi-annual	Source testing

 Table VII.A.3.2 Combustion

 Applicable Limits and Compliance Monitoring Requirements

#### Furnaces for which BAAQMD Regulation 9 Rule 10 and NSPS Subpart J both apply

S-4032 F-101 FCC GHT #3 Cat Furnace, S-4033 F-102 Penhex Isom #3 Cat Furnace, S-4039 F-3560 #4 Cat Furnace, S-4040 F-3570 #4 Cat Furnace, S-4041 F-3580 #4 Cat Furnace, S-4042 F-550 #5 Cat Furnace, S-4043 F-560 #5 Cat Furnace, S-4044 F-570 #5 Cat Furnace, S-4045 F-580 #5 Cat Furnace, S-4046 F-1 H.O. Heater-Asphalt Plant, S-4059 F-247 Furnace JHT MDH LSFO-W,

S-4060 F-210 A&B Furnace JHT MDH LSFO-W, S-4061 F-410 #5 Naphtha Hydrotreater LSFO-W, S-4062 F-447 #5 Naphtha Hydrotreater LSFO-W, S-4068 F-1610, DHT (old VGO) Furnace LSFO-E, S-4069 F-1670 Aromatic Saturator (Formerly VGO F-1660) DHT Furnace LSFO-E, S-4070 F-1100A 4 Crude LSFO-E, S-4071 F-1100B 4 Crude LSFO-E, S-4072 F-1160 4 Crude LSFO-E, S-4153 F-110 Asphalt Solution Heater SDA Isomax, S-4154 F-120 Asphalt Solution Heater SDA Isomax, S-4155 F-135 Hot Oil

Furnace SDA Rose DAO Solution Heater, S-4156 F-320 Naphtha Vaporizer H2 Plant Isomax, S-4157 F-330 Naphtha Vaporizer H2 Plant, Isomax, S-4158 F-340 Natural Gas Heater H2 Plant, Isomax,

S-4162 F-520 TKN Feed Furnace Isomax, S-4163 F-530 TKN Feed Furnace Isomax, S-4164 F-630 Isocracker Feed Furnace Isomax, S-4165 F-620 Isocracker Feed Furnace Isomax, S-4166 F-610 Isocracker Feed Furnace Isomax, S-4167 F-710 TKC Fractionator Isomax, S-4330 F1610 HNHF Reactor RLOP 16 Plant abated by A-0065 SCR, S-4331 F-1310 LNHF Reactor RLOP abated by A-0065 SCR, S-4332 F1360 Hot Oil Furnace RLOP abated by A-0065 SCR, S-4333 F-1750 TKC Vacuum Furnace abated by A-0066 SCR, S-4334 F-1200 Furnace LNC Atmos. RLOP 12 Plant abated by A-0066 SCR, S-4335 F-1250 Furnace LNC Vac. RLOP 12 Plant abated by

A-0066 SCR, S-4336 F-1410 HNC Reactor RLOP abated by A-0067 SCR, S-4337 F-1500 HNC Atmos. RLOP abated by A-0067 SCR, S-4338 F-1550, HNC Vac. RLOP abated by A-0067 SCR, S-4339 F-1110 LNC Reactor RLOP abated by A-0067 SCR

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
NOx	Consent decree sections F.33 & F.36 and P/O condition 23872 parts 1 and 3	Y		0.026 lbs NOx/MMBtu	Consent decree Sections F.38 & F.39 and P/O condtions 23872 part 3 for S-4070	С	CEM
NOx	Consent decree sections F.33 & F.36 and P/O condition 23872 parts 1 and 3	Y		0.027 lbs NOx/MMBtu	Consent decree Sections F.38 & F.39 and P/O condtions 23872 part 3 for S-4071	С	CEM
NOx	Consent decree sections F.33 & F.36 and P/O condition 23872 parts 1 and 3	Y		0.029 lbs NOx/MMBtu	Consent decree Sections F.38 & F.39 and P/O condtions 23872 part 3 for S-4072	С	СЕМ

 Table VII.A.3.2 Combustion

 Applicable Limits and Compliance Monitoring Requirements

#### Furnaces for which BAAQMD Regulation 9 Rule 10 and NSPS Subpart J both apply

S-4032 F-101 FCC GHT #3 Cat Furnace, S-4033 F-102 Penhex Isom #3 Cat Furnace, S-4039 F-3560 #4 Cat Furnace, S-4040 F-3570 #4 Cat Furnace, S-4041 F-3580 #4 Cat Furnace, S-4042 F-550 #5 Cat Furnace, S-4043 F-560 #5 Cat Furnace, S-4044 F-570 #5 Cat Furnace, S-4045
F-580 #5 Cat Furnace, S-4046 F-1 H.O. Heater-Asphalt Plant, S-4059 F-247 Furnace JHT MDH LSFO-W, S-4060 F-210 A&B Furnace JHT MDH LSFO-W, S-4061 F-410 #5 Naphtha Hydrotreater LSFO-W, S-4062 F-447 #5 Naphtha Hydrotreater LSFO-W, S-4068 F-1610, DHT (old VGO) Furnace LSFO-E, S-4069 F-1670 Aromatic Saturator (Formerly VGO F-1660) DHT Furnace LSFO-E, S-4070 F-1100A 4
Crude LSFO-E, S-4071 F-1100B 4 Crude LSFO-E, S-4072 F-1160 4 Crude LSFO-E, S-4153 F-110 Asphalt Solution Heater SDA Isomax, S-4154 F-120 Asphalt Solution Heater SDA Isomax, S-4155 F-135 Hot Oil Furnace SDA Rose DAO Solution Heater, S-4158 F-320 Naphtha Vaporizer H2 Plant, Isomax, S-4157 F-330 Naphtha Vaporizer H2 Plant, Isomax, S-4163 F-530 TKN Feed Furnace Isomax, S-4164 F-630
Isocracker Feed Furnace Isomax, S-4165 F-620 Isocracker Feed Furnace Isomax, S-4166 F-610 Isocracker Feed Furnace Isomax, S-4167 F-710 TKC Fractionator Isomax, S-4330 F1610 HNHF Reactor RLOP 16

Plant abated by A-0065 SCR, S-4331 F-1310 LNHF Reactor RLOP abated by A-0065 SCR, S-4332 F1360 Hot Oil Furnace RLOP abated by A-0065 SCR, S-4333 F-1750 TKC Vacuum Furnace abated by A-0066 SCR, S-4334 F-1200 Furnace LNC Atmos. RLOP 12 Plant abated by A-0066 SCR, S-4335 F-1250 Furnace LNC Vac. RLOP 12 Plant abated by

A-0066 SCR, S-4336 F-1410 HNC Reactor RLOP abated by A-0067 SCR, S-4337 F-1500 HNC Atmos. RLOP abated by A-0067 SCR, S-4338 F-1550, HNC Vac. RLOP abated by A-0067 SCR, S-4339 F-1110 LNC Reactor RLOP abated by A-0067 SCR

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
NOx	Consent decree sections F.33 & F.36 and P/O condition 23872 parts 1 and 3	Y		0.035 lbs NOx/MMBtu	Consent decree Sections F.38 & F.39 and P/O condtions 23872 part 3 for S-4158	P/semi-annual	Source testing
NOx	Consent decree sections F.33 & F.36 and P/O condition 23872 parts 1 and 3	Y		0.040 lbs NOx/MMBtu	Consent decree Sections F.38 & F.39 and P/O condtions 23872 part 3 for S- 4042, S-4043, S- 4167, S-4044, S- 4045	С	СЕМ

 Table VII.A.3.2 Combustion

 Applicable Limits and Compliance Monitoring Requirements

#### Furnaces for which BAAQMD Regulation 9 Rule 10 and NSPS Subpart J both apply

S-4032 F-101 FCC GHT #3 Cat Furnace, S-4033 F-102 Penhex Isom #3 Cat Furnace, S-4039 F-3560 #4 Cat Furnace, S-4040 F-3570 #4 Cat Furnace, S-4041 F-3580 #4 Cat Furnace, S-4042 F-550 #5 Cat Furnace, S-4043 F-560 #5 Cat Furnace, S-4044 F-570 #5 Cat Furnace, S-4045 F-580 #5 Cat Furnace, S-4046 F-1 H.O. Heater-Asphalt Plant, S-4059 F-247 Furnace JHT MDH LSFO-W,

S-4060 F-210 A&B Furnace JHT MDH LSFO-W, S-4061 F-410 #5 Naphtha Hydrotreater LSFO-W, S-4062 F-447 #5 Naphtha Hydrotreater LSFO-W, S-4068 F-1610, DHT (old VGO) Furnace LSFO-E, S-4069 F-1670 Aromatic Saturator (Formerly VGO F-1660) DHT Furnace LSFO-E, S-4070 F-1100A 4 Crude LSFO-E, S-4071 F-1100B 4 Crude LSFO-E, S-4072 F-1160 4 Crude LSFO-E, S-4153 F-110 Asphalt Solution Heater SDA Isomax, S-4154 F-120 Asphalt Solution Heater SDA Isomax, S-4155 F-135 Hot Oil Furnace SDA Rose DAO Solution Heater, S-4156 F-320 Naphtha Vaporizer H2 Plant Isomax,

S-4157 F-330 Naphtha Vaporizer H2 Plant, Isomax, S-4158 F-340 Natural Gas Heater H2 Plant, Isomax,

S-4162 F-520 TKN Feed Furnace Isomax, S-4163 F-530 TKN Feed Furnace Isomax, S-4164 F-630 Isocracker Feed Furnace Isomax, S-4165 F-620 Isocracker Feed Furnace Isomax, S-4166 F-610 Isocracker Feed Furnace Isomax, S-4167 F-710 TKC Fractionator Isomax, S-4330 F1610 HNHF Reactor RLOP 16 Plant abated by A-0065 SCR, S-4331 F-1310 LNHF Reactor RLOP abated by A-0065 SCR, S-4332 F1360 Hot Oil Furnace RLOP abated by A-0065 SCR, S-4333 F-1750 TKC Vacuum Furnace abated by A-0066 SCR, S-4334 F-1200 Furnace LNC Atmos. RLOP 12 Plant abated by A-0066 SCR, S-4335 F-1250 Furnace LNC Vac. RLOP 12 Plant abated by

A-0066 SCR, S-4336 F-1410 HNC Reactor RLOP abated by A-0067 SCR, S-4337 F-1500 HNC Atmos. RLOP abated by A-0067 SCR, S-4338 F-1550, HNC Vac. RLOP abated by A-0067 SCR, S-4339 F-1110 LNC Reactor RLOP abated by A-0067 SCR

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
NOx	Consent decree sections F.33 & F.36 and P/O condition 23872 parts 1 and 3	Y		0.060 lbs NOx/MMBtu	Consent decree Sections F.38 & F.39 and P/O condtions 23872 part 3 for S-4059	С	СЕМ
NOx	Consent decree sections F.33 & F.36 and P/O condition 23872 parts 1 and 3	Y		0.068 lbs NOx/MMBtu	Consent decree Sections F.38 & F.39 and P/O condtions 23872 part 3 for S- 4061, S-4062	С	СЕМ
NOx	Consent decree sections F.33 & F.36 and P/O condition 23872 parts 1 and 3	Y		0.021 lbs NOx/MMBtu	Consent decree Sections F.38 & F.39 and P/O condtions 23872 part 3 for S-4170	С	СЕМ

 Table VII.A.3.2 Combustion

 Applicable Limits and Compliance Monitoring Requirements

#### Furnaces for which BAAQMD Regulation 9 Rule 10 and NSPS Subpart J both apply

S-4032 F-101 FCC GHT #3 Cat Furnace, S-4033 F-102 Penhex Isom #3 Cat Furnace, S-4039 F-3560 #4 Cat Furnace, S-4040 F-3570 #4 Cat Furnace, S-4041 F-3580 #4 Cat Furnace, S-4042 F-550 #5 Cat Furnace, S-4043 F-560 #5 Cat Furnace, S-4044 F-570 #5 Cat Furnace, S-4045 F-580 #5 Cat Furnace, S-4046 F-1 H.O. Heater-Asphalt Plant, S-4059 F-247 Furnace JHT MDH LSFO-W,

S-4060 F-210 A&B Furnace JHT MDH LSFO-W, S-4061 F-410 #5 Naphtha Hydrotreater LSFO-W, S-4062 F-447 #5 Naphtha Hydrotreater LSFO-W, S-4068 F-1610, DHT (old VGO) Furnace LSFO-E, S-4069 F-1670 Aromatic Saturator (Formerly VGO F-1660) DHT Furnace LSFO-E, S-4070 F-1100A 4 Crude LSFO-E, S-4071 F-1100B 4 Crude LSFO-E, S-4072 F-1160 4 Crude LSFO-E, S-4153 F-110 Asphalt Solution Heater SDA Isomax, S-4154 F-120 Asphalt Solution Heater SDA Isomax, S-4155 F-135 Hot Oil

Furnace SDA Rose DAO Solution Heater, S-4156 F-320 Naphtha Vaporizer H2 Plant Isomax, S-4157 F-330 Naphtha Vaporizer H2 Plant, Isomax, S-4158 F-340 Natural Gas Heater H2 Plant, Isomax,

S-4162 F-520 TKN Feed Furnace Isomax, S-4163 F-530 TKN Feed Furnace Isomax, S-4164 F-630 Isocracker Feed Furnace Isomax, S-4165 F-620 Isocracker Feed Furnace Isomax, S-4166 F-610 Isocracker Feed Furnace Isomax, S-4167 F-710 TKC Fractionator Isomax, S-4330 F1610 HNHF Reactor RLOP 16 Plant abated by A-0065 SCR, S-4331 F-1310 LNHF Reactor RLOP abated by A-0065 SCR, S-4332 F1360 Hot Oil Furnace RLOP abated by A-0065 SCR, S-4333 F-1750 TKC Vacuum Furnace abated by A-0066 SCR, S-4334 F-1200 Furnace LNC Atmos. RLOP 12 Plant abated by A-0066 SCR, S-4335 F-1250 Furnace LNC Vac. RLOP 12 Plant abated by

A-0066 SCR, S-4336 F-1410 HNC Reactor RLOP abated by A-0067 SCR, S-4337 F-1500 HNC Atmos. RLOP abated by A-0067 SCR, S-4338 F-1550, HNC Vac. RLOP abated by A-0067 SCR, S-4339 F-1110 LNC Reactor RLOP abated by A-0067 SCR

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
NOx	Consent decree sections F.33 & F.36 and P/O condition 23872 parts 1 and 3	Y		0.023 lbs NOx/MMBtu	Consent decree Sections F.38 & F.39 and P/O condtions 23872 part 3 for S-4171	С	СЕМ
NOx	Consent decree sections F.33 & F.36 and P/O condition 23872 parts 1 and 3	Y		0.034 lbs NOx/MMBtu	Consent decree Sections F.38 & F.39 and P/O condtions 23872 part 3 for S-4168	С	CEM
NOx	Consent decree sections F.33 & F.36 and P/O condition 23872 parts 1 and 3	Y		0.033 lbs NOx/MMBtu	Consent decree Sections F.38 & F.39 and P/O condtions 23872 part 3 for S-4169	С	СЕМ

 Table VII.A.3.2 Combustion

 Applicable Limits and Compliance Monitoring Requirements

#### Furnaces for which BAAQMD Regulation 9 Rule 10 and NSPS Subpart J both apply

S-4032 F-101 FCC GHT #3 Cat Furnace, S-4033 F-102 Penhex Isom #3 Cat Furnace, S-4039 F-3560 #4 Cat Furnace, S-4040 F-3570 #4 Cat Furnace, S-4041 F-3580 #4 Cat Furnace, S-4042 F-550 #5 Cat Furnace, S-4043 F-560 #5 Cat Furnace, S-4044 F-570 #5 Cat Furnace, S-4045 F-580 #5 Cat Furnace, S-4046 F-1 H.O. Heater-Asphalt Plant, S-4059 F-247 Furnace JHT MDH LSFO-W, S-4060 F-210 A&B Furnace JHT MDH LSFO-W, S-4061 F-410 #5 Naphtha Hydrotreater LSFO-W, S-4062 F-447 #5 Naphtha Hydrotreater LSFO-W, S-4068 F-1610, DHT (old VGO) Furnace LSFO-E, S-4069 F-1670 Aromatic Saturator (Formerly VGO F-1660) DHT Furnace LSFO-E, S-4070 F-1100A 4 Crude LSFO-E, S-4071 F-1100B 4 Crude LSFO-E, S-4072 F-1160 4 Crude LSFO-E, S-4153 F-110 Asphalt Solution Heater SDA Isomax, S-4154 F-120 Asphalt Solution Heater SDA Isomax, S-4155 F-135 Hot Oil Furnace SDA Rose DAO Solution Heater, S-4156 F-320 Naphtha Vaporizer H2 Plant Isomax, S-4157 F-330 Naphtha Vaporizer H2 Plant, Isomax, S-4158 F-340 Natural Gas Heater H2 Plant, Isomax, S-4162 F-520 TKN Feed Furnace Isomax, S-4163 F-530 TKN Feed Furnace Isomax, S-4164 F-630 Isocracker Feed Furnace Isomax, S-4165 F-620 Isocracker Feed Furnace Isomax, S-4166 F-610 Isocracker Feed Furnace Isomax, S-4167 F-710 TKC Fractionator Isomax, S-4330 F1610 HNHF Reactor RLOP 16 Plant abated by A-0065 SCR, S-4331 F-1310 LNHF Reactor RLOP abated by A-0065 SCR, S-4332 F1360 Hot Oil Furnace RLOP abated by A-0065 SCR, S-4333 F-1750 TKC Vacuum Furnace abated by A-0066

SCR, S-4334 F-1200 Furnace LNC Atmos. RLOP 12 Plant abated by A-0066 SCR, S-4335 F-1250 Furnace LNC Vac. RLOP 12 Plant abated by

A-0066 SCR, S-4336 F-1410 HNC Reactor RLOP abated by A-0067 SCR, S-4337 F-1500 HNC Atmos. RLOP abated by A-0067 SCR, S-4338 F-1550, HNC Vac. RLOP abated by A-0067 SCR, S-4339 F-1110 LNC Reactor RLOP abated by A-0067 SCR

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
NOx	Consent decree sections F.33 & F.36 and P/O condition 23872 parts 1 and 3	Y		0.035 lbs NOx/MMBtu	Consent decree Sections F.38 & F.39 and P/O condtions 23872 part 3 for S- 4159, S-4160	С	СЕМ
NOx	60.44(a)(1)			0.2 lb NOx/Mmbtu limit for gaseous fossil fuel burned	9-10-502.1 federal requirement 60.45 subsumed under Reg. 9 Rule 10 see Table IXB S-4070, S-4071, S-4072	С	СЕМ

 Table VII.A.3.2 Combustion

 Applicable Limits and Compliance Monitoring Requirements

#### Furnaces for which BAAQMD Regulation 9 Rule 10 and NSPS Subpart J both apply

S-4032 F-101 FCC GHT #3 Cat Furnace, S-4033 F-102 Penhex Isom #3 Cat Furnace, S-4039 F-3560 #4 Cat Furnace, S-4040 F-3570 #4 Cat Furnace, S-4041 F-3580 #4 Cat Furnace, S-4042 F-550 #5 Cat Furnace, S-4043 F-560 #5 Cat Furnace, S-4044 F-570 #5 Cat Furnace, S-4045
F-580 #5 Cat Furnace, S-4046 F-1 H.O. Heater-Asphalt Plant, S-4059 F-247 Furnace JHT MDH LSFO-W, S-4060 F-210 A&B Furnace JHT MDH LSFO-W, S-4061 F-410 #5 Naphtha Hydrotreater LSFO-W, S-4062 F-447 #5 Naphtha Hydrotreater LSFO-W, S-4068 F-1610, DHT (old VGO) Furnace LSFO-E, S-4069 F-1670 Aromatic Saturator (Formerly VGO F-1660) DHT Furnace LSFO-E, S-4070 F-1100A 4

Crude LSFO-E, S-4071 F-1100B 4 Crude LSFO-E, S-4072 F-1160 4 Crude LSFO-E, S-4153 F-110 Asphalt Solution Heater SDA Isomax, S-4154 F-120 Asphalt Solution Heater SDA Isomax, S-4155 F-135 Hot Oil

Furnace SDA Rose DAO Solution Heater, S-4156 F-320 Naphtha Vaporizer H2 Plant Isomax,

S-4157 F-330 Naphtha Vaporizer H2 Plant, Isomax, S-4158 F-340 Natural Gas Heater H2 Plant, Isomax, S-4162 F-520 TKN Feed Furnace Isomax, S-4163 F-530 TKN Feed Furnace Isomax, S-4164 F-630
Isocracker Feed Furnace Isomax, S-4165 F-620 Isocracker Feed Furnace Isomax, S-4166 F-610 Isocracker Feed Furnace Isomax, S-4167 F-710 TKC Fractionator Isomax, S-4330 F1610 HNHF Reactor RLOP 16
Plant abated by A-0065 SCR, S-4331 F-1310 LNHF Reactor RLOP abated by A-0065 SCR, S-4332 F1360
Hot Oil Furnace RLOP abated by A-0065 SCR, S-4333 F-1750 TKC Vacuum Furnace abated by A-0066
SCR, S-4334 F-1200 Furnace LNC Atmos. RLOP 12 Plant abated by A-0066 SCR, S-4335 F-1250 Furnace LNC Vac. RLOP 12 Plant abated by

A-0066 SCR, S-4336 F-1410 HNC Reactor RLOP abated by A-0067 SCR, S-4337 F-1500 HNC Atmos. RLOP abated by A-0067 SCR, S-4338 F-1550, HNC Vac. RLOP abated by A-0067 SCR, S-4339 F-1110 LNC Reactor RLOP abated by A-0067 SCR

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
NOx	60.44b(e)			0.1 lb NOx/MMBtu limit for combusting natural gas with waste/byproduct (includes refinery fuel gas)	9-10-502.1 federal requirement 60.48b subsumed under Reg. 9 Rule 10 see Table IXB S-4155	С	СЕМ
NOx	Condition 21232 part 5			0.035 lbs NOx/MMBtu established as an emission factor for this furnace	#21232 S-4158, S-4154	P Semi-annual	Source test
NOx	Condition #21232 part 5			0.14 NOx/MMBtu established as an emission factor for this furnace	21232 S-4068	P Semi-annual	Source test

 Table VII.A.3.2 Combustion

 Applicable Limits and Compliance Monitoring Requirements

#### Furnaces for which BAAQMD Regulation 9 Rule 10 and NSPS Subpart J both apply

S-4032 F-101 FCC GHT #3 Cat Furnace, S-4033 F-102 Penhex Isom #3 Cat Furnace, S-4039 F-3560 #4 Cat Furnace, S-4040 F-3570 #4 Cat Furnace, S-4041 F-3580 #4 Cat Furnace, S-4042 F-550 #5 Cat Furnace, S-4043 F-560 #5 Cat Furnace, S-4044 F-570 #5 Cat Furnace, S-4045 F-580 #5 Cat Furnace, S-4046 F-1 H.O. Heater-Asphalt Plant, S-4059 F-247 Furnace JHT MDH LSFO-W, S-4060 F-210 A&B Furnace JHT MDH LSFO-W, S-4061 F-410 #5 Naphtha Hydrotreater LSFO-W, S-4062 F-447 #5 Naphtha Hydrotreater LSFO-W, S-4068 F-1610, DHT (old VGO) Furnace LSFO-E, S-4069 F-1670 Aromatic Saturator (Formerly VGO F-1660) DHT Furnace LSFO-E, S-4070 F-1100A 4 Crude LSFO-E, S-4071 F-1100B 4 Crude LSFO-E, S-4072 F-1160 4 Crude LSFO-E, S-4153 F-110 Asphalt Solution Heater SDA Isomax, S-4154 F-120 Asphalt Solution Heater SDA Isomax, S-4155 F-135 Hot Oil Furnace SDA Rose DAO Solution Heater, S-4156 F-320 Naphtha Vaporizer H2 Plant Isomax, S-4157 F-330 Naphtha Vaporizer H2 Plant, Isomax, S-4158 F-340 Natural Gas Heater H2 Plant, Isomax, S-4162 F-520 TKN Feed Furnace Isomax, S-4163 F-530 TKN Feed Furnace Isomax, S-4164 F-630 Isocracker Feed Furnace Isomax, S-4165 F-620 Isocracker Feed Furnace Isomax, S-4166 F-610 Isocracker Feed Furnace Isomax, S-4167 F-710 TKC Fractionator Isomax, S-4330 F1610 HNHF Reactor RLOP 16 Plant abated by A-0065 SCR, S-4331 F-1310 LNHF Reactor RLOP abated by A-0065 SCR, S-4332 F1360 Hot Oil Furnace RLOP abated by A-0065 SCR, S-4333 F-1750 TKC Vacuum Furnace abated by A-0066 SCR, S-4334 F-1200 Furnace LNC Atmos, RLOP 12 Plant abated by A-0066 SCR, S-4335 F-1250 Furnace LNC Vac. RLOP 12 Plant abated by A-0066 SCR, S-4336 F-1410 HNC Reactor RLOP abated by A-0067 SCR, S-4337 F-1500 HNC Atmos. RLOP abated by A-0067 SCR, S-4338 F-1550, HNC Vac. RLOP abated by A-0067 SCR, S-4339 F-1110

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
NOx	Condition #21232 part 5			0.045 NOx/MMBtu established as an emission factor for this furnace	21232 S-4069	P Semi-annual	Source test
NOx	Condition #21232 part 5			0.25 NOx/MMBtu established as an emission factor for this furnace	21232 S-4188, S-4189	P Semi-annual	Source test
NOx	Condition #8773 Part 1a	Y		8.85 lb/hr for S-4155	#8773 Part 1	С	CEM

 Table VII.A.3.2 Combustion

 Applicable Limits and Compliance Monitoring Requirements

#### Furnaces for which BAAQMD Regulation 9 Rule 10 and NSPS Subpart J both apply

S-4032 F-101 FCC GHT #3 Cat Furnace, S-4033 F-102 Penhex Isom #3 Cat Furnace, S-4039 F-3560 #4 Cat Furnace, S-4040 F-3570 #4 Cat Furnace, S-4041 F-3580 #4 Cat Furnace, S-4042 F-550 #5 Cat Furnace, S-4043 F-560 #5 Cat Furnace, S-4044 F-570 #5 Cat Furnace, S-4045
F-580 #5 Cat Furnace, S-4046 F-1 H.O. Heater-Asphalt Plant, S-4059 F-247 Furnace JHT MDH LSFO-W, S-4060 F-210 A&B Furnace JHT MDH LSFO-W, S-4061 F-410 #5 Naphtha Hydrotreater LSFO-W, S-4062 F-447 #5 Naphtha Hydrotreater LSFO-W, S-4068 F-1610, DHT (old VGO) Furnace LSFO-E, S-4069 F-1670 Aromatic Saturator (Formerly VGO F-1660) DHT Furnace LSFO-E, S-4070 F-1100A 4

Crude LSFO-E, S-4071 F-1100B 4 Crude LSFO-E, S-4072 F-1160 4 Crude LSFO-E, S-4153 F-110 Asphalt Solution Heater SDA Isomax, S-4154 F-120 Asphalt Solution Heater SDA Isomax, S-4155 F-135 Hot Oil Furnace SDA Rose DAO Solution Heater, S-4156 F-320 Naphtha Vaporizer H2 Plant Isomax,

S-4157 F-330 Naphtha Vaporizer H2 Plant, Isomax, S-4158 F-340 Natural Gas Heater H2 Plant, Isomax, S-4162 F-520 TKN Feed Furnace Isomax, S-4163 F-530 TKN Feed Furnace Isomax, S-4164 F-630

Isocracker Feed Furnace Isomax, S-4165 F-620 Isocracker Feed Furnace Isomax, S-4166 F-610 Isocracker Feed Furnace Isomax, S-4167 F-710 TKC Fractionator Isomax, S-4330 F1610 HNHF Reactor RLOP 16 Plant abated by A-0065 SCR, S-4331 F-1310 LNHF Reactor RLOP abated by A-0065 SCR, S-4332 F1360 Hot Oil Furnace RLOP abated by A-0065 SCR, S-4333 F-1750 TKC Vacuum Furnace abated by A-0066 SCR, S-4334 F-1200 Furnace LNC Atmos. RLOP 12 Plant abated by A-0066 SCR, S-4335 F-1250 Furnace LNC Vac. RLOP 12 Plant abated by

A-0066 SCR, S-4336 F-1410 HNC Reactor RLOP abated by A-0067 SCR, S-4337 F-1500 HNC Atmos. RLOP abated by A-0067 SCR, S-4338 F-1550, HNC Vac. RLOP abated by A-0067 SCR, S-4339 F-1110 LNC Reactor RLOP abated by A-0067 SCR

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
NOx	Condition #469 Part 6.B	Y		8-hour average NOx at 3% O2 shall not exceed 40 ppm	#469 Part 3.A S-4330, S-4331, S-4332, S-4333, S-4334, S-4335, S-4336, S-4337, S-4338, S-4339, A-0065, A-0066, A-0067	С	СЕМ
02		Y	7/1/02	No limit	9-10-502 #21232 part 2 #16679 Part 4 S-4170	С	CEMs
02		N		No limit	#21232 parts 2 and 4B	С	O2 Monitors and annual accuracy test

 Table VII.A.3.2 Combustion

 Applicable Limits and Compliance Monitoring Requirements

#### Furnaces for which BAAQMD Regulation 9 Rule 10 and NSPS Subpart J both apply

S-4032 F-101 FCC GHT #3 Cat Furnace, S-4033 F-102 Penhex Isom #3 Cat Furnace, S-4039 F-3560 #4 Cat Furnace, S-4040 F-3570 #4 Cat Furnace, S-4041 F-3580 #4 Cat Furnace, S-4042 F-550 #5 Cat Furnace, S-4043 F-560 #5 Cat Furnace, S-4044 F-570 #5 Cat Furnace, S-4045 F-580 #5 Cat Furnace, S-4046 F-1 H.O. Heater-Asphalt Plant, S-4059 F-247 Furnace JHT MDH LSFO-W, S-4060 F-210 A&B Furnace JHT MDH LSFO-W, S-4061 F-410 #5 Naphtha Hydrotreater LSFO-W,

S-4062 F-447 #5 Naphtha Hydrotreater LSFO-W, S-4068 F-1610, DHT (old VGO) Furnace LSFO-E, S-4069 F-1670 Aromatic Saturator (Formerly VGO F-1660) DHT Furnace LSFO-E, S-4070 F-1100A 4 Crude LSFO-E, S-4071 F-1100B 4 Crude LSFO-E, S-4072 F-1160 4 Crude LSFO-E, S-4153 F-110 Asphalt Solution Heater SDA Isomax, S-4154 F-120 Asphalt Solution Heater SDA Isomax, S-4155 F-135 Hot Oil

Furnace SDA Rose DAO Solution Heater, S-4156 F-320 Naphtha Vaporizer H2 Plant Isomax, S-4157 F-330 Naphtha Vaporizer H2 Plant, Isomax, S-4158 F-340 Natural Gas Heater H2 Plant, Isomax, S-4162 F-520 TVN Field Formation S-4162 F-520 TVN Field Formation S-4164 F-620

S-4162 F-520 TKN Feed Furnace Isomax, S-4163 F-530 TKN Feed Furnace Isomax, S-4164 F-630 Isocracker Feed Furnace Isomax, S-4165 F-620 Isocracker Feed Furnace Isomax, S-4166 F-610 Isocracker Feed Furnace Isomax, S-4167 F-710 TKC Fractionator Isomax, S-4330 F1610 HNHF Reactor RLOP 16 Plant abated by A-0065 SCR, S-4331 F-1310 LNHF Reactor RLOP abated by A-0065 SCR, S-4332 F1360 Hot Oil Furnace RLOP abated by A-0065 SCR, S-4333 F-1750 TKC Vacuum Furnace abated by A-0066 SCR, S-4334 F-1200 Furnace LNC Atmos. RLOP 12 Plant abated by A-0066 SCR, S-4335 F-1250 Furnace LNC Vac. RLOP 12 Plant abated by

A-0066 SCR, S-4336 F-1410 HNC Reactor RLOP abated by A-0067 SCR, S-4337 F-1500 HNC Atmos. RLOP abated by A-0067 SCR, S-4338 F-1550, HNC Vac. RLOP abated by A-0067 SCR, S-4339 F-1110 LNC Reactor RLOP abated by A-0067 SCR

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
02		Y		No limit	#8773 Part 3 S-4155 #469 Part 3.B S-4330, S-4331, S-4332, S-4333, S-4334, S-4335, S-4336, S-4337, S-4338, S-4339	С	CEMs
O2				No limit	40 CFR 60.46c(a)	С	CEM
СО	9-10-305 #21232	N		400 ppmv (and 200 ppmv for #21232) (dry, 3% O <sub>2</sub> )	#21232 parts 4, 7, 8, 9 9-10-502.1	P/semi- annual	Source testing
СО	Condition #8773 Part 2	Y		50 ppmv [applies to S- 4155]	Condition #8773 Part 2	P/semi- annual	source test

