# **Bay Area Air Quality Management District**

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

# **Draft**Proposed

# **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 Jim Whiteside,** Richmond Refinery Mgr. 510-242-4400 Facility Contact Bob Chamberlin, Environmental Specialist 510-242-1546

Type of Facility: Primary SIC: Petroleum Refinery 2911

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

Product:

Petroleum

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

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

Date

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### TANK AND WASTEWATER CLUSTER INDEXX

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

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-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

Table IV.F.1.2

#### Fixed Roof Tanks Cluster 01b

S-0127, S-0131, S-0151, S-0200A, S-0204, S-0223, S-0225, S-0234, S-0290, S-0291, S-0293, S-0319, S-0325, S-0329, S-0397, S-0401, S-0501, S-0518, S-0526, S-0550, S-0551, S-0555, S-0583, S-0585, S-0586, S-0587, S-0588, S-0589, S-0590, S-0591, S-0592, S-0594, S-0595, S-0596, S-0597, S-0900,
S-0907, S-0908, S-0910, S-0930, S-0931, S-0934, S-0935, S-0950, S-0957, S-0979, S-0984, S-1052, S-1149, S-1427, S-1455, S-1456, S-1460, S-1461, S-1468, S-1470, S-1492, S-1493, S-1523, S-1546, S-1547, S-1548, S-1636, S-1653, S-1679, S-1681, S-1685, S-1707, S-1708, S-1709, S-1710, S-1711, S-1712, S-1716, S-1723, S-1724, S-1725, S-1728, S-1729, S-1730, S-1731, S-1732, S-1733, S-1736, S-1756, S-1761, S-1762, S-1764, S-1766, S-1950, S-1951, S-1952, S-1989, S-2520, S-2540, S-3008, S-3028, S-3029, S-3125, S-3139, S-3140 (S-3140 also in Table IV.E.3.1 Sulfur Recovery), S-3142, S-3146, S-3148, S-3140

Internal Floating Roof Tanks Cluster 01b:

S-0328, S-1634, S-3147

External Floating Roof Tanks Cluster 01b:

S-1297, S-0955, S-0956, S-1292, S-1506, S-1451, S-1899, S-1428, S-1020, S-3132, S-3127, 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

S-1726, S-1727, S-1757, S-1758

Table IV.F.1.8

External Floating Roof Tanks Cluster 16

S-9302, S-9303

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

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

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)	
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#### A. Administrative Requirements

The permit holder shall comply with all applicable requirements in the following regulations: **BAAOMD** Regulation 1 - General Provisions and Definitions (as amended by the District Board on 5/2/01); 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 8/1/01); 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 5/17/00); SIP Regulation 2, Rule 2 - Permits, New Source Review and Prevention of Significant Deterioration (as approved by EPA through 1/26/99); BAAOMD Regulation 2, Rule 4 - Permits, Emissions Banking (as amended by the District Board on 5/17/00); SIP Regulation 2, Rule 4 - Permits, Emissions Banking (as approved by EPA through 1/26/99); and BAAQMD Regulation 2, Rule 6 - Permits, Major Facility Review (as amended by the District Board on 4/16/03).

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

- 1. This Major Facility Review Permit was issued on December 1, 2003, and expires on November 30, 2008. The permit holder shall submit a complete application for renewal of this Major Facility Review Permit no later than May 31, 2008 and no earlier than November 30, 2007. If a complete application for renewal has not been submitted in accordance with this deadline, the facility may not operate after November 30, 2008. (Regulation 2-6-307, 404.2, & 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.
- 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, Regulation 3; 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, Regulation 3; 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 December 1, 2003, to November 30, 2004. The second certification period shall be December 1, 2004, to December 31, 2004. 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 permit holder may satisfy this requirement through submittal of District-generated Compliance Certification forms. 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 for each source as shown in Table's II A1 and A2 is the maximum allowable capacity. Exceedance of the maximum allowable capacity 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.

### 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**

						as, except where no		
Source Number	Description	Make or Type	Model	Capacity	Annual Throughput Limits	Daily Throughput Limits	Units	Basis
S-0610	Tank	Abated Fixed Roof	N/A	84 gal	N/A, limited by S-0605 and S-6066	N/A, limited by S-0605 and S-6066	1,000,000 gal	Application #11562
								No limit. Limited by source #6061
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-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-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-1635	Tank	Internal Floating Roof	N/A	155K gal	2,000,000	N/A	bbl non- exempt stocks	P/C# 15671 offsets = NSR
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 = 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)

### Table II A 1 - Permitted Sources (New Source Review)

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

### Table II A 1 - Permitted Sources (New Source Review)

Source Number	Description	Make or Type	Model	Capacity	Annual Throughput Limits	Daily Throughput Limits	Units	Basis
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-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
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

### Table II A 1 - Permitted Sources (New Source Review)

Source Number	Description	Make or Type	Model	Capacity	Annual Throughput Limits	Daily Throughput Limits	Units	Basis
								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
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),

### Table II A 1 - Permitted Sources (New Source Review)

Source Number	Description	Make or Type	Model	Capacity	Annual Throughput Limits	Daily Throughput Limits	Units	Basis
								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
<u>S-3226</u>	Sulfur Storage Tank	Fixed Roof	<u>N/A</u>	<u>1.1514 MM gal</u>	<u>N/A</u>	<u>N/A</u>	gallons	Condition <u>#1046</u>
S-4032	#3 Rheniformer,	Foster	DWG 719-		525,600	1,440	million Btu	РТО
	F101	Wheeler	11-H1				HHV	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 P/C# 16698. Appendix 12.22 RLOP
8-4039	#4 Rheniformer, F-3560	Alcorn Combustion	HC-01403		1,489,200	4,080	million Btu HHV	Conditioned daily throughput P/C# 16698 RLOP

### Table II A 1 - Permitted Sources (New Source Review)

Source Number	Description	Make or Type	Model	Capacity	Annual Throughput Limits	Daily Throughput Limits	Units	Basis
S-4040	#4 Rheniformer, F-3570	Alcorn Combustion	HC-01403		1,331,520	3,648	million Btu HHV	Conditioned daily throughput P/C# 16698
								RLOP
S-4041	F-3580, #4 Rheniformer	Alcorn Combustion	HC-01403		674,520	1,848	million Btu HHV	Conditioned daily throughput P/C# 16698
								RLOP
S-4044	#5 Rheniformer F-570	Foster Wheeler	N/A		683,280	1,872	million Btu HHV	Conditioned daily throughput P/C# 18172 PA#8343
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 P/C# 18003
								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 P/C# 18003
								RLOP
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
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# 18015. Appendix 9F-2
								RLOP

#### Table II A 1 - Permitted Sources (New Source Review)

Source Number	Description	Make or Type	Model	Capacity	Annual Throughput Limits	Daily Throughput Limits	Units	Basis
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# 18015. 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# 18015. Appendix 9F-2
S-4093	Steam Heater F-11				79,856	219	Million Btu	РТО
	Lube Div						HHV	RLOP
S-4094	Air Heater - Thermofor Unit Lube Div.	Peabody Engineering Corp.	N/A		79,856	219	million Btu HHV	PTO RLOP
S-4095	Wax Rerun Furnace F-210, Lube Div.	Petro-Chem	N/A		329,937	904	million Btu HHV	Furnace firing rate limit for Reg 9 rule and per Chevron's June 21, 2000 proposal as subsequently amended. Appendix 12.4 RLOP
S-4107	Heat Treating Furnace No. 1 Boiler Shop	John R. Gearhart Co.	N/A		57,816	158	Million Btu HHV	PTO RLOP
<u>s 4118</u>	Emergency Fire Water Pump 15							RLOP
<del>S-4119</del>	Emergency Fire Water Pump 16							RLOP
<del>8-4127</del>	Emergency Electric Generator #1pp							RLOP
S-4153	F-110 Asphalt Solution Heater SDA 150 Max	M.W. Kellog	N/A		442,380	1212	million Btu HHV	See Appendix 3B5. RLOP
S-4156	F-320 Naphtha Vaporizer, H2 Plant Isomax	Born Engineering Co.	N/A		370,548	1,015	million Btu HHV	See Appendix 3B5. RLOP
S-4157	F-330 Naphtha Vaporizer, H2 Plant	Born Engineering Co.	MA-22		370,548	1,015	million Btu HHV	See Appendix 3B5.
								RLOP

#### Table II A 1 - Permitted Sources (New Source Review)

Source Number	Description	Make or Type	Model	Capacity	Annual Throughput Limits	Daily Throughput Limits	Units	Basis
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# 18387
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# 18387
S-4161	F-510 TKN Feed Furnace Isomax	Alcorn Combustion Co.	N/A		534,360	1,464	million Btu HHV	PTO. P/C# 16686
0.41(2			27/4		524.260	1.464	111' D.	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 P/C# 16731
								RLOP
S-4165	F-620 Isocracker Feed Furnace Isomax	Alcorn Combustion Co.	N/A		595,680	1,632	million Btu HHV	Conditioned daily throughput P/C# 16731
								RLOP
S-4166	F-610 Isocracker Feed Furnace Isomax	Alcorn Combustion Co.	N/A		595,680	1,632	million Btu HHV	Conditioned daily throughput P/C# 16731
								RLOP
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# 16731
								RLOP

### Table II A 1 - Permitted Sources (New Source Review)

Source Number	Description	Make or Type	Model	Capacity	Annual Throughput Limits	Daily Throughput Limits	Units	Basis
S-4169	F-731 Isocracker Reboiler Isomax	Born Engineering Co.	N/A		2,277,600	6,240	million Btu HHV	Conditioned daily throughput P/C# 16731
								RLOP
S-4171	F-355 Reforming Furnace, H2 Plant	Foster Wheeler	N/A		7,419,720	20,328	million Btu HHV	Conditioned daily throughput limit P/C# 17973 & 12.5
								RLOP
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 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
	CAT CIACK.				,			RLOP
S-4193	F-2270 Tail Gas Heater #2 SRU	Contractor	N/A		279,444.0*	765.6	million Btu HHV	original design
								RLOP

### Table II A 1 - Permitted Sources (New Source Review)

Source Number	Description	Make or Type	Model	Capacity	Annual Throughput Limits	Daily Throughput Limits	Units	Basis
S-4194	F-2370 Tail Gas Heater #3 SRU	Contractor	N/A		491,436	1346	million Btu HHV	original design
								RLOP
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
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	C.F. Braun	N/A		23,652,000	64,800	bbl	PTO
	Hydrotreater		-			- ,		app.#9014 '93
S-4236	No. 4 Crude Unit	C.F. Braun	N/A		88,659,000	257,200	bbl	RLOP C#469
S-4238	Liquefied	Fischer	N/A		10,000,000	27,400	bbl	Data form
	Petroleum Gas Loading Rack							RLOP
S-4250	Hydrogen Manufacturing Plant	Foster Wheeler	N/A		54,750*	181.1	million SCF H2 produced	Two trains, highest day. Post 79 apps justify annual limit
								RLOP
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-4261	Wax Deoiler No. 2	Bechtel	N/A		1,927,200	5280	bbl	RLOP data form '77
S-4262	Wax Rerun Plant		N/A		1,664,400	4560	bbl	RLOP data form '77 (historical

#### Table II A 1 - Permitted Sources (New Source Review)

Source Number	Description	Make or Type	Model	Capacity	Annual Throughput Limits	Daily Throughput Limits	Units	Basis
								data exceeds original design 190 bph)
S-4265	Wax Refinishing		N/A		2,338,920	6408		Data form '77 RLOP
S-4282	Penhex Isomerization Unit	Bechtel	N/A		23,725,000	65,000	bbl	See Appendix
								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
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 CFP
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

### Table II A 1 - Permitted Sources (New Source Review)

Source Number	Description	Make or Type	Model	Capacity	Annual Throughput Limits	Daily Throughput Limits	Units	Basis
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			15,500	bbl liquid reactor feed	RLOP
S-4341	Light Neutral Hydrofinisher (LNHF)	N/A	N/A			19,000	bbl liquid reactor feed	RLOP
S-4342	Heavy Neutral Hydrocracker (HNC)	N/A	N/A			20,000	bbl liquid reactor feed	RLOP
S-4343	Heavy Neutral Hydrofinisher (HNHF)	N/A	N/A			8000	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		96,360	264	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 <u>H</u> ⊾HV	1986 cogen applidation. 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		million Btu HHV	1986 cogen application.

#### Table II A 1 - Permitted Sources (New Source Review)

Source Number	Description	Make or Type	Model	Capacity	Annual Throughput Limits	Daily Throughput Limits	Units	Basis
					S-4353)			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
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 CFP
S-4356	Tertiary Amyl Methyl Ether Plant	N/A	N/A		5,475,000	15,000	bbl depentanizer feed	Application #9978 CFP
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-4402	Salt Furnace	National Air Oil Burner Co	N/A		43,800	120	million Btu HHV	See Appendix 10.3 RLOP
S-4403	Unrefined Wax Truck Loading Rack							RLOP

#### Table II A 1 - Permitted Sources (New Source Review)

Source Number	Description	Make or Type	Model	Capacity	Annual Throughput Limits	Daily Throughput Limits	Units	Basis
S-4404	Saturated Refined Wax Truck Loading Rack							RLOP
<u>S-4405</u>	<u>Heavy Oil</u> <u>Transloading</u> <u>Operation</u>				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	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
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.

### Table II A 1 - Permitted Sources (New Source Review)

Source Number	Description	Make or Type	Model	Capacity	Annual Throughput Limits	Daily Throughput Limits	Units	Basis
								Offsets = NSR
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 RLOP
S-6061	Alkane Treatment Plant	N/A	N/A		25,300,000	70,560	Gal	Data form G '95
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#

### Table II A 1 - Permitted Sources (New Source Review)

Source Number	Description	Make or Type	Model	Capacity	Annual Throughput Limits	Daily Throughput Limits	Units	Basis
								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 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-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#

#### Table II A 1 - Permitted Sources (New Source Review)

Source Number	Description	Make or Type	Model	Capacity	Annual Throughput Limits	Daily Throughput Limits	Units	Basis
								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
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#

#### Table II A 1 - Permitted Sources (New Source Review)

Source Number	Description	Make or Type	Model	Capacity	Annual Throughput Limits	Daily Throughput Limits	Units	Basis
								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
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#

### Table II A 1 - Permitted Sources (New Source Review)

Source Number	Description	Make or Type	Model	Capacity	Annual Throughput Limits	Daily Throughput Limits	Units	Basis
								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
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#

### Table II A 1 - Permitted Sources (New Source Review)

Source Number	Description	Make or Type	Model	Capacity	Annual Throughput Limits	Daily Throughput Limits	Units	Basis
								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
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#

### Table II A 1 - Permitted Sources (New Source Review)

Each of the following sources has been issued a permit to operate pursuant to the requirements of BAAQMD Regulation 2, Permits. The capacities in this table are the maximum allowable capacities for each source, pursuant to Standard Condition 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
								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
<u>S-7010</u>	Diesel engine, 153 bhp	Mercedes Benz		<u>153 bhp</u>	<u>1000 hr/y</u>	<u>N/A</u>	<u>hours</u>	Application 6523 condition 20366

### 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-0025	Tank	Fixed Roof	N/A	336 gal	2,520	N/A	gal	P/C# 15107
S-0399	Tank	External Floating Roof	N/A	4368K gal	3,500,000	N/A	bbl	Form T application #3061
S-0605	Tank	Abated Fixed Roof	N/A	1131 gal	84.1 (Sum of S-0605 and	N/A	1,000,000 gal	Conditioned annual throughput, P/C

### 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-6066)			#11193. Stated limit is the sum of S-605 & S-6066
S-0660	Tank	Abated Fixed Roof	N/A	252 gal	N/A, limited by S-0605 and S-6066	N/A, limited by S-0605 and S-6066	1,000,000 gal	No limit. Limited by source #6061
S-0870	Tank	Fixed Roof	N/A	2300 gal	4,500	N/A	bbl non- exempt stocks	condition #11208
S-1488	Tank	External Floating Roof	N/A	1197K gal	365,000	N/A	bbl by roof drop	Implied limit App.#31398 '86
S-1637	Tank	Internal Floating Roof	N/A	105K gal	1,750,000	N/A	bbl	App. #179 '86 Implied permit condition
S-1645	Tank	Internal Floating Roof	N/A	105K gal	73,000	N/A	bbl	'77 data form T throughput verified acceptable in app. 14939 in '95
S-1726	Tank	Abated Fixed Roof	N/A	18700 gal	100,000	N/A	gal	Form T App. #4554
S-1727	Tank	Abated Fixed Roof	N/A	18700 gal	100,000	N/A	gal	Form T App. #4554
S-1757	Tank	Abated Fixed Roof	N/A	18700 gal	100,000	N/A	gal	Application #4554
S-1758	Tank	Abated Fixed Roof	N/A	18700 gal	100,000	N/A	gal	Application #4554
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

### 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
								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 App.#27916 '81

### 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-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-3127	Tank	External Floating Roof	N/A	1992.86 Kgal	223,000	N/A	bbl	App.# 6851 P/C #20361 design drawings submitted 1/16/4
S-3141	Tank	Abated Fixed Roof	N/A		216,330	N/A	long tons	App.'s 10721 & 32587, '93 & <u>"88 AN 9329</u> 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-4042	#5 Rheniformer F-550	Foster Wheeler	N/A		1,734,480	4,752	million Btu HHV	Conditioned daily throughput P/C# 18172
S-4043	F-560, #5 Rheniformer	Foster Wheeler	N/A		1,130,040	3,192	million Btu HHV	Conditioned daily throughput P/C# 18172
S-4045	#5 Rheniformer F-580	Foster Wheeler	N/A		446,760	1,224	million Btu HHV	Conditioned daily throughput P/C# 18172
S-4061	#5 Naph Hydrotreater F-410	Born Engineering Co.	N/A		989,880	2,928	million Btu HHV	Conditioned daily throughput, P/C# 18166

### 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
								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, P/C# 18166 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 P/C# 18350
S-4076	3 Cat Cooling Tower E-460	Fluor Prod Co	N/A				million gal	
S-4129	800# Steam Boiler #1 #IPP	Riley Stoker Corp.	N/A		2,041,080	5,592	million Btu HHV	Conditioned daily throughput P/C# 16650
S-4131	Steam Boiler #3 #1PP	Riley Stoker Corp.	N/A		2,067,360	5,664	million Btu HHV	Conditioned daily throughput P/C# 16650
S-4132	Steam Boiler #4 #1PP	Riley Stoker Corp.	N/A		2,058,600	5,640	million Btu HHV	Conditioned daily throughput P/C# 17675
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/C# 17675
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

### 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-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-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-4158	F-340 Natural Gas Heater, H2 Plant	Born Engineering Co.	N/A		366,168	1,152	million Btu HHV	Implied condition application #553. Conditioned daily limit, condition #17631
S-4167	F-710 TKC Fractionator Isomax	Born Engineering Co.	N/A		1,007,400	3,480	million Btu HHV	Conditioned daily throughput P/C# 16731
S-4170	F-305 H2 Reforming Furnace, H2 Plant	Foster Wheeler	N/A			20,328	million Btu HHV	Conditioned daily throughput limit P/C# 16686 & 12.5
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-4229	SRU #3 Train	Contractor	N/A		106,835.5	336	long tons	Conditon #19063
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

### 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
								RLOP
S-4251	Solvent Deasphalting (SDA) Plant	M.W. Kellog	N/A		24,090,000	66,000	bbl	App.#9163
S-4292	FCC Polymer Plant	Socal/Warner Lewis	N/A		2,920,000	8000	bbl feed	Application #7948 pending
S-4360	Perc Storage Tank, V1513	N/A	N/A		9400	N/A	gal	Condition #C- 18337 & 12.17
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-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,

### 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/C# 18945
S-4435	#5 H2S Plant	N/A	N/A		1,825	5.0	million SCF H2S produced	Per Sour Gas & SRU proposal letter dated 5/2/01. Appendix 9P-1, P/C# 18945
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-6051	MTBE Plant Cooling Tower	N/A	N/A		12,351.6	33.84	million gal	Implied per application #16822
S-6054	#2 Dewax Plant Cooling Water Tower	N/A	N/A		1,310	3.6	million gal	Per District data base
S-6055	Wax Finishing Plant Cooling Water Tower (CWTS)	N/A	N/A		1,310	3.6	million gal	Per District data base
S-6066	Tank 6066: Process Water Tank <1000ppm (wt) Hydroc	Abated Fixed Roof	N/A		84.1 (sum of S-0605 and S-6066)	N/A	1,000,000 gal	Conditioned annual throughput limit, P/C# 11193. Stated limit is sum of S-605 and S- 6066.
S-6125	Tank 6125	Abated Fixed Roof	N/A	600 gal	1,400	N/A	bbl non- exempt stock	Conditioned annual throughput limit (non-exempt stock), P/C# 11208
S-6250	Oil Water Separator for Debru	N/A	N/A		115,500	N/A	bbl	Appendix 9M-3 App.#25134
7501	IC Engine				100		Hours	Condition 20225
<u>7502</u>	IC Engine			<u>200</u>			<u>Hours</u>	<u>Regulation</u> <u>9-8-330</u>
<u>7503</u>	IC Engine			<u>200</u>			<u>Hours</u>	Regulation

### 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
								<u>9-8-330</u>
<u>7504</u>	IC Engine			<u>&lt;200</u>			<u>Hours</u>	<u>Regulation</u> <u>9-8-330</u>
<u>7505</u>	IC Engine			<u>75</u>			<u>Hours</u>	<u>Regulation</u> <u>9-8-330</u>
<u>7506</u>	IC Engine			<u>235</u>			<u>Hours</u>	<u>Regulation</u> <u>9-8-330</u>
7507	IC Engine				720		Hours	Condition 20225
<u>7508</u>	<u>IC Engine</u>			<u>240</u>			<u>Hours</u>	<u>Regulation</u> <u>9-8-330</u>
<u>7509</u>	IC Engine			<u>240</u>			<u>Hours</u>	<u>Regulation</u> <u>9-8-330</u>
<del>75107510</del>	<del>IC Engine</del> IC Engine				<del>720720</del>		HoursHours	Condition 20225Condition 20225
7511	IC Engine				720		Hours	Condition 20225
7512	IC Engine				720		Hours	Condition 20225
7513	IC Engine				720		Hours	Condition 20225
7514	IC Engine				720		Hours	Condition 20225
7515	IC Engine				720		Hours	Condition 20225
7516	IC Engine				720		Hours	Condition 20225
7517	IC Engine				720		Hours	Condition 20225
7518	IC Engine				720		Hours	Condition 20225
<u>7519</u>	IC Engine			<u>217</u>			Hours	<u>Regulation</u> <u>9-8-330</u>
<del>7520</del>	<del>IC Engino</del>				720		Houre	Condition 20225
7521	IC Engine				720		Hours	Condition 20225
7522	IC Engine				720		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
								20225
7523	IC Engine				720		Hours	Condition 20225
<del>7524</del>	<del>IC Engine</del>				<del>720</del>		Hours	Condition 20225
7525	IC Engine				720		Hours	Condition 20225
<u>7526</u>	IC Engine			<u>435</u>	<u>100</u>		<u>Hours</u>	Condition 20225
<u>7527</u>	IC Engine			217			<u>Hours</u>	<u>Regulation</u> <u>9-8-330</u>
<u>7528</u>	IC Engine			<u>217</u>			<u>Hours</u>	<u>Regulation</u> <u>9-8-330</u>
<u>7529</u>	IC Engine			<u>217</u>			<u>Hours</u>	<u>Regulation</u> <u>9-8-330</u>
<u>7530</u>	IC Engine			<u>217</u>			<u>Hours</u>	<u>Regulation</u> <u>9-8-330</u>
<u>7531</u>	IC Engine			<u>370</u>	<u>100</u>		<u>Hours</u>	Condition 20225
S-9302	Tank T-302 in Lube/Chem	Fixed Roof	N/A	12600 gal	3,000,000	N/A	bbl	Form T, Appendix 1B2
	Division							App.#30395 '84
S-9303	Tank T-303 in Lube/Chem Division	Fixed Roof	N/A	12600 gal	2,000,000	N/A	bbl	Form T App.#30395 '84
S-9304	Non Retail Gasoline Dispensing Facility	1 NOZ/EW A3003/A3005 Type, Condensate Trap Type: Simple Trap	N/A		107,623*	294.9	bbl	P/C# 710 <u>.</u> 7880. 20666

#### 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-1296	Tank	External Floating Roof	N/A	6733K gal	4,015,000	N/A	bbl	Form T '77, Appendix 11.1 & 12.1
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-1514	Tank	External Floating Roof	N/A	4767K gal		N/A	bbl	condition #21237
S-1518	Tank	External Floating Roof	N/A	2764K gal	1,095,000	N/A	bbl non- exempt stocks	Form T

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

Source Number	Description	Make or Type	Model	Capacity	Annual Throughput Limits	Daily Throughput Limits	Units	Basis
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
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

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

Source Number	Description	Make or Type	Model	Capacity	Annual Throughput Limits	Daily Throughput Limits	Units	Basis
S-3104	Tank	External Floating Roof	N/A	31MM gal	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 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-4078	WRR Cooling Tower	Fluor Counterflo	N/A		972	3.12	million gal	Data form
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

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

Source Number	Description	Make or Type	Model	Capacity	Annual Throughput Limits	Daily Throughput Limits	Units	Basis
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
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 Devices	5
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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 <u>S-3226</u>			
A-0053	Packed Bed Inert Gas Wet Scrubber	S-4261			
A-0054	Wax Deoiler #2, Thermal Oxidizer, 10 MM Btu/hr TUH capacity, John Zink	S-4261 S-1726 S-1727 S-1757 S-1758	40 CFR 63 Part CC, Condition #16393, 8-1-110.3	Continuous temperature monitor	Minimum temperature of 1400 degrees F NOX: 0.2 Ib/MMBtu CO: 0.80 Ib/MMBtu SOX: 0.027 Ib/MMBtu PM: 0.01 Ib/MMBtu >98% (by weight) emissions reduction
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

Abatement Device Number	Description	Sources(s) Controlled	Applicable Requirement	Operating Parameters	Limit or Efficiency
			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 < <del>10</del> <u>10.8</u> ppm @15% O2 – 3-hr average; except startup/ shutdown
			9-9-301.3, 9-9-501	NOx CEM	11.9 <u>10.8</u> ppmv @15% O <sub>2</sub> (dry) adjusted from 9 ppm NOx limit to 11.9 <u>10.8</u> 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)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	11.910.8 ppmv <sup>4</sup> @ 5% O <sub>2</sub> (dry) adjusted from 9 ppm NOx limit to 11.910.8 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

Abatement Device Number	Description	Sources(s) Controlled	Applicable Requirement	Operating Parameters	Limit or Efficiency
			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 S-4265	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	8-4170	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
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 <80F, 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 <80F, 3-hr average vent flow <5Klb/hr, 3-hr average water flow >30 gal/min, water/vent flow ratio >11.6
A-0414	#2 Dewax and #2 Deoiler Thermatrix Model ES60H, Thermal Oxidizer	S-4261 S-32103	Condition #8869	Continuous temperature monitor	Minimum temperature of 1400 degrees F, Minimum VOC destruction efficiency 95% by weight,
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 <u>or minimum benzene destruction removal efficiency 98% by concentration weight, or 10 ppmv benzene</u>

Abatement Device Number	Description	Sources(s) Controlled	Applicable Requirement	Operating Parameters	Limit or Efficiency
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 <u>or minimum</u> 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 <u>pr</u> minimum benzene destruction removal efficiency 98% by concentration weight, or <u>10 ppmv benzene</u>
A-0620	Thermatrix, Model ES60H, Thermal Oxidizer, LPG Racks	Pumps and compressor seals S-32103	Condition #8869	Continuous temperature monitor	Minimum temperature of 1400 degrees F, Minimum VOC destruction efficiency 95% by weight
A-0621	Thermatrix, Model ES60H, Thermal Oxidizer, LPG Racks	Pumps and compressor seals S-32103	Condition #8869	Continuous temperature monitor	Minimum temperature of 1400 degrees F, Minimum VOC destruction efficiency 95% by weight
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 1400 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 1400 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 1400 degrees F, Minimum VOC destruction efficiency 95% by weight
A-0625	Thermatrix, Model ES60H, Thermal Oxidizer, 17 PS	Pumps and compressor seals S-32103	Condition #8869	Continuous temperature monitor	Minimum temperature of 1400 degrees F, Minimum VOC destruction efficiency 95% by weight

Table II-B	- Abatement Devices
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Abatement Device Number	Description	Sources(s) Controlled	Applicable Requirement	Operating Parameters	Limit or Efficiency
A-0627	Thermatrix, Model ES60H, Thermal Oxidizer, FCC Unit (backup)	Pumps and compressor seals S-32103	Condition #8869	Continuous temperature monitor	Minimum temperature of 1400 degrees F, Minimum VOC destruction efficiency 95% by weight
A-0628	Thermatrix, Model ES60H, Thermal Oxidizer, Alkylation Plant	Pumps and compressor seals S-32103	Condition #8869	Continuous temperature monitor	Minimum temperature of 1400 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 <u>, or mininum</u> 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 <u>, or</u> <u>minimum benzene</u> <u>destruction removal</u> <u>efficiency 98% by</u> <u>concentration weight, or</u> <u>10 ppmv benzene [applies</u> to A630/A631]
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
<u>A-919</u>	#21 pump station carbon				
A-3146	Vent Gas scrubber for S-3146 (Tank 3146 – Ammonia Tank), Adsorption, Activated Carbon/Charcoal	S-3146			

Abatement Device Number	Description	Sources(s) Controlled	Applicable Requirement	Operating Parameters	Limit or Efficiency
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 op <b>a</b> city
A-4422	Sandblaster Dust Collector, Shaking Baghouse for Abrasive Blasting at I&E Shop		Condition #5599		
<u>A-4429</u>	Temporary odor control scrubber	<u>8-4429</u>	Condition #20330	<u>15 – 5% aqua-ammonia</u> <u>solution</u>	Aqua-ammonia solution maintained betweer 15 – <u>5%</u>
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-4170 S- 4171 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
	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

Abatement Device Number	Description	Sources(s) Controlled	Applicable Requirement	Operating Parameters	Limit or Efficiency
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-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 firesh 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 firesh 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 firesh 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 firesh 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 firesh 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 firesh 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 firesh 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 firesh 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 firesh 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.

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

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	Requirement Condition #10761	Operating Parameters	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 C – Exempt Equipment List

Source Number	Source Code	Source Description	Proposed Annual Limit	Proposed Daily Limit	Units	Comments
-94	C8250189	Stack Burner	NA	NA		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
127	T441?318	TANK 127	NA	NA		Out of service
131	T441?419	TANK 131	NA	NA		exempt Reg 2-1-123.3
151	T441?419	TANK 151	NA	NA		exempt Reg 2-1-123.3
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
325	T441?419	TANK 325	NA	NA		exempt 2-1-123.3.3 WAX
328	T441?419	TANK 328	NA	NA		exempt 2-1-123.3.3 Lube
329	T441?392	TANK 329	NA	NA		exempt 2-1-123.3.10 API
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

Source Number	Source Code	Source Description	Proposed Annual Limit	Proposed Daily Limit	Units	Comments
501	T441?239	TANK 501	NA	NA		exempt 2-1-123.3.10 API
518	T441?419	TANK 518	NA	NA		exempt 2-1-123.3.3 Lube
526	T441?419	TANK 526	NA	NA		exempt 2-1-123.3.3 WAX
550	T441?419	TANK 550	NA	NA		exempt 2-1-123.3.3 WAX
551	T441?419	TANK 551	NA	NA		exempt 2-1-123.3.3 Lube
555	T441?419	TANK 555	NA	NA		exempt 2-1-123.3.3 Lube
583	T441?318	TANK 583	NA	NA		exempt 2-1-123.3.3 WAX
585	T441?318	TANK 585	NA	NA		exempt 2-1-123.3.3 WAX
586	T441?318	TANK 586	NA	NA		exempt 2-1-123.3.3 WAX
587	T441?318	TANK 587	NA	NA		exempt 2-1-123.3.3 WAX
588	T441?318	TANK 588	NA	NA		exempt 2-1-123.3.3 WAX
589	T431?318	TANK 589	NA	NA		exempt 2-1-123.3.3 WAX
590	T431?432	TANK 590	NA	NA		exempt 2-1-123.3.3 WAX
591	T441?432	TANK 591	NA	NA		exempt 2-1-123.3.3 WAX
592	T441?432	TANK 592	NA	NA		exempt 2-1-123.3.3 WAX
594	T441?432	TANK 594	NA	NA		exempt 2-1-123.3.3 WAX
595	T441?432	TANK 595	NA	NA		exempt 2-1-123.3.3 WAX
596	T441?432	TANK 596	NA	NA		exempt 2-1-123.3.3 WAX
597	T441?432	TANK 597	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

Source Number	Source Code	Source Description	Proposed Annual Limit	Proposed Daily Limit	Units	Comments
660	T81??502	Tank 660: Organic Liquid Storage Tank	NA	NA		No limit. Limited by source no. 6061
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
930	T441?419	TANK 930	NA	NA		exempt 2-1-123.3.3 WAX
931	T441?419	TANK 931	NA	NA		exempt 2-1-123.3.3 WAX
934	T441?419	TANK 934	NA	NA		exempt 2-1-123.3.3 WAX
935	T441?419	TANK 935	NA	NA		exempt 2-1-123.3.3 WAX
950	T441?315	TANK 950	NA	NA		ex 2-1-123.3.3 DO
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

Source Number	Source Code	Source Description	Proposed Annual Limit	Proposed Daily Limit	Units	Comments
1292	T5412158	TANK 1292	NA	NA	BBL	exempt 2-1-123.3.2 IBP
						······
1297	T63?2502	Tank 1297: Organic	NA	NA		exempt 2-1-123.3.2 IBP
		Storage Tank				
1427	T441?030	TANK 1427	NA	NA		exempt 2-1-123.3.3
						WAX
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
1460	T441?432	TANK 1460	NA	NA		exempt 2-1-123.3.3
						WAX
1461	T441?030	TANK 1461	NA	NA		exempt 2-1-123.3.3
						WAX
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
1523	T441?419	TANK 1523	NA	NA		exempt 2-1-123.3.3
						WAX
1546	T441?158	TANK 1546	NA	NA		exempt 2-1-123.3.3
						WAX
1547	T441?318	TANK 1547	NA	NA		exempt 2-1-123.3.3
						WAX
1548	T441?432	TANK 1548	NA	NA		exempt 2-1-123.3.3
						WAX

Source Number	Source Code	Source Description	Proposed Annual Limit	Proposed Daily Limit	Units	Comments
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
1681	T441?419	TANK 1681	NA	NA		exempt 2-1-123.3.3 WAX
1685	T441?315	TANK 1685	NA	NA		exempt 2-1-123.3.3 DO
1707	T441?318	TANK 1707	NA	NA		exempt 2-1-123.3.3 WAX
1708	T441?318	TANK 1708	NA	NA		exempt 2-1-123.3.3 WAX
1709	T441?432	TANK 1709	NA	NA		exempt 2-1-123.3.3 WAX
1710	T441?318	TANK 1710	NA	NA		exempt 2-1-123.3.3 WAX
1711	T441?432	TANK 1711	NA	NA		exempt 2-1-123.3.3 WAX
1712	T441?432	TANK 1712	NA	NA		exempt 2-1-123.3.3 WAX
1716	T441?432	TANK 1716	NA	NA		exempt 2-1-123.3.3 WAX
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
1728	T431?432	TANK 1728	NA	NA		exempt 2-1-123.3.3 WAX
1729	T431?432	TANK 1729	NA	NA		exempt 2-1-123.3.3 WAX
1730	T431?318	TANK 1730	NA	NA		exempt 2-1-123.3.3 WAX

Source Number	Source Code	Source Description	Proposed Annual Limit	Proposed Daily Limit	Units	Comments
1731	T441?318	TANK 1731	NA	NA		exempt 2-1-123.3.3 WAX
1732	T441?318	TANK 1732	NA	NA		exempt 2-1-123.3.3 WAX
1733	T441?432	TANK 1733	NA	NA		exempt 2-1-123.3.3 WAX
1736	T441?432	TANK 1736	NA	NA		exempt 2-1-123.3.3 WAX
1756	T431?432	TANK 1756	NA	NA		exempt 2-1-123.3.3 WAX
1761	T441?419	TANK 1761	NA	NA		exempt 2-1-123.3.3 WAX
1762	T441?419	TANK 1762	NA	NA		exempt 2-1-123.3.3 WAX
1764	T441?419	TANK 1764	NA	NA		exempt 2-1-123.3.3 WAX
1766	T441?432	TANK 1766	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
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
1950	T431?239	TANK 1950	NA	NA		exempt 2-1-123.3.3 WAX
1951	T431?318	TANK 1951	NA	NA		exempt 2-1-123.3.3 WAX
1952	T431?318	TANK 1952	NA	NA		exempt 2-1-123.3.3 WAX
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

Source Number	Source Code	Source Description	Proposed Annual Limit	Proposed Daily Limit	Units	Comments
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
3008	T441?432	TANK 3008	NA	NA		exempt 2-1-123.3.3 WAX
3028	T441?315	TANK 3028	NA	NA		exempt 2-1-123.3.3 DO
3029	T44??315	Tank 3029: Organic Liquid Storage Tank	NA	NA		exempt 2-1-123.3.3 DO
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
3125	T441?419	TANK 3125	NA	NA		exempt 2-1-123.3.3 WAX
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
3146	T44??201	Tank 3146: 20% Aqueous Ammonia	NA	NA		exempt 2-1-123.2 AqSol

Source Number	Source Code	Source Description	Proposed Annual Limit	Proposed Daily Limit	Units	Comments
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
3182	T64?2419	Tank 3182: Organic Liquid Storage Tank	NA	NA		exempt 2-1-123.3.10 API

Source Number	Source Code	Source Description	Proposed Annual Limit	Proposed Daily Limit	Units	Comments
3186	T44??201	Gas Oil Tank	NA	NA	Units	exempt 2-1-123.3.3 DO
5180	144?201		INA	INA		exempt 2-1-125.5.5 DO
3194	T54?2394	Storage Tank T-3194	NA	NA		exempt 2-1-123.3.10 API
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	NA	NA		exempt 2-1-123.3.3
4230	07013417	PACKAGE & GREASE PLANT	NA	INA		exempt 2-1-123.3.5
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
4285	C573?080	FCC Plant				
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		Exempt per Reg. 2-1- 118.1
6046	G7109473 G7109473	Sandblaster at Machine Shop Sandblaster at Machine	NA NA	NA NA		Exempt per Reg. 2-1- 118.1 Exempt per Reg. 2-1-
0047	07109473	Shop	INA	NA		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
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
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

Source Number	Source Code	Source Description	Proposed Annual Limit	Proposed Daily Limit	Units	Comments
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		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.

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

- 63. BAAQMD regulation(s): The date(s) of adoption or most recent amendment of the regulation by the District Board of Directors
- 63. 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 language of SIP requirements is on EPA Region 9's website. The address is included at the end of this permit.

#### 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.

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)
BAAQMD Regulation 1	General Provisions and Definitions (5/2/01)	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 (8/1/01)	Ν
2-1-429	Federal Emissions Statement (6/7/95)	N
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 6	Major Facility Review (05/02/01)	Y
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)	Ν
SIP Regulation 4	Air Pollution Episode Plan (8/6/90)	Y

#### Table III – Generally Applicable Requirements

**Table III – Generally Applicable Requirements** 

# 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 5	Open Burning (3/6/02)	Ν
SIP Regulation 5	Open Burning (9/4/98)	Y
BAAQMD 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)	Ν
BAAQMD Regulation 8, Rule 1	Organic Compounds, General Provisions (6/15/94)	Y
BAAQMD Regulation 8, Rule 2	Organic Compounds, Miscellaneous Operations (6/15/94)	Y
SIP BAAQMD Regulation 8, Rule 3	Organic Compounds, Architectural Coatings (2/18/98)	Y
BAAQMD Regulation 8, Rule 3	Organic Compounds, Architectural Coatings (11/21/01)	Ν
SIP BAAQMD Regulation 8, Rule 4	General Solvent and Surface Coating Operations (12/23/97)	Y
BAAQMD Regulation 8, Rule 4	General Solvent and Surface Coating Operations (10/16/02)	Ν
BAAQMD Regulation 8, Rule 5	Organic Compounds, Storage of Organic Liquids (11/27/02)	Ν
SIP BAAQMD Regulation 8, Rule 5	Organic Compounds, Storage of Organic Liquids (12/15/99)	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 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)	Ν
SIP BAAQMD Regulation 8, Rule 28	Organic Compounds, Pressure Relief Valves at Petroleum Refineries and Chemical Plants (12/9/94)	Y
BAAQMD Regulation 8, Rule 49	Organic Compounds, Aerosol Paint Products (12/20/95)	Ν
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)	Ν
BAAQMD Regulation 10	NSPS Incorporation by Reference, General Provisions (2/16/00)	N

# 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 11, Rule 2	Hazardous Pollutants, Asbestos Demolition/Renovation and Manufacturing (10/7/98)	Ν
BAAQMD Regulation 11, Rule 12	BAAQMD Regulation 11, Rule 12NESHAP Incorporation by Reference, 40 CFR 61 Subpart FF Benzene Waste (1/5/94)	
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)	Ν
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
CAC Title 17	State Provisions for Sandblasting	Ν
NESHAP Title 40 Part 61 Subpart M	NESHAP, Asbestos (11/20/90)	Y
Title 40 Part 68	Chemical Accident Prevention Provisions (1/31/94)	Y
Title 40 Part 82 Subpart F	CFC Recycling and Emissions Reduction (5/14/93)	Y
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

## 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 parenthesis in the Title column identify the versions of the regulations being cited and are, as applicable:

- 63. BAAQMD regulation(s): The date(s) of adoption or most recent amendment of the regulation by the District Board
- 63. 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 included in Appendix A of this permit if the SIP requirements are different from the current BAAQMD requirements. All other text may be found in the regulations themselves.

