

Bay Area Air Quality Management District

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Statement of Basis and Evaluation Report for MINOR REVISION to the Major Facility Review Permit

for
**Phillips 66 – San Francisco Refinery
Facility #A0016**

Facility Address:

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Rodeo, CA 94572

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October 2018

Application Engineer: M.K. Carol Lee

Site Engineer: M.K. Carol Lee

Application: 27955

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STATEMENT OF BASIS

This is minor permit revision pursuant to Regulation 2, Rule 6, section 215. The marked-up Title V sections are provided in the Appendix of the Evaluation Report that follows this Statement of Basis.

Section II

Table II A will be revised to update the materials stored in S126, S341, and S342. In addition, the throughput limits for S307 and S434 have been updated to reflect approved increases in throughput.

Section IV

Table IV-BB.8 will be revised to include S126 subject to permit condition #26689.

Table IV-BB.12 will be revised to include S341 subject to permit condition #26690 and S342 subject to permit condition # 26691.

Table IV-Na will be revised to include S434 in permit condition # 22965.

Section VI

Section VI will be revised to amend permit conditions # 22965, 22969, 20989, and 19278. In addition, new permit condition #26689, 26690, and 26691 for S126, S341, and S342, respectively are added.

Section VII

Table VII-BB.8 will be revised to include S126 subject to permit condition #26689.

Table VII-BB.12 will be revised to include S341 subject to permit condition # 26690 and S342 subject to permit condition # 26691.

Table VII-Na will be revised to update the throughput limit of S-307 and S434 combined.

Table VII-Ua will be revised to reflect that the type (daily and annual) throughput limits for S1002 and S1003.

EVALUATION REPORT

NSR Application 27954

I. BACKGROUND

The Phillips 66 Company – San Francisco Refinery (Phillips 66) has applied for a change of permit conditions.

Phillips 66 is requesting an increase of an additional 4,000 barrels per day in the maximum allowable throughput at the Unicracker complex:

S307 U240 Unicracking Unit 240

S434 U246 High Pressure Reactor Train

Permit Condition 22965 limits the throughput of S307 to 65,000 barrels/day. This throughput limit includes the amount processed by S434. Phillips 66 has requested that this value be increased to 69,000 barrels per day.

Permit Condition 22969 limits the throughput of S434 to 8,395,000 bbls/year (23,000 bbls/day x 365 days/year). Phillips 66 has requested that this limit be revised to 9,855,000 bbls/year (27,000 bbls/day x 365 days/year).

S307 and S434 receive material from pipeline, the refinery marine terminal, or from refinery processing done prior (called “upstream”) of the Unicracker complex such as the refinery coker.

In the future, the Refinery plans to bring additional gas oil across the marine terminal and/or via pipeline. Unit 246 (S434) processes heavy gas oil feed into diesel, jet fuel, and gasoline products that can be processed in downstream process units (S308 U244 and S309 U248)) or blended directly into fuels and stored in storage tanks.

The Unicracker complex employs a type of hydrocracker where gas oil is heated under high pressure in the presence of a catalyst and hydrogen to produce intermediate products (called “unicrackate”). Gas oil often contains some amount of sulfur and nitrogen that are removed using hydrogen within refinery hydrotreaters. This sulfur is converted to elemental sulfur at one of three refinery sulfur plants.

Phillips 66 has stated that the project will not require any construction of any new sources, physical modification of existing sources, nor any new piping or components.

However, as a result of increasing throughput at the Unicracker complex,

- additional heat (increase in furnace firing) will be needed,
- additional steam (increase in steam turbine firing) will be needed,
- additional hydrogen will be needed, and
- additional sulfur will be produced.

Phillips 66 provided estimated impacts on refinery operations as a result of increasing throughput at the Unicracker complex. These impacts are shown in Table 1.

Table 1: Estimated Operational Impacts

| Parameter | Project Increase | Units | Source # | Description |
|--------------------------------|------------------|-----------------|----------|----------------------------------|
| Increased Throughput | 4,000 | barrels per day | S307 | U240 Unicracking Unit |
| | | | S434 | U246 High Pressure Reactor Train |
| Additional Heat (Firing Rate) | 10 | MMBtu/hour | S45 | Heavy Gas Oil Feed Heater |
| Additional Steam (Firing Rate) | 5 | MMBtu/hour | S352 | Combustion Turbine |
| | | | S353 | Combustion Turbine |
| | | | S354 | Combustion Turbine |
| | | | S355 | Supplemental Firing Duct Burners |
| | | | S356 | Supplemental Firing Duct Burners |
| | | | S357 | Supplemental Firing Duct Burners |
| Additional Sulfur | 10 | tons/day | S1002 | Sulfur Plant Unit 236 |
| | | | S1003 | Sulfur Plant Unit 238 |
| | | | S1010 | Sulfur Plant Unit 235 |

IDENTIFICATION OF ALTERED OR MODIFIED SOURCES

Although the project will not require constructing any new sources, it may result in one or more altered and/or modified sources. Such sources would be considered the affected sources and the subject of this evaluation.

Per Regulation 2, Rule 1, Section 233; a source is considered altered if there is a “physical change, change in the method of operation, or other similar change at an existing source that may affect air pollutant emissions and that does not qualify as a modification under the criteria set forth in Section 2-1-234”.

Per Section 2-1-234, a source is considered modified if there is a “physical change, change in method of operation, change in throughput or production, or other similar change at an existing source, that results in an increase in emissions that is either” an increase in the source’s daily or annual potential to emit or an increase in over actual emissions baseline that constitute a “major modification”.

If all sources upstream and downstream of S307 and S434 have their potential to emit limited by permit conditions with required recordkeeping to demonstrate compliance and Phillips 66 is not requesting an increase in an associated permit limit apart from the throughput increase at S307 and S-434, then no other source will be deemed to be altered or modified. However, if an upstream or downstream source does not have its potential to emit limited, that source may be considered altered or modified if an increase in throughput at S307 and S434 will allow for a greater utilization of that source. Such a scenario would exist if S307 or S434 served as a “bottleneck” or constrain on operations.

To identify whether a source other than S307 and S434 are affected by the project, upstream and downstream sources will be evaluated based on whether their potential to emit is limited by permit condition and/or whether operation of the source is constrained by operation at S307 or S434.

UNICRACKER COMPLEX

The Unicracker complex is directly impacted by the project and comprises the sources listed in Table 2.

Table 2: Unicracker Complex

| Source # | Description | Daily Limit | Annual Limit | Units | Limit Basis |
|---|----------------------------------|---------------------|-------------------------|---------|-------------|
| S307 | U240 Unicracking Unit | 65,000 | 23,725,000 ¹ | barrels | PC 22965 |
| S434 | U246 High Pressure Reactor Train | 65,000 ² | 8,395,000 | barrels | PC 22969 |
| S45 | U246 B-801/B-802 Heater | 2,040 ³ | 744,600 | MMBtu | PC 22962 |
| 1. Annual limit based on daily limit multiplied by 365 days per year 2. See discussion regarding Clean Fuels Expansion Project 3. Daily limit derived from multiplying hour limit of 85 MMBtu by 24 hours per day | | | | | |

S307 and S434 are limited by a daily permit limit of 65,000 barrels per day, which was part of the “Clean Fuel Expansion Project (CFEP)” (Application # 13424). The purpose of the CFEP was to process heavy gas oil into gasoline and diesel by adding a high-pressure reactor train to S307 U240 Unicracker. The new train was integrated with S307, but was assigned a new source number of S434. A review of the prior application and discussions with the District permit engineer, Brenda Cabral, confirmed that the daily throughput limit of 65,000 barrels per day was requested by the applicant (Phillips 66). Also, a review of the flow diagram for the process and confirmed by Phillips 66 shows that the throughput limit of 65,000 barrels per day is the daily throughput limit for both S307 and S434 combined.

The Refinery has requested a revised limit of 69,000 barrels per day along with a corresponding increase in the annual throughput limit for S434 from 8,395,000 bbl to 9,855,000 bbl on a 12-month rolling average basis (27,000 bbl/day x 365 days/year). Both S307 and S434 are modified sources since the maximum daily and annual throughputs are increasing above the permitted level.

Although Phillips 66 has estimated that the project may require an additional firing of S45, S45 has both permit limits on hourly and annual firing rate as well as annual limits of mass emissions of NO_x, SO₂, CO, POC, PM₁₀ (PC 22962 Part 6) and daily or three hour average exhaust gas concentration limits of NO_x, SO₂, CO, POC, PM₁₀ (PC 22962 Part 4). Therefore, S45 is not considered altered or modified as Phillips 66 has not requested an increase in either the maximum allowable firing rate or in the maximum allowable emissions.

UPSTREAM/DOWNSTREAM PROCESS UNITS

Several upstream and/or downstream process units may be affected by the project. The upstream and downstream process units identified by the District through a review of refinery process flow diagrams are listed in Table 3.

Table 3: Upstream/Downstream Process Units

| Source # | Description | Upstream Or Downstream | Daily Limit | Annual Limit | Basis |
|----------|--------------------|------------------------|-------------|--------------|----------|
| S300 | U200 Delayed Coker | Upstream | 81,000 bbl | NA | PC 21092 |
| S308 | U244 Reformer | Downstream | 18,500 bbl | NA | PC 22966 |
| S309 | U248 Unisar Unit | Downstream | 16,740 bbl | NA | PC 22967 |

| | | | | | |
|------|--|------------|-------------|----------------|----------|
| S318 | U275 Gasoline/Mid Barrel Blending Unit | Downstream | 113,150 bbl | 41,300,000 bbl | PC 22549 |
| S339 | U80 Refining Oil Shipping | Downstream | NA | 52,600,000 bbl | PC 22968 |

The project does not require any new construction of any sources, no new piping, and no new components. Each of the process units upstream and downstream of Unit 240 (S307) and Unit 246 (S434 shown in Table 3 above will continue to operate within their existing New Source Review (NSR) throughput limits that were permitted as part of the facility’s Clean Fuels Project (Application # 13424) and included into their Title V permit. There are no emission increases, physical changes or changes in the method of operation of any of the upstream and downstream units. Therefore, none of the sources listed in Table 3 are considered modified or altered as defined in Regulation 2-1-234.

UPSTREAM/DOWNSTREAM STORAGE TANKS

Several storage tanks may be affected by the project. These tanks are identified in Table 4.

Table 4: Storage Tanks

| Source # | Description | Upstream Or Downstream from S307 or S434 | Current Daily Throughput Limit | Current 12-Month Rolling Throughput Limit |
|----------|-------------|--|-----------------------------------|---|
| S105 | Tank 129 | Downstream | Exempt per Regulation 2-1-123.3.2 | |
| S122 | Tank 167 | Downstream | NA | 2,000,000 bbl |
| S126 | Tank 172 | Downstream | | |
| S127 | Tank 173 | Downstream | Exempt per Regulation 2-1-123.3.3 | |
| S138 | Tank 203 | Downstream | Exempt per Regulation 2-1-123.3.2 | |
| S173 | Tank 280 | Downstream | See Footnote ¹ | |
| S341 | Tank 208 | Downstream | | |
| S342 | Tank 209 | Downstream | | |
| S506 | Tank 257 | Downstream | See Footnote ¹ | |

None of the storage tanks listed above in Table 4 will change the material stored as a result of this project.

Tank 172 (S126), Tank 208 (S341) and Tank 209 (S342) are treated as modified sources because they have not been through NSR and may increase throughput as part of this project. Tank 172 (S126) stores light uncrackate (LUK), which is a material used in gasoline blending. Tank 208 (S341) stores heavy uncrackate (HUK), which is a material used in diesel blending. Tank 209 (S342) stores jet fuel.

HYDROGEN PRODUCTION

There are two hydrogen plants, one at the refinery and one at a support facility, Air Liquide. The Air Liquide hydrogen plant is located within the Phillips 66 refinery and was permitted under NSR application 13424 (2008). The hydrogen plants will continue to supply hydrogen to S307 and S434. The hydrogen plant sources are listed in Table 5.

¹ Tank 280 (S173) and Tank 257 (S506) are fixed roof tanks with natural gas blanketing. Vapor generated in the tanks is routed to the odor abatement vapor recovery system (A7) as required per Permit Condition # 23724. The vapors routed to the A7 will ultimately be recovered and reused as fuel gas in the refineries heaters which all have throughput limits. Because tanks are not being physically modified, changing method of operation and any emission increase is negligible due to the vapor recovery system (A7), they are neither modified nor altered.

Table 5: Hydrogen Production

| Source # | Description | Daily Limit | Annual Limit | Units | Limit Basis |
|---|-----------------------------|-------------|--------------|-------|-----------------|
| Phillips 66 | | | | | |
| S437 | Hydrogen Manufacturing Unit | 28.5 | 10,402.5* | MMscf | Grandfathered |
| S438 | U110 H-1 Furnace | 6,000** | 2,190,000* | MMBTU | Grandfathered |
| Air Liquide | | | | | |
| S1 | Hydrogen Plant | 120 | 43,800* | MMscf | PC 23178, 23181 |
| S2 | Hydrogen Plant Furnace | 25,728** | 9,636,000 | MMBTU | PC 23179, 23181 |
| S3 | Hydrogen Plant Flare | NA | NA | | PC 23180, 23181 |
| S4 | Cooling Tower | NA | NA | | PC 23414 |
| S5 | Ammonia Tank | NA | NA | | |
| *Annual limit calculated from daily limit multiplied by 365 days per year | | | | | |
| ** Daily limit calculated from hourly limit multiplied by 24 hrs per day | | | | | |

The existing hydrogen plant (S437) and hydrogen plant furnaces (S438) will continue to supply hydrogen to S307 and S434. The increase in throughput at these sources will increase hydrogen demand at the Refinery.

S437 and S438 are expected to continue to comply with existing permit limits (reviewed for BACT and offset as part of Application # 12412) in condition #1694, and there is no potential emissions increase above existing permitted levels. The District has determined that S437 and S438 are not modified sources under 2-1-234. In addition, these sources are not considered to be altered sources since there are no physical changes or construction required to accommodate the new project.

The Air Liquide hydrogen plant is located within the Phillips 66 refinery and was permitted under NSR application 13424 (2008). The hydrogen plant will continue to supply hydrogen to S307 and S434.

All sources at the Air Liquid hydrogen plant are expected to continue to comply with existing permit limits (reviewed for BACT and offset as part of Application # 13424), and there is no potential emissions increase above existing permitted levels per 2-1-234.2. These sources are not considered altered sources under 2-1-233 since there are no physical changes or construction required to accommodate the proposed project.

STEAM PRODUCTION

Steam for refinery use is primarily produced by three refinery gas turbines and associated duct burners (see Table 6).

Table 6: Steam Production

| Source # | Description | Daily Limit | Annual Limit | Units | Limit Basis |
|---|----------------------------------|-------------|--------------|-------|-------------|
| S352 | Combustion Turbine | 2.52E10** | 2.42E12 | BTU | PC 12122 |
| S353 | Combustion Turbine | | | | |
| S354 | Combustion Turbine | | | | |
| S355 | Supplemental Firing Duct Burners | | | | |
| S356 | Supplemental Firing Duct Burners | | | | |
| S357 | Supplemental Firing Duct Burners | | | | |
| *Annual limit calculated from daily limit multiplied by 365 days per year | | | | | |
| ** Daily limit calculated from hourly limit multiplied by 24 hrs per day | | | | | |

The steam power plant gas turbine/heat recovery steam generator trains will continue to supply steam to S307 and S434. The throughput increase at these sources will increase refinery steam demand. There are no piping changes or construction at the steam power plant sources to accommodate the increase in steam usage.

The steam power plant trains are expected to continue to comply with existing condition #12122 and #18629. The existing permit limits (reviewed for BACT, offset, and PSD as part of Application # 30810) are adequate to demonstrate that there is no emissions increase for all pollutants except particulate matter. The existing limit on the amount of fuel combusted at each gas turbine/heat recovery steam generator train is limited to 466 MMBtu/hour. This firing rate limit is a surrogate limit for particulate matter (PM10) and ensures that the particulate emissions from the gas turbine/heat recovery steam generator trains will not increase due to the proposed project and will remain below permitted levels estimated during the original permitting of these sources.

The District has determined that S352, S353, S354, S355, S356, and S357 are not modified sources under 2-1-234.1 since there is no emissions increase above permitted levels. These sources are not considered to be altered sources under 2-1-233 since there is no physical change or construction required to support the proposed project.

SULFUR PRODUCTION

Sulfur removed from material processing is sent and recovered as elemental sulfur at one of three refinery sulfur plants (listed in Table 7).

Table 7: Sulfur Production

| Source # | Description | Daily Limit | Annual Limit | Units | Limit Basis |
|----------|-----------------------|-------------|--------------|-----------|--------------------|
| S1002 | Sulfur Plant Unit 236 | 201 | 73,365 | long tons | Table II-A (daily) |
| S1003 | Sulfur Plant Unit 238 | | | | PC 19278 (annual) |
| S1010 | Sulfur Plant Unit 235 | 200 | None | long tons | Table II-A (daily) |

S1002 Sulfur Plant started initial operation in 1971 and was issued a permit in September of 1978. S1003 Sulfur Plant started initial operation in 1975 and was issued a permit in September of 1978. The original design capacities for S1002 and S1003 were 75 LT/day and 100 LT/day. Under application 5814 (2002), the capacity of each unit was permitted to increase by 15% to 86 LT/day and 115 LT/day. The application approved of the installation of oxygen enrichment. The application treated the capacity increase and installation of oxygen enrichment as an alteration since the emissions of H2S and SO2 remain the same pre and post project.

The current condition #19278 limits annual throughput for both sources to 73,365 long tons per year combined. Table II of the Title V permit limits the throughput to 201 long tons per day for both sources combined. There are no individual source limits that limit throughput or daily and annual emissions. S1002 and S1003 were never considered modified under application 5814 since there was no increase in emissions. Therefore, these sources are considered grandfathered sources that have never been subject to NSR review and the emissions from these sources have never been offset.

As stated in the application, the sulfur throughput increase at S1002 and S1003 due to the project may increase actual daily and annual emissions at these sources. However, the actual emissions increases are not above the approved permitted level. The combined throughput of S1002 and S1003 will not exceed

201 long tons/day and the annual throughput will not exceed 73,365 long tons/day. Production records are maintained by Phillips 66 to demonstrate daily throughput.

During the processing of application 25199 (Propane Recovery Project), the District established daily and annual throughput limit for S1002 and S1003. The permit limits evaluated in Application 25199 (Propane Recovery Project) for S1002 and S1003 are considered limits which the District had established in accordance with 2-1-233 based on review of the permitting history of these units. We recommend that these limits be included as part of this application since installation of the Propane Recovery Project (Application # 25199) has been delayed.

S1010 was permitted (NSR) as part of the Clean Fuels Expansion Project (application 13424, 2008). S1010 is subject to the following conditions: 23125, 22970, 22964, 1694, and 1440. S1010 is expected to continue to comply with existing (reviewed for BACT, offset, and PSD as part of Application # 13424) permit limits, and there is no potential emissions increase above existing permitted levels per 2-1-234.2. S1010 is not considered an altered source under 2-1-233 since there is no physical modification or construction required to accommodate the proposed project.

MARINE TERMINAL LOADING/UNLOADING

Phillips 66 receives and transports material via marine terminal and pipeline.

The District did not limit the amount of material that Phillips 66 can receive by pipeline since emissions occur as fugitive emissions which are limited and required to be monitored by District Regulation 8, Rule 15. However, the District does limit material throughput at storage tanks where pipeline material is received.

Table 8: Marine Terminal

| Source # | Description | Limit | Limit Basis |
|----------|-------------------------|---|-------------|
| S425 | Marine Loading Berth M1 | Products: 25,000 bbls/day (annual average) | PC 4336 |
| S426 | Marine Loading Berth M2 | Crude Oil or Gas Oil: 51,182 bbls/day (annual average) | |
| S427 | Marine Loading Berth B2 | Exempt Source – Loading only exempt materials | |
| S428 | Marine Loading Berth B3 | Exempt Source – Loading only exempt materials | |
| S429 | Marine Loading Berth B4 | Exempt Source – Loading only exempt materials | |

District permit condition number 4336-part 7 limits crude and gas oil receipts at the Marine Terminal (MT) to 51,182 bbl/d on a 12-month rolling average basis. This throughput limit was reviewed for BACT, offset, and PSD as part of Application # 22904. Since this limit is not increasing, there is no emissions increase above existing permitted levels per 2-1-234.2.

Sources S427, S428, and S429 are marine loading berths that are exempt sources which are only to be used to load exempt materials. Phillips 66 would need to submit a permit application to change the operation of these marine berths if it intends to use them for this project. Phillips 66 has not requested any change for sources S427, S428, and S429.

AFFECTED SOURCES

S307 U240 Unicracker and S434 U246 High Pressure Reactor Train

S307 and S434 are limited by a daily permit limit of 65,000 barrels per day, which was part of the “Clean Fuel Expansion Project (CFEP)” (Application # 13424). The purpose of the CFEP was to process heavy gas oil into gasoline and diesel by adding a high-pressure reactor train to S307 U240 Unicracker. The new train was integrated with S307, but was assigned a new source number of S434. A review of the prior application and discussions with the District permit engineer, Brenda Cabral, confirmed that the daily throughput limit of 65,000 barrels per day was requested by the applicant (Phillips 66). Also, a review of the flow diagram for the process and confirmed by Phillips 66 shows that the throughput limit of 65,000 barrels per day is the daily throughput limit for both S307 and S434 combined.

The Refinery has requested a revised limit of 69,000 barrels per day along with a corresponding increase in the annual throughput limit for S434 from 8,395,000 bbl to 9,855,000 bbl on a 12-month rolling average basis (27,000 bbl/day x 365 days/year). Both S307 and S434 are modified sources since the maximum daily and annual throughputs are increasing above the permitted level.

Storage Tanks S126, S341, S342

District staff reviewed the impacts on storage tanks from the proposed project. Three storage tanks (S126, S341, and S342) are used to store the intermediate products after processing by S307 and S434. The annual throughputs for all three tanks are limited by condition 20989, which were imposed in accordance with Regulation 2-1-234.3. Because these three tanks have not been through NSR, the three storage tanks were determined to be modified sources under 2-1-234.3. Table 2 summarizes the changes of throughput for the three tanks.

Table 9 – Modified Tank Throughputs/Limits

| Source | New Source Review | Capacity (bbl) | Current Limit (bbl/yr) | Baseline Throughput (bbl/yr) | Proposed Limit (bbl/yr) |
|---------------|--------------------------|-----------------------|-------------------------------|-------------------------------------|--------------------------------|
| S126 Tank 172 | No | 75,000 | 10,500,000 | 284,595 | 594,845 |
| S341 Tank 208 | No | 103,000 | 43,800,000 | 1,016,583 | 1,819,583 |
| S342 Tank 209 | No | 103,000 | 43,800,000 | 1,787,200 | 2,407,700 |

Notes: Baseline Period is from July 13 to June 14 of the last three years (2014, 2015, and 2016) per Regulation 2-2-605.

S126 stores light unicrakte and is an internal floating roof tank with a dome. S341 stores heavy unicrakte which is a material used in diesel blending and is an external floating roof tank. S342 stores jet fuel and is an external floating roof tank.

II. EMISSION CALCULATIONS

Criteria Pollutants

Process Units (S307 and S434)

The emissions from process units are fugitive organic emissions from equipment leaks from fugitive components (such as valves, flanges, and pumps). The proposed requested increase in throughput at the S307 and S434 will not require an increase of fugitive components because no physical modification will be made at S307 or S434, therefore there will be no increase of emissions from S307 and S434.

Storage Tanks (S126, S341, S342)

Tank 172 (S126), Tank 208 (S341) and Tank 209 (S342) organic emissions were calculated using EPA's Tanks 4.09(d) software. Because none of the tanks are changing the material stored, only increasing the throughput, the emission increases are associated with the withdrawal losses only. The emissions were estimating following the procedures in BAAQMD Regulation 2-2-604 and 2-2-605 using the three-year average throughput for 2013 through 2015. The POC increases from the storage tanks is 0.065 TPY.

Table 10 – Storage Tank Throughput and Increased POC

| Source # | 3-Year Baseline Throughput (bbl/yr) | Proposed Throughput (bbl/yr) | Increased POC (lb/day) | Increased POC (lb/year) |
|-----------------|--|---|---------------------------------------|--|
| S126 | 284,595 | 594,845 | 0.06 | 22 |
| S341 | 1,016,583 | 1,819,583 | 0.16 | 57 |
| S342 | 1,787,200 | 2,407,700 | 0.15 | 51 |
| TOTAL | N/A | N/A | 0.36 | 130 |

Notes: Baseline Period is June 13 to June 14 of the last three years (2014, 2015, and 2016) per Regulation 2-2-605

Toxic Air Contaminants

The emissions of all toxic air contaminants associated with this application are less than the acute and chronic trigger levels in Regulation 2, Rule 5. A health risk screen was not required for this application.