 Table VII.A.3.2 Combustion

 Applicable Limits and Compliance Monitoring Requirements

#### Furnaces for which BAAQMD Regulation 9 Rule 10 and NSPS Subpart J both apply

S-4032 F-101 FCC GHT #3 Cat Furnace, S-4033 F-102 Penhex Isom #3 Cat Furnace, S-4039 F-3560 #4 Cat Furnace, S-4040 F-3570 #4 Cat Furnace, S-4041 F-3580 #4 Cat Furnace, S-4042 F-550 #5 Cat Furnace, S-4043 F-560 #5 Cat Furnace, S-4044 F-570 #5 Cat Furnace, S-4045 F-580 #5 Cat Furnace, S-4046 F-1 H.O. Heater-Asphalt Plant, S-4059 F-247 Furnace JHT MDH LSFO-W,

S-4060 F-210 A&B Furnace JHT MDH LSFO-W, S-4061 F-410 #5 Naphtha Hydrotreater LSFO-W, S-4062 F-447 #5 Naphtha Hydrotreater LSFO-W, S-4068 F-1610, DHT (old VGO) Furnace LSFO-E, S-4069 F-1670 Aromatic Saturator (Formerly VGO F-1660) DHT Furnace LSFO-E, S-4070 F-1100A 4 Crude LSFO-E, S-4071 F-1100B 4 Crude LSFO-E, S-4072 F-1160 4 Crude LSFO-E, S-4153 F-110 Asphalt Solution Heater SDA Isomax, S-4154 F-120 Asphalt Solution Heater SDA Isomax, S-4155 F-135 Hot Oil

Furnace SDA Rose DAO Solution Heater, S-4156 F-320 Naphtha Vaporizer H2 Plant Isomax, S-4157 F-330 Naphtha Vaporizer H2 Plant, Isomax, S-4158 F-340 Natural Gas Heater H2 Plant, Isomax,

S-4162 F-520 TKN Feed Furnace Isomax, S-4163 F-530 TKN Feed Furnace Isomax, S-4164 F-630 Isocracker Feed Furnace Isomax, S-4165 F-620 Isocracker Feed Furnace Isomax, S-4166 F-610 Isocracker Feed Furnace Isomax, S-4167 F-710 TKC Fractionator Isomax, S-4330 F1610 HNHF Reactor RLOP 16 Plant abated by A-0065 SCR, S-4331 F-1310 LNHF Reactor RLOP abated by A-0065 SCR, S-4332 F1360 Hot Oil Furnace RLOP abated by A-0065 SCR, S-4333 F-1750 TKC Vacuum Furnace abated by A-0066 SCR, S-4334 F-1200 Furnace LNC Atmos. RLOP 12 Plant abated by A-0066 SCR, S-4335 F-1250 Furnace LNC Vac. RLOP 12 Plant abated by

A-0066 SCR, S-4336 F-1410 HNC Reactor RLOP abated by A-0067 SCR, S-4337 F-1500 HNC Atmos. RLOP abated by A-0067 SCR, S-4338 F-1550, HNC Vac. RLOP abated by A-0067 SCR, S-4339 F-1110 LNC Reactor RLOP abated by A-0067 SCR

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
Opacity	SIP 6-301 BAAQMD 6-1- 301	Y		Ringelmann No. 1 for no more than 3 minutes/hour	None	P/E	Visual inspection
FP	SIP 6-305 BAAQMD 6-1- 305	Y		Visible Particulates	SIP 6-601 BAAQMD 6-1- 601	P/E	Visual Inspection
	SIP 6-310 BAAQMD 6-1- 310	Y		0.15 grain/dscf	None	N	None
	SIP 6-310.3 BAAQMD 6-1- 310.3	Y		0.15 grain/dscf @ 6% O2	None	None	
NH3	Condition #16679 Part 1	N		120 lb NH3/Hr [applies to S-4170]	none	Ν	None

 Table VII.A.3.2 Combustion

 Applicable Limits and Compliance Monitoring Requirements

#### Furnaces for which BAAQMD Regulation 9 Rule 10 and NSPS Subpart J both apply

S-4032 F-101 FCC GHT #3 Cat Furnace, S-4033 F-102 Penhex Isom #3 Cat Furnace, S-4039 F-3560 #4 Cat Furnace, S-4040 F-3570 #4 Cat Furnace, S-4041 F-3580 #4 Cat Furnace, S-4042 F-550 #5 Cat Furnace, S-4043 F-560 #5 Cat Furnace, S-4044 F-570 #5 Cat Furnace, S-4045 F-580 #5 Cat Furnace, S-4046 F-1 H.O. Heater-Asphalt Plant, S-4059 F-247 Furnace JHT MDH LSFO-W,

S-4060 F-210 A&B Furnace JHT MDH LSFO-W, S-4061 F-410 #5 Naphtha Hydrotreater LSFO-W, S-4062 F-447 #5 Naphtha Hydrotreater LSFO-W, S-4068 F-1610, DHT (old VGO) Furnace LSFO-E, S-4069 F-1670 Aromatic Saturator (Formerly VGO F-1660) DHT Furnace LSFO-E, S-4070 F-1100A 4 Crude LSFO-E, S-4071 F-1100B 4 Crude LSFO-E, S-4072 F-1160 4 Crude LSFO-E, S-4153 F-110 Asphalt Solution Heater SDA Isomax, S-4154 F-120 Asphalt Solution Heater SDA Isomax, S-4155 F-135 Hot Oil Furnace SDA Rose DAO Solution Heater, S-4156 F-320 Naphtha Vaporizer H2 Plant Isomax,

S-4157 F-330 Naphtha Vaporizer H2 Plant, Isomax, S-4158 F-340 Natural Gas Heater H2 Plant, Isomax, S-4162 F-520 TKN Feed Furnace Isomax, S-4163 F-530 TKN Feed Furnace Isomax, S-4164 F-630

Isocracker Feed Furnace Isomax, S-4165 F-550 TKN Feed Furnace Isomax, S-4164 F-650 Isocracker Feed Furnace Isomax, S-4165 F-620 Isocracker Feed Furnace Isomax, S-4166 F-610 Isocracker Feed Furnace Isomax, S-4167 F-710 TKC Fractionator Isomax, S-4330 F1610 HNHF Reactor RLOP 16 Plant abated by A-0065 SCR, S-4331 F-1310 LNHF Reactor RLOP abated by A-0065 SCR, S-4332 F1360 Hot Oil Furnace RLOP abated by A-0065 SCR, S-4333 F-1750 TKC Vacuum Furnace abated by A-0066 SCR, S-4334 F-1200 Furnace LNC Atmos. RLOP 12 Plant abated by A-0066 SCR, S-4335 F-1250 Furnace LNC Vac. RLOP 12 Plant abated by

A-0066 SCR, S-4336 F-1410 HNC Reactor RLOP abated by A-0067 SCR, S-4337 F-1500 HNC Atmos. RLOP abated by A-0067 SCR, S-4338 F-1550, HNC Vac. RLOP abated by A-0067 SCR, S-4339 F-1110 LNC Reactor RLOP abated by A-0067 SCR

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
H2S	40 CFR 60 Subpart J 60.104(a) (1) and Condition #23201	Y		Fuel gas H2S concentration limited to 230 mg/dscm (0.10 gr/dscf) [i.e., 160 ppm] except for gas burned as a result of process upset or gas burned at flares from relief valve leaks or other emergency malfunctions	40 CFR 60.105(a)(4) and Condition #23201	С	H2S analyzer
H2S	Condition #8773 Part 5	Y		Fuel gas H2S concentration (V-475) averaged over any 24- hour period shall be limited to 50 ppm [applies to S-4155]	#8773 Part 5	С	H2S analyzer

 Table VII.A.3.2 Combustion

 Applicable Limits and Compliance Monitoring Requirements

#### Furnaces for which BAAQMD Regulation 9 Rule 10 and NSPS Subpart J both apply

S-4032 F-101 FCC GHT #3 Cat Furnace, S-4033 F-102 Penhex Isom #3 Cat Furnace, S-4039 F-3560 #4 Cat Furnace, S-4040 F-3570 #4 Cat Furnace, S-4041 F-3580 #4 Cat Furnace, S-4042 F-550 #5 Cat Furnace, S-4043 F-560 #5 Cat Furnace, S-4044 F-570 #5 Cat Furnace, S-4045 F-580 #5 Cat Furnace, S-4046 F-1 H.O. Heater-Asphalt Plant, S-4059 F-247 Furnace JHT MDH LSFO-W, S-4060 F-210 A&B Furnace JHT MDH LSFO-W, S-4061 F-410 #5 Naphtha Hydrotreater LSFO-W, S-4062 F-447 #5 Naphtha Hydrotreater LSFO-W, S-4068 F-1610, DHT (old VGO) Furnace LSFO-E, S-4069 F-1670 Aromatic Saturator (Formerly VGO F-1660) DHT Furnace LSFO-E, S-4070 F-1100A 4 Crude LSFO-E, S-4071 F-1100B 4 Crude LSFO-E, S-4072 F-1160 4 Crude LSFO-E, S-4153 F-110 Asphalt Solution Heater SDA Isomax, S-4154 F-120 Asphalt Solution Heater SDA Isomax, S-4155 F-135 Hot Oil Furnace SDA Rose DAO Solution Heater, S-4156 F-320 Naphtha Vaporizer H2 Plant Isomax, S-4157 F-330 Naphtha Vaporizer H2 Plant, Isomax, S-4158 F-340 Natural Gas Heater H2 Plant, Isomax, S-4162 F-520 TKN Feed Furnace Isomax, S-4163 F-530 TKN Feed Furnace Isomax, S-4164 F-630 Isocracker Feed Furnace Isomax, S-4165 F-620 Isocracker Feed Furnace Isomax, S-4166 F-610 Isocracker Feed Furnace Isomax, S-4167 F-710 TKC Fractionator Isomax, S-4330 F1610 HNHF Reactor RLOP 16 Plant abated by A-0065 SCR, S-4331 F-1310 LNHF Reactor RLOP abated by A-0065 SCR, S-4332 F1360 Hot Oil Furnace RLOP abated by A-0065 SCR, S-4333 F-1750 TKC Vacuum Furnace abated by A-0066 SCR, S-4334 F-1200 Furnace LNC Atmos, RLOP 12 Plant abated by A-0066 SCR, S-4335 F-1250 Furnace LNC Vac. RLOP 12 Plant abated by A-0066 SCR, S-4336 F-1410 HNC Reactor RLOP abated by A-0067 SCR, S-4337 F-1500 HNC Atmos.

RLOP abated by A-0067 SCR, S-4339 F-110 INC Reactor RLOP abated by A-0067 SCR, S-4339 F-1100 LNC Reactor RLOP abated by A-0067 SCR

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
Fuel Flow	Condition #8773 Part 6 [for S-4155]	Y		209 MMBtu/Hr based on low heating value (LHV) that is equivalent to 230 MMBtu/Hr based on high heating value (HHV)	#8773 Part 6 S-4155	С	Fuel flowmeter

 Table VII.A.3.2 Combustion

 Applicable Limits and Compliance Monitoring Requirements

#### Furnaces for which BAAQMD Regulation 9 Rule 10 and NSPS Subpart J both apply

S-4032 F-101 FCC GHT #3 Cat Furnace, S-4033 F-102 Penhex Isom #3 Cat Furnace, S-4039 F-3560 #4 Cat Furnace, S-4040 F-3570 #4 Cat Furnace, S-4041 F-3580 #4 Cat Furnace, S-4042 F-550 #5 Cat Furnace, S-4043 F-560 #5 Cat Furnace, S-4044 F-570 #5 Cat Furnace, S-4045
F-580 #5 Cat Furnace, S-4046 F-1 H.O. Heater-Asphalt Plant, S-4059 F-247 Furnace JHT MDH LSFO-W, S-4060 F-210 A&B Furnace JHT MDH LSFO-W, S-4061 F-410 #5 Naphtha Hydrotreater LSFO-W, S-4062 F-447 #5 Naphtha Hydrotreater LSFO-W, S-4068 F-1610, DHT (old VGO) Furnace LSFO-E, S-4069 F-1670 Aromatic Saturator (Formerly VGO F-1660) DHT Furnace LSFO-E, S-4070 F-1100A 4

Crude LSFO-E, S-4071 F-1100B 4 Crude LSFO-E, S-4072 F-1160 4 Crude LSFO-E, S-4153 F-110 Asphalt Solution Heater SDA Isomax, S-4154 F-120 Asphalt Solution Heater SDA Isomax, S-4155 F-135 Hot Oil

Furnace SDA Rose DAO Solution Heater, S-4156 F-320 Naphtha Vaporizer H2 Plant Isomax,

S-4157 F-330 Naphtha Vaporizer H2 Plant, Isomax, S-4158 F-340 Natural Gas Heater H2 Plant, Isomax, S-4162 F-520 TKN Feed Furnace Isomax, S-4163 F-530 TKN Feed Furnace Isomax, S-4164 F-630
Isocracker Feed Furnace Isomax, S-4165 F-620 Isocracker Feed Furnace Isomax, S-4166 F-610 Isocracker Feed Furnace Isomax, S-4167 F-710 TKC Fractionator Isomax, S-4330 F1610 HNHF Reactor RLOP 16
Plant abated by A-0065 SCR, S-4331 F-1310 LNHF Reactor RLOP abated by A-0065 SCR, S-4332 F1360
Hot Oil Furnace RLOP abated by A-0065 SCR, S-4333 F-1750 TKC Vacuum Furnace abated by A-0066
SCR, S-4334 F-1200 Furnace LNC Atmos. RLOP 12 Plant abated by A-0066 SCR, S-4335 F-1250 Furnace LNC Vac. RLOP 12 Plant abated by

A-0066 SCR, S-4336 F-1410 HNC Reactor RLOP abated by A-0067 SCR, S-4337 F-1500 HNC Atmos. RLOP abated by A-0067 SCR, S-4338 F-1550, HNC Vac. RLOP abated by A-0067 SCR, S-4339 F-1110 LNC Reactor RLOP abated by A-0067 SCR

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
Fuel Flow	Condition #16686 Table II A.1 #23872	N, Y for 2387 2		50.5 MMbtu/hr [S-4152] 50.5 MMbtu/hr [S-4154] 68 MMbtu/hr [S-4159] 71 MMbtu/hr [S-4160] 61 MMbtu/hr [S-4161] 61 MMbtu/hr [S-4163] 331 MMbtu/hr [S-4163] 820 MMbtu/hr [S-4170] 820 MMbtu/hr [S-4171]	#16686 Part 1, 9-10-502.2, 23872	С	Fuel flowmeter
				187 MMBtu/Hr [applies for S-4038], 170 MMBtu/Hr [applies for S-4039] 152 MMBtu/Hr [applies for S-4040], 77 MMBtu/Hr [applies for S-4041]			

 Table VII.A.3.2 Combustion

 Applicable Limits and Compliance Monitoring Requirements

#### Furnaces for which BAAQMD Regulation 9 Rule 10 and NSPS Subpart J both apply

S-4032 F-101 FCC GHT #3 Cat Furnace, S-4033 F-102 Penhex Isom #3 Cat Furnace, S-4039 F-3560 #4 Cat Furnace, S-4040 F-3570 #4 Cat Furnace, S-4041 F-3580 #4 Cat Furnace, S-4042 F-550 #5 Cat Furnace, S-4043 F-560 #5 Cat Furnace, S-4044 F-570 #5 Cat Furnace, S-4045 F-580 #5 Cat Furnace, S-4046 F-1 H.O. Heater-Asphalt Plant, S-4059 F-247 Furnace JHT MDH LSFO-W,

S-4060 F-210 A&B Furnace JHT MDH LSFO-W, S-4061 F-410 #5 Naphtha Hydrotreater LSFO-W, S-4062 F-447 #5 Naphtha Hydrotreater LSFO-W, S-4068 F-1610, DHT (old VGO) Furnace LSFO-E, S-4069 F-1670 Aromatic Saturator (Formerly VGO F-1660) DHT Furnace LSFO-E, S-4070 F-1100A 4 Crude LSFO-E, S-4071 F-1100B 4 Crude LSFO-E, S-4072 F-1160 4 Crude LSFO-E, S-4153 F-110 Asphalt Solution Heater SDA Isomax, S-4154 F-120 Asphalt Solution Heater SDA Isomax, S-4155 F-135 Hot Oil Furnace SDA Rose DAO Solution Heater, S-4156 F-320 Naphtha Vaporizer H2 Plant Isomax,

S-4157 F-330 Naphtha Vaporizer H2 Plant, Isomax, S-4158 F-340 Natural Gas Heater H2 Plant, Isomax, S-4162 F 520 TVN Food Express Larger S 4162 F 520 TVN Food Express Larger S 4164 F 620

S-4162 F-520 TKN Feed Furnace Isomax, S-4163 F-530 TKN Feed Furnace Isomax, S-4164 F-630 Isocracker Feed Furnace Isomax, S-4165 F-620 Isocracker Feed Furnace Isomax, S-4166 F-610 Isocracker Feed Furnace Isomax, S-4167 F-710 TKC Fractionator Isomax, S-4330 F1610 HNHF Reactor RLOP 16 Plant abated by A-0065 SCR, S-4331 F-1310 LNHF Reactor RLOP abated by A-0065 SCR, S-4332 F1360 Hot Oil Furnace RLOP abated by A-0065 SCR, S-4333 F-1750 TKC Vacuum Furnace abated by A-0066 SCR, S-4334 F-1200 Furnace LNC Atmos. RLOP 12 Plant abated by A-0066 SCR, S-4335 F-1250 Furnace LNC Vac. RLOP 12 Plant abated by

A-0066 SCR, S-4336 F-1410 HNC Reactor RLOP abated by A-0067 SCR, S-4337 F-1500 HNC Atmos. RLOP abated by A-0067 SCR, S-4338 F-1550, HNC Vac. RLOP abated by A-0067 SCR, S-4339 F-1110 LNC Reactor RLOP abated by A-0067 SCR

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
Fuel Flow	Table II A.1	Y		121 MMBtu/Hr [applies for S-4059] 68 MMBtu/Hr [applies for S-4164], 68 MMBtu/Hr [applies for S-4165], 68 MMBtu/Hr [applies for S-4166], 331 MMBtu/Hr [applies for S-4168], 260 MMBtu/Hr [applies for S-4169]	9-10-502.2	С	Fuel flowmeter
Fuel Flow	Table II A.1	Y		144 MMBtu/Hr [applies for S-4060]	9-10-502.2	С	Fuel flowmeter
Fuel Flow	Condition #16679 Part 9 and condition 23872 part 2	Y for 2387 2 only		820 MMBtu/Hr [applies for S-4170]	#16679 Part 10 and condition 23872 part 2 9-10-502.2	С	Fuel flowmeter

 Table VII.A.3.2 Combustion

 Applicable Limits and Compliance Monitoring Requirements

#### Furnaces for which BAAQMD Regulation 9 Rule 10 and NSPS Subpart J both apply

S-4032 F-101 FCC GHT #3 Cat Furnace, S-4033 F-102 Penhex Isom #3 Cat Furnace, S-4039 F-3560 #4 Cat Furnace, S-4040 F-3570 #4 Cat Furnace, S-4041 F-3580 #4 Cat Furnace, S-4042 F-550 #5 Cat Furnace, S-4043 F-560 #5 Cat Furnace, S-4044 F-570 #5 Cat Furnace, S-4045 F-580 #5 Cat Furnace, S-4046 F-1 H.O. Heater-Asphalt Plant, S-4059 F-247 Furnace JHT MDH LSFO-W, S-4060 F-210 A&B Furnace JHT MDH LSFO-W, S-4061 F-410 #5 Naphtha Hydrotreater LSFO-W,

S-4062 F-447 #5 Naphtha Hydrotreater LSFO-W, S-4068 F-1610, DHT (old VGO) Furnace LSFO-E, S-4069 F-1670 Aromatic Saturator (Formerly VGO F-1660) DHT Furnace LSFO-E, S-4070 F-1100A 4 Crude LSFO-E, S-4071 F-1100B 4 Crude LSFO-E, S-4072 F-1160 4 Crude LSFO-E, S-4153 F-110 Asphalt Solution Heater SDA Isomax, S-4154 F-120 Asphalt Solution Heater SDA Isomax, S-4155 F-135 Hot Oil Furnace SDA Rose DAO Solution Heater, S-4156 F-320 Naphtha Vaporizer H2 Plant Isomax,

S-4157 F-330 Naphtha Vaporizer H2 Plant, Isomax, S-4158 F-340 Natural Gas Heater H2 Plant, Isomax, S-4162 F-520 TKN Feed Furnace Isomax, S-4163 F-530 TKN Feed Furnace Isomax, S-4164 F-630

Isocracker Feed Furnace Isomax, S-4165 F-620 Isocracker Feed Furnace Isomax, S-4166 F-610 Isocracker Feed Furnace Isomax, S-4167 F-710 TKC Fractionator Isomax, S-4330 F1610 HNHF Reactor RLOP 16 Plant abated by A-0065 SCR, S-4331 F-1310 LNHF Reactor RLOP abated by A-0065 SCR, S-4332 F1360 Hot Oil Furnace RLOP abated by A-0065 SCR, S-4333 F-1750 TKC Vacuum Furnace abated by A-0066 SCR, S-4334 F-1200 Furnace LNC Atmos. RLOP 12 Plant abated by A-0066 SCR, S-4335 F-1250 Furnace LNC Vac. RLOP 12 Plant abated by

A-0066 SCR, S-4336 F-1410 HNC Reactor RLOP abated by A-0067 SCR, S-4337 F-1500 HNC Atmos. RLOP abated by A-0067 SCR, S-4338 F-1550, HNC Vac. RLOP abated by A-0067 SCR, S-4339 F-1110 LNC Reactor RLOP abated by A-0067 SCR

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
Fuel Flow	Condition #16686	Y		398 MMBtu/Hr [applies for S-4070] 405 MMBtu/Hr [applies for S-4071] 336 MMBtu/hr [applies for S-4072]	#16686 9-10-502.2	С	Fuel flowmeter
Fuel Flow	Condition 21232 and Table II A.1	Y		48 MMBtu/Hr [applies for S-4158]	21232 9-10-502.2	С	Fuel flowmeter
Fuel Flow	Condition #16686 and Table II A.1	Y		198 MMBtu/Hr [applies for S-4042] 133 MMBtu/Hr [applies for S-4043] 78 MMBtu/Hr [applies for S-4044] 51 MMBtu/Hr [applies for S-4045]	9-10-502.2	С	Fuel flowmeter

 Table VII.A.3.2 Combustion

 Applicable Limits and Compliance Monitoring Requirements

#### Furnaces for which BAAQMD Regulation 9 Rule 10 and NSPS Subpart J both apply

S-4032 F-101 FCC GHT #3 Cat Furnace, S-4033 F-102 Penhex Isom #3 Cat Furnace, S-4039 F-3560 #4 Cat Furnace, S-4040 F-3570 #4 Cat Furnace, S-4041 F-3580 #4 Cat Furnace, S-4042 F-550 #5 Cat Furnace, S-4043 F-560 #5 Cat Furnace, S-4044 F-570 #5 Cat Furnace, S-4045 F-580 #5 Cat Furnace, S-4046 F-1 H.O. Heater-Asphalt Plant, S-4059 F-247 Furnace JHT MDH LSFO-W, S-4060 F-210 A&B Furnace JHT MDH LSFO-W, S-4061 F-410 #5 Naphtha Hydrotreater LSFO-W, S-4062 F-447 #5 Naphtha Hydrotreater LSFO-W, S-4068 F-1610, DHT (old VGO) Furnace LSFO-E, S-4069 F-1670 Aromatic Saturator (Formerly VGO F-1660) DHT Furnace LSFO-E, S-4070 F-1100A 4 Crude LSFO-E, S-4071 F-1100B 4 Crude LSFO-E, S-4072 F-1160 4 Crude LSFO-E, S-4153 F-110 Asphalt Solution Heater SDA Isomax, S-4154 F-120 Asphalt Solution Heater SDA Isomax, S-4155 F-135 Hot Oil Furnace SDA Rose DAO Solution Heater, S-4156 F-320 Naphtha Vaporizer H2 Plant Isomax, S-4157 F-330 Naphtha Vaporizer H2 Plant, Isomax, S-4158 F-340 Natural Gas Heater H2 Plant, Isomax, S-4162 F-520 TKN Feed Furnace Isomax, S-4163 F-530 TKN Feed Furnace Isomax, S-4164 F-630 Isocracker Feed Furnace Isomax, S-4165 F-620 Isocracker Feed Furnace Isomax, S-4166 F-610 Isocracker Feed Furnace Isomax, S-4167 F-710 TKC Fractionator Isomax, S-4330 F1610 HNHF Reactor RLOP 16 Plant abated by A-0065 SCR, S-4331 F-1310 LNHF Reactor RLOP abated by A-0065 SCR, S-4332 F1360 Hot Oil Furnace RLOP abated by A-0065 SCR, S-4333 F-1750 TKC Vacuum Furnace abated by A-0066 SCR, S-4334 F-1200 Furnace LNC Atmos, RLOP 12 Plant abated by A-0066 SCR, S-4335 F-1250 Furnace LNC Vac. RLOP 12 Plant abated by A-0066 SCR, S-4336 F-1410 HNC Reactor RLOP abated by A-0067 SCR, S-4337 F-1500 HNC Atmos. RLOP abated by A-0067 SCR, S-4338 F-1550, HNC Vac. RLOP abated by A-0067 SCR, S-4339 F-1110 LNC Reactor RLOP abated by A-0067 SCR

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
Fuel Flow	Condition #18166 Part 3	Y		122 MMBtu/Hr [applies to S-4061] 165 MMBtu/Hr [applies to S-4062]	#18166 Part 2 9-10-502.2	С	Fuel flowmeter
Fuel Flow	Table II a.1	Y		127.5 MMBtu/Hr [applies to S-4068] 145 MMBtu/Hr [applies to S-4167]	9-10-502.2	С	Fuel flowmeter

 Table VII.A.3.2 Combustion

 Applicable Limits and Compliance Monitoring Requirements

#### Furnaces for which BAAQMD Regulation 9 Rule 10 and NSPS Subpart J both apply

S-4032 F-101 FCC GHT #3 Cat Furnace, S-4033 F-102 Penhex Isom #3 Cat Furnace, S-4039 F-3560 #4 Cat Furnace, S-4040 F-3570 #4 Cat Furnace, S-4041 F-3580 #4 Cat Furnace, S-4042 F-550 #5 Cat Furnace, S-4043 F-560 #5 Cat Furnace, S-4044 F-570 #5 Cat Furnace, S-4045 F-580 #5 Cat Furnace, S-4046 F-1 H.O. Heater-Asphalt Plant, S-4059 F-247 Furnace JHT MDH LSFO-W,

S-4060 F-210 A&B Furnace JHT MDH LSFO-W, S-4061 F-410 #5 Naphtha Hydrotreater LSFO-W, S-4062 F-447 #5 Naphtha Hydrotreater LSFO-W, S-4068 F-1610, DHT (old VGO) Furnace LSFO-E, S-4069 F-1670 Aromatic Saturator (Formerly VGO F-1660) DHT Furnace LSFO-E, S-4070 F-1100A 4 Crude LSFO-E, S-4071 F-1100B 4 Crude LSFO-E, S-4072 F-1160 4 Crude LSFO-E, S-4153 F-110 Asphalt Solution Heater SDA Isomax, S-4154 F-120 Asphalt Solution Heater SDA Isomax, S-4155 F-135 Hot Oil Furnace SDA Rose DAO Solution Heater, S-4156 F-320 Naphtha Vaporizer H2 Plant Isomax,

S-4157 F-330 Naphtha Vaporizer H2 Plant, Isomax, S-4158 F-340 Natural Gas Heater H2 Plant, Isomax,

S-4162 F-520 TKN Feed Furnace Isomax, S-4163 F-530 TKN Feed Furnace Isomax, S-4164 F-630 Isocracker Feed Furnace Isomax, S-4165 F-620 Isocracker Feed Furnace Isomax, S-4166 F-610 Isocracker Feed Furnace Isomax, S-4167 F-710 TKC Fractionator Isomax, S-4330 F1610 HNHF Reactor RLOP 16 Plant abated by A-0065 SCR, S-4331 F-1310 LNHF Reactor RLOP abated by A-0065 SCR, S-4332 F1360 Hot Oil Furnace RLOP abated by A-0065 SCR, S-4333 F-1750 TKC Vacuum Furnace abated by A-0066 SCR, S-4334 F-1200 Furnace LNC Atmos. RLOP 12 Plant abated by A-0066 SCR, S-4335 F-1250 Furnace LNC Vac. RLOP 12 Plant abated by

A-0066 SCR, S-4336 F-1410 HNC Reactor RLOP abated by A-0067 SCR, S-4337 F-1500 HNC Atmos. RLOP abated by A-0067 SCR, S-4338 F-1550, HNC Vac. RLOP abated by A-0067 SCR, S-4339 F-1110 LNC Reactor RLOP abated by A-0067 SCR

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
Fuel Flow	Condition #469	Y		337.5 MMBtu/hour	Condition #469	С	fuel flowmeter
				[applies to only: S-4330 F1610 HNHF Reactor RLOP 16 Plant abated by A-0065 SCR, S-4331 F- 1310 LNHF Reactor	9-10-502.2		
				RLOP abated by A-0065 SCR, S-4332 F1360 Hot			
				Oil Furnace RLOP abated by A-0065 SCR			
				S-4333 F-1750 TKC			
				Vacuum Furnace abated			
				by A-0066 SCR, S-4334			
				F-1200 Furnace LNC			
				Atmos. RLOP 12 Plant			
				abated by A-0066 SCR,			
				S-4335 F-1250 Furnace			
				LNC Vac. RLOP 12			
				Plant abated by A-0066			
				SCR, S-4336 F-1410			
				HNC Reactor RLOP			
				abated by A-0067 SCR,			
				S-433/F-1500 HNC	R	evision Dated: A	ugust 1, 2014
				Atmos. KLOP abated by			
				A-006/ SCK, S-4538 F-			
				abatad by A 0067 SCP			
				$s_{A220} = 1110 \text{ JNC}$			

## Table VII.A.3.3 Combustion (Furnances)

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type

### Table VII.A.3.5 Combustion (Furnace)

 Table VII.A.3.5 Combustion

 Applicable Limits and Compliance Monitoring Requirements

### **Furnace for which BAAQMD Regulation 9 Rule 10 does not apply but NSPS does apply**

#### S-4349 F-1650 Furnace HNC Distillation Section RLOP (BO 2000)

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
NOx	Condition #469 Part 6 E2	Y		20 ppmv NOx limit	#469 Part 6 E4	P Annual	Source testing
СО	Condition #469 Part 6 E3	Y		50 ppmv CO limit	#469 Part 6 E4	P Annual	Source test
Opacity	SIP 6-301 BAAQMD 6-1-301	Y		Ringelmann No. 1 for no more than 3 minutes/hour	SIP 6-601 BAAQMD 6-1- 601	N	Visual inspection
FP	SIP 6-305 BAAQMD 6-1-305	Y		Visible Particulates	SIP 6-601 BAAQMD 6-1- 601	P/E	Visual Inspection
	SIP 6-310 BAAQMD 6-1-310	Y		0.15 grain/dscf	None	N	None
	SIP 6-310.3 BAAQMD 6-1-310.3	Y		0.15 grain/dscf @ 6% O2	None	N	None
H2S	40 CFR 60 Subpart J 60.104(a) (1)	Y		Fuel gas H2S concentration limited to 230 mg/dscm (0.10 gr/dscf) [i.e., 160 ppm] except for gas burned as a result of process upset or gas burned at flares from relief valve leaks or other emergency malfunctions	40 CFR 60.105(a)(4)	С	H2S analyzer

Table VII.A.4.1 Combustion (Engines)

## Table VII.A.4.1 Combustion Applicable Limits and Compliance Monitoring Requirements

#### **Internal Combustion Engines**

S-7013 STANDBY GENERATOR DIESEL ENGINE, S-7501 IC ENGINE, S-7507 IC ENGINE, IC ENGINE S-7511 IC ENGINE, S-7512 IC ENGINE, S-7513 IC ENGINE, S-7514 IC ENGINE, S-7515 IC ENGINE, S-7516 IC ENGINE, S-7517 IC ENGINE, S-7518 IC ENGINE, S-7521 IC ENGINE, S-7523 IC ENGINE, S-7531 IC ENGINE, S-7534 Plant Protection Emergency Standby Generator Diesel Engine, S-7535 Emergency Fire Pump Diesel Engine, S-7536 Emergency Fire Pump Diesel Engine, S-7538 Diesel Engine (GEN 5H2S-1), S-7539 Diesel Engine

S-7502, S-7503, S-7504, S-7505, S-7508, S-7509, S-7527, S-7530, S-7537 Primary FCCU Pump Diesel Engine Engines under 250 hp