#### <u>Table IV.Abatement</u> <u>Source-specific Applicable Requirements</u> <u>Abatement</u> A-0414, A-0620, A-0622, A-0623, A-0624, A-0627, A-0628

<u>Applicable</u> <u>Requirement</u>	Regulation Title or Description of Requirement	<u>Federally</u> <u>Enforceable</u> <u>(Y/N)</u>	<u>Future</u> Effective Date
BAAOMD Condition <u>8869</u>			
Part 1	95% destruction efficiency and minimum temperature of 1400F	<u>Y</u>	
Part 2	Temperature and flow monitor	<u>Y</u>	
Part 3	Record keeping	<u>Y</u>	
<u>40 CFR</u>	General Provisions	<u>Y</u>	
<u>Part 60</u> Subpart A			
<u>60.13(i)</u>	Alternative monitoring provisions	<u>Y</u>	
<u>60.18</u>	General control device requirements	<u>Y</u>	
<u>NSPS</u> <u>40 CFR 60</u> <u>Subpart J</u>	Standards of Performance for Petroleum Refineries (7/1/00)		
<u>60.104</u>	Standards for Sulfur Oxides: Compliance Schedule	<u>Y</u>	
<u>60.104(a)(1)</u>	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	<u>¥</u>	

### Revision date:

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

# <u>A-0414, A-0620, A-0622, A-0623, A-0624, A-0627, A-0628</u>

<u>Applicable</u> <u>Requirement</u>	Regulation Title or Description of Requirement	<u>Federally</u> <u>Enforceable</u> <u>(Y/N)</u>	<u>Future</u> Effective Date
	flares from relief valve leaks or other emergency malfunctions		

#### 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 (5/2/01)		
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	Ν	
1-602	Area and Continuous Monitoring Requirements	Ν	
SIP Regulation 1	PROVISIONS NO LONGER IN CURRENT F General Provisions and Definitions (6/28/99 {adopte		
1-522	Continuous Emission Monitoring and Recordkeeping Procedures	Y	
BAAQMD Regulation 2 Rule 1	Regulation 2, Rule 1 – Permits, General Requirements (5/2/01; SIP appr [Applicable if Subject to CEM Monitoring by permit con		oted 11/1/89})
2-1-403	Permit conditions-measurement of emissions	Ν	
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 by permit condition (BACT)]		
2-1-403	Permit conditions-measurement of emissions	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
BAAQMD Manual of Procedures, Volume V	Continuous Emission Monitoring Policy and Procedures (1/20/82)	Y	
BAAQMD Regulation 6	Particulate Matter and Visible Emissions (12/1	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 Operation	Y	
BAAQMD Regulation 9 Rule 1	Inorganic Gaseous Pollutants – Sulfur Dioxide (3/15/95; SIP approved 6,	/9/99 {version ado	pted 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 (9/21/94)	BAAQMD Regulation 9 Rule 9	Inorganic Gaseous Pollutants – Nitrogen Oxides from Stationary Gas Turbines (9/21/94)
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 (1/5/94)		
9-10-110.3	Exemption: Waste heat recovery boilers associated with gas turbines	Y	
NSPS 40 CFR 60 Subpart GG	Standards of Performance for Stationary Gas Turbines (1/27/82)		
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	

# 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
60.334 (b)	Fuel Sulfur and Nitrogen Content	Y	
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)		
60.44b(a)(4)	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	1

# 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
Condition 22262	Applies to S-4350 and S-4352	<u>Y</u>	
<u>Part 1</u>	Visible emissions inspection	<u>Y</u>	

#### 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
NSPS 4 <del>0 CFR 60</del> Subpart J	<del>-60</del>		
<del>60.104</del>	Standards for Sulfur Oxides: Compliance Schedule	¥	
<del>60.104(a)(1)</del>	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	¥	
<del>60.105</del>	Monitoring of Emissions and Operations	¥	
<del>60.105(a)(4)</del>	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))	¥	
<del>60.105(e)(3)</del>	Excess SO <sub>2</sub> emission definitions for 60.7©	¥	
BAAQMD Regulation 6	Particulate Matter and Visible Emissions (12/19/90)	Y	
6-301	Ringelmann No. 1 Limitation	Y	
6-305	Visible Particles	Y	
6-310	Particulate Weight Limitation	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
6-311	Particulate Matter Emission Rate	Y	
6-401	Appearance of Emissions	Y	
BAAQMD Regulation 8	Organic Compounds, General Provisions (6/	<del>15/94)</del>	
<u>8 1 110.3</u>	Exemption from 8-1, if 90% of organic earbon is exidized to earbon diexide.	¥	
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
40 CFR Part 60 Subpart A	General Provisions (applies to S-6015 and S-60	39 only)	1
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	
<del>60.13</del>	Monitoring requirements	¥	Upon loss of 104(a) exemption

# 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
<del>60.13(o)</del>	Monitoring requirements Continuous monitoring systems	¥	Upon loss of 101(a) exemption
40 CFR Part 60 Subpart J	Standards of Performance for Petroleum Refineries (7/1/00) [Subpart J does not apply to S-6010, S-6012, S-6013, S-6016, S-6017, and S-6019. Subpart J only applies to S-6015 and S-6039]		
60.104	Standards for Sulfur Oxides: Compliance Schedule	Y	
<u>60.104(a)(1)</u>	Exempt from fuel gas H2S limit if the flare is used only for upsets or emergency malfunctions	<u>Y</u>	
60.105	Monitoring of Emissions and Operations	<u>Y</u>	
<u>60.105(a)(4)</u>	Monitoring requirement for H2S (dry basis) in fuel gas prior to combustion (in lieu of separate combustion device exhaust SO2 monitors as required by <u>60.105(a)(3)</u> )	<u>Y</u>	
$\frac{60.105(e)(3)60}{104(a)(1)}$	$\underline{Excess SO_2 emission definitions for 60.7} CExempt from fuel gas H2S limit if the flare is used only for upsets or emergency malfunctions$	<u>Y</u> ¥	
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	
ition #18656	eligibility for exemption from the NSPS Subpart J standard for sulfur oxides, 40 CFR 60.104(a)(1), this flare shall only combust fuel that is released to the flare as a result of relief valve leakage, or other emergency malfunctions. These terms have the meanings defined in NSPS Subpart J.	Y	<del>1/1/05</del>
Part 1	-nes limit in #/hr	¥	
Part 2	Records of vent gas flared in #/hr	¥	
Part 3	Monitoring of Smoking Flares	Y	
Part 4	Procedures for inspecting smoking lares	Y	
Part 5	Visual Inspection of smoking flares	Y	
Part 6	Records of flaring events	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
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	

#### 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-4093 F-11 Steam Heater Wax Filter Building, S-4094 Air Heater Kiln Thermofor Unit abated by A-0094 Afterburner, 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, S-4402 Salt Furnace

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
BAAQMD Regulation 1	General Provisions and Definitions (11/15/00)		
1-521	Monitoring may be required	Y	
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	
Condition #469	S-4093, S-4094, S-4107, S-4192, S-4193, S-4194, S-4402 [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-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-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-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-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

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
BAAQMD Regulation 1	General Provisions and Definitions (11/15/	/00)	
1-520	Continuous Emission Monitoring [applies to S-4042-S-4045, S-4061-S- 4062, S-4070-S-4072, S-4155, S-4330-S-4339]	Ν	
1-520.1	NOx CEM Required for Steam Generators with Heat Input Capacity > 250 MMBtu/Hr [applies to S-4070-S-4072]	N	
1-520.8	Monitors pursuant to Regulation 2-1-403 [applies to S-4042-S-4045, S-4061-S-4062, S-4070-S-4072, S-4155, S-4330-S-4339]	N	
1-521	Monitoring May Be required	Y	
1-522	Continuous Emission Monitoring and Recordkeeping Procedures	N	
1-523	Parametric Monitoring and Recordkeeping Procedures [all except S-4069, S-4156-S-4157]	N	
1-602	Area and Continuous Monitoring Requirements	N	
SIP Regulation 1	PROVISIONS NO LONGER IN CURRENT General Provisions and Definitions (6/28/	-	
1-520	Continuous Emission Monitoring [applies to S-4042-S-4045, S-4061-S- 4062, S-4070-S-4072, S-4155, S-4330-S-4339]	Y	
1-520.1	NOx CEM Required for Steam Generators with Heat Input Capacity > 250 MMBtu/Hr [applies to S-4070-S-4072]	Y	
1-520.8	Monitors pursuant to Regulation 2-1-403 [applies to S-4042-S-4045, S-4061-S-4062, S-4070-S-4072, S-4155, S-4330-S-4339]	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-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-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-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-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-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

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date	
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-4069, 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 (5/2/01; SIP appr	roved 1/26/99 {adoj	oted 11/01/89})	
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 [applies for S-4155, and S-4330-S-4339]	Y		
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		
BAAQMD Regulation 9 Rule 10	Inorganic Gaseous Pollutants – Nitrogen Oxides and Carbon Monoxide and Process Heaters in Petroleum Refineries (		m Generators,	

# 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-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-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-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-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

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Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
9-10-301	Emission Limit for Facility, NOx: 0.033 lbs NOx/MMBTU	N	7/1/02 [plant did reform. Fuels project]
9-10-301.1	Start-up/Shutdown Contribution	N	7/1/02 [plant did reform. Fuels project]
9-10-301.2	Out-of-Service Units Contribution	N	7/1/02 [plant did reform. Fuels project]
9-10-303	Federal Interim Facility-wide NOx emission rate limit	Y	
9-10-305	CO emission limit	N	7/1/02 [plant did reform. Fuels project]
9-10-502	Monitoring	Y	7/1/02 [plant did reform. Fuels project]
9-10-502.1	CEMS for NOx, CO, and O2	N	7/1/02 [plant did reform. Fuels project]

# 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-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-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-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-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

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Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
9-10-502.2	Fuel flowmeters	Y	7/1/02 [plant did reform. Fuels project]
9-10-504	Recordkeeping	Y	7/1/02 [plant did reform. Fuels project]
9-10-505	Reporting	Y	7/1/02 [plant did reform. Fuels project]
NSPS 40 CFR 60 Subpart D [for S4070, S4071, S4072]	Standards of Performance for Steam Generating Units [only if construct having heat capacity > 250 MMBtu/hr]	ed or modified after	: 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	
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	

# 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-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-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-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-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

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
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	
<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]	ed or modified after	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	
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©	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	

# 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-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-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-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-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

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Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
60.48b(e)	Follow 60.13 to install, calibrate, and operate CEMs.	Y	
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©	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	
60.49b(w)	Semi-annual reports due 30 <sup>th</sup> day following reporting period.	Y	
NSPS 40 CFR 60 Subpart J	Standards of Performance for Petroleum Refineries (7/1/00) [Only if insta refinery-made fuel gas]	alled after 6/11/197	3 AND burning
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	
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 $60.105(a)(3)$ )		

# 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-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-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-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-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

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Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
60.105(e)(3)	Excess $SO_2$ emission definitions for $60.7$ <sup>©</sup>	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]	Ν	
Part 1c	NOx mass rate calculation method [applies to S-4155]	Ν	
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	Permit condition parts are listed below:		
Part 3A	Operate NOx 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 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-	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-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-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-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-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

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Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
	4332, S-4333, S-4334, S-4335, S-4336, S-4337, S-4338, S-4339, A0065, A0066, & A0067]		
Condition #16686	Max Firing Rate Limits [applies for S-4044, S-4070, S-4071, S-4072, S-4334, S-4335, S-4338, & S-4339]	Ν	
Condition #18003	Permit condition parts are listed below:		
Part 1	Operate fuel gas meter [applies to S-4059 and S-4060]	Y	
Part 3	Semiannual NOx, CO, & O2 source tests [applies to S-4059 and S-4060]	Y	
Part 4	2 additional source tests to maximize Co [applies to S-4059 and S-4060]	Y	
Part 5	Source Test if outside NOx box [applies to S-4059 and S-4060]	Y	
Part 5a	Violation if source test > limit [applies to S-4059 and S-4060]	Y	
Part 5b	Adjust NOx box if source test < limit [applies to S-4059 and S-4060]	Y	
Part 6	NOx limit of 0.03 lbs NOx/MMBtu [applies to S-4059 and S-4060]	N	
Part 7	Maximum firing rate limit [applies to S-4059]	N	
Part 8	Maximum firing rate limit [applies to S-4060]	N	
Part 9	Install CO CEM if [applies to S-4059 and S-4060]	Y	
Part 10	Daily records [applies to S-4059 and S-4060]	Y	
Condition #18015	Permit condition parts are listed below:		
Part 1	CO Source test [applies to S-4070, S-4071, and S-4072]	Y	
Part 1a	Install CO CEM if [applies to S-4070, S-4071, and 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-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-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-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-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

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Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
Part 2	Operate NOx and O2 CEMS and fuel flow meter[applies to S-4070, S-4071, and S-4072]	Y	
Part 3	Maximum Firing Rate Limits [applies to S-4070, S-4071, and S-4072]	Ν	
Part 4	Daily Records [applies to S-4070, S-4071, and S-4072]	Y	
Condition #17631	Permit condition parts are listed below:		
Part 1	Fuel flow meter [applies to S-4158]	Y	
Part 3	Semi-annual NOx, CO, & O2 source tests [applies to S-4158]	Y	
Part 4	Additional source tests to maximize CO [applies to S-4158]	Y	
Part 5	Source test if outside NOx box [applies to S-4158]	Y	
Part 5a	Violation if source test > limit [applies to S-4158]	Y	
Part 5b	Adjust NOx box if source test > limit [applies to S-4158]	Y	
Part 6	NOx limit of 0.035 lbs NOx/MMBtu [applies to S-4158]	Ν	
Part 7	48 MMBtu/Hr firing rate limit [applies to S-4158]	Ν	
Part 8	Install CO & O2 CEM [applies to S-4158]	Y	
Part 9	Daily records [applies to S-4158]	Y	
Condition #18172	Permit condition parts are listed below:		
Part 1	CO Source Tests [applies to S-4042, S-4043, S-4044, and S-4045]	Y	
Part 1a	Install CO CEM if [applies to S-4042, S-4043, S-4044, and S-4045]	Y	
Part 2	Operate fuel flowmeter, NOx & O2 CEMS [applies to S-4042, S-4043, 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-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-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-4070 F-1100A 4 Crude LSFO-E, S-4071 F-1100B 4 Crude LSFO-E, S-4072 F-1160 4 Crude LSFO-E, 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-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 12 Plant abated by A-0066 SCR, S-4339 F-1110 LNC Reactor

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Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
	4044, and S-4045]		
Part 3	Maximum firing rates [applies to S-4042, S-4043, S-4044, and S-4045]	Y	
Part 4	Maintain daily records [applies to S-4042, S-4043, S-4044, and S-4045]	Y	
Condition #18166	Permit condition parts are listed below:		
Part 1	CO Source Tests [applies to S-4061 and S-4062]	Y	
Part 1a	Install CO CEM if > limit [applies to S-4061 and S-4062]	Y	
Part 2	Operate NOx, O2 CEMs & fuel meter [applies to S-4061 and S-4062]	Y	
Part 3	Maximum firing rate [applies to S-4061 and S-4062]	Ν	
Part 4	Maintain daily records [applies to S-4061 and S-4062]	Y	
Condition #18350	Permit condition parts are listed below:		
Part 1	Fuel gas flow meter [applies to S-4068]	Y	
Part 3	NOx, CO, O2 source tests [applies to S-4068]	Y	
Part 4	Additional source tests [applies to S-4068]	Y	
Part 5	Source test outside box [applies to S-4068]	Y	
Part 6	0.14 lb NOx/MMBtu limit [applies to S-4068]	Ν	
Part 7	127.5 MMBtu/Hr Limit [applies to S-4068]	Ν	
Part 8	CO and O2 CEMs [applies to S-4068]	Y	
Part 9	Daily fuel use records [applies to S-4068]	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-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-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-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-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 Va -4339 F-1110 LNC Reactor

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RLOP	abated h	oy A-006'	7 SCR	

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
Condition #19586	Permit condition parts are listed below:		
Part 1	Semi-annual NOx source tests [applies to S-4069, S-4156]	Y	
Part 2	Annual NOx source test [applies to S-4189]	Y	
Part 3	Semi-annual CO source tests [applies to S-4069, S-4155, S-4156, S-4332 to S-4335, S-4337, S-4338]	Y	
Part 4	Annual CO source test [applies to S-4330, S-4331, S-4336, S-4339]	Y	
Part 5	Semi-annual CO source test for compliance [applies to S-4155]	Y	
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	
Part 5	NOx box ranges (basis: Regulation 9-10-502)	N	
Part 6	NOx Box Deviations (basis: Regulation 9-10-502)	N	
Part 7	Source test 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

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-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-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-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-4338 F-1550 HNC Vacuum RLOP abated by A-0067 SCR, S-4339 F-1110 LNC Reactor RLOP abated by A-0067 SCR

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
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.3.3 Combustion (Furnaces)

# Table IV.A.3.3 Combustion Source-specific Applicable Requirements

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

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
BAAQMD Regulation 1	General Provisions and Definitions (11/15/00)		
1-520	Continuous Emission Monitoring [applies to S-4038-S-4041, S-4164-S-4166, S-4168-S-4171]	Y	
1-520.1	NOx CEM required for Steam Generators with Heat Input Rated > 250 MMBtu/Hr [applies to S-4070, S-4071, S-4072, S-4169, S-4170, and S-4171]	Y	
1-520.8	Monitors pursuant to Regulation 2-1-403 [applies to S-4038-S-4041, S-4164- S-4166, S-4168-S-4171]	Y	
1-521	Monitoring may be required	Y	
1-522	Continuous Emission Monitoring and Recordkeeping Procedures	Ν	
1-523	Parametric Monitoring and Recordkeeping Procedures [applies to S-4038-S-4041, S-4152, S-4154, S-4159, S-4160, S-4164-S-4171]	Ν	
1-602	Area and Continuous Monitoring Requirements	Ν	
SIP Regulation 1	PROVISIONS NO LONGER IN CURRENT RULE General Provisions and Definitions (6/28/99)		
1-522	Continuous Emission Monitoring and Recordkeeping Procedures	Y	
1-523	Parametric Monitoring and Recordkeeping Procedures [applies to S-4038-S-4041, S-4152, S-4154, S-4159, S-4160, S-4164-S-4171]	Y	
BAAQMD Regulation 2 Rule 1	Regulation 2, Rule 1 – Permits, General Requirements (5/2/01; 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	Ν	
2-1-501	Monitors	Y	

## Table IV.A.3.3 Combustion Source-specific Applicable Requirements

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

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, either by BAAQMD 9-9 or permit condition (BACT)]		
2-1-403	Permit conditions-measurement of emissions	Y	
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	
BAAQMD Regulation 9 Rule 10	Inorganic Gaseous Pollutants – Nitrogen Oxides and Carbon Monoxide from Boilers, Steam Generators, and Process Heaters in Petroleum Refineries (1/5/94)		
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]	N	7/1/02 [plant did reform. Fuels project]
9-10-301.1	Start-up/Shutdown Contribution [applies for all sources listed in this table except S-4032 and S-4033]	N	7/1/02 [plant did reform. Fuels project]
9-10-301.2	Out-of-Service Units Contribution [applies for all sources listed in this table except S-4032 and S-4033]	Ν	7/1/02 [plant did reform. Fuels project]
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.3.3 Combustion Source-specific Applicable Requirements

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

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
9-10-305	CO Emission limit	N	
9-10-502	Monitoring	Y	
9-10-502.1	CEMS for NOx, CO, and O2	N	7/1/02 [plant did reform. Fuels project]
9-10-502.2	Fuel flowmeters	Y	7/1/02 [plant did reform. Fuels project]
9-10-504	Recordkeeping	Y	7/1/02 [plant did reform. Fuels project]
9-10-505	Reporting	Y	7/1/02 [plant did reform. Fuels project]
Condition #469	RLOP CAP, Monthly CME	Y	
Condition #469	S-4038-S-4041, S-4095, S-4152, S-4154, S-4159-S-4171, S-4188, S-4189 [Refinery Cap]	Y	
Condition #469	Permit condition parts are listed below:		
Part 12	47 MMBtu/Hr Fuel Use Limit [applies to S-4159]	Y	
Part 13	45 MMBtu/Hr Fuel Use Limit [applies to S-4160]	Y	
Part 14	Record fuel gas use monthly [applies to S-4159 and S-4160]	Y	
Condition	Permit condition parts are listed below:		

## Table IV.A.3.3 Combustion Source-specific Applicable Requirements

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

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
#16679			
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	
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-4152, S-4154, S-4159 to S-4163, S-4168, S-4170, S-4172]	Y	
Condition #16698	Permit condition parts are listed below:		
Part 1	Source Tests [applies to S-4038, S-4039, S-4040 and S-4041]	Y	
Part 1a	Install CO CEM if [applies to S-4038, S-4039, S-4040, and S-4041]	Y	
Part 2	Firing rate limits [applies to S-4038, S-4039, S-4040, and S-4041]	N	
Part 4	Fuel flow meter [applies to S-4038, S-4039, S-4040, and S-4041]	Y	
Part 5	Recordkeeping [applies to S-4038, S-4039, S-4040 and S-4041]	Y	
Condition #16731	Permit condition parts are listed below:		

## Table IV.A.3.3 Combustion Source-specific Applicable Requirements

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

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
Part 1	CO source tests [applies to S-4164, S-4165, S-4166, S-4168, and S-4169]	Y	
Part 1a	Install CO CEM if [applies to S-4164, S-4165, S-4166, S-4168, and S-4169]	Y	
Part 2	NOx & O2 CEMS [applies to S-4164, S-4165, S-4166, S-4168, and S-4169]	Y	
Part 3	Maximum firing rates [applies to S-4164, S-4165, S-4166, S-4168, and S-4169]	Ν	
Part 4	Recordkeeping [applies to S-4164, S-4165, S-4166, S-4168, and S-4169]	Y	
Condition #17310	Permit condition parts are listed below: Applies to S-4152 and S-4154		
Part 1	Fuel gas flowmeter and recorder	Y	
Part 2	Max fairing rate for S-4152, 50.5 MMBtuh	Ν	
Part 3	Max fairing rate for S-4154, 50.5 MMBtuh	Ν	
Part 4	Records of fuel usage and HHV	Y	
Condition #17628	Permit condition parts are listed below:		
Part 1	Fuel gas flow meter [applies to S-4152 and S-4154]	Y	
Part 3	Semi-annual NOx, CO & O2 source tests [applies to S-4152 and S-4154]	Y	
Part 4	Additional sources tests to maximize CO [applies to S-4152 and S-4154]	Y	
Part 5	Source test if outside NOx box [applies to S-4152 and S-4154]	Y	
Part 5a	Violation if source test > limit [applies to S-4152 and S-4154]	Y	
Part 5b	Adjust NOx box if source test > limit [applies to S-4152 and S-4154]	Y	
Part 6	NOx limit of 0.035 lbs NOx/MMBtu [applies to S-4152]	Ν	
Part 7	NOx limit of 0.035 lbs NOx/MMBtu [applies to S-4154]	Ν	
Part 8	Maximum Firing Rate Limit [applies to S-4152]	Ν	

## Table IV.A.3.3 Combustion Source-specific Applicable Requirements

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

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
Part 9	Maximum Firing Rate Limit [applies to S-4154]	Ν	
Part 10	Install CO & O2 CEMs if [applies to S-4152 and S-4154]	Y	
Part 11	Daily Records [applies to S-4152 and S-4154]	Y	
Condition #17973	Permit condition parts are listed below:		
Part 1	CO source test	N	
Part 2	Operate NOx and O2 CEMs and fuel flowmeter [applies for S-4171]	N	
Part 3	Maximum firing rate [applies for S-4171 ]	N	
Part 4	Daily records [applies for S-4171]	Y	
Condition #18387	Permit condition parts are listed below:		
Part 1	Fuel gas flowmeter [applies to S-4159 and S-4160]	Y	
Part 3	NOx, CO, and O2 source tests [applies to S-4159 and S-4160]	Y	
Part 4	Additional source tests [applies to S-4159 and S-4160]	Y	
Part 5	Source test outside box [applies to S-4159 and S-4160]	Y	
Part 6	0.033 lb NOx/MMBtu [applies to S-4159 and S-4160]	N	
Part 7	68 MMBtu/Hr [applies to S-4159]	N	
Part 8	71 MMBtu/Hr [applies to S-4160]	Ν	
Part 9	CO & O2 CEM if [applies to S-4159 and S-4160]	Y	
Part 10	Daily Records[applies to S-4159 and S-4160]	Y	
Condition #18391	Permit condition parts are listed below:		
Part 1	Fuel gas flowmeter [applies S-4167]	Y	

## Table IV.A.3.3 Combustion Source-specific Applicable Requirements

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

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
Part 3	NOx, CO, O2 source tests [applies to S-4167]	Y	
Part 4	Additional source tests [applies to S-4167]	Y	
Part 5	Source test outside of box [applies to S-4167]	Y	
Part 6	0.035 lb NOx/MMBtu limit [applies to S-4167]	N	
Part 7	145 MMBtu/Hr limit [applies to S-4167]	Y	
Part 8	CO & O2 CEM if [applies to S-4167]	N	
Part 9	Daily fuel use records	Ν	
Condition #18400	Permit condition parts are listed below:		
Part 1	Fuel gas flowmeters [applies to S-4188 and S-4189]	Y	
Part 2	648 MMBtu/Day limit [applies to S-4188]	Y	
Part 3	360 MMBtu/Day limit [applies to S-4189]	Y	
Part 6	Daily Records [applies to S-4188 and S-4189]	Y	

## Table IV.A.3.3 Combustion Source-specific Applicable Requirements

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

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
Condition #19586	Permit condition parts are listed below:		
Part 1	Semi-annual NOx source tests [applies to S-4032, S-4033, S-4095, S-4153, S-4161, S-4162, S-4163, S-4188]	Y	
Part 2	Annual NOx source test [applies to S-4189]	Y	
Part 3	Semi-annual CO source tests [applies to S-4032, S-4033, S-4095, S-4153, S-4161, S-4162, S-4163, S-4188]	Y	
Part 4	Annual CO source test [applies to S-4189]	Y	
Condition #21232	New NOx Box Conditions [effective 6/1/04]	Ν	1/1/05
Part 1	Sources subject to Regulation 9-10 (basis: Regulation 9-10-301 & 305)	Ν	
Part 2	O2 monitor and recorder requirement (basis: Regulation 9-10-502)	Ν	9/1/04
Part 3	Operating conditions requirements for those sources without CEM (basis: Regulation 9-10-502)	Ν	
Part 4	NOx box establishment requirements (basis: Regulation 9-10-502)	Ν	
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,	Ν	

## Table IV.A.3.3 Combustion Source-specific Applicable Requirements

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

S-4032 F-101 FCC GHT #3 Cat Furnace, S-4033 F-102 Penhex Isom #3 Cat Furnace, S-4038 F-3550 #4 Cat Furnace, S-4039 F-3560 #4 Cat Furnace, S-4040 F-3570 #4 Cat Furnace,
S-4041 F-3580 #4 Cat Furnace, S-4046 F-1 H.O. Heater-Asphalt Plant, S-4095 F-210 Slack Wax
Furnace Wax Re-Run, S-4152 F-100 Asphalt Solution Heater SDA Isomax, S-4153 F-110 Asphalt
Solution Heater SDA Isomax, S-4154 F-120 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-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-4168 F-730 Isocracker Splitter Feed Isomax, S-4169 F-731 Isocracker Reboiler Isomax, S-4170 F-305 H2 Reforming Furnace H2 Plant Isomax abated by A-0260 Selective Catalytic
Reduction(SCR), S-4171 F-355 H2 Reforming Furnace H2 Plant Isomax, S-4188 F-651 Polymer
Furnace Poly Plant, S-4189 F-661 Polymer Furnace Poly Plant

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
	1-522)		
Part 10	Source test records (basis: recordkeeping; Regulation 9-10-504)	N	

### 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 (11/15/00)		
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 Regulation 1	PROVISIONS NO LONGER IN CURRENT RULE General Provisions and Definitions (6/28/99)		
1-522	Continuous Emission Monitoring and Recordkeeping Procedures	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
BAAQMD Regulation 2 Rule 1	Regulation 2, Rule 1 – Permits, General Requirements (5/2/01; 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	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	
NSPS 40 CFR 60 Subpart J	Standards of Performance for Petroleum Refineries (7/1/00)		
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 $60.7$	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	30 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-4118 P15 FIRE WATER PUMP, S-4119 P16 FIRE WATER PUMP, S-4126 P10 FIRE WATER PUMP, S-4127 #1PP ELECTRICAL GENERATOR, <u>S-7010 DIESEL ENGINE</u>, <u>S-7501 IC ENGINE</u>, S-7507 IC ENGINE, <u>S-7510 IC Engine</u> 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, <u>S-7520</u> <del>IC Engine,</del> S-7521 IC Engine, S-7522 IC Engine, S-7523 IC Engine, <u>S-7524 IC Engine</u>, S-7525 IC Engine, S-7506 IC Engine, <u>S-7528 IC Engine</u>, and S-7531 IC Engine <u>S-7502, S-7503, S-7504, S-7505, S-7506, S-7508, S-7509, S-7519, S-7527, S-7529, S-7530,</u> Engines under 250 hp

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
BAAQMD Regulation 6	Particulate Matter and Visible Emissions (12/19/90)		
<u>6-301</u>	Ringelmann No. 1 Limitation (applies only to S-7010)	<u>Y</u>	
6-303	Ringelmann No. 2 Limitation (does not apply to § 7010)	Y	
<u>6-303.1</u>	Engines used solely as a standby source of motive power (does not apply to S-7010)	<u>¥</u>	
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; SIP approved 5/20/92)		
9-1-301	Limitations on Ground Level Concentrations	Y	
9-1-304	Fuel Burning (Liquid and Solid Fuels)	Y	
BAAQMD Regulation 9 Rule 8	Inorganic Gaseous Pollutants – Nitrogen Oxides and Carbon Monoxi Combustion Engines (1/20/93)	de from Stationar	y Internal
9-8-330	Emergency standby engines, hours of operation(does not apply to S-7010)	N¥	
<u>9-8-530</u>	Emergency standby engines, monitoring and recordkeeping(does not apply to <u>S-7010)</u>	<u>N</u>	
Condition # 20225	Applies to S-7501, S-7507 IC Engine, S-7510 IC Engine S-7511 IC Engi Engine, S-7514 IC Engine, S-7515 IC Engine, S-7516 IC Engine, S-7517 7520 IC Engine, S-7521 IC Engine, S-7522 IC Engine, S-7523 IC Engine Engine, S-7526 IC Engine, S-7528 IC Engine, and S-7531 IC Engine	IC Engine, S-7518	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)	Ν	
Part 3	Records (applies to S-7501 only)	Ν	
Part 4	Hours of Operation Limit (applies to S-7507 IC Engine, S-7510 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-7520 IC Engine, S-7521 IC Engine, S-7522 IC Engine, S-7523 IC Engine,	N	

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

### **Internal Combustion Engines**

S-4118 P15 FIRE WATER PUMP, S-4119 P16 FIRE WATER PUMP, S-4126 P10 FIRE WATER PUMP, S-4127 #1PP ELECTRICAL GENERATOR, <u>S-7010 DIESEL ENGINE</u>, <u>S-7501 IC ENGINE</u>, S-7507 IC ENGINE, <u>S-7510 IC Engine</u> 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, <u>S-7520</u> <u>IC Engine</u>, S-7521 IC Engine, S-7522 IC Engine, S-7523 IC Engine, <u>S-7524 IC Engine</u>, S-7525 IC Engine, S-7526 IC Engine, <u>S-7528 IC Engine</u>, and S-7531 IC Engine <u>S-7502, S-7503, S-7504, S-7505, S-7506, S-7508, S-7509, S-7519, S-7527, S-7529, S-7530, Engines under 250 hp</u>

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
	S-7524 IC Engine, S-7525 IC Engine, S-7526 IC Engine, S-7528 IC Engine, and S-7531 IC Engine only)		
Part 5	Hour or Fuel Meter Requirement (applies to S-7507 IC Engine, S-7510 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-7520 IC Engine, S-7521 IC Engine, S-7522 IC Engine, S-7523 IC Engine, S-7524 IC Engine, S-7525 IC Engine, S-7526 IC Engine, S-7528 IC Engine, and S-7531 IC Engine only)	Ζ	
Part 6	Records (applies to S-7507 IC Engine, S-7510 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-7520 IC Engine, S-7521 IC Engine, S-7522 IC Engine, S-7523 IC Engine, S-7524 IC Engine, S-7525 IC Engine, S-7526 IC Engine, S-7528 IC Engine, and S-7531 IC Engine only)	Ν	
Condition 20366	Applies to S-7010		
Part 1	Hours of operation	N	
Part 2	Emissions limits	<u>Y</u>	
Part 3	<u>Time recorder</u>	<u>N</u>	
Part 4	California diesel requirement	<u>N</u>	
Part 5	Record keeping	N	

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

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

#### **Boilers**

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
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# Table IV.A.5.1 Combustion Source-specific Applicable Requirements

### **Boilers**

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
BAAQMD Regulation 1	General Provisions and Definitions (11/15/00)		
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 (5/2/01; 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	Ν	
<mark>2-1-501</mark>	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	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	
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	N	7/1/02 [plant did reform. Fuels project]
9-10-301.1	Start-up/Shutdown Contribution	N	7/1/02 [plant did reform. Fuels project]

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

### **Boilers**

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
9-10-301.2	Out-of-Service Units Contribution	N	7/1/02 [plant did reform. Fuels project]
9-10-301.3	Test-firing on Non-gaseous fuel Contribution	N	7/1/02 [if plant did reform. Fuels project]
9-10-303	Emission Limit for Facility (Federal Requirements)	Y	[Not applicable for CO boilers]
9-10-305	CO emission limit	N	7/1/02 [plant did reform. Fuels project]
9-10-403	Clean-Fuel Extension Compliance Date	Ν	7/1/02 [plant did reform. Fuels project]
9-10-502	Monitoring	Y	7/1/02 [plant did reform. Fuels project]
9-10-502.1	CEMS for NOx, CO, and O2	N	7/1/02 [plant did reform. Fuels project]
9-10-502.2	Fuel flowmeters	Y	7/1/02 [plant did reform. Fuels project]
9-10-504	Recordkeeping	N	7/1/02 [plant did reform. Fuels project]
9-10-505	Reporting	N	7/1/02 [plant did reform. Fuels project]
Condition #469	RLOP CAP, monthly CME	Y	
Condition #16650	Permit condition parts are listed below:		

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

### **Boilers**

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
Part 1	Operate NOx, O2, fuel rate meters [applies to S-4129, S-4131]	Ν	
Part 2	Max firing rate [applies to S-4129]	Y	
Part 3	Max firing rate [applies to S-4131]	Y	
Part 4	Daily Records for 5 years of CEM data, NOx mass emissions, fuel use & heat content [applies to S-4129, S-4131]	Y	
Part 5	CO source test and CEM if failed (applies to S04129, S-4131)	Y	
Condition #16686			
Part 1	Firing Limits [applies for S-4131, S-4132, S-4133]	Y	
Condition #17675	Permit condition parts are listed below:		
Part 1	Operate NOx, O2, fuel gas meters [applies to S-4132, S-4135]	Y	
Part 2	Semi-annual CO Source Tests (applies to S-4132, S-4135)	Y	
Part 3	Max Fuel firing rate limit (applies to S-4132)	Ν	
Part 4	Max Fuel firing rate limit (applies to S-4135)	Ν	
Part 5	Maintain daily records (applies to S-4132, S-4135)	Y	
Condition #18029	Permit condition parts are listed below:		
Part 1	Semi-annual CO Source Tests (applies to S-4133)	Y	
Part 2	Operate NOx and O2 CEMs and fuel flow meter (applies to S-4133)	Y	
Part 3	Maintain daily records (applies to 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	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	
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)	Ν	

### 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	Particulate Matter and Visible Emissions (	12/19/90)	

## 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
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 Asp	halts (9/16/87)	
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 (11/17/99)	
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	
8-7-302	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	
8-7-302.12	Liquid Retainment Limit	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
8-7-302.13	Spitting Limit	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	
8-7-501	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	
Condition #710	Flow Limiter Requirement – Limit flowrate to 8.0 to 8.6 gal/min	Ν	
Condition #711	Vapor Flow Rate – not to exceed 17.2 gal/min	N	
Condition #712	Magnahelic Pressure Gauge Requirement	Ν	
Condition 7880	Throughput limit	<u>N</u>	
CARB State Exec. Order G-70-138 condition 20666	Applies to S-9304	N	

### 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	Organic Compounds-Organic Liquid Bulk Terminals and Bulk 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			
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	
<u>Condition</u> 20863	Applies to S-4405	<u>N</u>	

### 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 Vessel Loading Termin	aals (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	
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	

## 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
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	Ν	
Condition # 469	Refinery Cap	Y	

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

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

### **Cooling Water Towers**

### S-4073 LSFO, S-4076 #3 Cat, S-4078 WRR, 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 MTBE/ALTA, S-6054 #2 Wax Deoiler, S-6055 Wax Finishing Plant

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
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	Particulate Weight Limitation	Y	
6-311	General Operations (process weight rate limitation)	Y	
6-401	Appearance of Emissions	Y	
BAAQMD Regulation 8 Rule 2	Organic Compounds, Miscellaneous Operations (3/17/82)	¥	
Condition #14596	Permit condition parts are listed below:		
Part 1	Organic compound emissions from S-6051 shall not exceed 23.7 lb/day, averaged over any consecutive 30-day period.	Y	

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

### **Cooling Water Towers**

### S-4073 LSFO, S-4076 #3 Cat, S-4078 WRR, 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 MTBE/ALTA, S-6054 #2 Wax Deoiler, S-6055 Wax Finishing Plant

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
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	
Condition #10597	Permit condition parts are listed below:		
Part 1	Hydrocarbon emissions from S-6054 shall not exceed 2.5 lbs/day, averaged over any 30-day consecutive period.	Y	
Part 2	Total dissolved solids at the S-6054 inlet shall not exceed 1000 ppm (wt), averaged over any consecutive 30 day period	Y	
Condition #10598	Permit condition parts are listed below:		
Part 1	Hydrocarbon emissions from S-6055 shall not exceed 2.5 lbs/day, averaged over any 30 day consecutive period	Y	
Part 2	Total dissolved solids at the S-6055 inlet shall not exceed 1000 ppm (wt), averaged over any consecutive 30 day period	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 (5/02/01)		
1-301	Public Nuisance Prohibition	Ν	
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	Ν	

# 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
1-522.1	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	Ν	
1-522.8	Monitoring data submittal requirements	Y	
1-522.9	Recordkeeping requirements	Y	
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	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	
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	

# 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
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 (8/17/89)	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©	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	
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 ©	Recording requirement for coke burn-off rate	Y	

# Table IV.C.2.1 Process UnitsSource-specific Applicable Requirements

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
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 (4/11/02)	Y	Notifi- cation by 8/9/02; com- pliance by 4/11/05
<u>63.1561</u>	Subject to this subpart	<u>Y</u>	4/11/05
<u>63.1562</u>	Parts of plants that are covered (including exemptions)	<u>Y</u>	4/11/05
<u>63.1563</u>	When to comply	<u>Y</u>	4/11/05
<u>63.1564</u>	Requirement for metal hap emissions for catalytic cracking units	<u>Y</u>	4/11/05
<u>63.1564(a)(1)</u>	Catalytic cracking unit is subject to NSPS for PM in 60.102	<u>Y</u>	4/11/05
<u>63.1564(a)(3)</u>	Operation, maintenance, and monitoring plan (OMMP)	<u>Y</u>	4/11/05
<u>63.1564(a)(4)</u>	Emission and operating limit does not apply during pre-approved planned mtce	<u>Y</u>	<u>4/11/05</u>
<u>63.1564(b)(1)</u>	Continuous monitoring systems requirement (COMS required)	<u>Y</u>	4/11/05
<u>63.1564(b)(5)</u>	Initial compliance per table 5 (no new test if unit is NSPS but must certify)	<u>Y</u>	<u>4/11/05</u>
<u>63.1564(b)(6)</u>	Submit OMMP to permit authority with NOCS	<u>Y</u>	4/11/05
<u>63.1564(b)(7)</u>	Submit NOCS	<u>Y</u>	4/11/05
<u>63.1564(c)(1)</u>	Demonstrate continuous compliance	<u>Y</u>	4/11/05
<u>63.1564(c)(2)</u>	Maintain records documenting compliance with OMMP	<u>Y</u>	<u>4/11/05</u>
<u>63.1565</u>	Requirements for organic hap emissions form catalytic cracking units	<u>Y</u>	<u>4/11/05</u>
<u>63.1565(a)(1)</u>	Catalytic cracking unit is subject to NSPS for CO in 60.103	<u>Y</u>	<u>4/11/05</u>
<u>63.1565(a)(3)</u>	Operation, maintenanace, and monitoring plan (OMMP)	<u>Y</u>	4/11/05

# 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
<u>63.1565(a)(4)</u>	Emission and operating limit does not apply during pre-approved planned mtce	<u>Y</u>	<u>4/11/05</u>
<u>63.1565(b)(1)</u>	Continuous monitoring systems requirement (CO CEMS required)	<u>Y</u>	<u>4/11/05</u>
<u>63.1565(b)(1)(i</u> <u>)</u>	<u>CO CEMS not required, upon written request, if 30 days average&lt;50</u> <u>ppm CO</u>	<u>Y</u>	<u>4/11/05</u>
<u>63.1565(b)(4)</u>	Initial compliance per table 12 (no new test if unit is NSPS, but must certify)	<u>Y</u>	<u>4/11/05</u>
<u>63.1565(b)(5)</u>	Submit OMMP to permit authority with NOCS	<u>Y</u>	4/11/05
<u>63.1565(b)(6)</u>	Submit NOCS	<u>Y</u>	4/11/05
<u>63.1565(c)(1)</u>	Demonstrate continuous compliance per tables 13 and 14	<u>Y</u>	4/11/05
<u>63.1565(c)(2)</u>	Comply with OMMP procedures	<u>Y</u>	4/11/05
<u>63.1569</u>	Bypass lines	<u>Y</u>	4/11/05
<u>63.1570</u>	General requirements	<u>Y</u>	4/11/05
<u>63.1570(d)</u>	Develop & implement a SSMP	<u>Y</u>	4/11/05
<u>63.1570(e)</u>	During periods of SSM, operate in accordance with your SSMP	<u>Y</u>	4/11/05
<u>63.1570(f)</u>	Report all instances not in compliance with limits or work practice standards	<u>Y</u>	<u>4/11/05</u>
<u>63.1571</u>	Initial performance test requirements	<u>Y</u>	4/11/05
<u>63.1572</u>	Monitoring, installation, operation, & maintenance requirements	<u>Y</u>	4/11/05
<u>63.1573</u>	Monitoring alternatives	<u>Y</u>	4/11/05
<u>63.1574</u>	Notification requirements	<u>Y</u>	4/11/05
<u>63.1575</u>	Reporting requirements	<u>Y</u>	4/11/05
<u>63.1576</u>	Recordkeeping requirements	<u>Y</u>	4/11/05
<u>63.1577</u>	General provision applicability	<u>Y</u>	4/11/05
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 4	300 ppmv SO2 limit [applicable to S-4285]	Y	
Part 5	NOx 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 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 1	Source test requirement for 9-1-313.2	¥	
Part 2	Source test requirement for compliance with 6-330	Y	