Table 10a - Storage Tank TAC Emissions (Chronic)

| TAC | Tank 172 (S126) | | Tank 208 (S341) | | Tank 209 (S342) | |
|---------------|-----------------|-------------------|-----------------|-------------------|-----------------|-------------------|
| | Conc (%) | Emissions (lb/yr) | Conc (%) | Emissions (lb/yr) | Conc (%) | Emissions (lb/yr) |
| Benzene | 1.3 | 0.3 | 0.8 | 0.5 | 0.8 | 0.4 |
| Hexane | 1.3 | 0.3 | 3 | 1.7 | 3 | 1.5 |
| Naphthalene | 0.3 | 0.1 | 2 | 1.1 | 2 | 1.0 |
| Toluene | 0.2 | 0.04 | 8 | 4.5 | 8 | 4.1 |
| Xylene | 4.9 | 1.1 | 11 | 6.2 | 1.1 | 5.6 |
| Ethyl Benzene | 0.9 | 0.2 | 2 | 1.1 | 2 | 1.0 |

Table 10b - Storage Tank TAC Emissions (Acute)

| TAC | Tank 172 (S126) | | Tank 208 (S341) | | Tank 209 (S342) | |
|---------------|-----------------|-------------------|-----------------|-------------------|-----------------|-------------------|
| | Conc (%) | Emissions (lb/hr) | Conc (%) | Emissions (lb/hr) | Conc (%) | Emissions (lb/hr) |
| Benzene | 1.3 | 0.004 | 0.8 | 0.002 | 0.8 | 0.001 |
| Hexane | 1.3 | 0.004 | 3 | 0.009 | 3 | 0.002 |
| Naphthalene | 0.3 | 0.001 | 2 | 0.006 | 2 | 0.001 |
| Toluene | 0.2 | 0.001 | 8 | 0.023 | 8 | 0.006 |
| Xylene | 4.9 | 0.015 | 11 | 0.032 | 1.1 | 0.001 |
| Ethyl Benzene | 0.9 | 0.003 | 2 | 0.006 | 2 | 0.001 |

Table 10c - Total Project TAC Emissions Versus Chronic/Acute HRSR Trigger Levels

| TAC | TAC Emissions (lb/yr) | TAC Emissions (lb/hr) | Chronic Trigger (lb/yr) | Acute Trigger (lb/hr) | HRSR Triggered? (Y/N) |
|---------------|-----------------------|-----------------------|-------------------------|-----------------------|-----------------------|
| Benzene | 1.2 | 0.007 | 3.8 | 2.9 | N |
| Hexane | 3.5 | 0.015 | 270,000 | NA | N |
| Naphthalene | 2.2 | 0.008 | 3.2 | NA | N |
| Toluene | 8.64 | 0.03 | 12,000 | 82 | N |
| Xylene | 12.9 | 0.048 | 27,000 | 49 | N |
| Ethyl Benzene | 2.3 | 0.01 | 43 | NA | N |

III. PLANT CUMULATIVE INCREASE SINCE 4/5/1991

Table 11 – Plant Cumulative Increase

| Pollutant | Pre 4/5/91 Emissions (TPY) | Cumulative Increase Offset (TPY) | Cumulative Increase Not Offset (TPY) | Application Cumulative Increase Subject to Offsets (TPY) | Total Cumulative Increase Subject to Offsets (TPY) |
|------------------|-----------------------------------|---|---|---|---|
| NO _x | 709.012 | 45.803 | 0 | 0 | 0 |
| CO | 63.327 | 203.140 | 0 | 0 | 0 |
| POC | 101.652 | 89.435 | 0.002 | 0.065 | 0.067 |
| PM10 | 0.000 | 16.72 | 0 | 0 | 0 |
| SO ₂ | 101.652 | 63.433 | 0.120 | 0 | 0.120 |
| NPOC | 0 | 0 | 0 | 0 | 0 |

Notes: Phillips 66 Carbon Plant (Plant 21360) is considered to be part of the refinery. The refinery is required to offset all pollutants except CO and NPOC.

IV. OFFSETS

The following POC offsets are required for this application:

$$\text{POC offsets} = 0.065 \text{ TPY}(1.15) = 0.075 \text{ TPY}$$

The facility will use Banking Certificate # 1611 for the required POC offsets.

Application 11293 (2006) for S437 Hydrogen Manufacturing Unit had a SO₂ increase of 0.120 tons per year that was never offset. This amount of SO₂ emission reduction credits will be collected from Phillip 66's Banking Certificate # 1468 at a 1:1 ratio per Regulation 2-1-303.

V. TOXIC SCREENING ANALYSIS

There is no emissions increase of toxics air contaminants above acute and chronic trigger levels associated with this application and a health risk screening analysis is not required under Regulation 2, Rule 5.

VI. BEST AVAILABLE CONTROL TECHNOLOGY

Worst-case daily emissions from each of the modified storage tanks were estimated using the maximum withdrawal rate of each storage tank and assuming continuous operation at the maximum withdrawal rate (24 hours per day and 365 days per year) and using the EPA Tanks4 program to estimate maximum annual emissions. The worst-case daily emissions were estimated dividing the annual emissions by 365 days. Table 10 summarizes the worst-case daily emissions of the modified storage tanks:

Table 12– Worst-Case Daily Emissions from Storage Tanks

| Source | Maximum Withdrawal Rate (gal/hr) | Maximum Annual Emissions (lb/yr) | Worst-Case Daily Emissions (lb/day) |
|---------------|---|---|--|
| S126 Tank 172 | 50,400 | 3,364 | 9.2 |
| S341 Tank 208 | 21,000 | 2,760 | 7.6 |
| S342 Tank 209 | 21,000 | 787 | 2.2 |

The worst-case daily emissions will not exceed 10 lb/day. As a result, BACT review is not required, per Regulation 2-2-301.

VII. STATEMENT OF COMPLIANCE

BAAQMD Regulation 7, Odorous Emissions

The purpose of Regulation 7 is the general control of odorous compounds. The modified sources S307 and S434 and the affected sources are expected to continue to comply with Regulation 7 requirements.

BAAQMD Regulation 8, Rule 2, Miscellaneous Operations

The affected sources and modified sources subject to this regulation are expected to continue to comply with 8-2-301 by emitting less than 15 lb/day of organics and at a concentration less than 300 ppm as carbon on a dry basis.

BAAQMD Regulation 8, Rule 5, Storage of Organic Liquids

The tanks affected by this project are:

S126, Tank No. 172, Internal Floating Roof Tank with a dome, 75,000 bbl

S341, Tank No. 208, External Floating Roof Tank, 103,000 bbl

S342, Tank No. 209, External Floating Roof Tank, 103,000 bbl

None of the tanks are changing service due to the proposed project, although the throughput will change. The tanks are in compliance with the relevant standards and are expected to continue to comply.

BAAQMD Regulation 8, Rule 10, Process Vessel Depressurization

S434 process vessel and S1010 are subject to this rule. Section 301 of the rule requires that the emissions during depressurizing be controlled by an abatement device or the fuel gas system until the vessel is as close to atmospheric pressure as possible, but at least until the partial pressure of organic compounds in that vessel is less than 4.6 psig.

Section 302 requires that no process vessel may be opened to the atmosphere unless the internal concentration of total organic compounds has been reduced prior to release to atmosphere to less than 10,000 parts per million (ppm), with the following exception: vessels may be opened when the concentration of total organic compounds is 10,000 ppm or greater provided that the total number of such vessels opened with such concentration during any consecutive five year period does not exceed 10% of the total process vessel population, the organic compound emissions from the opening of these vessels does not exceed 15 pounds per day and the vessels are not opened on any day on which the APCO predicts an exceedance of a National Ambient Air Quality Standard for ozone or declares a Spare the Air Day.

The facility is expected to continue to comply with these standards.

BAAQMD Regulation 8, Rule 18, Equipment Leaks

Components such as valves, flanges, pumps, compressors, pressure relief devices, are subject to BAAQMD Regulation 8, Rule 18. The rule has total organic leak limits of 100 ppm for valves and flanges and 500 ppm for pumps, compressors, and pressure relief devices. This is a "work-practice" standard. The facility is obligated to test the components for leaks on a periodic basis and repair the leaks. A small percentage of non-repairable leaks are allowed until the next turnaround or five years, whichever is sooner.

The facility has an inspection program for this regulation and is expected to continue to comply with these standards.

BAAQMD Regulation 8, Rule 28, Episodic Releases from Pressure Relief Devices at Petroleum Refineries and Chemical Plants

BAAQMD Regulation 8, Rule 28 applies to pressure relief devices (PRD) installed on refinery equipment. Section 8-28-302 applies to PRDs on new or modified equipment. It requires that these PRDs comply with all requirements of BAAQMD Regulation 2, Rule 2, including BACT. BACT1 at this time is a rupture disk with a vent to a fuel gas recovery system, furnace, or flare with a recovery/destruction efficiency of 98%. All PRDs installed as S434 and S1010 installed during the original permitting for the Clean Fuels Expansion Project (application 13424) are subject to this standard.

Existing PRDs associated with S307 are also subject to the standard. These PRDs will be subject to BACT2, which is a vent to a fuel gas recovery system, furnace, or flare with a recovery/destruction efficiency of 98%.

All of the PRDs regulated by Regulation 8, Rule 28 are expected to continue to comply with these standards.

BAAQMD Regulation 9, Rule 1, Sulfur Dioxide

S45, Heater, and S1010, SRU, are sources of SO₂. The heater is not subject to the 300-ppm limit in Section 9-1-301 of the rule because the refinery complies with the exemption in Section 9-1-110. The exemption requires ground level monitoring and compliance with the ground level concentration limit.

S1010 is subject to the limit of 250 ppmv SO₂, dry, at zero percent O₂, in Section 9-1-307. The source will be subject to continuous monitoring by BAAQMD Regulations 1-520, 1-522, and 9-1-502, which will ensure compliance.

BAAQMD Regulation 9, Rule 2, Hydrogen Sulfide

The facility is subject to the requirements of this rule. Many pieces of equipment that are affected sources in this application can be sources of fugitive hydrogen sulfide: The facility has ground level monitoring of H₂S to ensure compliance with the ground level concentration limits of 0.06 ppm averaged over three consecutive minutes or 0.03 ppm averaged over any 60 consecutive minutes. These requirements have been incorporated into the Title V permit and apply to the facility as a whole. Therefore, the facility complies with the requirement.

New Source Performance Standards (NSPS) & National Emission Standards for Hazardous Air Pollutants (NESHAP)

The process units (S307 and S434) are subject to NSPS Subpart GGGa and VVa and NESHAP Subpart CC for fugitive leaks. The sources meet all requirements through existing refinery Leak Detection and Repair (LDAR) program.

The S126 storage tank is not subject to NSPS Subpart Ka or Kb because it was built in 1958 and prior to the applicability dates for NSPS Subpart Ka or Kb. The S126 storage tank is subject to NESHAP Subpart CC Group 1 requirements and complies with all required seal inspection and reporting requirements through the existing tank inspection program at the Refinery.

The S341 and S342 storage tanks are subject to NSPS Subpart Ka, NESHAP Subpart G, and Subpart CC and comply with all required seal inspection and reporting requirements through the existing tank inspection program.

Prevention of Significant Deterioration (PSD)

The permitted sources of the Clean Fuels Project (Application # 13424), as issued, did not trigger PSD. The project to increase hydrocracker throughput and the increased usage of tankage (S126, S341, and S342) will also not trigger PSD. The facility has conducted an analysis using the “actual to projected actual” methodology and confirmed that PSD is not triggered.

California Environmental Quality Act

Contra Costa County Community Development Department (County) acted as Lead Agency under CEQA for the ConocoPhillips Clean Fuels Expansion Project (the “CFEP”), which the County evaluated in the CFEP’s Environmental Impact Report (EIR). As a responsible agency under CEQA, the Air District participated in the EIR process for the CFEP and has closely reviewed and relies on the County’s EIR.

The operations and equipment at the Refinery affected by the Project described in Application #27954 has already undergone full CEQA review and the proposed throughput increase does not materially alter the analysis of, nor change any conclusion reached by, the Environmental Impact Report and neither recirculation of the EIR nor a preparation of a subsequent/supplemental EIR is required for the Project under Public Resources Code Section 21166 and CEQA Guidelines Section 15162. The Project does not require any physical change to any source at the Refinery or any new construction of any sources, new piping, or new components. With the exception of 130 pounds per year of precursor organic compound emissions, the throughput increase does not entail any increase in utilization of, or increase in emissions from, any support equipment beyond what was previously analyzed in the EIR and in the Air District’s own substantive permitting processes, including New Source Review.

The County has certified the EIR for the CFEP pursuant to the provisions of CEQA. The Air District has reviewed and considered Contra Costa County’s EIR, incorporated the EIR’s analyses into its decision-making process, and found, pursuant to CEQA Guidelines Section 15091, that, for each of the impacts identified in the EIR, changes or alterations have been required in, or incorporated into, the projects which avoid or substantially lessen the significant environmental effect as identified in the EIR. In approving the land use permit for these projects, Contra Costa County adopted some mitigation measures as a condition of the approval of the projects and adopted a mitigation monitoring plan or program. The Air District will file a Notice of Determination and Findings and Supporting Facts regarding the EIR with the Contra Costa County Clerk.

Regulation 2, Rule 1, Section 412 (School Notification)

This project is greater than 1,000 ft from the nearest public school and therefore is not subject to the public notification requirements of Regulation 2-1-412.

VIII. CONDITIONS

The underline and strikeouts indicate additions and deletions, respectively in the proposed changes of conditions for existing conditions for S307 and S434:

S307 U240 UNICRACKING UNIT 240

Condition 22965

Source S-307, U240 Unicracking Unit

1. The owner/operator shall ensure that the combined throughput of S-307 and S-434 does not exceed 695,000 barrels/day. [Cumulative Increase]
2. The owner/operator shall keep throughput records for this source on a daily basis. The records shall be kept on site for a period of at least 5 years and shall be made available for inspection by District staff upon request. [Cumulative Increase]
3. All pressure relief devices on the process unit shall be vented to a fuel gas recovery system, furnace, or flare with a recovery/destruction efficiency of 98% by weight. [8-28-302, BACT]

S434 U246 High Pressure Reactor Train

Condition 22969

Source S-434, U246 High Pressure Reactor Train (Cracking)

1. The owner/operator shall ensure that the throughput of S434 does not exceed 9,855,000~~8,395,000~~ barrels over any rolling 12-month period. [Cumulative Increase]
2. The owner/operator shall keep throughput records for this source on a monthly basis. The records shall be kept on site for a period of at least 5 years and shall be made available for inspection by District staff upon request. [Cumulative Increase]
3. All pressure relief devices on the process unit shall be vented to a fuel gas recovery system, furnace, or flare with a recovery/destruction efficiency of 98% by weight. [8-28-302, BACT]

S126 Tank 172

New Condition # 26689:

1. The owner/operator of S-126 shall ensure that following total throughput limits are not exceeded in any rolling consecutive 12 month period:
594,845 barrels of petroleum liquids.
[Basis: Cumulative Increase]
2. The owner/operator shall only store the following in S-126:
Petroleum liquids with a Reid vapor pressure less than or equal to 9 psia.
[Basis: Cumulative Increase]
3. Monthly records of the throughput of each material and its vapor pressure processed at this tank shall be kept in a District-approved log for at least 5 years and shall be made available to the District upon request. [Basis: Cumulative Increase]

S341 Tank 208

New Condition # 26690

1. The owner/operator of S-341 shall ensure that following total throughput limits are not exceeded in any rolling consecutive 12 month period:
1,819,583 barrels of petroleum liquids.
[Basis: Cumulative Increase]
2. The owner/operator shall only store the following in S-341:
Petroleum liquids with a true vapor pressure less than or equal to 3.0 psia.
[Basis: Cumulative Increase]
3. Monthly records of the throughput of each material and its vapor pressure processed at this tank shall be kept in a District-approved log for at least 5 years and shall be made available to the District upon request. [Basis: Cumulative Increase]

S342 Tank 209

New Condition # 26691

1. The owner/operator of S-342 shall ensure that following total throughput limits are not exceeded in any rolling consecutive 12 month period:
2,407,700 barrels of petroleum liquids
[Basis: Cumulative Increase]
2. The owner/operator shall only store the following in S-342:
Petroleum liquids with a true vapor pressure less than or equal to 0.5 psia.
[Basis: Cumulative Increase]

3. Monthly records of the throughput of each material and its vapor pressure processed at this tank shall be kept in a District- approved log for at least 5 years and shall be made available to the District upon request. [Basis: Cumulative Increase]

FACILITY-WIDE REQUIREMENTS

Condition 20989

A. THROUGHPUT LIMITS

The following limits are imposed through this permit in accordance with Regulation 2-1-234.3. Sources require BOTH hourly/daily and annual throughput limits (except for tanks and similar liquid storage sources, and small manually operated sources such as cold cleaners which require only annual limits). Sources with previously imposed hourly/daily AND annual throughput limits are not listed below; the applicable limits are given in the specific permit conditions listed above in this section of the permit. Also, where hourly/daily capacities are listed in Table II-A, these are considered enforceable limits for sources that have a New Source Review permit. Throughput limits imposed in this section and hourly/daily capacities listed in Table II-A are not federally enforceable for grandfathered sources. Grandfathered sources are indicated with an asterisk in the source number column in the following table. Refer to Title V Standard Condition J for clarification of these limits.

In the absence of specific recordkeeping requirements imposed as permit conditions, monthly throughput records shall be maintained for each source.

| source number | hourly / daily throughput limit | annual throughput limit (any consecutive 12-month period unless otherwise specified) |
|----------------------|--|---|
| 15 | Table II-A | 19.9 E 6 therm total at S15 through S19 |
| 16 | Table II-A | 19.9 E 6 therm total at S15 through S19 |
| 17 | Table II-A | 19.9 E 6 therm total at S15 through S19 |
| 18 | Table II-A | 19.9 E 6 therm total at S15 through S19 |
| 19 | Table II-A | 19.9 E 6 therm total at S15 through S19 |
| 20 | Table II-A | 1.9 E 6 therm |
| 21 | Table II-A | 0.7 E 6 therm |
| 22 | Table II-A | 2.6 E 6 therm |
| 29 | Table II-A | 8.6 E 6 therm |
| 30 | Table II-A | 4.2 E 6 therm |
| 31 | Table II-A | 1.7 E 6 therm |
| 43 | Table II-A | 19.1 E 6 therm |
| 44 | Table II-A | 3.8 E 6 therm |

| source number | hourly / daily throughput limit | annual throughput limit (any consecutive 12-month period unless otherwise specified) |
|----------------------|--|---|
| *100 | NA for tank | 4.38 E 6 bbl |
| 101 | NA for tank | 3.68 E 9 gal |
| 102 | NA for tank | 3.68 E 9 gal |
| 106 | NA for tank | 3.68 E 9 gal |
| *107 | NA for tank | 8.76 E 6 bbl |
| *110 | NA for tank | 1.40 E 7 bbl |
| *111 | NA for tank | 1.31 E 7 bbl |
| *112 | NA for tank | 1.49 E 7 bbl |
| *113 | NA for tank | 1.49 E 7 bbl |
| *114 | NA for tank | 1.31 E 7 bbl |
| *115 | NA for tank | 4.38 E 6 bbl |
| *125 | NA for tank | 1.05 E 7 bbl |
| *126 | NA for tank | 1.05 E 7 bbl |
| 129 | NA for tank | 4.6 E 6 bbl |
| 133 | NA for tank | 8.76 E 5 bbl |
| *134 | NA for tank | 1.31 E 7 bbl |
| 150 | NA for tank | 4.38 E 7 bbl |
| 151 | NA for tank | 4.38 E 7 bbl |
| *177 | NA for tank | 2.63 E 7 bbl |
| 178 | NA for tank | 3.50 E 7 bbl |
| 183 | NA for tank | 4.38 E 5 bbl |
| 184 | NA for tank | 4.38 E 6 bbl |
| *194 | NA for tank | 100 bbl |
| 195 | NA for tank | 525,600 bbl for S195, S196, S388 (combined) |
| 196 | NA for tank | 525,600 bbl for S195, S196, S388 (combined) |
| *216 | NA for tank | 4.6 E 6 bbl |
| *239 | NA for tank | 8.76 E 6 bbl |
| *254 | NA for tank | 7.01 E 7 bbl |
| *255 | NA for tank | 7.01 E 7 bbl |
| *256 | NA for tank | 7.01 E 7 bbl |
| *257 | NA for tank | 7.01 E 7 bbl |
| *258 | NA for tank | 7.01 E 7 bbl |
| *259 | NA for tank | 7.01 E 7 bbl |
| 294 | 20 gpm | 400,000 gallons |
| 305 | Table II-A | 10.22 E 6 bbl |
| *319 | Table II-A | 3.51 E 6 bbl |
| 324 | Table II-A | 3.68 E 9 gallons |
| 336 | Table II-A | 9.2 E 6 therm |

| source number | hourly / daily throughput limit | annual throughput limit (any consecutive 12-month period unless otherwise specified) |
|----------------------|--|---|
| 337 | Table II-A | 2.8 E 6 therm |
| *338 | Table II-A | 6.6 E 10 ft3 |
| 341 | NA for tank | 4.38 E 7 bbl |
| 342 | NA for tank | 4.38 E 7 bbl |
| 343 | NA for tank | 4.38 E 7 bbl |
| 351 | Table II-A | 8.4 E 6 therm |
| 360 | NA for tank | 2.78 E 6 bbl |
| 370 | Condition 12121 | 4.03 E6 bbl |
| 371 | Table II-A | 4.8 E6 therm for S371/S372 |
| 372 | Table II-A | 4.8 E6 therm for S371/S372 |
| 380 | 0.45 ton/hr | 3,942 ton |
| 381 | 420,000 gal/hr | 3.68 E 9 gal |
| 382 | 420,000 gal/hr | 3.68 E 9 gal |
| 383 | 420,000 gal/hr | 3.68 E 9 gal |
| 384 | 420,000 gal/hr | 3.68 E 9 gal |
| 385 | Table II-A | 3.68 E 9 gal |
| 386 | 3600 gal/hr | 3.2 E 7 gal |
| 387 | Table II-A | 13.14 E 6 gal |
| 388 | Table II-A | 525,600 bbl for S195, S196, S388 (combined) |
| 389 | 0.21 ton/hr | 1840 ton |
| 390 | N/A for tank | 7.884 E 6 gal |
| 392 | N/A for tank | 7.884 E 6 gal |
| 400 | N/A for sump | 3.68 E 9 gal |
| 401 | N/A for sump | 3.68 E 9 gal |
| 435 | Table II-A | 6.6 E 6 bbl |
| 436 | Table II-A | 4.7 E 6 bbl |
| 462 | Table II-A | 1.533 E 9 ft3 |
| 463 | Table II-A | 365,000 bbl |
| 1007 | Table II-A | 3.68 E 9 gal |

B. OTHER REQUIREMENTS

1. 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, for any unscheduled startup or shutdown of a process unit, within 48 hours or within the next normal business day. The notification shall be sent in writing by fax or email to the

Director of Enforcement and Compliance. This requirement is not federally enforceable. [Regulation 2-1-403]

During the processing of application 25199 (Propane Recovery Project), the District established daily throughput limits for S-1002 of 106.3 long tons/day, based on the maximum acid gas feed rate of 3.272 MMscf/day and the H₂S content of the amine acid gas of 88%. In addition, The District established the daily throughput limit for S-1003 of 134.5 long tons/day, based on the maximum acid gas feed rate of 4.138 MMscf/day and the H₂S content of the amine gas of 88%. These limits would have been made effective after construction of the Propane Recovery Project was completed and operations had started up. However, the project has been delayed due to a legal challenge. To ensure that there is indeed no increase at S-1002 and S-1003, the daily limits will be made effective with this application's change of conditions. The combined throughput limit of 201 long tons/day will also remain to ensure emissions do not increase above the existing permit level. The annual combined throughput limit will no longer be necessary and will be removed from condition 19278.

Existing permit condition 19278 will be modified as indicated below and will become effective when the change of conditions for S-307 and S-434 are approved. The changes to the existing condition 19278 are shown in strikethrough/lineout.