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
Opacity	SIP 6-303.1 BAAQMD 6-1-303.1	Y		Ringelmann No. 2 for > 3 minutes in any hour or equivalent opacity	None	N	N/A
FP	SIP 6-305 BAAQMD 6-1-305	Y		Visible Particulates		Ν	
	SIP 6-310 BAAQMD 6-1-310	Y		0.15 grain/dscf	None	N	N/A
SO2	9-1-304	Y		Sulfur content of liquid fuel $\leq 0.5\%$ by weight	9-1-602	Р	Fuel certification
Records	9-8-330 Condition 20225	N		Hours of Operation (applies to S-7501 IC Engine, S-7507 IC Engine, S-7511 IC Engine, S-7512 IC Engine, S-7515 IC Engine, S-7516 IC Engine, S-7517 IC Engine, S-7518 IC Engine, S-7521 IC Engine, and S-7531 IC Engine only)	9-8-530 Condition 20225	P/M	Recordkeeping
Records	Condition 22569	N		S-7013 Standby Generator Diesel Engine	Condition 22569 part 3	P/M	Record keeping
Records	Condition 22820	n		S-7515 AND S-7516	CONDITION 22820 PART 3	P/M	Record keeping
Records	Condition 22850 part 1	Ν		S-7534, S-7535, S-7536, S-7538, S-7539	Condition 22850 part 4	P/M	Record Keeping
Records	Condition 24022	N		S-7537	Condition 24022 part 5	P/M	Record Keeping
Records	Condition 24070	Ν		S-7513, S-7514, S-7523,	Condition 24070 part 5	P/M	Record keeping

# Table VII.A.4.1 Combustion Applicable Limits and Compliance Monitoring Requirements

#### **Internal Combustion Engines**

S-7013 STANDBY GENERATOR DIESEL ENGINE, S-7501 IC ENGINE, S-7507 IC ENGINE, IC ENGINE S-7511 IC ENGINE, S-7512 IC ENGINE, S-7513 IC ENGINE, S-7514 IC ENGINE, S-7515 IC ENGINE, S-7516 IC ENGINE, S-7517 IC ENGINE, S-7518 IC ENGINE, S-7521 IC ENGINE, S-7523 IC ENGINE, S-7531 IC ENGINE, S-7534 Plant Protection Emergency Standby Generator Diesel Engine, S-7535 Emergency Fire Pump Diesel Engine, S-7536 Emergency Fire Pump Diesel Engine, S-7538 Diesel Engine (GEN 5H2S-1), S-7539 Diesel Engine

S-7502, S-7503, S-7504, S-7505, S-7508, S-7509, S-7527, S-7530, S-7537 Primary FCCU Pump Diesel Engine Engines under 250 hp

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
Backpress ure	Condition 24285	N		S-7539	Condition 24285 part 2	P/E	Recordkeeping of corrective action
Fuel usage	Condition 24285 part 3	N		LOW SULFUR DIESEL ONLY	Condition 24285 part 3	P/M	recordkeeping

 Table VII.A.5.1 Combustion (Boilers)

# Table VII.A.5.1 Combustion Applicable Limits and Compliance Monitoring Requirements

### **Boilers**

### S-4129 800 lb. Steam Boiler No. 1, S-4131 800 lb. Steam Boiler No. 3, S-4132 800 lb Steam Boiler No. 4, S-4133 800 lb. Steam Boiler No. 5, S-4135 800 lb. Steam Boiler No. 7

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
NOx	9-10-301	N		Refinery-wide emissions (excluding CO Boilers) 0.033 lbs NOx/ MMBTU	Conditions: #21232 Part 9-10-502	С	CEMs
NOx	9-10-303	Y		Federal interim emissions refinery-wide emissions (excluding CO Boilers) 0.20 lbs NOx/MMBTU	Conditions: #21232 Part 1 9-10-502	С	CEMs
NOx	Consent decree sections F.33 & F.36 and P/O condition 23872 parts 1 and 3	Y		0.031 lbs NOx/MMBtu	Consent decree Sections F.38 & F.39 and P/O condtions 23872 part 3 for S-4132	С	СЕМ

# Table VII.A.5.1 Combustion Applicable Limits and Compliance Monitoring Requirements

## <u>Boilers</u>

### S-4129 800 lb. Steam Boiler No. 1, S-4131 800 lb. Steam Boiler No. 3, S-4132 800 lb Steam Boiler No. 4, S-4133 800 lb. Steam Boiler No. 5, S-4135 800 lb. Steam Boiler No. 7

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
NOx	Consent decree sections F.33 & F.36 and P/O condition 23872 parts 1 and 3	Y		0.033 lbs NOx/MMBtu	Consent decree Sections F.38 & F.39 and P/O condtions 23872 part 3 for S-4129, S-4135	С	СЕМ
02		Y		none	9-10-502 #21232 Part 2	С	CEMs and annual accuracy test
СО	9-10-305 #21232	N		400 ppmv (and 200 ppmv for #21232) (dry, 3% O <sub>2</sub> )	#21232 parts 4,7,8,9 9-10-502.1	P/ semi- annual	Source testing
Opacity	SIP 6-301 BAAQMD 6-1- 301	Y		Ringelmann No. 1 for no more than 3 minutes/hour	None	N	N/A
FP	SIP 6-305 BAAQMD 6-1- 305	Y		Visible Particulates	SIP 6-601 BAAQMD 6-1-601	P/E	Visual Inspection
	SIP 6-310 BAAQMD 6-1- 310	Y		0.15 grain/dscf	None	Ν	None
	SIP 6-310.3 BAAQMD 6-1- 310.3	Y		0.15 grain/dscf @ 6% O2	None	Ν	None
Fuel flow	Table II A.1			5592 MMBtu/day =233 MMBtu/hr [applies to S-4129 only]	Table II A.1 9-10-502.2	С	Fuel flowmeter
Fuel flow	Table II A.1 #16686			5664 MMBtu/day =236 MMBtu/hr [applies to S-4131 only]	16686 9-10-502.2	С	Fuel flowmeter
Fuel flow	Conditions #16686			5640 MMBtu/day =235 MMBtu/hr {applies to S-4132 only]	#16686 9-10-502.2	С	Fuel flowmeter
Fuel flow	Condition #16686			5688 MMBtu/day =237 MMBtu/hr [applies to S-4133 only]	16686 9-10-502.2	С	Fuel flowmeter
Fuel flow	Table II A.1			6528 MMBtu/day =272 MMBtu/Hr [applies to S-4135 only]	Table II A.1 9-10-502.2	С	Fuel flowmeter

# Table VII.A.5.1 Combustion Applicable Limits and Compliance Monitoring Requirements

## **Boilers**

### S-4129 800 lb. Steam Boiler No. 1, S-4131 800 lb. Steam Boiler No. 3, S-4132 800 lb Steam Boiler No. 4, S-4133 800 lb. Steam Boiler No. 5, S-4135 800 lb. Steam Boiler No. 7

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
H2S	40 CFR 60 Subpart J 60.104(a) (1)	Y		Fuel gas H2S concentration limited to 230 mg/dscm (0.10 gr/dscf) [i.e., 160 ppm] except for gas burned as a result of process upset or gas burned at flares from relief valve leaks or other emergency malfunctions	40 CFR 60.105(a)(4)	С	H2S analyzer

#### Table VII.B.1.1 Loading Terminals (Asphalt)

## Table VII.B.1.1 Loading Terminals Applicable Limits and Compliance Monitoring Requirements

#### **Asphalt**

#### S-4240 Asphalt Tank Truck Loading Rack abated by A-4241 Mist Eliminator, S-4241 Asphalt Tank Car Loading Racks abated by A-4241 Mist Eliminator, S-4415 Asphalt Tank Truck Loading Rack abated by A-37 Mist Eliminator

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
VOC	8-15-305, 8- 15-301 – 8- 15-304, & 8- 15-112			VOC content of asphalt	8-15-501	P/E	Recordkeeping
Opacity	SIP 6-301 BAAQMD 6-1-301	Y		Ringelmann No. 1 for no more than 3 minutes/hour	None	N	N/A
FP	SIP 6-305 BAAQMD 6-1-305	Y		Visible Particulates	SIP 6-601 BAAQMD 6-1- 601	P/E	Visual Inspection
	SIP 6-310 BAAQMD 6-1-310	Y		0.15 gr/dscf	None	N	N/A

# Table VII.B.1.1 Loading Terminals Applicable Limits and Compliance Monitoring Requirements

## <u>Asphalt</u>

S-4240 Asphalt Tank Truck Loading Rack abated by A-4241 Mist Eliminator, S-4241 Asphalt Tank Car Loading Racks abated by A-4241 Mist Eliminator, S-4415 Asphalt Tank Truck Loading Rack abated by A-37 Mist Eliminator

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
	Condition #1331 Part 2			For S-4415, loading limit of 238,000 gpd when A-0037 is down	Condition #1331 Part 3	P/D	RecordKeeping (Daily throughput)
Refinery Cap	Condition #469	Y					

## Table VII.B.2.1 Loading Terminals (Gasoline)

# Table VII.B.2.1 Loading Terminals Applicable Limits and Compliance Monitoring Requirements

### Gasoline

### S-9304 Gasoline Dispensing Facility

Pollutant	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
VOC	BAAQMD Regulation 8-7-301.6 and 8-7-302.5	Y		Vapor recovery equipment shall be leak-free and vapor tight	BAAQMD Regulation 8-7-301.13	P/A	Vapor tightness test
VOC	8-7-301.10	Y		98% or highest vapor recovery rate specified by CARB	Regulation 8-7-304 Regulation 8-7-503	P/6 months	Recordkeeping and CARB certification testing
VOC	None			None	BAAQMD Regulation 8-7-302.14	P/A	Backpressure test

# Table VII.B.2.1 Loading Terminals Applicable Limits and Compliance Monitoring Requirements

## **Gasoline**

## S-9304 Gasoline Dispensing Facility

Pollutant	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
VOC	None	N		0.95 <v l<1.15<="" td=""><td>BAAQMD Regulation 8-7- 302.15</td><td>P/A</td><td>V/L test</td></v>	BAAQMD Regulation 8-7- 302.15	P/A	V/L test
					CARB E.O.VR- 201		
VOC	8-7-313.1	Y		Fugitives <u>&lt;0.42</u> lb/1000 gallons dispensed	8-7-503	P/6 months	Recordkeeping and CARB certification testing
VOC	8-7-313.2	Y		Spillage ≤ 0.42 lb/1000 gallons dispensed	8-7-503	P/6 months	Recordkeeping and CARB certification testing
VOC	8-7-313.3	Y		Liquid Retain + Spitting ≤ 0.42 lb/1000 gallons dispensed	8-7-503	P/6 months	Recordkeeping and CARB certification testing
	None	Y		None	8-7-503	P/A	Recordkeeping
VOC	8-7-301.2	Y		95% recovery of gasoline vapors	8-7-503 and condition 18680	P/6 months	Recordkeeping and CARB certification testing-
Throughput	Condition 7880	N		Annual throughput	None	N	N/A
	Condition 18680	N		Phase 1 operating conditions	Condition 18680 part 2	P/every 3 years	Torque and leak tests
	Condition 22951	N		Phase II operating conditions	Condition 22951 part 4	P/A	V/L test
	Condition 24294	N		Phase I and II operating conditions	Condition 24294 part 7	P/A	V/L test
#### Table VII.B.3.1 Loading Terminals (LPG) Table VII.B.3.1 Loading Terminals Applicable Limits and Compliance Monitoring Requirements

#### LPG

#### S-4238 Liquefied Petroleum Gas Loading Rack, 15 Pumps

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
Refinery Cap	Condition #469	Y					

 Table VII.B.4.1 Loading Terminals (Wax)

# Table VII.B.4.1 Loading Terminals Applicable Limits and Compliance Monitoring Requirements

#### Wax

#### S-4239 Main Tank Car Loading Rack, S-4405 Heavy Oil Transloading Operation

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
VOC	8-6-301 and condition 20863 part 5(applies to S-4405)	Y		21 g/cubic meter (0.17 lb/1000 gallons)	CARB Certification	P/ 6 months; throughput limit revision	Source test, recordkeeping
	8-6-302.1	Y		44 g/cubic meter (0.35 lb/1000 gallons)	CARB Certification	P/ 6 months; throughput limit revision	Source test, recordkeeping
	8-6-302.2	Y		Submerged fill pipe, bottom filling, or a vapor loss control system	None	N	N/A
Throughput	Condition 20863 parts 1 and 2	N		Annual and daily throughput limits	Condition 20863 part 8	P/D	Recordkeeping
Vapor Pressure	Condition 20863 part 3	N		Vapor pressure not to exceed 1.13 psia	Condition 20863 part 8	P/D	Recordkeeping
Benzene	Condition 20863 part 4	Ν		Benzene not to exceed 3% by weight	Condition 20863 part 8	P/D	Recordkeeping
Refinery Cap	Condition #469	Y					

### Table VII.B.5.1 Loading Terminals (Wharf)

# Table VII.B.5.1 Loading Terminals Applicable Limits and Compliance Monitoring Requirements

#### <u>Wharf</u>

#### S-4315 Point Orient Wharf, S-9321 Berth #1 Long Wharf 4 Arms, S-9322 Berth #2 Long Wharf 18 Risers, S-9323 Berth #3 Long Wharf 6 Arms, S-9324 Berth #4 Long Wharf 5 Arms, S-9325 Berth #9 Long Wharf 15 Risers, S-9326 Berth #11 Long Wharf 2 Risers (S-9322, S-9323, S-9324, S-9325 abated by A-0900 Marine Vapor Recovery)

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
POC	SIP 8-44- 301.1	Y		POC emissions < 5.7 grams per cubic meter (2 lb/1000 barrel) loaded, or 8-44-301.2	Regulation 8-44- 502 For S-4315 only	P/E	Provide test data upon request of the APCO
POC	SIP 8-44- 301.1	Y		POC emissions $\leq 5.7$ grams per cubic meter (2 lb/1000 barrel) loaded, or 8-44-301.2	Condition #4714 S-9322, S-9323, S-9324, S-9325	P/E	Calculation based on temperature, pressure, hydrocarbons, and flow
POC	SIP 8-44- 301.2 & SIP 8- 44-305	Y		Controlled emissions ≥ 95% by weight	Condition # 4714 S-9322, S-9323, S-9324, S-9325	С	Calculation based on temperature, pressure, hydrocarbons, and flow
POC	SIP 8-44- 303	Y		Leak free and gas tight	40 CFR 63 563(a)(4)	P/E	Leak test
POC	BAAQMD 8-44-304.1	N		POC emissions ≤ 5.7 grams per cubic meter (2 lb/1000 barrel) loaded	BAAQMD 8-44- 504 For S-4315 only	P/E	Provide test data upon request of the APCO
POC	BAAQMD 8-44-304.1	Ν		Controlled emissions ≥ 95% by weight	Condition # 4714 S-9322, S-9323, S-9324, S-9325	С	Calculation based on temperature, pressure, hydrocarbons, and flow
Refinery cap	Condition #469	Y					
Through- put	Condition #18137	N		Throughput limits	Condition #18137	P/M	Recordkeeping

# Table VII.B.5.1 Loading Terminals Applicable Limits and Compliance Monitoring Requirements

#### <u>Wharf</u>

#### S-4315 Point Orient Wharf, S-9321 Berth #1 Long Wharf 4 Arms, S-9322 Berth #2 Long Wharf 18 Risers, S-9323 Berth #3 Long Wharf 6 Arms, S-9324 Berth #4 Long Wharf 5 Arms, S-9325 Berth #9 Long Wharf 15 Risers, S-9326 Berth #11 Long Wharf 2 Risers (S-9322, S-9323, S-9324, S-9325 abated by A-0900 Marine Vapor Recovery)

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type	
H2S	40 CFR 60 Subpart J 60.104(a) (1) and Condition #23201	Y		Fuel gas H2S concentration limited to 230 mg/dscm (0.10 gr/dscf) [i.e., 160 ppm] except for gas burned as a result of process upset or gas burned at flares from relief valve leaks or other emergency malfunctions	40 CFR 60.105(a)(4) and Condition #23201	С	H2S analyzer	
Condition #23201 Appli		Applies to A-0900						
Pa	urt 1	Sourc	Source subjects to NSPS Subparts A and J					

#### Table VII.C.1.1 Process Units (Cooling Water Towers)

# Table VII.C.1.1 Process Units Applicable Limits and Compliance Monitoring Requirements

#### **Cooling Water Towers**

#### S-4073 LSFO, S-4076 #3 Cat, S-4172 Isomax E-261F, S-4173 FCC E-710, S-4187 FCC Polymer E-781, S-4191 SRU (Alkane) E-2900, S-4329 RLOP Cooling Tower, S-6051 ALKY CWT

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
Opacity	SIP 6-301 and BAAQMD 6- 1-301	Y		Ringelmann No. 1 for no more than 3 minutes/hour	None	P/M	Measurement of total dissolved solids
FP	SIP 6-305 and BAAQMD 6- 1-305	Y		Visible Particulates	SIP 6-601 and BAAQMD 6-1- 601	P/E	Visual Inspection

# Table VII.C.1.1 Process Units Applicable Limits and Compliance Monitoring Requirements

#### **Cooling Water Towers**

#### S-4073 LSFO, S-4076 #3 Cat, S-4172 Isomax E-261F, S-4173 FCC E-710, S-4187 FCC Polymer E-781, S-4191 SRU (Alkane) E-2900, S-4329 RLOP Cooling Tower, S-6051 ALKY CWT

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
FP	SIP 6-311 and BAAQMD 6- 1-311	Y		4.10 P <sup>0.67</sup> lb/hr particulate, where P is process weight rate in ton/hr	none	P/M	Measurement of total dissolved solids
TDS	Condition #14596 Part 2	Y		For S-6051, TDS < 2000 ppm (wt) averaged over any consecutive 30-day period	Condition #14596 Part 6	P/M	monthly tests of TDS
POC	Condition 14596 Part 1	Y	6/1/4	For S-6051, POC < 30.2 lb/day averaged over any consecutive 12 month period	Condition #14596 Part 7	С	Hydrocarbon analyzer and flowmeter

Table VII.C.3.1 Process Units (Miscellaneous Process Units)

 Table VII.C.3.1 Process Units

 Applicable Limits and Compliance Monitoring Requirements

#### **Miscellaneous Process Units**

S-4226 FGHT FCC Gasoline Hydrotreater, S-4233 Jet Hydrotreater, S-4234 No. 5 Naphtha Hydrotreater, S-4235 Diesel Hydrotreater, DHT, S-4236 No. 4 Crude Unit, S-4237 No. 5 Rheniformer, S-4250 Hydrogen Manufacturing,

S-4251 Solvent Deasphalting Plant SDA, S-4252 TKN Isocracker Plant, S-4253 TKC Isocracker Plant, S-4282A Penhex Isomerization Plant, S-4283 No. 4 Catalytic Reformer,

S-4286 FCC Gas Recovery Unit Light Ends Recovery GRU, S-4291 H2SO4 Alkylation Plant, S-4292 FCC Polymer Plant, S-4340 Light Neutral Hydrocracker LNC, S-4341 Light Neutral Hydrofinisher LNHF, S-4342 Heavy Neutral Hydrocracker HNHC, S-4343 Heavy Neutral Hydrofinisher HNHF, S-4346 Gas Recovery Unit GRU RLOP, S-4348 H2 Recovery Plant RLOP, S-4354 Butamer Plant, S-4355 Alky (Yard) DIB, S-4356 Tertiary Amyl Methyl Ether Plant TAME, S-4400 Wax Melt Vessel, S-6050 MTBE Plant

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
Throughput	Condition	Y		Applies to S-4340 not to	Condition #469	P/Daily	Daily records
limit	#469			exceed 16,500	Part 6		recorded on a
	Part 5			barrels/operating day			monthly basis
				Applies to S-4341 not to			
				exceed 22,000			
				barrels/operating day			
				Applies to S-4342 not to			
				exceed 26,000			
				barrels/operating day			
				Applies to S-4343 not to			
				exceed 12,000			
				barrels/operating day			
				Applies to S-4253 not to			
				exceed 65,000			
				barrels/operating day			
Throughput	Condition	Y		Applies to S-4250 not to	Condition # 22979	P/daily	Daily recorded
limit	#22979 Part			exceed 181.1	Part 3		on a monthly
	1 and 2			MMSCF/operating day, and			basis
				not to exceed 66,102			
				MMSCF/year			

 Table VII.C.3.1 Process Units

 Applicable Limits and Compliance Monitoring Requirements

**Miscellaneous Process Units** 

S-4226 FGHT FCC Gasoline Hydrotreater, S-4233 Jet Hydrotreater, S-4234 No. 5 Naphtha Hydrotreater, S-4235 Diesel Hydrotreater, DHT, S-4236 No. 4 Crude Unit, S-4237 No. 5 Rheniformer, S-4250 Hydrogen Manufacturing,

S-4251 Solvent Deasphalting Plant SDA, S-4252 TKN Isocracker Plant, S-4253 TKC Isocracker Plant, S-4282A Penhex Isomerization Plant, S-4283 No. 4 Catalytic Reformer,

S-4286 FCC Gas Recovery Unit Light Ends Recovery GRU, S-4291 H2SO4 Alkylation Plant, S-4292 FCC Polymer Plant, S-4340 Light Neutral Hydrocracker LNC, S-4341 Light Neutral Hydrofinisher LNHF, S-4342 Heavy Neutral Hydrocracker HNHC, S-4343 Heavy Neutral Hydrofinisher HNHF, S-4346 Gas Recovery Unit GRU RLOP, S-4348 H2 Recovery Plant RLOP, S-4354 Butamer Plant, S-4355 Alky (Yard) DIB, S-4356 Tertiary Amyl Methyl Ether Plant

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
Throughput limit	Condition #22641 Part 5	Y		Applies to S-4226	Condition # 22641 Part 7	P/daily	Recordkeeping
	Condition #8180	Y		Applies to S-4235			
	Condition #9048	Y		Applies to S-4253	#9048	P/M	Recordkeeping
	Condition #13369	Y		Applies to S-4355, S-4348, S-4346			
	Condition #14701	Y		Applies to S-4355	#14701	P/D for S-4291	Recordkeeping
	Condition #18337	Y		Applies to S-4354 and S- 4360	#18337	P/D	Recordkeeping
	Condition #20944	Ν		Applies to S-4292	#20944	P/D	Recordkeeping
	Condition #6001	Y		Applies to S-4286			
NOx	Condition 8773 part 1	Y		8.85 #/hr	#8773 part 1	С	CEM

TAME, S-4400 Wax Melt Vessel, S-6050 MTBE Plant

 Table VII.C.3.1 Process Units

 Applicable Limits and Compliance Monitoring Requirements

**Miscellaneous Process Units** 

S-4226 FGHT FCC Gasoline Hydrotreater, S-4233 Jet Hydrotreater, S-4234 No. 5 Naphtha Hydrotreater, S-4235 Diesel Hydrotreater, DHT, S-4236 No. 4 Crude Unit, S-4237 No. 5 Rheniformer, S-4250 Hydrogen Manufacturing,

S-4251 Solvent Deasphalting Plant SDA, S-4252 TKN Isocracker Plant, S-4253 TKC Isocracker Plant, S-4282A Penhex Isomerization Plant, S-4283 No. 4 Catalytic Reformer,

S-4286 FCC Gas Recovery Unit Light Ends Recovery GRU, S-4291 H2SO4 Alkylation Plant, S-4292 FCC Polymer Plant, S-4340 Light Neutral Hydrocracker LNC, S-4341 Light Neutral Hydrofinisher LNHF, S-4342 Heavy Neutral Hydrocracker HNHC, S-4343 Heavy Neutral Hydrofinisher HNHF, S-4346 Gas Recovery Unit GRU RLOP, S-4348 H2 Recovery Plant RLOP, S-4354 Butamer Plant, S-4355 Alky (Yard) DIB, S-4356 Tertiary Amyl Methyl Ether Plant

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
со	Condition 8773 part 2	Y		50 ppm CO	#8773 part 2	P/initial source test	Source test
H2S	Condition #8773 part 5	Y		50 ppm	Condition #8773 part 5	С	CEM
02	Condition #8773	Y		None	#8773 part 3	С	CEM
POC	Condition #15698, Regulation 8-2	Y		Applies to S-4250 Emission < 15 lbs C/day or < 300 ppm C dry, 3-hr average, water temp <90F, 3-hr average vent flow < 5 Klb/hr, 3-hr average water flow > 30 gpm, water/vent flow ratio >11.6	#15698 parts 8 and 9 Regulation 8-2	P/A and P/M	Annual source testing and Recordkeeping

TAME, S-4400 Wax Melt Vessel, S-6050 MTBE Plant

 Table VII.C.3.1 Process Units

 Applicable Limits and Compliance Monitoring Requirements

**Miscellaneous Process Units** 

S-4226 FGHT FCC Gasoline Hydrotreater, S-4233 Jet Hydrotreater, S-4234 No. 5 Naphtha Hydrotreater, S-4235 Diesel Hydrotreater, DHT, S-4236 No. 4 Crude Unit, S-4237 No. 5 Rheniformer, S-4250 Hydrogen Manufacturing,

S-4251 Solvent Deasphalting Plant SDA, S-4252 TKN Isocracker Plant, S-4253 TKC Isocracker Plant, S-4282A Penhex Isomerization Plant, S-4283 No. 4 Catalytic Reformer,

S-4286 FCC Gas Recovery Unit Light Ends Recovery GRU, S-4291 H2SO4 Alkylation Plant, S-4292 FCC Polymer Plant, S-4340 Light Neutral Hydrocracker LNC, S-4341 Light Neutral Hydrofinisher LNHF, S-4342 Heavy Neutral Hydrocracker HNHC, S-4343 Heavy Neutral Hydrofinisher HNHF, S-4346 Gas Recovery Unit GRU RLOP, S-4348 H2 Recovery Plant RLOP, S-4354 Butamer Plant, S-4355 Alky (Yard) DIB, S-4356 Tertiary Amyl Methyl Ether Plant

Type of	Citation of	FE	Future Effective	T imit	Monitoring Requirement	Monitoring Frequency	Monitoring
Linnt	Linnt	1/1	Date		Citation	(1/C/N)	Туре
HCl	Refinery	Y		+ or> 92% reduction in HCl	Refinery MACT2,	P/initial source	Source test
	MACT2, 40			or = or < 30 ppmv HCl (dry	40 CFR 63	test (during	
	CFR 63			basis) emitted corrected to	subpart UUU,	coke burn off	
	subpart			3% O2 (applies to S-4237 &	63.1567(b)(2)	& catalyst	
	UUU,			S-4283 catalyst regne		rejuvenation)	
	63.1567(a)(1			exhaust gas)			
	)						
HCl	Refinery	Y		Site specific operating limit	Refinery MACT2,	P (during coke	Method in Table
	MACT2, 40			(ppm HCl in catalyst	40 CFR 63	burn off &	27/28 of subpart
	CFR 63			regenerator exhaust gas) = a	subpart UUU,	catalyst	
	subpart			numerical limit TBD during	63.1567(c)(1)	rejuvenation)	
	UUU,			initial source test			
	63.1567(a)(2						
	)						

TAME, S-4400 Wax Melt Vessel, S-6050 MTBE Plant

#### Table VII.C.2.1 Process Units (FCC)

# Table VII.C.2.1 Process Units Applicable Limits and Compliance Monitoring Requirements

#### FCC

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
Opacity	SIP 6-302 and BAAQMD 6-1-302	Y		Opacity shall not exceed 20% for more than 3 minutes in any hour	SIP 6-502 and BAAQMD 6-1- 502	С	Opacity monitor
Opacity	SIP 6-304 and BAAQMD 6-1-304	Y		During tube cleaning, and except for three minutes in any one hour, a person shall not emit from any heat transfer operation using fuel at a rate of not less than 140 million Btu per hour, a visible emission as dark or darker than No. 2 on the Ringelmann chart, or of such opacity as to obscure an observers view to an equivalent degree, or equal to or greater than 40% opacity as perceived by an opacity sensing device in good working order. The aggregate duration of such emissions in any 24-hour period shall not exceed 6.0 minutes per one billion Btu gross heating value of fuel burned during such 24 hour period.	SIP 1-520.5 and BAAQMD 1- 520.5	С	Opacity monitor
Opacity	40 CFR 60 Subpart J 60.102(a) (2)	Y		30 % opacity, except for one 6 minute average opacity reading in 1 hour	40 CFR 60 Subpart J 60.105(a)(1)	С	Opacity monitor
Opacity	Refinery MACT2, 40 CFR 63 subpart UUU, 63.1564(a)( 1)	Y		30% opacity, except for one 6 minute average opacity reading in 1 hour	63.1564(b)(1) & 63.1564(c)(1)	С	Opacity monitor
FP	SIP 6-310 BAAQMD 6-1-310	Y		0.15 grain/dscf	#11066 Part 7a	P/Q,P/D,C	Source test,TR set secondary current, Temperature monitor and recorder

# Table VII.C.2.1 Process Units Applicable Limits and Compliance Monitoring Requirements

### <u>FCC</u>

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
FP	SIP 6-311 and BAAQMD 6-1-311	Y		40 <sup>lb</sup> /hr particulate hr	#11066 Part 7a	P/Q,P/D,C	Source test,TR set secondary current, Temperature monitor and recorder
PM	40 CFR 60 Subpart J 60.102(a) (1)	Y		1.0 kg of PM per 1000 kg of coke burn off in catalyst regenerator	#11066 Part 7a	P/Q	Source test
PM	Refinery MACT2, 40 CFR 63 subpart UUU, 63.1564(a) (1)	Y		1.0 kg of PM per 1000 kg of coke burn off in catalyst regenerator	PM: #11066 part 7a	P/Q	Source test
TSP	Cleaner Fuels Project FCC Mod. Condition #11066 Part 3	Y		92 TPY TSP [applicable to S-4285]	#11066 Part 7a	P/Q	Source test
TSP	Cleaner Fuels Project FCC Mod. Condition #11066 Part #7	Y		21 lb TSP/hr, average of four source tests per calendar year [applicable to S-4285]	Cleaner Fuels Project FCC Mod. Condition #11066 Part #7	P/Q	Quarterly performance test
SO2	9-1-310.1	Y		1000 ppmv	9-1-502 1-520.5	С	SO2 CEM
SO2	9-1-313.1	Y		Sulfur content of crude oil shall not exceed 0.10% by wt, or	None	P/D	Crude Sampling when sulfur plants are down
SO2	9-1-313.2	Y		Removal and recovery of 95% of H2S in refinery fuel gas and 95% of H2S in process water streams on a refinery-wide basis		N/A	9

# Table VII.C.2.1 Process Units Applicable Limits and Compliance Monitoring Requirements

### <u>FCC</u>

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
SO2	SIP 9-1-313.2	Y		95% of H2S in refinery fuel gas is removed and recovered on a refinery-wide basis and 95% of H2S in process water streams is removed and recovered on a refinery-wide basis		N/A	
SO2	40 CFR 60 Subpart J 60.104(b) (2)	Y		Without add-on control device, maintain SO2 emissions to atmosphere at less than or equal to 9.8 kg of SO2 per 1000 kg of coke burn-off	40 CFR 60 Subpart J 60. 106(I)(12)	С	Calculated stoichio- metrically from SO2 CEM, & process monitoring for air inlet rate to regenerator
SOx	Cleaner Fuels Project FCC Mod. Condition #11066 Part 3			2199.4 TPY [applicable to S-4285]	#11066 Part 10a	С	CEMs
SO2	Cleaner Fuels Project FCC Mod. Condition #11066 Part 4a			Shall not exceed 330 ppmv averaged over any 24-hour operating period, corrected to 3% oxygen, dry [applicable to S-4285]	Cleaner Fuels Project FCC Mod. Condition #11066 Part 9c	С	CEMs
SO2	Cleaner Fuels Project FCC Mod. Condition #11066 Part 4b			Shall not exceed 25 ppmv @ O% O2 on a 365 day rolling average and 50 ppmv @ 0% O2 on a 7 day rolling average	Cleaner Fuels Project FCC Mod. Condition #11066 Part 9	С	CEMs
SO2	Cleaner Fuels Project FCC Mod. Condition #11066 Part 10a or Part 10b	Y		9.8 lbs SO2/1000 lbs coke burn off (7-day rolling average) [applicable to S-4285] or 0.3 wt.% S in fresh feed [applicable to S-4285]	40 CFR 60.106(I)(12) or 60.106(j)	C Or P/8 hours	Calculated stoichio- metrically from SO2 CEM, & process monitoring for air inlet rate to regenerator Or feed sample

# Table VII.C.2.1 Process Units Applicable Limits and Compliance Monitoring Requirements

### <u>FCC</u>

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
NH3	Cleaner Fuels Project FCC Mod. Condition #11066 Part 15	Y		Ammonia (NH3) injection rate shall not exceed 500 lbs/hr [applicable to S-4285 and A-0014]	regulation 2-6- 409.2.2	P/D	record keeping
СО	40 CFR 60 Subpart J 60.103(a) And condition 11066 part 6	Y		500 ppmv and 500 ppmv 1 hour average	40 CFR 60 Subpart J 60.105(a)(2) And condition 11066 part 6	С	CO monitor CEM
СО	Cleaner Fuels Project FCC Mod. Condition #11066 Part 3	Y		258.4 TPY [applicable to S-4285]	#11066 Part 9	С	CEMs
СО	Cleaner Fuels Project FCC Mod. Condition #11066 Part 6	Y		Shall not exceed 67 ppmv averaged over any rolling 30 day period, or 50 ppmv averaged over any calendar year corrected to 3% oxygen, dry [applicable to S-4285]	Cleaner Fuels Project FCC Mod. Condition #11066 Part 9	С	CEMs
СО	Refinery MACT2, 40 CFR 63 subpart UUU, 63.1565(a)( 1)	Y		500 ppmv	Refinery MACT2, 40 CFR 63 subpart UUU, 63.1565(b)(1) & 63.1565(c)(1)	С	CEMs
Process Unit Throughput	Cleaner Fuels Project FCC Mod. Condition #11066 Part 1	Y		FCC Reactor Feed rate shall not exceed 80 MBPD average over any calendar year, nor 90 MPBD average over any calendar day [applicable to S-4285]	#11066 Part 11	P/D	Recordkeeping