Table IV.C.3.1 Process Units (Miscellaneous Process Unaits)

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

### **Miscellaneous Process Units**

S-4155 F-135 Hot Oil Furnace, 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-4261 Wax Deoiler No. 2, S-4262 Wax Rerun Plant,
S-4265 Lube/Wax Refinishing, 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-4354/Butamer Plant, S-4356 Tertiary Amyl Methyl Ether Plant (TAME), S-4360 Perc Storage Vessel, 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 (4/11/02) (applies to S- 4237, S-4283 only)	Y	Notifi- cation by 8/9/02; com- pliance by 4/11/05
<u>63.1561</u>	Subject to this subpart (applies to S-4237, S-4283 only)	<u>Y</u>	<u>4/11/05</u>
<u>63.1562</u>	Parts of plants that are covered (including exemptions) (applies to S- 4237, S-4283 only)	<u>Y</u>	<u>4/11/05</u>
<u>63.1562(f)(5)</u>	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)	<u>Y</u>	4/11/05
<u>63.1563</u>	When to comply (applies to S-4237, S-4283 only)	<u>Y</u>	<u>4/11/05</u>
<u>63.1567</u>	Requirements for inorganic hap emissions from catalytic reforming units (S-4237, S-4283 only)	<u>Y</u>	<u>4/11/05</u>
<u>63.1567(a)(1)</u>	Emission limit (S-4237, S-4283 only)	<u>Y</u>	<u>4/11/05</u>
$\frac{\underline{63.1567(a)(1)}}{\underline{(i)}}$	Option 1: % reduction standard for HCl emissions (S-4237, S-4283 only) or	<u>Y</u>	<u>4/11/05</u>
<u>63.1567(a)(1)</u> (ii)	Option 2: 30 ppmv dry HCl concentration limit corrected to 3% O2 (S- 4237, S-4283 only)	<u>Y</u>	<u>4/11/05</u>
<u>63.1567(a)(2)</u>	Site specific operating limit. Cat regen HCl exhaust gas conc< limit established during performance test (S-4237, S-4283 only)	<u>Y</u>	<u>4/11/05</u>
<u>63.1567(a)(3)</u>	Prepare & operate in accordance with an OMMP (S-4237, S-4283 only)	Y	4/11/05
<u>63.1567(b)(2)</u>	Conduct performance test per table 25, measure HCl in exhaust gas & establish operting limit w/3 tube readings during each run (S-4237, S-4283 only)	<u>Y</u>	4/11/05

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

### **Miscellaneous Process Units**

S-4155 F-135 Hot Oil Furnace, 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-4261 Wax Deoiler No. 2, S-4262 Wax Rerun Plant,
S-4265 Lube/Wax Refinishing, 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-4354/Butamer Plant, S-4356 Tertiary Amyl Methyl Ether Plant (TAME), S-4360 Perc Storage Vessel, S-4400 Wax Melt Vessel, S-6050 MTBE Plant

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
<u>63.1567(b)(3)</u>	Establish site specific operating limit in talbe 23 using method in table 25 (S-4237, S-4283 only)	<u>Y</u>	<u>4/11/05</u>
<u>63.1567(b)(4)</u>	Demonstrate initial compliance by a performance test (S-4237, S-4283 only)	<u>Y</u>	<u>4/11/05</u>
<u>63.1567(b)(5)</u>	Submit OMM plnat with NOCS (S-4237, S-4283 only)	<u>Y</u>	4/11/05
<u>63.1567(b)(6)</u>	Submit NOCS with results of initial compliance demonstration (S-4237, S-4283 only)	<u>Y</u>	<u>4/11/05</u>
<u>63.1567(c)(1)</u>	Demonstrate continuous compliance per tables 27 & 28, (colorimetric tube sampling every 4 hours) (S-4237, S-4283 only)	<u>Y</u>	<u>4/11/05</u>
<u>63.1567(c)(2)</u>	Maintain records to document OMM plan compliance (S-4237, S-4283 only)	<u>Y</u>	<u>4/11/05</u>
<u>63.1569</u>	Bypass lines (S-4237, S-4283 only)	<u>Y</u>	4/11/05
<u>63.1570</u>	General requirements (S-4237, S-4283 only)	<u>Y</u>	4/11/05
<u>63.1570(d)</u>	Develop & implement a SSMP (S-4237, S-4283 only)	<u>Y</u>	4/11/05
<u>63.1570(e)</u>	During periods of SSM, operate in accordance with your SSMP (S- 4237, S-4283 only)	<u>Y</u>	<u>4/11/05</u>
<u>63.1570(f)</u>	Report all instances not in compliance with limits or work practis standards (S-4237, S-4283 only)	<u>Y</u>	<u>4/11/05</u>
<u>63.1570(g)</u>	Deviation during SSM not a violation if following SSMP (S-4237, S- 4283 only)	<u>Y</u>	<u>4/11/05</u>
<u>63.1571</u>	Initial performace test requirements (S-4237, S-4283 only)	<u>Y</u>	4/11/05
<u>63.1572</u>	Monitoring, installation, operation, & maintenance requirements (S- 4237, S-4283 only)	<u>Y</u>	4/11/05
<u>63.1573</u>	Monitoring alternatives (S-4237, S-4283 only)	<u>Y</u>	<u>4/11/05</u>
<u>63.1574</u>	Notification requirements (S-4237, S-4283 only)	<u>Y</u>	<u>4/11/05</u>

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

### **Miscellaneous Process Units**

S-4155 F-135 Hot Oil Furnace, 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-4261 Wax Deoiler No. 2, S-4262 Wax Rerun Plant,
S-4265 Lube/Wax Refinishing, 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-4354/Butamer Plant, S-4356 Tertiary Amyl Methyl Ether Plant (TAME), S-4360 Perc Storage Vessel, S-4400 Wax Melt Vessel, S-6050 MTBE Plant

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
<u>63.1575</u>	Reporting requirements (S-4237, S-4283 only)	<u>Y</u>	<u>4/11/05</u>
<u>63.1576</u>	Recordkeeping requirements (S-4237, S-4283 only)	<u>Y</u>	4/11/05
<u>63.1577</u>	General provision applicability (S-4237, S-4283 only)	<u>Y</u>	4/11/05
Condition #469	Applies to S-4233, S-4234, S-4236, S-4237, S-4250, S-4252, S-4261, S-4262, S-4265, 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	
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 < 80F, 3-hr average vent flow < 5 Klb/hr, 3-hr average water flow > 30 gpm, water/vent flow ratio > 11.6	Y	
Condition #16393	Applies to S-4261	Y	
Condtion #20944	Applies to S-4292	Ν	
Condition #18137	Throughput Limits	Ν	

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

### **Miscellaneous Process Units**

S-4155 F-135 Hot Oil Furnace, 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-4261 Wax Deoiler No. 2, S-4262 Wax Rerun Plant,
S-4265 Lube/Wax Refinishing, S-4282 Penhex Isomerization Plant, S-4283 No. 4 Catalytic Reformer,
S-4266 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-4354/Butamer Plant, S-4356 Tertiary Amyl Methyl Ether Plant (TAME), S-4360 Perc Storage Vessel, 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 18337	Applies to S-4354 and 4360		

#### 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 (05/02/01)		
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	
NSPS Title 40 Part 60 Subpart A	General Provisions		
40 CFR 60.1	Applicability	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 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	
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 (03/16/94)		
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	

# 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
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 (01/07/93)		
4 <del>0 CFR</del> <del>61.357(d)</del>	Reporting Requirements: Facilities with 10 Mg/yr or more total benzene in waste	¥	
<u>40 CFR</u> 61.342(e)(1)	Standards: general	<u>Y</u>	
40 CFR 61.343	Standards: Tanks	<u>Y</u>	
40 CFR 61.344	Standards: surface impoundments	<u>Y</u>	
40 CFR 61.345	Standards:containers	<u>Y</u>	
40 CFR 61.346	Standards: individual drain systems	<u>Y</u>	
40 CFR 61.347	Standards: Oil-water separators	<u>Y</u>	
40 CFR 61.348	Standards: Treatment processes	<u>Y</u>	
40 CFR 61.349	Standards: closed vent systems and control devices	<u>Y</u>	
40 CFR 61.350	Standards: delay of repair	<u>Y</u>	
<u>40 CFR</u> 61.357(d)	Reporting Requirements: Facilities with 10 Mg/yr or more total benzene in waste	<u>Y</u>	
NESHAP Title 40 Part 63 Subpart A	General Provisions of MACT Standards (03/16/94)		
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 maintenance requirements	Y	
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	

# 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 63.11	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);		
63.52	Final Rule 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	
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	

# 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
63.53(b)	Part 2 MACT application	Y	
40 CFR 63 Subpart CC	National Emission Standards for Hazardous Air Pollutants for Petroleum Refineries (06/12/1996)		
63.640(a)	Applicability applies to petroleum refining process units and to related emission points.	Y	
63.640©	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 Source —Exempt Processes	Y	
63.640(h)	Applicability and Designation of Affected Source —Compliance 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(l)	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©	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	
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	

# 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
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 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.	Y	
63.647(b)	Wastewater Provisions	Y	
63.647©	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	
BAAQMD Regulation 8 Rule 5	Storage of organic liquids (12/15/99)	Y	
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	Ν	
8-10-302	Opening of Process Vessels	N	
8-10-302.1	organic compounds cannot exceed 10,000 ppm (methane) prior to release to atmosphere	N	

# 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
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.	Ν	
8-10-501	Monitoring prior to and during process vessel opening	Y	
8-10-502	Concentration measurement <u>meeting the accuracy requirements of</u> using-EPA Method 21	Y	
8-10-503	Recordkeeping	Ν	
8-10-601	Monitoring Procedures	Ν	
SIP Regulation 8, Rule 10	Organic Compound – Process Vessel Depressurization (7/20/83)		
8-10-301	Process Vessel Depressurizing.	Y	
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	
BAAQMD Regulation 8 Rule 18	Organic Compounds, Equipment Leaks (1/7/98)	Y	
BAAQMD Regulation 8 Rule 40	Aeration of Contaminated Soil and Removal of Underground Storage Tanks (12/15/99)	Y	
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	

# 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 9 Rule 1	Sulfur Dioxide(3/15/95)	Ν	
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)	Ν	
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 #20620			
Part 1	Requirement to apply to incorporate 40 CFR 63, Subpart UUU (40 CFR 63, Subpart UUU)	¥	<del>10/11/0</del> 4
Part 2	Requirement to submit startup, shutdown, and maintenance plan for catalytic cracking units, catalytic reforming units, and sulfur recovery plants (40 CFR 63.1574(f))	¥	4/11/05
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 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	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	
Condition #469	Refinery Cap (Only applies to S-4345)	Y	
Condition #18655			
Part 1	Source test requirement for 9 1 313.2	¥	
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	

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

 Table IV.E.2.1 Sulfur Recovery

 Source-specific Applicable Requirements

### **Claus Plants**

S-4227 Sulfur Plant Claus Unit abated by A-0020 Tail Gas Unit for #1 SRU Train Absorption & Regeneration, S-4228 Sulfur Plant Claus Unit abated by A-0021 Tail Gas Unit for #2 SRU Train Absorption & Regeneration, S-4229 Sulfur Plant Claus Unit abated by A-0022 Tail Gas Unit for #3 SRU Train Absorption & Regeneration

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
BAAQMD Regulation 1	General Provisions and Definitions (5/2/01)	Ν	
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	General Provisions and Definitions (10/7/98) [provisions of SIP are identical to current Regulation 1 f'r """SO2 sour"es""", but not for combustion devices]	Y	
1-522	Continuous Emission Monitoring and Recordkeeping Procedures	Y	
1-522.7	Emission limit exceedance reporting requirements	Y	
BAAQMD Regulation 6	Particulate Matter and Visible Emissions (12/19/90)		
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	

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

### **Claus Plants**

S-4227 Sulfur Plant Claus Unit abated by A-0020 Tail Gas Unit for #1 SRU Train Absorption & Regeneration, S-4228 Sulfur Plant Claus Unit abated by A-0021 Tail Gas Unit for #2 SRU Train Absorption & Regeneration, S-4229 Sulfur Plant Claus Unit abated by A-0022 Tail Gas Unit for #3 SRU Train Absorption & Regeneration

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
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	
40 CFR 63 Subpart UUU	National Emission Standards for Hazardous Pollutants for Petroleum Refineries: Catalytic Cracking Units, Catalytic Reforming Units, and Sulfur Recovery Units (4/11/02)	Y	Notifi- cation by 8/9/02; com- pliance by 4/11/05
<u>63.1561</u>	Subject to this subpart	<u>Y</u>	4/11/05
63.1562	Parts of plants that are covered (including exemptions)	<u>Y</u>	4/11/05
63.1563	When to comply	<u>Y</u>	4/11/05
<u>63.1568</u>	Requirements for hap emissions from sulfur recovery units	<u>Y</u>	4/11/05
<u>63.1568(a)(1)</u>	250 ppmv dry SO2 emission limit (@0% O2) for existing unit W/oxidation control system	<u>Y</u>	<u>4/11/05</u>
<u>63.1568(a)(3)</u>	Prepare & operate in complian with an OMM plan	<u>Y</u>	4/11/05
<u>63.1568(b)(1)</u>	SO2 and O2 CEMS required to continuously monitor complaince	<u>Y</u>	4/11/05
<u>63.1568(b)(5)</u>	Demonstrate initial compliance: for units already NSPS, no new performance test or CEMS eval. But certify vents meet SO2 limit & CEMS performance	<u>Y</u>	<u>4/11/05</u>
<u>63.1568(b)(6)</u>	Submit OMM plan to permit authority with NOCS	<u>Y</u>	4/11/05
<u>63.1568(b)(7)</u>	Submit NOCS	<u>Y</u>	4/11/05
<u>63.1568(c)(1)</u>	Collect hourly average SO2 ppmv dry @ 0% O2. Record 12-hour average SO2 & report exceedances of the 12-hour average	<u>Y</u>	<u>4/11/05</u>
<u>63.1568(c)(2)</u>	Comply with the OMM plan	<u>Y</u>	4/11/05
<u>63.1569</u>	Bypass lines	<u>Y</u>	4/11/05
<u>63.1570</u>	General requirements	<u>Y</u>	4/11/05
<u>63.1570(d)</u>	Develop & implement a SSMP	<u>Y</u>	<u>4/11/05</u>

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

### **Claus Plants**

S-4227 Sulfur Plant Claus Unit abated by A-0020 Tail Gas Unit for #1 SRU Train Absorption & Regeneration, S-4228 Sulfur Plant Claus Unit abated by A-0021 Tail Gas Unit for #2 SRU Train Absorption & Regeneration, S-4229 Sulfur Plant Claus Unit abated by A-0022 Tail Gas Unit for #3 SRU Train Absorption & Regeneration

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
<u>63.1570(e)</u>	During periods of SSM, operate in accordance with your SSMP	<u>Y</u>	4/11/05
<u>63.1570(f)</u>	Report all instances not in compliance with limits or work practice standards	<u>Y</u>	<u>4/11/05</u>
<u>63.1570(g)</u>	Deviation during SSM not a violation if following SSMP	<u>Y</u>	<u>4/11/05</u>
<u>63.1571</u>	Initial performance test requirements	<u>Y</u>	<u>4/11/05</u>
<u>63.1572</u>	Monitoring, installation, operation, & maintenance requirements	<u>Y</u>	4/11/05
<u>63.1573</u>	Monitoring alternatives	<u>Y</u>	4/11/05
<u>63.1574</u>	Notification requirements	<u>Y</u>	4/11/05
<u>63.1575</u>	Reporting requirements	<u>Y</u>	4/11/05
<u>63.1576</u>	Recordkeeping requirements	<u>Y</u>	4/11/05
63.1577	General provision applicability	<u>Y</u>	4/11/05
Condition #469	Refinery Cap	Y	
Condition #18655.1	Annual Source Test to demonstrate compliance with 9-1-313.2	¥	
Condition #18655.2	Annual SO3/H2SO4 Source Test	Y	
Condition #19063.1	SRU #1 Train Sulfur Throughput Limit [applies to S-4227]	N	
Condition #19063.2	SRU #2 Train Sulfur Throughput Limit [applies to S-4228]	N	
Condition #19063.3	SRU #2 Train Sulfur Throughput Limit [applies to S-4229]	Ν	
Condition #19063.4	10 ppm H2S SRU stacks limit [applices 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 inspection monitoring	<u>¥</u>	

## IV. Source-Specific Applicable Requirements

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

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

### Sulfur Racks

## S-3140, S-3141, S-4396 Sulfur Loading Racks <u>and S-3226 Sulfur Storage Tank</u> 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	Ν	
Condition #1046 Part 3	Owner/operator of S-3141 shall maintain records of preventive maintenance downtime	Ν	

Table <del>IV</del>

#### <u>Table IV.F.1.0 Storage Tanks</u> <u>Source-specific Applicable Requirements</u>

### Tanks with Conditions only

### <u>S-25, S-1894, S-1909, S-1911, S-1913, S-1914, S-1915, S-1919, S-2920, S\_2921, S-6125</u>

<u>Applicable</u> <u>Requirement</u>	Regulation Title or Description of Requirement	<u>Federally</u> <u>Enforceable</u> <u>(Y/N)</u>	<u>Future</u> <u>Effective</u> <u>Date</u>
Permit Condition 4233	<u>Applies to S-1911, S-1913, S-1914, S-1915, S-1919, S-2920, S-2921</u>		
Permit Condition <u>11208</u>	<u>Applies to S-1911, S-6125, S-1909</u>		
Permit Condition 12580	Applies to S-1894		
Permit Condition <u>15107</u>	Applies to S-25		

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

# Table IV.F.1.1 Tanks Source-specific Applicable Requirements

Fixed Roof Tanks Cluster 01a

 $\begin{array}{l} & S-1821, S-2917, S-2918, S-3141, S-3160, S-3161, S-3162, S-3163, S-3164,\\ & S-3165, S-3166, S-3167, S-3168, S-3169, S-3170, S-3171, S-3172, S-3179, S-3182, S-3185,\\ & S-3186, S-3194, S-3195, S-3215, S-3216, \underline{S-3226}, S-5101, S-5103, S-5105, S-5107, S-5108, S-5109,\\ & S-5110, S-5112, S-5113, S-5115, S-5117, S-5118, S-5119, S-5121, S-5122, S-5123, S-5125,\\ & S-5126, S-5127, S-5128, S-5129, S-5130, S-5131, S-5132, S-5133, S-5134, S-5135, S-5136,\\ & S-5137, S-5138, S-5139, S-5140, S-5201, S-5202, S-5203, S-5204, S-5205, S-5206, S-5207,\\ & S-5208, S-5209, S-5210, S-5211, S-5212, S-5213, S-5214, S-5215, S-5216, S-5217, S-5218,\\ & S-5219, S-5220, S-5221, S-5222, S-5223, S-5224, S-5228, S-5229, S-5230, S-5232,\\ & S-5233, S-5234, S-5237, S-5240, S-5241, S-5603\end{array}$ 

**External Floating Roof Tanks Cluster 01a** 

### S-3185

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

Applicable Requirement	Regulation Title or D	escription of Requirement	Federally Enforceable (Y/N)	Future Effective Date
BAAQMD Regulation 8-5- 117	Low Vapor Pressure Exemption < 0.5 psia (11/27/02)		Y	
Refinery MACT	REQUIREME	NESHAP for Petroleum Refineries CNTS 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		olatile Organic Liquid Storage Vessels REMENTS FOR RECORD KEEPING ON	ILY	
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	
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	

# Table IV.F.1.1 Tanks Source-specific Applicable Requirements

#### Fixed Roof Tanks Cluster 01a

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, <u>S-3226</u>, 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

#### **External Floating Roof Tanks Cluster 01a**

#### S-3185

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

Applicable Requirement	Regulation Title or D	escription of Requirement	Federally Enforceable (Y/N)	Future Effective Date
	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	
Condition #4233	Applies to S-2917 and S-2918		Ν	
Condition #11024	Applies to S-3185		Y	
Condition #12580	Applies to S-1821		N	
Condition #1046	Applies to S-3141 and S-3226		Ν	
Condition #18137	Throughput limits		Ν	

#### 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-0127, S-0131, S-0151, S-0200A, S-0204, S-0223, S-0225, S-0234, S-0290, S-0291, S-0293, S-0319, S-0325, S-0329, S-0397, S-0401, S-0501, S-0518, S-0526, S-0550, S-0551, S-0555, S-0583, S-0585, S-0586, S-0587, S-0588, S-0589, S-0590, S-0591, S-0592, S-0594, S-0595, S-0596, S-0597, S-0900, S-0907, S-0910, S-0930, S-0931, S-0934, S-0935, S-0950, S-0957, S-0979, S-0984, S-1052, S-1149, S-1427, S-1431, S-1455, S-1456, S-1460, S-1461, S-1468, S-1470, S-1492, S-1493, S-1523, S-1546, S-1547, S-1548, S-1636, S-1653, S-1679, S-1681, S-1685, S-1707, S-1708, S-1709, S-1710, S-1711, S-1712, S-1716, S-1723, S-1724, S-1725, S-1728, S-1729, S-1730, S-1731, S-1732, S-1733, S-1736, S-1756, S-1761, S-1762, S-1764, S-1766, S-1908, S-1950, S-1951, S-1952, S-1989, S-2520, S-2540, S-3008, S-3028, S-3029, S-3125, S-3139, S-3140 (S-3140 also in Table IV.E.3.1), S-3142, S-3146, S-3148, S-3310

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

#### S-0328, S-1634, S-3147 External Floating Roof Tanks Cluster 01b

Applicable Requirement	Regulation Title or Description of Requirement		Federally Enforceable (Y/N)	Future Effective Date
BAAQMD Regulation 8- 5-117	Low Vapor Pressure Exemption < 0.5 psia (11/27/02)		Y	
Refinery		NESHAP for Petroleum Refineries		
MACT	REQUIR	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(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	
	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	

#### S-0955, S-0956, S-1297, S-1506, S-1451, S-1899, S-1428, S-1020, S-3132, S-3138

# Table IV.F.1.2 Tanks Source-specific Applicable Requirements

#### Fixed Roof Tanks Cluster 01b

S-0127, S-0131, S-0151, S-0200A, S-0204, S-0223, S-0225, S-0234, S-0290, S-0291, S-0293, S-0319, S-0325, S-0329, S-0397, S-0401, S-0501, S-0518, S-0526, S-0550, S-0551, S-0555, S-0583, S-0585, S-0586, S-0587, S-0588, S-0589, S-0590, S-0591, S-0592, S-0594, S-0595, S-0596, S-0597, S-0900, S-0907, S-0910, S-0930, S-0931, S-0934, S-0935, S-0950, S-0957, S-0979, S-0984, S-1052, S-1149, S-1427, S-1431, S-1455, S-1456, S-1460, S-1461, S-1468, S-1470, S-1492, S-1493, S-1523, S-1546, S-1547, S-1548, S-1636, S-1653, S-1679, S-1681, S-1685, S-1707, S-1708, S-1709, S-1710, S-1711, S-1712, S-1716, S-1723, S-1724, S-1725, S-1728, S-1729, S-1730, S-1731, S-1732, S-1733, S-1736, S-1756, S-1761, S-1762, S-1764, S-1766, S-1908, S-1950, S-1951, S-1952, S-1989, S-2520, S-2540, S-3008, S-3028, S-3029, S-3125, S-3139, S-3140 (S-3140 also in Table IV.E.3.1), S-3142, S-3148, S-3310

#### Internal Floating Roof Tanks Cluster 01b

#### S-0328, S-1634, S-3147 External Floating Roof Tanks Cluster 01b

Applicable Requirement	Regulation Title or Description of Requirement		Federally Enforceable (Y/N)	Future Effective Date
	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		
Condition # 4233	Applies to S-1908		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 #11228	Throughput Limits		Y	

#### S-0955, S-0956, S-1297, S-1506, S-1451, S-1899, S-1428, S-1020, S-3132, S-3138

# Table IV.F.1.2 Tanks Source-specific Applicable Requirements

#### Fixed Roof Tanks Cluster 01b

S-0127, S-0131, S-0151, S-0200A, S-0204, S-0223, S-0225, S-0234, S-0290, S-0291, S-0293, S-0319, S-0325, S-0329, S-0397, S-0401, S-0501, S-0518, S-0526, S-0550, S-0551, S-0555, S-0583, S-0585, S-0586, S-0587, S-0588, S-0589, S-0590, S-0591, S-0592, S-0594, S-0595, S-0596, S-0597, S-0900, S-0907, S-0910, S-0930, S-0931, S-0934, S-0935, S-0950, S-0957, S-0979, S-0984, S-1052, S-1149, S-1427, S-1431, S-1455, S-1456, S-1460, S-1461, S-1468, S-1470, S-1492, S-1493, S-1523, S-1546, S-1547, S-1548, S-1636, S-1653, S-1679, S-1681, S-1685, S-1707, S-1708, S-1709, S-1710, S-1711, S-1712, S-1716, S-1723, S-1724, S-1725, S-1728, S-1729, S-1730, S-1731, S-1732, S-1733, S-1736, S-1756, S-1761, S-1762, S-1764, S-1766, S-1908, S-1950, S-1951,S-1952, S-1989, S-2520, S-2540, S-3008, S-3028, S-3029, S-3125, S-3139, S-3140 (S-3140 also in Table IV.E.3.1), S-3142, S-3148, S-3310

#### Internal Floating Roof Tanks Cluster 01b

#### S-0328, S-1634, S-3147 External Floating Roof Tanks Cluster 01b

#### S-0955, S-0956, S-1297, S-1506, S-1451, S-1899, S-1428, S-1020, S-3132, S-3138

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
Condition #11436	Applies to S-1653	Y	
Condition #18137	Throughput limits	Ν	

#### 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**

#### S-0021, S-0660, S-6066

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
BAAQMD	Storage of Organic Liquids (11/27/02)		
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	

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

### Fixed Roof Tanks Cluster 02

### S-0021, S-0660, S-6066

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
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	
8-5-301	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 cleaning requirements	Y	
8-5-328.1.2	Concentration of <10,000 ppm as methane after cleaning	Y	
8-5-328.2	Tank degassing when ozone excess is predicted	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	
Condition #11193	Applies to S-0660 and S-6066	Y	
Condition #18137	Throughput limits	N	

#### 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	Storage of Organic Liquids (11/27/02)		
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 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 cleaning requirements	Y	
8-5-328.1.2	Concentration of <10,000 ppm as methane after cleaning	Y	
8-5-328.2	Tank degassing when ozone excess is predicted	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	

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

#### **Fixed Roof Tanks Cluster 05**

### S-0605 (S-0605 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 device requirements for S-6200 through S-6219 are provided in

Table II-B)

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date		
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		
EPA	Exempt from all Refinery MACT, N Hydrocarbon Storage Tanks (per <1		Y		
	Wastewater Requirements for S-6	6200 through S-6219 (from Wastewater Clu	ister 60b)		
BAAQMD Regulation 11 Rule 12		ssion Standards for Benzene Emissions nd Benzene Waste Operations (7/18/90,	N		
Refinery MACT	NESHAP for Petroleum Refineries REQUIREMENTS FOR WASTEWATER STREAMS				
63.641	What is a Refinery MACT Group 1 wastewater stream?	$\begin{array}{l} 63.641\\ \text{if Total Annual Benzene} \geq 10 \text{ Mg/yr},\\ \text{then each wastewater stream with flow}\\ \text{rate} \geq 0.02 \text{ liters/min and benzene}\\ \text{concentration} \geq 10 \text{ ppmw and not exempt}\\ \text{from controls under } 61 \text{ Subpart FF} \end{array}$	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© 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 Subpart FF	RE				
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		

# 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
	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 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	
	Requirement to keep openings closed not applicable when the cover and closed vent system are operated at negative pressure, subject to specified criteria?	61.345(a)(4) yes, but the container is not required to have a closed vent system, & the enclosure is not required to have all openings closed and sealed	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
	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© required for the container 61.345© required for the enclosure	Y	
	Delay of repair allowed?	61.345© yes, for the container, per 61.350 61.345© 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 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© 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©	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© 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**

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

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
BAAQMD	Storage of Organic Liquids (11/27/02)		
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	Y	
8-5-320.3	Vents Openings in the floating roof except floating roof legs	Y	
8-5-320.3	Solid sampling or gauging wells and similar fixed projections	Y	
8-5-320.4	Slotted sampling or gauging wells and similar fixed projections	Y	
8-5-320.5	Emergency roof drain	Y	
8-5-320.0	Primary seal requirements	Y	
8-5-321.1	No holes, tears, or other openings in the primary seal fabric	Y	
8-5-321.1		Y	
0-0-021.2	The seal shall be liquid mounted except as provided in 8-5-305.1	Y	

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

Applicable Requirement	Regulation Title or D	escription of Requirement	Federally Enforceable (Y/N)	Future Effective Date
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 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	
8-5-328.1.2	Concentration of <10,000 ppm as	methane after cleaning	Y	
8-5-328.2	Tank degassing when ozone exces	s is predicted	Y	
8-5-401	Inspection Requirements for Exter	rnal 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 Tes	st 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 compour	nds after degassing	Y	
8-5-604	Determinations of Applicability		Y	
Refinery MACT	REQUIR	NESHAP for Petroleum Refineries REMENTS 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(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	

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

Applicable Requirement	Regulation Title or D	escription of Requirement	Federally Enforceable (Y/N)	Future Effective Date
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	
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	Conditon #2238	Applies to S-3100	Y	
Condition #13597	Applies to S-1798		Y	
Condition #3697	Applies to S-1799		Y	
Condition #18137	Throughput limits		Ν	

### 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	Storage of Organic Liquids (11/27/02)		
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	

# Table IV.F.1.6 TanksSource-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
8-5-321.3.2	Gaps for welded tanks		Y	
8-5-322	Secondary seal requirements	Secondary seal requirements		
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	talled 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	
8-5-328.1.2	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 Tes	t 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 compour	nds after degassing	Y	
8-5-604	Determinations of Applicability		Y	
Refinery MACT	REQUIR	NESHAP for Petroleum Refineries EMENTS FOR RECORD KEEPING ON	LY	
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(h)	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	

# Table IV.F.1.6 TanksSource-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
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

#### **Fixed Roof Tanks Cluster 13**

#### S-1726, S-1727, S-1757, S-1758

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
BAAQMD Regulation 8, Rule 5	Storage of Organic Liquids (11/27/02)		
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 cleaning requirements	Y	
8-5-328.1.2	Concentration of <10,000 ppm as methane after cleaning	Y	
8-5-328.2	Tank degassing when ozone excess is predicted	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	

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

### Fixed Roof Tanks Cluster 13

## S-1726, S-1727, S-1757, S-1758

Applicable Requirement	Regulation Title or I	Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
8-5-604	Determinations of Applicability		Y	
Refinery MACT	REQUI	NESHAP for Petroleum Refineries 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:	63.642(e) & 63.654(i)(4) required	Y	
	Keep all reports and notification for the specified period of time.			
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	
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.1.8 Tanks (FRT's Cluster 16)

# Table IV.F.1.8 Tanks Source-specific Applicable Requirements

#### Fixed Roof Tanks Cluster 16

#### S-9302, S-9303

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
BAAQMD	Storage of Organic Liquids (11/27/02)		
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	
8-5-328	Tank cleaning requirements	Y	
8-5-328.1.2	Concentration of <10,000 ppm as methane after cleaning	Y	
8-5-328.2	Tank degassing when ozone excess is predicted	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	

# Table IV.F.1.8 Tanks Source-specific Applicable Requirements

#### Fixed Roof Tanks Cluster 16

#### S-9302, S-9303

Applicable Requirement	Regulation Title or I	Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
Refinery MACT	REQUI	NESHAP for Petroleum Refineries REMENTS FOR RECORDKEEPING ON	ILY	
63.642(e)	General recordkeeping requirements: Time period for keeping records, unless specified otherwise.	63.642(e) & 63.654(i)(4) keep all other records 5 years, 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	
63.654(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)	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	
	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**

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

Applicable Requirement			Future Effective Date
BAAQMD Regulation 8, Rule 5	Storage of Organic Liquids (11/27/02)		
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	
8-5-304	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.1.9 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
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 cleaning requirements	Y	
8-5-328.1.2	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	
Refinery MACT	NESHAP for Petroleum Refineries REQUIREMENTS FOR TANKS ALSO SUBJECT	FO NSPS K	
63.640(n)	Which rule governs for storage vessels subject to the control63.640(n)(6) NSPS subpart K but subject to only recordkeeping under Refinery MACT?	Y	
NSPS Subpart K	Petroleum Liquids Storage Vessels 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**

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

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 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.	Ν	

#### 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	Storage of Organic Liquids (11/27/02)		
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 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	
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 cleaning requirements	Y	
8-5-328.1.2	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 Pressure		Y	
8-5-603	Determination of Emissions		Y	
8-5-603.1.2	Concentration of organic compoun	ids after degassing	Y	
8-5-604	Determinations of Applicability		Y	
Refinery MACT		NESHAP for Petroleum Refineries 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 Subpart Kb		olatile Organic Liquid Storage Vessels TS FOR EXTERNAL FLOATING ROO	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**

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©	Applicability records: Additional recordkeeping requirements for certain tanks.	$60.116b^{\odot}$ internal diameter & TVP of the stored product, if capacity $\geq 20,000$ gallons and TVP $\geq 2.2$ , or capacity $\geq 40,000$ gallons and TVP $\geq 0.51$ keep record as long as the tank is in that service	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		N	
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	N	
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	Storage of Organic Liquids (11/27/02)		
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	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 cleaning requirements	Y	

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

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

Applicable Requirement	Regulation Title or Descr	ription of Requirement	Federally Enforceable (Y/N)	Future Effective Date
8-5-328.1.2	Concentration of <10,000 ppm as me	thane after cleaning	Y	
8-5-328.2	Tank degassing when ozone excess is	s 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 R	lequirement	Y	
8-5-503	Portable hydrocarbon detector		Y	
8-5-601	Analysis of Samples, Reid Vapor Pre	ssure	Y	
8-5-602	Analysis of Samples, True Vapor Pre	ssure	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	
Refinery MACT		ESHAP for Petroleum Refineries 'S FOR TANKS ALSO SUBJECT TO 1	NSPS Kb	
63.640(n)		3.640(n)(1) NSPS subpart Kb	Y	
		3.640(n)(8)(i) es	Y	
	delay of NSPS Kb seal gap y	3.640(n)(8)(ii) es – up to 30 days, or empty the tank vithin 45 days	Y	
	2 1	3.640(n)(8)(iii) es – up to 2 extensions of 30 days each	Y	
		3.640(n)(8)(iii) es – up to 2 extensions of 30 days each	Y	
	· ·	3.640(n)(8)(iii) es	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 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 Subpart Kb	Ve	olatile Organic Liquid Storage Vessels	;	
KU	REQUIREMEN	TS FOR INTERNAL FLOATING R	OOF TANKS	t
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	
	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	
	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	

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

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

Applicable Requirement	Regulation Title or De	scription of Requirement	Federally Enforceable (Y/N)	Future Effective Date
	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	
	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	

# 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
	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	
	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	

# 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
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©	Applicability records: Additional recordkeeping requirements for certain tanks.	$60.116b^{\odot}$ internal diameter & TVP of the stored product, if capacity $\geq 20,000$ gallons and TVP $\geq 2.2$ , or capacity $\geq 40,000$ gallons and TVP $\geq 0.51$ . Keep record as long as the tank is in that service.	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	]	New Source Performance Standards		
Α		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	
Condition #15671	Applies to S-1635		Y	
Condition 1069	Applies to S-1637		N	
Condition #18137	Throughput limits		Ν	

#### 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	Storage of Organic Liquids (11/27/02)		
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	
8-5-328	Tank cleaning requirements	Y	
8-5-328.1.2	Concentration of <10,000 ppm as methane after cleaning	Y	
8-5-328.2	Tank degassing when ozone excess is predicted	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	

# 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
8-5-602	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	
Refinery MACT	REQUIREME	NESHAP for Petroleum Refineries ENTS 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?	63.640(n)(1) NSPS subpart Kb	Y	
NSPS Subpart Kb		/olatile Organic Liquid Storage Vessels TS FOR FIXED ROOF TANK-CONTROL	DEVICE	
60.112b(a)	Closed vent system Performance requirements:	60.112b(a)(3)(i) no detectable emissions (i.e., < 500 ppm)	Y	
	Control device Performance requirements:	60.112b(a)(3)(ii) at least 95% efficient, or a flare per 60.18	Y	
	Control device (flare) Compliance demonstration:	60.112b(a)(3)(ii) flare to be designed as specified in 60.18 (c)	Y	
60.113b©	Control device (other than flare) Compliance demonstration:	60.113b©(1) operating plan, efficiency demonstration & parameter(s) to be monitored	Y	
	Other (initial) Reports: For control device other-than flare?	60.113b©(1) submit operating plan for approval, with the initial notification	Y	
	Control device (other than flare) Operating requirements:	60.113b©(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©	Record keeping for tanks routed to a control device other than a flare:	60.115b© 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	

# 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
	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©	Applicability records: Additional recordkeeping requirements for certain tanks.	$60.116b$ °C internal diameter & TVP of the stored product, if capacity $\geq 20,000$ gallons and TVP $\geq 2.2$ , or capacity $\geq 40,000$ gallons and TVP $\geq 0.51$ keep record as long as the tank is in that service	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	
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 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	

# 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
	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	
BAAQMD Regulation 11 Rule 12		ssion Standards for Benzene Emissions nd Benzene Waste Operations (7/18/90,	N	
Refinery MACT	NESHAP for Petroleum Refineries REQUIREMENTS FOR WASTEWA	TER STREAMS	Y	
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© a monitoring excursion, a failure to perform a leak inspection, or a failure to repair a leak shall constitute a violation	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
63.654	Which recordkeeping and reporting requirements govern?	63.654(a) recordkeeping and reporting shall be per 61 Subpart FF	Y	
NESHAP Subpart FF	Benzene Waste Operations REQUIREMENTS FOR CONTAINE	RS	Y	
61.345	When is this type of WMU subject to these requirements?	$\begin{array}{l} 61.345(a) \\ \text{when invoked by} \\ 61.342(c)(1)(ii) \text{ for facilities with total} \\ \text{annual Benzene} \geq 10 \text{ Mg/yr} \end{array}$	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	
	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	

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

#### Fixed Roof Tanks Cluster 25

Applicable Requirement	Regulation Title or De	escription of Requirement	Federally Enforceable (Y/N)	Future Effective Date
	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	
	Requirement to keep openings closed not applicable when the cover and closed vent system are operated at negative pressure, subject to specified criteria?	61.345(a)(4) yes, but the container is not required to have a closed vent system, & the enclosure is not required to have all openings closed and sealed	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© required for the container 61.345© required for the enclosure	Y	
	Delay of repair allowed?	61.345© yes, for the container, per 61.350 61.345© 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	

# 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
	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)(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) 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© 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©	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© daily inspect the continuous monitoring devices specified herein, except as specified in 61.354(d) & (e)	Y	

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

#### Fixed Roof Tanks Cluster 25

Applicable Requirement	Regulation Title or De	escription of Requirement	Federally Enforceable (Y/N)	Future Effective Date
	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	
	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	

# 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 Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
	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	Ν	

#### 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	Storage of Organic Liquids (11/27/02)		
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	

# 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
8-5-112.1	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	
8-5-304	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	
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 cleaning requirements	Y	
8-5-328.1.2	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	

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

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

Applicable Requirement	Regulation Title or D	escription of Requirement	Federally Enforceable (Y/N)	Future Effective Date
8-5-501	Records		Y	
8-5-502	Tank Cleaning Annual Source Tes	at 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 compour	nds after degassing	Y	
8-5-604	Determinations of Applicability		Y	
Refinery MACT	REQUIREMEN	NESHAP for Petroleum Refineries NTS FOR EXTERNAL FLOATING R	OOF 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: keep all reports and notification for the specified period of time.	63.642(e) & 63.654(i)(4) required	Y	
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	

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

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

Applicable Requirement	Regulation Title or De	escription of Requirement	Federally Enforceable (Y/N)	Future Effective Date
	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	
	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	

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

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

Applicable Requirement	Regulation Title or De	Regulation Title or Description of Requirement		Future Effective Date
	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	
	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	

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

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

Applicable Requirement	Regulation Title or De	escription of Requirement	Federally Enforceable (Y/N)	Future Effective Date
	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©	EFR well covers to be gasketed?	63.646© not required at existing sources	Y	
	EFR vents to be gasketed?	63.646© not required at existing sources	Y	
	EFR deck openings other than for vents to project into liquid?	63.646© not required at existing sources	Y	
	EFR access hatch & gauge float well covers to be bolted closed?	63.646© not required at existing sources	Y	
	EFR emergency roof drains to have seals covering at least 90% of the opening?	63.646© not required at existing sources	Y	
	EFR guidepole wells to have a deck cover gasket and a pole wiper?	63.646© not required at existing sources	Y	
	EFRT unslotted guidepoles to have a gasketed cap at the top of the pole?	63.646© not required at existing sources	Y	
	EFRT slotted guidepoles to have either an internal float or a pole sleeve?	63.646© 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	
	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(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	

# 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(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)©&(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	
	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	

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

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

Applicable Requirement	Regulation Title or De	escription of Requirement	Federally Enforceable (Y/N)	Future Effective Date
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© 63.654(d) 63.123(e)	Record keeping for inspections: Keep inspection reports as specified	63.654(i)(1) 63.123© - (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	
	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	

# 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
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.	Ν	

### 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**

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
BAAQMD	Storage of Organic Liquids (11/27/02)		
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 Description 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 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 cleaning requirements	Y	
8-5-328.1.2	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	
Refinery MACT	NESHAP for Petroleum Refineries REQUIREMENTS FOR INTERNAL FLOATING	ROOF TANKS	
63.642(e) 63.654(i)	General recordkeeping requirements:63.642(e) & 63.654(i)(4)Time period for keeping records, unless specified otherwise.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	
63.646(a) 63.119(b)	IFRT operating requirements:63.646(a)When landing the floating roof on its63.119(b)(1) & (b)(2)support legs, is the tank to be emptiedyes& either refilled or degassed ASAP?	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©	IFR well covers to be gasketed?	63.646© not required at existing sources	Y	
	IFR vents to be gasketed?	63.646© not required at existing sources	Y	
	IFR deck openings other than for vents to project into liquid?	63.646© not required at existing sources	Y	
	IFR access hatch & gauge float well covers to be bolted closed?	63.646© not required at existing sources	Y	
	IFR guidepole & column wells allowed a flexible-fabric sleeve seal or a gasketed cover?	63.646© not applicable at existing sources	Y	
	IFRT unslotted guidepoles to have a gasketed cap at the top of the pole?	63.646© 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© 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(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	
63.646(l) 63.654(h)	Notification of Inspections: Is the State or local authority allowed to waive the notification requirements?	63.646(1) 63.654(h)(2)(i)©&(ii) yes	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
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	
	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	