S1002, S1003 Sulfur Recovery Units

Conditions for S-1002 and S-1003

1. Deleted Application 12433
2. Deleted Application 12433
3. An annual District-approved source test shall be performed to verify compliance with the requirements of Regulation 6-1-330. A copy of the source test results shall be provided to the District Director of Compliance and Enforcement within 45 days of the test.
[Basis: Regulation 6-1-330]
4. The Owner/Operator shall perform a visible emissions check on Sources S-1002 and S-1003 on a monthly basis. The visible emissions check shall take place while the equipment is operating and during daylight hours. If any visible emissions are detected, the owner/operator shall have a CARB-certified smoke reader determine compliance with the opacity standard, using EPA Method 9 or the procedures outlined in the CARB manual, "Visible Emissions Evaluation" for six (6) minutes within three (3) days and record the results of the reading. If the reading is in compliance with the Ringelmann 1.0 limit in BAAQMD Regulation 6-1-301, the reading shall be recorded and the owner/operator shall continue to perform a visible emissions check on a monthly basis. If the reading is not in compliance with the Ringelmann 1.0 limit in BAAQMD Regulation 6-1-301, the owner/operator shall take corrective action and report the violation in accordance with Standard Condition 1.F of ~~the~~ Title V permit. The

certified smoke-reader shall continue to conduct the Method 9 or CARB Visible Emission Evaluation on a daily basis until the daily reading shows compliance with the applicable limit or until the equipment is shut down. Records of visible emissions checks and opacity readings made by a CARB-certified smoke reader 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: Regulations 6-1-301, 2-6-501, 2-6-503]

5. Within 90 days of issuance of the Major Facility review permit pursuant to Application 10994, the owner/operator shall perform source tests at the stacks of Tail Gas Incinerators A422 and A423 to determine compliance with BAAQMD Regulations 6-1-310 and 6-1-311 for filterable particulate using the existing single port. The owner/operator shall also utilize a District approved method to measure condensable particulate during annual particulate testing conducted under this part for a period of three years after issuance of the change of condition under application 27954. The APCO may administratively request that the owner/operator continue to perform annual condensable testing at the end of the three year period. The owner/operator shall submit a proposed source test protocol to the Source Test group at least 30 days before conducting the source test. Within 60 days of the source tests, the owner/operator shall submit the results of the source tests to the District. The owner/operator shall repeat the source tests on an annual basis. The District's Source Test Group will observe the initial test to determine if testing with a single port is acceptable for these stacks. If the Source Test Group finds that a single port is not acceptable, the District may reopen the permit to require installation of a second port at each stack. [Basis: 2-6-503]

6. The owner/operator shall ensure that the throughput of molten sulfur at S-1002 and S-1003 does not exceed 106.3 long tons/day and 134.5 long tons/day, respectively. The owner/operator shall ensure that the throughput of molten sulfur at S-1002 and S-1003 combined does not exceed 201 long tons/day. The owner/operator shall ensure that the throughput of molten sulfur at S-1002 and S-1003 does not exceed 31,390 long tons/year and 41,975 long tons/year, respectively. The owner/operator shall ensure that the throughput of molten sulfur at S1002 and S1003 combined does not exceed 73,365 long tons/yr.~~The owner/operator shall record the throughput of molten sulfur on a daily monthly basis.~~ [Basis: Cumulative Increase]

IX. TITLE V PERMIT

This facility is a Major Facility. The changes to the Title V permit are included in Appendix A of this evaluation.

X. RECOMMENDATION

Recommend issuing approval for a change of condition as described above to Phillips 66 for the following:

- S307 U240 UNICRACKING UNIT 240 (Condition # 22965)**
- S434 U246 High Pressure Reactor Train (Condition # 22969)**
- S126 Tank 172 (Condition # 26689, 20989)**
- S341 Tank 208 (Condition # 26690, 20989)**
- S342 Tank 209 (Condition # 26691, 20989)**
- S1002 Sulfur Plant – Unit 236 (Condition # 19278)**
- S1003 Sulfur Plant – Unit 238 (Condition # 19278)**

By: [Signed by Carol Lee]
Carol Lee
Senior Air Quality Engineer

[approved August 16, 2018]
Date

APPENDIX A

The proposed changes to Tables II (for S126, S307, S341, S342, S434, S1002 and S1003), IV, and VII are provided in this Appendix A. Changes to the proposed permit conditions are already reflected in the permit condition section of the evaluation report.

Table II A - Permitted Sources

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

| S# | Description | Make or Type | Model | Capacity |
|----|--|----------------|----------------|---|
| 2 | U229, B-301 Heater (natural gas, refinery fuel gas) | Petro-Chem | process heater | 22 MMbtu/hr |
| 3 | U230, B-201 Heater (natural gas, refinery fuel gas) | Petro-Chem | process heater | 53 MMbtu/hr |
| 4 | U231, B-101 Heater (natural gas, refinery fuel gas) | Braun | process heater | 96 MMbtu/hr |
| 5 | U231, B-102 Heater (natural gas, refinery fuel gas) | Braun | process heater | 104 MMbtu/hr |
| 7 | U231, B-103 Heater (natural gas, refinery fuel gas) | Petro-Chem | process heater | 64 MMbtu/hr |
| 9 | U240, B-2 Boiler (natural gas, refinery fuel gas) | Born | process heater | 61 MMbtu/hr |
| 10 | U240, B-101 Heater (natural gas, refinery fuel gas) | Foster-Wheeler | process heater | 223 MMbtu/hr |
| 11 | U240, B-201 Heater (natural gas, refinery fuel gas) | Econo-Therm | process heater | 108 MMbtu/hr |
| 12 | U240, B-202 Heater (natural gas, refinery fuel gas) | Econo-Therm | process heater | 42 MMbtu/hr |
| 13 | U240, B-301 Heater (natural gas, refinery fuel gas) | Born | process heater | 194 MMbtu/hr |
| 15 | U244, B-501 Heater (natural gas, refinery fuel gas) | Alcorn | process heater | 239.75 MMbtu/hr total for S15 through S19 |
| 16 | U244, B-502 Heater (natural gas, refinery fuel gas) | Alcorn | process heater | 239.75 MMbtu/hr total for S15 through S19 |
| 17 | U244, B-503 Heater (natural gas, refinery fuel gas) | Alcorn | process heater | 239.75 MMbtu/hr total for S15 through S19 |
| 18 | U244, B-504 Heater (natural gas, refinery fuel gas) | Alcorn | process heater | 239.75 MMbtu/hr total for S15 through S19 |
| 19 | U244, B-505 Heater (natural gas, refinery fuel gas) | Alcorn | process heater | 239.75 MMbtu/hr total for S15 through S19 |
| 20 | U244, B-506 Heater (natural gas, refinery fuel gas) | Econo-Therm | process heater | 23 MMbtu/hr |
| 21 | U244, B-507 Heater (natural gas, refinery fuel gas) | Econo-Therm | process heater | 8.1 MMbtu/hr |
| 22 | U248, B-606 Heater (natural gas, refinery fuel gas) | Econo-Therm | process heater | 31 MMbtu/hr |
| 29 | U200, B-5 Heater (natural gas, refinery fuel gas) | Foster-Wheeler | process heater | 103 MMbtu/hr |

Table II A - Permitted Sources

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

| S# | Description | Make or Type | Model | Capacity |
|-----|---|------------------------|--|----------------------|
| 30 | U200, B-101 Heater (natural gas, refinery fuel gas) | Petro-Chem | process heater | 50 MMbtu/hr |
| 31 | U200, B-501 Heater (natural gas, refinery fuel gas) | Petro-Chem | process heater | 20 MMbtu/hr |
| 36 | U200, B-102 Heater (natural gas, refinery fuel gas) | NA | process heater | 82.1 MMbtu/hr |
| 43 | U200, B-202 Heater (natural gas, refinery fuel gas) | | process heater | 230 MMbtu/hr |
| 44 | U200, B-201 PCT Reboil Furnace (natural gas, refinery fuel gas) | | process heater | 46 MMbtu/hr |
| 45 | U246 B-801 A/B Heater (refinery fuel gas, natural gas) | | | 85 MMbtu/hr |
| 50 | Diesel Engine (turbine S352 startup) | Allis-Chalmers | 6138 | 435 hp |
| 51 | Diesel Engine (turbine S353 startup) | Allis-Chalmers | 6138 | 435 hp |
| 52 | Diesel Engine (turbine S354 startup) | Allis-Chalmers | 6138 | 435 hp |
| 53 | SPP Emergency Generator G-27 (diesel fuel) | Cummins | 6B-5.9 | 97 hp |
| 56 | Pump Station 4 G-201A Emergency Engine (diesel fuel) | Caterpillar | 3406 | 370 hp |
| 57 | Pump Station 4 G-201B Emergency Engine (diesel fuel) | Caterpillar | 3406 | 370 hp |
| 58 | Pump Station 4 G-422A Emergency Engine (diesel fuel) | Caterpillar | 3406 | 370 hp |
| 59 | Pump Station 4 G-422B Emergency Engine (diesel fuel) | Caterpillar | 3406 | 370 hp |
| 97 | Tank 100 | external floating roof | crude oil | 298 thousand bbl |
| 98 | Tank 101 | external floating roof | Petroleum liquids | 170 thousand barrels |
| 100 | Tank 103 | external floating roof | ship ballast | 47 thousand bbl |
| 101 | Storm Water Equalization Tank T-104 | external floating roof | stormwater | 5.5 million gal |
| 102 | Storm Water Equalization Tank T-105 | external floating roof | stormwater | 5.5 million gal |
| 106 | Storm Water Equalization Tank T-130 | external floating roof | stormwater | 10.6 million gal |
| 107 | Tank 150 | external floating roof | crude oil | 68 thousand bbl |
| 110 | Tank 155 | external floating roof | crude oil, gas oil, distillate oil | 4.2 million gal |
| 111 | Tank 156 | external floating roof | crude oil | 100 thousand bbl |
| 112 | Tank 157 | external floating roof | crude oil | 100 thousand bbl |
| 113 | Tank 158 | external floating roof | crude oil | 101 thousand bbl |

Table II A - Permitted Sources

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

| S# | Description | Make or Type | Model | Capacity |
|-----|-------------------------------------|---|--------------------------------|------------------|
| 114 | Tank 159 | external floating roof | crude oil | 136 thousand bbl |
| 115 | Tank 160 | external floating roof | naphtha | 75 thousand bbl |
| 122 | Tank 167 | external floating roof | naphtha | 3.1 million gal |
| 123 | Tank 168 | external floating roof | naphtha | 75 thousand bbl |
| 124 | Tank 169 | external floating roof | naphtha | 75 thousand bbl |
| 125 | Tank 170 | external floating roof | naphtha | 75 thousand bbl |
| 126 | Tank 172 | internal floating roof tank with domed roof | naphtha, MTBE Petroleum Liquid | 75 thousand bbl |
| 128 | Tank 174 | external floating roof | crude oil, naphtha | 76 thousand bbl |
| 129 | Tank 180 | external floating roof | naphtha | 76 thousand bbl |
| 133 | API Waste Oil Tank T-193 | external floating roof | waste oil | 22 thousand bbl |
| 134 | API Waste Oil Tank T-194 | external floating roof | waste oil | 22 thousand bbl |
| 135 | Tank 200 | Fixed roof | Petroleum liquids to 11 psia | 79 thousand bbl |
| 137 | Tank 202 | Fixed roof | Petroleum liquids to 11 psia | 88 thousand bbl |
| 139 | Tank 204 (also oil-water separator) | Fixed roof | Sour water, distillate oil | 81 thousand bbl |
| 140 | Tank 205 (also oil-water separator) | Fixed roof | Sour water, naphtha | 54 thousand bbl |
| 150 | Tank 241 | external floating roof | gasoline | 79 thousand bbl |
| 151 | Tank 242 | external floating roof | gasoline | 75 thousand bbl |
| 168 | Tank 269 | Fixed roof | Non-phenolic water | 39 thousand bbl |
| 173 | Tank 280 | Fixed roof | Gas oil | 134 thousand bbl |
| 174 | Tank 281 | Fixed roof | Gas oil | 134 thousand bbl |
| 175 | Tank 284 | Fixed roof | Gas oil | 134 thousand bbl |
| 177 | Tank 287 | external floating roof | gasoline | 104 thousand bbl |
| 178 | Tank 288 | external floating roof | diesel | 104 thousand bbl |
| 182 | Tank 294 | fixed roof | naphtha | 40 thousand bbl |
| 183 | Tank 295 | external floating roof | naphtha | 13 thousand bbl |
| 184 | Tank 296 | external floating roof | naphtha | 70 thousand bbl |
| 186 | Tank 298 | external floating roof | naphtha | 47 thousand bbl |
| 194 | Tank 306 | fixed roof | dye | 2,000 gal |
| 195 | Water Treatment Sludge Tank T-501 | fixed-roof | sludge | 2,500 bbl |
| 216 | Tank 695 | external floating roof | naphtha | 2.0 million gal |
| 239 | Stripped Foul Water Tank T-212 | fixed-roof | sour water | 10,000 bbl |

Table II A - Permitted Sources

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

| S# | Description | Make or Type | Model | Capacity |
|-----|--|--|-------------------------|---|
| 254 | Tank 1001 | external floating roof | gasoline | 104 thousand bbl |
| 255 | Tank 1002 | external floating roof | gasoline | 104 thousand bbl |
| 256 | Tank 1003 | external floating roof | gasoline | 104 thousand bbl |
| 257 | Tank 1004 | internal floating roof tank with dome roof | gasoline | 104 thousand bbl |
| 258 | Tank 1005 | internal floating roof tank with dome roof | gasoline | 104 thousand bbl |
| 259 | Tank 1006 | external floating roof | gasoline | 104 thousand bbl |
| 261 | Tank 1010 | external floating roof | naphtha, distillate oil | 104 thousand bbl |
| 294 | Non-Retail Gasoline Dispensing Facility (GDF 7609 – 1 nozzle) | phase I / II vapor recovery | EW A4000 | 15,000 gal underground tank |
| 296 | C-1 Flare (main refinery flare, elevated, steam-assisted, serves S304, S305, S306) | Callidus | | 845 ton/hr gas handling capacity, 6.6 MMbtu/hr pilot |
| 300 | U200 Delayed Coker | delayed coker | NA | 81,000 bbl/day |
| 301 | Molten Sulfur Pit 234 | NA | NA | 271 long ton/day for S301, S302, S303 |
| 302 | Molten Sulfur Pit 236 | NA | NA | 271 long ton/day for S301, S302, S303 |
| 303 | Molten Sulfur Pit 238 | NA | NA | 271 long ton/day for S301, S302, S303 |
| 304 | U229 Light Naphtha Hydrotreater | NA | NA | 12,198 bbl/day monthly average |
| 305 | U230 Prefractionator/Naphtha Hydrotreater | NA | NA | 28,000 bbl/day |
| 306 | U231 Platforming Unit | NA | NA | 21,000 bbl/day |
| 307 | U240 Unicracking Unit | NA | NA | S307 + S434 < 6569,000 bbl/day |
| 308 | U244 Reforming Unit | NA | NA | 18,500 bbl/day |
| 309 | U248 UNISAR Unit | NA | NA | 16,740 bbl/day |
| 318 | U76 Gasoline/Mid Barrel Blending Unit | NA | NA | 113,150 bbl/day petroleum fluids except diesel, No daily limit for diesel |
| 319 | U215 Gasoline Fractionating Unit | NA | NA | 9,600 bbl/day |
| 322 | U40 Raw Materials Receiving | NA | NA | throughput limited at specific tanks, process units |
| 324 | U100 API Oil Wastewater Separator (with outlet channel cover) | NA | NA | 7,500 gpm during media filter backwash and 7,000 gpm during all other times |
| 334 | Tank 107 | external floating roof | crude oil | 180 thousand bbl |
| 336 | U231 B-104 Heater (natural gas, refinery fuel gas) | Foster-Wheeler | process heater | 111 MMbtu/hr |

Table II A - Permitted Sources

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

| S# | Description | Make or Type | Model | Capacity |
|-----|---|---------------------------|---|---------------------------|
| 337 | U231 B-105 Heater (natural gas, refinery fuel gas) | Foster-Wheeler | process heater | 34 MMBtu/hr |
| 338 | U233 Fuel Gas Center | | | 7.5 E 6 cubic feet/hr |
| 339 | U80 Refined Oil Shipping Unit | gasoline shipping | | 294 thousand gal/hr |
| 340 | Tank 108 | external floating roof | crude oil | 200 thousand bbl |
| 341 | Tank 208 | external floating roof | Gasoline Petroleum Liquid | 103 thousand bbl |
| 342 | Tank 209 | external floating roof | Gasoline Petroleum Liquid | 103 thousand bbl |
| 343 | Tank 210 | external floating roof | gasoline | 103 thousand bbl |
| 350 | U267 Crude Distillation Unit | atmospheric/vacuum towers | | 36,000 bbl/day |
| 351 | U267 B-601/602 Tower Pre-heaters (natural gas, refinery fuel gas) | | | 95 MMBtu/hr |
| 352 | Combustion Turbine (natural gas, refinery fuel gas) | Westinghouse | 191 | 291 MMBtu/hr continuously |
| 353 | Combustion Turbine (natural gas, refinery fuel gas) | Westinghouse | 191 | 291 MMBtu/hr continuously |
| 354 | Combustion Turbine (natural gas, refinery fuel gas) | Westinghouse | 191 | 291 MMBtu/hr continuously |
| 355 | Supplemental Firing Duct Burners (natural gas, refinery fuel gas) | Coen | | 175 MMBtu/hr |
| 356 | Supplemental Firing Duct Burners (natural gas, refinery fuel gas) | Coen | | 175 MMBtu/hr |
| 357 | Supplemental Firing Duct Burners (natural gas, refinery fuel gas) | Coen | | 175 MMBtu/hr |
| 360 | Mid-Barrel Tank 223 | fixed roof | distillate oil | 110 thousand bbl |
| 370 | U228 Isomerization Unit | | | 460 bbl/hr |
| 371 | U228 B-520 (Adsorber Feed) Furnace (natural gas, refinery fuel gas) | Selas | | 58 MMBtu/hr for S371, 372 |
| 372 | U228 B-521 (Hydrogen Plant) Furnace (natural gas, refinery fuel gas) | Selas | | 58 MMBtu/hr for S371, 372 |
| 376 | Tool Room Cold Cleaner | Build-All | DM-32 | 29 gal |
| 377 | Machine Shop Cold Cleaner | Build-All | DM-32 | 29 gal |
| 378 | Auto Shop Cold Cleaner | Snap-On | DM-226 | 18 gal |
| 380 | Activated Carbon Silo (P-204) | | | 50,000 lb |
| 381 | Aeration Tank, Pact (F-201) | wastewater | 100 ft dia | 1.2 million gal |
| 382 | Aeration Tank, Pact (F-202) | wastewater | 100 ft dia | 1.2 million gal |

Table II A - Permitted Sources

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

| S# | Description | Make or Type | Model | Capacity |
|-----|--|----------------------------|-------------------|---|
| 383 | Clarifier, F-203 | wastewater | 95 ft dia | 0.69 million gal |
| 384 | Clarifier (F-204) | wastewater | 95 ft dia | 0.69 million gal |
| 385 | Media Filter (F271-F278) | wastewater | | 420 thousand gal/hr |
| 386 | PAC Regeneration Sludge Thickener (F-211) | | 25 ft dia | 44,000 gal |
| 387 | Wet Air Regeneration (P-202) | Zimpro | | 15 gpm |
| 390 | F-106 Thickened Sludge Storage | 15 ft diameter open tank | | 38,000 gal |
| 392 | Regenerated PAC Slurry Storage Tank F-266 | fixed roof | | 42,000 gal |
| 398 | MP-30 Flare (backup refinery flare, elevated, steam-assisted, serves S304, S305, S306) | John Zink | Q5-48C | 845 ton/hr gas handling capacity, 3.1 MMbtu/hr pilot |
| 400 | Wet Weather Wastewater Sump (with vented cover) | 32 ft x 36 ft x 23 ft deep | | 175 thousand gal |
| 401 | Dry Weather Wastewater Sump (with vented cover) | 33 ft x 25 ft x 26 ft deep | | 150 thousand gal |
| 425 | Marine Loading Berth M1 | 2 permitted arms | | Products: 25,000 bbl/day annual average for S425, S426 total; Crude oil or gas oil: 51,182 bbl/day annual average for S425, S426 total |
| 426 | Marine Loading Berth M2 | 4 permitted arms | | Products: 25,000 bbl/day annual average for S425, S426 total; Crude oil or gas oil: 51,182 bbl/day annual average for S425, S426 total |
| 432 | U215 Deisobutanizer | | | 10,200 bbl/day |
| 433 | MOSC Storage Tank | fixed roof | | 30,000 gal |
| 434 | U246 High Pressure Reactor Train (Cracking) | | | 2327,000 2327,000 bbl/day (8,3959,855 8,3959,855,000 bbl per consecutive 12 months annual daily average period) |
| 435 | Reformate Splitter | | | 18,100 bbl/day |
| 436 | Deisopentanizer | | | 13,400 bbl/day |
| 437 | Hydrogen Manufacturing Unit | | | 28.5 million scf/day |
| 438 | U110, H-1 (H2 Plant Reforming) Furnace (natural gas, refinery fuel gas, PSA offgas) | John Zinc PFFG burners | reforming furnace | 250 MMbtu/hr |

Table II A - Permitted Sources

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

| S# | Description | Make or Type | Model | Capacity |
|------|---|------------------------|-----------------------------|--|
| 439 | Tank 109 | external floating roof | Crude oil, gasoline, others | 161 thousand bbl |
| 440 | Tank 110 (Alkylate) | external floating roof | alkylate | 161 thousand bbl |
| 442 | Tank 112 | external floating roof | crude oil, gas oil | 161 thousand bbl |
| 444 | Tank 243 | external floating roof | gasoline, others | 113 thousand bbl |
| 445 | Tank 271 (Cracked Naphtha) | fixed roof tank | naphtha | 189 thousand bbl |
| 446 | Tank 310 (Isopentane) | fixed roof | isopentane | 41 thousand bbl |
| 447 | Tank 311 (Isopentane) | fixed roof | isopentane | 41 thousand bbl |
| 448 | Tank 1007 (Blendstock Receiving) | internal floating roof | gasoline, diesel, others | 243 thousand bbl |
| 449 | Tank 285 (Cracked Naphtha) | fixed roof | naphtha | 189 thousand bbl |
| 450 | Groundwater Extraction Trenches | | ground-water remediation | 3 gpm continuously |
| 453 | U236 Cooling Tower | Induced draft | Unknown | 13,500 gpm |
| 455 | U240 Cooling Tower | Induced draft | Unknown | 33,000 gpm |
| 460 | U250 Diesel Hydrotreater | NA | NA | 35,000 bbl/day monthly average |
| 461 | U250, B-701 Heater (natural gas, refinery fuel gas) | NA | process heater | 50.2 MMbtu/hr |
| 462 | U215 Fuel Gas Caustic Treatment System | NA | NA | 4.2 million scf/day of fuel gas |
| 463 | U215 Butane Caustic Treatment System | NA | NA | 1,000 bbl/day of butane |
| 465 | Molten Sulfur Pit | NA | NA | 200 long ton/day |
| 503 | Sulfur Storage Tank | | | 471 long ton/day sulfur |
| 504 | Sulfur Degassing | | | 400 long tons/day sulfur |
| 505 | Sulfur Truck Loading Rack | | | 200 gpm sulfur |
| 506 | Tank 257 | fixed roof | heavy unicrackate | 80 thousand bbl |
| 507 | Tank 21, Unit 76 Active Skimmer System | fixed roof | | 450 gallons |
| 1002 | Sulfur Plant Unit 236 (including aux. burner, water stripper) | | Claus | 106.3 long ton/day ; 201 long ton/day for S1002 and S1003 combined |
| 1003 | Sulfur Plant Unit 238 (including aux. burner) | | Claus | 134.5 long ton/day ; 201 long ton/day for S1002 and S1003 combined |
| 1007 | U100 Dissolved Air Flotation Unit (with fixed roof) | | | 7,500 gpm during media filter backwash and 7,000 gpm during all other times |

Table II A - Permitted Sources

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

| S# | Description | Make or Type | Model | Capacity |
|------|---|--------------|------------------------|------------------|
| 1008 | U100 Primary Stormwater Basin | | | 2.3 MMgal |
| 1009 | U100 Main Stormwater Basin | | | 7.2 MMgal |
| 1010 | Sulfur Plant Unit 235 (including aux. burner) | | Claus | 200 long ton/day |
| 1012 | Fire Training Fluid Tank | fixed roof | E-III Industrial Grade | 8000 gallon |

**Table IV – BB.8
Source-Specific Applicable Requirements
INTERNAL FLOATING ROOF TANKS WITH DOME ROOFS
PREVIOUSLY EXTERNAL FLOATING ROOF TANKS
S126 (TANK 172), S257 (TANK 1004), S258 (TANK 1005)**

| Applicable Requirement | Regulation Title or Description of Requirement | Federally Enforceable (Y/N) | Future Effective Date |
|------------------------------------|--|-----------------------------|-----------------------|
| BAAQMD Regulation 8, Rule 5 | Organic Compounds, Storage of Organic Liquids (10/18/06) REQUIREMENTS FOR INTERNAL FLOATING ROOF TANKS | | |
| 8-5-111 | Limited Exemption, Tank Removal From and Return to Service | N | |
| 8-5-111.1 | Limited Exemption, Tank Removal From and Return to Service, Notification | N | |
| 8-5-111.2 | Limited Exemption, Tank Removal From and Return to Service; Tank in compliance at time of notification | N | |
| 8-5-111.3 | Limited Exemption, Tank Removal From and Return to Service; Filling, emptying, refilling floating roof tanks | N | |
| 8-5-111.5 | Limited Exemption, Tank Removal From and Return to Service; Minimize emissions and, if required, degas per 8-5-328 | N | |
| 8-5-111.6 | Limited Exemption, Tank Removal From and Return to Service; Self report if out of compliance during exemption period | N | |
| 8-5-112 | Limited Exemption, Preventative Maintenance and Inspection of Tanks in Operation | N | |
| 8-5-112.1 | Limited Exemption, Preventative Maintenance and Inspection of Tanks in Operation; Notification | N | |
| 8-5-112.2 | Limited Exemption, Preventative Maintenance and Inspection of Tanks in Operation; Tank in compliance at time of notification | N | |
| 8-5-112.3 | Limited Exemption, Preventative Maintenance and Inspection of Tanks in Operation; No product movement, Minimize emissions | N | |
| 8-5-112.4 | Limited Exemption, Preventative Maintenance and Inspection of Tanks in Operation; Not to exceed 7 days | N | |