# Table VII.C.2.1 Process Units Applicable Limits and Compliance Monitoring Requirements

### <u>FCC</u>

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
NOx	Cleaner Fuels Project FCC Mod. Condition #11066 Part 3	Y		1504.7 TPY [applicable to S-4285]	Cleaner Fuels Project FCC Mod. Condition #11066 Part 9	С	CEMs
NOx	Cleaner Fuels Project FCC Mod. Condition #11066 Part 5a	Y		Shall not exceed 220 ppmv averaged over any 24-hour operating day period, or 180 ppmv averaged over any 30 day period, or 150 ppmv averaged over any calendar year period, corrected to 3% oxygen, dry [applicable to S-4285]	Cleaner Fuels Project FCC Mod. Condition #11066 Part 9	С	CEMs
NOx	Cleaner Fuels Project FCC Mod. Condition #11066 Part 5b	Y		Shall not exceed 20 ppmv @ 0% O2 on a 365 day rolling average basis and 40 ppmv @ 0% O2 on a 7 day rolling average basis	Cleaner Fuels Project FCC Mod. Condition #11066 Part 9	С	CEMs
POC	Cleaner Fuels Project FCC Mod. Condition #11066 Part #3	Y		6.1 TPY [applicable to S-4285]	condition #11066 Part 2	P/A	Source Test
ESP Inlet Temperature		Y		Minimum of 550 F averaged over any one-hour period [applicable to S-4285 and A-0014]	Cleaner Fuels Project FCC Mod. Condition #11066 Part 7a4	С	Inlet temperature monitor and recorder
Secondary current of TR	Cleaner Fuels Project FCC Mod. Condition #11066 Part 7a5	Y		Average shall not be less than 200 milliamps averaged over any three hour period, [applicable to S-4285 and A-0014] or	Cleaner Fuels Project FCC Mod. Condition #11066 Part #7a3	P, daily basis	Monitor

# Table VII.C.2.1 Process Units Applicable Limits and Compliance Monitoring Requirements

### FCC

#### S-4285 Fluid Catalytic Cracking Unit

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
Secondary current of TR	Cleaner Fuels Project FCC Mod. Condition #11066 Part 7a5	Y		No more than 2 TR sets may be less than 200 milliamps averaged over any three hour period, as long as the remaining TR sets maintain an average secondary current above 296 milliamps averaged over any three hour period [applicable to S-4285 and A-0014]	Cleaner Fuels Project FCC Mod. Condition #11066 Part 7a3	С	Monitor/alarm set at 200 milliamps

#### Table VII.D.1.1 Refinery (Refinery)

# Table VII.D.1.1 Refinery Applicable Limits and Compliance Monitoring Requirements

### **Refinery**

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
POC	8-5-117 & condition #20764 part 1	Y		Exemption from Regulation 8-5 when true vapor pressure is less than 25.8 mm Hg (0.5 psia).	2-6-409.2 & condition # 20764 part 1	P/E	Fuel sampling upon storage material change. Recordkeeping
	8-10-301	Y		Abatement of emissions from process vessel depressurization is required until pressure is reduced to less than 1000 mm Hg	8-10-401(SIP) and 8-10-501/502 (non SIP)	P/E	Recordkeeping
HAP (Benzene)	61.343 (a)(1)(i)(A) tanks	Y		Cover leak tightness standards (< 500 ppmw)	61.343 (a)(1)(i)(A)	Periodic initially & annually	Method 21
HAP (Benzene)	61.343 (a)(1)(i)(B)	Y		Standards for openings in the cover	61.343 (a)(1)(i)(B)	Periodic initially & quarterly	Visual inspection
HAP (Benzene)	61.343 (a)(1)(i)(C)	Y		Standards for systems operated under negative pressure	61.343 (a)(1)(i)(C)	Continuous	System pressure

# Table VII.D.1.1 Refinery Applicable Limits and Compliance Monitoring Requirements

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
HAP (Benzene)	61.344 (a)(1)(i)(A) surface impoundmen ts	Y		Cover leak tightness standards (< 500 ppmw)	61.344 (a)(1)(i)(A)	Periodic initially & annually	Method 21
HAP (Benzene)	61.344 (a)(1)(i)(B)	Y		Standards for openings in the cover	61.344 (a)(1)(i)(B)	Periodic initially & quarterly	Visual inspection
HAP (Benzene)	61.344 (a)(1)(i)(C)	Y		Standards for systems operated under negative pressure	61.344 (a)(1)(i)(C)	Continuous	System pressure
HAP (Benzene)	61.345 (a)(1)(i)(A) containers	Y		Cover leak tightness standards (< 500 ppmw)	61.345 (a)(1)(i)(A)	Periodic initially & annually	Method 21
HAP (Benzene)	61.345 (a)(1)(i)(B)	Y		Standards for openings in the cover	61.345 (a)(1)(i)(B)	Periodic initially & quarterly	Visual inspection
HAP (Benzene)	61.345 (a)(1)(i)(C)	Y		Standards for systems operated under negative pressure	61.345 (a)(1)(i)(C)	Continuous	System pressure
HAP (Benzene)	61.346 (a)(1)(i)(A) individual drain systems	Y		Cover leak tightness standards (< 500 ppmw)	61.346 (a)(1)(i)(A)	Periodic initially & annually	Method 21
HAP (Benzene)	61.346 (a)(1)(i)(B)	Y		Standards for openings in the cover	61.346 (a)(1)(i)(B)	Periodic initially & quarterly	Visual inspection
HAP (Benzene)	61.346 (a)(1)(i)(C)	Y		Standards for systems operated under negative pressure	61.346 (a)(1)(i)(C)	Continuous	System pressure
HAP (Benzene)	61.349 (a)(1)(i) closed-vent systems and control devices	Y		Closed vent system leak tightness standards (< 500 ppmw)	61.349 (a)(1)(i)	Periodic initially & annually	Method 21
HAP (Benzene)	61.349 (a)(1)(ii)	Y		Closed vent systems by-pass line standards	61.354 (f)	Periodic daily for flow indicator; monthly for car-seal	Visual inspection
HAP (Benzene)	61.349 (a)(1)(iii), (iv)	Y		Closed vent system gauging & sampling and pressure relief device standards	61.349(f)	Periodic initially & annually	Visual inspection

# Table VII.D.1.1 Refinery Applicable Limits and Compliance Monitoring Requirements

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
HAP (Benzene)	61.349(a)(2)( i)	Y		Applies to S-3192. Reduce organics by 95 weight % or < 20 ppmv organics dry basis, 3% O2 or > 0.5 seconds residence time @ greater than 1400F.			
HAP (Benzene)	61.349(h)	Y		Control device standards [NOTE TO USER Delete this row for units that meet the conditions of 61.343(b)(1)]	61.354 (c) and (d)	Continuous check daily for part c and P/D or 20% of design carbon replacement interval whichevever is greater for part d	Specified parameter
Ambient SO <sub>2</sub>	9-1-301	Y		Ground level concentrations of 0.5 ppm for 3 min or 0.25 ppm for 60 min or 0.05 ppm for 24 hrs	9-1-501	С	Area monitoring
Ambient H <sub>2</sub> S	9-2-301	N		Ground level concentrations of 0.06 ppm for 3 min or 0.03 ppm for 60 min	9-2-501	С	Area monitoring
		Y		Benzene Waste NESHAP Annual Report	40 CFR 61 Subpart FF 61.357(d)	P/A	Reporting
		Y		Refinery MACT Startup, Shutdown, Malfunction Report	40 CFR 63 63.654(h)(1)	P/SA	Report
		Y		Refinery MACT Periodic Report	40 CFR 63 63.654(g)	P/SA	Report

# Table VII.D.1.1 Refinery Applicable Limits and Compliance Monitoring Requirements

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
Particulate emissions cap (refinery)	Condition #469	Y		Particulate 281.1 tons per year Refinery CAP, according to Appendix J, of Authority to Construct Number 27797, the following are excluded from the Refinery baseline: Coal liquefaction Pilot Plant (Chevron Research), FCC, Nitric Acid Plant, Fugitive emissions from existing process units (except as used to adjust the monthly and yearly emission limits for process units shutdown, valves, pump and compressor seals, cooling towers, and drains), tankage, and S-4155 SDA Furnace and wharf	Condition #469	P/M	Monthly records
Non- methane hydrocarbo n (refinery) emissions cap	Condition #469	Y		Non-methane hydrocarbons 326.3 tons per year Refinery CAP, according to Appendix J, of Authority to Construct Number 27797, the following are excluded from the Refinery baseline: Coal liquefaction Pilot Plant (Chevron Research), FCC, Nitric Acid Plant, Fugitive emissions from existing process units (except as used to adjust the monthly and yearly emission limits for process units shutdown, valves, pump and compressor seals, cooling towers, and drains), tankage, and S-4155 SDA Furnace and wharf	Condition #469	P/M	Monthly records

# Table VII.D.1.1 Refinery Applicable Limits and Compliance Monitoring Requirements

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
NOx (refinery) emissions cap	Condition #469	Y		NOx 5,772.0 tons per year Refinery CAP, according to Appendix J, of Authority to Construct Number 27797, the following are excluded from the Refinery baseline: Coal liquefaction Pilot Plant (Chevron Research), FCC, Nitric Acid Plant, Fugitive emissions from existing process units (except as used to adjust the monthly and yearly emission limits for process units shutdown, valves, pump and compressor seals, cooling towers, and drains), tankage, and S-4155 SDA Furnace and wharf	Condition #469	P/M	Monthly records
SO2 (refinery) emissions cap	Condition #469	Y		SO2 392.0 tons per year Refinery CAP, according to Appendix J, of Authority to Construct Number 27797, the following are excluded from the Refinery baseline: Coal liquefaction Pilot Plant (Chevron Research), FCC, Nitric Acid Plant, Fugitive emissions from existing process units (except as used to adjust the monthly and yearly emission limits for process units shutdown, valves, pump and compressor seals, cooling towers, and drains), tankage, and S-4155 SDA Furnace and wharf	Condition #469	P/M	Monthly records

# Table VII.D.1.1 Refinery Applicable Limits and Compliance Monitoring Requirements

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
CO (refinery) emissions cap	Condition #469	Y		CO 723.5 tons per year Refinery CAP, according to Appendix J, of Authority to Construct Number 27797, the following are excluded from the Refinery baseline: Coal liquefaction Pilot Plant (Chevron Research), FCC, Nitric Acid Plant, Fugitive emissions from existing process units (except as used to adjust the monthly and yearly emission limits for process units shutdown, valves, pump and compressor seals, cooling towers, and drains), tankage, and S-4155 SDA Furnace and wharf	Condition #469	P/M	Monthly records
Particulate emissions cap (refinery + wharf)	Condition #469	Y		Particulate 326.0 tons per year Refinery CAP, according to Appendix J, of Authority to Construct Number 27797, the following are excluded from the Refinery baseline: Coal liquefaction Pilot Plant (Chevron Research), FCC, Nitric Acid Plant, Fugitive emissions from existing process units (except as used to adjust the monthly and yearly emission limits for process units shutdown, valves, pump and compressor seals, cooling towers, and drains), tankage, and S-4155 SDA Furnace	Condition #469	P/M	Monthly records

# Table VII.D.1.1 Refinery Applicable Limits and Compliance Monitoring Requirements

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
Non- methane hydrocarbo n (refinery + wharf) emissions cap	Condition #469	Y		Non-methane hydrocarbons 391.1 tons per year Refinery CAP, according to Appendix J, of Authority to Construct Number 27797, the following are excluded from the Refinery baseline: Coal liquefaction Pilot Plant (Chevron Research), FCC, Nitric Acid Plant, Fugitive emissions from existing process units (except as used to adjust the monthly and yearly emission limits for process units shutdown, valves, pump and compressor seals, cooling towers, and drains), tankage, and S-4155 SDA Furnace	Condition #469	P/M	Monthly records
NOx (refinery + wharf) emissions cap	Condition #469	Y		NOx 6,141.0 tons per year Refinery CAP, according to Appendix J, of Authority to Construct Number 27797, the following are excluded from the Refinery baseline: Coal liquefaction Pilot Plant (Chevron Research), FCC, Nitric Acid Plant, Fugitive emissions from existing process units (except as used to adjust the monthly and yearly emission limits for process units shutdown, valves, pump and compressor seals, cooling towers, and drains), tankage, and S-4155 SDA Furnace	Condition #469	P/M	Monthly records

# Table VII.D.1.1 Refinery Applicable Limits and Compliance Monitoring Requirements

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
SO2 (refinery _ wharf) emissions cap	Condition #469	Y		SO2 918.0 tons per year Refinery CAP, according to Appendix J, of Authority to Construct Number 27797, the following are excluded from the Refinery baseline: Coal liquefaction Pilot Plant (Chevron Research), FCC, Nitric Acid Plant, Fugitive emissions from existing process units (except as used to adjust the monthly and yearly emission limits for process units shutdown, valves, pump and compressor seals, cooling towers, and drains), tankage, and S-4155 SDA Furnace	Condition #469	P/M	Monthly records
CO (refinery + wharf) emissions cap	Condition #469	Y		CO 773.5 tons per year Refinery CAP, according to Appendix J, of Authority to Construct Number 27797, the following are excluded from the Refinery baseline: Coal liquefaction Pilot Plant (Chevron Research), FCC, Nitric Acid Plant, Fugitive emissions from existing process units (except as used to adjust the monthly and yearly emission limits for process units shutdown, valves, pump and compressor seals, cooling towers, and drains), tankage, and S-4155 SDA Furnace	Condition #469	P/M	Monthly records

#### Table VII.E.1.1 Sulfur Recovery (H2S Plants)

# Table VII.E.1.1 Sulfur Recovery Applicable Limits and Compliance Monitoring Requirements

#### **H2S Plants**

#### S-4345 #18 Plant (also called #2 NH3/H2S), S-4433 #3 H2S Plant, S-4434 #4 H2S Plant, S-4435 #5 H2S Plant, S-4429 #8 Plant (also called NH3/H2S)

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
SO2	9-1-313.2	Y		95% of H2S in refinery fuel gas is removed and recovered on a refinery-wide basis AND 95% of H2S in process water streams is removed and recovered on a refinery-wide basis AND 95% of ammonia in process water streams is removed; refineries that remove the equivalent of 16.5 ton/day or more of elemental sulfur shall install a sulfur recovery plant or sulfuric acid plant		N/A	
SO2	SIP 9-1-313.2	Y		95% of H2S in refinery fuel gas is removed and recovered on a refinery-wide basis AND 95% of H2S in process water streams is removed and recovered on a refinery-wide basis AND 95% of ammonia in process water streams is removed;		N/A	
Through -put	Condition #18945Part 1	N		Throughput limits for S-4433	Condition #18945 Part 7	P/D	Recordkeeping
	Condition #18945 Part 2	Ν		Throughput limits for S-4434	Condition #18945 Part 7	P/D	Recordkeeping
	Condition #18945 Part 3	Ν		Throughput limits for S-4435	Condition #18945 Part 7	P/D	Recordkeeping
	Condition #18945 Part 4	Ν		Throughput limits for S-4429	Condition #18945 Part 7	P/D	Recordkeeping
	Condition #18945 Part 5	Ν		Throughput limits for S-4345	Condition #18945 Part 7	P/D	Recordkeeping
	Condition #18945 Part 6	Ν		Throughput limits for S-4345	Condition #18945 Part 7	P/D	Recordkeeping

# Table VII.E.2.1 Sulfur Recovery (Claus Units)

# Table VII.E.2.1 Sulfur Recovery Applicable Limits and Compliance Monitoring Requirements

#### **Claus Units**

#### S-4227, S-4228, S-4229

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
SO2	9-1-307	Y		SO2 emission limits for sulfur recovery plants that emit 100 lb/day SO2 or more (250 ppmv, dry, at 0% oxygen)	1-520.4 (9-1- 502 requires compliance with 1-520 and 1-522)	С	SO2 CEM
	9-1-313.2	Y		95% of H2S in refinery fuel gas is removed and recovered on a refinery-wide basis and 95% of H2S in process water streams is removed and recovered on a refinery-wide basis and 95% of ammonia in process water streams is removed; refineries that remove the equivalent of 16.5 ton/day or more of elemental sulfur shall install a sulfur recovery plant or sulfuric acid plant		N/A	
	SIP 9-1-313.2	Y		95% of H2S in refinery fuel gas is removed and recovered on a refinery-wide basis and 95% of H2S in process water streams is removed and recovered on a refinery-wide basis and 95% of ammonia in process water streams is removed		N/A	
SO2	Refinery MACT2, 40 CFR 63 subpart UUU, 63.1568(a)(1)	Y		250 ppm by volume, dry basis, of SO2 at 0% excess air	Refinery MACT2, 40 CFR 63 subpart UUU, 63.1568(b)(1) & 63.1568(c)(1)	С	SO2 CEM
SO2	60.104(a)(2)(i)	Y		250 ppmv SO2 @0% O2 (12 hrs avg. basis)	60.105(a)(5)	С	SO2 Analyzer
	Condition 469	Y		Emission limits	Condition 469	P/M	Recordkeeping
Opacity	SIP 6-301 and BAAQMD 6-1- 301	Y		Ringelmann No. 1 for no more than 3 minutes/hour	SIP 6-601 and BAAQMD 6-1- 601 condition 22262 part 2	P/M	Visible emissions monitoring

# Table VII.E.2.1 Sulfur Recovery Applicable Limits and Compliance Monitoring Requirements

### **Claus Units**

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
FP	SIP 6-310 and BAAQMD 6-1- 310	Y		0.15 grain/dscf	none	N/A	none
FP	SIP 6-311 and BAAQMD 6-1- 311	Y		4.10 P <sup>0.67</sup> lb/hr particulate, where P is process weight rate in ton/hr	None	P/E	Visible inspection
NH3	9-1-313.2	Y		Removal of 95% of ammonia in process water streams		N/A	
NH3	SIP 9-1-313.2	Y		Removal of 95% of ammonia in process water streams		NA	
SO3, H2SO4	SIP 6-330 and BAAQMD 6-1- 330	Y		0.08 grain/dscf exhaust concentration of SO3 and H2SO4, expressed as 100% H2SO4	#18655 Part 2	P/ A	District- approved source test method
H2S	Condition #19063 part 4	Ν		10 ppmv H2S	9-1-313.2	N/A	
02		Y		No limit	Refinery MACT2, 40 CFR 63 subpart UUU, 63.1568(b)(1) & 63.1568(c)(1)	С	O2 monitor
Refinery Cap	Condition #469	Y		Emission limits	Condition #469	P/M	Record keeping
Throughput	Condition #19063 part 1	Ν		Long tons of Sulfur	Condition #19063 part 5	P/D	Recordkeeping
Throughput	Condition #19063 part 1	Ν		Long tons of Sulfur	Condition #19063 part 5	P/A	Recordkeeping
Throughput	Condition #19063 part 2	Ν		Long tons of Sulfur	Condition #19063 part 5	P/D	Recordkeeping
Throughput	Condition #19063 part 2	Ν		Long tons of Sulfur	Condition #19063 part 5	P/A	Recordkeeping
Throughput	Condition #19063 part 3	N		Long tons of Sulfur	Condition #19063 part 5	P/D	Recordkeeping
Throughput	Condition #19063 part 3	Ν		Long tons of Sulfur	Condition #19063 part 5	P/A	Recordkeeping

#### S-4227, S-4228, S-4229

Table VII.E.3.1 Sulfur Recovery

# Table VII.E.3.1 Sulfur Recovery Applicable Limits and Compliance Monitoring Requirements

# S-3226 Sulfur Storage Tank, S-3141 Sulfur Storage Tank, S-4396 Sulfur Loading Racks all abated by A-0043 Vent Water Scrubber

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
Through-put	Condition #18137	N		Throughput limits	Condition #18137	P/M	Recordkeeping

#### Table VII F.1.0 tanks

# Table VII.F.1.0 Storage Tanks Applicable Limits and Compliance Monitoring Requirements

#### Tanks with permit conditions only

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
throughput	Condition #4233	N		Throughput limits for S- 1911, S-1913, S-1914, S- 1915, S-1919, S-2920, S- 2921-	N	N	N
Throughput	Condition #11208	N		Throughput and vapor pressure limits for S-1911, S-6125, S-1909	Condition #11208	P/M	recordkeeping
Throughput	Condition #12580	N		Throughput for S-1894	Ν	N	Ν
Throughput	Condition #15107 Part 1	N		Throughput limit of 60 barrels in any 12 consecutive months for S-25	Condition #15107 Part 3	P/M	Recordkeeping
Vapor Pressure	Condition #15107	N		True vapor pressure of stored materials not to exceed 0.5 psia for S-25	Condition #15107 Part 3	P/M	Recordkeeping
Throughput	Condition 23765	N		Throughput limit for S-4360	Condition 23765	P/D	Recordkeeping

# Table VII.F.1.0 Storage Tanks Applicable Limits and Compliance Monitoring Requirements

#### Tanks with permit conditions only

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
Throughput	Condition 23773	N		Throughput limit for S-4363	Condition 23773	P/D	Recordkeeping
Throughput	Condition 23774	N		Throughput limit for S-4364	Condition 23774	P/D	Recordkeeping
Throughput	Condition #24452 Part 1	N		Throughput limit of 15,000 gallons of Tri-Act 1825 in any 12 consecutive months for S-4365	Condition #24452 Part 4	P/M	Recordkeeping
Vapor Pressure	Condition #24452 Part 2	N		True vapor pressure of stored materials not to exceed 0.5 psia for S-4365	Condition #24452 Part 4	P/M	Recordkeeping
Composition	Condition #24452 Part 7	N		Formulation of materials stored in S-4365 may be changed. subject to District conditions and approval.	Condition #24452 Part 4	P/M	Recordkeeping
Throughput	Condition #24604 Part 1	N		Throughput limit of 10,000 gallons of Tri-Act 1803 and 1825 combined in any consecutive 12 months for S-4366	Condition #24604 Part 8	P/M	Recordkeeping
Throughput	Condition #24604 Part 2	N		Throughput limit of 5,000 gallons of Tri-Act 1803 and 1825 combined in any consecutive 12 months for S-4367	Condition #24604 Part 8	P/M	Recordkeeping
Throughput	Condition #24604 Part 3	N		Throughput limit of 5,000 gallons of Tri-Act 1803 and 1825 combined in any consecutive 12 months for S-4368	Condition #24604 Part 8	P/M	Recordkeeping
Throughput	Condition #24604 Part 4	N		Throughput limit of 15,000 gallons of Tri-Act 1803 and 1825 combined in any consecutive 12 months for S-4369	Condition #24604 Part 8	P/M	Recordkeeping

# Table VII.F.1.0 Storage Tanks Applicable Limits and Compliance Monitoring Requirements

#### Tanks with permit conditions only

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
Composition	Condition #24604 Part 7	<u>N</u>		Formulation of materials stored in S-4366 through S- 4370 may be changed, subject to District conditions and approval.	Condition #24452 Part 8	<u>P/M</u>	Recordkeeping
Throughput	Condition #24604 Part 5	N		Throughput limit of 4,000 gallons of Custamine in any consecutive 12 months for S-4370	Condition #24604 Part 8	P/M	Recordkeeping
Vapor Pressure	Condition #24604 Part 6	N		True vapor pressure of stored materials not to exceed 0.5 psia for S-4366, S-4367, S-4368, S-4369, and S-4370	Condition #24604 Part 8	P/M	Recordkeeping
Throughput	Condition #24606 Part 1	N		Throughput limit of 5,000 gallons of NALCO EC9085A in any12 consecutive months for S- 4372	Condition #24606 Part 3	P/M	Recordkeeping
Vapor Pressure	Condition #24606 Part 2	N		True vapor pressure of stored materials not to exceed 0.5 psia for S-4372	Condition #24606 Part 3	P/M	Recordkeeping
Throughput	Condition #25001 Part 1	N		Throughput limit of 28,000 gallons of Corrosion inhibitor in any 12 consecutive months for S- 4373	Condition #25001 Part 4	P/M	Recordkeeping
Vapor Pressure	Condition #25001 Part 2	N		True vapor pressure of stored materials not to exceed 0.5 psia for S-4373	Condition #25001 Part 4	P/M	Recordkeeping
Composition	Condition #25001 Part 3	N		Formulation of materials stored in S-4373 may be changed, subject to District conditions and approval.	Condition #25001 Part 4	P/M	Recordkeeping

# Table VII.F.1.0 Storage Tanks Applicable Limits and Compliance Monitoring Requirements

#### Tanks with permit conditions only

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
Fugitives	Condition #25001 Parts 5-12	Ν		Fugitive emissions from S- 4373 are to comply with a leak standard of 100 ppm TOC for at any valves, flanges, connectors, and/or PSVs, a maximum of 500.0 ppm fugitive TOC at any pumps, and are not to exceed 0.589 tons of POC in any 365 consecutive days. Full permit conditions available in Section VI	Condition #25001 Part 13	P/M	Recordkeeping
Throughput	Condition #25479 Part 1	N		Throughput limit of 10,000 gallons of Flocculent in any consecutive 12 months for S-4374	Condition #25479 Part 4	P/M	Recordkeeping
Vapor Pressure	Condition #25479 Part 2	N		True vapor pressure of stored materials not to exceed 0.5 psia for S-4374	Condition #25479 Part 4	P/M	Recordkeeping
Composition	Condition #25479 Part 3	N		The formulation of materials stored in S-4374 may be changed if there is no net increase in emissions (32 #/y) and no toxic trigger levels are met or exceeded,	Condition #25479 Part 4	P/M	Recordkeeping
Fugitives	Condition #25479 Parts 5-12	N		Fugitive emissions from S- 4374 are to comply with a leak standard of 100 ppm TOC for at any valves, flanges, and connectors, a maximum of 500.0 ppm fugitive TOC at any pumps, and are not to exceed 0.512 tons of POC in any 365 consecutive days. Full permit conditions available in Section VI.	Condition #25479 Part 13	P/Q	Recordkeeping

#### Table VII.F.1.1 Tanks (FRT's Cluster 10a)

 Table VII.F.1.2 Tanks (FRT's Cluster 01b)

# Table VII.F.1.2 Tanks Applicable Limits and Compliance Monitoring Requirements Fixed Roof Tanks Cluster 01b

S-0200A, S-0204, S-0223, S-0225, S-0234, S-0290, S-0291, S-0293, S-0319, S-0397, S-0401, S-0501, S-0583, S-0900, S-0907, S-0910, S-0957, S-0979, S-0984, S-1052, S-1149, S-1431, S-1455, S-1456, S-1468, S-1470, S-1492, S-1493, S-1546, S-1636, S-1653, S-1679, S-1723, S-1724, S-1725, S-1908, S-1989, S-2520, S-2540, S-3139, S-3142, S-3146, S-3148, S-3310 S-1821, S-2917, S-2918, S-3141, S-3160, S-3161, S-3162, S-3163, S-3164, S-3165, S-3166, S-3167, S-3168, S-3169, S-3170, S-3171, S-3172, S-3179, S-3182, S-3185, S-3186, S-3194, S-3195, S-3215, S-3216, S-3226, S-5101, S-5103, S-5105, S-5107, S-5108, S-5109, S-5110, S-5112, S-5113, S-5115, S-5117, S-5118, S-5119, S-5121, S-5122, S-5123, S-5125, S-5126, S-5127, S-5128, S-5129, S-5130, S-5131, S-5132, S-5133, S-5134, S-5135, S-5136, S-5137, S-5138, S-5139, S-5140, S-5201, S-5202, S-5203, S-5204, S-5205, S-5206, S-5207, S-5208, S-5209, S-5210, S-5211, S-5212, S-5213, 8-5214, S-5215, S-5216, S-5217, S-5218, S-5219, S-5220, S-5221, S-5222, S-5223, S-5224, S-5227, S-5228, S-5229, S-5230, S-5232, S-5233, S-5234, S-5237, S-5240, S-5241, S-5603

**Internal Floating Roof Tanks Cluster 01b** 

S-0328, S-1634, S-3147, S-3185 External Floating Roof Tanks Cluster 01b

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type				
Regulation 8 Rule 5		Organic Compounds – STORAGE OF ORGANIC LIQUIDS Exempt Per 8-5-117, Low Vapor Pressure (≤ 0.5 psia)									
Low Vapor Pressure	SIP Regulation 8-5-117	Y		The vapor pressure of material stored shall be less than 0.5 psia.	Regulation 8-5- 117 And condition #20764	P/E	Vapor pressure monitoring upon stock change				

Table VII.F.1.2 Tanks **Applicable Limits and Compliance Monitoring Requirements** Fixed Roof Tanks Cluster 01b S-0200A, S-0204, S-0223, S-0225, S-0234, S-0290, S-0291, S-0293, S-0319, S-0397, S-0401, S-0501, S-0583, S-0900, S-0907, S-0910, S-0957, S-0979, S-0984, S-1052, S-1149, S-1431, S-1455, S-1456, S-1468, S-1470, S-1492, S-1493, S-1546, S-1636, S-1653, S-1679, S-1723, S-1724, S-1725, S-1908, S-1989, S-2520, S-2540, S-3139, S-3142, S-3146, S-3148, S-3310 S-1821, S-2917, S-2918, S-3141, S-3160, S-3161, S-3162, S-3163, S-3164, S-3165, S-3166, S-3167, S-3168, S-3169, S-3170, S-3171, S-3172, S-3179, S-3182, S-3185, S-3186, S-3194, S-3195, S-3215, S-3216, S-3226, S-5101, S-5103, S-5105, S-5107, S-5108, S-5109, S-5110, S-5112, S-5113, S-5115, S-5117, S-5118, S-5119, S-5121, S-5122, S-5123, S-5125, S-5126, S-5127, S-5128, S-5129, S-5130, S-5131, S-5132, S-5133, S-5134, S-5135, S-5136, S-5137, S-5138, S-5139, S-5140, S-5201, S-5202, S-5203, S-5204, S-5205, S-5206, S-5207, S-5208, S-5209, S-5210, S-5211, S-5212, S-5213, S-5214, S-5215, S-5216, S-5217, S-5218, S-5219, S-5220, S-5221, S-5222, S-5223, S-5224, S-5227, S-5228, S-5229, S-5230, S-5232, S-5233, S-5234, S-5237, S-5240, S-5241, S-5603

**Internal Floating Roof Tanks Cluster 01b** 

#### S-0328, S-1634, S-3147, S-3185 External Floating Roof Tanks Cluster 01b

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type		
Vapor Pressure	BAAQMD 8-5-117	N		The vapor pressure of material stored shall be less than 0.5 psia.	BAAQMD 8-5- 117 And condition #20764	P/E	Vapor pressure monitoring upon stock change		
Vapor Pressure	Condition #11024 Part 3	Ν		The vapor pressure of material stored shall be less than 0.3 psia.	Condition #11024 Part 4	P/M	Recordkeeping		
Vapor Pressure	Condition #11436 Part 3	Ν		The vapor pressure of material stored shall be less than 0.5 psia.	Condition #11436 Part 4	P/D	Recordkeeping		
NSPS Kb		Volatile Organic Liquid Storage Vessels MONITORING FOR RECORDKEEPING ONLY							
VOC	60.116b (c)	Y		True vapor pressure determination	60.116b (e)	Periodic initially and upon change of service	Calculate		

Table VII.F.1.2 Tanks Applicable Limits and Compliance Monitoring Requirements <u>Fixed Roof Tanks Cluster 01b</u> S-0200A, S-0204, S-0223, S-0225, S-0234, S-0290, S-0291, S-0293, S-0319, S-0397, S-0401, S-0501, S-0583, S-0900, S-0907, S-0910, S-0957, S-0979, S-0984, S-1052, S-1149, S-1431, S-1455, S-1456, S-1468, S-1470, S-1492, S-1493, S-1546, S-1636, S-1653, S-1679, S-1723, S-1724, S-1725, S-1908, S-1989, S-2520, S-2540,