# 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) 63.123(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© 63.654(d) 63.123(e)	Record keeping for inspections: keep inspection reports as specified	63.654(i)(1) 63.123© - (e) all inspections	Y	
	Records of IFR & CFR inspection reports:	63.654(i)(1) 63.123© & (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		Ν	

### Table IV.G.1.1 Tanks (Treatment Unoit 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
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# Table IV.G.1.1 Wastewater Source-specific Applicable Requirements

### **Treatment Unit Cluster 10**

Applicable Requirement	Regulation Title or De	scription of Requirement	Federally Enforceable (Y/N)	Future Effective Date
BAAQMD Regulation 11 Rule 12		ission Standards for Benzene Emissions nd Benzene Waste Operations (7/18/90,	N	
Refinery MACT		NESHAP for Petroleum Refineries EMENTS FOR WASTEWATER STREA	MS	
63.641	What is a Refinery MACT Group 1 wastewater stream?	$\begin{array}{l} 63.641\\ \text{if Total Annual Benzene} \geq 10 \text{ Mg/yr},\\ \text{then each wastewater stream with flow}\\ \text{rate} \geq 0.02 \text{ liters/min and benzene}\\ \text{concentration} \geq 10 \text{ ppmw and not}\\ \text{exempt from controls under 61 Subpart}\\ FF \end{array}$	Y	
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© 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 Subpart FF	REQUIRI	Benzene Waste Operations EMENTS FOR TREATMENT PROCESS	SES	
61.342	Exemption for units downstream of the DAF	61.342 & 61.348 only if benzene concentration < 10 ppmw or the treatment process requirements are otherwise met	Y	
	Which facilities subject to this regulation are required to treat waste streams and control air emissions?	61.342(a) if Total Annual Benzene ≥ 10 Mg/yr, specified waste streams must be treated and specified Waste Management Units must be controlled; otherwise only recordkeeping & reporting is required	Y	
	When must facilities achieve compliance?	61.342(b) new sources shall be in compliance upon initial startup	Y	
	Where are the treatment requirements specified?	61.342©(1)(i) waste streams (unless exempted) shall be treated onsite [per 61.348] or offsite [per 61.342(f)]	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
	Where are the requirements for controlling air emissions specified?	61.342©(1)(ii) Waste Management Units receiving a waste stream prior to or during treatment per 61.342©(i) shall be controlled per the appropriate equipment standard [specified in 61.343-347]	Y	
	Are waste streams that are to be recycled to a process subject to controls?	61.342©(1)(iii) Waste Management Units receiving a waste stream prior to recycling to a process shall be controlled per the appropriate equipment standard [specified in 61.343-347]	Y	
	Exemption from controls for low concentration of pollutants (records are required)	61.342©(2) a waste stream with benzene concentration < 10 ppmw is exempt from treatment unless selected for treatment per 61.342(d) or (e) [but records are required]	¥	
	Are there other waste streams that may be exempt from treatment and controls on the basis of low flow rate or other mass limits?	61.342 <sup>(C)</sup> (3), (d) & (e) one of the four options specified herein may be selected for determining waste streams to exempt from treatment - see the BWON	Y	
	Are there notices required for wastes sent off-site?	61.342(f) wastes sent off-site for treatment shall include a notice that the waste is subject to this rule	Y	
	How is compliance determined?	61.342(g) compliance will be determined by review of facility records and monitoring/test results	Y	
	Are there provisions for alternatives to the specified treatment and control technologies?	61.342(h) provisions for alternatives are specified in 61.353	Y	
61.348	What level of performance is required for the treatment process?	61.348(a)(1) reduce benzene concentration to below 10 ppmw; or remove benzene mass by at least 99%; or destroy benzene by at least 99% via incineration	Y	
	Are treatment processes (e.g. a steam stripper) subject to the same controls as wastewater treatment units?	61.348(a)(2) treatment processes shall be controlled for air emissions in the same manner as wastewater treatment units (all are defined as Waste Management Units per 61.341)	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
	Are there special rules for combined waste streams?	61.348(a)(3)-(5) waste streams may be combined to facilitate wastewater treatment, but dilution cannot be considered treatment; such combined waste streams shall be controlled per 61.348(b)	Y	
	Does combining waste streams restrict the mass-limit options available for selecting waste streams to exempt?	61.348(b) combined waste streams shall comply with either the requirements of this paragraph or the 61.342(e) option	Y	
	Exemption for biological treatment units	61.348(b) & 61.355(k) enhanced bio units may be exempt for controls under the cited options if benzene concentration < 10 ppmw	Y	
	What is required to demonstrate compliance of the treatment process?	61.348© either engineering calculations or performance tests	Y	
	Are there exemptions in the case of overlapping regulations?	61.348(d) waste streams that are controlled under certain Resource Conservation and Recovery Act or Clean Water Act rules are exempt from treatment under this rule [but records are required]	Y	
	Are the requirements for inspecting openings in treatment processes modified as compared to openings in wastewater treatment units?	61.348(e) no detectable emissions (< 500 ppmv) and annual verification by Method 21 are only required for systems operated under negative pressure	Y	
	Can performance tests be required for treatment processes?	61.348(f) perform performance tests of the treatment process upon the request of the Administrator	Y	
	How is ongoing compliance of the treatment process to be assured?	61.348(g) the treatment process shall be monitored per 61.354	Y	
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 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	

# 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
	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 a flare?	61.349(a)(2)(iii) comply with 60.18	Y	
	What is required if the control device is an alternative technology?	61.349(a)(2)(iv) reduce Total Organic Compounds $\geq 95\%$ or benzene $\geq 98\%$ ; <u>and</u> 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 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© either engineering calculations or performance tests	Y	
	What is required to demonstrate compliance of a flare?	61.349(d) demonstrate compliance per 60.18	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©	Y	

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

### **Treatment Unit Cluster 10**

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	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 additional monitoring required for combined waste streams?	61.354(b) for a combined waste stream subject to 61.348(b) also monitor monthly the benzene concentration entering the first exempt Waste Management Unit, & the flow if not a bio-unit	Y	
	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	
	Is additional monitoring required for systems maintained at negative pressure?	61.354(g) continuously monitor the system pressure	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	

# 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 performance testing of treatment processes	61.355(d) for 61.348(a)(1)(i) to demonstrate compliance with 10 ppmw	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	
	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	
	Procedure for determining specified benzene quantity (Benzene Quantity)	61.355(j) for 61.342©(3)(ii) to demonstrate compliance w/ benzene mass limit	Y	
	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) – (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© 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	

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

### **Treatment Unit Cluster 10**

Applicable Requirement	Regulation Title or De	scription of Requirement	Federally Enforceable (Y/N)	Future Effective Date
	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	
61.357	Is an initial facility status report required?	61.357(a) required, with Total Annual Benzene determination & data on each waste stream	Y	
	What continuing reports are required subsequent to the initial report, for facilities exempt from controls?	61.357 <sup>©</sup> if $1 \le \text{Total Annual Benzene} < 10 \text{ Mg/yr}$ , update the facility status report annually, and when a change results in Total Annual Benzene $\ge 10 \text{ Mg/yr}$	Y	
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	

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

### **Treatment Unit Cluster 10**

#### S-3200 4 CU Desalter Water Treatment Unit, , S-6061 Alkane Groundwater Treatment Unit

Applicable Requirement	Regulation Title or 2	Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
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 #11193 Part 2	Applies to S-6061	Flanges equipped with BACT as specified	Y	
Condition #11193 Part 3	Applies to S-6061	Valves equipped with BACT as specified	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–WASTEWATER (OIL-WATER) SEPARATORS (IND EXEMPT FROM CONTROLS)	IVIDUAL DRA	IN SYSTEMS

# 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
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	
	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		ssion Standards for Benzene Emissions d Benzene Waste Operations (7/18/90,	Ν	
Refinery MACT		NESHAP for Petroleum Refineries EMENTS FOR WASTEWATER STREAD	MS	
63.641	What is a Refinery MACT Group 1 wastewater stream?	$\begin{array}{l} 63.641\\ \text{if Total Annual Benzene} \geq 10 \text{ Mg/yr, then}\\ \text{each wastewater stream with flow rate} \geq \\ 0.02 \text{ liters/min and benzene concentration}\\ \geq 10 \text{ ppmw and not exempt from controls}\\ \text{under } 61 \text{ Subpart FF} \end{array}$	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 D	escription of Requirement	Federally Enforceable (Y/N)	Future Effective Date
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© 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 Subpart FF	some cases monitoring requirements for		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**

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

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
BAAQMD Regulation 8 Rule 8	Organic Compounds–WASTEWATER (OIL-WATER) SEPARATORS (IND EXEMPT FROM CONTROLS) (6/15/94)	IVIDUAL DRAI	N SYSTEMS

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

Applicable Requirement	Regulation Title or Description of Req	uirement	Federally Enforceable (Y/N)	Future Effective Date
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	Y	
8-8-302		Keep all records		
	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		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 Stationar Subpart QQQ below)	y Sources (2/16/00, refer to NSPS	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	
Refinery MACT		P for Petroleum Refineries 'S FOR WASTEWATER STREAN	AS	

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

Applicable Requirement	Regulation Title or Description of Reg	uirement	Federally Enforceable (Y/N)	Future Effective Date
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© 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 Subpart FF	Benzene Waste Operations INDIVIDUAL DRAIN SYSTEMS exempt FI There are no 61 Subpart FF requirements related WMUs that are exempt from controls. [There a some cases monitoring requirements for the was but these requirements are addressed within the Processes.]	to control of air emissions for re record keeping, reporting, and in ste stream(s) received by this WMU,	Y	
NSPS Subpart QQQ		Refinery Wastewater Systems FOR INDIVIDUAL DRAIN SYST with 60.692-2, and do not address co		).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	

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

Applicable Requirement	Regulation Title or Description of Rec	juirement	Federally Enforceable (Y/N)	Future Effective Date
	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	Υ	
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	
60.692-7	When must facilities achieve compliance?	60.692-7 & 60.14(g) Up to 180 days after modifications, unless delayed to avoid shutdown (otherwise prior to initial startup)	Y	
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	

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

Applicable Requirement	Regulation Title or Description of F	Requirement	Federally Enforceable (Y/N)	Future Effective Date
	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

Applicable Requirement	Regulation Title or De	escription of Requirement	Federally Enforceable (Y/N)	Future Effective Date
BAAQMD Regulation 8 Rule 8	Organic Compounds–WASTEWATER (OIL-WATER) SEPARATORS REQUIREMENTS FOR OIL-WATER SEPARATORS			
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 cone. (as defined at 8- 8-210) [this exemption does not apply to sludge dewatering units or to slop oil vessels]	¥	

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

### Separator Cluster 30c

Applicable Requirement	Regulation Title or Description 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]	¥	
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	
8-8-301 8-8-302	Are there conditions for which vapors are not required to be routed to a control device?	301.1, 302.1, 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?	301.1 if capacity is < 300 gal/min and the fixed cover is gasketed w/no gaps > 1/8 in, subject to semiannual inspections, then vapors need not be routed to control device 302.1 if capacity is $\geq$ 300 gal/min then routing to a control device is not required if the fixed cover is full contact and vapor tight 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	
	If not exempt from the control device requirements, are there alternative provisions for compliance?	301.2 & 302.2 floating roof	Y	
	What are the requirements of the alternative?	301.2 & 302.2 Floating roof shall be vapor-tight, and shall be equipped with primary and secondary seals subject to gap criteria, with inspection of the primary seal every 5 years and inspection of the secondary seal annually	Y	
	Route vapors through a closed vent system to a control device?	301.3 & 302.3 required	Y	

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

### Separator Cluster 30c

Applicable Requirement	Regulation Title or Description of Requirement			Future Effective Date
	Closed vent system requirements?	301.3 & 302.3 95% efficiency, by weight requirement applies to the combination of collection and destruction of vapors	Y	
	Control device requirements?	301.3 & 302.3 95% efficiency, by weight requirement applies to the combination of collection and destruction of vapors	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	
<u>8-8-313</u>	Uncontrolled wastewater collection system components at petroleum refineries		N	
8-8-501	Are records required for bypassed wastewater?	501 for 114 required	Y	
8-8-501 <del>8-8-502</del>	How long are records to be kept?	501 <del>&amp; 502</del> keep all records	Y	
<del>8 8 502</del>	Are records required for units exempt from controls due to low concentration of pollutants?	<del>502</del> for 112 required	¥	
	Are records required for units exempt from controls due to low temperature of the influent wastewater?	<del>502</del> for 112 required	¥	
8-8-503	Are records required for visual inspections and repairs?	503 required for each inspection	Y	
	Are records required for Method 21 leak inspections and repairs?	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	

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

### Separator Cluster 30c

Applicable Requirement	Regulation Title or D	escription of Requirement	Federally Enforceable (Y/N)	Future Effective Date
	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 11 Rule 12		ssion Standards for Benzene Emissions nd Benzene Waste Operations (7/18/90,	N	
Refinery MACT	REQUIR	NESHAP for Petroleum Refineries EMENTS FOR WASTEWATER STREA	MS	
63.641	What is a Refinery MACT Group 1 wastewater stream?	$\begin{array}{l} 63.641\\ \text{if Total Annual Benzene} \geq 10 \text{ Mg/yr, then}\\ \text{each wastewater stream with flow rate} \geq \\ 0.02 \text{ liters/min } \underline{\text{and}} \text{ benzene concentration}\\ \geq 10 \text{ ppmw}  \underline{\text{and}} \text{ not exempt from controls}\\ \text{under 61 Subpart FF} \end{array}$	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© 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 Subpart FF	Benzene Waste Operations 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	

### 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

Applicable Requirement	Regulation Title or Do	escription of Requirement	Federally Enforceable (Y/N)	Future Effective Date
BAAQMD Regulation 8 Rule 8	Organic Compour 7	PARATORS		
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	
8-8-114 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	
8-8-501 8-8-502	How long are records to be kept?	501 & 502 keep all records	Y	
	Are records required for bypassed wastewater?	501 for 114 required	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	
BAAQMD Regulation 11 Rule 12		ssion Standards for Benzene Emissions ad Benzene Waste Operations (7/18/90,	N	

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

### **Non-EFRT or IFRT Tanks Cluster 40b**

Applicable Requirement	Regulation Title or D	escription of Requirement	Federally Enforceable (Y/N)	Future Effective Date		
Refinery MACT	REQUIR	NESHAP for Petroleum Refineries 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© 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 Subpart FF		Benzene Waste Operations REQUIREMENTS FOR TANKS				
61.343	When is this type of WMU subject to these requirements?	$\begin{array}{l} 61.343(a) \\ \text{when invoked by} \\ 61.342(c)(1)(ii) \\ \text{for facilities with Total Annual Benzene} \geq \\ 10 \text{ Mg/yr} \end{array}$	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			

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

### **Non-EFRT or IFRT Tanks Cluster 40b**

Applicable Requirement	Regulation Title or De	scription of Requirement	Federally Enforceable (Y/N)	Future Effective Date
	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	
	Requirement to keep openings closed not applicable when the cover and closed vent system are operated at negative pressure, subject to specified criteria?	61.343(a)(1)(i)(C) yes	Y	
	Are there conditions for which vapors are not required to be routed to a control device?	61.343(b)(1) Not required for non-aqueous streams if: TVP < 0.75 psi, or < 40,000 gallons & < 4.0 psi < 20,000 gallons & < 11.1 psi	Y	
	What is required for WMUs not routed to a control device?	61.343(b)(2) & (3) Fixed roof & P/V vent	Y	
	Visual inspection initially, and quarterly thereafter, to ensure that the cover and all openings are closed & gasketed properly?	61.343© required	Y	
	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	

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

### **Non-EFRT or IFRT Tanks Cluster 40b**

Applicable Requirement	Regulation Title or De	scription of Requirement	Federally Enforceable (Y/N)	Future Effective Date
	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 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 $\ge 95\%$ or benzene $\ge 98\%$	Y	
	What is required if the control device is a flare?	61.349(a)(2)(iii) comply with 60.18	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	
	What is required to demonstrate compliance of a control device that is not a flare?	61.349© performance tests	Y	
	What is required to demonstrate compliance of a flare?	61.349(d) demonstrate compliance per 60.18	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©	Y	

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

### **Non-EFRT or IFRT Tanks Cluster 40b**

Applicable Requirement	Regulation Title or Do	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© 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	
	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	

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

### **Non-EFRT or IFRT Tanks Cluster 40b**

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	
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 #465	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	
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 #11193	Permit conditions as follows:			
Part 1	Applies to S-0605 abated by A0607 and S-0610	Total Throughput for S-0605	Y	
Part 2	Applies to S-0605 abated by A0607 and S-0610	Flanges equipped with BACT	Y	
Part 3	Applies to S-0605 abated by A0607 and S-0610	Valves equipped with BACT	Y	
Part 6	Applies to S-0605 abated by A0607 and S-0610	Vent S-0605 to A-0607 at all times	Y	
Part 7	Applies to S-0605 abated by A0607 and S-0610	Vent S-0610 to A-0607 at all times	Y	

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

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

Applicable Requirement	Regulation Title or De	scription of Requirement	Federally Enforceable (Y/N)	Future Effective Date
Part 8	Applies to S-0605 abated by A0607 and S-0610	Abatement efficiency of 95% or more	Y	
Part 9	Applies to S-0605 abated by A0607	Carbon Monitoring requirement	Y	
Part 10	Applies to S-0605 abated by A0607 and S-0610	Annual average Benzene concentration <250 ppm	Y	
Part 11	Applies to S-0605 abated by A0607, and S-0610	Sample/Analysis Required	Y	
Part 12	Applies to S-0605 abated by A0607, and S-0610	Record keeping	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-0605, S-3110, S-3111		N	

### 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 D	escription of Requirement	Federally Enforceable (Y/N)	Future Effective Date
SIP BAAQMD Regulation 8 Rule 5	Organic Comp–unds – STORAC	GE OF ORGANIC LIQUIDS. REQUIRE FLOATING ROOF TANKS	MENTS FOR EX	TERNAL
8-5-111	EFRT operating requirements: When landing the floating roof on its support legs, is the tank to be emptied & either refilled or degassed ASAP?	111 yes, but only allowed for stock change, tank cleaning, or repairs, & requires written notice	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?	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	
8-5-311 8-5-320 8-5-321	EFR Rim Seals: vapor-mounted primary seal: liquid-mounted primary seal: mechanical-shoe primary seal:	311.1, 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	

# 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
	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	
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	

# 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
8-5-402	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	
	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	
BAAQMD Regulation 11 Rule 12	Hazardous Pollutants – National En Emissions from Benzene Transfer ( Operations (7/18/90, refer to NESH	Ν		

# 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	
NSPS Subpart Kb	Volatile Organic Liquid Storage Vessels REQUIREMENTS FOR EXTERNAL FLOATING ROOF 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.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 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	
	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	

# 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
	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	
	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.G.1.6 Wastewater Source-specific Applicable Requirements

### EFRT Tanks Cluster 45e

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

Applicable Requirement	Regulation Title or D	escription 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 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	
	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	

# Table IV.G.1.6 Wastewater Source-specific Applicable Requirements

### EFRT Tanks Cluster 45e

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

Applicable Requirement	Regulation Title or D	Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
60.116b©	Applicability records: Additional recordkeeping requirements for certain tanks.	$60.116b^{\odot}$ internal diameter & TVP of the stored product, if capacity $\geq 20,000$ gallons and TVP $\geq 2.2$ , OR capacity $\geq 40,000$ gallons and TVP $\geq 0.51$ keep record as long as the tank is in that service	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 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	
Refinery MACT	REQUI	NESHAP for Petroleum Refineries REMENTS FOR WASTEWATER STREA	MS	
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	

# Table IV.G.1.6 Wastewater Source-specific Applicable Requirements

### EFRT Tanks Cluster 45e

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

Applicable Requirement	Regulation Title or D	escription of Requirement	Federally Enforceable (Y/N)	Future Effective Date
	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© 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 Subpart FF		Benzene Waste Operations 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	
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	

# Table IV.G.1.6 Wastewater Source-specific Applicable Requirements

### **EFRT Tanks Cluster 45e**

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

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
	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	
Conditon #20361	Applies to S-3127	N	
Part 1	Throughput	Ν	
Part 2	Vapor Pressure Limit	N	
Part 3	Benzene Limit	N	
Part 4	Sampling of Vapor Pressure and Benzene	N	
Part 5	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 De	escription of Requirement	Federally Enforceable (Y/N)	Future Effective Date
BAAQMD Regulation 8 Rule 8	Organic Compounds–WASTEWATER (OIL-WATER) SEPARATORS SURFACE IMPOUNDMENTS exempt FROM CONTROLS			
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.1.7 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
	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	
BAAQMD Regulation 11 Rule 12		ssion Standards for Benzene Emissions nd Benzene Waste Operations (7/18/90,	N	
Refinery MACT	REQUIR	NESHAP for Petroleum Refineries EMENTS FOR WASTEWATER STREA	MS	
63.641	What is a Refinery MACT Group 1 wastewater stream?	$\begin{array}{l} 63.641 \\ \text{if Total Annual Benzene} \geq 10 \text{ Mg/yr, then} \\ \text{each wastewater stream with flow rate} \geq \\ 0.02 \text{ liters/min and benzene concentration} \\ \geq 10 \text{ ppmw and not exempt from controls} \\ \text{under 61 Subpart FF} \end{array}$	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© 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.1.7 Wastewater Source-specific Applicable Requirements

### **Bioreactor Cluster 50d**

#### S-4393 Bioreactor

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
NESHAP Subpart FF	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 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	Ν	
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 De	escription of Requirement	Federally Enforceable (Y/N)	Future Effective Date
BAAQMD Regulation 8 Rule 8	Organic Compounds–WASTEWA	TER (OIL-WATER) SEPARATORS (CO CONTROLS)	NTAINERS exc	empt FROM
	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.1.8 Wastewater Source-specific Applicable Requirements

### Containers (Portable Wastewater Handling Units) Cluster 60b

Applicable Requirement	Regulation Title or D	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	
8-8-114 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	
8-8-501 8-8-502	How long are records to be kept?	501 & 502 keep all records	Y	
	Are records required for bypassed wastewater?	501 for 114 required	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	
BAAQMD Regulation 11 Rule 12		ssion Standards for Benzene Emissions nd Benzene Waste Operations (7/18/90,	N	
Refinery MACT	REQUIR	NESHAP for Petroleum Refineries EMENTS FOR WASTEWATER STREAD	MS	
63.641	What is a Refinery MACT Group 1 wastewater stream?	$\begin{array}{l} 63.641\\ \text{if Total Annual Benzene} \geq 10 \text{ Mg/yr, then}\\ \text{each wastewater stream with flow rate} \geq \\ 0.02 \text{ liters/min and benzene concentration}\\ \geq 10 \text{ ppmw and not exempt from controls}\\ \text{under 61 Subpart FF} \end{array}$	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.1.8 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
	Clarification with respect to violations	63.647© 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 Subpart FF	Benzene Waste (	OperationsREQUIREMENTS FOR CONT	TAINERS	
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	
	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	

# 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 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	
	Requirement to keep openings closed not applicable when the cover and closed vent system are operated at negative pressure, subject to specified criteria?	61.345(a)(4) yes, but the container is not required to have a closed vent system, & the enclosure is not required to have all openings closed and sealed	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© required for the container 61.345© required for the enclosure	Y	
	Delay of repair allowed?	61.345© yes, for the container, per 61.350 61.345© 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	

# 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
	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)(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	
	What is required to demonstrate compliance of a control device that is not a flare?	61.349© 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©	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© daily inspect the continuous monitoring devices specified herein, except as specified in 61.354(d) & (e)	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 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	
	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	

# Table IV.G.1.8 Wastewater Source-specific Applicable Requirements

### Containers (Portable Wastewater Handling Units) Cluster 60b

#### Bins, Drums, Vacuum Trucks, S-6250 Oil Water Separator Tank abated by A-0630 and A-0631 Carbon Canisters, Vessels 1A & B and 2A and B (Carbon Washout Poly Tanks for S-1504 Tank)

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
Condition #12842	Permit condition applies as follows:		
Part 1	Applies to S-6250 abated by A0630 and S-6250 vented to abatement at all times A0631	Y	
Part 2	Applies to S-6250 abated by A0630 and A-0630 Carbon Replacement Requirement A0631	Y	
Part 3	Applies to S-6250 abated by A0630 and A-0631 Carbon Replacement Requirement A0631	Y	
Part 4	Applies to S-6250 abated by A0630 and Limits apply to non-methane HC A0631 emissions	Y	
Part 5	Applies to S-6250 abated by A0630 and Carbon Monitoring Requirement A0631	Y	
Part 6	Applies to S-6250 abated by A0630 and Recordkeeping for carbon life A0631	Y	
Part 7	Applies to S-6250 abated by A0630 and Record keeping A0631	Y	
Part 8	Applies to S-6250 abated by A-0630 Recordkeeping and A-0631	Y	
Condition #18137	Throughput Limit for S-6250	N	

#### Table IV.H.1.1 VOC (Cold Cleaners)

## 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
BAAQMD Regulation 8 Rule 1	Organic Compounds – General Provisions (6/15/	94)	

# 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
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 Operat	ions (9/16/98)	
8-16-118	Limited Exemption, Compounds with Low Volatility	Ν	
8-16-303	Cold Cleaner Requirements	Ν	
8-16-303.1	General Operating Requirements	Ν	
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	Ν	
8-16-303.1.4(a)	Covered Containers for Waste Solvent Awaiting Pick-up	N	
8-16-303.1.5	Solvent Evaporation Minimization Devices shall not be Removed	N	
8-16-303.1.6	Solvent Spray Requirements	Ν	
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	Ν	
8-16-303.3.1	Container	Y	
8-16-303.3.2	Solvent Evaporation Reduction for Idle Equipment	Ν	
8-16-303.3.3	Used Solvent Returned to Container	Ν	
8-16-303.3.4	Label Stating Operating Requirements	Y	ľ
8-16-501	Solvent Records	Ν	
SIP Regulation 8 Rule 16	Organic Compounds – Solvent Cleaning Operat	ions (6/15/94)	
8-16-303	Cold Cleaner Requirements	Y	
8-16-303.1	General Operating Requirements	Y	
8-16-303.1.4	Waste Solvent Disposal	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
8-16-303.1.5	Solvent Evaporation Minimization Devices shall not be Removed	Y	
8-16-303.1.6	Solvent Spray Requirements	Y	
8-16-303.3.2	Solvent Evaporation Reduction for Idle Equipment	Y	
8-16-303.3.3	Used Solvent Returned to Container	Y	
8-16-501	Solvent Records	Y	
8-16-501.2	Facility-wide Quarterly Solvent Usage Records	Y	
Condition #17527	Applies to S-4426 S-4427, S-4428	·	
Part 1	High IBP (> 248 F) solvent restriction	Y	
Part 2	Annual solvent throughput limit	Y	
Part 3	Recordkeeping requirement	Y	
Condition #18137	Throughput Limits	N	

### 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	X				x	x
102-MTBE Plant		х	х	Х				х	
104-FCC Gas Recovery Unit		X	X	Х				X	
105-FCC H2S Removal		X							x
106-FCC Caustic Treating		x						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
107-FCC CO Boiler and Misc		х							X
108-DeIsobutanizer		х	х	X				x	x
110-Propylene Polymer		x							
120-Pole Yard Tanks		x			x applicable components– only – Benzene service		x applicable components– only – Benzene service	x	
121-LPG Spheres & Racks		X							
127-Sulfur Recovery Unit		X							
135/136 C5 SHU/TAME Plant		X	X	X				X	X
137-H2SO4 Alkylation – new		x	X	X				X	x
305-Boiler Shop Furnace		x							
401-Solvent Deasphalting (SDA)		x	X	X				X	
402-H2 Mfg. Plant A & B Train		х							
403-TKC Reaction/Distillation		х	X	X				x	
404-TKN Reaction		x						x	
405-IsoCracking Reaction		x						x	
406-Iso Distillation/Gas Recovery		X						x	
407-NH3-H2S Recovery		X							
408-Isomax H2 Booster	X	X							
409-Isomax Tar Stripper		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
410-Misc Utilities		x							
412-4 H2S Plant		X							
413-Flare Gas Recovery		X							
414-RLOP LNC Plant		X						x	
415-RLOP LNC Distillation Section		X	X	X				х	
416-RLOP LNHF Plant		x						х	
417-RLOP HNC Plant		x						x	
418-RLOP HNC Distillation Section		x						x	
419-RLOP HNHF Plant		x	X	X				x	
420-RLOP LNHF Distillation Section		X	X	X				X	
421-RLOP No 2 NH3- H2S Removal		X	X	X				X	
422-RLOP Gas Recovery Unit		X	X	X				X	
423-H2 Recovery Unit		x	X	X					x
425-RLOP Flares		x							
429-H2S Mfg. Plant B Train		x							
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	

# 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
951-Naptha Hydrotreater		X			x applicable components– only – Benzene service		x applicable components– only – Benzene service	x	
952-No 5 Rheniformer		x						x	
953-No 5 H2S & Flare Gas Recovery		x							
954-LSFO H2 Booster		x							
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		x						x	
962-Penhex Isomerization		X	x	X	x applicable components– only – Benzene service		x applicable components– only – Benzene service	X	X
966-Naptha 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	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
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	
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		х						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	

## 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 (3/18/98)							
8-18-100	General/Applicability	Y						
8-18-200	Definitions	Y						
8-18-301	General Standard	Y						
8-18-302	Valves	Y						
8-18-303	Pumps and compressors	Y						
8-18-304	Connections	Y						
8-18-305	Pressure relief devices	Y						
8-18-306	Non-repairable equipment	Y						
8-18-307	Liquid Leaks	Y						
8-18-308	Alternate compliance	Y						
8-18-401	Inspection	Y						
8-18-402	Identification	Y						
8-18-403	Visual inspection schedule	Y						
8-18-404	Alternate inspection schedule	Y						
8-18-405	Alternate inspection reduction plan	Y						
8-18-406	Interim Compliance	Y						
8-18-501	Portable Hydrocarbon Detector	Y						
8-18-502	Records	Y						
BAAQMD Regulation 8 Rule 28	Episodic Releases From Pressure Relief Devices at Petroleum Refineries and Chemical Plants (3/18/98)	Ν						
8-28-100	General/Applicability	Ν						
8-28-200	Definitions	Ν						
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	<u>NY</u>						
8-28-401	Reporting at Petroleum Refineries and Chemical Plants	Ν						
8-28-402	Inspection	Ν						
8-28-403	Records	Ν						
8-28-404	Identification	Ν						

# 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
8-28-405	Prevention Measures Procedures	Ν	
SIP Regulation 8 Rule 28	Pressure Relief Valves at Petroleum Refineries and Chemica	l Plants (6/15/94)	
8-28-100	General/Applicability	Y	
8-28-200	Definitions	Y	
8-28-301	Pressure Relief Valve	Y	
8-28-401	Reporting	Y	
8-28-402	Inspection	Y	
8-28-403	Records	Y	
8-28-404	Identification	Y	
NSPS Part 60 Subpart GGG; BAAQMD Regulation 10-59	Standards of Performance for Equipment Leaks (Fugitive Emission Source BAAQMD Standards of Performance for New Stationary Sources (4/19/89		
40 CFR 60.590	Applicability	Y	
60.591	Definitions	Y	
60.592	Subject to provisions of Part 60, Subpart VV	Y	
60.593	Exceptions	Y	
BAAQMD	Incorporates by reference 40 CFR 60 Subpart GGG	Y	
Regulation 10-59			
NSPS Part 60 Subpart QQQ; BAAQMD Regulation 10 Rule 69	Standards of Performance for VOC Emission From Petroleum Refinery Wastewater Systems (7/18/95);BAAQMD Standards of Performance for New Stationary Sources (12/20/95) [see Wastewater Cluster 20q for QQQ exemption requirements]	Y	
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	1
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	

# 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
60.693-2	Alternative standards for oil water separators	Y	
NSPS Part 60 Subpart VV; BAAQMD Regulation 10 Rule 52	Standards of Performance for Equipment Leaks (Fugitive Emission Source BAAQMD Standards of Performance for New Stationary So		
60.480	Applicability	Y	
60.481	Definitions	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©, 60.482-2(d), (e), or (f)	Y	
60.482-2(a)(2)	Weekly visual inspection of each pump, except for (e), (f), or (g)	Y	
60.482-2(b)	Air measurement >10,000 ppm or dripping liquid indicates leak	Y	
60.482 –2 ©	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 connecting systems	Y	
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, them 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 flanges and other connectors	Y	

# 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
60.482-8(a)	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	Y	
60.482-9(b)	Repair may be delayed for isolated equipment	Y	
60.482-9©	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	Y	
60.482-10	Requirements for Closed-vent systems and control devices	Y	
60.482-10©	Combustion devices ≥95% destruction efficiency or ≥0.75 seconds and ≥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	
<u>60.484</u>	Equivalence of means of of emission limitation	<u>Y</u>	
60.485	Test Methods and Procedures	Y	
60.486	Record Keeping	Y	
60.487	Reporting	Y	
BAAQMD Regulation 10 Rule 52	Incorporates by reference 40 CFR 60 Subpart VV	Y	
NESHAP Part 61 Subpart J	National Emission Standards for Equipment Leaks (Fugitive Emission S	Sources) of Benzer	ne (6/6/84)
61.110	Applicability	Y	
61.111	Definitions	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 Operati BAAQMD National Emission Standard for Benzene Emissions from Benz Benzene Waste Operations (4/19/89)		erations and
61.340	Applicability	Y	
61.341	Definitions	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	

# 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
61.349(a)(1)(i)	Closed vent system designed to operate with no detectable emissions (<500 ppm).	Y	
<del>61.349(a)(1)(ii)</del>	Vent systems that contain any bypass line that could divert the vent stream away from a control device used to comply with this subpart shall install, maintain, and operate according to manufacturer's specifications a flow indicator that measures the vent stream flow at least once every 15 minutes, except as provided in (a)(1)(ii)(B).	¥	
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 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	
BAAQMD Regulation 11 Rule 12	Incorporates by reference 40 CFR 61 Subpart FF	N	
NESHAP Part 61 Subpart V; BAAQMD Regulation 11 Rule 7	National Emission Standards for Equipment Leaks (Fugitive Emis Hazardous Pollutants: Benzene (3/6/85)	sion Sources) (6/6	5/84);
40 CFR 61.240	Applicability: VHAP service	Y	
61.241	Definitions	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	

# Table IV.H.2.1 VOC SourcesSource-specific Applicable Requirements

Applicable Requirement	Regulation Title or Description of Requirement		Future Effective Date
61.242-2(b)	Air measurement >10,000 ppm or dripping liquid indicates leak	Y	
61.242-2 ©	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)	I For 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	
	$\mathbb{O}(1)$ Any value 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	
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 Standards	Y	
61.242-8(a)	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	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©	Delay of repair for valves is only allowed under certain circumstances	Y	

# 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
61.242-10(d)(1)	Only dual-mechanical seal pumps qualify for delay of repair	Y	
61.242-10(d)(2)	Pump leaks must be repaired within 6 months	Y	
61.242-11	Requirements for closed-vent systems and control devices	Y	
61.242-11©	Combustion devices ≥95% destruction efficiency or ≥0.50 seconds and ≥760°C	Y	
61.242-11(f)	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	
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	General: Equipment must be uniquely marke	ed	
11-7-100	General/Applicability	Ν	
11-7-200	Definitions	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	
11-7-305	Sampling Connecting System Standards	Ν	
11-7-306	Open-ended Valve Standards	Ν	
11-7-307	Valve Standards	Ν	
11-7-308	Pressure Relief Devices in Liquid Service, Flanges and Other Connector Standards	Ν	
11-7-309	Product Accumulator Vessel Standards	Ν	
11-7-310	Delay of Repair Limitations	Ν	
11-7-311	Closed Vent Systems and Control Device Standards	Ν	
11-7-312	Alternative Standards for Valves in Benzene Service	Ν	
11-7-313	Alternative Standards for Valves - Skip Period Leak Detection and Repair	Ν	
11-7-314	Alternative Means of Emission Limitation	Ν	
11-7-601	Monitoring shall be conducted as specified in 40 CFR 61 and the Manual of Procedures	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
NESHAP Part 63 Subpart CC	National Emission Standards for Hazardous Air Pollutants from Petroleum Ref		
63.640(a)	Applicability	Y	
63.641	Definitions	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©	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 22003	Applies to A-414, A-620 – 625, A-627, A-628	Y	

### Table IV.H.31. VOC Sources (Paint Booth)

## Table IV.H.3.1 VOC Sources Source-specific Applicable Requirements

### Paint Booth

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	

# Table IV.H.3.1 VOC Sources Source-specific Applicable Requirements

## Paint Booth

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
BAAQMD Regulation 8 Rule 4	Organic Compounds – General Solvent and Surface Coating O	perations (5/15/96	)
8-4-302	Solvents and Surface Coating Requirements	Ν	
8-4-302.1	Emissions less than 5 tons per year	Ν	
8-4-302.2	Abatement $\geq 85\%$	Ν	
8-4-302.3	$VOC \le 3.5 \text{ lb/gal}$	Ν	
8-4-312	Solvent Evaporation Loss Minimization	Ν	
8-4-312.1	Storage and Disposal of Solvent Impregnated Cloth or Paper	Ν	
8-4-312.2	No Organic Compounds for Cleanup of Spray Equipment Unless Controls are Used	Ν	
8-4-312.3	Closed Containers for Spent or Fresh Organic Solvents	Ν	
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 and Solvent Used	Y	
8-4-501.3	Daily Recording of Key System Operating Parameters	Y	
8-4-501.4	Records Retention	Y	
SIP Regulation 8 Rule 4	Organic Compounds – General Solvent and Surface Coating Op	oerations (12/20/95	5)
8-4-302	Limitation on Solvents and Surface Coatings	Y	
BAAQMD Regulation 8 Rule 19	Organic Compounds – Surface Coating of Miscellaneous Metal Parts	and Products (12/	/20/95)
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	

# Table IV.H.3.1 VOC Sources Source-specific Applicable Requirements

## Paint Booth

Applicable Requirement	Regulation Title or Description of Requirement		Future Effective Date
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	
8-19-407	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	
<b>D</b> 1 1 0 1 0 1			
BAAQMD Regulation 8 Rule 31	Organic Compounds – Surface Coating of Plastic Parts and Pr	roducts (12/20/95)	
Regulation 8	Organic Compounds – Surface Coating of Plastic Parts and Pr Exemption, Low usage coatings	roducts (12/20/95)	
Regulation 8 Rule 31			
Regulation 8 Rule 31 8-31-111	Exemption, Low usage coatings	Y	
Regulation 8 Rule 31           8-31-111           8-31-302	Exemption, Low usage coatings General VOC Limit	Y Y	
Regulation 8 Rule 31           8-31-111           8-31-302           8-31-306	Exemption, Low usage coatings General VOC Limit Flexible Coating VOC Limits	Y Y Y	
Regulation 8 Rule 31           8-31-111           8-31-302           8-31-306           8-31-307	Exemption, Low usage coatings General VOC Limit Flexible Coating VOC Limits Prohibition of Specification	Y Y Y Y Y	
Regulation 8 Rule 31           8-31-111           8-31-302           8-31-306           8-31-307           8-31-309	Exemption, Low usage coatings         General VOC Limit         Flexible Coating VOC Limits         Prohibition of Specification         Specialty Coating VOC Limits	Y Y Y Y Y Y	
Regulation 8 Rule 31           8-31-111           8-31-302           8-31-306           8-31-307           8-31-309           8-31-310	Exemption, Low usage coatings         General VOC Limit         Flexible Coating VOC Limits         Prohibition of Specification         Specialty Coating VOC Limits         Spray Application Equipment Limitations	Y Y Y Y Y Y Y	
Regulation 8 Rule 31           8-31-111           8-31-302           8-31-306           8-31-307           8-31-309           8-31-310           8-31-310.1	Exemption, Low usage coatings General VOC Limit Flexible Coating VOC Limits Prohibition of Specification Specialty Coating VOC Limits Spray Application Equipment Limitations HVLP Spray; or	Y Y Y Y Y Y Y Y	
Regulation 8 Rule 31           8-31-111           8-31-302           8-31-306           8-31-307           8-31-309           8-31-310           8-31-310.1           8-31-310.2	Exemption, Low usage coatings         General VOC Limit         Flexible Coating VOC Limits         Prohibition of Specification         Specialty Coating VOC Limits         Spray Application Equipment Limitations         HVLP Spray; or         Electrostatic Spray; or	Y Y Y Y Y Y Y Y Y	
Regulation 8 Rule 31           8-31-111           8-31-302           8-31-306           8-31-307           8-31-309           8-31-310           8-31-310.1           8-31-310.2           8-31-310.3	Exemption, Low usage coatings         General VOC Limit         Flexible Coating VOC Limits         Prohibition of Specification         Specialty Coating VOC Limits         Spray Application Equipment Limitations         HVLP Spray; or         Electrostatic Spray; or         Detailing Gun; or	Y Y Y Y Y Y Y Y Y Y	
Regulation 8 Rule 31           8-31-111           8-31-302           8-31-306           8-31-307           8-31-309           8-31-310           8-31-310.1           8-31-310.2           8-31-310.3           8-31-310.4	Exemption, Low usage coatingsGeneral VOC LimitFlexible Coating VOC LimitsProhibition of SpecificationSpecialty Coating VOC LimitsSpray Application Equipment LimitationsHVLP Spray; orElectrostatic Spray; orDetailing Gun; orOther Method Approved in Writing by the APCO	Y Y Y Y Y Y Y Y Y Y Y Y	
Regulation 8 Rule 31           8-31-111           8-31-302           8-31-306           8-31-307           8-31-309           8-31-310           8-31-310.1           8-31-310.2           8-31-310.3           8-31-310.4           8-31-320	Exemption, Low usage coatingsGeneral VOC LimitFlexible Coating VOC LimitsProhibition of SpecificationSpecialty Coating VOC LimitsSpray Application Equipment LimitationsHVLP Spray; orElectrostatic Spray; orDetailing Gun; orOther Method Approved in Writing by the APCOSolvent Evaporative Loss Minimization	Y Y Y Y Y Y Y Y Y Y Y Y Y	

# Table IV.H.3.1 VOC Sources Source-specific Applicable Requirements

## Paint Booth

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
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)	
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	Ν	
8-32-302.1	High Solids Coatings	Ν	
8-32-302.2	Low Solids Coatings	Ν	
8-32-303	Furniture, Custom Cabinetry and Custom Architectural Millwork Limits	Ν	
8-32-303.1	High Solids Coatings	Ν	
8-32-303.2	Low Solids Coatings	Ν	
8-32-305	Prohibition of Specification	Y	
8-32-307	Alternative Compliance, Section 8-32-302	Ν	
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	Ν	
8-32-404	Alternative Compliance Petition and Approval	Ν	
8-32-501	Records	Ν	
8-32-501.1	Maintain Data Necessary to Evaluate Compliance	Ν	
8-32-501.2	Daily Coating Usage Records	Y	

# Table IV.H.3.1 VOC Sources Source-specific Applicable Requirements

## Paint Booth

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
8-32-501.3	Daily Recording of Key System Operating Parameters	N	
8-32-501.4	Records Retention	Y	
SIP Regulation 8 Rule 32	Organic Compounds – Wood Products Coating (12/20/95)		
8-32-111	Exemption, Small coating operations	Y	
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:	·	
Part 1	Annual coating usage limit	Y	
Part 2	Hexavalent chrome coating brush application requirement	N	
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	N	
Part 2	Daily POC emission limit	N	
Part 3	Toxic emission limit	N	
Part 4	Recordkeeping 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-4095, 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-4262, S-4265, 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. Conditions #16393 and #16698 are considered part of or linked to these conditions. **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.