Table IV – BB.8
Source-Specific Applicable Requirements
INTERNAL FLOATING ROOF TANKS WITH DOME ROOFS
PREVIOUSLY EXTERNAL FLOATING ROOF TANKS
S126 (TANK 172), S257 (TANK 1004), S258 (TANK 1005)

| Applicable Requirement | Regulation Title or Description of Requirement | Federally Enforce-able (Y/N) | Future Effective Date |
|-------------------------------|--|-------------------------------------|------------------------------|
| 8-5-112.5 | Limited Exemption, Preventative Maintenance and Inspection of Tanks in Operation; Self report if out of compliance during exemption period | N | |
| 8-5-112.6 | Limited Exemption, Preventative Maintenance and Inspection of Tanks in Operation; Keep records for each exemption | N | |
| 8-5-119 | Limited Exemption, Repair Period for Enhanced Monitoring Program | N | |
| 8-5-301 | Storage Tank Control Requirements | N | |
| 8-5-305 | Requirements for Internal Floating Roof Tanks | N | |
| 8-5-305.2 | Requirements for Internal Floating roof tanks; Seals installed after 2/1/1993 | Y | |
| 8-5-305.3 | Requirements for Internal Floating roof tanks; Viewports in fixed roof tank; not required if dome roof has translucent panels | Y | |
| 8-5-305.4 | Requirements for Internal Floating roof tanks; Tank fitting requirements | Y | |
| 8-5-305.5 | Requirements for Internal Floating roof tanks; Floating roof requirements | N | |
| 8-5-320 | Floating Roof Tank Fitting Requirements | N | |
| 8-5-320.2 | Floating Roof Tank Fitting Requirements; Projection below liquid surface | N | |
| 8-5-320.3 | Floating Roof Tank Fitting Requirements; Gasketed covers, seals, lids | N | |
| 8-5-320.3.1 | Floating Roof Tank Fitting Requirements; Gasketed covers, seals, lids - Gap requirements | Y | |
| 8-5-320.3.2 | Tank fitting requirements; Floating roof tanks; Gasketed covers, seals, lids – Inaccessible openings on internal floating roof tanks | Y | |
| 8-5-320.4 | Floating Roof Tank Fitting Requirements; Solid sampling or gauging wells-- | N | |
| 8-5-320.4.1 | Floating Roof Tank Fitting Requirements; Solid sampling or gauging wells--projection below liquid surface | Y | |
| 8-5-320.4.2 | Floating Roof Tank Fitting Requirements; Solid sampling or gauging wells--cover, seal, or lid | Y | |
| 8-5-320.4.3 | Floating Roof Tank Fitting Requirements; Solid sampling or gauging wells-- total secondary seal gap must include well gap | Y | |
| 8-5-320.6 | Floating Roof Tank Fitting Requirements; emergency roof drains must be 90% covered | N | |
| 8-5-321 | Primary seal requirements | N | |
| 8-5-321.1 | Primary seal requirements; No holes, tears, or other openings | Y | |
| 8-5-321.2 | Primary seal requirements; The seal shall be metallic shoe or liquid mounted except as provided in 8-5-305.1.3 | Y | |
| 8-5-321.3 | Primary seal requirements; Metallic-shoe-type seal requirements | N | |
| 8-5-321.3.1 | Primary seal requirements; Metallic-shoe-type seal requirements - geometry of shoe | N | |

Table IV – BB.8
Source-Specific Applicable Requirements
INTERNAL FLOATING ROOF TANKS WITH DOME ROOFS
PREVIOUSLY EXTERNAL FLOATING ROOF TANKS
S126 (TANK 172), S257 (TANK 1004), S258 (TANK 1005)

| Applicable Requirement | Regulation Title or Description of Requirement | Federally Enforce-able (Y/N) | Future Effective Date |
|---------------------------------|---|-------------------------------------|------------------------------|
| 8-5-321.3.2 | Primary seal requirements; Metallic-shoe-type seal requirements - welded tanks gap requirements | N | |
| 8-5-322 | Secondary seal requirements | N | |
| 8-5-322.1 | Secondary seal requirements; No holes, tears, or other openings | N | |
| 8-5-322.2 | Secondary seal requirements; Insertion of probes | N | |
| 8-5-322.5 | Secondary seal requirements; Gap requirements for welded external floating roof tanks with seal installed after September 4, 1985 | N | |
| 8-5-322.6 | Secondary seal requirements; extent of seal | N | |
| 8-5-328 | Tank degassing requirements | N | |
| 8-5-328.1 | Tank degassing requirements; Tanks > 75 cubic meters | N | |
| 8-5-328.2 | Tank degassing requirements; Ozone Excess Day Prohibition | N | |
| 8-5-328.3 | Tank degassing requirements; BAAQMD notification required | N | |
| 8-5-402 | Inspection Requirements for Internal Floating Roof Tanks | N | |
| 8-5-402.1 | Inspection Requirements for Internal Floating Roof Tanks; Primary and Secondary Seal Inspections | Y | |
| 8-5-402.2 | Inspection Requirements for Internal Floating Roof Tanks; Visual Inspection of Outer Most Seal | N | |
| 8-5-402.3 | Inspection Requirements for Internal Floating Roof Tanks; Tank Fitting Inspection | N | |
| 8-5-404 | Inspection, Abatement Efficiency Determination, and Source Test Reports | N | |
| 8-5-411 | Enhanced Monitoring Program (Optional) | N | |
| 8-5-411.1 | Enhanced Monitoring Program (Optional); Notify BAAQMD of tanks selected for enhanced monitoring program | N | |
| 8-5-411.2 | Enhanced Monitoring Program (Optional); Criteria for operating enhanced monitoring program | N | |
| 8-5-411.3 | Enhanced Monitoring Program (Optional); Performance requirements | N | |
| 8-5-501 | Records | N | |
| 8-5-501.1 | Records; Type and amount of liquid, type of blanket gas, TVP- Retain 24 months | N | |
| 8-5-501.2 | Records; Internal and External Floating Roof Tanks, Seal Replacement Records- Retain 10 years | N | |
| 8-5-501.3 | Records; Retention | N | |
| 8-5-602 | Analysis of Samples, True Vapor Pressure | Y | |
| 8-5-604 | Determination of Applicability Based on True Vapor Pressure | Y | |
| 8-5-605 | Measurement of Leak Concentration and Residual Concentrations | N | |
| 8-5-605.1 | Measurement of Leak Concentration and Residual Concentrations; EPA method 21 Instruments | N | |
| 8-5-605.2 | Measurement of Leak Concentration and Residual Concentrations; Method 21 and tank degassing residual organic concentration measurement method | N | |
| SIP Regulation 8, Rule 5 | Storage of Organic Liquids (06/05/2003) | | |
| 8-5-111 | Limited Exemption, Tank Removal From and Return to Service | Y | |

Table IV – BB.8
Source-Specific Applicable Requirements
INTERNAL FLOATING ROOF TANKS WITH DOME ROOFS
PREVIOUSLY EXTERNAL FLOATING ROOF TANKS
S126 (TANK 172), S257 (TANK 1004), S258 (TANK 1005)

| Applicable Requirement | Regulation Title or Description of Requirement | Federally Enforce-able (Y/N) | Future Effective Date |
|-------------------------------|--|-------------------------------------|------------------------------|
| 8-5-111.1 | Limited Exemption, Tank Removal From and Return to Service; Notice to the APCO | Y | |
| 8-5-111.1.1 | Limited Exemption, Tank Removal From and Return to Service; Notice to the APCO; 3 day prior notification | Y | |
| 8-5-111.1.2 | Limited Exemption, Tank Removal From and Return to Service; Notice to the APCO; Telephone notification | Y | |
| 8-5-111.2 | Limited Exemption, Tank Removal From and Return to Service; Compliance before notification | Y | |
| 8-5-111.3 | Limited Exemption, Tank Removal From and Return to Service; Floating roof tanks - continuous and quick filling, emptying and refilling | Y | |
| 8-5-111.5 | Limited Exemption, Tank Removal From and Return to Service; Minimization of emissions | Y | |
| 8-5-111.6 | Limited Exemption, Tank Removal From and Return to Service; Written notice of completion not required | Y | |
| 8-5-111.7 | Limited Exemption, Tank Removal From and Return to Service; Compliance with Section 8-5-328 | Y | |
| 8-5-112 | Limited Exemption, Tanks in Operation | Y | |
| 8-5-112.1 | Limited Exemption, Tanks in Operation; Notice to the APCO | Y | |
| 8-5-112.1.1 | Limited Exemption, Tanks in Operation; Notice to the APCO; 3 day prior notification | Y | |
| 8-5-112.1.2 | Limited Exemption, Tanks in Operation; Notice to the APCO; Telephone notification | Y | |
| 8-5-112.2 | Limited Exemption, Tanks in Operation; Compliance and certification before commencement of work per 8-5-404 | Y | |
| 8-5-112.3 | Limited Exemption, Tanks in Operation; No product movement; minimization of emissions | Y | |
| 8-5-112.4 | Limited Exemption, Tanks in Operation; 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 | |
| 8-5-305.5 | Requirements for Internal Floating roofs; Floating roof requirements | Y | |
| 8-5-320 | Tank fitting requirements; Floating roof tanks | Y | |
| 8-5-320.2 | Tank fitting requirements; Floating roof tanks; Projection below liquid surface | Y | |
| 8-5-320.3 | Tank fitting requirements; Floating roof tanks; Gasketed covers, seals, lids | Y | |
| 8-5-320.4 | Tank fitting requirements; Floating roof tanks; Solid sampling or gauging wells | Y | |
| 8-5-320.6 | Tank Fitting Requirements; Emergency roof drain | Y | |
| 8-5-321 | Primary seal requirements | Y | |
| 8-5-321.3 | Primary seal requirements; Metallic shoe type seals requirements | Y | |

Table IV – BB.8
Source-Specific Applicable Requirements
INTERNAL FLOATING ROOF TANKS WITH DOME ROOFS
PREVIOUSLY EXTERNAL FLOATING ROOF TANKS
S126 (TANK 172), S257 (TANK 1004), S258 (TANK 1005)

| Applicable Requirement | Regulation Title or Description of Requirement | Federally Enforce-able (Y/N) | Future Effective Date |
|---|---|------------------------------|-----------------------|
| 8-5-321.3.1 | Primary seal requirements; Metallic shoe type seals requirements; Geometry of shoe | Y | |
| 8-5-321.3.2 | Primary seal requirements; Metallic shoe type seals requirements; Gaps for welded tanks | Y | |
| 8-5-322 | Secondary seal requirements | Y | |
| 8-5-322.1 | Secondary seal requirements; No holes, tears, or other openings | Y | |
| 8-5-322.2 | Secondary seal requirements; Insertion of probes | Y | |
| 8-5-322.5 | Secondary seal requirements; Gaps for welded tanks with seals installed after 2/1/93 – note 2 | Y | |
| 8-5-322.6 | Secondary seal requirements; Extent of seal | Y | |
| 8-5-328 | Tank degassing requirements | Y | |
| 8-5-328.1 | Tank degassing requirements; tanks > 75 cubic meters | Y | |
| 8-5-328.1.2 | Tank degassing requirements; tanks > 75 cubic meters; Concentration of <10,000 ppm as methane after degassing | Y | |
| 8-5-328.2 | Tank degassing requirements; Ozone excess day prohibition | Y | |
| 8-5-402 | Inspection Requirements for Internal Floating Roof Tanks | Y | |
| 8-5-402.2 | Inspection Requirements for Internal Floating Roof Tanks; Visual Inspection of Outer Most Seal | Y | |
| 8-5-402.3 | Inspection Requirements for Internal Floating Roof Tanks; Tank Fitting Inspection | Y | |
| 8-5-404 | Certification | Y | |
| 8-5-405 | Information required | Y | |
| 8-5-501 | Records | Y | |
| 8-5-501.1 | Records; Type and amounts of liquid; true vapor pressure; Retain 24 months | Y | |
| 8-5-501.2 | Records; Internal and External Floating Roof Tanks; Seal Replacement Records – Retain 10 years | Y | |
| 8-5-503 | Portable hydrocarbon detector | Y | |
| 8-5-605 | Pressure Vacuum Valve Gas Tight Determination | Y | |
| 40 CFR 63, Subpart G | SOCMI HON G (12/21/2006) REQUIREMENTS FOR INTERNAL FLOATING ROOF TANKS | | |
| The tanks in this table will be subject to the provisions of 40 CFR 63.646 and the referenced requirements of 40 CFR 63, subpart G until compliance with 40 CFR 63.660 and the referenced requirements contained in 40 CFR 63, subpart WW is demonstrated, as specified in 40 CFR 63.640(h), 63.660, and 63.1063. | | | |
| 63.119(a) | Storage Vessel Provisions -- Reference Control Technology | Y | |
| 63.119(a)(1) | Storage Vessel Provisions -- Reference Control Technology--Group 1, TVP < 76.6 kPa | Y | |
| 63.119(b) | Storage Vessel Provisions -- Reference Control Technology— Internal floating roof | Y | |
| 63.119(b)(1) | Storage Vessel Provisions -- Reference Control Technology-- Internal floating roof--Must float on liquid | Y | |

Table IV – BB.8
Source-Specific Applicable Requirements
INTERNAL FLOATING ROOF TANKS WITH DOME ROOFS
PREVIOUSLY EXTERNAL FLOATING ROOF TANKS
S126 (TANK 172), S257 (TANK 1004), S258 (TANK 1005)

| Applicable Requirement | Regulation Title or Description of Requirement | Federally Enforce-able (Y/N) | Future Effective Date |
|-------------------------------|---|-------------------------------------|------------------------------|
| 63.119(b)(1)(i) | Storage Vessel Provisions -- Reference Control Technology-- Internal floating roof --Must float on liquid except during initial fill | Y | |
| 63.119(b)(1)(ii) | Storage Vessel Provisions -- Reference Control Technology-- Internal floating roof-- Must float on liquid except after completely emptied and degassed | Y | |
| 63.119(b)(1)(iii) | Storage Vessel Provisions -- Reference Control Technology-- Internal floating roof -- Must float on liquid except when completely emptied before refilling | Y | |
| 63.119(b)(2) | Storage Vessel Provisions -- Reference Control Technology-- Internal Floating Roof Operations, when not floating | Y | |
| 63.119(b)(3) | Storage Vessel Provisions -- Reference Control Technology-- Internal floating roof – seals; must have at least one seal | Y | |
| 63.119(b)(3)(i) | Storage Vessel Provisions -- Reference Control Technology-- Internal floating roof – seal option; single liquid-mounted seal | Y | |
| 63.119(b)(3)(ii) | Storage Vessel Provisions -- Reference Control Technology-- Internal floating roof - seal option; single metallic shoe seal | Y | |
| 63.119(b)(3)(iii) | Storage Vessel Provisions -- Reference Control Technology-- Internal floating roof - seal option; double seal, lower can be vapor mounted | Y | |
| 63.119(b)(4) | Storage Vessel Provisions -- Reference Control Technology-- Internal floating roof – automatic bleeder valve requirements | Y | |
| 63.120(a) | Storage Vessel Provisions -- Procedures to Determine Compliance-- Compliance Demonstration--Internal floating roof | Y | |
| 63.120(a)(1) | Storage Vessel Provisions -- Procedures to Determine Compliance—Internal FR tank inspection schedule | Y | |
| 63.120(a)(3) | Storage Vessel Provisions -- Procedures to Determine Compliance—Internal FR tank inspections – tanks with double seals | Y | |
| 63.120(a)(3)(ii) | Storage Vessel Provisions -- Procedures to Determine Compliance-- Internal FR tank inspections – tanks with double seals - annual visual inspection of IFR and secondary seal through manholes and roof hatches. Also must comply with 63.120(a)(3)(iii) every time emptied and degassed and every 10 years. | Y | |
| 63.120(a)(3)(iii) | Storage Vessel Provisions -- Procedures to Determine Compliance-- Internal FR tank inspections – tanks with double seals - visually inspect IFR and both seals each time emptied and degassed and at least once every 10 years [does not apply to gaskets, slotted membranes, or sleeve seals for Group 1 Refinery MACT tanks per 63.646(e)]. Also must comply with annual visual inspection in 63.120(a)(3)(ii). | Y | |
| 63.120(a)(4) | Storage Vessel Provisions -- Procedures to Determine Compliance Internal FR Repairs must be made within 45 days after identification or empty and remove tank from service. Two 30 day extensions are allowed to empty the tank. Decision to use extension must be documented. | Y | |

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Source-Specific Applicable Requirements
INTERNAL FLOATING ROOF TANKS WITH DOME ROOFS
PREVIOUSLY EXTERNAL FLOATING ROOF TANKS
S126 (TANK 172), S257 (TANK 1004), S258 (TANK 1005)

| Applicable Requirement | Regulation Title or Description of Requirement | Federally Enforce-able (Y/N) | Future Effective Date |
|---|--|------------------------------|-----------------------|
| 63.120(a)(5) | Storage Vessel Provisions -- Procedures to Determine Compliance Internal FR and seal visual inspection each time emptied – 30 day notification required for 10 year inspection (63.120(a)(3)(iii)) | Y | |
| 63.120(a)(6) | Storage Vessel Provisions -- Procedures to Determine Compliance-- External FR and seal visual inspection each time emptied -- Notification for unplanned | Y | |
| 63.120(a)(7) | Storage Vessel Provisions -- Procedures to Determine Compliance-- Internal FR and seal visual inspection each time emptied – Repair defects before refilling [does not apply to gaskets, slotted membranes, or sleeve seals for Group 1 Refinery MACT tanks per 63.646(e)] | Y | |
| 63.123(a) | Storage Vessel Provisions -- Recordkeeping--Group 1 and Group 2 storage vessel dimensions and capacity. Keep for life of source. | Y | |
| 63.123(c) | Storage Vessel Provisions -- Recordkeeping--Group 1 Internal floating roof tank requirements - records of each tank inspection | Y | |
| 63.123(g) | Storage Vessel Provisions -- Recordkeeping, Extensions for emptying storage vessel – keep documentation specified | Y | |
| 40 CFR 63, Subpart CC | National Emission Standards for Hazardous Air Pollutants for Petroleum Refineries (12/01/15) REQUIREMENTS FOR INTERNAL FLOATING ROOF TANKS | | |
| The tanks in this table will be subject to the provisions of 40 CFR 63.646 and the referenced requirements of 40 CFR 63, subpart G until compliance with 40 CFR 63.660 and the referenced requirements contained in 40 CFR 63, subpart WW is demonstrated, as specified in 40 CFR 63.640(h), 63.660, and 63.1063. | | | |
| 63.640(c)(2) | Applicability and Designation of Storage Vessels | Y | |
| 63.640(h) | Compliance by dates specified in Table 11, except as provided in paragraphs (h)(1) through (h)(3) | Y | |
| 63.646 | Upon demonstration of compliance with the standards in 63.660 by the compliance dates specified in 63.640(h), the standards in this section shall no longer apply. | Y | |
| 63.646(a) | Storage Vessel Provisions-Group 1 | Y | |
| 63.646(b)(1) | Storage Vessel Provisions-Determine stored liquid % OHAP for group determination | Y | |
| 63.646(b)(2) | Storage Vessel Provisions-Determine stored liquid % OHAP | Y | |
| 63.646(c) | Storage Vessel Provisions—63 Subpart G exclusions for storage vessels [IFRs exempt from 63.119(b)(5) and (b)(6)] | Y | |
| 63.646(d) | Storage Vessel Provisions-References | Y | |
| 63.646(d)(2) | Storage Vessel Provisions-References to April 22,1994 | Y | |
| 63.646(d)(3) | Storage Vessel Provisions-References to December 31, 1992 | Y | |
| 63.646(d)(4) | Storage Vessel Provisions-References to compliance dates in 63.100 of Subpart F | Y | |
| 63.646(e) | Storage Vessel Provisions—Exceptions for compliance with inspection requirements of 63.120 of Subpart G – Not required to | Y | |

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Source-Specific Applicable Requirements
INTERNAL FLOATING ROOF TANKS WITH DOME ROOFS
PREVIOUSLY EXTERNAL FLOATING ROOF TANKS
S126 (TANK 172), S257 (TANK 1004), S258 (TANK 1005)

| Applicable Requirement | Regulation Title or Description of Requirement | Federally Enforce-able (Y/N) | Future Effective Date |
|-------------------------------|---|-------------------------------------|------------------------------|
| | comply with provisions for gaskets, slotted membranes, and sleeve seals. | | |
| 63.646(f) | Storage Vessel Provisions-Group 1 floating roof requirements | Y | |
| 63.646(f)(1) | Storage Vessel Provisions—Group 1 floating roof requirements-Covers or lids closed except when in use | Y | |
| 63.646(f)(2) | Storage Vessel Provisions-Group 1 floating roof requirements-Rim space vents requirements | Y | |
| 63.646(f)(3) | Storage Vessel Provisions-Group 1 floating roof requirements-Automatic bleeder vents requirements | Y | |
| 63.646(l) | Storage Vessel Provisions-State or local permitting agency notification requirements | Y | |
| 63.655(f) | Reporting and Recordkeeping Requirements-Notice of compliance status report requirements | Y | |
| 63.655(f)(1) | Reporting and Recordkeeping Requirements-Notice of compliance status report requirements | Y | |
| 63.655(f)(1)(i) | Reporting and Recordkeeping Requirements-Notice of compliance status report requirements-Reporting--storage vessels | Y | |
| 63.655(f)(1)(i)(A) | Reporting and Recordkeeping Requirements-Notice of compliance status report requirements-Reporting--storage vessels | Y | |
| 63.655(f)(1)(i)(A)(1) | Reporting and Recordkeeping Requirements-Notice of compliance status report requirements-Reporting--storage vessels | Y | |
| 63.655(g) | Periodic Reporting and Recordkeeping Requirements | Y | |
| 63.655(g)(1) | Periodic Reporting and Recordkeeping Requirements-storage vessels [Information related to gaskets, slotted membranes, and sleeve seals not required for storage vessels that are part of existing source] | Y | |
| 63.655(g)(2)(i) | Periodic Reporting and Recordkeeping Requirements- internal floating roof tanks – submit results of each tank inspection where failure is detected in control equipment | Y | |
| 63.655(g)(2)(i)(A) | Periodic Reporting and Recordkeeping Requirements-internal floating roof tanks – submit results of each tank inspection where failure is detected in control equipment – annual inspection reports | Y | |
| 63.655(g)(2)(i)(A)(1) | Periodic Reporting and Recordkeeping Requirements- internal floating roof tanks – submit results of each tank inspection where failure is detected in control equipment – annual inspection report; definition of failure | Y | |
| 63.655(g)(2)(i)(A)(2) | Periodic Reporting and Recordkeeping Requirements—internal floating roof tanks - submit results of each tank inspection where failure is detected in control equipment – annual inspection report; Periodic Report requirements | Y | |
| 63.655(g)(2)(i)(A)(3) | Periodic Reporting and Recordkeeping Requirements—internal floating roof tanks – submit results of each tank inspection where | Y | |