S-3139, S-3142,

S-3146, S-3148, S-3310

S-1821, S-2917, S-2918, S-3141, S-3160, S-3161, S-3162, S-3163, S-3164, S-3165,

S-3166, S-3167, S-3168, S-3169, S-3170, S-3171, S-3172, S-3179, S-3182, S-3185, S-3186, S-3194,

S-3195, S-3215, S-3216, S-3226, S-5101, S-5103, S-5105, S-5107, S-5108, S-5109, S-5110, S-5112, S-

5113,

 $\begin{array}{l} \text{S-5115, S-5117, S-5118, S-5119, S-5121, S-5122, S-5123, S-5125, S-5126, S-5127, S-5128, S-5129, S-5130, S-5131, S-5132, S-5133, S-5134, S-5135, S-5136, S-5137, S-5138, S-5139, S-5140, S-5201, S-5202, S-5203, S-5204, S-5205, S-5206, S-5207, S-5208, S-5209, S-5210, S-5211, S-5212, S-5213, S-5214, S-5215, S-5216, S-5217, S-5218, S-5219, S-5220, S-5221, S-5222, S-5223, S-5224, S-5227, S-5228, S-5229, S-5230, S-5232, S-5233, S-5234, S-5237, S-5240, S-5241, S-5603 \end{array}$ 

**Internal Floating Roof Tanks Cluster 01b** 

#### S-0328, S-1634, S-3147, S-3185 External Floating Roof Tanks Cluster 01b

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
Refinery				NESHAP for Petroleu	m Refineries		
MACI	MONITO	RING I	FOR RECOR	RDKEEPING ONLY. There are not tanks that are exempt fr	o 61 Subpart FF mor com controls.	nitoring requireme	ents for storage
	Condition #18137	N			Applies to S- 0957, S-1653, S- 3140	P/M	Recordkeeping
	Condition #11436	N			Applies to S- 1653	P/M	Recordkeeping
Throughput	Condition #4233 part 1	N		Applies to S-1911, 1913, 1914, 2917, 2918, 1908, 1915, 1919, 2920, 2921	None	P/A	Recordkeeping
Throughput	Condition #10967 parts 1 and 2	N		Applies to S-1052	Condition #10967 part 3	P/M	Recordkeeping
Throughput	Condition #11228 parts 1 and 2	N		Applies to S-957	Condition #11228 part 4	P/D	Recordkeeping

Table VII.F.1.2 Tanks Applicable Limits and Compliance Monitoring Requirements <u>Fixed Roof Tanks Cluster 01b</u> S-0200A, S-0204, S-0223, S-0225, S-0234, S-0290, S-0291, S-0293, S-0319, S-0397, S-0401, S-0501, S-0583,

S-0900,

S-0907, S-0910, S-0957, S-0979, S-0984, S-1052,

S-1149, S-1431, S-1455, S-1456, S-1468, S-1470, S-1492, S-1493,

S-1546, S-1636, S-1653, S-1679, S-1723, S-1724, S-1725, S-1908, S-1989, S-2520, S-2540,

S-3139, S-3142,

S-3146, S-3148, S-3310

S-1821, S-2917, S-2918, S-3141, S-3160, S-3161, S-3162, S-3163, S-3164, S-3165,

S-3166, S-3167, S-3168, S-3169, S-3170, S-3171, S-3172, S-3179, S-3182, S-3185, S-3186, S-3194,

S-3195, S-3215, S-3216, S-3226, S-5101, S-5103, S-5105, S-5107, S-5108, S-5109, S-5110, S-5112, S-

5113,

 $\begin{array}{l} \text{S-5115, S-5117, S-5118, S-5119, S-5121, S-5122, S-5123, S-5125, S-5126, S-5127, S-5128, S-5129, S-5130, S-5131, S-5132, S-5133, S-5134, S-5135, S-5136, S-5137, S-5138, S-5139, S-5140, S-5201, S-5202, S-5203, S-5204, S-5205, S-5206, S-5207, S-5208, S-5209, S-5210, S-5211, S-5212, S-5213, S-5214, S-5215, S-5216, S-5217, S-5218, S-5219, S-5220, S-5221, S-5223, S-5224, S-5227, S-5228, S-5229, S-5230, S-5232, S-5233, S-5234, S-5237, S-5240, S-5241, S-5603 \end{array}$ 

**Internal Floating Roof Tanks Cluster 01b** 

#### S-0328, S-1634, S-3147, S-3185 External Floating Roof Tanks Cluster 01b

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
Throughput	Condition #11024 Part 1	N		S-3185 throughput not to exceed 20,000,000 Bbls	Condition #11024 Part 4	P/M	Recordkeeping
Throughput	Condition #12580 part 1	N		S-1821 and S-1894 only to store sulfuric acid and phosphoric acid	None	P/E	Recordkeeping
Throughput	Condition #18137	N		Throughput limits	Condition #18137	P/M	Recordkeeping

### Table VII.F.1.3 Tanks (FRT'S Cluster 02)

# Table VII.F.1.3 Tanks Applicable Limits and Compliance Monitoring Requirements <u>Fixed Roof Tanks Cluster 02</u>

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type			
Regulation 8 Rule 5	Ех	Organic Compounds – STORAGE OF ORGANIC LIQUIDS Exempt Per 8-5-117, Low Vapor Pressure (< 0.5 psia) SIP approved (11/27/02), BAAQMD (10/18/06)								
VOC	8-5-301, 8-5-117	Y	6/1/4	True vapor pressure determination	8-5-501.1	Periodic initially and upon change of service	Look up table or sample analysis			
VOC	8-5-303.1	Y		P/V valve set [ressure within 10% of max allowable working pressure or at least 0.5 psig	8-5-403	P/SA	Visual Inspection			
VOC	8-5-303.2	Y		P/V valve must be gas tight: less than 500 ppm(as methane) above background	8-5-403, SIP 8-5- 503, 8-5-605	P/SA	Method 21 portable hydrocarbon detector			
VOC	8-5-328.1.2	Y		Tank cleaning control device standards includes 90% efficiency requirement until tank less than 10,000 ppm	8-5-502	P/A	ST-7			
VOC	8-5-110	Y		Exemption due to age and size	2-6-501	Ν	Record keeping			
EPA	Exempt fr	Exempt from all Refinery MACT, NSPS K, Ka and Kb Standards for Hydrocarbon Storage Tanks (per <10,000 gallon exemption)								
POC	40 CFR 61 Subpart FF	Y		Minimum VOC destruction removal efficiency: 95% by concentration weight or outlet < 500 ppmv organics		P/M	FID			
Condition #18137		N			Applies to S-0021,					
Throughput	Condition #23001	N		Throughput limits	Cond# 23001.3 Applies to S-4940	P/M	Record keeping			

# S-0021, , S-4940

### Table VII.F.1.4 Tanks

# Table VII.F.1.4 Tanks Applicable Limits and Compliance Monitoring Requirements

#### **Fixed Roof Tanks Cluster 05**

# S-0605 (S-0605 also in Wastewater Cluster 40b), S-6200, S-6201, S-6202, S-6203, S-6204, S-6205, S-6206, S-6207, S-6208, S-6209, S-6210, S-6211, S-6212, S-6213, S-6214, S-6215, S-6216, S-6217, S-6218, S-6219 (abatement requirements for S-6200 through S-6219 are provided in Table II-B)

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type			
Regulation 8 Rule 5		Organic Compounds – STORAGE OF ORGANIC LIQUIDS								
VOC	8-5-306	Y		Control device standards; includes 95% efficiency requirement	SIP 8-5-503 #11193 S-0605 #10761 S-6200 through S- 6219	P/D for S-6200 - 6219 and P/M for S- 0605	FID and ST-4 (ST-4 no longer exists, replaced by ST-34, ST-7 or EPA Method 25)			
VOC	8-5-328.1.2	Y		Tank cleaning control device standards includes 90% efficiency requirement until tank less than 10,000 ppm	8-5-502	P/A	ST-7			
VOC	8-5-110	Y		Exemption due to age and size	2-6-501	Ν	Record keeping			
EPA	Exempt from a	Exempt from all Refinery MACT, NSPS K, Ka and Kb Standards for Hydrocarbon Storage Tanks.								
NESHAP FF	Benzene Waste Operations LIMITS AND MONITORING FOR CONTAINERS									
HAP (Benzene)	61.345 (a)(1)(i)(A)	Y		Cover leak tightness standards (< 500 ppmw)	61.345 (a)(1)(i)(A)	Periodic initially & annually	Method 21			
HAP (Benzene)	61.345 (a)(1)(i)(B)	Y		Standards for openings in the cover	61.345 (a)(1)(i)(B)	Periodic initially & quarterly	Visual inspection			
HAP (Benzene)	61.345 (a)(1)(i)(C)	Y		Standards for systems operated under negative pressure	61.345 (a)(1)(i)(C)	Continuous	System pressure			
HAP (Benzene)	61.349 (a)(1)(i)	Y		Closed vent system leak tightness standards (< 500 ppmw)	61.349 (a)(1)(i)	Periodic initially & annually	Method 21			
HAP (Benzene)	61.349 (a)(1)(ii)	Y		Closed vent systems by-pass line standards	61.354 (f)	Periodic daily for flow indicator; monthly for car-seal	Visual inspection			
HAP (Benzene)	61.349 (a)(1)(iii), (iv)	Y		Closed vent system gauging & sampling and pressure relief device standards	61.349(f)	Periodic initially & annually	Visual inspection			

# Table VII.F.1.4 Tanks Applicable Limits and Compliance Monitoring Requirements

#### Fixed Roof Tanks Cluster 05

S-0605 (S-0605 also in Wastewater Cluster 40b), S-6200, S-6201, S-6202, S-6203, S-6204, S-6205, S-6206, S-6207, S-6208, S-6209, S-6210, S-6211, S-6212, S-6213, S-6214, S-6215, S-6216, S-6217, S-6218, S-6219 (abatement requirements for S-6200 through S-6219 are provided in Table II-B)

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
HAP (Benzene)	61.349(h)	Y		Control device standards	61.354 (c)	Continuous check daily	Specified parameter
	Condition #11193	N		Benzene concentration limit	Applies to S-0605	P/M	Recordkeeping
	Condition #10761	N		Benzene concentration limit	Applies to S-6200 through S-6219	P/M	Recordkeeping
Throughput	Condition #18137	N		Throughput limits	Condition #18137	P/M	Recordkeeping

#### Table VII.F.1.5 Tanks (EFRT's Cluster 11)

# Table VII.F.1.5 Tanks Applicable Limits and Compliance Monitoring Requirements

#### **External Floating-Roof Tanks Cluster 11**

#### S-0232, S-0297, S-0298, S-0398, S-1292, S-1518, S-1798, S-1799, S-1843, S-1966, S-3074, S-3100

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type		
Regulation 8 Rule 5		Organic Compounds – STORAGE OF ORGANIC LIQUIDS LIMITS							
VOC	8-5-301	Y		Records of liquids stored and TVP	8-5-501.1	P/E	Records		
VOC	8-5-320	Y		Deck fitting closure standards; includes gasketed covers	8-5-401.2, 8-5- 404, 8-5-405	P/SA	Measurement and Visual inspection And Certification Report		
VOC	8-5-321	Y		Primary rim-seal standards; includes gap criteria	8-5-401.1, 8-5- 404, 8-5-405 and 8-5-501.2	P/SA and every time seal is replaced	Seal inspection and Records And Certification Report		

# Table VII.F.1.5 Tanks Applicable Limits and Compliance Monitoring Requirements

#### **External Floating-Roof Tanks Cluster 11**

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type	
VOC	8-5-322	Y		Secondary rim-seal standards; includes gap criteria	8-5-401.1, 8-5- 404, 8-5-405 and 8-5-501.2	P/SA and every time seal is replaced	Seal inspection and Records And	
							Certification Report	
VOC	8-5-328.1.2	Y		Tank cleaning control device standards includes 90% efficiency requirement until tank less than 10,000 ppm	8-5-502	P/A	ST-7	
VOC		Y		Determination of Applicability	8-5-604	P/E	Look-up table or sample analysis	
Refinery MACT	MONITO	NESHAP for Petroleum Refineries MONITORING FOR RECORDKEEPING ONLY. There are no 61 Subpart FF monitoring requirements for storage tanks that are exempt from controls.						
Throughput	Condition #13597	Y			Applies to S-1798	P/M	Recordkeeping	
Throughput	Condition #3697	Y			Applies to S-1799	P/M	Recordkeeping	
Throughput	Condition #2238	Y		Applies to S-3100	Condition #2238.4	P/M	Recordkeeping	
Throughput	Condition #18137	N		Throughput limits	Condition #18137	P/M	Recordkeeping	
Throughput	Condition #25144 Part 1	N		Throughput limit of 4,802,722 barrels of JP-8, Jet A, or similar jet fuel in any 12 consecutive months for S-1292	Condition #25144 Part 7	P/D	Recordkeeping	
Vapor Pressure	Condition #25144 Part 4	N		True vapor pressure of stored materials never to exceed 0.8 psia nor 0.5 psia on a monthly average for S-1292	Condition #25144 Part 4	P/M	Recordkeeping	
Temperature	Condition #25144 Parts 3	N		The initial boiling point shall be maintained at a minimum of 290 degrees F on a monthly average basis and 302 degrees F on any consecutive 12 month basis for materials stored in S- 1292.	Condition #25144 Parts 4 & 7	P/W	Recordkeeping	
Composition	Condition #25144 Part 2	N		Only JP-8, Jet A, or similar jet fuel or exempt stock may be stored in S-1292, if there is no net increase in emissions and no toxic trigger levels are met or exceeded, subject to District conditions and approval.	Condition #25144 Part 2	P/M	Recordkeeping	

#### S-0232, S-0297, S-0298, S-0398, S-1292, S-1518, S-1798, S-1799, S-1843, S-1966, S-3074, S-3100
# Table VII.F.1.5 Tanks Applicable Limits and Compliance Monitoring Requirements

#### **External Floating-Roof Tanks Cluster 11**

5-0232, 5-0297, 5-0298, 5-0398, 5-1292, 5-1518, 5-1798, 5-1799, 5-1843, 5-1966, 5-3074, 5-3100												
Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type					
Fugitives	Condition #25144 Part 6	N Y?		S-1292 shall be tagged, inspected, and included in Chevron's LDAR program for all fugitive components. Full permit conditions available in	Condition #25479 Part 7	P/M	Recordkeeping					
				Section VI.								

### S-0232, S-0297, S-0298, S-0398, S-1292, S-1518, S-1798, S-1799, S-1843, S-1966, S-3074, S-3100

#### Table VII.F.1.6 Tanks (IFRT's Cluster 12)

# Table VII.F.1.6 Tanks Applicable Limits and Compliance Monitoring Requirements

#### **Internal Floating Roof Tank Cluster 12**

#### S-1633

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type					
Regulation 8 Rule 5		Organic Compounds – STORAGE OF ORGANIC LIQUIDS										
VOC	8-5-301	Y		Records of liquids stored and TVP	8-5-501.1	P/E	Records					
VOC	8-5-305, 8- 5-321.1, 8- 5-322.1	Y		Visual inspection of outer most seal	8-5-402.2	P/SA	Visual inspection					
VOC	8-5-320	Y		Deck fitting closure standards; includes gasketed covers	8-5-402, 8-5-404, 8-5-405	P/SA	Measurement and Visual inspection					
							And Certification Report					
VOC	8-5-321	Y		Primary rim-seal standards; includes gap criteria	8-5-402, 8-5-404, 8-5-405 and 8-5-501.2	P/SA and every time seal is replaced	Seal inspection and Records And Certification Report					
VOC	8-5-322	Y		Secondary rim-seal standards; includes gap criteria	8-5-402, 8-5-404, 8-5-405 and 8-5-501.2	P/SA and every time seal is replaced	Seal inspection and Records And Certification Report					
VOC	8-5-328.1.2	Y		Tank cleaning control device standards includes 90% efficiency requirement until tank less than 10,000 ppm	8-5-502	P/A	ST-7					
VOC		Y		Determination of Applicability	8-5-604	P/E	Look-up table or sample analysis					
Refinery MACT	MONITO	RING I	FOR ONLY.	NESHAP for Petroleur There are no 61 Subpart FF moni from control	n Refineries toring requirements s.	for storage tanks	s that are exempt					
Throughput	Condition #18137	N		Throughput limits	Condition #18137	P/M	Recordkeeping					

### Table VII.F.1.7 Tanks (FRT's Cluster 13)

# Table VII.F.1.7 Tanks Applicable Limits and Compliance Monitoring Requirements

#### **Fixed Roof Tanks Cluster 13**

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type					
Regulation 8 Rule 5		Organic Compounds – STORAGE OF ORGANIC LIQUIDS										
VOC	8-5-301	Y		Records of liquids stored and TVP	8-5-501.1	P/E	Records					
VOC	8-5-303.1	Y		P/V valve set [ressure within 10% of max allowable working pressure or at least 0.5 psig	8-5-403	P/SA	Visual Inspection					
VOC	8-5-303.2	Y		P/V valve must be gas tight: less than 500 ppm(as methane) above background	8-5-403, SIP 8- 5-503, 8-5-605	P/SA	Method 21 portable hydrocarbon detector					
VOC	8-5-306	Y		Control device standards; includes 95% efficiency requirement	8-5-603.1	P/A	MOP Volume IV ST-4(ST-4 no longer exists, replaced by ST-34, ST-7 or EPA Method 25)					
VOC	8-5-328.1.2	Y		Tank cleaning control device standards includes 90% efficiency requirement until tank less than 10,000 ppm	8-5-502	P/A	ST-7					
VOC		Y		Determination of Applicability	8-5-604	P/E	Look-up table or sample analysis					
Refinery MACT	MONITORIN	NESHAP for Petroleum Refineries MONITORING FOR RECORDKEEPING ONLY. There are no 61 Subpart FF monitoring requirements for storage tanks that are exempt from controls.										
Throughput	Condition #18137	N		Throughput limits	Condition #18137	P/M	Recordkeeping					

#### Table VII.F.1.8 Tanks (FRT's Cluster 16)

#### Table VII.F.1.9 Tanks (EFRT's Cluster 17)

# Table VII.F.1.9 Tanks Applicable Limits and Compliance Monitoring Requirements

#### **External Floating Roof Tanks Cluster 17**

#### S-3101, S-3102, S-3129

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
Regulation 8 Rule 5	Orgai	nic Com	pounds – ST	ORAGE OF ORGANIC LIQUIDS	LIMITS SIP (11/2	27/02), BAAQMD	(10/18/06)
VOC	8-5-301	Y		Records of liquids stored and TVP	8-5-501.1	P/E	Records
VOC	8-5-320	Y		Deck fitting closure standards; includes gasketed covers	8-5-401.2, 8-5- 404, 8-5-405	P/SA	Measurement and Visual inspection
							And Certification Report
VOC	8-5-321	Y		Primary rim-seal standards; includes gap criteria	8-5-401.1, 8-5- 404, 8-5-405	P/SA and every time seal is	Seal inspection and Records
					and 8-5-501.2	replaced	And Certification Report
VOC	8-5-322	Y		Secondary rim-seal standards; includes gap criteria	8-5-401.1, 8-5- 404, 8-5-405	P/SA and every time seal is	Seal inspection and Records
					and 8-5-501.2	replaced	And Certification Report
VOC	8-5- 328.1.2	Y		Tank cleaning control device standards includes 90% efficiency requirement until tank less than 10,000 ppm	8-5-502	P/A	ST-7
VOC		Y		Determination of Applicability	8-5-604	P/E	Look-up table or sample analysis
NSPS K		·		Petroleum Liquids Stor LIMITS AND MONITORIN	age Vessels NG FOR EFRTs		
VOC	60.113 (a)	Y		True vapor pressure determination	60.113 (b) & (c)	Periodic initially and upon change of service	Calculate
VOC	60.113b (a2)	Y		Inspection of secondary seals for holes, tears, or detatchment	60.113b(a2)	P/A	Seal inspection and records

# Table VII.F.1.9 Tanks Applicable Limits and Compliance Monitoring Requirements

#### **External Floating Roof Tanks Cluster 17**

#### S-3101, S-3102, S-3129

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
Throughput	Condition #18137	N		Throughput limits	Condition #18137	P/M	Recordkeeping
Throughput	Condition #21237, part 1	Y		Notification requirement regarding piping and pumping for S-1514, 3072, and S-3101	Condition #21237 part 1	P/E	Recordkeeping and reporting

### Table VII.F.1.10 Tanks (EFRT's Cluster 23)

# Table VII.F.1.10 Tanks Applicable Limits and Compliance Monitoring Requirements

#### **External Floating Roof Tanks Cluster 23**

#### S-0399, S-3180, S-3189, S-3190, S-3191, S-3193, S-3196, S-3197, S-3198, S-3201, S-3202, S-3213, S-3214, S-3225

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type					
Regulation 8 Rule 5	C	Organic Compounds – STORAGE OF ORGANIC LIQUIDS SIP (11/27/02), BAAQMD (10/18/06)										
VOC	8-5-301	Y		Records of liquids stored and TVP	8-5-501.1	P/E	Records					
VOC	8-5-320	Y		Deck fitting closure standards; includes gasketed covers	8-5-401.2, 8-5- 404, 8-5-405	P/SA	Measurement and Visual inspection					
							And Certification Report					
VOC	8-5-321	Y		Primary rim-seal standards; includes gap criteria	8-5-401.1, 8-5- 404, 8-5-405	P/SA and every time seal	Seal inspection and Records					
					and 8-5-501.2	is replaced	And Certification Report					
VOC	8-5-322	Y		Secondary rim-seal standards; includes gap criteria	8-5-401.1, 8-5- 404, 8-5-405	P/SA and every time seal	Seal inspection and Records					
					and 8-5-501.2	is replaced	And Certification Report					
VOC	8-5- 328.1.2	Y		Tank cleaning control device standards includes 90% efficiency requirement until tank less than 10,000 ppm	8-5-502	P/A	ST-7					
VOC		Y		Determination of Applicability	8-5-604	P/E	Look-up table or sample analysis					
NSPS Kb				Volatile Organic Liquid St LIMITS AND MONITORIN	orage Vessels IG FOR EFRTs							
VOC	60.112b (a)(2)(ii)	Y		Deck fitting closure standards; includes gasketed covers	60.113b (b)(6)	Periodic initially & each time emptied & degassed	Visual inspection					
VOC	60.113b (b)(4)(i)	Y		Primary rim-seal standards; includes gap criteria	60.113b (b)(1)-(b)(3)	Periodic initially & at 5 yr intervals	Measurement and visual inspection					

# Table VII.F.1.10 Tanks Applicable Limits and Compliance Monitoring Requirements

#### **External Floating Roof Tanks Cluster 23**

#### S-0399, S-3180, S-3189, S-3190, S-3191, S-3193, S-3196, S-3197, S-3198, S-3201, S-3202, S-3213, S-3214, S-3225

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
VOC	60.113b (b)(4)(ii)	Y		Secondary rim-seal standards; includes gap criteria	60.113b (b)(1)-(b)(3)	Periodic initially & annually	Measurement and visual inspection
VOC	60.116(b)( c)	Y		True vapor pressure determination	60.116b (e)	Periodic initially and upon change of service	Calculation
VOC	60.113b(a 2)	Y		Inspection of secondary seals for holes, tears, or detachment	60.113b(a2)	P/A	Seal inspection and records
Throughput	Condition 2856	N		3,500,000 bbl/y, max vapor pressure 10 psia avg vapor pressure 7.0	Condition 2856	P/M	recordkeeping
Throughput	Condition #6660, part 1	Y		throughput shall not exceed 12,000,000 barrels of non- exempt stock during consecutive 12-month period	Condition #6660, part 3 S-3189	P/M	Recordkeeping
Throughput	Condition #6661, part 1	N		throughput shall not exceed 7,300,000 barrels during consecutive 12-month period	Condition #6661, part 3 S-3190	P/M	Recordkeeping
Throughput	Condition #7583, part 1	Y		throughput shall not exceed 2,000,000 barrels of non- exempt stock during consecutive 12-month period	Condition #7583, part 4 S-3191	P/M	Recordkeeping
Throughput	Condition #8253, part 1	Y		throughput shall not exceed 9,500,000 barrels during consecutive 12-month period	Condition #8253, part 5 S-3193	P/M	Recordkeeping
Throughput	Condition #13467, part 1	Y		throughput shall not exceed 2,000,000 barrels during consecutive 12-month period	Condition #13467, part 5 S-3196	P/M	Recordkeeping
Throughput	Condition #8252, part 1	Y		throughput shall not exceed 4,000,000 barrels during consecutive 12-month period	Condition #8252, part 4 S-3197	P/M	Recordkeeping
Throughput	Condition #8715, part 1	N		throughput shall not exceed 500,000 barrels during consecutive 12-month period	Condition #8715, part 3 S-3198	P/M	Recordkeeping
Throughput	Condition #13008, part 1	Y		throughput of non-exempt stocks shall not exceed 7,300,000 barrels during consecutive 12-month period	Condition #13008, part 3 S-3201	P/M	Recordkeeping

# Table VII.F.1.10 Tanks Applicable Limits and Compliance Monitoring Requirements

#### **External Floating Roof Tanks Cluster 23**

#### S-0399, S-3180, S-3189, S-3190, S-3191, S-3193, S-3196, S-3197, S-3198, S-3201, S-3202, S-3213, S-3214, S-3225

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
Throughput	Condition #13364, part 1	Y		throughput of non-exempt stocks shall not exceed4,000, 000 barrels during consecutive 12-month period	S-3202		
Throughput	Condition #12139, part 1	Y		throughput of non-exempt stocks shall not exceed 9,100,000 barrels during consecutive 12-month period	Condition #12139, part 3 S-3213	P/M	Recordkeeping
Throughput	Condition #12104, part 1	Y		throughput of non-exempt stocks shall not exceed 3,000,000 barrels during consecutive 12-month period	Condition #12104, part 3 S-3214	P/M	Recordkeeping
Throughput	Condition # 18702 part 1	Y		Throughput limit for S-3225	Condition #18702 part 3	P/M	Recordkeeping
Throughput	Condition #18137	Ν		Throughput limits	Condition #18137	P/M	Recordkeeping

#### Table VII.F1.11 Tanks (IFRT's Cluster 24)

	Table VII.F.1.11 Tanks											
Applicable Limits and Compliance Monitoring Requirements												
Internal Floating Roof Tanks Cluster 24 S-1635, S-1637, S-3229												
5-1033, 5-1037, 5-3229												
			Future		Monitoring	Monitoring						
	Citation of	FE	Effective		Requirement	Frequency	Monitoring					
Type of Limit	Limit	Y/N	Date	Limit	Citation	(P/C/N)	Туре					
Regulation 8												
Rule 5	Organic Compounds - STORAGE OF ORGANIC LIQUIDS LIMITS SIP (11/27/02), BAAQMD (10/18/06)											
				Records of liquids stored and								
VOC	8-5-301	Y		TVP	8-5-501.1	P/E	Records					

	Table VII.F.1.11 Tanks           Applicable Limits and Compliance Monitoring Requirements												
	Internal Floating Roof Tanks Cluster 24												
S-1635, S-1637, S-3229													
Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type						
VOC	8-5-305, 8-5-321.1, 8- 5-322.1	Y		Visual inspection of outer most seal	8-5-402.2	P/SA	Visual inspection						
VOC	8-5-320	Y		Deck fitting closure standards; includes gasketed covers	8-5-401.2, 8-5-404, 8-5- 405	P/SA	Measurement and Visual inspection						
							And Certification Report						
VOC	8-5-321	Y		Primary rim-seal standards; includes gap criteria	8-5-401.1, 8-5-404, 8-5- 405 and 8-5-501.2	P/SA and every time seal is replaced	Seal inspection and Records And Certification Report						
VOC	8-5-322	Y		Secondary rim-seal standards; includes gap criteria	8-5-401.1, 8-5-404, 8-5- 405 and 8-5-501.2	P/SA and every time seal is replaced	Seal inspection and Records And Certification Report						
VOC	8-5-328.1.2	Y		Tank cleaning control device standards includes 90% efficiency requirement until tank less than 10,000 ppm	8-5-502	P/A	ST-7						
VOC		Y		Determination of Applicability	8-5-604	P/E	Look-up table or sample analysis						
NSPS Kb				Volatile Organic Liquid Sto LIMITS AND MONITORIN	orage Vessels IG FOR IFRTs								

# VII. Applicable Limits and Compliance Monitoring Requirements

	Table VII.F.1.11 Tanks           Applicable Limits and Compliance Monitoring Requirements												
	Internal Floating Roof Tanks Cluster 24												
S-1635, S-1637, S-3229													
Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type						
VOC	60.112b (a)(1)	Y		Deck fitting closure standards; includes gasketed covers	60.113b (a)(4)	Periodic initially & each time emptied & degassed, at least every 10 yr	Visual inspection						
VOC	60.113b (a)(1) & (4)	Y		Primary rim-seal standards; no holes or tears	60.113b (a)(4)	Periodic initially & each time emptied & degassed, at least every 10 yr	Visual inspection						
VOC	60.113b (a)(1) & (4)	Y		Secondary rim-seal standards; no holes or tears	60.113b (a)(4)	Periodic initially & each time emptied & degassed, at least every 10 yr	Visual inspection						
VOC	60.113b (a)(2)	Y		No liquid on the floating roof or other obvious defects	60.113b (a)(2)	Periodic annually	Visual inspection						
VOC	60.113b(a2)	Y		Inspection of secondary seals for holes, tears, or detatchment	60.113b(a2)	P/A	Seal inspection and records						
VOC	60.116b (c)	Y		True vapor pressure determination	60.116b (e)	Periodic initially and upon change of service	Calculate						
VOC	Condition 1069	Ν		Organic vapor concentration	Condition 1069	P/Q	Concentration measurement and recordkeeping						

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	Table VII.F.1.11 Tanks           Applicable Limits and Compliance Monitoring Requirements											
	Internal Floating Roof Tanks Cluster 24											
S-1635, S-1637, S-3229												
Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type					
Throughput	Condition #15671, part 1	Ν		throughput of non-exempt stocks shall not exceed 2,000,000 barrels during consecutive 12-month period	Condition #15671, part 4 S-3213	P/M	Recordkeeping					
Condition #18137	Throughput lir	nits				P/M	Recordkeeping					
Throughput	Condition #25037 Parts 1 & 2	Y		Throughput limit of 6,000,000 barrels of recovered oil in any 12 consecutive months or 38,000 in any calendar day for S-3229	Condition #25037 Part 16	P/M	Recordkeeping					
Vapor Pressure	Condition #25037 Part 3	Y		True vapor pressure of stored materials not to exceed 10.3 psia for S-3229	Condition #25037 Part 16	P/M	Recordkeeping					
Temperature	Condition #25037 Part 7	Y		S-3229 shall be equipped with a temperature measuring device with a set point of no more than 180F. Tank S-3229 shall be heated to above 120F to demonstrate vapor pressure compliance.	Condition #25037 Part 16	P/M	Recordkeeping					
Composition	Condition #25037 Part 4	Y	I	S-3229 will store materials as recovered oil or other petroleum hydrocarbon material that with benzene, ethylbenzene, and naphthalene content not to exceed 2% by weight each. Stored materials <u>subject to</u> <u>District conditions and</u> <u>approval.</u>	Condition #25037 Part 4	P/Q	Recordkeeping					
Fugitives	Condition #25037 Parts 8 to 14	Y	]	Fugitive emissions from S-3229 are to comply with a leak standard of 100 ppm TOC at any pumps, valves, flanges, and/or PRDs and are not to exceed 0.702 tons of POC in any 365 consecutive days. Full permit conditions available in Section VI.	Condition #25037 Part 15	P/D	Recordkeeping					

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### Table VII.F.1.12 Tanks (FRT's Cluster 25)

	Table VII.F.1.12 Tanks           Applicable Limits and Compliance Monitoring Requirements												
S-62 S-6	<u>Fixed Roof Tanks Cluster 25</u> S-6220, S-6221, S-6222, S-6223, S-6224, S-6225, S-6226, S-6227, S-6228, S-6229, S-6230, S-6231, S-6232, S-6233, S-6234, S-6235, S-6236, S-6237, S-6238, S-6239, S-3110, S-3111 (S-3110 & S-3111 also included in Wastewater Cluster 40b)												
Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type						
Regulation 8 Rule 5	Or	ganic C	Compounds –	STORAGE OF ORGANIC LIQU	IDS SIP (11/27/02)	BAAQMD (10	/18/06)						
VOC	8-5-301	Y		Records of liquids stored and TVP	8-5-501.1	P/E	Records						
VOC	8-5-303.1	Y		P/V valve set [ressure within 10% of max allowable working pressure or at least 0.5 psig	8-5-403	P/SA	Visual Inspection						
VOC	8-5-303.2	Y		P/V valve must be gas tight: less than 500 ppm(as methane) above background	8-5-403, SIP 8-5- 503, 8-5-605	P/SA	Method 21 portable hydrocarbon detector						
VOC	8-5-306	Y		Control device standards; includes 95% efficiency requirement	8-5-603.1	P/A	MOP Volume IV ST-4(ST-4 no longer exists, replaced by ST-34, ST-7 or EPA Method 25)						
VOC	8-5-328.1.2	Y		Tank cleaning control device standards includes 90% efficiency requirement until tank less than 10,000 ppm	8-5-502	P/A	ST-7						
VOC		Y		Determination of Applicability	8-5-604	P/E	Look-up table or sample analysis						
NSPS Kb			LIMIT	Volatile Organic Liquid Sto S AND MONITORING FOR CVS	orage Vessels S & CONTROL DE	VICES							
VOC	60.112b (a)(3)(i)	Y		Closed vent system leak tightness standards (< 500 ppmw)	60.112b (a)(3)(i)	P/A	Method 21						
VOC	60.112b (a)(3)(ii)	Y		Control device standards; includes 95% efficiency requirement, or a flare per 60.18	60.113b (c)(2) & (d)	P/D	FID Continuous temperature monitor						