В.

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	5,772.0 ton/yr	Nox	6,151.0 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.

Listed below are the maximum calendar month emission limits for refinery activity. These limits provide C. 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)	15,500 BPOD
Light Neutral Hydrofinisher(S-4341)	19,000 BPOD
Heavy Neutral Hydrocracker(S-4342)	20,000 BPOD
Heavy Neutral Hydrofinisher(S-4343)	8,000 BPOD
TKC Unit (Changed from 52K BGY 3/1/95	5) 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 332 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	Frnace	Enforceable Limit MMBtu/day (HHV)	Used for Fees MMBtu/h (HHV)
S-4330	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	264.0	11.0

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 30 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 (basis: 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 . (basis: Regulation 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	Units
Area	Name	Description	
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.

#### TABLE II

Refinery	Meter	Meter	<b>TT 1</b> /
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

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:

- 1. T-241
- 2. T-242
- 3. T-907
- 4. 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	Meter	Meter	Units
Area	Name	Description	
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	Meter	Meter	Units
Area	Name	Description	
CRACKING	G528Y	Tank Blanketing to Petrolite Hill	SCF/D
CRACKING	G301	Natural Gas Blanketing to Poleyard Tkg.	
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

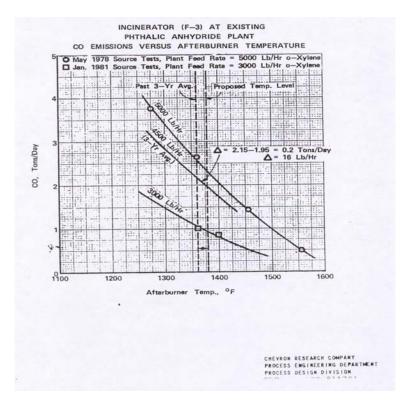
Phthalic Anhydride Plant Incinerator

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)	Hoteling		Heating for Minas Crude	Discharging
Mater Chin City	(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. STEAM SHIPSFUEL CONSUMPTION FOR VARIOUS OPERATIONS

Steam Ship Size	Maneuver (Transit) (Fuel Oil) Gal/hr	Hoteling 100% (Fuel Oil) Gal/hr	Heating for Minas Crude (Fuel Oil) Gal/hr/MBBL	Discharging (Fuel Oil) 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

Ship	Maneuver (Transit) (Diesel) Gal/hr	Hoteling 100% Diesel Gal/hr	Discharging (Diesel) Gal/hr/MBBL	Comments
Exxon Galvaston (Tug permanently attached to barge)	190	42	30	Use tug assist emission factors
Gas Turbines	341	42	30	
Barges	See tug assist fuel consumption table	0	30	Use tug assist emission factors

## APPENDIX G

# TABLE IV. TUG ASSISTFUEL CONSUMPTION FOR VARIOUS OPERATIONS

Fuel Consumed

	(Diesel (Gal/hr)
Tug Assist for Ship $\leq$ 50 MDWT	65.56
Tug Assist for Ship > 50 MDWT	131.12
Tug Assist for Barge $\leq 100$ MBBLS	65.56
Tug 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 w % Sulfur, 0.43 w % Nitrogen, 18° 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 Assist Emissions = (lbs pollutant/call)	Tug Assist Time (hrs/call)	Fi x	uel Consumption (Table IV) (gal/hr) (Appen. G)	X	Factor (Appen. I, Table E) (lb/gal)
	Tug Assi Barge Tanker Lighter Barge Lighter Tanker (Add 1 hr if vessel w		6 hrs 4 hrs 4 hrs 4 hrs 4 hrs		
Transit Emissions (Ships	<u>Only)</u>				
Transit Emissions = (lbs pollutant/call)	Transit Time (hrs/call)	Х	Fuel Consumption (Appen. G Tables I II, III, gal/hr)		Factor (Appen. I, Table E) (lb/gal)
	Tanker Lighter Tanker	essel wen	Per Call 6 hrs 4 hrs t to Pt. Orient Whar	f)	
Hoteling Emissions (Shi					
Hotel Emissions = (lbs pollutant/call)	Hotel Time (hrs)	X	Fuel Consumptio (Appen. G, Table I, II, III, gal/hr)	es x	Factor (Appen. I, Table E) (lb/gal)
Hotel Time = Dock hrs + *Bracketed calculation ind ** <u>Lighter Rates</u> 1. Crude lighter rate = 2. If other than crude: a. 25 Mbbls/hr if is >29 MDWT or >50 Mbbls b. 5 Mbbls/hr if 1 is $\leq$ 29 MDWT or $\leq$ 50 Mbbl b	Lightered **Lighte eluded only if ship wa 25 Mbbls/hr lighter vessel ship arge ighter vessel ship		$\frac{(bbls)}{bls/hr} + 2 hrs]*$		(10/gai)

# Emissions (Discharge Only)

Emissions (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				
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 (# of Pollutant/	Pollutant				
	Billion Net BTU)	TSP	NMHC	Nox	SOx	СО
1.	Fuel Oil					
	a. Boilers	56	7	470	515.2	35
	b. Furnaces	56	7	358.4	515.2	35
2.	Fuel Gas					
	a. New Furnaces	10	3	52.3	27	39.8
					(160 ppm H2S)	
	b. Existing Furnaces	10	3	170	3.88	17
					(23 ppm)	
	c. Flares (Pilot)	10	3	170	3.88	17
	d. Boilers					
	<250 x 10 BTU/Hr	10	3	300	3.88	17
3.	Naphtha	12.2	5.2	196.6	12.51	25
4.	Natural Gas					
	a. Internal Comb. Eng.	10	105	3400	0.6	430
B.	Fugitive					
1.	Valves (#/day/valve)	-	-	-	-	-
	HC Vapor	-	1.416	-	-	-
	Light Liquid RVP>5	-	0.576	-	-	-
	Heavy Liquid RVP<5	-	0.012	-	-	-
2.	Pump Seals (#/day/seal)					
	a. Mechanical					
	Light Liquid RVP>5	-	6.0	-	-	-
	Heavy Liquid RVP>5	-	1.104	-	-	-
	b. Packing					
	Light Liquid RVP>5	-	10.0	-	-	-
	Heavy Liquid RVP>5	-	1.84	-	-	-
3.	Compressor Seals					
	(#/day/seal)	-				
	H2>50%	-	2.64	-	-	-
	HC Vapor	-	33.6	-	-	-
4.	Cooling Towers					
	(#/m gal)	-	0.7	-	-	-
5.	Separators (#/m gal)	-	0.2	-	-	-
6.	Drains (#/day/drain)	-	1.68	-	-	-

# VI. Permit Conditions

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

# C. Refinery Product Loading

Note: Unless otherwise stated, product emission factors are for loading without vapor recovery.

# D. Asphalt Blowing

Asphalt Product	Airblown Asphalt Content (%)	A.P. 42 Emission <sup>1</sup> Factor for Airblown Asphalt (lb/ton)		Emission Factor for <sup>2</sup> This Product (lb/ton)			
		СО	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)

Operation	Р	0	NOx	SOx	CO
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%) HC Vapor Service Light HC Liquid (RVP >0.5) Heavy HC Liquid (RVP <0.5)	250 ea. 635 ea. 1050 ea. 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	15
	H2 Service (>50%)	17 ea.
	HC Service	11 ea.
4.	Drains All Service	227 ea.
	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 #710, #711, and #712

For S-9304, Gasoline dispensing facility, G6042:

Condition 710

\*1. To reduce flowrate between 8 to 8.6 gallons per minute, a flow limiter shall be permanently installed when using Emco-Wheaton nozzles. (basis: (cumulative increase)

Condition 711

\*1. Vapor flowrate to Hirt processor shall not exceed 17.2 gallons per minute. (basis: (cumulative increase) Condition 712

\*1. To measure gauge pressure, a magnahelic shall be permanently installed on the vapor line of the dispenser. (basis: cumulative increase)

COND# 1046 -----

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 the

A-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

when 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)
2. The sum of $(an anotae of S 2141 and S 2226 shall$

- 3. The owner/operator of S-3141 and S-3226 shall
- maintain records of preventative maintenance
- downtime and/or API inspections to confirm
- compliance with above conditions. These records
- shall be kept on site for at least 60 months from
  - the date of entry.
    - (basis: cumulative increase)

#### Condition #1046

For S 3141:

- \*1 Sulfur Storage Tank S 3141 shall be abated by the properly maintained and properly operated A Venturi Scrubber at all times of operation, except during preventative maintenance at the A-43 Scrubber (basis: cumulative increase)
- Downtime of the A 43 Scrubber shall be minimized to the extent practicable, and emissions from S 3141 \*? shall be minimized to the extent practicable during periods of preventative maintenance. Additionally, liquid transfers into S 3141 shall be minimized during periods of preventative maintenance. In no event shall preventative maintenance downtime exceed 51 hours in any consecutive 30 day period. (basis: cumulative increase)
- \*3 The owner/operator of S 3141 shall maintain records of preventative maintenance downtime to confirm compliance with above conditions. These records shall be kept on site for at least 60 months from the date of entry. (basis: cumulative increase)

(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 space
- above 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 which 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)
- 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 10-26, Section 501. (basis: Regulation 10Rule 10 26 501)
- 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 Access hatch Guide pole/Well (amended per AN 8452)

Gauge float well Gauge hatch/Sample well Control Technique Bolted cover, gasketed Slotted with a pole sleeve that projects below liquid surface, a zero-gap pole wiper, and a exterior flexible barrier/cover that covers all of theslots 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: The owner/operator of S-3100 shall have the exterior flexible barrier/cover installed by 2/4/04. (BACT)

6. 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
	-

3,50	0,000 barrels	of material	throughput during

any consecutive twelve-month period. (cum inc)

2. The owner/operator of S-399 shall only store

materials with a vapor pressure that shall not

exceed 10.0 psia and the annual average vapor

pressure shall not to exceed 7.0 psia. (cum inc)

3. 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 made

available 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:

-Sources 1913, 1914	225,000 bbl/yr ea.
-Sources 2917 & 2918	20,000 bbl/yr ea.
-Source 1908	1,750,000 bbl/yr
-Source 1915	1,000,000 bbl/yr
-Source 1919	500,000 bbl/yr
-Source 2920	150,000 bbl/yr
-Source 2921	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 ho 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 -----

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

Pumps, heavy liquid:	Single mechanical seal
Valves, heavy liquid:	Flexible graphite packing
Valves, light liquid:	Live-loaded or flexible graphite packing
Flanges, heavy liquid	Graphite gasket
Flanges, light liquid:	Graphite gasket
Compressors, vapor:	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 A-620 through 626 and A-414 Thermal Oxidizers shall have a minimum VOC destruction efficiency of 95% by weight, minimum of 1 sec residence time, and minimum of 1400 deg F oxidizer temperature. (basis: BACT)
- 2. Each Thermal Oxidizer shall have a continuous temperature monitor. Each pump duct shall have a continuous flow monitor. (basis: BACT)
- 3. The owner/operator shall monitor twice daily and record in a District approved log the temperature of each of the thermal oxidizers. 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: 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 #101	60					
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, 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 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 (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 Tanl	ks:				
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 #10597 For S-6054:

- 1. Hydrocarbon emissions from S-6054 shall not exceed 2.5 lbs/day, averaged over any 30-day consecutive period. (basis: cumulative increase)
- 2. Total dissolved solids at the S-6054 inlet shall not exceed 1000 ppm (wt), averaged over any consecutive 30-day period. (basis: cumulative increase)
- 3. Deleted.

Condition #10598 For S-6055:

- 1. Hydrocarbon emissions from S-6055 shall not exceed 2.5 lbs/day, averaged over any 30-day consecutive period. (basis: cumulative increase)
- 2. Total dissolved solids at the S-6055 inlet shall not exceed 1000 ppm (wt), averaged over any consecutive 30-day period. (basis: cumulative increase)
- 3. Deleted.

#### 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:

Throughput at S-1489 shall not exceed 2,500,000 barrels of non-exempt stock during any consecutive 12-month period. (basis: (cumulative increase)

### Deleted

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)

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:

Throughput at S-992 shall not exceed 6,000,000 Bbls of non-exempt stock in any consecutive 12-month period. (basis: cumulative increase.

#### Deleted.

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) 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 Guide pole/Well (amended per AN 7919)	Control Technique Bolted cover, gasketed Slotted with a pole sleeve 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)
- :
- 1.

#### 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: BACT)

- 2. The owner/operator shall conduct a District approved source test on every fifteenth day that S-4285 thruput-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: BACT2-1-301)
- 3. 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: <u>BACToffsets</u>)

- 4. The concentration of SO2 emitted from S-4285 shall not exceed 330 ppmv/24 hour, corrected to 3% O2. (basis: BACT)
- 5. 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)
- 6. 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)
- 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)

- 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.
  - (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)

#### Condition #11193 For S-605,-S-610, S-660, S-6061, S-6066:

S-6061 – Alkane Groundwater Treatment Plant; S-0605–(Carbon Bed Feed Surge Tank), S-0610 – Process Vessel; A-607 (d-607A/B, two 175 lb carbon canisters in series); S-6066 Carbon Bed Feed Surge Tank; S-660 Process Vessel; and A-0615 (D-615A/D-615B) Carbon canisters.:

- 1. Total throughput for S-0605 (D-605, Carbon Bed Feed Surge Tank) and S-6066 (d655) carbon Bed Feed Surge Tank combined for a 12 month consecutive period shall not exceed 84.1 million gallons. (basis: cumulative increase)
- 2. Chevron shall equip flanges associated with S-6061, S-0605, and S-0610, S-6066 and S-0660 with graphite packed gaskets, or District approved equivalent technology. (basis: BACT)
- 3. For S-6061, S-0605, and S-0610, S-6066 and S-0660, Chevron shall use only live loaded valves or graphitic packed valves, or District approved equivalent technology. (basis: BACT)
- 4. No light liquid pumps shall be used at these sources, unless their shaft seals are vented to a District approved abatement device that achieves a minimum of 95% VOC destruction efficiency, or District approved equivalent technology. (basis: BACT)
- Valves pump seals, and flanges shall comply with regulation 8 requirements (basis: Regulation 8,Rule 18) 6.S-0605 and S-6066 shall be vented at all times of operation to A-0607 (D-607A/D-607B, 2 ea 175 lb carbon canisters in series) and A-0615. (basis: BACT)

- S-0610 (process vessel) shall be vented at all times of operation to A-0607, either directly, or via S-0605.
   S-0660 Process vessel shall be vented at all times of operation to A0615, either directly or via S-6066. (basis: BACT)
- 8. A-0607 and A-0615 shall have an overall abatement efficiency of at least 95% by concentration, unless the following criteria are met:

The first carbon canister in series shall be changed out with unspent carbon upon detection of an outlet concentration of greater than 1000 ppmv measured as C1 above background 1 cm from the outlet with a flame ionization detector (OVA-FID) or other method approved in writing by the APCO, and

The outlet of the last carbon in series shall not exceed 500 ppmv measured as C1 above background 1 cm from the outlet with a flame ionization detector (OVA-FID) or other method approved in writing by the APCO. (basis: BACT)

- 9. The operator of A0607 and A0615 shall measure the organic compound concentration at least once per month. Readings shall be taken at the inlet and outlet of the first carbon canister and the outlet of the second carbon canister in series. These monitoring readings shall be recorded in a log as the readings are taken. The monitoring results shall be used to determine the carbon change out frequency necessary to maintain compliance with Part #8. (basis: BACT)
- 10. The annual average liquid benzene concentration in S-0605 and S-6066 shall not exceed 250 ppm (t) respectively. (basis: toxics)
- 11. Sampling and analysis of the fluid in S-0605 and s6066 shall be conducted semi-annually to verify compliance with Part #10. (basis: toxics)
- 12. The operator shall keep records of the following:
  - a. throughput
  - b. carbon change outs
  - c. each monitor reading or analysis result and the day of operation they are taken
  - d. S-0605 and S-6066 liquid sample results

These records shall be kept on file for a minimum of 5 years following the date the data is recorded and shall be made available to District personnel on request. (basis: -BACT, toxics)

#### 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, 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)
- 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.
- 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 #11775 S – For S-4701, S-4702, S-4703, IC Engines, at Plant 10

- 1. These sources (1500 scfm Portable Air Compressor powered by Diesel Engine) shall cease operation by January 31, 1995. (basis: Regulation 2, Rule 4)
- 2. Daily records shall be maintained, in a District approved logbook, for the hours of operation of the engines, and fuel usage. The logbook shall be kept on site and shall be made available to the District staff upon basis: record keeping)
- 3. Visible particulate emissions from the engine shall not exceed 1.0 on the Ringelmann Chart. (basis: Regulation 6)

### 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. Or vol.?)
  - (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 liquid mounted primary seal, 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 liquid mounted primary seal, 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:

jeci i	o District approval, prior to instann	ig the foot 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
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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

1. 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:

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'''' (basis: toxics)

#### Condition # 12842 For S-6250:

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- 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 on<u>ce during</u> <u>each 24 hour period of operation. At least one monitoring event shall take place during each</u> <u>period when S-6250 is in service a daily basis</u>. 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 <del>two</del> 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.

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 1 inch 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:

- 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)
- 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)

The owner/operator of S-3202 shall not store any 3. 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 liquid mounted primary seal 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 district staff 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 MBbls 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

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)

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:

- 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)
- 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)

### 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)
- 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, gasolihe 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 stored in Storage Tank S-25 shall not exceed 60 Bbls (2520 gallons) during any consecutive 12 month period (basis: cumulative increase).
- 2. 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 purchased per month used at S-25. The purchased amount shall be considered to be equal "o the volume of Automate Blue 8 stored.

(basis: cumulative increase)

#### 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.
  Eitting Type

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;
  - 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)

#### Condition # 15698 For S – 4148 and 4393: Conditions for A-261 and A-262:

- 1. Washwater temperature shall not exceed 80 degree Fahrenheit during any 3-hour averaging period. (Basis: Regulation 8, Rule 2)
- 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)
- 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. 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. (Basis: Regulation 8, Rule 2)
- 8. To determine compliance with Regulation 8-2-301, a source test shall be performed on the scrubber vent by the District or by a District-approved source test contractor within 60 days of startup of the scrubber abatement system. 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 inspection for a period of 5 years from the date on that a record is made. 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). The parametric measurements mentioned above the hours and date of any Hydrogen Plant shutdowns all source test records (Basis: Regulation 8, Rule 2)
- 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 # 16393 For S – 4261:

These conditions will be linked to condition #469. Emissions from A-54 shall be included in the cap emission calculation.

1. Total fuel usage at A-54 Thermal oxidizer shall not exceed 43,800 million btu's in any consecutive 12-

month period. (basis: (cumulative increase)

2. Emissions from A-54 shall not exceed the following limits:

NOx: 0.2 lb/MMBtu CO: 0.80lb/MMBtu SOx: 0.027 lb/MMBtu PM: 0.01 lb/MMBtu

(basis: Regulation 2-2-112)

- 3. A-54 shall maintain a minimum temperature of 1400F at all times that S-4261 is venting to A-54. The averaging time for this condition is one hour. (basis: BACT)
- 4. The owner operator of A-54 shall install and operate a continuous temperature monitor and recorder in order to demonstrate compliance with part #3. (basis: BACT)
- 5. Deleted.
- 6. The owner/operator of A-54 shall maintain a District approved monthly log of all the fuel usage, temperature logs, and source 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. "" (basis: cumulative increase, BACT)

### Condition #16650 For S – 4129 and 4131:

This condition is effective until 1/1/05. After 1/1/05, this condition shall be replaced by Condition No. 21232.

- 1. The owner/operator of S-4129 and S-4131 shall properly install and properly operate an in-stack NOx CEM, an O2 CEM, fuel gas flowmeter, and recorder on both of these units in order to demonstrate compliance with Regulation 9-10. (basis: Reg.9-10)
- 2. The maximum firing rate at S-4129 shall not exceed 5592 million Btu''s per day. (basis: Reg.2-2)
- 3. The maximum firing rate at S-4131 shall not exceed 5664 million Btu''s per day. (basis: Reg.2-2)
- 4. The owner/operator of S-4129 and S-4131 shall maintain daily records of all CEM data, NOx mass emissions, fuel usage, CO source test data results, and the higher heat content of the fuel in order to demonstrate compliance with condition numbers 2 and 3 and Regulation 9- 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)
- 5. The owner/operator of S-4129 and S-4131 shall conduct semi-annual district approved CO source tests with the first occurring within 45 days of the startup of S-4129 and S-4131 in order to demonstrate that the CO emissions are less than 200 ppmv at 3% O2. The time interval between tests shall not exceed 8 months. District conducted CO emission test associated with District-conducted NOx CEM field accuracy tests may be substituted for the CO semi- annual source tests.
  - (a.) If two or more of the CO source test results, over any consecutive five-year period, are greater than or equal to 200 ppmv at 3%, the owner/operator of S-4129 and S-4131 is required to install and operate a CEM to continuously measure CO. The owner/operator shall be given the time period, allowed in the District''s Manual of Procedures to have the CEM installed and properly operating.

#### **Condition #16679 For S – 4170:**

Conditions for A-260 Selective Catalytic Reduction (SCR) System for abatement of: S-4170 F-305 Furnace, 847 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.

	Furnace #/	Enforceable Limit,	Used 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 p	lt. 20328	847

4171	F-355 Reform Furn. H2 plt.	20328	847
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# 16698 AN 19297; Amended under AN 8342 (Oct. 2003)

This condition is effective until 1/1/05. After 1/1/05, this condition shall be replaced by Condition No. 21232.

1. The owner/operator of S-4038, S-4039, S-4040, and S-4041 shall conduct semi-annual District-approved source tests for CO in order to demonstrate compliance with Regulation 9-10. The time interval between tests shall not exceed 8 months. At least one of the source tests each year shall be conducted during operation that is deemed by the District to be representative of normal operation. District-conducted CO emission tests associated with District-conducted NOx CEM field accuracy tests may be substituted for the required semi-annual CO source tests.

If any two source test results, over any consecutive five year period, are > 200 ppmv CO at 3% O2, the owner/operator is required to install and operate a CEM to continuously measure CO and O2. The owner/operator shall be given the time period allowed in the District's Manual of Procedures to have the CEM installed and properly operating. (Basis: Reg. 9-10)

2. Each combustion source listed below shall not exceed its indicated maximum firing rate (higher heating value), expressed in units of million Btu per day (MM Btu/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.

Source Description	Enforceable Limit MM Btu/day	Used for Fees MM Btu/h
S-4038 F-3550 #4 Rheniformer Process Heater	4480	187
S-4039 F-3560 #4 Rheniformer Process Heater	4080	170
S-4040 F-3570 #4 Rheniformer Process Heater	3648	152
S-4041 F-3580 #4 Rheniformer Process Heater	1848	77

- 3. (deleted per AN 8342)
- 4. The owner/operator of S-4038, 4039, 4040 and 4041 shall install and properly operate an in-stack NOx CEM, and O2 CEM, and a fuel-flow meter to demonstrate compliance with section 9-10-502. (Basis: Reg. 9-10- 502)

5. The owner/operator of S-4038, S-4039, S-4040, and S-4041 shall maintain daily records of all CEM data, NOx mass emissions, fuel usage and higher heating value of the fuel in order to demonstrate compliance with condition number 2 and Regulation 9-10, and shall keep all source test data. 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. (Basis: record keeping, Reg. 9-10-504)

#### Condition #16731 For S – 4164, S-4165, S-4166, S-4168, S-4169:

This condition is effective until 1/1/05. After 1/1/05, this condition shall be replaced by Condition No. 21232.

- 1. The owner/operator of S-4164, S-4165, S-4166, S-4168, and S-4169 shall conduct a District approved CO source test semi-annually in order to demonstrate compliance with Regulation 9, Rule 10 and the Monitoring Policy for Regulation 9, Rule 10. At least one of the source tests each year shall be deemed, by the district, to be representative of normal operation. (basis: Regulation 9, Rule 10)
  - (a.) If any two source test results, over any consecutive five year period, are more than 200 ppmv CO at 3% O2, the owner/operator is required to install and operate a CEM to continuously measure CO. The owner/operator shall be given six months to have the CEM installed and properly operating. (basis: Regulation 9, Rule 10)
- 2. The owner/operator of S-4164, S-4165, S-4166, S-4168, and S-4169 shall properly install and properly operate an in-stack NOx CEM, an O2 CEM, fuel gas flowmeter, and recorder on these units in order to demonstrate compliance with Regulation 9, Rule 10. (basis: Regulation 9, Rule 10)
- 3. Each combustion source listed below shall not exceed its indicated maximum firing rate (higher heating value), expressed in units of million Btu per day (MM Btu/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 for
	Limit	fees
Source Description	MM Btu/day	MM Btu/h
S-4164 F-630 TKN Furnace	1632	68
S-4165 F-620 TKN Furnace	1632	68
S-4166 F-610 TKN Furnace	1632	68
S-4168 F-730 TKN Furnace	7944	331
S-4169 F-731 TKN Furnace	6240	260(basis: Cumulative Increase)

4. The owner/operator of S-4164, S-4165, S-4166, S-4168, and S-4169 shall maintain daily records of all CEM data, NOx mass emissions, fuel usage, and the higher heat content of the fuel in order to demonstrate compliance with part #3 and Regulation 9, Rule 10. 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. (basis: Regulation 9, Rule 10; Cumulative Increase)

#### Condition# 17310

- 1. The owner/operator of S-4152 and S-4154 shall properly install and properly operate a fuel gas flowmeter, and recorder on both of these units in order to demonstrate compliance with Regulation 9-10. (basis: Reg.9-10)
- \*2. The maximum firing rate at S-4152 shall not exceed 50.5 million Btu's per hour. (basis: Reg.2-2)
- \*3. The maximum firing rate at S-4154 shall not exceed 50.5 million Btu's per hour. (basis: Reg.2-2)
- 4. The owner/operator of S-4152 and S-4154 shall maintain daily records of all fuel usage, and the higher heat content of the fuel in order to demonstrate compliance with condition numbers 2 and 3 and Regulation 9-10. 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)

#### 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 #17628 For S – 4152, S-4154:

- 1. The owner/operator of S-4152 and S-4154 shall properly install and properly operate a fuel gas flowmeter, and recorder on both of these units in order to demonstrate compliance with Regulation 9, Rule-10. (basis: Regulation 9, Rule 10)
- 2. The owner/operator of S-4152 and S-4154 shall conduct a district approved NOx, CO, and O2 source test within 45 days of the startup of S 4152 and S-4154 in order to demonstrate the NOx and CO emissions over the full-range of operation of these units or to establish the ""box". The box will contain these four conditions as the corners: (1) low fire/low O2, (2) low fire/high O2, (3) high fire/low O2, and (4) high fire/high O2. The results of this test shall be submitted to the district within 45 days of the test date. (basis: Regulation 9, Rule 10)
- 3. The owner/operator of S-4152 and S-4154 shall conduct at least two district approved NOx, CO, and O2 source tests per consecutive 12 month period in order to measure NOX, CO, and O2 at the as-found firing rate, within 20% of the permitted O2 conditions likely to maximize NOx emissions. (basis: Regulation 9, Rule 10)
- 4. The owner/operator of S-4152 and S-4154 shall conduct two additional district approved NOx, CO, and O2 source tests at conditions likely to maximize CO at the as-found firing rate, for units that the initial test results or any semi annual test results of the unit during the past five consecutive year period, are greater than or equal to 200 ppmv CO at 3% O2. (basis: Regulation 9, Rule 10)

- 5. The owner/operator of S-4152 and S-4154 shall conduct a district approved source test within 45 days of operation outside of the "box" established in part #2. This condition does not apply to low firing rate conditions during startup or shutdown periods less than 3 days. These source test results shall be submitted to the district source test manager within 45 days of the test date.
  - A. If the results of this source test exceed the permitted emission concentrations or emission rates, the unit will be considered to have been in violation for each day it operated outside of the defined operating range. In this situation, the facility may submit a permit application and a new Regulation 9, Rule 10 control plan, to request a modification of the permit condition to change the NOx emission concentration or emission rate and/or an adjustment of the operating range, based on the new test data.
  - B. If the results of this source test do not exceed emission concentrations or rates, the allowable operating range will be adjusted as stated above, based on the new test data. In this situation, the unit will not be considered to be in violation during this period for operating out of the ""box" if the unit is operated within the alternate operating conditions approved by the APCO. (basis: Regulation 9, Rule 10)
- 6. \*NOx emissions from S-4152 shall not exceed 0.035 pounds NOx per million Btu. (basis: Regulation 9, Rule 10)
- 7. \*NOx emissions from S-4154 shall not exceed 0.035 pounds NOx per million Btu. (basis: Regulation 9, Rule 10)
- 8. \*The maximum firing rate at S-4152 shall not exceed 1212 million Btu''s per day. (basis: Regulation 2, Rule 2)
- 9. \*The maximum firing rate at S-4154 shall not exceed 1212 million Btu''s per day. (basis: Regulation 2, Rule 2)
- 10. The owner/operator of S-4152 and S-4154 shall properly install and properly operate a CEM to continuously measure CO and O2 if any two source test results over any consecutive five year period are greater than or equal to 200 ppmv CO at 3% O2. The owner/operator shall be given the time period, allowed in the District's Manual of Procedures to have the CEM installed and properly operating. (basis: Regulation 9, Rule 10)
- 11. The owner/operator of S-4152 and S-4154 shall maintain daily records of all fuel usage, the higher heat content of the fuel, and all source test data in order to demonstrate compliance with part numbers 6, 7, 8, and 9, and Regulation 9, Rule 10. 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. (basis: Regulation 9, Rule 10)

#### Condition #17631 For S – 4158:

- 1. The owner/operator of S-4158 shall properly install and properly operate a fuel gas flowmeter, and recorder on both of these units in order to demonstrate compliance with Regulation 9, Rule 10. (basis: Regulation 9, Rule 10)
- 2. The owner/operator of S-4158 shall conduct a district approved NOx, CO, and O2 source test within 45 days of the startup of S-4158 in order to demonstrate the NOx and CO emissions over the full range of operation of these units or to establish the "box". The box will contain these four conditions as the corners: (1) low fire/low O2, (2) low fire/high O2, (3) high fire/low O2, and (4) high fire/high O2. The results of this test shall be submitted to the district within 45 days of the test date. (basis: Regulation 9, Rule 10)
- 3. The owner/operator of S-4158 shall conduct at least two district approved NOx, CO, and O2 source tests per consecutive 12-month period in order to measure NOX, CO, and O2 at the as-found firing rate, within

20% of the permitted O2 conditions likely to maximize NOx emissions. (basis: Regulation 9, Rule 10)

- 4. The owner/operator of S-4158 shall conduct two additional district approved NOx, CO, and O2 source tests at conditions likely to maximize CO at the as found firing rate, for units that the initial test results or any semi-annual test results of the unit during the past five consecutive year period, are greater than or equal to 200 ppmv CO at 3% O2. (basis: Regulation 9, Rule 10)
- 5. The owner/operator of S-4158 shall conduct a district approved source test within 45 days of operation outside of the ""box" established in part #2. This condition does not apply to low firing rate conditions during startup or shutdown periods less than 3 days. These source test results shall be submitted to the district source test manager within 45 days of the test date.
  - A. If the results of this source test exceed the permitted emission concentrations or emission rates, the unit will be considered to have been in violation for each day it operated outside of the defined operating range. In this situation, the facility may submit a permit application and a new Regulation 9, Rule 10 control plan, to request a modification of the permit condition to change the NOx emission concentration or emission rate and/or an adjustment of the operating range, based on the new test data.
  - B. If the results of this source test do not exceed emission concentrations or rates, the allowable operating range will be adjusted as stated above, based on the new test data. In this situation, the unit will not be considered to be in violation during this period for operating out of the ""box" if the unit is operated within the alternate operating conditions approved by the APCO. (basis: Regulation 9, Rule 10)
- 6. \*NOx emissions from S-4158 each shall not exceed 0.035 pounds NOx per million Btu. (basis: Regulation 9, Rule 10)
- \*The maximum firing rate at S-4158 shall not exceed 1152 million Btu''s per day. (basis: Regulation 2, Rule 2)
- 8. The owner/operator of S-4158 shall properly install and properly operate a CEM to continuously measure CO and O2 if any two source test results over any consecutive five year period are greater than or equal to 200 ppmv CO at 3% O2. The owner/operator shall be given the time period, allowed in the District''s Manual of Procedures to have the CEM installed and properly operating. (basis: Regulation 9, Rule 10)
- 9. The owner/operator of S-4158 shall maintain daily records of all fuel usage, the higher heat content of the fuel, and all source test data in order to demonstrate compliance with part numbers 6 and 7, and Regulation 9, Rule 10. 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. (basis: Regulation 9, Rule 10; Regulation 2, Rule 2)

#### Condition #17675 For S – 4132 AND S-4135:

- 1. The owner/operator of S-4132 and S-4135 shall properly install and properly operate a fuel gas flowmeter, NOx and O2 CEM and continuous recorders on both of these units in order to demonstrate compliance with Regulation 9, Rul (basis: Regulation 9, Rule 10)
- 2. The owner/operator of S-4132 and S-4135 shall conduct semi-annual district approved CO source tests with the first occurring within 45 days of the startup of S-4132 and S-4135 in order to demonstrate that the CO emissions are less than 200 ppmv at 3% O2. The time interval between tests shall not exceed 8 months. District conducted CO emission test associated with District-conducted NOx CEM field accuracy tests may be substituted for the CO semi-annual source tests. (basis: Regulation 9, Rule 10)
  - A. If two or more of the CO source test results, over any consecutive five-year period, are greater than or equal to 200 ppmv at 3%, the owner/operator of S-4132 and S-4135 is required to install and operate a CEM to continuously measure CO. The owner/operator shall be given the time period,

allowed in the District''s Manual of Procedures to have the CEM installed and properly operating.

- 3. The maximum firing rate at S-4132 shall not exceed 5640 million Btu''s per day. (basis: Regulation 2, Rule 2)
- 4. The maximum firing rate at S-4135 shall not exceed 6528 million Btu''s per day. (basis: Regulation 2, Rule 2)
- 5. The owner/operator of S-4132 and S-4135 shall maintain daily records of all fuel usage, the higher heat content of the fuel, and all CEM and source test data in order to demonstrate compliance with part numbers 2, 3, and 4, and Regulation 9, Rule 10. 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. (basis: Regulation 9, Rule 10; Regulation 2, Rule 2)

### **Condition #17973 For S – 4171:**

This condition is effective until 1/1/05. After 1/1/05, this condition shall be replaced by Condition No. 21232...

- 1. The owner/operator of S-4171 shall conduct at least two District approved CO source tests within a 12 month period in order to demonstrate compliance with Regulation 9-10 and the Monitoring Policy for Regulation 9-10. The time interval between tests shall not exceed 8 months. At least one of the source tests each year shall be deemed, by the district, to be representative of normal operation. (basis: Reg.9-10)
  - A. If any two source test results, over any consecutive five year period, are > 200 ppmv CO at 3% O2, the owner/operator is required to install and operate a CEM to continuously measure CO. The owner/operator shall be given the time period allowed in the District's Manual of Procedures to have the CEM installed and properly operating. (basis: Reg.9-10)
- 2. The owner/operator of S-4171 shall properly install and properly operate an in-stack NOx CEM, an O2 CEM, fuel gas flowmeter, and recorder on these units in order to demonstrate compliance with Regulation 9-10. (basis: Reg.9-10)
- 3. Each combustion source listed below shall not exceed its indicated maximum firing rate (higher heating value), expressed in units of million Btu per day (MM Btu/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 for
Limit	fees
MM Btu/day	MM Btu/h
20,328	847
	Limit MM Btu/day

4. The owner/operator of S-4171 shall maintain daily records of all CEM data, NOx mass emissions, fuel usage, and the higher heat content of the fuel in order to demonstrate compliance with condition #3 and Regulation 9-10. 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)

### Condition #18003 For S – 4059 and S-4060:

- 1. The owner/operator of S-4059 and S-4060 shall properly install and properly operate a fuel gas flowmeter, and recorder on both of these units in order to demonstrate compliance with Regulation 9, Rule 10. (basis: Regulation 9, Rule 10)
- 2. The owner/operator of S-4059 and S-4060 shall conduct a district approved NOx, CO, and O2 source test within 45 days of the startup of S-4059 and S-4060 in order to demonstrate the NOx and CO emissions over the full-range of operation of these units or to establish the ""box". The box will contain these four conditions as the corners: low fire/low O2, (2) low fire/high O2, (3) high fire/low O2, and (4) high

fire/high O2. The results of this test shall be submitted to the district within 45 days of the test date. (basis: Regulation 9, Rule 10)

- 3. The owner/operator of S-4059 and S-4060 shall conduct at least two district approved NOx, CO, and O2 source tests per consecutive 12 month period in order to measure NOX, CO, and O2 at the as-found firing rate, within 20% of the permitted O2 conditions likely to maximize NOx emissions. (basis: Regulation 9, Rule 10)
- 4. The owner/operator of S-4059 and S-4060 shall conduct two additional district approved NOx, CO, and O2 source tests at conditions likely to maximize CO at the as-found firing rate, for units that the initial test results or any semi-annual test results of the unit during the past five consecutive year period, are greater than or equal to 200 ppmv CO at 3% O2. (basis: Regulation 9, Rule 10)
- 5. The owner/operator of S-4059 and S-4060 shall conduct a district-approved source test within 45 days of operation outside of the ""box" established in part #2. This condition does not apply to low firing rate conditions during startup or shutdown periods less than 3 days. These source test results shall be submitted to the district source test manager within 45 days of the test date.
  - A. If the results of this source test exceed the permitted emission concentrations or emission rates, the unit will be considered to have been in violation for each day it operated outside of the defined operating range. In this situation, the facility may submit a permit application and a new Regulation 9, Rule 10 control plan, to request a modification of the permit condition to change the NOx emission concentration or emission rate and/or an adjustment of the operating range, based on the new test data.
  - B If the results of this source test do not exceed emission concentrations or rates, the allowable operating range will be adjusted as stated above, based on the new test data. In this situation, the unit will not be considered to be in violation during this period for operating out of the ""box" if the unit is operated within the alternate operating conditions approved by the APCO. (basis: Regulation 9, Rule 10)
- 6. NOx emissions from S-4059 and S-4060 each shall not exceed 0.03 pounds NOx per million Btu. (basis: Regulation 9, Rule 10)
- 7. The maximum firing rate at S-4059 shall not exceed 121 million Btu''s per hour or 2904 million Btu''s per rolling 24-hour period. (basis: Regulation 2, Rule 2)
- 8. The maximum firing rate at S-4060 shall not exceed 144 million Btu''s per hour or 3456 million Btu''s per rolling 24-hour period. (basis: Regulation 2, Rule 2)
- 9. The owner/operator of S-4059 and S-4060 shall properly install and properly operate a CEM to continuously measure CO and O2 if any two source test results over any consecutive five year period are greater than or equal to 200 ppmv CO at 3% O2. The owner/operator shall be given the time period, allowed in the District's Manual of Procedures to have the CEM installed and properly operating. (basis: Regulation 9, Rule 10)
- 10. The owner/operator of S-4059 and S-4060 shall maintain daily records of all fuel usage, the higher heat content of the fuel, and all source test data in order to demonstrate compliance with parts 6, 7, 8, and 9, and Regulation 9, Rule 10. 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. (basis: Regulation 9, Rule 10; Regulation 2, Rule 2)

### Condition # 18015 For S – 4070 to S-4072:

This condition is effective until 1/1/05. After 1/1/05, this condition shall be replaced by Condition No. 21232.

1. The owner/operator of S-4070, S-4071, and S-4072 shall conduct at least two District approved CO source tests within a 12-month period in order to demonstrate compliance with Regulation 9, Rule 10 and the Monitoring Policy for Regulation 9, Rule 10. The time interval between tests shall not exceed 8

months. At least one of the source tests each year shall be deemed, by the district, to be representative of normal operation. (basis: Regulation 9, Rule 10)

- (a) If any two source test results, over any consecutive five year period, are more than 200 ppmv CO at 3% O2, the owner/operator is required to install and operate a CEM to continuously measure CO. The owner/operator shall be given the time period allowed in the District's Manual of Procedures to have the CEM installed and properly operating. (basis: Regulation 9, Rule 10)
- 2. The owner/operator of S-4070, S-4071, and S-4072 shall properly install and properly operate an in-stack NOx CEM, an O2 CEM, fuel gas flowmeter, and recorder on these units in order to demonstrate compliance with Regulation 9, Rule 10. (basis: Regulation 9, Rule 10)
- 3. Each combustion source listed below shall not exceed its indicated maximum firing rate (higher heating value), expressed in units of million Btu per day (MM Btu/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.