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INTERNAL FLOATING ROOF TANKS WITH DOME ROOFS
PREVIOUSLY EXTERNAL FLOATING ROOF TANKS
S126 (TANK 172), S257 (TANK 1004), S258 (TANK 1005)

| Applicable Requirement | Regulation Title or Description of Requirement | Federally Enforce-able (Y/N) | Future Effective Date |
|------------------------|--|------------------------------|-----------------------|
| | failure is detected in control equipment – annual inspection report; extension documentation | | |
| 63.655(g)(2)(i)(B) | Periodic Reporting and Recordkeeping Requirements- internal floating roof tanks – submit results of each tank inspection where failure is detected in control equipment – internal inspection report | Y | |
| 63.655(g)(2)(i)(B)(1) | Periodic Reporting and Recordkeeping Requirements- internal floating roof tanks – submit results of each tank inspection where failure is detected in control equipment – internal inspection report; definition of failure | Y | |
| 63.655(g)(2)(i)(B)(2) | Periodic Reporting and Recordkeeping Requirements- internal floating roof tanks – submit results of each tank inspection where failure is detected in control equipment – internal inspection report; Periodic report requirements | Y | |
| 63.655(g)(2)(ii) | Periodic Reporting and Recordkeeping Requirements- internal floating roof tanks– submit results of each tank inspection where failure is detected in control equipment – internal inspection report; Periodic report requirements | Y | |
| 63.655(h)(2) | Reporting and Recordkeeping Requirements-Other reports-Storage vessel notification of inspections. | Y | |
| 63.655(h)(2)(i) | Reporting and Recordkeeping Requirements-Other reports-Storage vessel notification of inspections – refilling Group 1 storage vessel. | Y | |
| 63.655(h)(2)(ii) | Reporting and Recordkeeping Requirements-Other reports-Storage vessel notification of inspections –Group 1 storage vessel seal gap measurements – 30 day notification [can be waived or modified by state or local]. | Y | |
| 63.655(h)(6) | Reporting and Recordkeeping Requirements-Other reports- Determination of Applicability | Y | |
| 63.655(h)(6)(ii) | Reporting and Recordkeeping Requirements-Other reports- Determination of Applicability | Y | |
| 63.655(i)(1) | Reporting and Recordkeeping Requirements-Recordkeeping for storage vessels – keep records specified in 63.123 (Subpart G) | Y | |
| 63.655(i)(1)(i) | Reporting and Recordkeeping Requirements-Recordkeeping for storage vessels– keep records specified in 63.123 (Subpart G) except records related to gaskets, slotted membranes, and sleeve seals for vessels in existing sources. Each owner or operator subject to the storage vessel provisions in 63.660 shall keep records as specified in paragraphs (i)(1)(v) and (vi). | Y | |
| 63.655(i)(6) | Reporting and Recordkeeping Requirements—Recordkeeping for storage vessels-Record retention – 5 years | Y | |
| 63.660 | Storage vessel provisions. Group 1 storage vessel shall comply with the requirements in 40 CFR 63, subpart WW according to the requirements of 63.660(a) through (i). | Y | |
| 63.660(a) | Determination of stored liquid HAP content | Y | |
| 63.660(b) | Floating Roof Storage Vessel Requirements | Y | |

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Source-Specific Applicable Requirements
INTERNAL FLOATING ROOF TANKS WITH DOME ROOFS
PREVIOUSLY EXTERNAL FLOATING ROOF TANKS
S126 (TANK 172), S257 (TANK 1004), S258 (TANK 1005)

| Applicable Requirement | Regulation Title or Description of Requirement | Federally Enforce-able (Y/N) | Future Effective Date |
|--|--|------------------------------|-----------------------|
| 63.660(c) | References | Y | |
| 63.660(e) | Violations | Y | |
| 63.660(g) | Notification of Compliance Status | Y | |
| 63.660(h) | Periodic Reporting | Y | |
| 63.660(i) | Requirements for electing to comply with subpart SS | Y | |
| BAAQMD Condition 20989, Part A | Throughput limits for sources S126 , S257, S258 [Basis: 2-1-234.3] | N | |
| BAAQMD Condition 26689 | | | |
| Part 1 | Throughput limit for source S126. [Basis: Cumulative Increase] | Y | |
| Part 2 | Storage material vapor pressure limit for S126. [Basis: Cumulative Increase] | Y | |
| Part 3 | Tank parameters requirement for S126. [Basis: Cumulative Increase] | Y | |
| Part 4 | Recordkeeping for S126. [Basis: Cumulative Increase] | Y | |

Table VII – BB.8
Applicable Limits and Compliance Monitoring Requirements
INTERNAL FLOATING ROOF TANKS WITH DOME ROOFS
PREVIOUSLY EXTERNAL FLOATING ROOF TANKS
S126 (Tank 172), S257 (Tank 1004), S258 (Tank 1005)

| Type of Limit | Emission Limit Citation | FE Y/N | Future Effective Date | Emission Limit | Monitoring Requirement Citation | Monitoring Frequency (P/C/N) | Monitoring Type |
|---|-------------------------|--------|-----------------------|---|---------------------------------|--|-----------------------------------|
| BAAQMD Regulation 8, Rule 5, Organic Compounds - STORAGE OF ORGANIC LIQUIDS LIMITS AND MONITORING FOR INTERNAL FLOATING-ROOF TANKS | | | | | | | |
| VOC | BAAQMD 8-5-301 | Y | | Record of liquids stored and true vapor pressure | BAAQMD & SIP 8-5-501.1 | <u>periodic</u> initially and upon change of service | Records |
| VOC | BAAQMD & SIP 8-5-320 | Y | | Floating roof fitting closure standards; includes gasketed covers | BAAQMD & SIP 8-5-402.3 | P/SA | Measurement and visual inspection |

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Applicable Limits and Compliance Monitoring Requirements
INTERNAL FLOATING ROOF TANKS WITH DOME ROOFS
PREVIOUSLY EXTERNAL FLOATING ROOF TANKS
S126 (Tank 172), S257 (Tank 1004), S258 (Tank 1005)

| Type of Limit | Emission Limit Citation | FE Y/N | Future Effective Date | Emission Limit | Monitoring Requirement Citation | Monitoring Frequency (P/C/N) | Monitoring Type |
|---------------|--|--------|-----------------------|--|---|---|---|
| VOC | BAAQMD & SIP 8-5-321 | Y | | Primary rim-seal standards; includes gap criteria | BAAQMD & SIP 8-5-402.1 | <u>periodic</u> 10 year intervals and every time a seal is replaced | Seal inspection |
| VOC | BAAQMD & SIP 8-5-322 | Y | | Secondary rim-seal standards; includes gap criteria | BAAQMD & SIP 8-5-402.1 | <u>periodic</u> 10 year intervals and every time a seal is replaced | Seal inspection |
| VOC | BAAQMD 8-5-305, 8-5-321.1, 8-5-322.1 | Y | | Visual inspection of outer most seal | BAAQMD & SIP 8-5-402.2 | P/SA | Visual inspection |
| VOC | BAAQMD 8-5-320 8-5-321 8-5-321.1 8-5-322.1 | N | | Floating roof fittings, visual inspection of outer most seal | BAAQMD 8-5-402.2 8-5-402.3 8-5-411.3 (optional) | P/Q (optional) | Fitting inspection; Visual inspection |
| VOC | BAAQMD 8-5-328.1 | N | | Residual organic concentration of < 10,000 ppm as methane after degassing | BAAQMD 8-5-328.1 | P/each time emptied & degassed; 4 consecutive measurements at 15 minute intervals | Method 21 portable hydrocarbon detector |
| VOC | SIP 8-5-328.1.2 | Y | | Concentration of < 10,000 ppm as methane after degassing | SIP 8-5-503 | <u>periodic</u> each time emptied & degassed | Portable hydrocarbon detector |
| VOC | | Y | | Records of tank seal replacement | BAAQMD 8-5-501.2 | <u>periodic</u> after each tank seal replacement | Records |
| VOC | BAAQMD 8-5-303.1 | N | | Pressure vacuum valve set to 90% of tank's maximum allowable working pressure or at least 0.5 psig | BAAQMD 8-5-501.4 | P/initial | Records |

**Table VII – BB.8
Applicable Limits and Compliance Monitoring Requirements
INTERNAL FLOATING ROOF TANKS WITH DOME ROOFS
PREVIOUSLY EXTERNAL FLOATING ROOF TANKS
S126 (Tank 172), S257 (Tank 1004), S258 (Tank 1005)**

| Type of Limit | Emission Limit Citation | FE Y/N | Future Effective Date | Emission Limit | Monitoring Requirement Citation | Monitoring Frequency (P/C/N) | Monitoring Type |
|---|----------------------------------|--------|-----------------------|---|---|---|--|
| VOC | SIP 8-5-303.1 | Y | | Pressure vacuum valve set pressure within 10% of maximum allowable working pressure of the tank, or at least 0.5 psig | SIP 8-5-403 | P/SA | visual inspection |
| VOC | BAAQMD 8-5-303.2 | N | | Pressure vacuum valve sealing mechanism must be gas-tight: < 500 ppm | BAAQMD 8-5-403 8-5-403.1 | P/SA | Method 21 portable hydrocarbon detector |
| | | | | OR | BAAQMD 8-5-403 8-5-403.1 8-5-411.3 (optional) | P/Q (optional) | Method 21 portable hydrocarbon detector |
| | | | | Pressure vacuum valve sealing mechanism must be vented to abatement with 95% efficiency | BAAQMD 8-5-502.1 | P/A | Source test (Not required if vented to fuel gas) |
| VOC | SIP 8-5-303.2 | Y | | Pressure vacuum valve must be gas-tight: < 500 ppm (as methane) above background | SIP 8-5-403 8-5-503 8-5-605 | P/SA | Method 21 portable hydrocarbon detector |
| The following apply only to S126 and S258 | | | | | | | |
| CFR 63, Subpart G – SOCMHON 40 CFR 63, Subpart CC – NESHAPS for Petroleum Refineries 40 LIMITS AND MONITORING FOR INTERNAL FLOATING ROOF TANKS | | | | | | | |
| HAP | 40 CFR 63.646(f) | Y | | Deck fitting closure standards | 40 CFR 63.646 (a) & (e) 63.120(a)(3) | <u>periodic</u> each time emptied & degassed, at least every 10 years | visual inspection |
| HAP | 40 CFR 63.646(a) 63.120(a)(7) | Y | | Primary rim-seal standards; no holes or tears | 40 CFR 63.646(a) 63.120(a)(3) | <u>periodic</u> each time emptied & degassed, at least every 10 years | visual inspection |

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Applicable Limits and Compliance Monitoring Requirements
INTERNAL FLOATING ROOF TANKS WITH DOME ROOFS
PREVIOUSLY EXTERNAL FLOATING ROOF TANKS
S126 (Tank 172), S257 (Tank 1004), S258 (Tank 1005)**

| Type of Limit | Emission Limit Citation | FE Y/N | Future Effective Date | Emission Limit | Monitoring Requirement Citation | Monitoring Frequency (P/C/N) | Monitoring Type |
|---------------------------------|--|-------------------|-----------------------|--|---|--|-------------------------|
| HAP | 40 CFR 63.646(a) 63.120(a)(4) | Y | | No gaps visible from the tank top | 40 CFR 63.646(a) 63.120(a)(3) | P/A | visual inspection |
| HAP | 40 CFR 63.646(a) 63.120(a)(4) | Y | | No liquid on the floating roof or other obvious defects visible from the tank top | 40 CFR 63.646(a) 63.120(a)(3) | P/A | visual inspection |
| HAP | 40 CFR 63.660 and subpart WW or subpart SS according to the provisions of 63.660 | Y | | Rim-seal standards, deck fitting standards, operational requirements, inspection and repair requirements | | P/A or <u>periodic</u> each time emptied & degassed, at least every 10 years | visual inspection |
| BAAQMD PERMIT CONDITIONS | | | | | | | |
| throughput | BAAQMD Condition 20989, Part A | N | | S126: 1.05 E 7 bbl/yr S257: 7.01 E 7 bbl/yr S258: 7.01 E 7 bbl/yr | BAAQMD Condition 20989 , Part A | P/M | Records |
| Throughput | BAAQMD Condition 26689 Part 1 | Y | | S126: 594,845 bbl/yr | BAAQMD Condition 26689 Part 5 | P/M | Records |

**Table IV – BB.12
Source-Specific Applicable Requirements
NSPS K AND NSPS KA ZERO-GAP EXTERNAL FLOATING ROOF TANKS
NSPS K – S334 (TANK 107),
NSPS KA – S341 (TANK 208), S342 (TANK 209), S343 (TANK 210)**

| Applicable Requirement | Regulation Title or Description of Requirement | Federally Enforceable (Y/N) | Future Effective Date |
|-----------------------------|--|-----------------------------|-----------------------|
| BAAQMD Regulation 8, Rule 5 | Organic Compounds, Storage of Organic Liquids (10/18/06) REQUIREMENTS FOR EXTERNAL FLOATING ROOF TANKS | | |
| 8-5-111 | Limited Exemption, Tank Removal From and Return to Service | Y | |

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Source-Specific Applicable Requirements
NSPS K AND NSPS KA ZERO-GAP EXTERNAL FLOATING ROOF TANKS
NSPS K – S334 (TANK 107),
NSPS KA – S341 (TANK 208), S342 (TANK 209), S343 (TANK 210)

| Applicable Requirement | Regulation Title or Description of Requirement | Federally Enforceable (Y/N) | Future Effective Date |
|-------------------------------|---|------------------------------------|------------------------------|
| 8-5-111.1 | Limited Exemption, Tank Removal From and Return to Service, Notification | N | |
| 8-5-111.1.1 | Limited Exemption, Tank Removal From and Return to Service, Notification, 3 day prior notification | Y | |
| 8-5-111.1.2 | Limited Exemption, Tank Removal From and Return to Service, Notification, Telephone notification | Y | |
| 8-5-111.2 | Limited Exemption, Tank Removal From and Return to Service, Tank in compliance prior to notification | N | |
| 8-5-111.3 | Limited Exemption, Tank Removal From and Return to Service, Floating roof tanks | Y | |
| 8-5-111.5 | Limited Exemption, Tank Removal From and Return to Service, Minimize emissions | Y | |
| 8-5-112 | Limited Exemption, Preventative Maintenance and Inspection of Tanks in Operation | N | |
| 8-5-112.1 | Limited Exemption, Tanks in Operation, Notification | N | |
| 8-5-112.1.1 | Limited Exemption, Tanks in Operation, Notification, 3 day prior notification | N | |
| 8-5-112.1.2 | Limited Exemption, Tanks in Operation, Notification, Telephone notification | N | |
| 8-5-112.2 | Limited Exemption, Tanks in Operation, Tank in compliance prior to start of work. Certified per 8-5-404 | N | |
| 8-5-112.3 | Limited Exemption, Tanks in Operation, No product movement, Minimize emissions | N | |
| 8-5-112.4 | Limited Exemption, Tanks in Operation, Not to exceed 7 days | N | |
| 8-5-112.6 | Tank Records | N | |
| 8-5-119 | Limited Exemption, Repair Period (Applies to S341 only) | N | |
| 8-5-301 | Storage Tank Control Requirements (internal floating roof, external floating roof, or approved emission control system) | N | |
| 8-5-304 | Requirements for External Floating Roofs | N | |
| 8-5-304.1 | Requirements for External Floating Roofs; Tank fitting requirements | Y | |
| 8-5-304.2 | Requirements for External Floating Roofs; Primary seal requirements | Y | |
| 8-5-304.3 | Requirements for External Floating Roofs; Secondary seal requirements | Y | |
| 8-5-304.4 | Requirements for External Floating Roofs; Floating roof requirements | N | |
| 8-5-304.5 | Requirements for External Floating Roofs; Shell in good condition | N | |
| 8-5-304.6 | Requirements for External Floating Roofs; tank pontoons | N | |
| 8-5-320 | Tank Fitting Requirements; Floating roof tanks | Y | |
| 8-5-320.2 | Tank Fitting Requirements; Floating roof tanks, Projection below liquid surface | Y | |
| 8-5-320.3 | Tank Fitting Requirements; Floating roof tanks, Gasketed covers, seals, lids | Y | |
| 8-5-320.3.1 | Tank Fitting Requirements; Floating roof tanks, Gasketed covers, seals, lids – Gap requirements | Y | |

Table IV – BB.12
Source-Specific Applicable Requirements
NSPS K AND NSPS KA ZERO-GAP EXTERNAL FLOATING ROOF TANKS
NSPS K – S334 (TANK 107),
NSPS KA – S341 (TANK 208), S342 (TANK 209), S343 (TANK 210)

| Applicable Requirement | Regulation Title or Description of Requirement | Federally Enforceable (Y/N) | Future Effective Date |
|-------------------------------|---|------------------------------------|------------------------------|
| 8-5-320.4 | Tank Fitting Requirements; Solid sampling or gauging well requirements in floating roof tanks | Y | |
| 8-5-320.4.1 | Tank Fitting Requirements; Solid sampling or gauging well requirements-projection below liquid surface | Y | |
| 8-5-320.4.2 | Tank Fitting Requirements; Solid sampling or gauging well requirements-cover, seal, or lid | Y | |
| 8-5-320.4.3 | Tank Fitting Requirements; Solid sampling or gauging well requirements-gap between well and roof | Y | |
| 8-5-320.6 | Tank Fitting Requirements; Emergency roof drain | Y | |
| 8-5-320.7 | Tank Fitting Requirements; Pressure relief devices | Y | |
| 8-5-321 | Primary Seal Requirements | Y | |
| 8-5-321.1 | Primary Seal Requirements; No holes, tears, other openings | Y | |
| 8-5-321.2 | Primary seal requirements; The seal shall be metallic shoe or liquid mounted except as provided in 8-5-305.1.3 | Y | |
| 8-5-321.3 | Primary Seal Requirements; Metallic-shoe-type seal requirements | Y | |
| 8-5-321.3.1 | Primary Seal Requirements; Metallic-shoe-type seal requirements-geometry of shoe | Y | |
| 8-5-321.3.2 | Primary Seal Requirements; Metallic-shoe-type seal requirements-welded tanks | Y | |
| 8-5-322 | Secondary Seal Requirements | Y | |
| 8-5-322.1 | Secondary Seal Requirements; No holes, tears, other openings | Y | |
| 8-5-322.2 | Secondary Seal Requirements; Insertion of probes | Y | |
| 8-5-322.5 | Secondary Seal Requirements; Welded external floating roof tanks with seals installed after 9/4/1985 or welded internal floating roof tanks with seals installed after 2/1/1993 | Y | |
| 8-5-322.6 | Secondary Seal Requirements; Extent of seal | Y | |
| 8-5-328 | Tank Degassing Requirements | Y | |
| 8-5-328.1 | Tank Degassing Requirements; Tanks > 75 cubic meters | Y | |
| 8-5-328.1.2 | Tank Degassing Requirements; Tanks > 75 cubic meters, Approved Emission Control System | Y | |
| 8-5-328.2 | Tank Degassing Requirements; Ozone Excess Day Prohibition | Y | |
| 8-5-328.3 | Notification of degassing | N | |
| 8-5-331 | Tank Cleaning Requirements | N | |
| 8-5-332 | Sludge Handling Requirements | N | |
| 8-5-401 | Inspection Requirements for External Floating Roof Tanks | Y | |
| 8-5-401.1 | Inspection Requirements for External Floating Roof Tanks; Primary and Secondary Seal Inspections | Y | |
| 8-5-401.2 | Inspection Requirements for External Floating Roof Tanks; Tank Fittings Inspections | Y | |
| 8-5-404 | Inspection, Abatement Efficiency Determination and Source Test Reports | N | |
| 8-5-405 | Information Required | Y | |

Table IV – BB.12
Source-Specific Applicable Requirements
NSPS K AND NSPS KA ZERO-GAP EXTERNAL FLOATING ROOF TANKS
NSPS K – S334 (TANK 107),
NSPS KA – S341 (TANK 208), S342 (TANK 209), S343 (TANK 210)

| Applicable Requirement | Regulation Title or Description of Requirement | Federally Enforceable (Y/N) | Future Effective Date |
|---------------------------------|---|------------------------------------|------------------------------|
| 8-5-411 | Enhanced Monitoring Program (Applies to list of tanks chosen by facility) | N | |
| 8-5-412 | Monitoring of Leaking Pontoons | N | |
| 8-5-501 | Records | Y | |
| 8-5-501.1 | Records; Type and amounts of liquid, type of blanket gas, TVP – Retain 24 months | Y | |
| 8-5-501.2 | Records; Internal and External Floating Roof Tanks, Seal Replacement Records – Retain 10 years | Y | |
| 8-5-602 | Analysis of Samples, True Vapor Pressure | Y | |
| 8-5-604 | Determination of Applicability | Y | |
| SIP Regulation 8, Rule 5 | Organic Compounds, Storage of Organic Liquids (6/5/03) | | |
| 8-5-111.1 | Limited Exemption, Tank Removal From and Return to Service, Notification | Y | |
| 8-5-111.2 | Limited Exemption, Tank Removal From and Return to Service, Tank in compliance prior to notification | Y | |
| 8-5-111.5 | Limited Exemption, Tank Removal From and Return to Service, Minimize emissions | Y | |
| 8-5-111.6 | Limited Exemption, Tank Removal From and Return to Service, Notice of completion not required | Y | |
| 8-5-111.7 | Limited Exemption, Tank Removal From and Return to Service, Satisfy requirements of 8-5-328 | Y | |
| 8-5-112 | Limited Exemption, Preventative Maintenance and Inspection of Tanks in Operation | Y | |
| 8-5-112.1 | Limited Exemption, Tanks in Operation, Notification | Y | |
| 8-5-112.1.1 | Limited Exemption, Tanks in Operation, Notification, 3 day prior notification | Y | |
| 8-5-112.1.2 | Limited Exemption, Tanks in Operation, Notification, Telephone notification | Y | |
| 8-5-112.2 | Limited Exemption, Tanks in Operation, Tank in compliance prior to start of work. Certified per 8-5-404 | Y | |
| 8-5-301 | Storage Tank Control Requirements (internal floating roof, external floating roof, or approved emission control system) | Y | |
| 8-5-303 | Requirements for Pressure Vacuum Valves (applies only to S107 (Tank 150), S110 (Tank 155), S115 (Tank 160), S123 (Tank 168), S128 (Tank 174), S129 (Tank 180), S178 (Tank 288)) | Y | |
| 8-5-320 | Tank Fitting Requirements | Y | |
| 8-5-320.3 | Tank Fitting Requirements; Floating roof tanks, Gasketed covers, seals, lids | Y | |
| 8-5-320.4 | Tank Fitting Requirements; Solid sampling or gauging well requirements in floating roof tanks | Y | |
| 8-5-320.4.1 | Tank Fitting Requirements; Solid sampling or gauging well requirements-projection below liquid surface | Y | |

Table IV – BB.12
Source-Specific Applicable Requirements
NSPS K AND NSPS KA ZERO-GAP EXTERNAL FLOATING ROOF TANKS
NSPS K – S334 (TANK 107),
NSPS KA – S341 (TANK 208), S342 (TANK 209), S343 (TANK 210)

| Applicable Requirement | Regulation Title or Description of Requirement | Federally Enforceable (Y/N) | Future Effective Date |
|-------------------------------|--|------------------------------------|------------------------------|
| 8-5-320.4.2 | Tank Fitting Requirements; Solid sampling or gauging well requirements-cover, seal, or lid | Y | |
| 8-5-320.4.3 | Tank Fitting Requirements; Solid sampling or gauging well requirements-gap between well and roof | Y | |
| 8-5-328 | Tank Degassing Requirements | Y | |
| 8-5-328.1 | Tank Degassing Requirements; Tanks > 75 cubic meters | Y | |
| 8-5-328.1.2 | Tank Degassing Requirements; Tanks > 75 cubic meters, Approved Emission Control System | Y | |
| 8-5-328.2 | Tank Degassing Requirements; Ozone Excess Day Prohibition | Y | |
| 8-5-328.3 | Notification of degassing | N | |
| 8-5-331 | Tank Cleaning Requirements | N | |
| 8-5-332 | Sludge Handling Requirements | N | |
| 8-5-401 | Inspection Requirements for External Floating Roof Tanks | Y | |
| 8-5-401.1 | Inspection Requirements for External Floating Roof Tanks; Primary and Secondary Seal Inspections | Y | |
| 8-5-401.2 | Inspection Requirements for External Floating Roof Tanks; Tank Fittings Inspections | Y | |
| 8-5-403 | Inspection Requirements for Pressure Vacuum Valves (applies only to S107 (Tank 150), S110 (Tank 155), S115 (Tank 160), S123 (Tank 168), S128 (Tank 174), S129 (Tank 180), S178 (Tank 288)) | Y | |
| 8-5-404 | Certification | Y | |
| 8-5-501 | Records | Y | |
| 8-5-501.1 | Records; Type and amounts of liquid, type of blanket gas, TVP - Retain 24 months | Y | |
| 8-5-501.2 | Records; Internal and External Floating Roof Tanks, Seal Replacement Records - Retain 10 years | Y | |
| 8-5-503 | Portable Hydrocarbon Detector | Y | |
| 40 CFR 60, Subpart K | Standards of Performance for Storage Vessels for Volatile Organic Liquid Storage Vessels for Which Construction, Reconstruction, or Modification Commenced After June 11, 1973, and Prior to May 19, 1978 (10/17/2000) APPLIES TO S334 (Tank 107) | | |
| 60.110(a) | Applicability and Designation of Affected Facility; Affected facility | Y | |
| 60.110(c)(2) | Applicability and Designation of Affected Facility-->65,000 gal after 6/11/1973 and before 5/19/1978. | Y | |
| 60.112(a)(1) | Standard for petroleum liquids above 1.5 psia and below 11.1 psia | Y | |
| 60.113(a) | Records of petroleum liquids, period of storage, and maximum true vapor pressure | Y | |
| 60.113(b) | Nomographs may be used | Y | |
| 40 CFR 60, Subpart Ka | Standards of Performance for Storage Vessels for Volatile Organic Liquid Storage Vessels for Which Construction, | | |