	Table VII.F.1.12 Tanks           Applicable Limits and Compliance Monitoring Requirements												
	Fixed Roof Tanks Cluster 25												
S-6220, S-6221, S-6222, S-6223, S-6224, S-6225, S-6226, S-6227, S-6228, S-6229, S-6230, S-6231, S-6232, S-6233, S-6234, S-6235, S-6236, S-6237, S-6238, S-6239, S-3110, S-3111 (S-3110 & S-3111 also included in Wastewater Cluster 40b)													
Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type						
NESHAP FF	NESHAP     Benzene Waste Operations       FF     LIMITS AND MONITORING FOR CONTAINERS												
HAP (Benzene)	61.345 (a)(1)(i)(A )	Y		Cover leak tightness standards (< 500 ppmw)	61.345 (a)(1)(i)(A)	Periodic initially & annually	Method 21						
HAP (Benzene)	61.345 (a)(1)(i)(B )	Y		Standards for openings in the cover	61.345 (a)(1)(i)(B)	Periodic initially & quarterly	Visual inspection						
HAP (Benzene)	61.345 (a)(1)(i)(C )	Y		Standards for systems operated under negative pressure	61.345 (a)(1)(i)(C)	Continuous	System pressure						
HAP (Benzene)	61.349 (a)(1)(i)	Y		Closed vent system leak tightness standards (< 500 ppmw)	61.349 (a)(1)(i)	Periodic initially & annually	Method 21						
HAP (Benzene)	61.349 (a)(1)(ii)	Y		Closed vent systems by-pass line standards	61.354 (f)	Periodic daily for flow indicator; monthly for car-seal	Visual inspection						
HAP (Benzene)	61.349 (a)(1)(iii), (iv)	Y		Closed vent system gauging & sampling and pressure relief device standards	61.349(f)	Periodic initially & annually	Visual inspection						
HAP (Benzene)	61.349(a)( 2)(i)	Y		Applies to S-3110 and S-3111. Reduce organics by 95 weight % or < 20 ppmv organics dry basis, 3% O2 or > 0.5 seconds residence time @ greater than 1400F.	#4650	С	Temperature monitor						
HAP (Benzene)	61.349(h)	Y		Control device standards	61.354 (c)	Continuous check daily	Specified parameter						
POC	Condition #4650	Y		Applies to S-3110 and S-3111. Minimum temperature of 1000 degrees F, at least 98.5% by weight VOC abatement, POC emissions less than 1 lb/day, benzene emissions less than 0.04 lb/day	#4650 Part 5	С	Temperature monitor						
POC	Condition #10761	Y		Applies to S-6220 through S-6239. Control efficiency >99% or less than 100 ppm outlet hydrocarbon concentration	#10761 Part 9	P/M	FID						

	Table VII.F.1.12 Tanks										
	Applicable Limits and Compliance Monitoring Requirements										
<u>Fixed Roof Tanks Cluster 25</u> S-6220, S-6221, S-6222, S-6223, S-6224, S-6225, S-6226, S-6227, S-6228, S-6229, S-6230,											
S-6	231, S-623	2, S-6	5233, S-623	34, S-6235, S-6236, S-6237	, S-6238, S-623	9, S-3110, S	-3111				
	,	(Ś-31	10 & S-31	11 also included in Wastev	water Cluster 4	40b)					
Type of Limit	Type of LimitCitation of LimitFE Y/NFuture Effective DateMonitoring LimitMonitoring 										
Condition #18137	Condition #18137     Throughput limits     P/M     Recordkeeping										

#### Table VII.F.1.13 Tanks (EFRT's Cluster 26)

# Table VII.F.1.13 Tanks Applicable Limits and Compliance Monitoring Requirements

#### **External Floating Roof Tanks Cluster 26**

S-0231, S-0634, S-0679, S-0953, S-0954, S-0990, S-0991, S-0992, S-1287, S-1296, S-1444, S-1459, S-1488, S-1489, S-1491, S-1504, S-1514, S-1686, S-1687, S-1688, S-3071, S-3072, S-3073, S-3075, S-3076, S-3103, S-3104, S-3105, S-3106, S-3107, S-3126, S-3128, S-3133, S-3134, S-3144

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type				
Regulation 8 Rule 5	Or	Organic Compounds – STORAGE OF ORGANIC LIQUIDS SIP (11/27/02), BAAQMD (10/18/06)									
VOC	8-5-301	Y		Records of liquids stored and TVP	8-5-501.1	P/E	Records				
VOC	8-5-320	Y		Deck fitting closure standards; includes gasketed covers	8-5-401.2, 8-5- 404, 8-5-405	P/SA	Measurement and Visual inspection				
							And Certification Report				
VOC	8-5-321	Y		Primary rim-seal standards; includes gap criteria	8-5-401.1, 8-5- 404, 8-5-405	P/SA and every time seal is	Seal inspection and Records				
					and 8-5-501.2	replaced	And Certification Report				
VOC	8-5-322	YN		Secondary rim-seal standards; includes gap criteria	8-5-401.1, 8-5- 404, 8-5-405	P/SA and every time seal is	Seal inspection and Records				
					and 8-5-501.2	replaced	And Certification Report				
VOC	8-5-328.1.2	Y		Tank cleaning control device standards includes 90% efficiency requirement until tank less than 10,000 ppm	8-5-502	P/A	ST-7				
VOC		Y		Determination of Applicability	8-5-604	P/E	Look-up table or sample analysis				
40 CFR 63 Subpart CC Refinery MACT				NESHAP for Petroleur LIMITS AND MONITORI	n Refineries NG FOR EFRTs						
НАР	63.646(f)	Y		Deck fitting closure standards	63.646 (a) & (e) 63.120 (b)(10)	Periodic initially & each time emptied & degassed	Visual inspection				

# Table VII.F.1.13 Tanks Applicable Limits and Compliance Monitoring Requirements

#### **External Floating Roof Tanks Cluster 26**

# S-0231, S-0634, S-0679, S-0953, S-0954, S-0990, S-0991, S-0992, S-1287, S-1296, S-1444, S-1459, S-1488, S-1489, S-1491, S-1504, S-1514, S-1686, S-1687, S-1688, S-3071, S-3072, S-3073, S-3075, S-3076, S-3103, S-3104, S-3105, S-3106, S-3107, S-3126, S-3128, S-3133, S-3134, S-3144

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
НАР	63.646(a) 63.120 (b)(3)&(5)	Y		Primary rim-seal standards; includes gap criteria	63.646(a) 63.120 (b)(1) & (2)	Periodic initially & at 5 yr intervals	Measurement and visual inspection
НАР	63.646(a) 63.120 (b)(4)&(6)	Y		Secondary rim-seal standards; includes gap criteria	63.646(a) 63.120 (b)(1) & (2)	Periodic initially & annually	Measurement and visual inspection
Throughput	Condition #8503, part 1	Y		throughput of jet fuel components shall not exceed 1,000,000 barrels during consecutive 12-month period	Condition #8503, part 3 S-679	P/M	Recordkeeping
Throughput	Condition #10908 part 1	Y		Throughput limit for S-1489	Condition #10908 part 4	P/M	Recordkeeping
Throughput	Condition #10909, part 1	Y		throughput of non-exempt stocks shall not exceed 6,000,000 barrels during consecutive 12-month period	Condition #10909, part 4 S-992	P/M	Recordkeeping
Throughput	Condition #11025, part 1	Y		throughput of non-exempt stocks shall not exceed 30,000,000 barrels during consecutive 12-month period	Condition #11025, part 4 S-3106	P/M	Recordkeeping
Throughput	Condition #17470, part 1	Y		throughput of crude oil shall not exceed 50,000 barrels during consecutive 12-month period	Condition #17470, part 3 S-3126	P/M	Recordkeeping
Throughput	Condition #17470, part 2	Y		throughput of naphtha shall not exceed 365,000 barrels during consecutive 12-month period	Condition #17470, part 3 S-3126	P/M	Recordkeeping
Throughput	Condition #15038, part 1	Y		throughput of non-exempt stocks shall not exceed 15,000,000 barrels during consecutive 12-month period	Condition #15038, part 2 S-3133	P/M	Recordkeeping
Throughput	Condition #13859, part 1	Y		throughput of non-exempt stocks shall not exceed 10,000,000 barrels during consecutive 12-month period	Condition #13859, part 2 S-3134	P/M	Recordkeeping
Condition #18137	Throughput 1	imits				P/M	Recordkeeping

# Table VII.F.1.13 Tanks Applicable Limits and Compliance Monitoring Requirements

#### **External Floating Roof Tanks Cluster 26**

# S-0231, S-0634, S-0679, S-0953, S-0954, S-0990, S-0991, S-0992, S-1287, S-1296, S-1444, S-1459, S-1488, S-1489, S-1491, S-1504, S-1514, S-1686, S-1687, S-1688, S-3071, S-3072, S-3073, S-3075, S-3076, S-3103, S-3104, S-3105, S-3106, S-3107, S-3126, S-3128, S-3133, S-3134, S-3144

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
Throughput	Condition #, 21237, part 1	Y		Notification requirement regarding piping and pumping for S-1514, S-3072 and S-3101	Condition #21237 part 1	P/E	Recordkeeping and reporting
Throughput	Condition # 22641, part 1			Throughput of material shall not exceed 3,495,000 barrels during consecutive 12-month period	Condition # 22641, part 7 S-1296	P/M	Recordkeeping
Throughput	Condition # 22641, part 3			Throughput of material shall not exceed 3,000,000 barrels during consecutive 12-month period	Condition # 22641, part 7 S-1514	P/M	Recordkeeping

#### Table VII.F.1.14 Tanks (IFRT's Cluster 27) Table VII.F.1.14 Tanks Applicable Limits and Compliance Monitoring Requirements

#### Internal Floating-Roof Tanks Cluster 27

#### S-1289, S-1645

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
Regulation 8 Rule 5	0	rganic (	Compounds –	STORAGE OF ORGANIC LIQU	IDS SIP (11/27/02)	), BAAQMD (10	/18/06)
VOC	8-5-301	Y		Records of liquids stored and TVP	8-5-501.1	P/E	Records
VOC	8-5-305, 8- 5-321.1, 8- 5-322.1	Y		Visual inspection of outer most seal	8-5-402.2	P/SA	Visual inspection
VOC	8-5-320	Y		Deck fitting closure standards; includes gasketed covers	8-5-401.2, 8-5-404, 8-5-405	P/SA	Measurement and Visual inspection
							And Certification Report
VOC	8-5-321	Y		Primary rim-seal standards; includes gap criteria	8-5-401.1, 8-5-404, 8-5-405 and 8-5-501.2	P/SA and every time seal is replaced	Seal inspection and Records And Certification Report
VOC	8-5-322	Y		Secondary rim-seal standards; includes gap criteria	8-5-401.1, 8-5-404, 8-5-405 and 8-5-501.2	P/SA and every time seal is replaced	Seal inspection and Records And Certification Report
VOC	8-5- 328.1.2	Y		Tank cleaning control device standards includes 90% efficiency requirement until tank less than 10,000 ppm	8-5-502	P/A	ST-7
VOC		Y		Determination of Applicability	8-5-604	P/E	Look-up table or sample analysis
Refinery MACT				NESHAP for Petroleum	Refineries		
НАР	63.646(f)	Y		Deck fitting closure standards	63.646 (a) & (e) 63.120 (a)(2) & (3)	Periodic initially & each time emptied & degassed, at least every 10 yr	Visual inspection

# Table VII.F.1.14 Tanks Applicable Limits and Compliance Monitoring Requirements

#### **Internal Floating-Roof Tanks Cluster 27**

#### S-1289, S-1645

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
НАР	63.646(a) 63.120 (a)(7)	Y		Primary rim-seal standards; no holes or tears	63.646(a) 63.120 (a)(2) & (3)	Periodic initially & each time emptied & degassed, at least every 10 yr	Visual inspection
НАР	63.646(a) 63.120 (a)(7)	Y		Secondary rim-seal standards (if so equipped); no holes or tears	63.646(a) 63.120 (a)(2) & (3)	Periodic initially & each time emptied & degassed, at least every 10 yr	Visual inspection
HAP	63.646(a) 63.120 (a)(4)	Y		Additional rim-seal standards; includes no gaps visible from the tank top	63.646(a) 63.120 (a)(2) & (3)	Periodic annually	Visual inspection
HAP	63.646(a) 63.120 (a)(4)	Y		No liquid on the floating roof or other obvious defects	63.646(a) 63.120 (a)(2) & (3)	Periodic annually	Visual inspection
throughput	Condition #21307	n		S-1645 Throughput, vapor pressure and benzene content	Condition 21307	P/M	recordkeeping
Condition #18137	Throughput	limits		·		P/M	Recordkeeping

#### Table VII.G.1.1 Wastewater Treatment Units (Cluster 10) Table VII.G.1.1 Wastewater Applicable Limits and Compliance Monitoring Requirements

#### **Treatment Unit Cluster 10**

#### S-3200 4 CU Desalter Water Treatment Unit abated by A-3200 F-1100B Furnace,

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
SIP Regulation 8 Rule 8	Regulation exemption	O 8-8 do ns for s	rganic Compo LIMIT es not address specified WM	ounds – WASTEWATER (OIL-W S AND MONITORING FOR TRE s treatment of the waste stream. [7] IUs. Those requirements are listed repeated below for refe	ATER) SEPARAT EATMENT PROC There are monitorin l in the templates f erence.]	FORS (6/15/94) ESSES ng requirements a for the applicable	associated with WMUs, and
Organic Compounds	SIP 8-8-112	Y		Monitoring for exemption from controls for low wastewater temperature or low concentration of pollutants	SIP 8-8-502	Periodic initially & semiannually	Sample analysis

# Table VII.G.1.1 Wastewater Applicable Limits and Compliance Monitoring Requirements

#### **Treatment Unit Cluster 10**

#### S-3200 4 CU Desalter Water Treatment Unit abated by A-3200 F-1100B Furnace,

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
Organic Compounds	SIP 8-8-114	Y		Monitoring wastewater bypassing oil-water separator or DAF	SIP 8-8-501	Periodic upon occurrence	Sample analysis
BAAQMD Regulation 8 Rule 8	Organic Cor (INDIVIDU	npoun AL DF	ds-WASTE' RAIN SYSTE	WATER COLLECTION AND S	SEPARATION SY DLS)	YSTEMS (9/15/0	14)
Organic Compound	8-8-112	N		Monitoring for exemption from controls for low wastewater temperature or low concentration of pollutants	8-8-502	Periodic initially & semiannually	Sample analysis
NESHAP FF Regulation 11 Rule 12	The 61 Su	bpart I	LIMIT F requiremer W	Benzene Waste Oper S AND MONITORING FOR TRE hts related to control of air emissio 'MU, and are not listed here under	ations EATMENT PROC ns for WMUs are treatment process	ESSES listed in the temp es.	lates for each
Wastewater (Benzene)	61.342 (e)	Y		6 Mg/yr benzene quantity (BQ) limit	61.342 (e)	Periodic annually	Flow measurement & sample analysis
HAP (Benzene)	61.343 (a)(1)(i)(A)	Y		Cover leak tightness standards (< 500 ppmw)	61.343 (a)(1)(i)(A)	Periodic initially & annually	Method 21
HAP (Benzene)	61.343 (a)(1)(i)(B)	Y		Standards for openings in the cover	61.343 (a)(1)(i)(B)	Periodic initially & quarterly	Visual inspection
HAP (Benzene)	61.343 (a)(1)(i)(C)	Y		Standards for systems operated under negative pressure	61.343 (a)(1)(i)(C)	Continuous	System pressure
HAP (Benzene)	61.345 (a)(1)(i)(A)	Y		Cover leak tightness standards (< 500 ppmw)	61.345 (a)(1)(i)(A)	Periodic initially & annually	Method 21
HAP (Benzene)	61.345 (a)(1)(i)(B)	Y		Standards for openings in the cover	61.345 (a)(1)(i)(B)	Periodic initially & quarterly	Visual inspection
HAP (Benzene)	61.345 (a)(1)(i)(C)	Y		Standards for systems operated under negative pressure	61.345 (a)(1)(i)(C)	Continuous	System pressure
POC	Condition #4650, part 9	Y		1000 F minimum operating temperature for A-3200	Condition #4650, part 9 S-3200	С	temperature monitoring
POC	Condition #4650, part 11	Y		nitrogen purge and vent gases vented to A-3200	Condition #4650, part 11 S-3200	С	flow monitoring

# Table VII.G.1.1 Wastewater Applicable Limits and Compliance Monitoring Requirements

#### **Treatment Unit Cluster 10**

#### S-3200 4 CU Desalter Water Treatment Unit abated by A-3200 F-1100B Furnace,

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
POC	Condition #4650, part 12	Y		no unintended leaks, depressurizations, or bypasses to atmosphere	Condition #4650, part 12 S-3200	С	pressure monitoring
POC	Condition #4650, part 13	Y		100 ppm concentration limit at S-3200 pump seals	BAAQMD 8-18-401.2 S-3200	P/Q	Method 21 inspection
Throughput	Condition #18137	N		Throughput limits	Condition #18137	P/M	Recordkeeping

#### Table VII.G.1.2 Wastewater (Wastewater Cluster 20D)

# Table VII.G.1.2 Wastewater Applicable Limits And Compliance Monitoring Requirements

#### Wastewater Cluster 20d

#### **Process Drains not Subject to QQQ**

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type			
SIP Regulation 8 Rule 8		Organic Compounds – WASTEWATER (OIL-WATER) SEPARATORS (6/15/94) INDIVIDUAL DRAIN SYSTEMS EXEMPT FROM CONTROLS 8-8 has no monitoring requirements								
VOC	SIP 8-8- 112	Y		Exemption from controls for low concentration of pollutants (records are required)	SIP 8-8-502	Periodic upon occurrence	Sample analysis and records			
Regulation 8 Rule 8		I	Organic Co LIMITS AND	mpounds – WASTEWATER (O ) MONITORING FOR OIL-WA	IL-WATER) SEI TER SEPARAT	PARATORS ORS (9/15/04)				
Regulation 8 Rule 8	8-8-302.6	N		Roof seals, fixed covers, access doors and other openings inspected initially and semiannually thereafter.	8-8-503 and 8- 8-603	Periodic initially & semiannually	Method 21			
Regulation 8 Rule 8	8-8-306.2,	N		70% by weight or greater reduction in total organics	8-8-503	P/semiannually	PID/FID or other approved method			
VOC	8-8-312	N		Controlled wastewater collection system components at petroleum refineries	8-8-505	P/Semi- annually	Recordkeeping			

# Table VII.G.1.2 Wastewater Applicable Limits And Compliance Monitoring Requirements

#### Wastewater Cluster 20d

#### **Process Drains not Subject to QQQ**

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
Regulation 8 Rule 8	8-8-313	Ν		Uncontrolled wastewater collection system components at petroleum refineries	8-8-505	P/BI MON UNTIL 1/1/07 THEN P/SEMI- ANNUALLY	RECORDKEE PING
NESHAP FF Regulation 11 Rule 12	There are n [There are this	o 61 Su recordk WMU, 1	INDIV bpart FF requ ceeping, repor but these requ	Benzene Waste Oper- IDUAL DRAIN SYSTEMS EXEM irements related to control of air e ting, and in some cases monitoring irements are addressed within the	ations MPT FROM CON missions for WMI g requirements for scope of Cluster 1	TROLS Us that are exempt the waste stream 0 – Treatment Pr	ot from controls. (s) received by rocesses.]

#### Table VII.G.1.3 Wastewater (Process Drains Cluster 20q)

# Table VII.G.1.3 Wastewater Applicable Limits and Compliance Monitoring Requirements

#### **Process Drains Cluster 20q**

#### S-4235 Diesel Hydrotreater Plant, S-4251 Solvent Deasphalting Plant, S-4282A Penhex Isomerization Plant, S-4285 FCCU, S-4291 H2SO4 Alkylation Plant, S-6050 MTBE Plant, S-4356 TAME/SHU Plant

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type		
Regulation 8 Rule 8	Organic Compounds – WASTEWATER (OIL-WATER) SEPARATORS LIMITS AND MONITORING FOR OIL-WATER SEPARATORS (9/15/04)								
Organic compounds	8-8-302.6	N		Roof seals, fixed covers, access doors and other openings inspected initially and semiannually thereafter.	8-8-503 and 8- 8-603	Periodic initially & semiannually	Method 21		
Organic compounds	8-8-306.2,	N		70% by weight or greater reduction in total organics	8-8.503	P/semiannually	PID/FID or other approved method		
Organic compounds	8-8-313	N		Uncontrolled wastewater collection system components at petroleum refineries	8-8-505	P/BI MON UNTIL 1/1/07 THEN P/SEMI- ANNUALLY	RECORDKEE PING		

# Table VII.G.1.3 Wastewater Applicable Limits and Compliance Monitoring Requirements

#### Process Drains Cluster 20q

#### S-4235 Diesel Hydrotreater Plant, S-4251 Solvent Deasphalting Plant, S-4282A Penhex Isomerization Plant, S-4285 FCCU, S-4291 H2SO4 Alkylation Plant, S-6050 MTBE Plant, S-4356 TAME/SHU Plant

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type			
VOC	Condition 24085 parts 1, 4, and 5	Ν		A-32105 must meet 90% by weight or greater reduction in total organics, or 298 ppmv total organics in outlet stream for second to last carbon bed, 10 ppmv organics for the last carbon vessel, and 70 cfm flow rate, in addition to carbon change requirements.	Condition 24085 parts 2, 3 and 6	P/W/M	PID/FID or other approved method			
NESHAP FF Regulation 11 Rule 12	There are n [There are this]	Benzene Waste Operations INDIVIDUAL DRAIN SYSTEMS EXEMPT FROM CONTROLS here are no 61 Subpart FF requirements related to control of air emissions for WMUs that are exempt from controls. [There are recordkeeping, reporting, and in some cases monitoring requirements for the waste stream(s) received by this WMU, but these requirements are addressed within the scope of Cluster 10 – Treatment Processes.]								
NSPS QQQ	Req	luiremei	LIMITS Ants shown are	Petroleum Refinery Wastew AND MONITORING FOR INDIV for compliance with 60.692-2, and	ater Systems IDUAL DRAIN S d do not address co	YSTEMS ompliance with 6	0.693-1.			
VOC	60.692-2 (a)(1)	Y		Drains shall be equipped with water seal controls	60.692-2 (a)(2) & (3)	Periodic initially, plus monthly (if in- service) or weekly (if out- of-service)	Visual inspection			
VOC	60.692-2 (a)(4)	Y		ALTERNATIVE Drains that are out-of-service may be equipped with a tightly sealed cap or plug	60.692-2 (a)(4)	Periodic initially, plus semiannually	Visual inspection			
VOC	60.692-2 (b)(2)	Y		Junction box covers shall be sealed & kept in place, except during inspection and maintenance	60.692-2 (b)(3)	Periodic initially, plus semiannually	Visual inspection			
VOC	60.692-2 (c)(1)	Y		Sewer lines shall be covered or enclosed	60.692-2 (c)(2)	Periodic initially, plus semiannually	Visual inspection			

#### Table VII.G.1.4 Wastewater (Wastewater Cluster 30c)

# Table VII.G.1.4 Wastewater Applicable Limits and Compliance Monitoring Requirements

#### Wastewater Cluster 30c

#### S-4148 #13 Separator, S-4413 #2A Separator, S-4414 #1A Separator, (S-6250 is in Cluster 60b)

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type				
SIP Regulation 8 Rule 8		Organic Compounds – WASTEWATER (OIL-WATER) SEPARATORS LIMITS AND MONITORING FOR OIL-WATER SEPARATORS (6/15/94)									
VOC	8-8-114	Y		Monitoring wastewater bypassing oil-water separator or DAF	8-8-501	Periodic upon occurrence	Sample analysis				
VOC	8-8-302.4	Y		ALTERNATIVE Gasketed fixed cover standards; includes 1,000 ppm leak standard	8-8-603 8-8-503 8-8-504	Periodic initially & semiannually	Method 21				
VOC	8-8-303	Y		Gauging and sampling devices vapor tight	8-8-603	P/A	Method 21				
Regulation 8 Rule 8			Organic Co LIMITS ANE	mpounds – WASTEWATER (OII ) MONITORING FOR OIL-WAT	WATER) SEPA ER SEPARATOR	RATORS S (9/15/04)					
VOC	8-8-302.6	N		Roof seals, fixed covers, access doors and other openings inspected initially and semiannually thereafter.	8-8-503, 8-8- 504 and 8-8- 603	Periodic initially & semiannually	Method 21				
VOC	8-8-306.2,	Ν		70% by weight or greater reduction in total organics	8-8-306.2	P/semiannually	PID/FID or other approved method				
VOC	8-8-313	Ν		Uncontrolled wastewater collection system components at petroleum refineries	8-8-505	P/SEMI- ANNUALLY	RECORDKEE PING				
VOC	Condition 24085 parts 1, 4, and 5	Ν		A-32105 must meet 90% by weight or greater reduction in total organics, or 298 ppmv total organics in outlet stream for second to last carbon bed, 10 ppmv organics for the last carbon vessel, and 70 cfm flow rate, in addition to carbon change requirements.	Condition 24085 parts 2, 3 and 6	P/W/M	PID/FID or other approved method				
Condition #18137	Applies to S-4	Applies to S-4148, S-4413, S-4414									
NESHAP FF Regulation 11 Rule 12	There are no [There are rec WN	61 Sub ordkeeg 1U, but	OIL-V part FF requir ping, reporting these required	Benzene Waste Operat VATER SEPARATORS EXEMP rements related to control of air en g, and in some cases monitoring re ments are addressed within the scc	tions Γ FROM CONTR( nissions for WMU quirements for the pe of Cluster 10 –	OLS s that are exempt waste stream(s) Treatment Proce	from controls. received by this				

#### Table VII.G.1.5 Wastewater (Tanks Cluster 40b)

# Table VII.G.1.5 Wastewater Applicable Limits and Compliance Monitoring Requirements

#### Non-EFRT or IFRT Wastewater Tanks Cluster 40b S-3229

5-3229

#### S-3110 & S-3111 DEBRU Surge Tanks abated by A-3200, S-3192 Desalter Effluent Skim Tank

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
NESHAP FF							
Regulation 11 Rule 12				Benzene Waste Oper LIMITS AND MONITORING	ations FOR TANKS		
HAP (Benzene)	61.343 (a)(1)(i)(A)	Y		Cover leak tightness standards (< 500 ppmw)	61.343 (a)(1)(i)(A)	Periodic initially & annually	Method 21
HAP (Benzene)	61.343 (a)(1)(i)(B)	Y		Standards for openings in the cover	61.343 (a)(1)(i)(B)	Periodic initially & quarterly	Visual inspection
HAP (Benzene)	61.349 (a)(1)(i)	Y		Closed vent system leak tightness standards (< 500 ppmw)	61.349 (a)(1)(i)	Periodic initially & annually	Method 21
HAP (Benzene)	61.349 (a)(1)(ii)	Y		Closed vent systems by-pass line standards	61.354 (f)	Periodic daily for flow indicator; monthly for car-seal	Visual inspection
HAP (Benzene)	61.349 (a)(1)(iii), (iv)	Y		Closed vent system gauging & sampling and pressure relief device standards	61.349(f)	Periodic initially & annually	Visual inspection
HAP (Benzene)	61.349(a)(2) (i)	Y		Applies to S-3192. Reduce organics by 95 weight % or reduce benzene by 98% by weight.			
HAP (Benzene)	61.349(h)	Y		Control device standards [NOTE TO USER Delete this row for units that meet the conditions of 61.343(b)(1)]	61.354 (c)	Continuous check daily	Specified parameter
POC	40 CFR 61 Subpart FF	Y		Minimum VOC destruction removal efficiency 95% by concentration weight or outlet < 500 ppmv organics, or minimum benzene destruction removal efficiency 98% by concentration weight, or outlet <10 ppmv benzene	61-349 condition #11193 part 9	P/E	Carbon Changeout
Throughput	Condition #11193, Part 1	Y		throughput for S-6011 shall not exceed 84.1 million gallons for any consecutive 12-month period	Condition #11193, Part 12 S-6011	P/M S-6011	records

# Table VII.G.1.5 Wastewater Applicable Limits and Compliance Monitoring Requirements

#### Non-EFRT or IFRT Wastewater Tanks Cluster 40b S-3229

S-3110 & S-3111 DEBRU Surge Tanks abated by A-3200, S-3192 Desalter Effluent Skim Tank

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
POC Condition #4650, parts 1 and 5	Condition #4650, parts	Y		at least 98.5% by weight VOC abatement	Condition #4650, part 9	С	temperature monitoring
				S-3110, S-3111, S-3192			
POC	Condition #4650, parts	Y		POC emissions less than 1 lb/day from S-3110, S-3111,	Condition #4650, part 9	С	temperature monitoring
	2 and 6		and S-3192 combined	S-3110, S-3111, S-3192			
POC	Condition #4650, parts	Y		Benzene emissions less than 0.04 lb/day from S-3110, S-	Condition #4650, part 9	С	temperature monitoring
	3 and 7			3111, and S-3192 combined	S-3110, S-3111, S-3192		
POC	Condition #4650, parts 4 and 8	Y		Benzene concentration less than 1% by weight	S-3111, S-3192		
Throughput	Condition #18137	N		Throughput limits	Condition #18137	P/M	Recordkeeping

#### Table VII.G.1.6 Wastewater (Tanks Cluster 45e)

# Table VII.G.1.6 Wastewater Applicable Limits and Compliance Monitoring Requirements

#### **External Floating Roof Wastewater Tanks Cluster 45e**

#### S-0231, S-0232, S-0399, S-1504, S-3126, S-3127, S-3128, S-3076, S-3144

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
SIP Regulation 8 Rule 5			Organic C LIMIT	Compounds – STORAGE OF ORC S AND MONITORING FOR FLO	GANIC LIQUIDS ( DATING-ROOF T	(11/27/02) TANKS	
VOC	SIP 8-5-320	Y		Deck fitting closure standards; includes gasketed covers	SIP 8-5-402	Periodic initially & at 1 or 10 yr intervals, depending upon rim seal age	Visual inspection

# Table VII.G.1.6 Wastewater Applicable Limits and Compliance Monitoring Requirements

#### External Floating Roof Wastewater Tanks Cluster 45e

#### S-0231, S-0232, S-0399, S-1504, S-3126, S-3127, S-3128, S-3076, S-3144

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
VOC	SIP 8-5-321	Y		Primary rim-seal standards; includes gap criteria	SIP 8-5-401	Periodic initially & at 5 or 10 yr intervals, depending upon rim seal age	Measurement and visual inspection
VOC	SIP 8-5-322	Y		Secondary rim-seal standards; includes gap criteria	SIP 8-5-402	Periodic initially & at 1 or 10 yr intervals, depending upon rim seal age	Measurement and visual inspection
VOC	SIP 8-5-328	Y		Tank degassing	SIP 8-5-502	P/A	Source Test
					SIP 8-5-404		
Regulation 8 Rule 8			Organic C LIMITS AN	ompounds – WASTEWATER (O D MONITORING FOR OIL-WA	IL-WATER) SEPA TER SEPARATO	ARATORS RS (9/15/04)	
VOC	8-8-305.1	Ν		Visual inspection initially and semi-annually therafter with no cracks or gaps greater than 0.125" and access doors an other openings are closed and gasketed properly	8-8-305.1	P/Initially and Semi-annually	Visual inspection
SIP Regulation 8 Rule 8			Organic C LIMITS AN	ompounds – WASTEWATER (OI D MONITORING FOR OIL-WA	IL-WATER) SEPA TER SEPARATO	ARATORS RS (6/15/94)	
VOC	8-8-305.1	Y		Visual inspection initially and semi-annually therafter with no cracks or gaps greater than 0.125" and access doors an other openings are closed and gasketed properly	8-8-305.1	P/Initially and Semi-annually	Visual inspection
NSPS Kb				Volatile Organic Liquid Sto LIMITS AND MONITORING	rage Vessels G FOR EFRTs		
VOC	60.112b (a)(2)(ii)	Y		Deck fitting closure standards; includes gasketed covers	60.113b (b)(6)	Periodic initially & each time emptied & degassed	Visual inspection
VOC	60.113b (b)(4)(i)	Y		Primary rim-seal standards; includes gap criteria	60.113b (b)(2)-(b)(3)	Periodic initially & at 5 yr intervals	Measurement and visual inspection
VOC	60.113b (b)(4)(ii)	Y		Secondary rim-seal standards; includes gap criteria	60.113b (b)(2)-(b)(3)	Periodic initially & annually	Measurement and visual inspection