Source Description	Enforceable Limit MM Btu/day	used for fees MM Btu/h
S-4070 F-1100A Crude Unit Furnace	9552	398
S-4071 F-1100B Crude Unit Furnace	9720	405
S-4072 F-1160 Crude Unit Furnace	8064	336

(basis: Cumulative Increase)

4. The owner/operator of S-4070, S-4071, and S-4072 shall maintain daily records of all CEM data, NOx mass emissions, fuel usage, and the higher heat content of the fuel in order to demonstrate compliance with part #3 and Regulation 9, Rule 10. 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. (basis: Regulation 9, Rule 10; Cumulative Increase)

### Condition #18029 For S - 4133

- 1. The owner/operator of S-4133 shall conduct at least two District approved CO source tests within a 12month period in order to demonstrate compliance with Regulation 9, Rule 10 and the Monitoring Policy for Regulation 9, Rule 10. The time interval between tests shall not exceed 8 months. At least one of the source tests each year shall be deemed, by the district, to be representative of normal operation. (basis: Regulation 9, Rule 10)
  - A. If any two source test results, over any consecutive five year period, are more than 200 ppmv CO at 3% O2, the owner/operator is required to install and operate a CEM to continuously measure CO. The owner/operator shall be given the time period allowed in the District's Manual of Procedures to have the CEM installed and properly operating. (basis: Regulation 9, Rule 10)
- 2. The owner/operator of S-4133 shall properly install and properly operate an in-stack NOx CEM, an O2 CEM, fuel gas flowmeter, and recorder on these units in order to demonstrate compliance with Regulation 9, Rule 10. (basis: Regulation 9, Rule 10)
- 3. The owner/operator of S-4133 shall maintain daily records of all CEM data, NOx mass emissions, fuel usage, and the higher heat content of the fuel in order to demonstrate compliance with condition #16686 and Regulation 9, Rule 10. 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. (basis: Regulation 9, Rule 10)

### 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)
- \*3. In addition to part 1 and part 2 above, those tanks with non-exempt stock throughput limits shall comply with the following operating condition. Prior to filling the tank with exempt stock, the Owner/Operator shall degas the tank to an approved emission control system. An approved emission control system collects and processes all organic vapors and gases and has an abatement efficiency of at least 90% by weight. The system shall be operated until the concentration of organic compounds in the tank is less than 10,000 ppm expressed as methane. (Basis: Section 2-1-234.3)

#### Condition #18166 For Sources S-4061 and S-4062:

This condition is effective until 1/1/05. After 1/1/05, this condition shall be replaced by Condition No. 21232.

- 1. The owner/operator of S-4061 and S-4062 shall conduct at least two District approved CO source tests within a 12 month period in order to demonstrate compliance with Regulation 9, Rule 10 and the Monitoring Policy for Regulation 9, Rule 10. The time interval between tests shall not exceed 8 months. At least one of the source tests each year shall be deemed, by the district, to be representative of normal operation. (basis: Regulation 9, Rule 10)
  - A. If any two source test results, over any consecutive five year period, are > 200 ppmv CO at 3% O2, the owner/operator is required to install and operate a CEM to continuously measure CO. The owner/operator shall be given the time period allowed in the District''s Manual of Procedures to have the CEM installed and properly operating. (basis: Regulation 9, Rule 10)
- The owner/operator of S-4061 and S-4062 shall properly install and properly operate an in-stack NOx CEM, an O2 CEM, fuel gas flowmeter, and recorder on these units in order to demonstrate compliance with Regulation 9, Rule 10. (basis: Regulation 9, Rule 10)
- 3. \*Each combustion source listed below shall not exceed its indicated maximum firing rate (higher heating value), expressed in units of million Btu per day (MM Btu/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 Limit	used for fees
Source Description	MM Btu/day	MM Btu/h
S-4061 F-410 #5 NHT Furnace	2928	122
S-4062 F-447 #5 NHT Furnace	3960	165
(basis: cumulative increase)		

4. The owner/operator of S-4061 and S-4062 shall maintain daily records of all CEM data, NOx mass

emissions, fuel usage, and the higher content of the fuel in order to demonstrate compliance with part condition #3 and Regulation 9, Rule 10. 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. (Regulation 9, Rule 10, cumulative increase)

#### Condition #18172 For Sources S-4042, S-4043, S-4044, and S-4045:

This condition is effective until 1/1/05. After 1/1/05, this condition shall be replaced by Condition No. 21232.

1. The owner/operator of S-4042, S-4043, S-4044, and S-4045 shall conduct at least two District approved CO source tests within a 12 month period in order to demonstrate compliance with Regulation 9, Rule 10 and the Monitoring Policy for Regulation 9, Rule 10. The time interval between tests shall not exceed 8 months. At least one of the source tests each year shall be deemed, by the district, to be representative of normal operation. (basis: Regulation 9, Rule 10)

- A. If any two source test results, over any consecutive five year period, are > 200 ppmv CO at 3% O2, the owner/operator is required to install and operate a CEM to continuously measure CO. The owner/operator shall be given the time period allowed in the District's Manual of Procedures to have the CEM installed and properly operating. (basis: Regulation 9, Rule 10)
- 2. The owner/operator of S-4042, S-4043, S-4044, and S-4045 shall properly install and properly operate an in stack NOx CEM, an O2 CEM, fuel gas flowmeter, and recorder on these units in order to demonstrate compliance with Regulation 9-10. (basis: Regulation 9, Rule 10)
- 3. Each combustion source listed below shall not exceed its indicated maximum firing rate (higher heating value), expressed in units of million Btu per day (MM Btu/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 Limit	used for fees
Source Description	MM Btu/day	MM Btu/h
S-4042 F-550 #5 Rheni Furnace	4752	198
S-4043 F-560 #5 Rheni Furnace	3192	133
S-4044 F-570 #5 Rheni Furnace	1872	78
S-4045 F-580 #5 Rheni Furnace	1224	51

(basis: cumulative increase)

4.——The owner/operator of S-4042, S-4043, S-4044, and S-4045 shall maintain daily records of all CEM data, NOx mass emissions, fuel usage, and the higher heat content of the fuel in order to demonstrate compliance with condition part3 and Regulation 9, Rule 10. 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. (Regulation 9, Rule 10)

COND# 18337 -----

- 1. The S-4354 Butamer Plant throughput shall not
- exceed 12,000 barrels per operating day. (cum inc)
- 2. The total throughput at S-4360 shall not exceed
- 9400 gallons in any consecutive 12 month period. (cum
- inc)
- 3. All fugitive components associated with sources S-4354
  - and S-4360 shall comply with 40 CFR Part 60 Subpart VV.

<u>(NSPS)</u>
4. The owner/operator of S-4354 and S-4360 shall
maintain a district approved daily log for S-4354
and monthly summaries for both S-4354 and S-4360 of
all throughput at both S-4354 and S-4360. 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 #18350 For Source S-4068:

- 1. The owner/operator of S-4068 shall properly install and properly operate a fuel gas flowmeter, and recorder on this unit in order to demonstrate compliance with Regulation 9, Rule 10. (basis: Regulation 9, Rule 10)
- 2. The owner/operator of S-4068 shall conduct a district approved NOx, CO, and O2 source test prior to 12/31/01 in order to demonstrate the NOx and CO emissions over the full-range of operation of S-4068 or to establish the ""box". The box will contain these four conditions as the corners: (1) low fire/low O2, (2) low fire/high O2, (3) high fire/low O2, and (4) high fire/high O2. The results of this test shall be submitted to the district within 45 days of the last test date. (basis: Regulation 9, Rule 10)
- 3. Beginning on 7/1/02 the owner/operator of S-4068 shall conduct at least two district approved NOx, CO, and O2 source tests per consecutive 12 month period in order to measure NOX, CO, and O2 at the as-found firing rate, within 20% of the permitted O2 conditions likely to maximize NOx emissions. (basis: Regulation 9, Rule 10)
- 4. The owner/operator of S-4068 shall conduct two additional district approved NOx, CO, and O2 source tests at conditions likely to maximize CO at the as-found firing rate, for units that the initial test results or any semi-annual test results of the unit during the past five consecutive year period, are greater than or equal to 200 ppmv CO at 3% O2. (basis: Regulation 9, Rule 10)
- 5. The owner/operator of S-4068 shall conduct a district approved source test within 45 days of operation outside of the ""box" established in condition #2. This condition does not apply to low firing rate conditions during startup or shutdown periods less than 3 days. These source test results shall be submitted to the district source test manager within 45 days of the test date.
  - A. If the results of this source test exceed the permitted emission concentrations or emission rates, the unit will be considered to have been in violation for each day it operated outside of the defined operating range. In this situation, the facility may submit a permit application and a new Regulation 9, Rule 10 control plan, to request a modification of the permit condition to change the NOx emission concentration or emission rate and/or an adjustment of the operating range, based on the new test data.
  - B. If the results of this source test do not exceed emission concentrations or rates, the allowable operating range will be adjusted as stated above, based on the new test data. In this situation, the unit will not be considered to be in violation during this period for operating out of the ""box" if the unit is operated within the alternate operating conditions approved by the APCO. (basis: Regulation 9, Rule 10)
- 6. \*NOx emissions from S-4068 each-shall not exceed 0.14 pounds NOx per million Btu. (basis: cumulative increase)
- 7. \*The maximum firing rate at S-4068 shall not exceed 127.5 million Btu''s per hour or 3060 million Btu''s

per rolling 24-hour period. (basis: Regulation 2, Rule 2)

- 8. The owner/operator of S-4068 shall properly install and properly operate a CEM to continuously measure CO and O2 if any two source test results over any consecutive five year period are greater than or equal to 200 ppmv CO at 3% O2. The owner/operator shall be given the time period, allowed in the District's Manual of Procedures to have the CEM installed and properly operating. (basis: Regulation 9, Rule 10)
- 9. The owner/operator of S-4068 shall maintain daily records of all fuel usage, the higher heat content of the fuel, and all source test data in order to demonstrate compliance with condition numbers 6 and 7, and Regulation 9, Rule 10. 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. (basis: Regulation 9, Rule 10, and Regulation 2, Rule 2)

### Condition #18387 For Sources S-4159 and S-4160:

- 1. The owner/operator of S-4159 and S-4160 shall properly install and properly operate a fuel gas flowmeter, and recorder on both of these units in order to demonstrate compliance with Regulation 9, Rule 10. (basis: Regulation 9, Rule 10)
- 2. The owner/operator of S-4159 and S-4160 shall conduct a district approved NOx, CO, and O2 source test within 45 days of the startup of S- 4159 and S-4160 in order to demonstrate the NOx and CO emissions over the full-range of operation of these units or to establish the "box". The box will contain these four conditions as the corners: (1) low fire/low O2, (2) low fire/high O2, (3) high fire/low O2, and (4) high fire/high O2. The results of this test shall be submitted to the district within 30 days of the test date. (basis: Regulation 9, Rule 10)
- 3. The owner/operator of S-4159 and S-4160 shall conduct at least two district approved NOx, CO, and O2 source tests per consecutive 12 month period in order to measure NOX, CO, and O2 at the as-found firing rate, within 20% of the permitted O2 conditions likely to maximize NOx emissions. (basis: Regulation 9, Rule 10)
- 4. The owner/operator of S-4159 and S-4160 shall conduct two additional district approved NOx, CO, and O2 source tests at conditions likely to maximize CO at the as-found firing rate, for units that the initial test results or any semi-annual test results of the unit during the past five consecutive year period, are greater than or equal to 200 ppmv CO at 3% O2. (basis: Regulation 9, Rule 10)
- 5. The owner/operator of S-4159 and S-4160 shall conduct a district approved source test within 45 days of operation outside of the ""box" established in condition #2. This condition does not apply to low firing rate conditions during startup or shutdown periods less than 3 days. These source test results shall be submitted to the district source test manager within 30 days of the test date.
  - A. If the results of this source test exceed the permitted emission concentrations or emission rates, the unit will be considered to have been in violation for each day it operated outside of the defined operating range. In this situation, the facility may submit a permit application and a new Regulation 9, Rule 10 control plan, to request a modification of the permit condition to change the NOx emission concentration or emission rate and/or an adjustment of the operating range, based on the new test data.
  - B. If the results of this source test do not exceed emission concentrations or rates, the allowable operating range will be adjusted as stated above, based on the new test data. In this situation, the unit will not be considered to be in violation during this period for operating out of the "'box'" if the unit is operated within the alternate operating conditions approved by the APCO. (basis: Regulation 9, Rule 10)
- 6. .\*NOx emissions from S-4159 and S-4160 each shall not exceed 0.033 pounds NOx per million Btu. (basis: Regulation 9, Rule 10)

- 7. \*The maximum firing rate at S-4159 shall not exceed 68 million Btu''s per hour or 1632 million Btu''s per rolling 24-hour period. (basis: Regulation 2, Rule 2)
- 8. \*The maximum firing rate at S-4160 shall not exceed 71 million Btu''s per hour or 1704 million Btu''s per rolling 24-hour period. (basis: Regulation 2, Rule 2)
- 9. The owner/operator of S-4159 and S-4160 shall properly install and properly operate a CEM to continuously measure CO and O2 if any two source test results over any consecutive five year period are greater than or equal to 200 ppmv CO at 3% O2.10The owner/operator shall be given the time period, allowed in the District's Manual of Procedures to have the CEM installed and properly operating. (basis: Regulation 9, Rule 10)
- 10. The owner/operator of S-4159 and S-4160 shall maintain daily records of all fuel usage, the higher heat content of the fuel, and all source test data in order to demonstrate compliance with condition number parts 6, 7, and 8, and Regulation 9, Rule 10. (basis: Regulation 9, Rule 10)
- 11. 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. (basis: Regulation 9, Rule 10)

### Condition #18391 For Source S-4167:

This condition is effective until 1/1/05. After 1/1/05, this condition shall be replaced by Condition No. 21232.

- 1. The owner/operator of S-4167 shall properly install and properly operate a fuel gas flowmeter, and recorder on both of these units in order to demonstrate compliance with Regulation 9-10. (basis: Regulation 9, Rule 10)
- 2. The owner/operator of S-4167 shall conduct a district approved NOx, CO, and O2 source test within 45 days of the startup of S-4167 in order to demonstrate the NOx and CO emissions over the full-range of operation of these units or to establish the ""box". The box will contain these four conditions as the corners: (1) low fire/low O2, (2) low fire/high O2, (3) high fire/low O2, and (4) high fire/high O2. The results of this test shall be submitted to the district within 30 days of the test date. (basis: Regulation 9, Rule 10)
- 3. The owner/operator of S-4167 shall conduct at least two district approved NOx, CO, and O2 source tests per consecutive 12 month period in order to measure NOX, CO, and O2 at the as-found firing rate, within 20% of the permitted O2 conditions likely to maximize NOx emissions. (basis: Regulation 9, Rule 10)
- 4. The owner/operator of S-4167 shall conduct two additional district approved NOx, CO, and O2 source tests at conditions likely to maximize CO at the as-found firing rate, for units that the initial test results or any semi-annual test results of the unit during the past five consecutive year period, are greater than or equal to 200 ppmv CO at 3% O2. (basis: Regulation 9, Rule 10)
- 5. The owner/operator of S-4167 shall conduct a district approved source test within 45 days of operation outside of the ""box" established in condition #2. This condition does not apply to low firing rate conditions during startup or shutdown periods less than 3 days. These source test results shall be submitted to the district source test manager within 45 days of the test date.
  - (a.) If the results of this source test exceed the permitted emission concentrations or emission rates, the unit will be considered to have been in violation for each day it operated outside of the defined operating range. In this situation, the facility may submit a permit application and a new Regulation 9, Rule 10 control plan, to request a modification of the permit condition to change the NOx emission concentration or emission rate and/or an adjustment of the operating range, based on the new test data.
  - (b.) If the results of this source test do not exceed emission concentrations or rates, the allowable operating range will be adjusted as stated above, based on the new test data. In this situation, the unit will not be considered to be in violation during this period for operating out of the ""box" if the unit is operated within the alternate operating conditions approved by the APCO. (basis: Regulation 9, Rule 10)
- 6. NOx emissions from S-4167 shall not exceed 0.035 pounds NOx per million Btu. (basis: Regulation 9, Rule 10)

- 7. The maximum firing rate at S-4167 shall not exceed 145 million Btu''s per hour or 3480 million Btu''s per rolling 24-hour period. (basis: Regulation 2, Rule 2)
- 8. The owner/operator of S-4167 shall properly install and properly operate a CEM to continuously measure CO and O2 if any two source test results over any consecutive five year period are greater than or equal to 200 ppmv CO at 3% O2. The owner/operator shall be given the time period, allowed in the District's Manual of Procedures to have the CEM installed and properly operating. (basis: Regulation 9, Rule 10)
- 9. The owner/operator of S-4167 shall maintain daily records of all fuel usage, the higher heat content of the fuel, and all source test data in order to demonstrate compliance with condition numbers 6, and 7, and Regulation 9-10. 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 Districtstaff upon request. (basis: Regulation 9, Rule 10)

#### Condition #18400 Sources S-4188 and S-4189:

This condition is effective until 1/1/05. After 1/1/05, this condition shall be replaced by Condition No. 21232. For

- 1. The owner/operator of S-4188 and S-4189 shall properly install and properly operate a fuel gas flowmeter and recorder in order to demonstrate compliance with Regulation 9-10Rule 10. (basis: Regulation 9, Rule 10)
- 2. The maximum firing rate at S-4188 shall not exceed 648 million Btu''s per day. (basis: Regulation 2-1-301)
- 3. The maximum firing rate at S-4189'shall not exceed 360 million Btu''s per day. (basis: Regulation 2-1-301)
- 4. The owner/operator of the S-4188 and S-4189 shall conduct a District-approved source test within 60 days of receipt of this Authority to Construct deemed by the District to be representative of normal operation in order to demonstrate the pre-temporary experimental emissions of NOx, CO, and SO2. The results of this test shall be submitted to the district within 45 days of the completion of the source test. (basis: Regulations 9-10 & 2-1-403)
- 5. The use of these temporary experimental Low NOx burners shall be completed by 7/1/02. (basis: Regulation 9-10)
- 6. The owner/operator of S-4188 and S-4189 shall maintain daily records of all NOx emissions measured, fuel usage, source test data, and the higher heat content of the fuel in order to demonstrate compliance with condition numbers parts 2 and 3, and Regulation 9-10. 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. (Regulations 2-1-301and Regulation 9, Rule 10)

#### Condition # 18655

Chevron Products Company; Plant #A0010; Conditions for S-4227, S-4228, and S-4229:

- 1. Owner/Operator shall conduct an annual source test to demonstrate compliance with District Regulation 9, Rule 1, Section 313.2. (basis: Regulation 2-6-503)
- 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.

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:

<del>S 6012 381,040 #//hr S 6013 1,357,512 #/hr</del>

<u>S 6015 878,900 #/hr</u> <u>S 6017 3497 #/hr</u>

 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)
 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; 2-6-501)

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(c) 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 #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 5.08.57 MM scfd total H2S produced in any calendar day and 5.08.57 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)
- 4. H2S emissions from each of the tail gas units A-20, A-21, and A-22 shall each not exceed 10 ppmv. (CEQA/BACT)
- 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 <del>conditions</del> 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 #19586

This condition is effective until 12/1/04. After 12/1/04, this condition shall be replaced by Condition No.

21232.

### General Monitoring Condition

- The owner/operator shall conduct a District-approved source test on a semi-annual basis on Sources S-4032, S-4033, S-4069, S-4095, S-4153, S-4156, S-4161, S-4162, S-4163, and S-4188 to demonstrate compliance with Regulation 9-10-301.1 (NOx not to exceed 0.033 lbs/MMbtu on refinery wide basis). The test results shall be provided to the District's Compliance and Enforcement Division and the District's Permit Services Division no less than 30 days after the test. These records shall be kept for a period of at least 5 years from date of entry and shall be made available to District staff upon request. [Basis: Regulation 9-10-501]
- 2. The owner/operator shall conduct a District-approved source test on an annual basis on Source S-4189 to demonstrate compliance with Regulation 9-10-301.1 (NOx not to exceed 0.033 lbs/MMbtu on refinery wide basis) and Regulation 9-10-303 (NOx not to exceed 0.2 lbs/MMbtu). The test results shall be provided to the District's Compliance and Enforcement Division and the District's Permit Services Division no less than 30 days after the test. These records shall be kept for a period of at least 5 years from date of entry and shall be made available to District staff upon request. [Basis: Regulation 9-10-501]
- 3. The owner/operator shall conduct a District-approved source test on a semi-annual basis on Sources S-4032, S-4033, S-4046, S-4069, S-4095, S-4153, S-4156, S-4161, S-4162, S-4163, S-4188, S-4332 to S-4335, S-4337, and S-4338 to demonstrate compliance with Regulation 9-10-305 (CO not to exceed 400 ppmv, dry, at 3% O2, operating day average). The test results shall be provided to the District's Compliance and Enforcement Division and the District's Permit Services Division no less than 30 days after the test. These records shall be kept for a period of at least 5 years from date of entry and shall be made available to District staff upon request. [Basis: Regulation 9-10-501]
- 4. The owner/operator shall conduct a District-approved source test on an annual basis on Sources S-4189, S-4330, S-4331, S-4336, and S-4339 to demonstrate compliance with Regulation 9-10-305 (CO not to exceed 400 ppmv, dry, at 3% O2, operating day average). The test results shall be provided to the District's Compliance and Enforcement Division and the District's Permit Services Division no less than 30 days after the test. These records shall be kept for a period of at least 5 years from date of entry and

shall be made available to District staff upon request. [Basis: Regulation 9-10-501]

5. The owner/operator of S-4155 shall conduct district approved semi-annual source tests to determine compliance with the 50 ppmv CO limit in BAAQMD Condition 8773, part 2. All test results shall be submitted to the district within 45 days of the test date. (Basis: Regulation 2-6-501)

### 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-7510, S-7511, S-7512, S-7513, S-7514, S-7515, S-7516, S-7517, S-7518, S-7520, S-7521, S-7522, S-7523, S-7524, S-7525, S-7526, S-7528, and S-7531

 Hours of Operation: The owner/operator shall ensure the total hours of operation of S 7507, S 7510, S 7511, S-7512, S-7513, S-7514, S-7515, S-7516, S-7517, S-7518, S-7520, S-7521, S-7522, S-7523, S 7524, S-7525, S-7526, S-7528, and S-7531 each does not exceed 720 hours during any calendar year. (Basis: Loss of Exemption of Reg 2 1 113.2.10) deleted Revision 3.0

- 2. In order to demonstrate compliance with the above condition, the owner/operator of S-7507, S-7510, S-7511, S-7512, S-7513, S-7514, S-7515, S-7516, S-7517, S-7518, S-7520, S-7521, S-7522, S-7523, S-7524, S-7525, S-7526, 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)
- 3. The owner/operator shall ensure that S-7507, S-7510, S-7511, S-7512, S-7513, S-7514, S-7515, S-7516, S-7517, S-7518, S-7520, S-7521, S-7522, S-7523, S-7524, S-7525, S-7526, S-7528, and S-7531 does 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 its
strength 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 available to district staff upon request.
(record keeping)

Condition# 20361

1. ——The owner/operator of S-3127 shall not exceed 223,000 barrels of recovered oil or any material that has the equivalent or lower vapor pressure and equivalent or lower toxicity than recovered oil in any consecutive 12 month period. (cum inc)

2. The owner/operator of S-3127 shall only store materials with a maximum vapor pressure of 2.5 ps[a. (cum inc)

- 32. The owner/operator of S-3127 shall not exceed a total benzene concentration of 0.38% by weight. (toxics)
- <u>43</u>. The owner/operator of S-3127 shall analyze material stored in S-3127 on a quarterly basis for both vapor pressure and benzene content in order to demonstrate compliance with condition #'s 2 and 3. (cum inc)
- 54. The owner/operator of S-3127 shall maintain adistrict approved monthly log of all material throughput at S-3127 and all quarterly analyses of both vapor pressure and benzene content. 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)

COND# 20366 -----

1.	The owner/operator of	S-7010 shall not exceed
	-	

1000 hours in any calendar year. (Toxics)

2. The owner/operator of S-7010 shall not exceed the

following emission rate limits:

0.20 grams per brake horse power hour PM10,

and

6.10 grams per brake horse power hour NOx.

(BACT/Toxics)

3. The owner/operator of S-7010 shall install a non-

resettable time recorder in order to demonstrate

compliance with condition #1. (Toxics)

4. The owner/operator of S-7010 shall use only

California Diesel fuel (fuel oil with less than

0.05% by weight sulfur). (Toxics)

5. The owner/operator of S-7010 shall maintain a

district approved monthly log of all hours of

operation of S-7010 and any source 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)

#### Condition #20620: For Refinery:

- 1. By October 11, 2004, the owner/operator shall submit a complete application for a significant revision to the Major Facility Review permit to incorporate the limits, compliance options, and monitoring requirements in 40 CFR 63, Subpart UUU, National Emission Standards for Hazardous Air Pollutants for Petroleum Refineries: Catalytic Cracking Units, Catalytic Reforming Units, and Sulfur Recovery Units. (basis: 40 CFR 63, Subpart UUU)
- 2. By April 11, 2005, the owner/operator shall submit an operation, maintenance, and monitoring plan for District review in accordance with 40 CFR 63.1574(f). The plan shall be prepared for each affected source, control system, and continuous monitoring system. The plan shall be submitted to the Director of Enforcement. (basis: 40 CFR 63.1574(f))

COND# 20666 -----

- 1. The OPW 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-102. 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-102.
- Results shall be submitted to BAAQMD within 15 days of
- the test date in a District-approved format.

### 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: Regulation 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# 20773

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: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: 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)

4.——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 exceed
7,000 gallons heavy oil throughput in any
consecutive 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 greater
than 3% by weight. The owner/operator of S-4405
shall measure the benzene concentration of the material
contained 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
<u>request. (8-6-501)</u>

### 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

Regulation 9-10 Refinery-Wide Compliance Affected Sources

\*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)

Source#	<b>Description</b>	<u>CEM(Y/N,EF)</u>
S-4038	F-3550	Y
S-4039	F-3560	Y
S-4040	F-3570	Y
S-4041	F-3580	Y
S-4042	F-550	Y
S-4043	F-560	Y
S-4044	F-570	Y
S-4045	F-580	Y
S-4059	F-247	Ν
S-4060	F-210A/B	Ν
S-4061	F-410	Y
S-4062	F-447	Y
S-4068	F-1610	Ν
S-4069	F-1660	Ν
S-4070	F-1100A	Y
S-4071	F-1100B	Y
S-4072	F-1160	Y
S-4095	F-210	Ν
S-4129	Blr #1	Y
S-4131	Blr #3	Y
S-4132	Blr #4	Y
S-4133	Blr #5	Y

S-4135	Blr #7	Y
S-4152	F-100	<u>YN</u>
S-4154	F-120	<u>Y</u> N
S-4155	F-135	Y
S-4156	F-320	Ν
S-4158	F-340	Ν
S-4159	F-410	Y
S-4160	F-420	Y
S-4161	F-510	Y
S-4162	F-520	Y
S-4163	F-530	Y
S-4164	F-630	Y
S-4165	F-620	Y
S-4166	F-610	Y
S-4167	F-710	Ν
S-4168	F-730	Y
S-4169	F-731	Y
S-4170	F-305	Y
S-4171	F-355	Y
S-4188	F-651	Ν
S-4189	F-661	Ν
S-4330	F-1610	Y
S-4331	F-1310	Y
S-4332	F-1360	Y
S-4333	F-1750	Y
S-4334	F-1200	Y
S-4335	F-1250	Y
S-4336	F-1410	Y
S-4337	F-1500	Y
S-4338	F-1550	Y
S-4339	F-1110	Y

#### Monitoring Device Installation

\*2. The owner/operator of each source with a maximum firing rate greater than 25 MMBtu/hr 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)
  - A. The NOx Box for units with a maximum firing rate of 25 MMBH or more shall be established using the procedures in Part 4.
  - B. The NOx Box for units with a maximum firing rate less than 25MMBH shall be established as follows: 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 O<sub>2</sub>.

- \*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. Determine the minimum and maximum oxygen concentrations and firing rates for the desired 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

\*5. 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)

A.	NOx Box ranges Source No. 2		
	Emission Factor (lb/MMBtu)	0.0256	0.0335
	Min O2 at Low Firing		
	(O2%, MMBtu/hr)	0,0	1.3, 57
	Max O2 at Low Firing		
	(O2%, MMBtu/hr)	3.98, 0	6.0, 57
	Min O2 at High Firing		
	(O2%, MMBtu/hr)	1.3, 57	1.3, 61
	Mid O2 at Mid/High Firing (polygon)		
	(O2%, MMBtu/hr)	n/a	n/a
	Max O2 at High Firing		
	(O2%, MMBtu/hr)	3.98, 57	6.0, 61

The limits listed above are based on a calendar day averaging period for both firing rate and O2%.

B. 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).

C. 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)
  - A. 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 represents 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.
- c. 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 on 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
    - 1. 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)

If a source has been shutdown longer than the period allowed between source testing periods (e.g. <25 MMBtu/hr - > 12 mos or > 25 MMBtu/hr - > 8 mos), the owner/operator shall conduct the required semi-annual source test within 30 days of start up of the source.

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 semi-annual 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/hr 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, the 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)

Page: 1

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#### 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 -----

1. 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)

Condition 22003:

Added during the January 2005 reopening of the Title V permit.

Effective July 1, 2006, Owner/operator of A-414, A-620, A-621, A-622, A-623, A-624, A-625, A-627, and A-628 shall monitor and record operating parameters such that the flow rate may be continuously determined. The owner/operator shall meet the following increments of progress:

April 1, 2005 Submit a proposed monitoring plan listing the parameters

to be monitored and the method used to calculate flow rate from the

parameters.

July 1, 2005 Submit to the APCO a detailed design of the proposed monitoring system, including probe/sample locations, range and span of the proposed instruments, and any other information necessary to review the design.

June 1, 2006 Complete installation and testing of the monitoring system.

The increments of progress shall not apply if the APCO determines in writing that monitoring of temperature alone is sufficient to verify compliance with 40 CFR 60.482-10(c); 40 CFR 60.692-5(a); and/or 40 CFR 61.242-11(c). Basis: Monitoring required under 2-6-409.2 to show compliance with 40 CFR 60.482-10(c); 40 CFR 60.692-5(a); and/or 40 CFR 61.242-11(c).

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)
- 2. 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)

2. The owner/operator of S-4227, S-4228, and S-4229 shall

conduct visible emissions inspection during an upset.

<del>(6-301)</del>

# 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  $\mathbb{C}$  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.

#### Table VII – Abatement (Devices not in Source Tables)

# Table VII – Abatement Applicable Limits and Compliance Monitoring Requirements

# A-0054, A-0094, A-0414, A-0620, A-0622, A-0623, A-0624, A-0627, A-0628, A-0917, <u>A-919</u>, 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-0054 Thermal Oxidizer			
POC	8-1-110.3	Y		Abatement of emissions >90% of organic carbon for exemption	N/A	N/A	N/A
	Condition #16393 and 40 CFR 63 Part CC	Y		Minimum temperature of 1400 degrees F NOx 0.2 # /MMBtu, CO 0.80 lb/MMBtu, SOx: 0.027 lb/MMBtu, PM 0.01 lb/MMBtu >98% (by weight) emissions reduction	Condition #16393 Part 4	С	OVA/FID monitoring
			1	A-0094 Thermor Kiln Stack Bur	ner		
POC	8-1-110.3	Y		Abatement of emissions >90% of organic carbon for exemption	condition 20791	С	Temperature monitor
POC	Condition 20791	Ν		minimum temperature requirement	condition 20791	С	Temperature monitor
	А	-0414,	A-0620, A-06	522, A-0623, A-0624, A-0627, A-0	)628 Thermal Oxidi	izers	
РОС	Condition # 8869 Part 1	Y		Minimum temperature of 1400 degrees F, minimum VOC destruction efficiency 95% by weight	Condition #8869 Part 2	С	Temperature monitor
<u>H2S</u>	<u>60.104(a)(1</u> )	<u>Y</u>		H2S in fuel gas burned < 230 mg/dscm (0.1 gr/dscf), EXCEPT process upset gases or emergency malfunctions	<u>60.105(a)(3) or</u> <u>60.105(a)(4)</u> <u>60.13(i)</u>	<u>C</u>	<u>Records</u> SO2/O2 or H2S
			A-0917, <u>A</u>	- <u>919,</u> A-0921, A-0920, A-0922 Ca	arbon Drums	1	I

# Table VII – Abatement Applicable Limits and Compliance Monitoring Requirements

#### <u>Abatement Devices (In Table II-B, but not included in Table IV)</u> A-0054, A-0094, A-0414, A-0620, A-0622, A-0623, A-0624, A-0627, A-0628, A-0917, <u>A-919</u>, 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
РОС	40 CFR 61 FF	Y		95% by weight or greater reduction in total organics, or < 500 ppmv total organics in outlet stream <u>, or minimum</u> <u>benzene destruction removal</u> <u>efficiency 98% by concentration</u> <u>weight, or 10 ppmv benzene</u>	40 CFR 61 FF	С	OVA/FID monitoring <u>or</u> <u>portabl G/C</u> <u>monitoring</u>

 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	9-9-301.3 adjustment pending per 9-9-401.2.2.2	Y		9 ppmv @15% O <sub>2</sub> (dry)	9-9-501	С	NOx CEM
NOx	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	9-9-501	С	NOx CEM
NOx	NSPS Subpart Db, 60.44b (a)(4)	Y		0.2 lb/MMBtu	Condition #1162 Part 8, 12	С	NOx CEM, fuel gas flow meters, calorimeter on fuel gas

# 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
	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	6/1/4	> 80% CO reduction	Condition #1162 Part 12	С	CO CEM and O2 or CO2 CEM
POC	Condition #1162 Part 11	Y	6/1/4	> 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	6-301	Y		Ringelmann No. 1 for no more than 3 minutes/hour	6-601 <u>condition</u> 22262 part 2 <u>1</u>	P/ <u>M</u> E	Visual inspection
FP	6-305	Y		Visible Particulates	6-601	P/E	Visual Inspection
	6-310	Y		0.15 grain/dscf	Nonecondition 22262 part 1	P/E	Visual inspection
	NSPS Subpart GG, 60.333 (b)	Y		0.8 % sulfur in fuel by weight	NSPS Subpart GG, 60.334 (b)	P/semi-annual	Fuel analysis
	Condition #1162 Part 9	Y		0.05% sulfur in diesel	Condition #1162 part 9	P/E	Diesel fuel documents
H2S	40 CFR, Subpart J, 60.104(a) (1)	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)	С	H2S analyzer

# 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
NH3	Condition #1162 Part 18	Y	6/1/4	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	6-301	Y		Ringelmann No. 1 for no more than 3 minutes/hour	6-601 Condition 18656 part 4	P/E	Visual inspection, flowmeter and record keeping
					(effective 1/1/05)		51 5
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	Condition 18656 Part 6 (effective 1/1/05)	P/E	Records
				other emergency malfunctions. Visible for no more than 5 minutes in any two hours.			
FP	6-305	Y		Visible Particulates	6-601	P/E	Visual Inspection
	6-310	Y		0.15 grain/dscf	condition 18656 parts 3, 4, 5 (effective 1/1/05)	P/E	Visual inspection
	6-311	Y		emissions based on process weight rate (lb/hour)	condition 18656 parts 3, 4, 5 1 (effective 1/1/05)	P/E	Visual inspection
POC	<del>8-1-110.3</del>	N		At least 90% destruction of organics for exemption	None	N	flowrate flame composition
	Condition #469	Y		Smokeless capacity of S-6015 shall not be less than 240,000 lbs/hr	None	Ν	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

## <u>Flares</u>

#### 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	12/4/03		BAAQMD	С	Flow Rate
Monitoring					Regulation 12- 11-501 &		
					12-11-505		
	<del>Conditio</del>	¥		Flow meters	<del>Reg. 2-6-409.2</del>	e	Flow rate
	<del>n 18656</del> <del>Parts 1</del> & 2				BAAQMD Regulation 12- 11-501		
		Ν	9/4/03		BAAQMD	P/E	Composition
					Regulation		
					12-11502.1 &		
					12-11-505		
		Ν	3/4/./04		BAAQMD	P/E	Composition
					Regulation		
					12-11-502.3 <b>&amp;</b>		
					12-11-505		
Flare Design	40 CFR	¥	Upon loss	Heat content specification	<del>60.18(f)(3)</del>	$\frac{P/E}{P/E}$	Records of
	<del>60.18©(</del>		<del>of 104(a)</del> <del>exemption</del>	as per ©(3)(ii) and maximum tip velocity	<del>60.18(f)(4)</del>		heat contont and
	<del>3)</del>			specification per ©(4), or <del>60.18©(3)(i) flare</del> specifications	<del>60.18(f)(5)</del>		<del>maximum tip</del> <del>volocity</del>
Presence of	12-11-5	N		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 <b>&amp;</b>		
					12-11-505		

# 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
Presence of a Flame	4 <del>0 CFR</del> 60.18©( <del>2)</del>	¥	Upon loss of 194(a) exemption	The flare shall be operated with a flame present at all times	<del>60.18(f)(2)</del>	₽∕€	<del>Flame</del> <del>Detector</del>
	Conditio n #13370	N		purge and pilot gas flow measurements	BAAQMD Regulation 12-11-504 & 12-11-505	P/C	Purge and pilot Gas Flow Rate
		N	12/4/03 (if video monitor installed by 1/1/03)		BAAQMD Regulation 12- 11-507	P/C	1 frame per minute image video recording
		Ν	12/4/03 (if any >1E6 SCF/24- hr vent gas flared)		BAAQMD Regulation 12- 11-507	P/C	1 frame per minute image video recording

Table VII.A.3.1 Combustion rnaces)

 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-4093 F-11 Steam Heater Wax Filter Building, S-4094 Air Heater Kiln Thermofor Unit abated by A-0094 Afterburner, 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, S-4402 Salt Furnace

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
Opacity	6-301	Y		Ringelmann No. 1 for no more than 3 minutes/hour	6-601	Ν	None
FP	6-305	Y		Visible Particulates	6-601	P/E	Visual Inspection
	6-310	Y		0.15 grain/dscf	None	Ν	None
	6-310.3	Y		0.15 grain/dscf @ 6% O2	None	Ν	None

Table VII.A.3.2 Combustion (Furnances)

# 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

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	7/1/02	Refinery-wide emissions (excluding CO Boilers) 0.033 lbs NOx/ MMBTU	Conditions: #18015 Part 2 S-4070, S-4071, S-4072 #18172 Part 2 S-4042, S-4043, S-4044, S-4045 #18166 Part 2 S-4061, S-4062	С	СЕМ
NOx	9-10-301	N		Refinery-wide emissions (excluding CO Boilers) 0.033 lbs NOx/ MMBTU	#18003 Part 3 S-4059, S-4060 #17631 Part 3 S-4158 #18350 Part 3 S-4068	P/semi-annual	Source testing
NOx	9-10-301	Ν	1/1/05	Refinery-wide emissions (excluding CO Boilers) 0.033 lbs NOx/ MMBTU	#21232 parts 4, 5, 6, 7	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

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
NOx	NOx 9-10-303 Y	Y		Federal interim emissions Refinery-wide emissions (excluding CO Boilers)	#18172 Part 2 S-4042, S-4043, S-4044, S-4045	С	CEM
			0.20 lbs NOx/MMBTU	#18166 Part 2 S-4061, S-4062			
				#18015 Part 2 S-4070, S-4071, S-4072			
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,	С	СЕМ
NOx	60.44b(e)			0.1 lb NOx/MMBtu limit	S-4072 9-10-502.1	С	СЕМ
				for combusting natural gas with waste/byproduct (includes refinery fuel gas)	federal requirement 60.48b subsumed under Reg. 9 Rule 10 see Table IXB		
					S-4155		

 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

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	7/1/02	No limit	9-10-502 #18015 Part 2 S-4070, S-4071, S-4072 #18172 Part 2 S-4042, S-4043, S-4044, S-4045 #181-6 Part 2 S-4061, S-4062 #469 3b S-4330 - 4339	С	CEMs
02		N	7/1/02	No limit	#18003 Part 3 S-4059, S-4060 #17631 Part 3 S-4158 #18350 Part 3 S-4068	P/semi-annual	Source testing
02		N	9/1/04	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

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
СО	9-10-305 #18003 part 4 and part 9	Ν		400 ppmv (and 200 ppmv for #18003) (dry, 3% O <sub>2</sub> )	#18015 Part 1 S-4070, S-4071, S-4072 #18003 Part 3 S-4059, S-4060 #17631 Part 3 S-4158 #18172 Part 1 S-4042, S-4043, S-4044, S-4045 #18166 Part 1 S-4061, S-4062 #18350 Part 3 S-4068	P semi-annual	Source testing
СО	9-10-305 #21232	Ν		400 ppmv (and 200 ppmv for #21232) (dry, 3% O <sub>2</sub> )	#21232 parts 4, 7, 8, 9	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

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		332 MMBtu/hour	Condition 469	P/daily	Daily records
	Part 6E			[applies to only: 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, and S-4349]	Part 4a		reported on a monthly basis

 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

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	#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	#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	#18003 Part 3 S-4059, S-4060 #17631 Part 3 S-4158 #18350 Part 3 S-4068	P semi-annual	Source testing
NOx	Condition #18003 Part 6			0.03 lbs NOx/MMBtu established as an emission factor for this furnace	#18003 Part 3 S-4059, S-4060	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

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 #17631 Part 6			0.035 lbs NOx/MMBtu established as an emission factor for this furnace	#17631 Part 3 S-4158	P Semi-annual	Source test
NOx	Condition #18350 Part 6			0.14 NOx/MMBtu established as an emission factor for this furnace	#18350 Part 3 S-4068	P Semi-annual	Source test
NOx	40 CFR 60 Subpart Dc	Y					
NOx	Condition #8773 Part 1a	Y		8.85 lb/hr for S-4155	#8773 Part 1	С	CEM
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	CEM
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
02				No limit	40 CFR 60.46c(a)	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