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Source-Specific Applicable Requirements
NSPS K AND NSPS KA ZERO-GAP EXTERNAL FLOATING ROOF TANKS
NSPS K – S334 (TANK 107),
NSPS KA – S341 (TANK 208), S342 (TANK 209), S343 (TANK 210)

| Applicable Requirement | Regulation Title or Description of Requirement | Federally Enforceable (Y/N) | Future Effective Date |
|--|---|-----------------------------|-----------------------|
| | Reconstruction, or Modification Commenced After May 18, 1978, and Prior to July 23, 1984 (12/14/2000) APPLIES TO S341 (Tank 208), S342 (Tank 209), S343 (Tank 210) | | |
| 60.110a(a) | Applicability and Designation of Affected Facility | Y | |
| 40 CFR 63, Subpart G | SOCMI HON G (01/27/1995) REQUIREMENTS FOR EXTERNAL FLOATING ROOF TANKS | | |
| The tanks in this table will be subject to the provisions of 40 CFR 63.646 and the referenced requirements of 40 CFR 63, subpart G until compliance with 40 CFR 63.660 and the referenced requirements contained in 40 CFR 63, subpart WW is demonstrated, as specified in 40 CFR 63.640(h), 63.660, and 63.1063. | | | |
| 63.119(a) | Storage Vessel Provisions -- Reference Control Technology | Y | |
| 63.119(a)(1) | Storage Vessel Provisions -- Reference Control Technology--Group 1, TVP < 76.6 kPa | Y | |
| 63.119(c) | Storage Vessel Provisions -- Reference Control Technology-- External floating roof | Y | |
| 63.119(c)(1) | Storage Vessel Provisions -- Reference Control Technology-- External floating roof seals | Y | |
| 63.119(c)(1)(i) | Storage Vessel Provisions -- Reference Control Technology-- External floating roof double seals required | Y | |
| 63.119(c)(1)(ii) | Storage Vessel Provisions -- Reference Control Technology-- External floating roof primary seal requirements – metallic shoe or liquid-mounted | Y | |
| 63.119(c)(1)(iii) | Storage Vessel Provisions -- Reference Control Technology-- External floating roof seal requirements | Y | |
| 63.119(c)(3) | Storage Vessel Provisions -- Reference Control Technology-- External floating roof--Must float on liquid | Y | |
| 63.119(c)(3)(i) | Storage Vessel Provisions -- Reference Control Technology-- External floating roof --Must float on liquid except during initial fill | Y | |
| 63.119(c)(3)(ii) | Storage Vessel Provisions -- Reference Control Technology-- External floating roof-- Must float on liquid except after completely emptied and degassed | Y | |
| 63.119(c)(3)(iii) | Storage Vessel Provisions -- Reference Control Technology-- External floating roof -- Must float on liquid except when completely emptied before refilling | Y | |
| 63.119(c)(4) | Storage Vessel Provisions -- Reference Control Technology-- External Floating Roof Operations, when not floating | Y | |
| 63.120(b) | Storage Vessel Provisions -- Procedures to Determine Compliance-- Demonstration--External floating roof | Y | |
| 63.120(b)(1) | Storage Vessel Provisions -- Procedures to Determine Compliance-- External FR seal gap measurement | Y | |
| 63.120(b)(1)(i) | Storage Vessel Provisions -- Procedures to Determine Compliance-- External FR with double seals - primary seal gap measurement – 5 year intervals | Y | |

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Source-Specific Applicable Requirements
NSPS K AND NSPS KA ZERO-GAP EXTERNAL FLOATING ROOF TANKS
NSPS K – S334 (TANK 107),
NSPS KA – S341 (TANK 208), S342 (TANK 209), S343 (TANK 210)

| Applicable Requirement | Regulation Title or Description of Requirement | Federally Enforceable (Y/N) | Future Effective Date |
|-------------------------------|--|------------------------------------|------------------------------|
| 63.120(b)(1)(iii) | Storage Vessel Provisions -- Procedures to Determine Compliance-- External FR with double seals - secondary seal gap measurement – annual requirement | Y | |
| 63.120(b)(1)(iv) | Storage Vessel Provisions -- Procedures to Determine Compliance-- External FR seal inspections prior to tank refill with organic HAP after not storing organic HAP for 1 year or longer | Y | |
| 63.120(b)(2) | Storage Vessel Provisions -- Procedures to Determine Compliance-- External FR seal gap determination methods | Y | |
| 63.120(b)(2)(i) | Storage Vessel Provisions -- Procedures to Determine Compliance-- External FR seal gap determination methods – roof not resting on legs | Y | |
| 63.120(b)(2)(ii) | Storage Vessel Provisions -- Procedures to Determine Compliance-- External FR seal gap determination methods – measure gaps around entire circumference of seal and measure width and length of gaps | Y | |
| 63.120(b)(2)(iii) | Storage Vessel Provisions -- Procedures to Determine Compliance-- External FR seal gap determination methods – determine total surface area of each gap | Y | |
| 63.120(b)(3) | Storage Vessel Provisions -- Procedures to Determine Compliance-- External FR primary seal gap calculation method – total surface area of primary seal gaps ≤ 212 cm ² per meter of vessel diameter. Maximum width ≤ 3.81 cm | Y | |
| 63.120(b)(4) | Storage Vessel Provisions -- Procedures to Determine Compliance-- External FR secondary seal gap calculation method – total surface area of secondary seal gaps ≤ 21.2 cm ² per meter of vessel diameter. Maximum width ≤ 1.27 cm | Y | |
| 63.120(b)(5) | Storage Vessel Provisions -- Procedures to Determine Compliance-- External FR primary seal additional requirements | Y | |
| 63.120(b)(5)(i) | Storage Vessel Provisions -- Procedures to Determine Compliance-- External FR primary seal additional requirements – metallic shoe seal – shoe geometry | Y | |
| 63.120(b)(5)(ii) | Storage Vessel Provisions -- Procedures to Determine Compliance-- External FR primary seal additional requirements – no holes, tears, or openings | Y | |
| 63.120(b)(6) | Storage Vessel Provisions -- Procedures to Determine Compliance-- External FR secondary seal requirements | Y | |
| 63.120(b)(6)(i) | Storage Vessel Provisions -- Procedures to Determine Compliance-- External FR secondary seal requirements – location and extent | Y | |
| 63.120(b)(6)(ii) | Storage Vessel Provisions -- Procedures to Determine Compliance-- External FR secondary seal requirements - no holes, tears or openings | Y | |
| 63.120(b)(7) | Storage Vessel Provisions -- Procedures to Determine Compliance-- External FR unsafe to perform seal measurements or inspect the tank | Y | |
| 63.120(b)(7)(i) | Storage Vessel Provisions -- Procedures to Determine Compliance-- External FR unsafe to perform seal measurements or inspect the | Y | |

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Source-Specific Applicable Requirements
NSPS K AND NSPS KA ZERO-GAP EXTERNAL FLOATING ROOF TANKS
NSPS K – S334 (TANK 107),
NSPS KA – S341 (TANK 208), S342 (TANK 209), S343 (TANK 210)

| Applicable Requirement | Regulation Title or Description of Requirement | Federally Enforceable (Y/N) | Future Effective Date |
|-------------------------------|---|------------------------------------|------------------------------|
| | tank – complete measurements or inspection within 30 days after determining roof is unsafe or comply with 63.120(b)(7)(ii) | | |
| 63.120(b)(7)(ii) | Storage Vessel Provisions -- Procedures to Determine Compliance-- External FR unsafe to perform seal measurements or inspect the tank – empty and remove vessel from service within 45 days after determining roof is unsafe or comply with 63.120(b)(7)(i). Two 30 day extensions are allowed to empty the tank. Decision to use extension must be documented. | Y | |
| 63.120(b)(8) | Storage Vessel Provisions -- Procedures to Determine Compliance External FR Repairs must be made within 45 days after identification or empty and remove tank from service. Two 30 day extensions are allowed to empty the tank. Decision to use extension must be documented. | Y | |
| 63.120(b)(9) | Storage Vessel Provisions -- Procedures to Determine Compliance External FR seal gap measurement 30 day notification | Y | |
| 63.120(b)(10) | Storage Vessel Provisions -- Procedures to Determine Compliance-- External FR and seals visual inspection each time emptied | Y | |
| 63.120(b)(10)(i) | Storage Vessel Provisions -- Procedures to Determine Compliance-- External FR and seal visual inspection each time emptied – Repair defects before refilling [does not apply to gaskets, slotted membranes, or sleeve seals for Group 1 Refinery MACT tanks per 63.646(e)] | Y | |
| 63.120(b)(10)(ii) | Storage Vessel Provisions -- Procedures to Determine Compliance-- External FR and seal visual inspection each time emptied – 30 day notification | Y | |
| 63.120(b)(10)(iii) | Storage Vessel Provisions -- Procedures to Determine Compliance-- External FR and seal visual inspection each time emptied – Notification for unplanned | Y | |
| 63.123(a) | Storage Vessel Provisions -- Recordkeeping--Group 1 and Group 2 storage vessel dimensions and capacity. Keep for life of source. | Y | |
| 63.123(d) | Storage Vessel Provisions -- Recordkeeping--Group 1 External floating roof tank requirements - records of seal gap measurements (date, raw data, and required calculations) | Y | |
| 63.123(g) | Storage Vessel Provisions -- Recordkeeping, Extensions for emptying storage vessel – keep documentation specified | Y | |
| 40 CFR 63, Subpart CC | National Emission Standards for Hazardous Air Pollutants for Petroleum Refineries (12/01/15) REQUIREMENTS FOR EXTERNAL FLOATING ROOF TANKS ALSO SUBJECT TO NSPS Subparts K OR Ka | | |

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Source-Specific Applicable Requirements
NSPS K AND NSPS KA ZERO-GAP EXTERNAL FLOATING ROOF TANKS
NSPS K – S334 (TANK 107),
NSPS KA – S341 (TANK 208), S342 (TANK 209), S343 (TANK 210)

| Applicable Requirement | Regulation Title or Description of Requirement | Federally Enforceable (Y/N) | Future Effective Date |
|---|--|------------------------------------|------------------------------|
| The tanks in this table will be subject to the provisions of 40 CFR 63.646 and the referenced requirements of 40 CFR 63, subpart G until compliance with 40 CFR 63.660 and the referenced requirements contained in 40 CFR 63, subpart WW is demonstrated, as specified in 40 CFR 63.640(h), 63.660, and 63.1063. | | | |
| 63.640(c)(2) | Applicability and Designation of Storage Vessels | Y | |
| 63.640(h) | Compliance by dates specified in Table 11, except as provided in paragraphs (h)(1) through (h)(3) | Y | |
| 63.640(n)(5) | Applicability and Designation of Affected Source Overlap for Storage Vessels— Group 1 vessel also subject to NSPS, Subparts K or Ka only subject to 63 Subpart CC | Y | |
| 63.646 | Upon demonstration of compliance with the standards in 63.660 by the compliance dates specified in 63.640(h), the standards in this section shall no longer apply. | Y | |
| 63.646(a) | Storage Vessel Provisions-Group 1 | Y | |
| 63.646(b)(1) | Storage Vessel Provisions-Determine stored liquid % OHAP for group determination | Y | |
| 63.646(b)(2) | Storage Vessel Provisions-Determine stored liquid % OHAP | Y | |
| 63.646(c) | Storage Vessel Provisions—63 Subpart G exclusions for storage vessels [EFRs exempt from 63.119(c)(2)] | Y | |
| 63.646(d) | Storage Vessel Provisions-References | Y | |
| 63.646(d)(2) | Storage Vessel Provisions-References to April 22,1994 | Y | |
| 63.646(d)(3) | Storage Vessel Provisions-References to December 31, 1992 | Y | |
| 63.646(d)(4) | Storage Vessel Provisions-References to compliance dates in 63.100 of Subpart F | Y | |
| 63.646(e) | Storage Vessel Provisions—Exceptions for compliance with inspection requirements of 63.120 of Subpart G – Not required to comply with provisions for gaskets, slotted membranes, and sleeve seals. | Y | |
| 63.646(f) | Storage Vessel Provisions-Group 1 floating roof requirements | Y | |
| 63.646(f)(1) | Storage Vessel Provisions—Group 1 floating roof requirements- Covers or lids closed except when in use | Y | |
| 63.646(f)(2) | Storage Vessel Provisions-Group 1 floating roof requirements-Rim space vents requirements | Y | |
| 63.646(f)(3) | Storage Vessel Provisions-Group 1 floating roof requirements- Automatic bleeder vents requirements | Y | |
| 63.646(l) | Storage Vessel Provisions-State or local permitting agency notification requirements | Y | |
| 63.655(f) | Reporting and Recordkeeping Requirements-Notice of compliance status report requirements | Y | |
| 63.655(f)(1) | Reporting and Recordkeeping Requirements-Notice of compliance status report requirements | Y | |
| 63.655(f)(1)(i) | Reporting and Recordkeeping Requirements-Notice of compliance status report requirements-Reporting--storage vessels | Y | |
| 63.655(f)(1)(i)(A) | Reporting and Recordkeeping Requirements-Notice of compliance status report requirements-Reporting--storage vessels | Y | |

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Source-Specific Applicable Requirements
NSPS K AND NSPS KA ZERO-GAP EXTERNAL FLOATING ROOF TANKS
NSPS K – S334 (TANK 107),
NSPS KA – S341 (TANK 208), S342 (TANK 209), S343 (TANK 210)

| Applicable Requirement | Regulation Title or Description of Requirement | Federally Enforceable (Y/N) | Future Effective Date |
|-------------------------------|--|------------------------------------|------------------------------|
| 63.655(f)(1)(i)(A)(1) | Reporting and Recordkeeping Requirements-Notice of compliance status report requirements-Reporting--storage vessels | Y | |
| 63.655(g) | Periodic Reporting and Recordkeeping Requirements | Y | |
| 63.655(g)(1) | Periodic Reporting and Recordkeeping Requirements-storage vessels [Information related to gaskets, slotted membranes, and sleeve seals not required for storage vessels that are part of existing source] | Y | |
| 63.655(g)(3)(i) | Periodic Reporting and Recordkeeping Requirements-storage vessels with external floating roofs | Y | |
| 63.655(g)(3)(i)(A) | Periodic Reporting and Recordkeeping Requirements-storage vessels with external floating roofs-document results of each seal gap measurement | Y | |
| 63.655(g)(3)(i)(B) | Periodic Reporting and Recordkeeping Requirements-storage vessels with external floating roofs – extension documentation | Y | |
| 63.655(g)(3)(i)(C) | Periodic Reporting and Recordkeeping Requirements-storage vessels with external floating roofs – documentation of failures | Y | |
| 63.655(g)(3)(ii) | Periodic Reporting and Recordkeeping Requirements-storage vessels with external floating roofs – documentation of failures | Y | |
| 63.655(h)(2) | Reporting and Recordkeeping Requirements-Other reports-Storage vessel notification of inspections. | Y | |
| 63.655(h)(2)(i) | Reporting and Recordkeeping Requirements-Other reports-Storage vessel notification of inspections – refilling Group 1 storage vessel. | Y | |
| 63.655(h)(2)(ii) | Reporting and Recordkeeping Requirements-Other reports-Storage vessel notification of inspections –Group 1 storage vessel seal gap measurements – 30 day notification [can be waived or modified by state or local]. | Y | |
| 63.655(h)(6) | Reporting and Recordkeeping Requirements-Other reports-Determination of Applicability | Y | |
| 63.655(h)(6)(ii) | Reporting and Recordkeeping Requirements-Other reports-Determination of Applicability | Y | |
| 63.655(i)(1) | Reporting and Recordkeeping Requirements-Recordkeeping for storage vessels – keep records specified in 63.123 (Subpart G) | Y | |
| 63.655(i)(1)(i) | Reporting and Recordkeeping Requirements-Recordkeeping for storage vessels– keep records specified in 63.123 (Subpart G) except records related to gaskets, slotted membranes, and sleeve seals for vessels in existing sources. Each owner or operator subject to the storage vessel provisions in 63.660 shall keep records as specified in paragraphs (i)(1)(v) and (vi). | Y | |
| 63.655(i)(6) | Reporting and Recordkeeping Requirements—Recordkeeping for storage vessels-Record retention – 5 years | Y | |
| 63.660 | Storage vessel provisions. Group 1 storage vessel shall comply with the requirements in 40 CFR 63, subpart WW according to the requirements of 63.660(a) through (i). | Y | |
| 63.660(a) | Determination of stored liquid HAP content | Y | |

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Source-Specific Applicable Requirements
NSPS K AND NSPS KA ZERO-GAP EXTERNAL FLOATING ROOF TANKS
NSPS K – S334 (TANK 107),
NSPS KA – S341 (TANK 208), S342 (TANK 209), S343 (TANK 210)

| Applicable Requirement | Regulation Title or Description of Requirement | Federally Enforceable (Y/N) | Future Effective Date |
|---|---|-----------------------------|-----------------------|
| 63.660(b) | Floating Roof Storage Vessel Requirements | Y | |
| 63.660(c) | References | Y | |
| 63.660(d) | Group 1 Storage Vessel Requirements | Y | |
| 63.660(e) | Violations | Y | |
| 63.660(g) | Notification of Compliance Status | Y | |
| 63.660(h) | Periodic Reporting | Y | |
| 63.660(i) | Requirements for electing to comply with subpart SS | Y | |
| BAAQMD Condition 22478 | Applies to S334 | | |
| Part 4 | Vapor pressure limitContents of tank limited to crude oil [Basis: BACT, cumulative increase] | Y | |
| Part 7 | Throughput limit for S334 [Basis: cumulative increase] | Y | |
| Part 8b | BACT equipment requirements for S123, S124, S186, and S334 [Basis: BACT, cumulative increase] | Y | |
| <u>BAAQMD Condition 26990</u> | | | |
| <u>Part 1</u> | <u>Throughput limit for source S341. [Basis: Cumulative Increase]</u> | <u>Y</u> | |
| <u>Part 2</u> | <u>Storage material vapor pressure limit for S341. [Basis: Cumulative Increase]</u> | <u>Y</u> | |
| <u>Part 3</u> | <u>Tank parameters requirement for S341. [Basis: Cumulative Increase]</u> | <u>Y</u> | |
| <u>Part 4</u> | <u>Recordkeeping for S341. [Basis: Cumulative Increase]</u> | <u>Y</u> | |
| <u>BAAQMD Condition 26991</u> | | | |
| <u>Part 1</u> | <u>Throughput limit for source S342. [Basis: Cumulative Increase]</u> | <u>Y</u> | |
| <u>Part 2</u> | <u>Storage material vapor pressure limit for S342. [Basis: Cumulative Increase]</u> | <u>Y</u> | |
| <u>Part 3</u> | <u>Tank parameters requirement for S342. [Basis: Cumulative Increase]</u> | <u>Y</u> | |
| <u>Part 4</u> | <u>Recordkeeping for S342. [Basis: Cumulative Increase]</u> | <u>Y</u> | |

Table VII – BB.12
Applicable Limits and Compliance Monitoring Requirements
NSPS K AND NSPS KA ZERO-GAP EXTERNAL FLOATING ROOF TANKS
NSPS K - S334 (TANK 107),
NSPS KA - S341 (TANK 208), S342 (TANK 209), S343 (TANK 210)

| Type of Limit | Emission Limit Citation | FE Y/N | Future Effective Date | Emission Limit | Monitoring Requirement Citation | Monitoring Frequency (P/C/N) | Monitoring Type |
|--|-------------------------|--------|-----------------------|---|---------------------------------|--|-----------------------------------|
| BAAQMD Regulation 8, Rule 5, Organic Compounds - STORAGE OF ORGANIC LIQUIDS LIMITS AND MONITORING FOR EXTERNAL FLOATING-ROOF TANKS | | | | | | | |
| VOC | BAAQMD 8-5-301 | Y | | Record of liquids stored and true vapor pressure | BAAQMD 8-5-501.1 | <u>periodic</u> initially and upon change of service | Records |
| VOC | BAAQMD 8-5-320 | Y | | Floating roof fitting closure standards; includes gasketed covers | BAAQMD 8-5-401.2 | P/SA | Measurement and visual inspection |
| VOC | BAAQMD 8-5-321 | Y | | Primary rim-seal standards; includes gap criteria | BAAQMD 8-5-401.1 | P/SA and every time a seal is replaced | Seal inspection |
| VOC | BAAQMD 8-5-322 | Y | | Secondary rim-seal standards; includes gap criteria | BAAQMD 8-5-401.1 | P/SA and every time a seal is replaced | Seal inspection |
| VOC | BAAQMD 8-5-328.1.2 | Y | | Concentration of < 10,000 ppm as methane after degassing | BAAQMD 8-5-503 | <u>periodic</u> each time emptied & degassed | Portable hydrocarbon detector |
| VOC | | Y | | Certification reports on tank inspections and source tests | BAAQMD 8-5-404 8-5-405 | <u>periodic</u> after each tank inspection and source test | Reports |
| VOC | | Y | | Records of tank seal replacement | BAAQMD 8-5-501.2 | <u>periodic</u> after each tank seal replacement | Records |
| VOC | | Y | | Determination of applicability | BAAQMD 8-5-604 | P/E | look-up table or sample analysis |
| 40 CFR 60, Subpart K – NSPS for Petroleum Storage Vessels (note 2) 40 CFR 60, Subpart Ka – NSPS for Petroleum Storage Vessels (note 3) 40 CFR 63, Subpart G – SOCMH HON 40 CFR 63, Subpart CC – NESHAPS for Petroleum Refineries LIMITS AND MONITORING FOR EXTERNAL FLOATING ROOF TANKS | | | | | | | |

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Applicable Limits and Compliance Monitoring Requirements
NSPS K AND NSPS KA ZERO-GAP EXTERNAL FLOATING ROOF TANKS
NSPS K - S334 (TANK 107),
NSPS KA - S341 (TANK 208), S342 (TANK 209), S343 (TANK 210)

| Type of Limit | Emission Limit Citation | FE Y/N | Future Effective Date | Emission Limit | Monitoring Requirement Citation | Monitoring Frequency (P/C/N) | Monitoring Type |
|---------------------------------|--|-------------------|-----------------------|--|---|--|-----------------------------------|
| HAP | 40 CFR 63.640(n)(5) 63.646(f) | Y | | Deck fitting closure standards | 40 CFR 63.640(n)(5) 63.646(a) & (e) 63.120(b)(10) | <u>periodic</u> initially & each time emptied & degassed | visual inspection |
| HAP | 40 CFR 63.640(n)(5) 63.646(a) 63.120(b)(3)&(5) | Y | | Primary rim-seal standards; includes gap criteria | 40 CFR 63.640(n)(5) 63.646(a) 63.120(b)(1) & (2) | <u>periodic</u> initially & at 5 yr intervals | measurement and visual inspection |
| HAP | 40 CFR 63.640(n)(5) 63.646(a) 63.120(b)(4)&(6) | Y | | Secondary rim-seal standards; includes gap criteria | 40 CFR 63.640(n)(5) 63.646(a) 63.120(b)(1) & (2) | <u>periodic</u> initially & annually | measurement and visual inspection |
| HAP | 40 CFR 63.660 and subpart WW or subpart SS according to the provisions of 63.660 | Y | | Rim-seal standards, deck fitting standards, operational requirements, inspection and repair requirements | | P/A or <u>periodic</u> each time emptied & degassed, at least every 10 years | visual inspection |
| BAAQMD PERMIT CONDITIONS | | | | | | | |
| throughput | BAAQMD Condition 20989, Part A | Y | | S341: 4.38 E 7 bbl/yr S342: 4.38 E 7 bbl/yr S343: 4.38 E 7 bbl/yr | BAAQMD Condition 20989, Part A | P/M | Records |
| throughput | BAAQMD Condition 22478, Parts 4 and 7 | Y | | S334: 10 E 6 bbl/yr Crude oil or petroleum liquids below 3.0 psia | BAAQMD 8-5-501.1 | periodic initially and upon change of service | Records |
| Throughput | BAAQMD Condition 26990 Part 1 | Y | | S341: 1.819,583 bbl/yr | BAAQMD Condition 26990 Part 5 | P/M | Records |

Table VII – BB.12
Applicable Limits and Compliance Monitoring Requirements
NSPS K AND NSPS KA ZERO-GAP EXTERNAL FLOATING ROOF TANKS
NSPS K - S334 (TANK 107),
NSPS KA - S341 (TANK 208), S342 (TANK 209), S343 (TANK 210)

| Type of Limit | Emission Limit Citation | FE Y/N | Future Effective Date | Emission Limit | Monitoring Requirement Citation | Monitoring Frequency (P/C/N) | Monitoring Type |
|---------------|---|--------|-----------------------|--|---|------------------------------|-------------------------|
| Throughput | BAAQMD Condition 26991 Part 1 | Y | | S342: 2,407,700 bbl/yr | BAAQMD Condition 26991 Part 5 | P/M | Records |

- Tanks subject to 63 Subpart CC (MACT) and NSPS K are subject only to MACT per 63.640(n)(5). Source S334 (Tank 107) is subject to NSPS K and MACT.
- Tanks subject to 63 Subpart CC (MACT) and NSPS Ka are subject only to MACT per 63.640(n)(5). Sources S341 (Tank 208), S342 (Tank 209), and S343 (Tank 210) are subject to NSPS Ka and MACT.