# Table VII.G.1.6 Wastewater Applicable Limits and Compliance Monitoring Requirements

#### External Floating Roof Wastewater Tanks Cluster 45e

#### S-0231, S-0232, S-0399, S-1504, S-3126, S-3127, S-3128, S-3076, S-3144

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type			
VOC	60.116b (c)	Y		True vapor pressure determination	60.116b (e)	Periodic initially and upon change of service	Calculation			
NESHAP FF Regulation 11 Rule 12	The 61 Su	Benzene Waste Operations LIMITS AND MONITORING FOR TREATMENT PROCESSES The 61 Subpart FF requirements related to control of air emissions for WMUs are listed in the templates for each WMU, and are not listed here under treatment processes.								
Benzene	Condition 23262 part 3			S-3127, 0.38% by weight benzene	Condition 23262 part 4	P/Q	Sample analysis			
Throughput	Condition #18137	N		Throughput limits	Condition #18137	P/M	Recordkeeping			
	Condition 23262	N		S-3127 Throughput limits and vapor pressure	Condition 23262 part 1, 2, 5	P/M	Recordkeeping			

#### Table VII.G.1.7 (Wastewater Cluster 50d)

# Table VII.G.1.7 Applicable Limits and Compliance Monitoring Requirements

#### Wastewater Cluster 50d

#### S-4393 Bioreactor

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
SIP BAAQMD Regulation 8- 8	Organic C	ompoun	ds – WASTE	WATER (OIL-WATER) SEPARA EXEMPT FROM CON	ATORS (6/15/94) TROLS	SURFACE IMPO	DUNDMENTS
VOC	SIP 8-8- 112	Y		Monitoring for exemption from controls for low wastewater temperature or low concentration of pollutants	SIP 8-8-502	Periodic initially & semiannually	Sample analysis/Recor d keeping
BAAQMD Regulation 8 Rule8	Organic Co SURFACE	ompoun IMPO	ds – WASTI UNDMENTS	EWATER COLLECTION AND SEXEMPT FROM CONTROLS	SEPARATION S	SYSTEMS (9/15)	/04)

# Table VII.G.1.7 Applicable Limits and Compliance Monitoring Requirements

#### Wastewater Cluster 50d

#### S-4393 Bioreactor

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type			
VOC	8-8-112	Ν		Monitoring for exemption from controls for low wastewater temperature or low concentration of pollutants	8-8-502	P/ initially & semiannually	Sample analysis/Recor d keeping			
NESHAP FF Regulation 11 Rule 12	There are n [There are this]	Benzene Waste Operations SURFACE IMPOUNDMENTS EXEMPT FROM CONTROLS There are no 61 Subpart FF requirements related to control of air emissions for WMUs that are exempt from controls. [There are recordkeeping, reporting, and in some cases monitoring requirements for the waste stream(s) received by this WMU, but these requirements are addressed within the scope of Cluster 10 – Treatment Processes.]								
Throughput	Condition #18137	N		Throughput limit	Condition #18137	P/M	Record keeping			
Odorous Emissions	Condition #15698 part 11	Ν		Odorous Emission limit	Condition #15698 part 11	P/E	Odor detection			

#### Table VII.G.1.8 Wastewater (Containers Cluster 60b)

#### Table VII.G.1.8 Wastewater

#### **Applicable Limits and Compliance Monitoring Requirements**

#### Containers (Portable Wastewater Handling Units) Cluster 60b

#### Bins, Drums, Vacuum Trucks, S-6250 Oil Water Separator Poly Tank abated by A-0630/A-0631 Carbon Canisters Vessels 1A & B and 2A and B (Carbon Washout Poly Tanks for 1504 Tank also in Wastewater Cluster 10)

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type				
SIP Regulation 8 Rule 8		Organic Compounds – WASTEWATER (OIL-WATER) SEPARATORS (6/15/94) CONTAINERS EXEMPT FROM CONTROLS									
VOC	SIP 8-8-112	Y		Monitoring for exemption from controls for low wastewater temperature or low concentration of pollutants	SIP 8-8-502	Periodic initially & semiannually	Sample analysis				
VOC	SIP 8-8-114	Y		Monitoring for bypassing the oil water separator or air floatation device	SIP 8-8-501/502	P/E	Sample analysis				
BAAQMD Regulation 8 Rule8	Organic Cor SURFACE I	rganic Compounds – WASTEWATER COLLECTION AND SEPARATION SYSTEMS (9/15/04) JRFACE IMPOUNDMENTS EXEMPT FROM CONTROLS									

# Table VII.G.1.8 Wastewater Applicable Limits and Compliance Monitoring Requirements

#### Containers (Portable Wastewater Handling Units) Cluster 60b

#### Bins, Drums, Vacuum Trucks, S-6250 Oil Water Separator Poly Tank abated by A-0630/A-0631 Carbon Canisters Vessels 1A & B and 2A and B (Carbon Washout Poly Tanks for 1504 Tank also in Wastewater Cluster 10)

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
VOC	8-8-112	N		Monitoring for exemption from controls for low wastewater temperature or low concentration of pollutants	8-8-502	Periodic initially & semiannually	Sample analysis
VOC	8-8-114	N		Monitoring for bypassing the oil water separator or air floatation device	8-8-501/502	P/E	Sample analysis
NESHAP FF							
Regulation 11 Rule 12				Benzene Waste Opera LIMITS AND MONITORING FC	ations OR CONTAINERS	5	
HAP (Benzene)	61.345 (a)(1)(i)(A)	Y		Cover leak tightness standards (< 500 ppmw)	61.345 (a)(1)(i)(A)	Periodic initially & annually	Method 21
HAP (Benzene)	61.345 (a)(1)(i)(B)	Y		Standards for openings in the cover	61.345 (a)(1)(i)(B)	Periodic initially & quarterly	Visual inspection
HAP (Benzene)	61.349 (a)(1)(i)	Y		Closed vent system leak tightness standards (< 500 ppmw)	61.349 (a)(1)(i)	Periodic initially & annually	Method 21
HAP (Benzene)	61.349 (a)(1)(ii)	Y		Closed vent systems by-pass line standards	61.354 (f)	Periodic daily for flow indicator; monthly for car-seal	Visual inspection
HAP (Benzene)	61.349 (a)(1)(iii), (iv)	Y		Closed vent system gauging & sampling and pressure relief device standards	61.349(f)	Periodic initially & annually	Visual inspection
HAP (Benzene)	61.349(h)	Y		Control device standards	61.354 (c), (d)	Continuous check daily for part c and P/D or 20% of design carbon replacement interval whichevever is greater for part d	Specified parameter

# Table VII.G.1.8 Wastewater Applicable Limits and Compliance Monitoring Requirements

#### Containers (Portable Wastewater Handling Units) Cluster 60b

#### Bins, Drums, Vacuum Trucks, S-6250 Oil Water Separator Poly Tank abated by A-0630/A-0631 Carbon Canisters Vessels 1A & B and 2A and B (Carbon Washout Poly Tanks for 1504 Tank also in Wastewater Cluster 10)

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
POC	Condition #12842, parts 2 and 3	Y		Applies to S-6250. Outlet stream VOC concentration of A-630 and A- 631 <10% of inlet stream organics concentration, 95% reduction of organics, or < 500 ppmv at outlet	Condition #12842, parts 4 to 7	P/D	FID monitoring
Throughput	Condition #18137	N		Throughput limits	Condition #18137	P/M	Recordkeeping

#### Table VII.H.1.1 VOC Sources (Cold Cleaners)

# Table VII.H.1.1 VOC Sources Applicable Limits and Compliance Monitoring Requirements

#### **Cold Cleaners**

#### S-4420 (Exempt), S-4426, S-4427, S-4428

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
VOC	8-16-118	Y		Compounds with low volatility	8-16-502	P/E	Record keeping
VOC	Condition #17527 Part 1	Y		Initial boiling point >248F	#17527 Part 3	P/M	Record keeping
VOC	Condition #17527 Part 2	Y		Solvent limit of 100 gal per any consecutive 12- month period per solvent cleaner	#17527 Part 3	P/M	Recordkeeping
Through- put	Condition #18137	N		Table II-A	#18137 Part 2	P/M	Recordkeeping

# Table VII.H.2.1 VOC Sources (Fugitive Components)

# Table VII.H.2.1 VOC Sources Applicable Limits and Compliance Monitoring Requirements

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
POC	8-18-301	Y		General equipment leak $\leq 100$ ppm	None	N/A	Inspection
POC	8-18-302	Y		Valve leak ≤ 100 ppm	8-18-401.2, or 8-18-404 or 8-18-401.3 (if inaccessible)	P/Q or P/A	Inspection
POC	8-18-303	Y		Pump and compressor leak ≤ 500 ppm	8-18-401.2	P/Q	Inspection
POC	8-18-304	Y		Connection leak $\leq 100$ ppm	8-18-401.6 and 8- 18-502	P/A or P/E	Inspection and Recordkeeping
POC	8-18-305	Y		Pressure relief valve leak ≤ 500 ppm	8-18-401.2 or 8-18-401.3 (if inaccessible)	P/Q or P/A	Inspection
POC	8-18-305	Y		Pressure relief valve leak ≤ 500 ppm	8-28-402	Е	Inspection
POC	8-18-306.1	Y		Valve, pressure relief, pump or compressor must be repaired within 5 years or at the next scheduled turnaround	8-18-502.4	PE	record keeping
POC	8-18-306.2	Y		$\begin{array}{c} A \text{waiting repair} \\ Valves \leq 0.5\% \\ \text{Pressure Relief} \leq 1\% \\ \text{Pump and Connector} \leq \\ 1\% \end{array}$	8-18-502.4	PE	record keeping
POC	BAAQMD 8-18-306.2	N		Awaiting repair Valves $\leq 0.3\%$ Valves with Major Leaks <0.025% Pressure Relief $\leq 1\%$ Pump and Connector $\leq 1\%$	8-18-502.4	P/E	record keeping
POC	8-18- 306.3.3	Y		Total valve, pressure relief, pump or compressor leaks $\geq$ 15 lb/day, they must be repaired within 7 days	8-18-502.4	P/E	record keeping
POC	8-18-307	Y		3 drops per minute and applicable leak standard	8-18-403	P/D	visual inspection

# Table VII.H.2.1 VOC Sources Applicable Limits and Compliance Monitoring Requirements

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
POC	SIP 8-28-301	Y		A person shall not use a pressure relief valve on any equipment if the concentration of organic compounds, measured within 1 cm from any leak in such valve exceeds 10,000 ppm (as methane) above background	SIP 8-28-401, 8-28- 402, and 8-28-403	P/Q or P/E	Inspection, reporting, and records
POC	SIP 8-28- 304	Y		PHA within 90 days and meet Prevention Measures Procedures. After 2 <sup>nd</sup> release Vent Pressure Relief Devices to an Abatement Device with at least 95% by weight control efficiency.	SIP 8-28-405	P/release per 5 calendar years	Record keeping
POC	BAAQMD 8-28-303.2	N		Facility to implement Process Safety Requirements of BAAQMD 8-28-405 for Pressure Relief Devices	BAAQMD 8-28-502.1	P/E	Records
				40 CFR 60; Subpart QQQ			
POC	60.692-2	Y		Individual Drain Systems	60.692-2(a)(2)	P/initially and M	Visual/physical inspection for low water levels
		Y			60.692-2(a)(3) or 60.692-2(a)(4)	P/initially and W or P/initially and semi- annually	Visual/physical inspection
		Y		Junction Boxes	60.692-2(b)(3)	P/initially and semi-annually	Visual/physical inspection
		Y		Sewer Lines	60.692-2(c)(2)	P/initially and semi-annually	Visual/physical inspection
	60.692-3	Y		Oil-Water Separators	60.692-3(a)(4)	P/initially and semi-annually	Visual/physical inspection
POC	60.692- 5(e)(1)	Y		Closed vent system < 500 ppm above background	60.692-5(e)(1)	P/ Semi-annual	Measure for leaks

# Table VII.H.2.1 VOC Sources Applicable Limits and Compliance Monitoring Requirements

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
POC	60.692-5(a)	Y		Closed vent system using combustion devices shall have 0.75 sec. residence and 816 degrees C.	60.692-5(e)(1) and 60.692-5(e)(5))	P/E and C	Repair the closed system to eliminate any emissions detected as soon as possible, but no later than 30 days from the date the emissions are detected. Temperature and flowrate monitoring
POC	60.692- 5(b)	Y		Vapor recover >= 95%	60.695	С	Temperature or concentration depending on control device
POC	60.482-2 (b)(1)	Y		Pump leak ≥ 10,000 ppm	60.482-2 (a)(1)	P/M	Measure for leaks
POC	60.482-2 (b)(2)	Y		Pump leak Indicated by dripping liquid	60.482-2 (a)(2)	P/W	Visual Inspection
POC	60.482-2(e)	Y		Designated "No detectable emissions" ≤ 500 ppm	60.482-2(e)(3)	P/A	Measure for leaks
POC	60.482- 2(g)	Y		If unsafe to monitor, monitor as frequently as practicable.	60.482-2(g)	P/E	Measure for leaks
POC	60.482-3	Y		Compressor shall have a sensor to detect failure of seal system, barrier fluid system, or both.	60.482-3 (e)(1)	P/C	Sensor with audible alarm or checked daily and record keeping
POC	60.482-4(a)	Y		Pressure relief valve (gas/vapor) leak < 500 ppm above background		P/E	Measure for leaks
POC	60.482- 4(b)	Y		Pressure relief valve (gas/vapor) leak ≥ 500 ppm within 5 days after a pressure release event		P/E	Measure for leaks within 5 days after release and record keeping
POC	60.482- 7(b) and (c)	Y		Valve leak ≥ 10,000 ppm	60.482-7(a), (b), and (c)	P/M	Measure for leaks
POC	60.482- 7(b) and (c)	Y		Valve leak ≥ 10,000 ppm; 2 successive months w/o leaking	60.482-7(a), (b), and (c)	P/Q	Measure for leaks and record keeping
POC	60.482-7(f)	Y		Designated "No detectable emissions" ≤ 500 ppm	60.482-7 (f)(3)	P/A	Measure for leaks

# Table VII.H.2.1 VOC Sources Applicable Limits and Compliance Monitoring Requirements

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
POC	60.482- 7(g)	Y		Allows relief from 60.482.7(a) monitoring if designated as unsafe-to- monitor. BAAQMD Regulation 8-18 does not allow this relief.	60.482-7(g)	P/E	Demonstration of danger
POC	60.482-8(a)	Y		Pumps and valves in heavy liquid service, Pressure Relief devices (light or heavy liquid), Flanges, Connectors leak shall be measured for leak in 5 days if detected by inspection, or if a leak is seen, heard, or smelled	60.482-8(a)	P/E	Visible, audible, or olfactory Inspection and record keeping
POC	60.482- 8(b)	Y		Pressure Relief devices (liquid), Flanges, Connectors leak ≥ 10,000 ppm	60.482-8(a)	P/E	Measure for leaks
POC	60.482-8 (b)	Y		Pump leak ≥ 10,000 ppm	60.482-8 (a)	P/5 days	Visual, audible, olfactory Inspection; measure for leaks
POC	60.482-9 (d)	Y		Pumps under "Delay of repair" repaired, as soon as practicable, but within 6 months		P/E	Record keeping and recording
POC	60.482-10 (b)	Y		Closed-vent systems and control devices: Vapor recovery systems ≥ 95%	60.482-10(e)	С	Temperature monitoring
POC	60.482-10 (c)	Y		Combustion devices ≥95% destruction efficiency or ≥0.75 seconds and ≥816°C	60.482-10(e)	С	Temperature and flowrate monitoring
POC	60.482-10 (g)	Y		Closed-vent systems leak ≥ 500 ppm and visible leak indication. First attempt to repair leak (visible or >= 500 ppm) within 5 days, repair complete within 15 days, except as allowed for in 60.482-10(h)	60.482-10 (f)	P/A	Measure for leaks; visual Inspection and record keeping

# Table VII.H.2.1 VOC Sources Applicable Limits and Compliance Monitoring Requirements

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
POC	60.483 and 8-18-404.1	Y		Individual valve that measures <100 ppm for 5 consecutive quarters may be monitored annually, if in a process unit with 5 consecutive quarters <2% valves leaking ≥10,000 ppm.		P/Q P/A	Measure for leaks. Notify Administrator of election to comply with 60.483 or 61.243. Record keeping of percent of valves found leaking during each leak detection period.
POC	61.349 (a)(1)(i)	Y		Closed-vent systems <500 ppm above background	61.349 (a)(1)(i)	P/A	Measure for leaks
POC	61.242-2 (b)(1)	Y		Pump leak ≥ 10,000 ppm	61.242-2 (a)(1)	P/M	Measure for leaks
POC	61.242-2 (b)(2)	Y		Pump leak Indicated by dripping liquid	61.242-2 (a)(2)	P/W	Visual Inspection
POC	61.242-2(e)	Y		Designated "No detectable emissions" ≤ 500 ppm	61.242-2(e)(3)	P/A	Measure for leaks
POC	61.242(g)	Y		If unsafe to monitor, monitor as frequently as practicable.	61.242-2(g)	P/E	Measure for leaks
POC	61.242-2 (h)	Y		Pump leak Indicated by dripping liquid at unmanned sites	61.242-2 (h)	P/M	Visual Inspection
POC	61.242-10 (d)	Y		Pumps under "Delay of repair" repaired within 6 months		Ν	Record keeping
POC	61.242-3	Y		Compressor shall have a sensor to detect failure of seal system, barrier fluid system, or both.	61.242-3 (e)(1)	P/C	Sensor with audible alarm or checked daily and record keeping
POC	61.242-4(a)	Y		Pressure relief valve (gas/vapor) leak ≥ 500 ppm above background		Р	Measure for leaks
POC	61.242- 4(b)	Y		Pressure relief valve (gas/vapor) leak ≥ 500 ppm within 5 days after a pressure release event		P/E	Measure for leaks and record keeping
POC	61.242- 7(b)	Y		Valve leak ≥ 10,000 ppm	61.242-7(a)	P/M	Measure for leaks and record keeping
POC	61.242- 7(b) and 7(c)	Y		Valve leak ≥ 10,000 ppm; 2 successive months w/o leaking	61.242-7(b) and (c)	P/Q	Measure for leaks
# Table VII.H.2.1 VOC Sources Applicable Limits and Compliance Monitoring Requirements

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
POC	61.242-7(f)	Y		Designated "No detectable emissions" ≤ 500 ppm	61.242-7 (f)(3)	P/A	Measure for leaks
POC	61.242- 7(g)	Y		Allows relief from 61.242.7(a) monitoring if designated as unsafe-to- monitor.	61.242-7(g)	P/E	Demonstation of danger
POC	61.242-8(a)	Y		Pressure Relief devices (liquid), Flanges, Connectors leak shall be measured for leak in 5 days if detected by inspection if detected by inspection, or if a leak is seen, heard, or smelled	61.242-8(a)	P/E	Visible, audible, or olfactory Inspection and record keeping
POC	61.242- 8(b)	Y		Pressure Relief devices (liquid), Flanges, Connectors leak ≥ 10,000 ppm	61.242-8(a)	P/E	Measure for leaks
POC	61.242-11 (b)	Y		Closed-vent systems and control devices: Vapor recovery systems ≥ 95%	61.242-11(e)	P/1/2 breakthrough	method 21
POC	61.242-11 (c)	Y		Combustion devices ≥95% destruction efficiency or ≥0.50 seconds and ≥760°C	61.242-11(e)	С	Temperature and flowrate Monitoring
POC	61.242-11 (f)	Y		Closed-vent systems leak ≥ 500 ppm and visible leak indication. First attempt to repair leak (visible or >= 500 ppm) within 5 days, repair complete within 15 days, except as allowed for in 60.482-10(h)	61.242-11 (f)	P/A	Measure for leaks and visual Inspection and record keeping
POC	61.243 and 8-18-404.1	Y		Individual valve that measures <100 ppm for 5 consecutive quarters may be monitored annually, if in a process unit with 5 consecutive quarters <2% valves leaking ≥10,000 ppm.		P/Q P/A	Measure for leaks. Notify Administrator of election to comply with 60.483 or 61.243. Record keeping of percent of valves found leaking during each leak detection period.
POC	61.349	Y		Standards for closed vent systems and control devices	61.349(f) and 61.354(c)	Initially and P/Q	Sampling and record keeping

#### **Fugitive Components**

# Table VII.H.2.1 VOC Sources Applicable Limits and Compliance Monitoring Requirements

Type of Limit	Citation of Limit	FE Y/N	FutureMonitoringFEEffectiveRequirementY/NDateLimitCitation		Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
POC	61.349(g)	Y Repair any detectable 6 emissions within 15 calendar days after the emissions are detected		61.356(h)	P/E	Recordkeeping	
POC	61.349 (a)(2)	Y		Design and operation of control device	61.354	C for combustion and P/D or 20% of design carbon replacement interval whichever is greater for carbon	Temperature Monitor for combustion and method 21 or other method approved by administrator for carbon
POC	Condition #8869 parts 1 and 2	Y		Applies to A-620, A-622, A-623, A-624,627, A-628 95% by weight reduction of VOCs and minimum temp of 1500F and 1565 F, respectively	Condition #8869 parts 3 and 4	С	Temperature Monitor
Vent Stream Flow	61.349(a) (1)(ii)	Y		Vent stream flow indicator	61.349(a)(1)(ii)	P/every 15 minutes under certain circumstances	Flow indicator
H2S	40 CFR 60 Subpart J 60.104 (a) (1) and Condition #23201	Y		Fuel gas H2S concentration limited to 230 mg/dscm (0.10 gr/dscf) [i.e., 160 ppm] except for gas burned as a result of process upset or gas burned at flares from relief valve leaks or other emergency malfunctions	40 CFR 60.105(a)(4) and Condition #23201	С	H2S analyzer
TOC & POC	Condition #24671 Parts 1-10	N		Fugitive emissions from S-4440 are to comply with a leak standard of 100ppm TOC at any valves, flanges, or connectors; a maximum of 100ppm of TOC at any pumps; and are not to exceed 0.718 tons of POC in any 365 consecutive days. Full permit conditions available in Section VI.	BAAQMD Regulation 8-18- 302 through 8-18- 304, Condition #24671 Part 11	P/M/Q	Recordkeeping
Condition #23201		Applies	s to A-620, A-	622, A-623, A-624, A-627,	and A-628		
Pa	rt 1	Source	s subject to NS	SPS Subparts A and J			
Condition 24433		Applies	s to S-4252, S-	-4253, S-4348, S-4435			

#### **Fugitive Components**

# Table VII.H.2.1 VOC Sources Applicable Limits and Compliance Monitoring Requirements

#### **Fugitive Components**

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
Condition #24671		Applie	s to S-4440				

#### Table VII.H.3.1 VOC Sources (Paint Booth)

#### Table VII.H.3.1 VOC Sources

# Applicable Limits and Compliance Monitoring Requirements Paint Booth S-4410, S-4424

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
VOC	8-3-302	Y		Content of air dried coating < 250 g/l		P/E	Labeling & recordkeeping
	8-3-304	Y		Content of coatings < specified VOC content	8-3-403	P/E	Labeling & recordkeeping
	8-4-302.1	N		5 tons/yr (each source)	8-4-501	P/A	Recordkeeping
	8-4-302.2	Ν		Capture/Control > 85%	8-4-501	P/A	Recordkeeping
	8-4-302.3	N		≤3.5 lb/gal (alternative to 5 ton Limit)	8-4-501	P/A	Recordkeeping
	SIP 8-4-302.1	Y		5 tons/yr (each source)	8-4-501	P/A	Recordkeeping
	8-19-110	Y		<20 gal/yr of any coating and <100 gal/yr total	8-19-405 & 8- 19-501	P/A	Petition and Recordkeeping
	8-31-111	Y		<20 gal/yr of any coating and <55 gal/yr total	8-31-403.4 & 8- 31-501	P/W	Record keeping
	8-32-111	Y		<20 gal/yr	None	P/E	Recordkeeping
	Condition #5640 Part 1			Coating limit of 500 gal per consecutive 12- month period	#5640 Part 4	P/M	Recordkeeping
	Condition #5640 Part 3			Cleanup solvent limit of 55 gal per consecutive 12-month period	#5640 Part 4	P/M	Recordkeeping
	Condition #21165 part 1 and 2	N		POC limit annual and daily	Condition #21165 part 4	P/M	recordkeeping
	Condition #22266 Part 1 and 2	N		Ink and Cleanup solvent annual limit	Condition # 22266 Part 3	P/M	Record keeping

The test methods associated with the emission limit of a District regulation are generally *found* in Section 600 et seq. of the regulation. The following table indicates only the test methods associated with the emission limits *included* in Section VII, Applicable Limits & Compliance Monitoring Requirements, of this permit.

#### Table VIII – Test Methods

Applicable Requirement	Description of Requirement	Acceptable Test Methods
SIP 6-301 and BAAQMD 6-1- 301	Ringelmann No. 1 Limitation	Manual of Procedures, Volume I, Evaluation of Visible Emissions
SIP 6-304 and BAAQMD 6-1- 304	Tube Cleaning	Manual of Procedures, Volume I, Evaluation of Visible Emissions
SIP 6-310 and BAAQMD 6-1- 310	Particulate Weight Limitation	Manual of Procedures, Volume IV, ST-15, Particulates Sampling; or EPA Method 5, Determination of Particulate Emissions from Stationary Sources
SIP 6-311 and BAAQMD 6-1- 311	General Operations	Manual of Procedures, Volume IV, ST-15, Particulates Sampling; or EPA Method 5, Determination of Particulate Emissions from Stationary Sources Manual of Procedures, Volume IV, ST-15, Particulates Sampling; or EPA Method 5
SIP 6-601 and BAAQMD 6-1- 601	Particulate Matter Sampling	Manual of Procedures, Volume IV, ST-15, Particulates Sampling; or EPA Method 5, Determination of Particulate Emissions from Stationary Sources
8-3-301	VOC Limits	Manual of Procedures, Volume III, Method 21, Determination of Compliance of Volatile Organic Compounds for Water Reducible Coatings or Manual of Procedures, Volume III, Method 22, Determination of Compliance of Volatile Organic Compounds for Solvent Based Coatings
8-3-302	VOC Limits	Manual of Procedures, Volume III, Method 21, Determination of Compliance of Volatile Organic Compounds for Water Reducible Coatings or Manual of Procedures, Volume III, Method 22, Determination of Compliance of Volatile Organic Compounds for Solvent Based Coatings
8-4-302	Solvent and Surface Coating Requirements, VOC Emissions	Manual of Procedures, Volume IV, ST-7, Organic Compounds; or EPA Method 25, Determination of Total Gaseous Nonmethane Organic Emissions as Carbon; or EPA Method 25A, Determination of Total Gaseous Nonmethane Organic Emissions Using a Flame Ionization Analyzer
8-4-302.3	Surface Coating, VOC Content	Manual of Procedures, Volume III; Method 21, Determination of Compliance of Volatile Organic Compounds for Water Reducible Coatings; or Method 22, Determination of Compliance of Volatile Organic Compounds for Solvent Based Coatings
8-5-304	True Vapor Pressure	Manual of Procedures, Volume III, Lab Method 28, Determination of Vapor Pressure of Organic Liquids from Storage Tanks, if organic compound is not listed in Table I
8-5-328.2	VOC emissions for tank cleaning	Manual of Procedures, Volume IV, ST-7, Non-Methane Organic Carbon Sampling
8-5-320.3	Pressure vacuum leak concentration	EPA Reference Method 21, Determination of Volatile Organic Compounds Leaks

Applicable Requirement	Description of Requirement	Acceptable Test Methods
8-5-601	Reid Vapor Pressure	Manual of Procedures, Volume III, Lab Method 13, Determination of the Reid Vapor Pressure of Petroleum Products
8-5-602	True Vapor Pressure	Manual of Procedures, Volume III, Lab Method 28, Determination of Vapor Pressure of Organic Liquids from Storage Tanks
SIP 8-5-603 and BAAQMD 8-5-603	Determination of Emissions	Manual of Procedures, Volume IV, ST-34, Bulk and Marine Loading Terminals Vapor Recovery Units; ST-7 Organic compounds
SIP 8-5-605 and BAAQMD 8-5-605	Pressure-Vacuum Valve Gas Tight Determination	EPA Reference Method 21, Determination of Volatile Organic Compounds Leaks
8-6-502	Portable Hydrocarbon Detector	EPA Reference Method 21 (40 CFR 60, Appendix A) Determination of Volatile Organic Compounds Leaks
8-6-601	Efficiency and Rate Determination	Manual of Procedures, Volume IV, ST-3, Bulk Plants, Emission Factor Determination, or ST-34, Bulk Marine Loading Terminals, Vapor Recovery Units
8-6-603	Analysis of Samples, True Vapor Pressure	Manual of Procedures, Volume III, Method 28, Determination of Vapor Pressure of Organic Liquids From Storage Tanks
8-6-604	Determination of Applicability	EPA-450/3-87-026 (Exhibit A-2 in Appendix A or Appendix D), or Standard reference texts, or for liquid mixtures, use Raoult's Law of Partial Pressures as defined in Section 8-6-205 or ASTM Method D 2879-83
8-7-301	Phase I Vapor Recovery Requirements	Manual of Procedures, Volume IV, ST-30, Gasoline Vapor Recovery Leak Test Procedure; and ST-36, Gasoline Dispensing Facility Phase I Volumetric Efficiency
8-7-302	Phase II Vapor Recovery Requirements	Manual of Procedures, Volume IV, ST-30, Vapor Tightness; ST-37, Liquid Removal; and ST-41, Liquid Retain and Spitting from Nozzles
8-8-301 8-8-302	Vapor tight cover	EPA Reference Method 21, Determination of Volatile Organic Compounds Leaks
8-8-601	Wastewater Analysis for Organic Compounds	Manual of Procedures, Volume III, Lab Method 33, Determination of Dissolved Critical Volatile Organic Compounds in Wastewater Separators
8-8-504	Portable Hydrocarbon Detector	A gas detector that meets the specifications and performance criteria of and has been calibrated in accordance with EPA Reference Method 21 (40 CFR 60, Appendix A)
8-8-601	Wastewater Analysis for Critical OCs	Samples of wastewater shall be taken at the influent stream for each unit and analyzed for the concentration of dissolved critical organic compounds as prescribed in the District's Manual of Procedures, Volume III, and Lab Method 33.
8-8-602	Determination of Emissions	Emissions of POCs, as specified in Sections 8-8-301.3, 8-8-302.3, 8-8-304, 8-8-305.2, 8-8-306.2, and 8-8-307.2 shall be measured by as prescribed by any of the following methods: 1). BAAQMD MOP, Volume IV, ST-7 or; 2). EPA Method 25 or 25(A).
8-8-603	Inspection Procedures	For the purposes of 8-8-301, 302, 303, and 304, leaks shall be measured using a portable gas detector as prescribed in EPA Reference Method 21 (40 CFR 60, Appendix A)

Applicable Requirement	Description of Requirement	Acceptable Test Methods
BAAQMD Regulation 8-18	Equipment Leaks (9/15/04)	
8-18-301 8-18-302 8-18-303 8-18-304 8-18-305	Leak inspection procedures	EPA reference method 21 (40 CFR 60, Appendix A), Determination of Volatile Organic Compound Leaks
8-18-306	Determination of mass emissions	EPA Protocol for equipment leak emission estimates, Chapter 4, Mass Emission Sampling, (EPA-453/R-95-017) November 1995
8-33-603	Vapor Recovery System Loading Pressure	Manual of Procedures, Volume IV, ST-34, Bulk and Marine Loading Terminals Vapor Recovery Units
8-33-604	Vapor Tight – Delivery Vehicles	Manual of Procedures, Volume IV, ST-33, Gasoline Cargo Tanks
8-33-605	Analysis of Samples	Manual of Procedures, Volume III, Lab Method 13, Determination of the Reid Vapor Pressure of Petroleum Products
SIP 8-44-301 and BAAQMD 8-44- 304.1	POC emission rate limitation during vessel loading	Manual of Procedures, Volume IV, ST-34, Bulk Marine Loading Terminals, Vapor Recovery Units
SIP 8-44-304.1 and BAAQMD 8-44-603	Tank vessel is leak free and gas tight	EPA Method 21, Determination of Volatile Organic Compounds Leaks
8-46-301	POC emission rate limitation during vessel loading	Manual of Procedures, Volume IV, ST-34, Bulk Marine Loading Terminals, Vapor Recovery Units
8-46-304.1	Tank vessel is leak free and gas tight	EPA Method 21, Determination of Volatile Organic Compounds Leaks
9-1-301 9-2-301	Ground Level Monitoring	Manual of Procedures, Volume VI, Section 1, Area Monitoring
9-1-304	Fuel Burning (Liquid and Solid Fuels)	Manual of Procedures, Volume III, Method 10, Determination of Sulfur in Fuel Oils.
9-1-310.1	Emission Limitations for Fluid Catalytic Cracking Units, Fluid Cokers, and Coke Calcining Unit	Manual of Procedures, Volume IV, ST-19A, Sulfur Dioxide, Continuous Sampling, or ST-19B, Total Sulfur Oxides Integrated Sample
9-1-313.1	Sulfur in Fuel Limitation	Manual of Procedures, Volume III, Method 10, Determination of Sulfur in Fuel Oils.
9-1-313.2	Sulfur Removal and Recovery	Manual of Procedures, Volume III, Method 32, Determination of Hydrogen Sulfide in Process Water Streams and Method 1, Determination of Ammonia in Effluents
9-1-501, 9-1-502, 9-2-501	Continuous Monitoring	Manual of Procedures, Volume 5, Continuous Monitoring
9-8-301.1	NOx Limits for Rich Burn Engines Burning Exclusively Fossil Fuel Derived Fuel Gas	Manual of Procedures, Volume IV, ST-13A, Oxides of Nitrogen, Continuous Sampling and ST-14, Oxygen, Continuous Sampling
9-8-301.2	NOx Limits for Lean Burn Engines Burning Exclusively Fossil Fuel Derived Fuel Gas	Manual of Procedures, Volume IV, ST-13A, Oxides of Nitrogen, Continuous Sampling and ST-14, Oxygen, Continuous Sampling