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
СО	9-10-305	Ν		400 ppmv (dry, 3% O <sub>2</sub> )	9-10-502.1	P/A	Source test
СО	Condition #8773 Part 2	Y		50 ppmv [applies to S- 4155]	Condition #8773 Part 2	P/semi-annual	source test
Opacity	6-301	Y		Ringelmann No. 1 for no more than 3 minutes/hour	None	Ν	N/A
FP	6-305	Y		Visible Particulates	6-601	P/E	Visual Inspection
	6-310	Y		0.15 grain/dscf	None	Ν	None
	6-310.3	Y		0.15 grain/dscf @ 6% O2	None	Ione	
Opacity	40 CFR 60 Subpart Dc 60.43c©	Y		20% opacity; 27% opacity for 6 min/hour	40 CFR 60.45c(a)	P/E	Visual liection
Opacity	40 CFR 60 Subpart Dc 60.43c©			20% opacity; 27% opacity for 6 min/hour	40 CFR 60.47c(a)	С	CEM [For residual oil- fueled]
SO2	40 CFR 60 Subpart Dc 60.42c(d)	Y		Compliance option: very low sulfur oil (0.5% S)	40 CFR 60.46c(d)	P/fuel change	Fuel sampling
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.3.2 Combustion

 Applicable Limits and Compliance Monitoring Requirements

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

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
H28	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
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
Fuel Flow	Condition #16686	N		78 MMBtu/Hr [applies for S-4044] 398 MMBtu/Hr [applies for S-4070] 405 MMBtu/Hr [applies for S-4071] 336 MMBtu/Hr [applies for S-4072] 24.8 MMBtu/Hr [applies for S-4335] 41 MMBtu/Hr [applies for S-4338] 19 MMBtu/Hr [applies for S-4339]	#16686 Part 1	P/D	Record-keeping
Fuel Flow	Condition #18003 Part 7	Y		121 MMBtu/Hr [applies for S-4059]	#18003 Part 1	С	Fuel flowmeter
Fuel Flow	Condition #18003 Part 8	Y		144 MMBtu/Hr [applies for S-4060]	#18003 Part 1	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-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-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-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 #18015 Part 3	Y		398 MMBtu/Hr [applies for S-4070] 405 MMBtu/Hr [applies for S-4071] 336 MMBtu/hr [applies for S-4072]	#18015 Part 2	С	Fuel flowmeter
Fuel Flow	Condition #17631 Part 7	Y		48 MMBtu/Hr [applies for S-4158]	#17631 Part 1	С	Fuel flowmeter
Fuel Flow	Condition #18172 Part 3	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]	#18172 Part 2	С	Fuel flowmeter
Fuel Flow	Condition #18166 Part 3	Y		122 MMBtu/Hr [applies to S-4061] 165 MMBtu/Hr [applies to S-4062]	#18166 Part 2	С	Fuel flowmeter
Fuel Flow	Condition #18350 Part 7	Y		127.5 MMBtu/Hr [applies to S-4068]	#18350 Part 1	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-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-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-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		302 MMBtu/hour	Condition #469	P/Daily	Daily records
Fuel Flow	Condition #469 Part 6E	Y		302 MMBtu/hour [applies to only: 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-	Condition #469 Part 4A	P/Daily	Daily records recorded on a monthly basis
				1550, HNC Vac. RLOP abated by A-0067 SCR, S-4339 F-1110 LNC			
				Reactor RLOP abated by A-0067 SCR, and S- 4349]			

#### Table VII.A.3.3 Combustion (Furnances)

 Table VII.A.3.3 Combustion

 Applicable Limits and Compliance Monitoring Requirements

#### **Furnaces for which BAAQMD Regulation 9 Rule 10 applies, but NSPS does not apply:**

S-4032 F-101 FCC GHT #3 Cat Furnace, S-4033 F-102 Penhex Isom #3 Cat Furnace,
S-4038 F-3550 #4 Cat Furnace, S-4039 F-3560 #4 Cat Furnace, S-4040 F-3570, #4 Cat Furnace,
S-4041 F-3580 #4 Cat Furnace, S-4095 F-210 Slack Wax Furnace Wax Re-Run, S-4152 F-100,
Asphalt Solution Heater, SDA Isomax, S-4153 F-110 Asphalt Solution Heater SDA Isomax, S-4154
F-120 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-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-4168 F-730 Isocracker Splitter Feed Isomax, S-4169 F-731 Isocracker Reboiler Isomax, S-4170 F-305 H<sub>2</sub> Reforming Furnace H<sub>2</sub> Plant Isomax abated by A0260 SCR, S-4171 F-355 H<sub>2</sub> Reforming Furnace H<sub>2</sub> Plant, Isomax abated by A6011 SCR, S-4188 F-651 Polymer Furnace Poly Plant, S-4189 F-661 Polymer Furnace Poly Plant

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	#16698 Part 6 S-4038, S-4039, S-4040, S-4041	С	CEMs
					#16731 Part 2 S-4164, S-4165, S-4166, S-4168, S-4169		
					#16679 Part 4 S-4170		
					#17973 Part 2 S-4171		
					9-10-502		
NOx	9-10-301	Ν	7/1/02	Refinery-wide emissions (excluding CO Boilers)	#17628 Part 3 S-4152, S-4154	P semi-annual	Source testing
				0.033 lbs NOx/ MMBTU	#18387 Part 3 S-4159, S-4160		
					#18391 Part 3 S-4167		
NOx	9-10-301	N	1/1/05	Refinery-wide emissions (excluding CO Boilers) 0.033 lbs NOx/ MMBTU	#21232 parts 4,5,6,7	P/semi-annual	Source testing

 Table VII.A.3.3 Combustion

 Applicable Limits and Compliance Monitoring Requirements

#### **Furnaces for which BAAQMD Regulation 9 Rule 10 applies, but NSPS does not apply:**

S-4032 F-101 FCC GHT #3 Cat Furnace, S-4033 F-102 Penhex Isom #3 Cat Furnace, S-4038 F-3550 #4 Cat Furnace, S-4039 F-3560 #4 Cat Furnace, S-4040 F-3570, #4 Cat Furnace, S-4041 F-3580 #4 Cat Furnace, S-4095 F-210 Slack Wax Furnace Wax Re-Run, S-4152 F-100, Asphalt Solution Heater, SDA Isomax, S-4153 F-110 Asphalt Solution Heater SDA Isomax, S-4154 F-120 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-4162 F-520 TKN Feed Furnace Isomax, S-4163 F-530 TKN Feed Furnace Isomax, S-4166 F-610 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-4168 F-730 Isocracker Splitter Feed Isomax, S-4169 F-731 Isocracker Reboiler Isomax, S-4170 F-305 H<sub>2</sub> Reforming Furnace H<sub>2</sub> Plant Isomax abated by A0260 SCR, S-4171 F-355 H<sub>2</sub> Reforming Furnace H<sub>2</sub> Plant, Isomax abated by A6011 SCR, S-4188 F-651 Polymer Furnace Poly Plant, S-4189 F-661 Polymer Furnace Poly Plant

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	9-10-303 Y		Federal interim emissions refinery-wide emissions (excluding CO Boilers)	#16698 Part 6 S-4038, S-4039, S-4040, S-4041	С	CEMs
	0.20 lbs	0.20 lbs NOx/MMBTU	#16731 Part 2 S-4164, S-4165, S-4166, S-4168, S-4169				
					#16679 Part 4 S-4170		
					#17973 Part 2 S-4171		
					9-10-502		
NOx	9-10-303	9-10-303 Y	Federal interim emissions refinery-wide emissions	#17628 Part 3 S-4152, S-4154	P semi-annual	Source testing	
				(excluding CO Boilers) 0.20 lbs NOx/MMBTU	#18387 Part 3 S-4159, S-4160		
					#18391 Part 3 S-4167		
					9-10-502		
NOx	Condition #17628 Part 6			0.035 lbs NOx/MMBtu established as an emission factor for this furnace	#17628 Part 3 S-4152	P semi-annual	Source test
NOx	Condition #17628 Part 7			0.035 lbs NOx/MMBtu established as an emission factor for this furnace	#17628 Part 3 S-4154	P semi-annual	Source test
NOx	Condition #18387 Part 6			0.033 NOx/MMBtu established as an emission factor for these furnaces	#18387 Part 3 [applies for S-4159, S-4160]	P Semi-annual	Source test

 Table VII.A.3.3 Combustion

 Applicable Limits and Compliance Monitoring Requirements

#### **Furnaces for which BAAQMD Regulation 9 Rule 10 applies, but NSPS does not apply:**

S-4032 F-101 FCC GHT #3 Cat Furnace, S-4033 F-102 Penhex Isom #3 Cat Furnace, S-4038 F-3550 #4 Cat Furnace, S-4039 F-3560 #4 Cat Furnace, S-4040 F-3570, #4 Cat Furnace, S-4041 F-3580 #4 Cat Furnace, S-4095 F-210 Slack Wax Furnace Wax Re-Run, S-4152 F-100, Asphalt Solution Heater, SDA Isomax, S-4153 F-110 Asphalt Solution Heater SDA Isomax, S-4154 F-120 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-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-4168 F-730 Isocracker Splitter Feed Isomax, S-4169 F-731 Isocracker Reboiler Isomax, S-4170 F-305 H<sub>2</sub> Reforming Furnace H<sub>2</sub> Plant Isomax abated by A0260 SCR, S-4171 F-355 H<sub>2</sub> Reforming Furnace H<sub>2</sub> Plant, Isomax abated by A6011 SCR, S-4188 F-651 Polymer Furnace Poly Plant, S-4189 F-661 Polymer Furnace Poly Plant

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
NOx	#18391 Part 6			0.035 NOx/MMBtu established as an emission factor for this furnace	#18391 Part 3 S-4167	P Semi-annual	Source test
02		Y	7/1/02	No limit	#16698 Part 6 S-4038, S-4039, S-4040, S-4041 #16731 Part 2 S-4164, S-4165, S-4166, S-4168, S-4169 #16679 Part 4 S-4170 #17973 Part 2 S-4171 9-10-502	С	CEMs
02			7/1/02	No limit	#17628 Part 3 S-4152, S-4154 #18387 Part 3 S-4159, S-4160 #18391 Part 3 S-4167	P Semi-annual	Source testing
02		Ν	1/1/05	No limit	#21232 parts 2, 4B	С	O2 Monitors and annual accuracy test

 Table VII.A.3.3 Combustion

 Applicable Limits and Compliance Monitoring Requirements

#### **Furnaces for which BAAQMD Regulation 9 Rule 10 applies, but NSPS does not apply:**

S-4032 F-101 FCC GHT #3 Cat Furnace, S-4033 F-102 Penhex Isom #3 Cat Furnace, S-4038 F-3550 #4 Cat Furnace, S-4039 F-3560 #4 Cat Furnace, S-4040 F-3570, #4 Cat Furnace, S-4041 F-3580 #4 Cat Furnace, S-4095 F-210 Slack Wax Furnace Wax Re-Run, S-4152 F-100, Asphalt Solution Heater, SDA Isomax, S-4153 F-110 Asphalt Solution Heater SDA Isomax, S-4154 F-120 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-4162 F-520 TKN Feed Furnace Isomax, S-4163 F-530 TKN Feed Furnace Isomax, S-4166 F-610 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-4168 F-730 Isocracker Splitter Feed Isomax, S-4169 F-731 Isocracker Reboiler Isomax, S-4170 F-305 H<sub>2</sub> Reforming Furnace H<sub>2</sub> Plant Isomax abated by A0260 SCR, S-4171 F-355 H<sub>2</sub> Reforming Furnace H<sub>2</sub> Plant, Isomax abated by A6011 SCR, S-4188 F-651 Polymer Furnace Poly Plant, S-4189 F-661 Polymer Furnace Poly 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	9-10-305	N		400 ppmv (dry, 3% O <sub>2</sub> )	#16698 Part 1 S-4038, S-4039, S-4040, S-4041	P Semi-annual	Source testing
					#16731 Part 1 S-4164, S-4165, S-4166, S-4168, S-4169		
					#16679 Part 7 S-4170		
					#17973 Part 7 S-4171		
					#17628 Part 3 S-4152, S-4154		
					#18387 Part 3 S-4159, S-4160		
					#18391 Part 3 S-4167		
					9-10-502		
СО	9-10-305 #21232	N	6/1/04	400 ppmv (and 200 ppmv for #21232) (dry, 3% O <sub>2</sub> )	#21232 parts 4, 7, 8., 9	P/ semi- annual	Source testing
Opacity	6-301	Y		Ringelmann No. 1 for no more than 3 minutes/hour	6-601	Ν	Visual inspection
FP	6-305	Y		Visible Particulates	6-601	P/E	Visual Inspection
	6-310	Y		0.15 grain/dscf	None	Ν	None
	6-310.3	Y		0.15 grain/dscf @ 6% O2	None	Ν	None

 Table VII.A.3.3 Combustion

 Applicable Limits and Compliance Monitoring Requirements

#### **Furnaces for which BAAQMD Regulation 9 Rule 10 applies, but NSPS does not apply:**

S-4032 F-101 FCC GHT #3 Cat Furnace, S-4033 F-102 Penhex Isom #3 Cat Furnace, S-4038 F-3550 #4 Cat Furnace, S-4039 F-3560 #4 Cat Furnace, S-4040 F-3570, #4 Cat Furnace, S-4041 F-3580 #4 Cat Furnace, S-4095 F-210 Slack Wax Furnace Wax Re-Run, S-4152 F-100, Asphalt Solution Heater, SDA Isomax, S-4153 F-110 Asphalt Solution Heater SDA Isomax, S-4154 F-120 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-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-4168 F-730 Isocracker Splitter Feed Isomax, S-4169 F-731 Isocracker Reboiler Isomax, S-4170 F-305 H<sub>2</sub> Reforming Furnace H<sub>2</sub> Plant Isomax abated by A0260 SCR, S-4171 F-355 H<sub>2</sub> Reforming Furnace H<sub>2</sub> Plant, Isomax abated by A6011 SCR, S-4188 F-651 Polymer Furnace Poly Plant, S-4189 F-661 Polymer Furnace Poly Plant

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
NH3	Condition #16679 Part 1	<u>N</u>		120 lb NH3/Hr [applies to S-4170]	none	Ν	None
Fuel Flow	condition #16686 #18387 #16731	Ν		505 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] 847 MMbtu/hr [S-4170] 847 MMbtu/hr [S-4171]	Condition #16686 #18387 #16731	С	Fuel flowmeter
Fuel Flow	Condition #16698 Part 2	N		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]	#16698 Part 4	С	Fuel flowmeter
Fuel Flow	Condition #17628 Part 8	Ν		50.5 MMBtu/Hr [applies for S-4152]	#17628 Part 1	С	Fuel flowmeter
Fuel Flow	Condition #17628 Part 9	Ν		50.5 MMBtu/Hr [applies for S-4154]	#17628 Part 1	С	Fuel flowmeter
Fuel Flow	Condition #469	Y		47 MMBtu/Hr HHV[applies for S-4159], 45 MMBtu/Hr HHV [applies for S-4160]	#469	С	Fuel flowmeter

 Table VII.A.3.3 Combustion

 Applicable Limits and Compliance Monitoring Requirements

#### **Furnaces for which BAAQMD Regulation 9 Rule 10 applies, but NSPS does not apply:**

S-4032 F-101 FCC GHT #3 Cat Furnace, S-4033 F-102 Penhex Isom #3 Cat Furnace, S-4038 F-3550 #4 Cat Furnace, S-4039 F-3560 #4 Cat Furnace, S-4040 F-3570, #4 Cat Furnace, S-4041 F-3580 #4 Cat Furnace, S-4095 F-210 Slack Wax Furnace Wax Re-Run, S-4152 F-100, Asphalt Solution Heater, SDA Isomax, S-4153 F-110 Asphalt Solution Heater SDA Isomax, S-4154 F-120 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-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-4168 F-730 Isocracker Splitter Feed Isomax, S-4169 F-731 Isocracker Reboiler Isomax, S-4170 F-305 H<sub>2</sub> Reforming Furnace H<sub>2</sub> Plant Isomax abated by A0260 SCR, S-4171 F-355 H<sub>2</sub> Reforming Furnace H<sub>2</sub> Plant, Isomax abated by A6011 SCR, S-4188 F-651 Polymer Furnace Poly Plant, S-4189 F-661 Polymer Furnace Poly Plant

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 #16731 Part 3			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]	#16731 Part 5	С	Fuel flowmeter
Fuel Flow	Condition #16679 Part 9			847 MMBtu/Hr [applies for S-4170]	#16679 Part 10	С	Fuel flowmeter
Fuel Flow	Condition #17973 Part 3			847 MMBtu/Hr [applies for S-4171]	#17973 Part 2	С	Fuel flowmeter
Fuel Flow	Condition #18387 Part 7			68 MMBtu/Hr [applies to S-4159]	#18387 Part 1	С	Fuel flowmeter
Fuel Flow	Condition #18387 Part 8			71 MMBtu/Hr [applies to S-4160]	#18387 Part 1	С	Fuel flowmeter
Fuel Flow	Condition #18391 Part 7			145 MMBtu/Hr [applies to S-4167]	#18391 Part 1	С	Fuel flowmeter

#### Table VII.A.3.5 Combustion (Furnance)

## 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

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		30 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	6-301	Y		Ringelmann No. 1 for no more than 3 minutes/hour	6-601	N	Visual inspection
FP	6-305	Y		Visible Particulates	6-601	P/E	Visual Inspection
	6-310	Y		0.15 grain/dscf	None	Ν	None
	6-310.3	Y		0.15 grain/dscf @ 6% O2	None	N	None
H28	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

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

Table VII.A.4.1 Combustion (Engines)

## Table VII.A.4.1 Combustion Applicable Limits and Compliance Monitoring Requirements

#### **Internal Combustion Engines**

S-4118 P15 Fire water pump, S-4119 P16 Fire water pump, S-4126 P10 Fire water pump, S-4127 #1PP ELECTRICAL GENERATOR, S-7010 DIESEL ENGINE, S-7501 IC ENGINE, S-7507 IC ENGINE, S-7510-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-7520 IC ENGINE, S-7521 IC ENGINE, S-7522 IC ENGINE, S-7523 IC ENGINE, S-7524 IC ENGINE, S-7525 IC ENGINE, S-7526 IC ENGINE, S-7528 IC ENGINE, S-7531 IC ENGINE, S-7531 IC ENGINE, S-7526 IC ENGINE, S-7528 IC ENGINE, AND S-7531 IC ENGINE

<u>S-7502, S-7503, S-7504, S-7505, S-7506, S-7508, S-7509, S-7519, S-7527, S-7529, S-7530,</u> 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	6-303 <u>.1</u>	Y		Ringelmann No. 2 for > 3 minutes in any hour or equivalent opacity <u>(does</u> <u>not apply to S-7010)</u>	None	N	N/A
FP	6-305	Y		Visible Particulates	<del>6-601</del>	<del>P/E</del> N	Visual Inspection
	6-310	Y		0.15 grain/dscf	None	Ν	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 (applices only to S- 7501), 9-8-321 (applies only to S-7501), Condition 20225 condition 20366 (applies to S-7010)	Ν		Hours of Operation (applies to S-7501 IC Engine, S-7507 IC Engine, S-7507 IC Engine, S-7510 IC Engine, S-7511 IC Engine, S-7513 IC Engine, S-7513 IC Engine, S-7514 IC Engine, S-7516 IC Engine, S-7516 IC Engine, S-7517 IC Engine, S-7518 IC Engine, S-7521 IC Engine, S-7522 IC Engine, S-7523 IC Engine, S-7523 IC Engine, S-7525 IC Engine, S-7525 IC Engine, S-7526 IC	9-8-530 (applies only to S-7501), Condition 20225 <u>condition 20366</u> <u>part 3 (applies</u> <u>only to S-7010)</u>	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	7/1/02	Refinery-wide emissions (excluding CO Boilers) 0.033 lbs NOx/ MMBTU	Conditions: #16650 Part 1 S-4129, S-4131	С	CEMs
					#17675 Part 1 S-4132, S-4135		
					#18029 Part 2 S-4133		
					9-10-502		
NOx	9-10-302	N		Interim emissions 50% of affected units 0.033 lbs	#16650 Part 1 S-4129, S-4131	С	CEMs
				NOx/MMBTU	#17675 Part 1 S-4132, S-4135		
					#18029 Part 2 S-4133		
					9-10-502		
NOx	9-10-301	N	1/1/05	Refinery-wide emissions (excluding CO Boilers) 0.033 lbs NOx/ MMBTU	#21232 parts 4,5,6,7	P/semi-annual	Source testing
NOx	9-10-303	Y		Federal interim emissions refinery-wide emissions (excluding CO Boilers) 0.20 lbs NOx/MMBTU	Conditions: #16650 Part 1 S-4129, S-4131	С	CEMs
					#17675 Part 1 S-4132, S-4135		
					#18029 Part 2 S-4133		
					9-10-502		
NOx	9-10-303	Y		Federal interim emissions refinery-wide emissions	#16650 Part 1 S-4129, S-4131	P semi-annual	Source testing
				(excluding CO Boilers) 0.20 lbs NOx/MMBTU	#17675 Part 1 S-4132, S-4135		
					#18029 Part 2 S-4133		
					9-10-502		

## 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
02		Y	7/1/02	none	9-10-502	С	CEMs
					#16650 Part 1 S-4129, S-4131		
					#17675 Part 1 S-4132, S-4135		
					#18029 Part 2 S-4133		
02		N	1/1/05	No limit	#21232 parts 2, 4B	С	CEMs and annual accuracy test
СО	9-10-305	Ν		400 ppmv (dry, 3% O <sub>2</sub> )	9-10-502.1	Р	Source tests
					#16650 Part 5 S-4129, S-4131	Semi-annual	
					#17675 Part 2 -4132, S-4135		
					#18029 Part 1 S-4133		
СО	9-10-305 #21232	Ν	1/1/05	400 ppmv (and 200 ppmv for #21232) (dry, 3% O <sub>2</sub> )	#21232 parts 4,7,8,9	P/ semi-annual	Source testing
Opacity	6-301	Y		Ringelmann No. 1 for no more than 3 minutes/hour	None	Ν	N/A
FP	6-305	Y		Visible Particulates	6-601	P/E	Visual Inspection
	6-310	Y		0.15 grain/dscf	None	Ν	None
	6-310.3	Y		0.15 grain/dscf @ 6% O2	None	Ν	None
Fuel flow	Condition #16650 Part 2			5592 MMBtu/day =233 MMBtu/hr [applies to S-4129 only]	#16650 Part 1	С	Fuel flowmeter
Fuel flow	Conditions #16650 Part 3 #16686			5664 MMBtu/day =236 MMBtu/hr [applies to S-4131 only]	#16650 Part 1	С	Fuel flowmeter
Fuel flow	Conditions #17675 Part 3 #16686			5640 MMBtu/day =235 MMBtu/hr {applies to S-4132 only]	#17675 Part 1	С	Fuel flowmeter
Fuel flow	Condition #18029 Part 3 #16686			5688 MMBtu/day =237 MMBtu/hr [applies to S-4133 only]	#18029 Part 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
Fuel flow	Condition #17675 Part 4			6528 MMBtu/day =272 MMBtu/Hr [applies to S-4135 only]	#17675 Part 1	С	Fuel flowmeter

 Table VII.B.1.1 Loading Terminals (Asphalt)

 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
VOC	8-15-305, 8- 15-301 – 8- 15-304, & 8- 15-112			VOC content of asphalt	8-15-501	P/E	Recordkeeping
Opacity	6-301	Y		Ringelmann No. 1 for no more than 3 minutes/hour	None	Ν	N/A
FP	6-305	Y		Visible Particulates	6-601	P/E	Visual Inspection
	6-310	Y		0.15 gr/dscf	None	Ν	N/A
	Condition #1331 Part 2			For S-4415, loading limit of 238,000 gpd when A-0037 is down	Condition #1331 Part 3	P/D	Record Keeping (Daily throughput)
Refinery Cap	Condition #469	¥					

#### 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	A	Vapor tightness test
VOC	8-7-301.10	N		98% or highest vapor recovery rate specified by CARB	Regulation 8-7-304 Regulation 8-7-503 CARB State Exec Order G-70-138	P/6 months	Recordkeeping and CARB certification testing
VOC	None			None	BAAQMD Regulation 8-7-302.14	А	Backpressure test
VOC	8-7-313.1	Ν		Fugitives ≤0.42 lb/1000 gallons dispensed	8-7-503	P/6 months	Recordkeeping and CARB certification testing
VOC	8-7-313.2	Ν		Spillage ≤ 0.42 lb/1000 gallons dispensed	8-7-503	P/6 months	Recordkeeping and CARB certification testing
VOC	8-7-313.3	N		Liquid Retain + Spitting ≤ 0.42 lb/1000 gallons dispensed	8-7-503	P/6 months	Recordkeeping and CARB certification testing
	None	Ν		None	8-7-503	P/A	Recordkeeping
VOC	SIP 8-7-301.2	Y		95% recovery of gasoline vapors	8-7-503 <u>and</u> condition 20666	P/6 months	Recordkeeping and CARB certification <u>t</u> —esting—
	Condition #710	Y		Flowrate limit of 8.0 – 8.6 gpm	None	Ν	N/A
	Condition #711	Y		Vapor flowrate limit of 17.2 gpm max	None	N	N/A
<u>Throughput</u>	Condition 7880	<u>N</u>		Annual throughput	None	<u>N</u>	<u>N/A</u>

#### Table VII.B.3.1 Loading Terminalsm (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 Operaion

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 <u>and</u> <u>condition</u> <u>20863 part</u> <u>5(applies to</u> <u>S-4405)</u>	Y		21 g/cubic meter (0.17 Ib/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	Ν	N/A
Throughp ut	Condition 20863 parts 1 and 2	<u>N</u>		Annual and daily throughput limits	Condition 20863 part 8	<u>P/D</u>	<u>Recordkeeping</u>
<u>Vapor</u> Pressure	Condition 20863 part <u>3</u>	<u>N</u>		Vapor pressure not to exceed 1.13 psia	Condition 20863 part 8	<u>P/D</u>	Recordkeeping
<u>Benzene</u>	Condition 20863 part <u>4</u>	<u>N</u>		Benzene not to exceed 3% by weight	Condition 20863 part 8	<u>P/D</u>	Recordkeeping

 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 Operaion

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.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	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	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	8-44-301.2 & 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	8-44-303	Y		Leak free and gas tight	40 CFR 63 563(a)(4)	P/E	Leak test
Refinery cap	Condition #469	Y					

## 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
Through- put	Condition #18137	Ν		Throughput limits	Condition #18137	P/M	Recordkeeping

#### 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-4078 WRR, 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 MTBE/ALTA,

#### S-6054 #2 Wax Deoiler, S-6055 Wax Finishing Plant

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
Opacity	6-301	Y		Ringelmann No. 1 for no more than 3 minutes/hour	None	P/M	Measurement of total dissolved solids
FP	6-305	Y		Visible Particulates	6-601	P/E	Visual Inspection
FP	6-311	Y		4.10 P <sup>0.67</sup> lb/hr particulate, where P is process weight rate in ton/hr	none	P/M	Measuremen of total dissolved solids
TDS	Condition #14596 Part 2	Y	6/1/4	For S-6051, TDS < 2000 ppm (wt) averaged over any consecutive 30-day period	Condition #14596 Part 3	P/M	monthly tests of TDS
	Condition #10597 Part 2	Y	6/1/4	For S-6054, TDS < 1000 ppm (wt) averaged over any consecutive 30-day period		P/M	monthly tests of TDS

## Table VII.C.1.1 Process Units Applicable Limits and Compliance Monitoring Requirements

#### **Cooling Water Towers**

#### S-4073 LSFO, S-4076 #3 Cat, S-4078 WRR, 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 MTBE/ALTA,

S-6054 #2 Wax Deoiler, S-6055 Wax Finishing Plant

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
	Condition #10598 Part 2	Y	6/1/4	For S-6055, TDS < 1000 ppm (wt) averaged over any consecutive 30-day period		P/M	monthly tests of TDS
РОС	Condition 14596 Part 1	Y	6/1/4	For S-6051, POC < 23.7 lb/day averaged over any consecutive 30-day period	Condition #14596 Part 3	P/M	monthly tests of <u>POC</u> TDS
	Condition #10597 Part 1	Y	6/1/4	For S-6054, HC emissions < 2.5 lb/day averaged over any consecutive 30-day period		P/M	monthly tests of <del>TDS</del> POC
	Condition #10598 Part 1	Y	6/1/4	For S-6055, HC emissions < 2.5 lb/day averaged over any consecutive 30-day period		P/M	monthly tests of <u>POC</u> TDS

 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-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-4261 Wax Deoiler No. 2, S-4262 Wax Rerun Plant, S-4265 Lube/Wax Refinishing, 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-4360 Perc Storage Vessel, S-4400 Wax Melt Vessel, S-6050 MTBE I
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			Future		Monitoring	Monitoring	
Type of	Citation of	FE	Effective		Requirement	Frequency	Monitoring
Limit	Limit	Y/N	Date	Limit	Citation	(P/C/N)	Туре
Throughput	Condition	Y		Applies to S-4340 not to	Condition #469	P/Daily	Daily records
limit	#469			exceed 1 <u>25,05</u> 00	Part 6		recorded on a
	Part 5			barrels/operating day			monthly basis
				Applies to S-4341 not to			
				exceed 1 <del>0</del> 9,000			
				barrels/operating day			
				Applies to S-4342 not to			
				exceed <del>18<u>20</u>,5<u>0</u>00</del>			
				barrels/operating day			
				Applies to S-4343 not to			
				exceed <u>58</u> ,000			
				barrels/operating day			
				Applies to S-4253 not to			
				exceed 65,000			
				barrels/operating day			
	Condition	Y		Applies to S-4235			
	#8180						

 Table VII.C.3.1 Process Units

 Applicable Limits and Compliance Monitoring Requirements

**Miscellaneous Process Units** 

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-4261 Wax Deoiler No. 2, S-4262 Wax Rerun Plant, S-4265 Lube/Wax Refinishing, 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.

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
	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 <u> and S-</u> <u>4360</u>	#18337	P/D	Record Keeping
	Condition #20944	Ζ		Applies to S-4292	#20944	P/D	Record Keeping
	Condition #6001	Y		Applies to S-4286			
	Condition # 16393 part 1	Y		Applies to A-54	Condition #16393 part 6	С	Flow meter
NOx	Condition 8773 part 1	Y		8.85 #/hr	#8773 part 1	С	CEM

 Table VII.C.3.1 Process Units

 Applicable Limits and Compliance Monitoring Requirements

**Miscellaneous Process Units** 

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-4261 Wax Deoiler No. 2, S-4262 Wax Rerun Plant, S-4265 Lube/Wax Refinishing, 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,

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
NOx	Condition #16393 part 2	Y		0.2 #/MMBtu	Condition #16393 part 5	P/initial source test	Source test
СО	Condition 8773 part 2	Y		50 ppm CO	#8773 part 2	P/initial source test	Source test
СО	Condition #16393	Y		0.8 #/MMBtu	#16393 part 5	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

 Table VII.C.3.1 Process Units

 Applicable Limits and Compliance Monitoring Requirements

**Miscellaneous Process Units** 

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-4261 Wax Deoiler No. 2, S-4262 Wax Rerun Plant, S-4265 Lube/Wax Refinishing, 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

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		Monitoring Requirement	Monitoring Frequency	Monitoring
Limit	Limit	Y/N	Date	Limit	Citation	(P/C/N)	Туре
POC	Condition #15698, Regulation 8-2	Υ		Applies to S-4250 Emission < 15 lbs C/day or < 300 ppm C dry, 3-hr average, water temp <80F, 3-hr average vent flow < 5 Klb/hr, 3-hr average water flow > 30 gpm, water/vent	#15698 Regulation 8-2	P/M	Recordkeeping
РОС	Condition			flow ratio >11.6	Condition #16393	С	Temperature
	#16393 part 3				part 4		monitor
SOx	Condition #16393 part 2	Y		0.027 #/MMBtu	#16393 part 5	P/initial source test	Source test
РМ	Condition #16393 part 2	Y		0.01 #/MMBtu	#16393 part 5	P/initial source test	Source test

 Table VII.C.3.1 Process Units

 Applicable Limits and Compliance Monitoring Requirements

**Miscellaneous Process Units** 

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-4261 Wax Deoiler No. 2, S-4262 Wax Rerun Plant, S-4265 Lube/Wax Refinishing, 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 I NC, S-4341 Light Neutral Hydrofinisher I NHF

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
HCI	Refinery MACT2, 40 CFR 63 subpart UUU, 63.1567(a)(1 )	<u>Y</u>	4/11/05	+ or> 92% reduction in HCl or = or < 30 ppmv HCl (dry basis) emitted corrected to 3% O2 (applies to S-4237 & S-4283 catalyst regne exhaust gas)	Refinery MACT2, 40 CFR 63 subpart UUU, 63.1567(b)(2)	P/initial source test (during coke burn off & catalyst rejuvenation)	Source test and colorimetric tube sampling
HCI	Refinery MACT2, 40 <u>CFR 63</u> <u>subpart</u> <u>UUU,</u> 63.1567(a)(2 )	Y	4/11/05	Site specific operating limit (ppm HCl in catalyst regenerator exhaust gas) = a numerical limit TBD during initial source test	Refinery MACT2, <u>40 CFR 63</u> <u>subpart UUU,</u> <u>63.1567(c)(1)</u>	<u>P at least every</u> <u>4 hours (during</u> <u>coke burn off</u> <u>&amp; catalyst</u> <u>rejuvenation)</u>	colorimetric tube sampling

#### 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	6-302	Y		Opacity shall not exceed 20% for more than 3 minutes in any hour	6-502	С	Opacity monitor
Opacity	6-304			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.	1-520.5	С	Opacity monitor
<u>Opacity</u>	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)	Ϋ́	<u>4/11/05</u>	30% opacity, except for one 6 minute average opacity reading in 1 hour	<u>63.1564(b)(1) &amp;</u> <u>63.1564(c)(1)</u>	<u>C</u>	<u>Opacity</u> <u>monitor</u>
FP	6-310	Y		0.15 grain/dscf	#11066 Part 7a	P/Q <u>,P/D,C</u>	Source test <u>, TR</u> set secondary current, Temperature monitor and recorder

## 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
FP	6-311	Y		40 <sup>lb</sup> /hr particulate hr	#11066 Part 7a	P/Q <u>,P/D,C</u>	Source test, <u>TR</u> set secondary current, <u>Temperature</u> <u>monitor and</u> <u>recorder</u>
РМ	40 CFR 60 Subpart J 60.102(a) (1)	Y		1.0 kg of PM per 1000 kg of coke burn off in catalyst generator	#11066 Part 7a	P/Q	Source test
<u>PM</u>	<u>Refinery</u> <u>MACT2,</u> <u>40 CFR 63</u> <u>subpart</u> <u>UUU,</u> <u>63.1564(a)(</u> <u>1)</u>	<u>Y</u>	<u>4/11/05</u>	<u>1.0 kg of PM per 1000 kg of coke burn off in catalyst generator</u>	<u>PM: #11066 part</u> <u>7a</u>	<u>P/Q</u>	<u>Source test</u>
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 Par #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	6/1/04	Removal and recovery of 95% of H2S in refinery fuel gas and 95% of H2S in process water streams on a refinery-wide basis	#18655	<del>₽/A<u>N/A</u></del>	Source test a S 4227-9

## 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
SO2	SIP 9-1-313.2	Y	6/1/04	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	<del>#18655</del>	₽ <u>N</u> /A	Source test a: 8 4227 9
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(1)(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 4			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 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
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)	Y		500 ppmv	40 CFR 60 Subpart J 60.105(a)(2)	С	CO monitor

## 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
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
CO	Refinery           MACT2,           40 CFR 63           subpart           UUU,           63.1565(a)(           1)	Y	4/11/05	<u>500 ppmv</u>	Refinery MACT2, 40 CFR 63 subpart UUU, 63.1565(b)(1) & 63.1565(c)(1)	C	<u>CEMs</u>
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
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 5	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

## 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
РОС	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
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

#### <u>Refinery</u>

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
РОС	8-5-117 & condition #20764 part	Y	6/1/4	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.
	1						Record Keeping
	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	Record Keeping
<u>HAP</u> (Benzene)	<u>61.343</u> (a)(1)(i)(A) <u>tanks</u>	<u>Y</u>		Cover leak tightness standards (< 500 ppmw)	<u>61.343</u> (a)(1)(i)(A)	<u>Periodic</u> <u>initially &amp;</u> <u>annually</u>	Method 21
<u>HAP</u> (Benzene)	<u>61.343</u> (a)(1)(i)(B)	Y		Standards for openings in the <u>cover</u>	<u>61.343</u> (a)(1)(i)(B)	Periodic initially & quarterly	Visual inspection
<u>HAP</u> (Benzene)	<u>61.343</u> (a)(1)(i)(C)	<u>Y</u>		Standards for systems operated under negative pressure	$\frac{61.343}{(a)(1)(i)(C)}$	<u>Continuous</u>	System pressure
HAP (Benzene)		<u>Y</u>		Cover leak tightness standards (< 500 ppmw)	<u>61.344</u> (a)(1)(i)(A)	Periodic initially & annually	Method 21
<u>HAP</u> (Benzene)	<u>61.344</u> (a)(1)(i)(B)	<u>Y</u>		Standards for openings in the cover	<u>61.344</u> (a)(1)(i)(B)	Periodic initially & quarterly	Visual inspection
<u>HAP</u> (Benzene)	<u>61.344</u> (a)(1)(i)(C)	<u>Y</u>		Standards for systems operated under negative pressure	<u>61.344</u> (a)(1)(i)(C)	<u>Continuous</u>	System pressure
<u>HAP</u> (Benzene)	<u>61.345</u> (a)(1)(i)(A) <u>containers</u>	Y		Cover leak tightness standards (< 500 ppmw)	<u>61.345</u> (a)(1)(i)(A)	<u>Periodic</u> <u>initially &amp;</u> <u>annually</u>	Method 21
<u>HAP</u> (Benzene)	<u>61.345</u> (a)(1)(i)(B)	Y		Standards for openings in the <u>cover</u>	<u>61.345</u> (a)(1)(i)(B)	Periodic initially & quarterly	Visual inspection
<u>HAP</u> (Benzene)	<u>61.345</u> (a)(1)(i)(C)	Y		Standards for systems operated under negative pressure	<u>61.345</u> (a)(1)(i)(C)	<u>Continuous</u>	System pressure
<u>HAP</u> (Benzene)	<u>61.346</u> (a)(1)(i)(A) <u>individual</u> <u>drain</u> <u>systems</u>	Y		Cover leak tightness standards (< 500 ppmw)	<u>61.346</u> (a)(1)(i)(A)	Periodic initially & annually	Method 21

# 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)	<u>61.346</u> (a)(1)(i)(B)	<u>Y</u>		Standards for openings in the <u>cover</u>	<u>61.346</u> (a)(1)(i)(B)	Periodic initially & quarterly	Visual inspection
<u>HAP</u> (Benzene)	<u>61.346</u> (a)(1)(i)(C)	<u>Y</u>		Standards for systems operated under negative pressure	<u>61.346</u> (a)(1)(i)(C)	<u>Continuous</u>	System pressure
<u>HAP</u> (Benzene)	$\frac{61.347}{(a)(1)(i)(A)}$ $\frac{oil-water}{separators}$	<u>Y</u>		Cover leak tightness standards (< 500 ppmw)	<u>61.347</u> (a)(1)(i)(A)	Periodic initially & annually	Method 21
<u>HAP</u> (Benzene)	<u>61.347</u> (a)(1)(i)(B)	<u>Y</u>		Standards for openings in the <u>cover</u>	<u>61.347</u> (a)(1)(i)(B)	<u>Periodic</u> <u>initially &amp;</u> <u>quarterly</u>	Visual inspection
<u>HAP</u> (Benzene)	<u>61.347</u> (a)(1)(i)(C)	<u>Y</u>		Standards for systems operated under negative pressure	<u>61.347</u> (a)(1)(i)(C)	<u>Continuous</u>	System pressure
HAP (Benzene)	$\frac{61.348}{(a)(1)(i)}$ $\frac{treatment}{processes}$ $OR$	Y		Waste stream less than 10 ppmw benzene	<u>61.348</u> (a)(2)	Periodic initially	Design criteria
<u>HAP</u> (Benzene)	<u>61.348</u> (a)(1)(ii) <u>OR</u>	<u>Y</u>		Remove benzene by 99% or more by mass basis	<u>61.348</u> (a)(2)	Periodic initially	Design criteria
<u>HAP</u> (Benzene)	61.349 (a)(1)(i) closed-vent systems and control devices	<u>Y</u>		Closed vent system leak tightness standards (< 500 ppmw)	<u>61.349</u> (a)(1)(i)	Periodic initially & annually	Method 21
<u>HAP</u> (Benzene)	<u>61.349</u> (a)(1)(ii)	Y		<u>Closed vent systems by-pass</u> <u>line standards</u>	<u>61.354</u> ( <u>f</u> )	Periodic daily for flow indicator; monthly for car-seal	Visual inspection
HAP (Benzene)	<u>61.349</u> (a)(1)(iii), (iv)	<u>Y</u>		Closed vent system gauging & sampling and pressure relief device standards	<u>61.349(f)</u>	Periodic initially & annually	Visual inspection
<u>HAP</u> (Benzene)	<u>61.349(a)(2)(</u> <u>i)</u>	Y		$\begin{tabular}{lllllllllllllllllllllllllllllllllll$			

# 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
<u>HAP</u> (Benzene)	<u>61.349(h)</u>	<u>Y</u>		Control device standards [NOTE TO USER Delete this row for units that meet the conditions of <u>61.343(b)(1)</u> ]	<u>61.354</u> ©, (d), (e)	Continuous check daily	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
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

# 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) emissions cap	Condition #469	Υ		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
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

# 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) emissions cap	Condition #469	Υ		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
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

# Table VII.D.1.1 Refinery Applicable Limits and Compliance Monitoring Requirements

#### <u>Refinery</u>

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 + wharf)	Condition #469	Υ		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
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

# Table VII.D.1.1 Refinery Applicable Limits and Compliance Monitoring Requirements

#### <u>Refinery</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 (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
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

## 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
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									
<u>H2S Plants</u>									
	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		

		Appl		Table VII.E.1.1 Sulfur Red         nits and Compliance Moni		nents						
				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	6/1/04	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	#18655 Part 1	₽ <del>Annual<u>N/A</u></del>	Source test					
SO2	SIP 9-1-313.2	Y	6/1/04	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;	#18655 Part 1	₽ <del>Annual<u>N/A</u></del>	Source test					
Through -put	Condition #18945Part 1	Ν		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	N		Throughput limits for S-4345	Condition #18945 Part 7	P/D	Recordkeeping					
	Condition #18945 Part 6	N		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