Table IV – Na
Source-specific Applicable Requirements – Process Vessels
S304 – U-229 LIGHT NAPHTHA HYDROTREATER;
S305 – U-230 PREFRACTIONATOR / NAPHTHA HYDROTREATER;
S307 – U-240 UNICRACKING UNIT; S309 – U-248 UNISAR UNIT;
S318 – U-76 GASOLINE / MID-BARREL BLENDING UNIT;
S319 – U-215 GASOLINE FRACTIONATING UNIT;
S322 – U-40 RAW MATERIALS RECEIVING; S339-U80 REFINED OIL SHIPPING UNIT;
S434, U246 HIGH PRESSURE REACTOR TRAIN (CRACKING);
S435 – REFORMATE SPLITTER; S436 – DEISOPENTANIZER;
S460 – U-250 ULSD HYDROTREATER

| Applicable Requirement | Regulation Title or Description of Requirement | Federally Enforceable (Y/N) | Future Effective Date |
|-------------------------------------|---|-----------------------------|-----------------------|
| | For additional requirements for S434, see Table IV-I.1 | | |
| BAAQMD Regulation 8, Rule 10 | Organic Compounds – Process Vessel Depressurization (1/21/2004) | | |
| 8-10-301 | Depressurization Control Options | N | |
| 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 | |
| 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% | N | |

Table IV – Na
Source-specific Applicable Requirements – Process Vessels
S304 – U-229 LIGHT NAPHTHA HYDROTREATER;
S305 – U-230 PREFRACTIONATOR / NAPHTHA HYDROTREATER;
S307 – U-240 UNICRACKING UNIT; S309 – U-248 UNISAR UNIT;
S318 – U-76 GASOLINE / MID-BARREL BLENDING UNIT;
S319 – U-215 GASOLINE FRACTIONATING UNIT;
S322 – U-40 RAW MATERIALS RECEIVING; S339-U80 REFINED OIL SHIPPING UNIT;
S434, U246 HIGH PRESSURE REACTOR TRAIN (CRACKING);
S435 – REFORMATE SPLITTER; S436 – DEISOPENTANIZER;
S460 – U-250 ULSD HYDROTREATER

| Applicable Requirement | Regulation Title or Description of Requirement | Federally Enforceable (Y/N) | Future Effective Date |
|----------------------------------|---|------------------------------------|------------------------------|
| 8-10-401 | Turnaround Records. Annual report due February 1 of each year with initial report of process vessels due 4/1/2004. | N | |
| 8-10-501 | Monitoring prior to and during process vessel opening | Y | |
| 8-10-502 | Concentration measurement using EPA Method 21 | Y | |
| 8-10-503 | Recordkeeping | N | |
| 8-10-601 | Monitoring Procedures | N | |
| SIP Regulation 8, Rule 10 | Organic Compounds – Process Vessel Depressurization (10/03/84) | | |
| 8-10-301 | Process Vessel Depressurizing. POC emissions shall be vented through a knock-out pot and then abated in one of the following ways, to as low a vessel pressure as possible, but at least until pressure is reduced to less than 1000 mm Hg (4.6 psig) | 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. The following records shall be kept for each process unit turnaround, and retained for at least 2 years and made available to the District on demand during inspections: | 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 | |
| 40 CFR 60 Subpart QQQ | Standards of Performance for VOC Emissions from Petroleum Refinery Wastewater Systems (8/18/95) APPLIES TO S434 ONLY. See Table IV-I.1 | Y | |
| BAAQMD Condition | Throughput limits for S305, S435, S436, S437 [Basis: 2-1-234.3] | Y | |

Table IV – Na
Source-specific Applicable Requirements – Process Vessels
S304 – U-229 LIGHT NAPHTHA HYDROTREATER;
S305 – U-230 PREFRACTIONATOR / NAPHTHA HYDROTREATER;
S307 – U-240 UNICRACKING UNIT; S309 – U-248 UNISAR UNIT;
S318 – U-76 GASOLINE / MID-BARREL BLENDING UNIT;
S319 – U-215 GASOLINE FRACTIONATING UNIT;
S322 – U-40 RAW MATERIALS RECEIVING; S339-U80 REFINED OIL SHIPPING UNIT;
S434, U246 HIGH PRESSURE REACTOR TRAIN (CRACKING);
S435 – REFORMATE SPLITTER; S436 – DEISOPENTANIZER;
S460 – U-250 ULSD HYDROTREATER

| Applicable Requirement | Regulation Title or Description of Requirement | Federally Enforceable (Y/N) | Future Effective Date |
|---------------------------------------|---|------------------------------------|------------------------------|
| 20989, Part A | | | |
| BAAQMD Condition 20989, Part A | Throughput limits for S319 [Basis: 2-1-234.3] | N | |
| BAAQMD Condition 21094 | APPLIES TO S460 ONLY | | |
| Part 1 | Daily throughput limit [Basis: Regulation 2-1-234] | Y | |
| Part 2 | Throughput records [Basis: Regulation 2-1-234] | Y | |
| BAAQMD Condition 21095 | APPLIES TO S304 ONLY | | |
| Part 1 | Daily throughput limit [Basis: 2-1-234] | Y | |
| Part 2 | Daily throughput records [Basis: 2-1-234] | Y | |
| BAAQMD Condition 21099 | APPLIES TO S304, S460 ONLY | | |
| Part 1 | Light hydrocarbon control valve requirements [Basis: BACT] | Y | |
| Part 2 | Light hydrocarbon flange/connector requirements [Basis: BACT] | Y | |
| Part 3 | Centrifugal compressor requirements [Basis: BACT] | Y | |
| Part 4 | Light hydrocarbon centrifugal pump requirements [Basis: BACT] | Y | |
| Part 5 | Monitoring and repair program requirement [Basis: BACT] | Y | |
| Part 6 | ULSD project component count report requirement [Basis: BACT, Cumulative Increase, Toxic Management Policy] | Y | |
| BAAQMD Condition 22549 | [APPLIES TO S318 ONLY] | | |
| Part 1 | Daily petroleum liquid throughput limit excluding diesel | Y | |

Table IV – Na
Source-specific Applicable Requirements – Process Vessels
S304 – U-229 LIGHT NAPHTHA HYDROTREATER;
S305 – U-230 PREFRACTIONATOR / NAPHTHA HYDROTREATER;
S307 – U-240 UNICRACKING UNIT; S309 – U-248 UNISAR UNIT;
S318 – U-76 GASOLINE / MID-BARREL BLENDING UNIT;
S319 – U-215 GASOLINE FRACTIONATING UNIT;
S322 – U-40 RAW MATERIALS RECEIVING; S339-U80 REFINED OIL SHIPPING UNIT;
S434, U246 HIGH PRESSURE REACTOR TRAIN (CRACKING);
S435 – REFORMATE SPLITTER; S436 – DEISOPENTANIZER;
S460 – U-250 ULSD HYDROTREATER

| Applicable Requirement | Regulation Title or Description of Requirement | Federally Enforceable (Y/N) | Future Effective Date |
|-------------------------------|---|-----------------------------|-----------------------|
| | [Cumulative Increase] | | |
| Part 2 | Annual throughput limit [Cumulative Increase] | Y | |
| Part 3 | Daily records of petroleum liquid throughput limit [Cumulative Increase] | Y | |
| Part 4 | Pressure relief devices routed to fuel gas system, furnace or flare with 98% recovery efficiency [8-28-302, BACT] | Y | |
| BAAQMD Condition 22965 | APPLIES TO S307 <u>and S434 ONLY</u> | | |
| Part 1 | Daily throughput limit [Cumulative Increase] | Y | |
| Part 2 | Daily throughput records [Cumulative Increase] | Y | |
| Part 3 | Pressure relief valves vented to fuel gas recovery system, furnace or flare [8-28-302, BACT] | Y | |
| BAAQMD Condition 22967 | APPLIES TO S309 ONLY | | |
| Part 1 | Daily throughput limit [Cumulative Increase] | Y | |
| Part 2 | Daily throughput records [Cumulative Increase] | Y | |
| BAAQMD Condition 22968 | APPLIES TO S339 ONLY | | |
| Part 1 | Daily throughput limit [Cumulative Increase] | Y | |
| Part 2 | Daily throughput records [Cumulative Increase] | Y | |
| BAAQMD Condition 22969 | APPLIES TO S434 ONLY | | |
| Part 1 | Annual throughput limit [Cumulative Increase] | Y | |
| Part 2 | Monthly throughput records [Cumulative Increase] | Y | |

Table IV – Na
Source-specific Applicable Requirements – Process Vessels
S304 – U-229 LIGHT NAPHTHA HYDROTREATER;
S305 – U-230 PREFRACTIONATOR / NAPHTHA HYDROTREATER;
S307 – U-240 UNICRACKING UNIT; S309 – U-248 UNISAR UNIT;
S318 – U-76 GASOLINE / MID-BARREL BLENDING UNIT;
S319 – U-215 GASOLINE FRACTIONATING UNIT;
S322 – U-40 RAW MATERIALS RECEIVING; S339-U80 REFINED OIL SHIPPING UNIT;
S434, U246 HIGH PRESSURE REACTOR TRAIN (CRACKING);
S435 – REFORMATE SPLITTER; S436 – DEISOPENTANIZER;
S460 – U-250 ULSD HYDROTREATER

| Applicable Requirement | Regulation Title or Description of Requirement | Federally Enforceable (Y/N) | Future Effective Date |
|-------------------------------|--|------------------------------------|------------------------------|
| Part 3 | Pressure relief valves vented to fuel gas recovery system, furnace or flare [8-28-302, BACT] | Y | |
| BAAQMD Condition 22970 | APPLIES TO S434 ONLY | | |
| Part A.1 | Applicability of Condition 22970 [Cumulative increase, PSD] | Y | |
| Part A.2a | Annual NOx limit for S45, Heater, S434, U246 High Pressure Reactor Train; and S1010, Sulfur Recovery Unit [Cumulative increase] | Y | |
| Part A.2b | Annual SO2 limit for S45, Heater, S434, U246 High Pressure Reactor Train; and S1010, Sulfur Recovery Unit [Cumulative increase] | Y | |
| Part A.2c | Annual PM10 limit for S45, Heater, S434, U246 High Pressure Reactor Train; and S1010, Sulfur Recovery Unit [Cumulative increase, PSD] | Y | |
| Part A.2d | Annual POC limit for S45, Heater, S434, U246 High Pressure Reactor Train; and S1010, Sulfur Recovery Unit [Cumulative increase] | Y | |
| Part A.2e | Annual CO limit for S45, Heater, S434, U246 High Pressure Reactor Train; and S1010, Sulfur Recovery Unit [Cumulative increase] | Y | |
| Part A.2f | Annual sulfuric acid mist limit for S45, Heater, S434, U246 High Pressure Reactor Train; and S1010, Sulfur Recovery Unit [PSD] | Y | |
| Part A.2g | Annual ammonia limit for S45, Heater, S434, U246 High Pressure Reactor Train; and S1010, Sulfur Recovery Unit [BAAQMD Regulation 2, Rule 5] | N | |
| Part A.3 | Daily sulfuric acid mist limit for S45, Heater, S434, U246 High Pressure Reactor Train; and S1010, Sulfur Recovery Unit at Facility A0016 and S2 at B7419. [PSD] | Y | |
| Part A.4 | Determination of compliance with Part A.2 [Cumulative increase, | Y | |

Table IV – Na
Source-specific Applicable Requirements – Process Vessels
S304 – U-229 LIGHT NAPHTHA HYDROTREATER;
S305 – U-230 PREFRACTIONATOR / NAPHTHA HYDROTREATER;
S307 – U-240 UNICRACKING UNIT; S309 – U-248 UNISAR UNIT;
S318 – U-76 GASOLINE / MID-BARREL BLENDING UNIT;
S319 – U-215 GASOLINE FRACTIONATING UNIT;
S322 – U-40 RAW MATERIALS RECEIVING; S339-U80 REFINED OIL SHIPPING UNIT;
S434, U246 HIGH PRESSURE REACTOR TRAIN (CRACKING);
S435 – REFORMATE SPLITTER; S436 – DEISOPENTANIZER;
S460 – U-250 ULSD HYDROTREATER

| Applicable Requirement | Regulation Title or Description of Requirement | Federally Enforceable (Y/N) | Future Effective Date |
|-------------------------------|--|------------------------------------|------------------------------|
| | PSD, BAAQMD Regulation 2, Rule 5] | | |
| Part A.5 | Additional offsets and PSD analysis, if necessary [Offsets, PSD] | Y | |
| Part A.6 | Annual PM10 limit for S45, S434, and S1010 at Facility A0016, and S2 and S3 at Facility B7419 [1-104, 2-2-304] | Y | |
| Part B | Offset Report [2-1-403, 2-2-410] | Y | |

Table VII – Na
Applicable Limits and Compliance Monitoring Requirements
S304 – U-229 LIGHT NAPHTHA HYDROTREATER;
S305 – U-230 PREFRACTIONATOR / NAPHTHA HYDROTREATER;
S307 – U-240 UNICRACKING UNIT; S309 – U-248 UNISAR UNIT;
S318 – U-76 GASOLINE / MID-BARREL BLENDING UNIT;
S319 – U-215 GASOLINE FRACTIONATING UNIT;
S322 – U-40 RAW MATERIALS RECEIVING; S339, U80 REFINED OIL SHIPPING UNIT;
S434, U246 HIGH PRESSURE REACTOR TRAIN (CRACKING);
S435 – REFORMATE SPLITTER; S436 – DEISOPENTANIZER;
S460 – U-250 ULSD HYDROTREATER

| Type of Limit | Citation of Limit | FE Y/N | Future Effective Date | Limit | Monitoring Requirement Citation | Monitoring Frequency (P/C/N) | Monitoring Type |
|------------------------------|--|--------|-----------------------|--|--------------------------------------|------------------------------|-----------------|
| | For additional requirements for S434, see Table VII-I.1. | | | | | | |
| POC | BAAQMD 8-10-301 | N | | abatement of emissions from process vessel depressurization is required until pressure is reduced to less than 1000 mm Hg (4.6 psig) | BAAQMD 8-10-501 & 8-10-502 | P/E | Records |
| POC | SIP 8-10-301 | Y | | abatement of emissions from process vessel depressurization is required until pressure is reduced to less than 1000 mm Hg (4.6 psig) | SIP 8-10-401.2 | P/E | Records |
| throughput | BAAQMD Condition 20989, Part A | Y | | S305: 9.23 E 6 bbl/yr S435: 6.6 E 6 bbl/yr S436: 4.7 E 6 bbl/yr S437: 10.4 E 9 ft3/yr | BAAQMD Condition 20989, Part A | P/M | records |
| throughput | BAAQMD Condition 20989, Part A | N | | S319: 3.51 E 6 bbl/yr | BAAQMD Condition 20989, Part A | P/M | Records |
| throughput (S460 only) | BAAQMD Condition 21094, Part 1 | Y | | 35,000 bbl/day (monthly average) | BAAQMD Condition 21094, Part 2 | P/D | records |
| throughput (S304 only) | BAAQMD Condition 21095, Part 1 | Y | | 12,198 bbl/day (monthly average) | BAAQMD Condition 21095, Part 2 | P/D | records |

Table VII – Na
Applicable Limits and Compliance Monitoring Requirements
S304 – U-229 LIGHT NAPHTHA HYDROTREATER;
S305 – U-230 PREFRACTIONATOR / NAPHTHA HYDROTREATER;
S307 – U-240 UNICRACKING UNIT; S309 – U-248 UNISAR UNIT;
S318 – U-76 GASOLINE / MID-BARREL BLENDING UNIT;
S319 – U-215 GASOLINE FRACTIONATING UNIT;
S322 – U-40 RAW MATERIALS RECEIVING; S339, U80 REFINED OIL SHIPPING UNIT;
S434, U246 HIGH PRESSURE REACTOR TRAIN (CRACKING);
S435 – REFORMATE SPLITTER; S436 – DEISOPENTANIZER;
S460 – U-250 ULSD HYDROTREATER

| Type of Limit | Citation of Limit | FE Y/N | Future Effective Date | Limit | Monitoring Requirement Citation | Monitoring Frequency (P/C/N) | Monitoring Type |
|--|------------------------------------|--------|-----------------------|---|------------------------------------|------------------------------|--------------------------------------|
| throughput (S318 only) | BAAQMD Condition 22549, Part 1 | Y | | 113,150 bbl/day (except for diesel, which does not have a daily limit) | BAAQMD Condition 22549, Part 3 | P/D | records |
| throughput (S318 only) | BAAQMD Condition 22549, Part 2 | Y | | 41,300,000 bbl/yr excluding diesel | BAAQMD Condition 22549, Part 3 | P/D | records |
| throughput (S307 ± S434 combined only) | BAAQMD Condition 22965, Part 1 | Y | | 6569 ,000 bbl/day | BAAQMD Condition 22965, Part 2 | P/D | records |
| throughput (S309 only) | BAAQMD Condition 22967, Part 1 | Y | | 16,740 bbl/day | BAAQMD Condition 22967, Part 2 | P/D | Records |
| throughput (S339 only) | BAAQMD Condition 22968, Part 1 | Y | | 52,600,000 bbl/12-month period | BAAQMD Condition 22968, Part 2 | P/D | Records |
| throughput (S434 only) | BAAQMD Condition 22969, Part 1 | Y | | 8,395,500 9,855,000 bbl/12-month period | BAAQMD Condition 22969, Part 2 | P/M | Records |
| NOX (S434 only) | BAAQMD Condition 22970, Part A.2.a | Y | | 13.5 tons per any consecutive 12 months for S45, S434, and S1010 combined | BAAQMD Condition 22970, Part A.4.c | P/A | CEMS, source tests, and calculations |

Table VII – Na
Applicable Limits and Compliance Monitoring Requirements
S304 – U-229 LIGHT NAPHTHA HYDROTREATER;
S305 – U-230 PREFRACTIONATOR / NAPHTHA HYDROTREATER;
S307 – U-240 UNICRACKING UNIT; S309 – U-248 UNISAR UNIT;
S318 – U-76 GASOLINE / MID-BARREL BLENDING UNIT;
S319 – U-215 GASOLINE FRACTIONATING UNIT;
S322 – U-40 RAW MATERIALS RECEIVING; S339, U80 REFINED OIL SHIPPING UNIT;
S434, U246 HIGH PRESSURE REACTOR TRAIN (CRACKING);
S435 – REFORMATE SPLITTER; S436 – DEISOPENTANIZER;
S460 – U-250 ULSD HYDROTREATER

| Type of Limit | Citation of Limit | FE Y/N | Future Effective Date | Limit | Monitoring Requirement Citation | Monitoring Frequency (P/C/N) | Monitoring Type |
|---------------------|------------------------------------|--------|-----------------------|--|------------------------------------|------------------------------|--------------------------------------|
| CO (S434 only) | BAAQMD Condition 22970, Part A.2.e | Y | | 40.72 tons per any consecutive 12 months for S45, S434, and S1010 combined | BAAQMD Condition 22970, Part A.4.c | P/A | CEMS, source tests, and calculations |
| POC (S434 only) | BAAQMD Condition 22970, Part A.2.d | Y | | 1.9 tons per any consecutive 12 months for S45, S434, and S1010 combined | BAAQMD Condition 22970, Part A.4.c | P/A | Source tests and calculations |
| PM10 (S434 only) | BAAQMD Condition 22970, Part A.2.c | Y | | 2.9 tons per any consecutive 12 months for S45, S434, and S1010 combined | BAAQMD Condition 22970, Part A.4.c | P/A | Source tests and calculations 2290 |
| PM10 (S434 only) | BAAQMD Condition 22970, Part A.6 | Y | | 16.7 tons per any consecutive 12 months for S45, S434, and S1010 at Facility A0016 and S2 and S3 at Facility B7419, combined | BAAQMD Condition 22970, Part A.6 | P/A | Source tests and calculations |
| Ammonia (S434 only) | BAAQMD Condition 22970, Part A.2.g | N | | 6.35 tons per any consecutive 12 months for S45, S434, and S1010 combined | BAAQMD Condition 22970, Part A.4.c | P/A | Source tests and calculations |
| SO2 (S434 only) | BAAQMD Condition 22970, Part A.2.b | Y | | 34.4 tons per any consecutive 12 months for S45, S434, and S1010 combined | BAAQMD Condition 22970, Part A.4.c | P/A | CEMS, source tests, and calculations |

Table VII – Na
Applicable Limits and Compliance Monitoring Requirements
S304 – U-229 LIGHT NAPHTHA HYDROTREATER;
S305 – U-230 PREFRACTIONATOR / NAPHTHA HYDROTREATER;
S307 – U-240 UNICRACKING UNIT; S309 – U-248 UNISAR UNIT;
S318 – U-76 GASOLINE / MID-BARREL BLENDING UNIT;
S319 – U-215 GASOLINE FRACTIONATING UNIT;
S322 – U-40 RAW MATERIALS RECEIVING; S339, U80 REFINED OIL SHIPPING UNIT;
S434, U246 HIGH PRESSURE REACTOR TRAIN (CRACKING);
S435 – REFORMATE SPLITTER; S436 – DEISOPENTANIZER;
S460 – U-250 ULSD HYDROTREATER

| Type of Limit | Citation of Limit | FE Y/N | Future Effective Date | Limit | Monitoring Requirement Citation | Monitoring Frequency (P/C/N) | Monitoring Type |
|--------------------------------|------------------------------------|--------|-----------------------|--|------------------------------------|------------------------------|--------------------------------|
| Sulfuric Acid Mist (S434 only) | BAAQMD Condition 22970, Part A.2.f | Y | | 6.01 tons per any consecutive 12 months for S45, S434, and S1010 combined | BAAQMD Condition 22970, Part A.4.c | P/A | Source tests, and calculations |
| Sulfuric Acid Mist (S434 only) | BAAQMD Condition 22970, Part A.3 | Y | | 38 lb/day for S45, S434, and S1010 at Facility A0016 and S2 at Facility B7419 combined | BAAQMD Condition 22970, Part A.3 | C/D | CEMS |

Table IV – Ua
Source-specific Applicable Requirements
S1002 – SULFUR PLANT UNIT 236
S1003 – SULFUR PLANT UNIT 238, S301 – MOLTEN SULFUR PIT 234
S302 – MOLTEN SULFUR PIT 236 AND S303 – MOLTEN SULFUR PIT 238

| Applicable Requirement | Regulation Title or Description of Requirement | Federally Enforceable (Y/N) | Future Effective Date |
|------------------------------------|--|------------------------------------|------------------------------|
| BAAQMD Regulation 1 | General Provisions and Definitions (4/18/2012//) | | |
| 1-520 | Continuous Emission Monitoring | Y | |
| 1-520.8 | Monitors pursuant to Regulation 10 | Y | |
| 1-522 | Continuous Emission Monitoring and Recordkeeping Procedures | | |
| 1-522.3 | CEM performance testing | Y | |
| 1-522.4 | reporting of inoperative CEMs | Y | |
| 1-522.5 | CEM calibration requirements | Y | |
| 1-522.6 | CEM accuracy requirements | Y | |
| 1-522.7 | emission limit exceedance reporting requirements | N | |
| 1-522.8 | monitoring data submittal requirements | Y | |
| 1-522.9 | recordkeeping requirements | Y | |
| 1-522.10 | Regulation 1-521 monitors shall meet requirements specified by District | Y | |
| 1-602 | Area and Continuous Monitoring Requirements | N | |
| 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 – note 1 | |
| 1-522.7 | emission limit exceedance reporting requirements | Y - note 1 | |
| BAAQMD Regulation 6, Rule 1 | Particulate Matter, General Requirements (12/5/07) | | |
| 6-1-301 | Ringelmann #1 Limitation | N | |
| 6-1-305 | Visible Particles | N | |
| 6-1-310 | Particulate Weight Limitation | N | |
| 6-1-311 | General Operations | N | |
| 6-1-330 | Sulfur Recovery Units (SO ₃ , H ₂ SO ₄ emission limitations) | N | |
| 6-1-401 | Appearance of Emissions | N | |
| SIP Regulation 6 | Particulate Matter and Visible Emissions (9/4/98) | | |
| 6-301 | Ringelmann #1 Limitation | Y | |
| 6-305 | Visible Particles | Y | |
| 6-310 | Particulate Weight Limitation | Y | |
| 6-311 | General Operations | Y | |