Applicable Requirement	Description of Requirement	Acceptable Test Methods
9-8-301.3	CO Limits for Engines Burning Exclusively Fossil Fuel Derived Fuel Gas	Manual of Procedures, Volume IV, ST-6, Carbon Monoxide, Continuous Sampling and ST-14, Oxygen, Continuous Sampling
9-9-301.1.1	Emission Limits- Turbines Rated < 10 MW	Manual of Procedures, Volume IV, ST-13A, Oxides of Nitrogen, Continuous Sampling and ST-14, Oxygen, Continuous Sampling
9-9-301.1.2	Emission Limits- Turbines Rated > 10 MW w/o SCR	Manual of Procedures, Volume IV, ST-13A, Oxides of Nitrogen, Continuous Sampling and ST-14, Oxygen, Continuous Sampling
9-9-301.1.3	Emission Limits- Turbines Rated > 10 MW with SCR	Manual of Procedures, Volume IV, ST-13A, Oxides of Nitrogen, Continuous Sampling and ST-14, Oxygen, Continuous Sampling
9-9-503	Deadline for Demonstration of Compliance with §9-9-301	Manual of Procedures, Volume IV, ST-13A, Oxides of Nitrogen, Continuous Sampling and ST-14, Oxygen, Continuous Sampling
9-9-601	Determination of Nitrogen Oxides	Manual of Procedures, Volume IV, ST-13A, Oxides of Nitrogen, Continuous Sampling and ST-14, Oxygen, Continuous Sampling
9-9-602	Determination of Carbon Monoxide and Stack-Gas Oxygen	Manual of Procedures, Volume IV, ST-6, Carbon Monoxide, Continuous Sampling and ST-14, Oxygen, Continuous Sampling
9-9-604	Determination of HHV and LHV	(1) ASTM D2015-85 for solid fuels; (2) ASTM D240-87 or ASTM D2382-88 for liquid hydrocarbon fuels; or (3) ASTM D1826-88 or ASTM D1945-81 in conjunction with ASTM D3588-89 for gaseous fuels
9-10-301	Emission Limit for Facility, NOx	Manual of Procedures, Volume IV, ST-13A, Oxides of Nitrogen, Continuous Sampling and ST-14, Oxygen, Continuous Sampling
9-10-303	Federal Interim Facility-wide NOx emission rate limit	Manual of Procedures, Volume IV, ST-13A, Oxides of Nitrogen, Continuous Sampling and ST-14, Oxygen, Continuous Sampling
9-10-304	NOx emission limit for CO Boilers	Manual of Procedures, Volume IV, ST-13A, Oxides of Nitrogen, Continuous Sampling and ST-14, Oxygen, Continuous Sampling
9-10-305	CO emission limit	Manual of Procedures, Volume IV, ST-6, Carbon Monoxide, Continuous Sampling and ST-14, Oxygen, Continuous Sampling
MOP Volume IV Source Test 7, 2	Organic compound concentration monitoring	EPA Method 25 or 25A
NSPS 40 CFR 60 Subpart Dc	Standards of performance for small industrial-commercial-institutional steam generating units (10/17/00)	
60.42c	SO2 Standard	
60.42c(d)	Oil fired: Emissions less than 0.50 lb/MMBTU OR oil with <0.5 weight sulfur	
60.43c	PM Standard	
60.43c(c)	Oil-fired: 20% opacity and 27% opacity for 6 min/hr	
NSPS 40 CFR 60 Subpart J	Standards of performance for Petroleum Refineries (10/17/00)	

Applicable Requirement	Description of Requirement	Acceptable Test Methods
40 CFR 60, Subpart J, 102 (a) (1)	Limit on Particulate Matter from Catalyst Regenerator	Method 5B, Determination of Nonsulfuric Acid Particulate Matter from Stationary Sources, or Method 5F, Determination of Nonsulfate Particulate Matter From Stationary Sources
40 CFR 60, Subpart J, 102 (a) (1)	Limit on Particulate Matter from Catalyst Regenerator	Method 5B, Determination of Nonsulfuric Acid Particulate Matter from Stationary Sources, or Method 5F, Determination of Nonsulfate Particulate Matter From Stationary Sources
40 CFR 60, Subpart J, 102 (a) (2)	Limit on Opacity of gases from catalyst regenerator	Method 9, Visual Determination of the Opacity of Emissions from Stationary Sources
40 CFR 60, Subpart J, 102 (b)	Limit on particulate matter from catalyst regenerator where gases pass through an incinerator or waste heat boiler in which auxiliary or supplemental fuel is burned	Method 5B, Determination of Nonsulfuric Acid Particulate Matter from Stationary Sources, or Method 5F, Determination of Nonsulfate Particulate Matter From Stationary Sources
40 CFR 60, Subpart J, 103 (a)	Limit on carbon monoxide	Method 6, Determination of Sulfur Dioxide Emissions from Stationary Sources
40 CFR 60, Subpart J, 104 (a)	Limit on H2S content in fuel gas	Method 11, Determination of Hydrogen Sulfide Content of Fuel Gas Streams in Petroleum Refineries
40 CFR 60, Subpart J, 104 (b) (1)	Limit on sulfur oxide emissions from catalyst regenerator with add-on control device	Method 6, Determination of Sulfur Dioxide Emissions from Stationary Sources
40 CFR 60, Subpart J, 104 (b) (2)	Limit on sulfur oxide emissions from catalyst regenerator without add-on control device	Method 6, Determination of Sulfur Dioxide Emissions from Stationary Sources
40 CFR 60, Subpart J, 104 (b) (3)	Limit on sulfur content of fluid catalytic cracking unit feed	ASTM D129–64, ASTM D1552–83, ASTM D2622–87, or ASTM D1266–87
40 CFR 60 Subpart J 60.106(e)	H2S concentration monitoring	EPA Method 11: H2S
40 CFR 60 Subpart J 60.106(f)(1)	SO2 concentration monitoring	EPA Method 6: SO2
40 CFR Subpart J 60.106(f)(2)	TRS concentration monitoring	EPA Method 15: Total Reduced Sulfur
40 CFR Subpart J 60.106(f)(3)	H2S concentration monitoring	EPA Method 3: O2
NSPS 40 CFR 60 Subpart CC		
40 CFR 60 Subpart CC	Test methods, procedures	EPA reference method 21 (40 CFR 60, Appendix A), Determination of Volatile Organic Compound Leaks
NSPS 40 CFR 60 Subpart GG		

Applicable Requirement	Description of Requirement	Acceptable Test Methods
40 CFR 60 Subpart GG 60.332 (a)(1)	Performance Standard, NOx	EPA Method 20, Determination of Nitrogen Oxides, Sulfur Dioxide, and Diluent Emissions from Stationary Gas Turbines
40 CFR 60 Subpart GG 60.332 (a)(2)	Performance Standard, NOx	EPA Method 20, Determination of Nitrogen Oxides, Sulfur Dioxide, and Diluent Emissions from Stationary Gas Turbines
40 CFR 60 Subpart GG 60.333 (a)	SO2 Volumetric Emission Limit	EPA Method 20, Determination of Nitrogen Oxides, Sulfur Dioxide, and Diluent Emissions from Stationary Gas Turbines
40 CFR 60 Subpart GG 60.333 (b)	Fuel Sulfur Limit (gaseous fuel)	ASTM D1072-80, 90 (Reapproved 1994), Standard Method for Total Sulfur in Fuel Gases; ASTM D 3246-81, 92, 96, Standard Method for Sulfur in Petroleum Gas by Oxidative Microcoulometry; ASTM D4468-85 (Reapproved 2000), Standard Test Method for Total Sulfur in Gaseous Fuels by Hydrogenolysis and Rateometric Colorimetry; or ASTM D6667-01, Standard Test Method for Determination of Total Volatile Sulfur in Gaseous Hydrocarbons and Liquefied Petroleum Gases by Ultraviolet Fluorescence. If total sulfur content of gaseous fuel during most recent performance test was less than 0.4 weight percent (4000 ppmw), the following methods may be used per 60.334(h)(1): - ASTM D4084-82, 94; - ASTM D5504-01; - ASTM D6228-98; or - Gas Processors Association Standard 2377-86.
40 CFR 60 Subpart GG 60.333 (b)	Fuel Sulfur Limit (liquid fuel)	ASTM D129-00, Standard Test Method for Sulfur in Petroleum Products (General Bomb Method); ASTM D2622-98, Standard Test Method for Sulfur in Petroleum Products by Wavelength Dispersive X-Ray Fluorescence Spectrometry; ASTM D4294-02; Standard Test Method for Sulfur in Petroleum and Petroleum Products by Energy-Dispersive X-Ray Fluorescence Spectrometry ASTM D1266-98, Standard Test Method for Sulfur in Petroleum Products (Lamp Method); ASTM D5453-00, Standard Test Method for Determination of Total Sulfur in Light Hydrocarbons, Motor Fuels and Oils by Ultraviolet Fluorescence; or ASTM D1552-01, Standard Test Method for Sulfur in Petroleum Products (High-Temperature Method);
NSPS 40 CFR 60 Subpart VV	Standards of Performance for Equipment Leaks Of VOC In The Synthetic Organic Chemicals Manufacturing Industry For Which Construction, Reconstruction, Or Modification Commenced After 1/5/81, and on or before 11/7/06 (6/2/08)	EPA Reference Method 21, Determination of Volatile Organic Compounds Leaks

Applicable Requirement	Description of Requirement	Acceptable Test Methods	
Subpart VV 40 CFR 60.482-2(b)(1), 60.482-7(b), 60.482-8(b), 60.482-10 (g),	Leak inspection procedures	60 Subpart VV, 60.485(b): EPA reference method 21 (40 CFR 60, Appendix A), Determination of Volatile Organic Compound Leaks	
Subpart VV 40 CFR 60.482-2(b)(2), 60.482-8(a),	Visual inspection	60 Subpart VV, 60.485(b)	
Subpart VV 40 CFR 60.482-2(e), 60.482-4(a), 60.482-4(b), 60.482-7(f),	Leak inspection procedures	60 Subpart VV, 60.485(c): EPA reference method 21 (40 CFR 60, Appendix A), Determination of Volatile Organic Compound Leaks	
Subpart VV 40 CFR 60.483 and 8-18-404.1	Leak inspection procedures	60 Subpart VV, 60.485(b): EPA reference method 21 (40 CFR 60, Appendix A), Determination of Volatile Organic Compound Leaks	
NSPS 40 CFR 60 Subpart QQQ	Standards of Performance for VOC Emissions From Petroleum Refinery Wastewater Systems (10/17/00)		
40 CFR 60 Subpart QQQ, 60.696	Performance test methods and procedures and compliance provisions	Sources equipped with a closed-vent system and control device shall use EPA Method 21 to measure the emission concentrations, using 500 ppm as the no detectable emission limit. Acceptable seal gap criteria also included.	
40 CFR 60, Subpart QQQ 60.696	Leak inspection procedures	EPA reference method 21 (40 CFR 60, Appendix A), Determination of Volatile Organic Compound Leaks	
NSPS 40 CFR 60 Appendix A	Appendix A to Part 60 – Test Methods	EPA Reference Method 21	
NSPS 40 CFR 60 Appendix B	Performance Specifications		
Performance Specification 3	O2 and CO2 continuous emission monitoring systems		
Performance Specification 5	Total reduced sulfur (TRS) continuous emission monitoring systems		
Performance Specification 7	H2S continuous emission monitoring systems		
NSPS 40 CFR 60 Appendix F	Quality Assurance Procedures		
Procedure 1	QA requirements for gas continuous emission monitoring systems		

Applicable Requirement	Description of Requirement	Acceptable Test Methods	
NESHAPS 40 CFR 61, Subpart FF	National Emission Standard for Benzene Waste Operations (12/4/03)		
40 CFR 61 Subpart FF 61.349 (a)(1)(i)	Leak inspection procedures	61 Subpart FF, 61.355(h): EPA reference method 21 (40 CFR 60, Appendix A), Determination of Volatile Organic Compound Leaks	
40 CFR Subpart FF 61.354 (f)	Visual Inspection	61 Subpart FF, 61.354(f)	
NESHAP Part 61 Subpart V	National Emission Standards for Equipment Leaks (Fugitive Emission Sources) (12/14/00)	Manual of Procedures, Volume IV, ST-34, Bulk Gasoline Distribution Facilities Vapor Recovery Units	
Subpart V 40 CFR 61.242-2(b)(1), 61.242-7(b), 61.242-8(b)	Leak inspection procedures	61 Subpart V, 61.245(b): EPA reference method 21 (40 CFR 60, Appendix A), Determination of Volatile Organic Compound Leaks	
Subpart V 40 CFR 61.242-2 (b)(2), 61.242-2 (g), 61.242-8(a)	Visual Inspection	61 Subpart V, 61.242-2 (b)	
Subpart V 40 CFR 61.242-2(e), 61.242-4(a), 61.242-4(b), 61.242-7(f), 61.242-11 (f)	Leak inspection procedures	61 Subpart V, 61.245(c): EPA reference method 21 (40 CFR 60, Appendix A), Determination of Volatile Organic Compound Leaks	
Subpart V 40 CFR 61.243 and 8-18-404.1	Leak inspection procedures	61 Subpart V, 61.245(b): EPA reference method 21 (40 CFR 60, Appendix A), Determination of Volatile Organic Compound Leaks	
NESHAPS 40 CFR 63, Subpart Y	NESHAPs for Marine Tank Vessel Loading Operations (4/20/06)		
40 CFR 63, Subpart Y 562(c)(2)(iii)	Vapor tightness of marine tank vessel	40 CFR 63, 565(c)(1) Pressure Test for Marine Tank Vessel; and EPA Method 21 for Leak Test	
40 CFR 63, Subpart Y 562(c)(3)	POC destruction/removal efficiency requirements	EPA Method 25 (for non-flare combustion device) EPA Method 25A (for recovery device) EPA Method 22 (for flare)	
40 CFR 63, Subpart Y 562(c)(4)	1000 ppmv outlet VOC concentration	EPA Method 25 (for non-flare combustion device) EPA Method 25A (for recovery device) EPA Method 22 (for flare)	
NESHAPS 40 CFR 63 subpart CC	National Emission Standards for Hazardous Air Pollutants from Petroleum Refineries (6/23/03)		

Applicable Requirement	Description of Requirement	Acceptable Test Methods
40 CFR 63 Subpart CC 63.646(a)	Group 1 external floating roof tanks primary rim-seal gap measurement	
40 CFR 63 Subpart CC 63.646(a)	Group 1 external floating roof tanks secondary rim-seal gap measurement	
NESHAPS 40 CFR 63, Subpart VV	NESHAPs for Oil-Water Separators and Organic Water Separators (6/23/03)	
40 CFR 63 Subpart VV, 63.1046	Test methods, procedures	Method 21 of 40 CFR part 60, appendix A. Acceptable floating roof seal gap criteria included.

## IX. PERMIT SHIELD

#### A. Non-applicable Requirements

Pursuant to District Regulations 2-6-233 and 2-6-409.12, the federally enforceable regulations and/or standards cited in the following table[s] do not apply to the source or group of sources identified at the top of the table[s]. Enforcement actions and litigation may not be initiated against the source or group of sources covered by this shield based on the regulatory and/or statutory provisions cited, as long as the reasons listed below remain valid for the source or group of sources covered by this shield.

#### Table IX-A-1 Combustion (Cogeneration)

#### Table IX-A-1 Combustion Permit Shield for Non-Applicable Requirements

#### **Cogeneration**

S-4350 Gas Turbine with Steam Injection Cogeneration Train 1000 and S-4351 Heat Recovery Steam Generation Train 1000 abated by A-0070 CO/HC Catalyst and A-0072 SCR NOx Reduction Catalyst, S-4352 Gas Turbine with Steam Injection Cogeneration Train 2000 and S-4353 Heat Recovery Steam Generation Train 2000 abated by A-0071 CO/HC Catalyst and A-0073 SCR NOx Reduction Catalyst

Citation	Title or Description (Reason not applicable)	
NSPS Part 60 Subpart GG	Standards of Performance for Stationary Gas Turbines (2/24/06)	
60.334 NOx Monitoring	Cogeneration Unit does not meet applicability requirements for 60.332 NOx emission standard.	
Provisions	Hence, NOx monitoring, reporting, & recordkeeping provisions are not applicable.	

#### Table IX-A-2 Sources (Fugitive Components)

#### Table IX-A-2 VOC Sources Permit Shield for Subsumed Requirements Fugitive Components

Citation	Title or Description (Reason not applicable)		
NSPS Part 60 Subpart VV	National Emission Standards for Equipment Leaks (Fugitive Emission Sources) (6/2/08)		
60.482-7(h)	Allows relief from 60.482.7(a) monitoring if designated as difficult-to-monitor. BAAQMD		
	Regulation 8-18-206 definition of inaccessible is more stringent. Both 60.482.7(h) and BAAQMD		
	8-18-401.3 require yearly monitoring for difficult-to-monitor valves.		
60.482-9(e)	Allows delay of repair beyond a process unit shutdown under supply circumstances. BAAQMD		
	Regulation 8-18-306 does not allow this relief.		
NESHAPS 40 cfr Part 61	National Emission Standards for Equipment Leaks (Fugitive Emission Sources) (12/14/00)		
Subpart V			
61.242-7(h)	Allows relief from 61.242.7(a) monitoring if designated as difficult-to-monitor. BAAQMD		
	Regulation 8-18-206 definition of inaccessible is more stringent. Both 61.242.7(h) and BAAQMD		
	8-18-401.3 require yearly monitoring for difficult-to-monitor valves.		

## IX. Permit Shield

# Table IX-A-2 VOC Sources Permit Shield for Subsumed Requirements Fugitive Components

Citation	Citation Title or Description (Reason not applicable)	
61.242-10(e)	Allows delay of repair beyond a process unit shutdown under supply circumstances. BAAQMD	
	Regulation 8-18-306 does not allow this relief.	
61.244	Subsumed by BAAQMD Regulation 8-18-308 that requires public noticing.	

#### Table IX-A-3 Loading Terminals (Wharf)

# Table IX-A-3 Loading TerminalsPermit Shield for Non-Applicable Requirements

<u>Wharf</u> S-4315 Point Orient Wharf, S-9321 Berth #1 Long Wharf 4 Arms, S-9322 Berth #2 Long Wharf 18 Risers, S-9323 Berth #3 Long Wharf 6 Arms, S-9324 Berth #4 Long Wharf 5 Arms, S-9325 Berth #9 Long Wharf 15 Risers, S-9326 Berth #11 Long Wharf 2 Risers (S-9322, S-9323, S-9324, S-9325 abated

by A-0900 Marine Vapor Recovery)

Citation	Title or Description (Reason not applicable)
NESHAPS 40 cfr Part 63	National Emission Standards for Gasoline Distribution Facilities (Bulk Gasoline Terminals
Subpart R	and Pipeline Breakout Stations) (12/22/08)
63.422	No gasoline cargo trucks are loaded at the Richmond Wharf
63.423	No gasoline storage vessels are located at the Richmond Wharf
63.424	No gasoline cargo tanks are located at the Richmond Wharf

#### Table IX-B-2 Tanks (EFRT's Cluster 23)

# Table IX-B-2 TanksSource-Specific Subsumed RequirementsExternal Floating Roof Tanks Cluster 23

S-399, S-3180, S-3190, S-3191, S-3193, S-3196, S-3197, S-3198, S-3201, S-3202, S-3213, S-3214, S-3229

Citation	Title or Description (Reason not applicable)
BAAQMD Regulation 11-7	Hazardous Pollutants: Benzene (5/15/85)
11-7-401	Weekly visual inspection of pumps is also required by 40 CFR 61.242-2.
11-7-402	Initial report is also required by 40 CFR 61.247 (a).
11-7-403	Semiannual reports are also required by 40 CFR 61.247 (b)-(c).
11-7-501	Monthly monitoring of pumps and valves is also required by 40 CFR 61.242-2(a)(1), (e); 61.242-7(a), (f).
11-7-502	Recordkeeping is also required by 40 CFR 61.246.

### IX. Permit Shield

#### **B.** Subsumed Requirements

Pursuant to District Regulations 2-6-233.2 and 2-6-409.12, as of the date this permit is issued, the federally enforceable monitoring, recordkeeping, and reporting requirements cited in the following table for the source or group of sources identified at the top of the table[s] are subsumed by the monitoring, recordkeeping, and reporting for more stringent requirements or by a "hybrid" monitoring scheme. The District has determined that compliance with the requirements listed below and elsewhere in this permit will assure compliance with the substantive requirements of the subsumed monitoring requirements. Enforcement actions and litigation may not be initiated against the source or group of sources covered by this shield based on the subsumed monitoring requirements cited.

#### Table IX-B-1 Tanks (EFRT's Cluster 17)

# Table IX-B-1 Tanks Source-Specific Subsumed Requirements

#### **External Floating Roof Tanks Cluster 17**

#### S-3101, S-3102, S-3129

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
Requirement	Regulation The or Description of Requirement	$(1/\mathbf{N})$	Date

#### Table IX-B-2 Tanks (EFRT's Cluster 23)

#### Table IX-B-2 Tanks Source-Specific Subsumed Requirements

#### **External Floating Roof Tanks Cluster 23**

#### S-399, S-3180, S-3189, S-3190, S-3191, S-3193, S-3196, S-3197, S-3198, S-3201, S-3202, S-3213, S-3214

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
NSPS Subpart Kb	Volatile Organic Liquid Storage Vessels SUBSUMED REQUIREMENTS FOR EFRTs		
60.115b(b)	<b>Reporting and Recordkeeping for EFRTs.</b> Subsumed into the Refinery MACT requirements [section 63.640(h).		

# IX. Permit Shield

#### Table IX-B-3 Tanks (IFRT's Cluster 24)

# Table IX-B-3 Tanks Source-Specific Subsumed Requirements

#### Internal Floating Roof Tanks Cluster 24

#### S-1635, S-1637

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
NSPS Subpart Kb	Volatile Organic Liquid Storage Vessels SUBSUMED REQUIREMENTS FOR IFRT	s s	
60.115b(a)	Reporting and Recordkeeping for IFRTs. Subsumed into the Refinery MACT requirements [section 63.640(h).		

#### Table IX-B-4 Tanks (EFRT's Cluster 26)

 Table IX B-5 Tanks (IFRT's Cluster 27)

#### Table IX B-6 Combustion (Steam Generating Units)

# Table IX B-6 Combustion Source-Specific Subsumed Requirements

#### <u>Steam Generating Units</u> S-4070, S-4071, S-4072, S-4155

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
NSPS 40 CFR 60 Subpart D			
{for source S-4070, S-4071, S-4072	Standards of Performance for Steam Generating U	Jnits	
60.45	Emission and Fuel Monitoring: Install CEMs and comply with applicable monitoring requirements of this subpart. Subsumed into the BAAQMD 9-10-502.1 requirementfor a Monitoring Plan including a NOx and O2 CEM	Y	
NSPS 40 CFR 60 Subpart Db [for S-4155]	Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units (1/28/09)		
60.48b	Emission Monitoring for Nitrogen Oxides:       Install, calibrate, and operate a       Y         NOx CEM.       Subsumed into the BAAQMD 9-10-502.1 requirement for a       Y         Monitoring Plan including a NOx and O2 CEM.       Y		
60.49b	Reporting and Recordkeeping Requirements	Y	

# X. REVISION HISTORY

Final Title V Permit:	December 1, 2003
Administrative Amendment (no application) Change in effective date for NOx Box and Flare Monitoring Administrative Amendment (Application 10324) Addition of NOx and O2 CEMs for S-4159 and S-4160	May 27, 2004
Reopening EPA Review (Application No. 9294): See Statement of Basis for details	December 16, 2004
Minor Revision (Application No. 9782): Change in throughput and vapor pressure limits for S-3202, Tank	December 16, 2004
Reopening (Application No.11695):	April 12, 2005
Reopening (Application No: 12429, 12602, 13570 & 14308) October 12, 2006	
Reopening (Application No. 13024):	April 5, 2007
Minor Revision (Application No. 17171): Change in the Responsible Offical; Deletion of the annual throughput of S-4236 (No.4 Crude unit) in Table II.A.1.	April 17, 2008
Minor Revision (Application No. 17429 et al) Includes Applications: 6898, 8451, 14676, 15712, 15822, 15915, 16393 16591,16643, 17027, 17176, 17282, 17429, and 17452.	January 26, 2009
Renewal Title V Permit (Application No. 21614)	August 11, 2011
Minor Revision (Application No. 24427 et al) Includes Applications: 21463/21462, 22278/22277, 23070/23069, 22713/22634, 23413/23423, 21687/21677, 22927/22916, 22795/22794, 22723/22722, and 22108/21980 Change in responsible official and facility contact See Statement of Basis for details	August 1, 2014

## XI. GLOSSARY

ACT — Federal Clean Air Act

Avgas-Aviation Gas

BAAQMD — Bay Area Air Quality Management District

BACT — Best Available Control Technology

CAA — The federal Clean Air Act

CAAQS — California Ambient Air Quality Standards

CEQA — California Environmental Quality Act

**CFR** — The Code of Federal Regulations. 40 CFR contains the implementing regulations for federal environmental statutes such as the Clean Air Act. Parts 50-99 of 40 CFR contain the requirements for air pollution programs.

**CO** — Carbon Monoxide

 $CO_2$  — Carbon Dioxide

CVS-Closed Vent System

**CWTS-** Cooling Water Towers

**Cumulative Increase** — The sum of permitted emissions from each new or modified source since a specified date pursuant to BAAQMD Rule 2-1-403, Permit Conditions (as amended by the District Board on 7/17/91) and SIP Rule 2-1-403, Permit Conditions (as approved by EPA on 6/23/95). Used to determine whether threshold-based requirements are triggered.

**DAF-** "dissolved air flotation" unit

#### **DEBRU- Desalter Effluent Benzene Removal Unit**

District — The Bay Area Air Quality Management District

DSCF – Dry Standard Cubic Feet

**EFRT-** External Floating Roof Tank

**EMP**— Environmental Management Plan

EPA — The federal Environmental Protection Agency

**ESP** — Electrostatic Precipitator

**Excluded** — Not subject to any District regulations.

**Federally Enforceable, FE** — All limitations and conditions that are enforceable by the Administrator of the EPA including those requirements developed pursuant to 40 CFR Part 51, subpart I (NSR), Part 52.21 (PSD), Part 60 (NSPS), Part 61 (NESHAPs), Part 63 (HAP), and Part 72 (Permits Regulation, Acid Rain), including limitations and conditions contained in operating permits issued under an EPA-approved program that has been incorporated into the SIP.

FCC — Fluid Catalytic Cracker

FID-Flame ionization detector (for measurement of hydrocarbons)

FP — Filterable Particulate as measured by BAAQMD Method ST-15, Particulate.

**FRT-** Floating Roof Tank

**GRU** — Gas Recovery Unit

GWTU- Ground Water treatment unit

 $H_2S$  — Hydrogen Sulfide

 $H_2SO_4$  — Sulfuric acid

**HAP** — Hazardous Air Pollutant. Any pollutant listed pursuant to Section 112(b) of the Act. Also refers to the program mandated by Title I, Section 112, of the Act and implemented by both 40 CFR Part 63, and District Regulation 2, Rule 5.

HC — Hydrocarbon

Hg — Mercury

**HHV** – Higher Heating Value

HNC — Heavy Neutral Hydrocracker

HNHF — Heavy Neutral Hydrofinisher

IFRT- Internal Floating Roof TankJHT- Jet Hydrotreater

K-thousand

LNC — Light Neutral Hydrocracker

LNHF — Light Neutral Hydrofinisher

**LPG-** Liquified Petroleum Gas

**LSFO-** Low Sulfur Fuel Oil

**Major Facility** — A facility with potential emissions of: (1) at least 100 tons per year of any regulated air pollutant, (2) at least 10 tons per year of any single hazardous air pollutant, and/or (3) at least 25 tons per year of any combination of hazardous air pollutants, or such lesser quantity of hazardous air pollutants as determined by the EPA administrator.

**MFR** — Major Facility Review. The District's term for the federal operating permit program mandated by Title V of the Federal Clean Air Act and implemented by District Regulation 2, Rule 6.

MOP — The District's Manual of Procedures

MTBE- Methyl Tertiary Butyl Ether

NA — Not Applicable

NAAQS — National Ambient Air Quality Standards

NESHAPS - National Emission Standards for Hazardous Air Pollutants. See in 40 CFR Parts 61 and 63

**NMHC** — Non-methane Hydrocarbons

NOx — Oxides of nitrogen

**NSPS** — Standards of Performance for New Stationary Sources. Federal standards for emissions from new stationary sources. Mandated by Title I, Section 111 of the Federal Clean Air Act, and implemented by 40 CFR Part 60 and District Regulation 10.

**NSR** — New Source Review. A federal program for pre-construction review and permitting of new and modified sources of pollutants for which criteria have been established in accordance with Section 108 of the Federal Clean Air Act. Mandated by Title I of the Federal Clean Air Act and implemented by 40 CFR Parts 51 and 52 and District Regulation 2, Rule 2. (Note: There are additional NSR requirements mandated by the California Clean Air Act.)

**Offset Requirement** — A New Source Review requirement to provide federally enforceable emission offsets for the emissions from a new or modified source. Applies to emissions of POC, NOx, PM10, and SO2.

**Phase II Acid Rain Facility** — A facility that generates electricity for sale through fossil-fuel combustion and is not exempted by 40 CFR 72 from Titles IV and V of the Clean Air Act.

POC — Precursor Organic Compounds

**PM**—Particulate Matter

PM10 — Particulate matter with aerodynamic equivalent diameter of less than or equal to 10 microns.

**Process Unit** – For the purpose of start-up and shutdown reporting, a unit is defined as found in 40 CFR Part 60 Subpart GGG, which states: Process Unit means components assembled to produce intermediate or final products from petroleum, unfinished petroleum derivatives, or other intermediates; a process unit can operate independently if supplied with sufficient feed or raw materials and sufficient storage facilities for the product.

**PSD** — Prevention of Significant Deterioration. A federal program for permitting new and modified sources of those air pollutants for which the District is classified "attainment" of the National Air Ambient Quality Standards. Mandated by Title I of the Act and implemented by both 40 CFR Part 52 and District Regulation 2, Rule 2.

**PSV-**Pressure Safety Valve

**RLOP-** Richmond Lube Oil Project

**RLW-** Richmond Long Wharf

**SDA** — Solvent Deasphalting

**SIP** — State Implementation Plan. State and District programs and regulations approved by EPA and developed in order to attain the National Air Ambient Quality Standards. Mandated by Title I of the Act.

SO2 — Sulfur dioxide

 $SO_3$  — Sulfur trioxide

**SRU** — Sulfur Recovery Unit

**ST-7** — District Manual of Procedures, Vol. IV, ST-7 (source test procedures for non-methane organic compound sampling (BAAQMD Reg. 8))

Shutdown Reporting – For reporting purposes only, a shutdown shall be defined as any of the following; there is no process feed to a unit, no furnace fires, or the boundary blinds are installed.

Start-Up Reporting – For reporting purposes only, a start-up shall be defined as any of the following; the removal of boundary blinds, first fire to a furnace, or the introduction of process feed to a unit. A start-up only occurs following a shutdown unless it involves a newly constructed process unit.

TBD-To be determined

**TDS-**Total Dissolved Solids

**Title V** — Title V of the federal Clean Air Act. Requires a federally enforceable operating permit program for major and certain otherfacilities.

#### **TKC-Taylor Kinetic Cracking**

TRMP-Toxic Risk Management Plan

**TSP** — Total Suspended Particulate

**TVP**-True Vapor Pressure

VGO- Vacuum Gas Oil

**VOC** — Volatile Organic Compounds

**VR** — Vapor Recovery

WMU - Wastewater Management Unit

WWT —Wastewater Treatment

#### Units of Measure:

bbl	=	barrels
bhp	=	brake-horsepower
btu	=	British Thermal Unit
g	=	grams
gal	=	gallon
gpm	=	gallons per minute
hp	=	horsepower
hr	=	hour
lb	=	pound
in	=	inches
max	=	maximum
$m^2$	=	square meter
min	=	minute
mm	=	million (in the Permit, "mm" typically refers to "millimeter")
MM	=	million
MMBH	=	million Btu per hour
ppb	=	parts per billion
ppmv	=	parts per million, by volume
ppmw	=	parts per million, by weight
psia	=	pounds per square inch, absolute
psig	=	pounds per square inch, gauge
scfd	=	standard cubic feet per day
scfm	=	standard cubic feet per minute
yr	=	year