### <u>Claus Units</u>

### 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	6/1/04	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	Condition #18655 Part 1	₽ <del>Annual<u>N/A</u></del>	Source test
	SIP 9-1-313.2	Y	6/1/04	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	Condition #18655 Part 1	P Annual <u>N/A</u>	Source test
<u>SO2</u>	<u>Refinery</u> <u>MACT2, 40</u> <u>CFR 63</u> <u>subpart UUU,</u> <u>63.1568(a)(1)</u>	Y	4/11/05	250 ppm by volume, dry basis, of SO2 at 0% excess air	Refinery MACT2, <u>40 CFR 63</u> <u>subpart UUU,</u> <u>63.1568(b)(1) &amp;</u> <u>63.1568(c)(1)</u>	<u>C</u>	SO2 CEM
	Condition 469	Y		Emission limits	Condition 469	P/M	Recordkeeping
Opacity	6-301	Y		Ringelmann No. 1 for no more than 3 minutes/hour	6-601 <u>condition</u> 22262 part 2	P/ <u>M</u> E	Visible inspectionemiss ions monitoring
FP	6-310	Y		0.15 grain/dscf	<u>condition 22262</u> <u>part 2</u> Nonenone	P/EN/A	<u>none</u> Visible 
FP	6-311	Y		4.10 P <sup>0.67</sup> lb/hr particulate, where P is process weight rate in ton/hr	None	P/E	Visible —nspection
NH3	9-1-313.2	Y	6/1/04	Removal of 95% of ammonia in process water streams	# <del>18655</del>	P/A <u>N/A</u>	Source test for S-4227-9
NH3	SIP 9-1-313.2	Y	6/1/04	Removal of 95% of ammonia in process water streams	<del>#18655</del>	P/A <u>NA</u>	Source test for 8-4227-9

### 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
SO3, H2SO4	6-330	Y	6/1/04	0.08 grain/dscf exhaust concentration of SO3 and H2SO4, expressed as 100% H2SO4	#18655 Part 2	P Annual	District- approved source test method
H2S	Condition #19063 part 4	N	6/1/4	10 ppmv H2S	9-1-313.2	P/A <u>N/A</u>	Source Test
02		Y	<u>4/11/05</u>	<u>No limit</u>	Refinery MACT2, 40 CFR 63 subpart UUU, 63.1568(b)(1) & 63.1568(c)(1)	<u>C</u>	<u>O2 monitor</u>
Refinery Cap	Condition #469	Y		Emission limits	Condition #469	P/M	Record keeping
Through put	Condition #19063 part 1	N		Long tons of Sulfur	Condition #19063 part 5	P/D	Recordkeeping
Through put	Condition #19063 part 1	N		Long tons of Sulfur	Condition #19063 part 5	P/A	Recordkeeping
Through put	Condition #19063 part 2	N		Long tons of Sulfur	Condition #19063 part 5	P/D	Recordkeeping
Through put	Condition #19063 part 2	N		Long tons of Sulfur	Condition #19063 part 5	P/A	Recordkeeping
Through put	Condition #19063 part 3	Ν		Long tons of Sulfur	Condition #19063 part 5	P/D	Recordkeeping
Through put	Condition #19063 part 3	N		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

Sulfur Racks S-3226 Sulfur Storage Tank, S-3140 Sulfur Storage Tank (S-3140 also in Cluster 01b), 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

### Tab

### <u>Table VII.F.1.0 Storage Tanks</u> <u>Applicable Limits and Compliance Monitoring Requirements</u>

### Tanks with permit conditions only

#### <u>S-25, S-1894, S-1909, S-1911, S-1913, S-1914, S-1915, S-1919, S-2920, S\_2921, S-6125</u>

<u>Type of</u> <u>Limit</u>	<u>Citation of</u> <u>Limit</u>	FE Y/N	<u>Future</u> <u>Effective</u> <u>Date</u>	Limit	<u>Monitoring</u> <u>Requirement</u> <u>Citation</u>	<u>Monitoring</u> <u>Frequency</u> (P/C/N)	Monitoring Type
<u>throughpu</u> <u>t</u>	Condition <u>#4233</u>	<u>N</u>		<u>Throughput limits for S-</u> <u>1911, S-1913, S-1914, S-</u> <u>1915, S-1919, S-2920, S-</u> <u>2921-</u>	<u>Z</u>	2	Z
<u>Throughp</u> <u>ut</u>	Condition #11208	N		Throughput and vapor pressure limits for S-1911, S-6125, S-1909	Condition <u>#11208</u>	<u>P/M</u>	recordkeeping
<u>Throughp</u> <u>ut</u>	Condition #12580	N		Throughput for S-1894	<u>N</u>	<u>N</u>	<u>N</u>
Throughp <u>ut</u>	Condition #15107	<u>N</u>		Throughput limit for S-25	Condition #15107	<u>P/M</u>	Recordkeeping

#### le VII.F.1.1 Tanks (FRT's Cluster 10a)

# Table VII.F.1.1 Tanks Applicable Limits and Compliance Monitoring Requirements <u>Fixed Roof Tanks Cluster 01a</u>

External Floating Roof Tank Cluster 01a S-3185

5-5165
Internal Floating Roof Tank Cluster 01a
S-3182

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)							

**Table VII.F.1.1 Tanks Applicable Limits and Compliance Monitoring Requirements Fixed Roof Tanks Cluster 01a** 

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

**External Floating Roof Tank Cluster 01a** 

S-3185 **Internal Floating Roof Tank Cluster 01a** S-3182

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
Low Vapor Pressure	Regulation 8-5-117	Y	6/1/4	The vapor pressure of material stored shall be less than 0.5 psia.	Regulation 8-5- 117 And condition #20773	P/E	Vapor pressure monitoring upon stock change
NSPS Kb				Volatile Organic Liquid St MONITORING FOR RECORD			
VOC	60.116b ©©	Y		True vapor pressure determination	60.116b (e)	Periodic initially and upon change of service	Calculate
Condition #11024		N				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	Ν		Throughput limits	Condition #18137	P/M	Recordkeeping

#### 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-0127, S-0131, S-0151, S-0200A, S-0204, S-0223, S-0225, S-0234, S-0290, S-0291, S-0293, S-0319, S-0325, S-0329, S-0397, S-0401, S-0501, S-0518, S-0526, S-0550, S-0551, S-0555, S-0583, S-0585, S-0586, S-0587, S-0588, S-0589, S-0590, S-0591, S-0592, S-0594, S-0595, S-0596, S-0597, S-0900, S-0907, S-0910, S-0930, S-0931, S-0934, S-0935, S-0950, S-0957, S-0979, S-0984, S-1052, S-1149, S-1431, S-1427, S-1455, S-1456, S-1460, S-1461, S-1468, S-1470, S-1492, S-1493, S-1523, S-1546, S-1547, S-1548, S-1636, S-1653, S-1679, S-1681, S-1685, S-1707, S-1708, S-1709, S-1710, S-1711, S-1712, S-1716, S-1723, S-1724, S-1725, S-1728, S-1729, S-1730, S-1731, S-1732, S-1733, S-1736, S-1756, S-1761, S-1762, S-1764, S-1766, S-1908, S-1950, S-1951, S-1952, S-1989, S-2520, S-2540, S-3008, S-3028, S-3029, S-3125, S-3139, S-3140 (S-3140 also included in Table VIII.E.3.1), S-3142, S-3146, S-3148, S-3310 Internal Floating Roof Tanks Cluster 01b

#### Internal Floating Roof Tanks Cluster 010

### S-0328, S-1634, S-3147 External Floating Roof Tanks Cluster 01b

#### S-0955, S-0956, S-1297, S-1506, S-1451, S-1899, S-1428, S-1020, S-3132, S-3138

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	Regulation 8-5-117	Y	6/1/4	The vapor pressure of material stored shall be less than 0.5 psia.	Regulation 8-5- 117 And condition #20773	P/E	Vapor pressure monitoring upon stock change					
Refinery		NESHAP for Petroleum Refineries										
MACT	MONITO	MONITORING FOR RECORDKEEPING ONLY. There are no 61 Subpart FF monitoring requirements for storage tanks that are exempt from controls.										
Condition #18137		N			Applies to S- 0957, S-1653, S- 3140, S-3127	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.1.3 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		Organic Compounds – STORAGE OF ORGANIC LIQUIDS Exempt Per 8-5-117, Low Vapor Pressure ( $\leq 0.5$ psia) (11/27/02)										
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, 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	N	Record keeping					
EPA	Exempt fr	om all R	Refinery MAC	CT, NSPS K, Ka and Kb Standard exemption)	2	orage Tanks (per	<10,000 gallon					
РОС	Condition #11193, 40 CFR 61 Subpart FF	Y		Part 1 – 12 apply to S-0605 and S-0610. Minimum VOC destruction removal efficiency: 95% by concentration weight or outlet < 500 ppmv organics	#11193 Part 9 Applies to S-660, S-6066	P/M	FID					
Condition #18137		N			Applies to S-0021, S-6066							

### S-0021, S-0660, S-6066

### 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	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	ll Refine	ery MACT, N	SPS K, Ka and Kb Standards for I	Hydrocarbon Storag	ge Tanks.					
NESHAP FF			I	Benzene Waste Opera LIMITS AND MONITORING FO							
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 ©, (d), (e)	Continuous check daily	Specified parameter
Condition #11193		N			Applies to S-0605	P/M	Recordkeeping
Condition #10761		Ν			Applies to S-6200 through S-6219	P/M	Recordkeeping
Throughput	Condition #18137	Ν		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			Organi	c Compounds – STORAGE OF O	RGANIC LIQUID	S 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
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	Report ST-7
VOC		Y		Determination of Applicability	8-5-604	P/E	Look-up table or sample analysis
Refinery MACT	MONITO	RING I	FOR RECOR	NESHAP for Petroleun DKEEPING ONLY. There are no tanks that are exempt fr	o 61 Subpart FF mo	nitoring requirem	ents for storage
Throughput	Condition #13597	Y			Applies to S- 1798	P/M	Recordkeeping
	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	Ν		Throughput limits	Condition #18137	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.1.6 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			

# 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		
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	MONITOF	NESHAP for Petroleum Refineries MONITORING FOR ONLY. There are no 61 Subpart FF monitoring requirements for storage tanks that are exempt from controls.							
Throughput	Condition #18137	Ν		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

### S-1726, S-1727, S-1757, S-1758

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, 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( <u>ST-4</u> <u>no longer</u> <u>exists,</u> <u>replaced by</u> <u>ST-34, ST-7</u> <u>or EPA</u> <u>Method 25)</u>				
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	MONITORI	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.1.8 Tanks Applicable Limits and Compliance Monitoring Requirements

### Fixed Roof Tanks Cluster 16

#### S-9302, S-9303

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		Requirements for P/V valves	8-5-403	P/SA	Visual inspection					
VOC	8-5-303.2	Y		P/V valves must be gas tight: <500 ppm (as methane) above background	8-5-403, 8-5-503, 8-5-605	P/SA	Method 21 protable 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		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 #18137	N		Throughput limits	Condition #18137	P/M	Recordkeeping					

### 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		Organic Compounds – STORAGE OF ORGANIC LIQUIDS LIMITS (11/27/02)								
VOC	8-5-301	Y		Records of liquids stored and TVP	8-5-501.1	P/E	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
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 MONITORI			
VOC	60.113 (a)	Y		True vapor pressure determination	60.113 (b) & (c)	Periodic initially and upon change of service	Calculate
VOC	60.113b(a 2)	Y		Insepction of secondary seals for holes, tears, or detatchment	60.113b(a2)	P/A	Seal inspection and records
Throughput	Condition #18137	N		Throughput limits	Condition #18137	P/M	Recordkeeping
Throughput	Conditio n #21237, part 1	Y		Notification requirement regarding piping and pumping for S-1514, 3072, and S-3101	Condition #21237 part 1	P/E	Recordkeepi ng 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		Organic Compounds – STORAGE OF ORGANIC LIQUIDS (11/27/02)									
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							
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				
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				

# 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	60.11©©	Y		True vapor pressure determination	60.116b (e)	Periodic initially and upon change of service	Calculation
VOC	60.113b(a 2)	Y		Insepction of secondary seals for holes, tears, or detatchment	60.113b(a2)	P/A	Seal inspection and records
<u>Throughput</u>	Condition 2856	<u>N</u>		3,500,000 bbl/y, max vapor pressure 10 psia avg vapor pressure 7.0	Condition 2856	<u>P/M</u>	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
Throughput	Condition #13364, part 1	Y		throughput of non-exempt stocks shall not exceed4,000, 000 barrels during consecutive 12-month period	S-3202		

# 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 #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	Condtion #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.F1.11 Tanks Applicable Limits and Compliance Monitoring Requirements <u>Internal Floating Roof Tanks Cluster 24</u>											
S-1635, S-1637												
			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 Comp	oounds – STORAGE OF ORGAN	VIC LIQUIDS LIM	ITS (11/27/02)						
				Records of liquids stored and								
VOC	8-5-301	Y		TVP	8-5-501.1	P/E	Records					
	8-5-305,											
	8-5-321.1, Visual inspection of outer most											
VOC	8-5-322.1	Y		seal	8-5-402.2	P/SA	Visual inspection					

	Table VII.F1.11 Tanks           Applicable Limits and Compliance Monitoring Requirements												
	Internal Floating Roof Tanks Cluster 24												
S-1635, S-1637													
Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type						
VOC	8-5-320	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 o sample analysis						
NSPS Kb				Volatile Organic Liquid St LIMITS AND MONITORI	-								

	Table VII.F1.11 Tanks Applicable Limits and Compliance Monitoring Requirements <u>Internal Floating Roof Tanks Cluster 24</u>												
S-1635, S-1637													
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		Insepction of secondary seals for holes, tears, or detatchment	60.113b(a2)	P/A	Seal inspection						
VOC	60.116b ©	Y		True vapor pressure determination	60.116b (e)	Periodic initially and upon change of service	Calculate						
<u>VOC</u>	Condition 1069	N		Organic vapor concentration	Condition 1069	<u>P/Q</u>	Concentration measurement and recordkeepin						

	Table VII.F1.11 Tanks           Applicable Limits and Compliance Monitoring Requirements												
	<b>Internal Floating Roof Tanks Cluster 24</b>												
	S-1635, S-1637												
	Future     Monitoring												
-	Citation of	FE	Effective		Requirement	Frequency	Monitoring						
Type of Limit	Limit	Y/N	Date	Limit	Citation	(P/C/N)	Туре						
Throughput	Condition	Ν		throughput of non-exempt	Condition	P/M	Recordkeeping						
	#15671,			stocks shall not exceed	#15671, part 4								
	part 1			2,000,000 barrels during consecutive 12-month period	8-3213								
Condition #15671	Applies to S	<del>1635</del>				<del>P/M</del>	Recordkeeping						
Condition #18137	Throughput l	imits				P/M	Recordkeeping						

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

	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											
Regulation 8 Rule 5			Organic (	Compounds – STORAGE OF ORC	GANIC LIQUIDS (	11/27/02)						
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, 8-5-503, 8-5-605	P/SA	Method 21 portable hydrocarbon detector					

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	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     Future Limit     Monitoring Requirement Citation     Monitoring Frequency (P/C/N)     Monitoring Monitoring												
VOC VOC	8-5-306 8-5-328.1.2	Y		Control device standards; includes 95% efficiency requirement Tank cleaning control device	8-5-603.1	P/A P/A	MOP Volume IV ST-4 <u>(ST-4</u> <u>no longer</u> <u>exists,</u> <u>replaced by</u> <u>ST-34, ST-7</u> <u>or EPA</u> <u>Method 25)</u> ST-7						
VUC	8-3-328.1.2	I		standards includes 90% efficiency requirement until tank less than 10,000 ppm	8-3-302	1/A	51-7						
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		EVICES							
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 ©(2) & (d)	P/D	FID Continuous temperature monitor						
NESHAP FF				Benzene Waste Oper LIMITS AND MONITORING FO									
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						

	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				34, S-6235, S-6236, S-6237 11 also included in Wastev			-3111				
Type of Limit											
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 ©, (d), (e)	Continuous check daily	Specified parameter				
РОС	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				
РОС	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				
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			Organic (	Compounds – STORAGE OF OR	GANIC LIQUIDS	(11/27/02)	
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
Refinery MACT		I		NESHAP for Petroleur LIMITS AND MONITORI			
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
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

# 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 #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 l	imits				P/M	Recordkeeping
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

### 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			Organic	Compounds – STORAGE OF OR	GANIC LIQUIDS (	(11/27/02)	
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	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
Refinery				NESHAP for Petroleum	Refineries	I	
MACT				LIMITS AND MONITORIN			
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
НАР	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
НАР	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	<u>Condition</u> <u>#21307</u>	<u>n</u>		S-1645 Throughput, vapor pressure and benzene content	Condition 21307	<u>P/M</u>	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, S-6061 Alkane Groundwater Treatment Unit

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	0	Organic Compounds – WASTEWATER (OIL-WATER) SEPARATORS LIMITS AND MONITORING FOR TREATMENT PROCESSES Regulation 8-8 does not address treatment of the waste stream. [There are monitoring requirements associated with exemptions for specified WMUs. Those requirements are listed in the templates for the applicable WMUs, and repeated below for reference.]								
OC	8-8-112	Y		Monitoring for exemption from controls for low wastewater temperature or low concentration of pollutants	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, S-6061 Alkane Groundwater Treatment Unit

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type				
OC	8-8-114	Y		Monitoring wastewater bypassing oil-water separator or DAF	8-8-501	Periodic upon occurrence	Sample analysis				
NESHAP FF Regulation 11 Rule 12	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.										
Wastewater (Benzene)	<del>61.342</del> <del>©(2)</del>	¥		Benzene concentration for waste streams that are exempt under this provision	<del>61.342</del> <del>©(2)</del>	<del>Periodic</del> <del>monthly</del>	<del>Sample</del> analysis				
Wastewater (Benzene)	<del>61.342</del> <del>©(3)(i)</del>	¥		Flow rate for process waste- water streams that are exempt under this provision	<del>61.342</del> <del>©(3)(i)</del>	<del>Periodic</del> <del>annually</del>	<del>Flow</del> <del>measurement</del>				
<del>Wastewater</del> (Benzene)	<del>61.342</del> <del>©(3)(ii)</del>	¥		2 Mg/yr benzene quantity (BQ) limit	<del>61.342</del> <del>©(3)(ii)</del>	<del>Periodic</del> annually	Flow measurement & sample analysis				
Wastewater (Benzene)	<del>61.342</del> ( <del>d)</del>	¥		1 Mg/yr benzene quantity (BQ) limit	<del>61.342</del> <del>(d)</del>	<del>Periodic</del> annually	Flow measurement & sample analysis				
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				

# 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, S-6061 Alkane Groundwater Treatment Unit

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
Wastewater (Benzene)	61.348 (a)(1)(i)	Y		Benzene concentration exiting the treatment process	61.354 (a)(1)	Periodic monthly	Sample analysis
Wastewater (Benzene)	61.348 (a)(1)(ii)	Y		ALTERNATIVE 99% benzene removal	61.354 (a)(2)	Continuous check daily	Parameter
Wastewater (Benzene)	61.348 (a)(1)(iii)	Y		ALTERNATIVE 99% benzene destruction by incineration	61.354 (a)(2)	Continuous check daily	Parameter
Wastewater (Benzene)	61.348 (b)	Y		1 Mg/yr benzene quantity (BQ) limit	61.354 (b)	Periodic monthly	Flow measurement & sample analysis
РОС	Condition #4650, part 9	Y		1000 F minimum operating temperature for A-3200	Condition #4650, part 9 S-3200	С	temperature monitoring
РОС	Condition #4650, part 11	Y		nitrogen purge and vent gases vented to A-3200	Condition #4650, part 11 S-3200	С	flow monitoring
РОС	Condition #4650, part 12	Y		no unintended leaks, depressurizations, or bypasses to atmosphere	Condition #4650, part 12 S-3200	С	pressure monitoring
РОС	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		
Regulation 8 Rule 8		Organic Compounds – WASTEWATER (OIL-WATER) SEPARATORS INDIVIDUAL DRAIN SYSTEMS EXEMPT FROM CONTROLS 8-8 has no monitoring requirements							
VOC	8-8-112	Y		Exemption from controls for low concentration of pollutants (records are required)	8-8-502	Periodic upon occurrence	Sample analysis and records		
NESHAP FF Regulation 11 Rule 12	[There are	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 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.]							

### 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	Organi	Organic Compounds – WASTEWATER (OIL-WATER) SEPARATORS INDIVIDUAL DRAIN SYSTEMS EXEMPT FROM CONTROLS Regulation 8-8 has no monitoring requirements.							
VOC	8-8-112	Y		Exemption from controls for low concentration of pollutants (records are required)	8-8-502	Periodic upon occurrence	Sample analysis and records		
NESHAP FF Regulation 11 Rule 12	[There are	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 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	Rec	quireme		Petroleum Refinery Wastew ND MONITORING FOR INDIV for compliance with 60.692-2, and	'IDUÂL DRAIN S		0.693-1.		

# 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	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 ©(1)	Y		Sewer lines shall be covered or enclosed	60.692-2 ©(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			
<u>SIP</u> Regulation 8 Rule 8		Organic Compounds – WASTEWATER (OIL-WATER) SEPARATORS LIMITS AND MONITORING FOR OIL-WATER SEPARATORS								
VOC	<del>8 8 112</del>	¥		Exemption from controls for low concentration of pollutants (records are required)	<del>8 8 502</del>	Periodic upon occurrence	Sample analysis and records			
VOC	8-8-114	Y		Monitoring wastewater bypassing oil-water separator or DAF	8-8-501	Periodic upon occurrence	Sample analysis			

# 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
VOC	8-8-301.1	Y		ALTERNATIVE Gasketed fixed cover standards; including gap limitation	8-8-503	Periodic initially & semiannually	Measurement and visual inspection
VOC	8-8-301.2	Y		ALTERNATIVE Floating cover standards (< 300 gpm); includes seal gap limits	8-8-503	Periodic initially then every 5 years for primary, annually for secondary	Measurement and visual inspection
VOC	8-8-301.3	Y		Vapor recovery system	8-8-602		ST-7 or
	8-8-302.3			standards; includes 95% efficiency requirement	8-8-503	P/E	method 25 or 25A
VOC	8-8-302.1	Y		ALTERNATIVE	8-8-603		Method 21
				Vapor tight full contact fixed cover standards	8-8-503	P/E	
VOC	8-8-302.2	Y		ALTERNATIVE Floating cover standards (≥ 300 gpm); includes seal gap limits	8-8-503	Periodic initially then every 5 years for primary, annually for secondary	Measurement and visual inspection
VOC	8-8-302.3	Y		Vapor tight fixed cover	8-8-603		Method 21
				standards (in addition to vapor recovery)	8-8-503	Periodic initially & semiannually	
VOC	8-8-302.4	Y		ALTERNATIVE	8-8-603	Periodic	Method 21
				Gasketed fixed cover standards; includes 1,000 ppm leak standard	8-8-503	initially & semiannually	
VOC	8-8-303	Y		Gauging and sampling devices vapor tight	8-8-603	P/A	Method 21
Regulation 8 Rule 8				mpounds – WASTEWATER (OIL AND MONITORING FOR OIL-V			
Regulation 8 Rule 8	<u>8-8-313</u>	<u>N</u>		Uncontrolled wastewater collection system components at petroleum refineries	<u>8-8-505</u>	P/BI MON UNTIL 1/1/07 THEN P/SEMI- ANNUALLY	<u>RECORDKEE</u> <u>PING</u>
Condition #18137	Applies to S-4	148, S-4	4413, S-4414	1			

# 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			
NESHAP FF		Benzene Waste Operations OIL-WATER SEPARATORS EXEMPT FROM CONTROLS								
Regulation 11 Rule 12	[There are rec	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. here 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.]								

#### 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-0605 Alkane GWT Feed Surge Tank abated by A-0607, S-0610 Alkane GWT Surge Tank, 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 Opera LIMITS AND MONITORING			
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)	61.349 (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.G.1.5 Wastewater Applicable Limits and Compliance Monitoring Requirements

### Non-EFRT or IFRT Wastewater Tanks Cluster 40b

### S-0605 Alkane GWT Feed Surge Tank abated by A-0607, S-0610 Alkane GWT Surge Tank, 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
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 ©, (d), (e)	Continuous check daily	Specified parameter
HAP (Benzene)	Condition #11193, Part 9	Y		annual average liquid benzene concentration shall not exceed 250 ppm by weight	Condition #11193, Part 11 S-605	P/semi-annual	sampling and analysis
HAP (Benzene)	Condition #11193, part 10	Y		annual average liquid benzene concentration shall not exceed 250 ppm by weight	Condition #11193, Part 11	P/semi-annual	sampling and analysis
РОС	40 CFR 61 Subpart FF	Y		Minimum VOC destruction removal efficiency 95% by concentration weight or outlet < 500 ppmv organics	61-349 condition #11193 part 9	P/E	Carbon Changeout
РОС	Condition #11193, Part 8	Y		95% overall abatement efficiency at A-607	Condition #11193, Part 9 S-605 and S-610	P/M	FID measurement
Throughput	Condition #11193, Part 1	Y		throughput for S-605 and S- 6011 shall not exceed 84.1 million gallons for any consecutive 12-month period	Condition #11193, Part 12 S-605 and S- 6011	P/M S-605 and S- 6011	records
РОС	Condition #4650, parts 1 and 5	Y		at least 98.5% by weight VOC abatement	Condition #4650, part 9 S-3110, S-3111, S-3192	С	temperature monitoring
РОС	Condition #4650, parts 2 and 6	Y		POC emissions less than 1 lb/day from S-3110, S-3111, and S-3192 combined	Condition #4650, part 9 S-3110, S-3111, S-3192	С	temperature monitoring

# Table VII.G.1.5 Wastewater Applicable Limits and Compliance Monitoring Requirements

### Non-EFRT or IFRT Wastewater Tanks Cluster 40b

### S-0605 Alkane GWT Feed Surge Tank abated by A-0607, S-0610 Alkane GWT Surge Tank, 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 3 and 7	Y		Benzene emissions less than 0.04 lb/day from S-3110, S- 3111, and S-3192 combined	Condition #4650, part 9 S-3110, S-3111, S-3192	С	temperature monitoring
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 Compounds – STORAGE OF ORGANIC LIQUIDS LIMITS AND MONITORING FOR FLOATING-ROOF TANKS								
VOC	8-5-320	Y		Deck fitting closure standards; includes gasketed covers	8-5-402	Periodic initially & at 1 or 10 yr intervals, depending upon rim seal age	Visual inspection			
VOC	8-5-321	Y		Primary rim-seal standards; includes gap criteria	8-5-401	Periodic initially & at 5 or 10 yr intervals, depending upon rim seal age	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	8-5-322	Y		Secondary rim-seal standards; includes gap criteria	8-5-402	Periodic initially & at 1 or 10 yr intervals, depending upon rim seal age	Measurement and visual inspection
VOC	8-5-328	Y		Tank degassing	8-5-502 8-5-404	P/A	Source Test
NSPS Kb				Volatile Organic Liquid Sto LIMITS AND MONITORING			
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
VOC	60.116b ©	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	bpart F	F requirement	Benzene Waste Opera S AND MONITORING FOR TRE tts related to control of air emissio MU, and are not listed here under	EATMENT PROC ns for WMUs are	listed in the temp	lates for each
Wastewater (Benzene)	<del>61.342</del> ©(2)	¥		Benzene concentration for waste streams that are exempt under this provision	<del>61.342</del> <del>©(2)</del>	Periodic monthly	Sample analysis
Benzene	Condition 20361 part 3			S-3127, 0.38% by weight benzene	Condition 20361 part 4	<u>P/Q</u>	<u>Sample</u> analysis
Throughput	Condition #18137	N		Throughput limits	Condition #18137	P/M	Recordkeeping
	Condition 20361	N		S-3127 Throughput limits and vapor pressure	Condition 20361	<u>P/M</u>	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			
BAAQMD Regulation 8- 8	Organic Compounds – WASTEWATER (OIL-WATER) SEPARATORS SURFACE IMPOUNDMENTS EXEMPT FROM CONTROLS									
VOC	8-8-112	Y		Monitoring for exemption from controls for low wastewater temperature or low concentration of pollutants	8-8-502	Periodic initially & semiannually	Sample analysis/Recor d keeping			
NESHAP FF Regulation 11 Rule 12	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	
Regulation 8 Rule 8	Organic Compounds – WASTEWATER (OIL-WATER) SEPARATORS CONTAINERS EXEMPT FROM CONTROLS							
VOC	8-8-112	Y		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	Y		Monitoring for bypassing the oil water separator or air floatation device	8-8-501/502	P/E	Sample analysis	

# 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
NESHAP FF							
Regulation 11 Rule 12				Benzene Waste Oper LIMITS AND MONITORING FC		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)	61.345 (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(h)	Y		Control device standards	61.354 ©, (d), (e)	Continuous check daily	Specified parameter
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	Ν		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
РОС	8-18-302	Y		Valve leak $\leq 100$ 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 $\leq$ 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		Awaiting repair Valves $\leq 0.5\%$ Pressure Relief $\leq 1\%$ Pump and Connector $\leq 1\%$	8-18-502.4	PE	record keeping
POC	8-18- 306.3.3	Y		Total valve, pressure relief, pump or compressor leaks ≥ 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
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

# 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	8-28-304	<u>Y</u>		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.	8-28-405	P/release per 5 calendar years	Record keeping
				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©(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
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)) <u>and condition</u> <u>#22003</u>	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 <u>and</u> <u>flowrate</u> 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
РОС	60.482-2(e)	Y		Designated "No detectable emissions" ≤ 500 ppm	60.482-2(e)(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- 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
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
РОС	60.482- 8(b)	Y		Pressure Relief devices (liquid), Flanges, Connectors leak ≥ 10,000 ppm	60.482-8(a)	P/E	Measure for leaks
РОС	60.482-8 (b)	Y		Pump leak ≥ 10,000 ppm	60.482-8 (a)	P/5 days	Visual, audible, olfactory Inspection; measure for leaks

# Table VII.H.2.1 VOC Sources Applicable Limits and Compliance Monitoring Requirements

#### Future Monitoring Monitoring Type of Citation FE Effective Requirement Frequency Monitoring . Citation (P/C/N) Limit of Limit Y/N Date Limit Туре POC 60.482-9 Pumps under "Delay of P/E Y Record keeping and (d) repair" repaired, as soon recording as practicable, but within 6 months POC 60.482-10 Y Closed-vent systems and 60.482-10(e) С Temperature (b) control devices: Vapor monitoring recovery systems $\geq 95\%$ С POC 60.482-10 Y Combustion devices 60.482-10(e) and Temperature and ≥95% destruction condition #22003 flowrate monitoring (c) efficiency or ≥0.75 seconds and ≥816°C 60.482-10 (f) POC 60.482-10 Υ Closed-vent systems leak P/A Measure for leaks; visual Inspection $\geq$ 500 ppm and visible (g) leak indication. First and record keeping attempt to repair leak (visible or $\geq 500 \text{ ppm}$ ) within 5 days, repair complete within 15 days, except as allowed for in 60.482-10(h) POC 60.483 and Y Individual valve that P/Q Measure for leaks. measures <100 ppm for 5 8-18-404.1 Notify consecutive quarters may P/A Administrator of be monitored annually, if election to comply in a process unit with 5 with 60.483 or 61.243. Record consecutive quarters <2% keeping of percent valves leaking ≥10,000 of valves found ppm. leaking during each leak detection period. POC 61.349 Y Closed-vent systems 61.349 (a)(1)(i) P/A Measure for leaks <500 ppm above (a)(1)(i)background POC 61.242-2 Y Pump leak $\geq$ 10,000 ppm 61.242-2 (a)(1) P/MMeasure for leaks (b)(1) 61.242-2 POC Y Pump leak Indicated by P/W 61.242-2 (a)(2) Visual Inspection (b)(2) dripping liquid POC Designated "No Measure for leaks 61.242-2(e) Y 61.242-2(e)(3) P/A detectable emissions" $\leq$ 500 ppm Y 61.242-2(g) POC 61.242(g) If unsafe to monitor, P/E Measure for leaks monitor as frequently as practicable. Pump leak Indicated by POC 61.242-2 Y 61.242-2 (h) P/M Visual Inspection (h) dripping liquid at unmanned sites

# 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
РОС	61.242-10 (d)	Y		Pumps under "Delay of repair" repaired within 6 months		N	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
РОС	61.242-4(a)	Y		Pressure relief valve (gas/vapor) leak ≥ 500 ppm above background		Р	Measure for leaks
РОС	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
РОС	61.242- 7(b) and (c0	Y		Valve leak ≥ 10,000 ppm; 2 successive months w/o leaking	61.242-7(b) and (c)	P/Q	Measure for leaks
POC	61.242-7(f)	Y		Designated "No detectable emissions" ≤ 500 ppm	61.242-7 (f)(3)	P/A	Measure for leaks
РОС	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
РОС	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)	<u>P/1/2</u> breakthrough <del>C</del>	Temperature Monitoringmethod 21
РОС	61.242-11 ©	Y		Combustion devices ≥95% destruction efficiency or ≥0.50 seconds and ≥760°C	61.242-11(e) and condition #22003	С	Temperature and flowrate Monitoring

# 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	61.242-11 (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)	P/M	Sampling and record keeping
POC	61.349(g)	Y		Repair any detectable emissions within 15 calendar days after the emissions are detected	61.3 <u>56</u> 4 <del>9</del> (h <del>g</del> )	P/E	Recordkeeping
POC	61.349(a)(2 )	Y		Design and operation of control device	61.354	C <u>for</u> combustion and <u>P/1/2</u> breakthrough <u>for carbon</u>	Temperature Monitor <u>for</u> <u>combustion and</u> <u>method 21 for</u> <u>carbon</u>
POC	Condition #8869 part 1	Y		Applies to A-620 throught A-626 and A- 414 95% by weight reduction of VOCs and minimum temp of 1400F	Condition #8869 part 2 and 3	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

#### 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	8-3-403	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		<u>≤</u> 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/y 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/y	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

The test methods associated with the emission limit of a District regulation are generally referenced in Section 600 et seq. of the regulation. The following table indicates only the test methods associated with the emission limits referenced in Section VII, Applicable Emission Limits & Compliance Monitoring Requirements, of this permit.

Applicable Requirement	Description of Requirement	Acceptable Test Methods
6-301	Ringelmann No. 1 Limitation	Manual of Procedures, Volume I, Evaluation of Visible Emissions
6-304	Tube Cleaning	Manual of Procedures, Volume I, Evaluation of Visible Emissions
6-310	Particulate Weight Limitation	Manual of Procedures, Volume IV, ST-15, Particulates Sampling; or EPA Method 5, Determination of Particulate Emissions from Stationary Sources
6-311	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
6-601	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
SIP 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
8-5-304	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
8-5-311.3	VOC emissions	Manual of Procedures, Volume IV, ST-34, Bulk and Marine Loading Terminals Vapor Recovery Units
8-5-328.2	VOC emissions for tank cleaning	Manual of Procedures, Volume IV, ST-7, Non-Methane Organic Carbon Sampling

**Table VIII – Test Methods** 

Applicable Requirement	Description of Requirement	Acceptable Test Methods
8-5-320.3	Pressure vacuum leak concentration	EPA Reference Method 21, Determination of Volatile Organic Compounds Leaks
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
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
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 (1/7/98)	
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
8-44-301	POC emission rate limitation during vessel loading	Manual of Procedures, Volume IV, ST-34, Bulk Marine Loading Terminals, Vapor Recovery Units
8-44-304.1	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
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

Applicable Requirement	Description of Requirement	Acceptable Test Methods
9-9-301.1	Emission Limits- Turbines Rated < 10 MW	Manual of Procedures, Volume IV, ST-13A, Oxides of Nitrogen, Continuous Sampling and ST-14, Oxygen, Continuous Sampling
9-9-301.2	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
9-9-301.3	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
9-9-503.2	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
9-10-302	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
9-10-303	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©	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)	

Table	VIII –	<b>Test Methods</b>	
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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 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 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 D 1072-80, Standard Method for Total Sulfur in Fuel Gases ASTM D 3031-81, Standard Test Method for Total Sulfur in Natural Gas by Hydrogenation ASTM D 4084-82, Standard Method for Analysis of Hydrogen Sulfide in Gaseous Fuels (Lead Acetate Reaction Rate Method), ASTM D 3246-81, Standard Method for Sulfur in Petroleum Gas by Oxidative Microcoulometry
40 CFR 60 Subpart GG 60.333 (b)	Fuel Sulfur Limit (liquid fuel)	ASTM D 2880-71, Standard Specification for Gas Turbine Fuel Oils
NSPS 40 CFR 60 Subpart VV	Standards of Performance for Equipment Leaks (Fugitive Emission Sources) (10/18/83)	EPA Reference Method 21, Determination of Volatile Organic Compounds Leaks
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©: 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 (11/23/88)	
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.

Table	VIII –	Test	Methods
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Applicable Requirement	Description of Requirement	Acceptable Test Methods
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	
NESHAPS 40 CFR 61, Subpart FF	National Emission Standard for Benzene Waste Operations (10/17/2000)	
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) (6/6/84)	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)

Applicable Requirement	Description of Requirement	Acceptable Test Methods
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©: 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	National Emission Standards for Marine Tank Vessel Loading Operations (9/19/95)	
40 CFR 63, Subpart Y 562©(2)(iii)	Vapor tightness of marine tank vessel	40 CFR 63, 565©(1) Pressure Test for Marine Tank Vessel; and EPA Method 21 for Leak Test
40 CFR 63, Subpart Y 562©(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©(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 VV	National Emission Standards for Oil- Water Separators and Organic Water Separators (7/1/96)	
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 (1/27/82)	
60.334(a)	Requires CEM Water to fuel monitoring, but does not require Steam to fuel monitoring. The	
	refinery injects steam only.	

#### 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) (6/6/84)		
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.		
<del>60.484</del>	Subsumed by BAAQMD Regulation 8-18-308 that requires public noticing.		
NESHAPS Part 61	National Emission Standards for Equipment Leaks (Fugitive Emission Sources) (6/6/84)		
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.		

# Table IX-A-2 VOC Sources Permit Shield for Subsumed Requirements Fugitive Components

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 Part 63 Subpart R	National Emission Standards for Loading Racks	
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 Tanks

 Source-Specific Subsumed Requirements

**External 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

Citation	Title or Description (Reason not applicable)	
BAAQMD Regulation 11-7	Hazardous Pollutants: Benzene (3/6/85)	
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.	

#### **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
SIP Regulation	Organic Compounds - STORAGE OF ORGANIC LIQUIDS SUBSUMED REQU	JIREMENTS FOR	FLOATING
8 Rule 5	ROOF TANKS		
<del>501</del>	Records: Subsumed into the Refinery MACT recordkeeping requirement[Section		
	<u>62.6541.</u>		
NSPS	Petroleum Liquids Storage Vessels		
Subpart-K	SUBSUMED REQUIREMENTS FOR EFRTS		
<del>60.113(a)</del>	Reporting and Recordscoping for EFRTs. Subsumed into the Refinery MACT requirements [Section 62.640(n].		

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
SIP BAAQMD Regulation 8 Rule 5	Organic Compounds - STORAGE OF ORGANIC LIQUIDS SUBSUMED REQUIREMENTS FOR FLOATING ROOF TANKS		
<del>501</del>	Records: Subsumed into the Refinery MACT recordkeeping requirement[Section 63.654].s.		
NSPS Subpart Kb	Volatile Organic Liquid Storage Vessels SUBSUMED REQUIREMENTS FOR EFRTs		

# 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
60.115b(b)	<b>Reporting and Recordkeeping for EFRTs.</b> Subsumed into the Refinery MACT requirements <u>[section 63.640(he)</u> .		
<del>60.116b</del> ( <del>a) (e)</del>	Additional Record keeping. Subsumed into the Refinery MACT requirements [section 63.640(hn].		

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
SIP Regulation 8 Rule 5	Organic Compounds – STORAGE OF ORGANIC LIQUIDS SUBSUMED REQUIREMENTS FOR FLOATING ROOF TANKS		
<del>501</del>	Records: Subsumed into the Refinery MACT recordkeeping requirement[Section 62.654].s.		
NSPS Subpart Kb	Volatile Organic Liquid Storage Vessels SUBSUMED REQUIREMENTS FOR IFRT		
60.115b(a)	Reporting and Recordkeeping for IFRTs. Subsumed into the Refinery MACT requirements [section 63.640( <u>nh</u> ).		
<del>60.116b</del> <del>(a)-(c)</del>	Additional Recordkeeping. Subsumed into the Refinery MACT requirements [costion 62.640(n].		

#### Table IX-B-4 Tanks (EFRT's Cluster 26)

#### Table IX-B-4 Tanks Source-Specific Subsumed 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

Applicable Requirement	Regulation Title or Description of Requirement	<del>Federally</del> <del>Enforceable</del> <del>(Y/N)</del>	<del>Future</del> Effective Date
SIP Regulation 8 Rule 5	Organic Compounds STORAGE OF ORGANIC I SUBSUMED REQUIREMENTS FOR FLOATING RO	OFTANKS	
<del>501</del>	Records: Subsumed into the reporting and recordkeeping requirements of Refinery MACT [Section 63.654].		

#### Table IX B-5 Tanks (IFRT's Cluster 27)

#### Table IX B-5 Tanks Source Specific Subsumed Requirements

#### Internal Floating Roof Tanks Cluster 27

#### S-1289, S-1645

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (¥/N)	<del>Future</del> Effective Date
SIP Regulation 8 Rule 5	Organic Compounds—STORAGE OF ORGANIC LIQUIDS SUBSUMED REQUIREMENTS FOR FLOATING ROOF TANKS		
<del>501</del>	Records: Subsumed into the reporting and recordkeeping requirements of Refinery MACT [Section 63.654].		

#### 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 I	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 Steam Generating Units		
60.48b	Emission Monitoring for Nitrogen Oxides: Install, calibrate, and operate a NOx CEM. Subsumed into the BAAQMD 9-10-502.1 requirement for a Monitoring Plan including a NOx and O2 CEM.	Y	
60.49b	9b Reporting and Recordkeeping Requirements		

#### 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 # 9294): See Statement of Basis for details	December 16, 2004
Minor Revision (Application 9782):	December 16, 2004

Change in throughput and vapor pressure limits for S-3202, Tank

#### 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<sub>2</sub> — 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 regulated air pollutants, (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:

Cinto U	I IVICubul	
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
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

#### XII. APPLICABLE STATE IMPLEMENTATION PLAN

The Bay Area Air Quality Management District's portion of the State Implementation Plan can be found at EPA Region 9's website. The address is:

http://yosemite1.epa.gov/r9/r9sips.nsf/California?ReadForm&Start=1&Count=30&Expand=3.1