Table IV – Ua
Source-specific Applicable Requirements
S1002 – SULFUR PLANT UNIT 236
S1003 – SULFUR PLANT UNIT 238, S301 – MOLTEN SULFUR PIT 234
S302 – MOLTEN SULFUR PIT 236 AND S303 – MOLTEN SULFUR PIT 238

| Applicable Requirement | Regulation Title or Description of Requirement | Federally Enforceable (Y/N) | Future Effective Date |
|--|---|------------------------------------|------------------------------|
| 6-330 | Sulfur Recovery Units (SO ₃ , H ₂ SO ₄ emission limitations) | Y | |
| 6-401 | Appearance of Emissions | Y | |
| BAAQMD Regulation 9, Rule 1 | Inorganic Gaseous Pollutants – Sulfur Dioxide (3/15/95) | | |
| 9-1-313 | Sulfur Removal Operations at Petroleum Refineries (processing more than 20,000 bbl/day of crude oil) | N | |
| 9-1-313.2 | operation of a sulfur removal and recovery system that removes and recovers: 95% of H ₂ S from refinery fuel gas, 95% of H ₂ S and ammonia from process water streams | N | |
| SIP Regulation 9, Rule 1 | Inorganic Gaseous Pollutants – Sulfur Dioxide (6/8/99) | | |
| 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 H ₂ S from refinery fuel gas, 95% of H ₂ S and ammonia from process water streams | Y – note 1 | |
| BAAQMD Manual of Procedures, Volume V | Continuous Emission Monitoring Policy and Procedures (1/20/82) | Y | |
| 40 CFR 60 Subpart A | General Provisions (03/16/1994) | | |
| 60.7 | Notification and record keeping | Y | |
| 60.7(a)(5) | Notification of beginning of demonstration of continuous monitoring system | Y | |
| 60.7(b) | Records of startup, shutdown, or malfunction, malfunction of control equipment; or periods when CEM is inoperative | Y | |
| 60.7(c) | Excess emissions and monitoring systems reports | Y | |
| 60.7(d) | Format of summary report forms | Y | |
| 60.7(f) | Records | Y | |
| 60.8 | Performance tests | Y | |
| 60.11 | Compliance with standards and maintenance requirements | Y | |
| 60.11(a) | Compliance determined by performance tests and CEM | Y | |

Table IV – Ua
Source-specific Applicable Requirements
S1002 – SULFUR PLANT UNIT 236
S1003 – SULFUR PLANT UNIT 238, S301 – MOLTEN SULFUR PIT 234
S302 – MOLTEN SULFUR PIT 236 AND S303 – MOLTEN SULFUR PIT 238

| Applicable Requirement | Regulation Title or Description of Requirement | Federally Enforceable (Y/N) | Future Effective Date |
|--|---|------------------------------------|------------------------------|
| 60.11(d) | Good air pollution control practice | Y | |
| 60.11(f) | applicable subpart shall supersede any conflicting provisions in paragraphs (a) through (e) | Y | |
| 60.11(g) | Credible evidence | Y | |
| 60.12 | Circumvention | Y | |
| 60.13 | Monitoring requirements | Y | |
| 60.13(a) | CEMs subject to Appendices B and F | Y | |
| 60.13(b) | Installation of CEMs before performance tests | Y | |
| 60.13(d)(1) | Zero and span calibration drifts | Y | |
| 60.13(e) | Continuous operation; minimum frequency of operation | Y | |
| 60.13(e)(2) | Monitoring cycle every 15 minutes | Y | |
| 60.13(f) | Representative measurements | Y | |
| 60.19 | General notification and reporting requirements | Y | |
| NSPS 40 CFR 60 Subpart Ja | Standards of Performance for Petroleum Refineries for which Construction, Reconstruction, or Modification Commenced After May 14, 2007 (12/01/15) | | |
| 60.100a(b) | Applicability to sources built after 5/14/07 | Y | |
| 60.102a | Emissions limitations | Y | |
| 60.102a(a) | Compliance within 60 days of achieving maximum production rate or 180 days after initial startup | Y | |
| 60.102a(f)(1) | Standards for Sulfur Oxides | Y | |
| 60.102a(f)(3) | Periods of maintenance for the sulfur pits | Y | |
| 60.103a | Work Practice Standards | Y | |
| 60.103a(c)(3) | Root cause analysis of any emission limit exceedance or process start-up, shutdown, upset, or malfunction that causes a discharge to the atmosphere in excess 500 lb per day of SO ₂ . | Y | |
| 60.103a(d) | Root cause analysis and corrective action analysis must be completed not later than 45 days after a discharge meeting the conditions specified in 60.103a(c)(3) | Y | |
| 60.103a(d)(1) | Root cause analysis for a single continuous discharge | Y | |
| 60.103a(d)(5) | Root cause analysis for more than one affected facility in the same 24-hour period | Y | |
| 60.103a(e) | Implementation of corrective action(s) identified pursuant to | Y | |

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S1002 – SULFUR PLANT UNIT 236
S1003 – SULFUR PLANT UNIT 238, S301 – MOLTEN SULFUR PIT 234
S302 – MOLTEN SULFUR PIT 236 AND S303 – MOLTEN SULFUR PIT 238

| Applicable Requirement | Regulation Title or Description of Requirement | Federally Enforceable (Y/N) | Future Effective Date |
|--|---|------------------------------------|------------------------------|
| | 60.103a(d) | | |
| 60.104a | Performance tests | Y | |
| 60.104a(a) | Initial performance test | Y | |
| 60.104a(c) | Allowable performance tests | Y | |
| 60.104a(h) | Performance tests for SRUs | Y | |
| 60.104a(h)(1) | Method 1 for sample and velocity traverses | Y | |
| 60.104a(h)(2) | Method 2 for velocity and volumetric flow rate | Y | |
| 60.104a(h)(3) | Method 3, 3A, or 3B for gas analysis | Y | |
| 60.104a(h)(4) | Method 6, 6A, or 6C for SO ₂ concentration | Y | |
| 60.104a(h)(5) | Method 15 or 15A for reduced sulfur compounds and H ₂ S concentrations | Y | |
| 60.106a | Monitoring of emissions and operations for sulfur recovery units | Y | |
| 60.106a(a) | Continuous monitoring systems | Y | |
| 60.106a(a)(1) | Continuous SO ₂ and O ₂ Monitoring systems | Y | |
| 60.106a(b) | Excess emissions | | |
| 60.108a | Recordkeeping and reporting requirements. | Y | |
| 60.108a(a) | Compliance with notification, recordkeeping, and reporting requirements in §60.7 and other requirements as specified in this section. | Y | |
| 60.108a(b) | Notification to Administrator of monitoring option | Y | |
| 60.108a(c)(6) | Notification of discharges greater than 500 lb SO ₂ /day and discharge to flare greater than 500,000 scfd | Y | |
| 60.108a(d) | Excess emissions reports | Y | |
| NSPS 40 CFR 60 Appendix B | Performance Specifications | | |
| Performance Specification 2 | Specifications and Test Procedures for SO ₂ and NO _x Continuous Emission Monitoring Systems in Stationary Sources | Y | |
| NSPS 40 CFR 60 Appendix F | Quality Assurance Procedures | | |
| 40 CFR 63 Subpart | National Emission Standards for Hazardous Pollutants for Petroleum Refineries: Catalytic Cracking Units, Catalytic | Y | |

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S1002 – SULFUR PLANT UNIT 236
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S302 – MOLTEN SULFUR PIT 236 AND S303 – MOLTEN SULFUR PIT 238

| Applicable Requirement | Regulation Title or Description of Requirement | Federally Enforceable (Y/N) | Future Effective Date |
|-------------------------------|---|------------------------------------|------------------------------|
| UUU | Reforming Units, and Sulfur Recovery Units (12/01/15) | | |
| 63.1561 | Am I subject to this subpart? | Y | |
| 63.1562(a) | New, reconstructed, or existing affected sources | Y | |
| 63.1562(b)(3) | Sulfur recovery units and tail gas treatment units | Y | |
| 63.1563 | When do I have to comply with this subpart? | Y | |
| 63.1563(b) | Deadline for existing sources-4/11/05 | Y | |
| 63.1563(e) | Notification requirements | Y | |
| 63.1568 | What are my requirements for HAP emissions from sulfur recovery units? | Y | |
| 63.1568(a) | Emission limitations and work practice standards | Y | |
| 63.1568(a)(1) | Sulfur Emission Limitation from Claus sulfur recovery units electing to meet NSPS Limits: 250 ppmvd SO ₂ at 0% excess air. (Table 29, Item 2.a) | Y | |
| 63.1568(a)(3) | Prepare Operation, Maintenance, and Monitoring Plan and operate at all times according to the procedures in the plan | Y | |
| 63.1568(a)(4) | Options for compliance during periods of startup and shutdown | Y | |
| 63.1568(b) | Demonstrate Initial Compliance with Emission Limitation and Work Practice Standard | Y | |
| 63.1568(b)(1) | Continuous Emission Monitoring System to measure and record hourly average SO ₂ concentration, with O ₂ monitor to correct excess air concentration (Table 31, Item 2.a) | Y | |
| 63.1568(b)(2) | Performance Test: measure SO ₂ concentration using CEMS every 15 minutes for 24 hours and reduce the data to 1-hr averages (Table 32, Item 1) | Y | |
| 63.1568(b)(5) | Demonstrate Initial Compliance with Emission Limitation: Average SO ₂ emissions measured by CEMS in initial performance test not greater than 250 ppmvd at 0% excess O ₂ , and monitoring system meets applicable requirements (Table 33, Item 2.a) | Y | |
| 63.1568(b)(6) | Demonstrate initial compliance by submitting Operation, Maintenance, and Monitoring Plan | Y | |
| 63.1568(b)(7) | Submit Notice of Compliance Status | Y | |
| 63.1568(c) | Demonstrate Continuous Compliance with Emission Limitation and Work Practice Standards | Y | |
| 63.1568(c)(1) | Demonstrate Continuous Compliance with Emission Limitation: collect hourly average SO ₂ monitoring data; maintain hourly | Y | |

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S1002 – SULFUR PLANT UNIT 236
S1003 – SULFUR PLANT UNIT 238, S301 – MOLTEN SULFUR PIT 234
S302 – MOLTEN SULFUR PIT 236 AND S303 – MOLTEN SULFUR PIT 238

| Applicable Requirement | Regulation Title or Description of Requirement | Federally Enforceable (Y/N) | Future Effective Date |
|-------------------------------|---|------------------------------------|------------------------------|
| | average below applicable limit; determine and record each 12-hour concentration; report 12-hour concentration greater than applicable limitation (Table 34, Item 2.a) | | |
| 63.1568(c)(2) | Demonstrate Continuous Compliance with Work Practice Standards by complying with the procedures in Operation, Maintenance, and Monitoring Plan. | Y | |
| 63.1570 | What are my general requirements for complying with this subpart? | Y | |
| 63.1570(a) | Operate in compliance with non-opacity standards at all times | Y | |
| 63.1570(c) | Operate and maintain source including pollution control and monitoring equipment in a manner consistent with safety and good air pollution control practices for minimizing emissions. | Y | |
| 63.1570(d) | Between 4/11/05 and the date continuous monitoring systems are installed and validated and operating limits have been set, maintain a log detailing operation and maintenance of process and equipment. | Y | |
| 63.1570(f) | Report deviations from compliance with this subpart according to the requirements of 63.1575 | Y | |
| 63.1571 | How and when do I conduct a performance test or other initial compliance demonstration? | Y | |
| 63.1571(a) | Conduct Performance Test and submit results no later than 150 days after compliance date | Y | |
| 63.1571(a)(1) | For emission limitation or work practice standard where compliance not demonstrated using performance test, opacity observation, or visible emission observation, conduct initial compliance demonstration within 30 days after compliance date | Y | |
| 63.1571(b) | Requirements for Performance Tests | Y | |
| 63.1571(b)(1) | Conduct performance tests in accordance with the requirements of 63.7(e) and at maximum representative operating capacity for the process. | Y | |
| 63.1571(b)(2) | Conduct three separate test runs of at least an hour for each performance test | Y | |
| 63.1571(b)(3) | Conduct each performance evaluation in accordance with the requirements of 63.8(e) | Y | |
| 63.1571(b)(4) | Arithmetic average of emission rates | Y | |
| 63.1572 | What are my monitoring installation, operation, and maintenance requirements? | Y | |

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S1003 – SULFUR PLANT UNIT 238, S301 – MOLTEN SULFUR PIT 234
S302 – MOLTEN SULFUR PIT 236 AND S303 – MOLTEN SULFUR PIT 238

| Applicable Requirement | Regulation Title or Description of Requirement | Federally Enforceable (Y/N) | Future Effective Date |
|-------------------------------|---|------------------------------------|------------------------------|
| 63.1572(a) | Requirements for installation, operation, and maintenance of continuous emission monitoring system | Y | |
| 63.1572(a)(1) | SO2 CEMS must meet requirements of Performance Specification 2 (40 CFR Part 60, App B) (Table 40, Item 4) | Y | |
| 63.1572(a)(2) | Conduct performance evaluation for SO2 CEMS according to Performance Specification 2 (Table 40, Item 4) | Y | |
| 63.1572(a)(3) | CEMS must complete one cycle of operation for each 15-minute period | Y | |
| 63.1572(a)(4) | Data reduction per 63.8(g)(2) | Y | |
| 63.1572(d) | Data monitoring and collection requirements | Y | |
| 63.1572(d)(1) | Conduct all monitoring in a continuous operation at all times the affected source is operating | Y | |
| 63.1572(d)(2) | Data recorded during QA/QC activities (including calibration checks and required zero and span adjustments) not used for compliance purposes | Y | |
| 63.1573 | What are my monitoring alternatives? | Y | |
| 63.1573(e) | Monitoring for alternative parameters (optional) | Y | |
| 63.1573(f) | Alternative Monitoring Requests (optional) | Y | |
| 63.1574 | What notifications must I submit and when? | Y | |
| 63.1574(a) | Notifications Required by Subpart A | Y | |
| 63.1574(a)(1) | Notifications of reconstruction | Y | |
| 63.1574(a)(2) | Submit notification of intent to conduct performance test 30 days before scheduled (instead of 60 days) | Y | |
| 63.1574(a)(3) | Notification of Compliance Status | Y | |
| 63.1574(a)(3)(ii) | Submit Notification of Compliance Status for initial compliance demonstration that includes a performance test, no later than 150 days after source compliance date | Y | |
| 63.1574(d) | Information to be Submitted in Notice of Compliance Status (Table 42): identification of affected sources and emission points (Item 1); initial compliance demonstration (Item 2); continuous compliance (Item 3) | Y | |
| 63.1574(f) | Requirement to prepare Operation, Maintenance, and Monitoring Plan | Y | |

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S1003 – SULFUR PLANT UNIT 238, S301 – MOLTEN SULFUR PIT 234
S302 – MOLTEN SULFUR PIT 236 AND S303 – MOLTEN SULFUR PIT 238

| Applicable Requirement | Regulation Title or Description of Requirement | Federally Enforceable (Y/N) | Future Effective Date |
|-------------------------------|--|------------------------------------|------------------------------|
| 63.1574(f)(1) | Submit plan to permitting authority for review and approval along with notification of compliance status. Include duty to prepare and implement plan into Part 70 or 71 permit. | Y | |
| 63.1574(f)(2) | Minimum contents of Operation, Maintenance, and Monitoring Plan | Y | |
| 63.1574(f)(2)(ii) | Procedures for monitoring emissions and process and control device operating parameters for each affected source. | Y | |
| 63.1574(f)(2)(viii) | Monitoring schedule | Y | |
| 63.1574(f)(2)(ix) | Quality control plan for continuous emission monitor | Y | |
| 63.1574(f)(2)(x) | Maintenance schedule for monitoring systems and control devices | Y | |
| 63.1575 | What reports must I submit and when? | Y | |
| 63.1575(a) | Required reports: Statement that there were no deviations or report including information in 63.1575(c) through (e) (Table 43, Item 1) on a semi-annual basis; Performance test and CEMS performance evaluation data (Table 43, Item 2) within 60 days after the test completion date according to 63.1575(k) | Y | |
| 63.1575(b) | Specified semiannual report submittal dates | Y | |
| 63.1575(c) | Information required in compliance report | Y | |
| 63.1575(d) | Information required for deviations from emission limitations and work practice standards where CEMS or COMS is not used to comply with emission limitation or work practice standard | Y | |
| 63.1575(e) | Information required for deviations from emission limitations and work practice standards where CEMS or COMS is used to comply with emission limitation or work practice standard | Y | |
| 63.1575(f) | Additional information for compliance reports | Y | |
| 63.1575(f)(1) | Requirement to submit performance test reports | Y | |
| 63.1575(f)(2) | Submittal of requested change in the applicability of an emission standard | Y | |
| 63.1575(g) | Submittal of reports required by other regulations in place of or as part of compliance report if they contain the required information | Y | |
| 63.1575(k) | Electronic submittal of performance test and CEMS performance evaluation data | Y | |

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S1002 – SULFUR PLANT UNIT 236
S1003 – SULFUR PLANT UNIT 238, S301 – MOLTEN SULFUR PIT 234
S302 – MOLTEN SULFUR PIT 236 AND S303 – MOLTEN SULFUR PIT 238

| Applicable Requirement | Regulation Title or Description of Requirement | Federally Enforceable (Y/N) | Future Effective Date |
|-------------------------------|---|------------------------------------|------------------------------|
| 63.1575(k)(1) | Submittal of performance test results within 60 days | Y | |
| 63.1575(k)(2) | Submittal of CEMS performance evaluation data within 60 days | Y | |
| 63.1576 | What records must I keep, in what form, and for how long? | Y | |
| 63.1576(a) | Required Records – General | Y | |
| 63.1576(b) | Records for CEMs | Y | |
| 63.1576(b)(1) | Records described in §63.10(b)(2)(vi) through (xi). | Y | |
| 63.1576(b)(3) | Performance evaluation plan as required in §63.8(d)(2). | Y | |
| 63.1576(b)(4) | Requests for alternatives to the relative accuracy test for continuous emission monitoring systems as required in §63.8(f)(6)(i). | Y | |
| 63.1576(b)(5) | Records of the date and time that each deviation started and stopped. | Y | |
| 63.1576(d) | Records required by Tables 34 and 35 of Subpart UUU | Y | |
| 63.1576(e) | Maintain copy of operation, maintenance, and monitoring plan | Y | |
| 63.1576(f) | Records of changes that affect emission control system performance | Y | |
| 63.1576(g) | Records in a form suitable and readily available for review | Y | |
| 63.1576(h) | Maintain records for 5 years | Y | |
| 63.1576(i) | Records onsite for 2 years; may be maintained offsite for remaining 3 years | Y | |
| BAAQMD Condition 18255 | | | |
| Part 13 | Tail Gas Root Cause Analysis [Basis: Consent Decree Case No. 05-0258, paragraph 152] | Y | |
| BAAQMD Condition 19278 | | | |
| Part 3 | Annual source test to verify SO ₃ and H ₂ SO ₄ exhaust concentrations. [Basis: Regulation 6-330] | Y | |
| Part 4 | Visible emissions monitoring for particulate [Basis: Regulation 2-6-503] | Y | |
| Part 5 | Source test within 90 days of issuance of Major Facility Review permit pursuant to Application 10994; Annual testing [2-6-503] | Y | |
| Part 6 | Daily and annual throughput limits for S1002 and S1003 [Cumulative Increase] | Y | |
| BAAQMD Condition | APPLIES TO S1002, S1003 ONLY | | |

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S1002 – SULFUR PLANT UNIT 236
S1003 – SULFUR PLANT UNIT 238, S301 – MOLTEN SULFUR PIT 234
S302 – MOLTEN SULFUR PIT 236 AND S303 – MOLTEN SULFUR PIT 238

| Applicable Requirement | Regulation Title or Description of Requirement | Federally Enforceable (Y/N) | Future Effective Date |
|-------------------------------|--|-----------------------------|-----------------------|
| 21099 | | | |
| Part 1 | Light hydrocarbon control valve requirements [Basis: BACT] | Y | |
| Part 2 | Light hydrocarbon flange/connector requirements [Basis: BACT] | Y | |
| Part 3 | Centrifugal compressor requirements [Basis: BACT] | Y | |
| Part 4 | Light hydrocarbon centrifugal pump requirements [Basis: BACT] | Y | |
| Part 5 | Monitoring and repair program requirement [Basis: BACT] | Y | |
| Part 6 | ULSD project component count report requirement [Basis: BACT, Cumulative Increase, Toxic Management Policy] | Y | |
| BAAQMD Condition 22964 | APPLIES TO S301, S302, S303 | | |
| Part 1 | Throughput limit for S301, S302, S303 [Cumulative Increase] | <u>Y</u> | |
| Part 4 | Abatement requirement for S301 [Consent Decree Case No. 05-0258, paragraph 123, DATE: 1/27/05; Consent Decree Case No. 05-0258 amendment, paragraph 123, DATE: 5/1/07; 40 CFR 60.104(a)(2)(i)] | <u>Y</u> | |
| Part 5 | Abatement requirement for S302 [Consent Decree Case No. 05-0258, paragraph 123, DATE: 1/27/05; Consent Decree Case No. 05-0258 amendment, paragraph 123, DATE: 5/1/07; 40 CFR 60.104(a)(2)(i)] | <u>Y</u> | |
| Part 6 | Abatement requirement for S303 [Consent Decree Case No. 05-0258, paragraph 123, DATE: 1/27/05; Consent Decree Case No. 05-0258 amendment, paragraph 123, DATE: 5/1/07; 40 CFR 60.104(a)(2)(i)] | <u>Y</u> | |
| Part 7 | Maintenance allowance for sulfur pits [Consent Decree Case No. 05-0258 amendment, paragraph 123, DATE: 5/1/07] | <u>Y</u> | |
| Part 8 | Recordkeeping [Cumulative Increase] | Y | |

1 This section has been removed from BAAQMD Regulations because it has been superseded. Nevertheless, the source must comply with this regulation until US EPA has reviewed and approved (or disapproved) the District’s revision of the regulation.

Table VII – Ua
Applicable Limits and Compliance Monitoring Requirements
S1002 - SULFUR PLANT UNIT 236;
S1003 - SULFUR PLANT UNIT 238; S301 - MOLTEN SULFUR PIT 234;
S302 - MOLTEN SULFUR PIT 236; S303 - MOLTEN SULFUR PIT 238

| Type of Limit | Citation of Limit | FE Y/N | Future Effective Date | Limit | Monitoring Requirement Citation | Monitoring Frequency (P/C/N) | Monitoring Type |
|----------------|------------------------------------|--------|-----------------------|--|---------------------------------|------------------------------|---------------------------------------|
| (H2S, ammonia) | BAAQMD 9-1-313.2 and SIP 9-1-313.2 | N Y | | 95% of H2S in refinery fuel gas is removed and recovered on a refinery-wide basis AND 95% of H2S in process water streams is removed and recovered on a refinery-wide basis AND 95% of ammonia in process water streams is removed | None | N | None |
| Opacity | BAAQMD 6-1-301 | N | | Ringelmann No. 1 for no more than 3 minutes/hour | BAAQMD Condition 19278 Part 4 | P/M | Visible emissions inspection |
| Opacity | SIP 6-301 | Y | | Ringelmann No. 1 for no more than 3 minutes/hour | BAAQMD Condition 19278 Part 4 | P/M | Visible emissions inspection |
| FP | BAAQMD 6-1-305 | N | | Prohibition of nuisance | None | N | None |
| FP | SIP 6-305 | Y | | Prohibition of nuisance | None | N | None |
| FP | BAAQMD 6-1-310 | N | | 0.15 grain/dscf | BAAQMD Condition 19278 Part 5 | P/A | Source test on thermal oxidizer stack |
| FP | SIP 6-310 | Y | | 0.15 grain/dscf | BAAQMD Condition 19278 Part 5 | P/A | Source test on thermal oxidizer stack |
| FP | SIP 6-1-311 | Y | After turn-around | 4.10P ^{0.67} lb/hr, where P is process weight, ton/hr | BAAQMD Condition 19278 Part 5 | P/A | Source test on thermal oxidizer stack |

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S1002 - SULFUR PLANT UNIT 236;
S1003 - SULFUR PLANT UNIT 238; S301 - MOLTEN SULFUR PIT 234;
S302 - MOLTEN SULFUR PIT 236; S303 - MOLTEN SULFUR PIT 238

| Type of Limit | Citation of Limit | FE Y/N | Future Effective Date | Limit | Monitoring Requirement Citation | Monitoring Frequency (P/C/N) | Monitoring Type |
|---|--|--------|-----------------------|--|--|------------------------------------|---------------------------------------|
| FP | BAAQMD 6-1-311 | N | After turn-around | 4.10P ^{0.67} lb/hr, where P is process weight, ton/hr | BAAQMD Condition 19278 Part 5 | P/A | Source test on thermal oxidizer stack |
| SO3, H2SO4 | BAAQMD 6-1-330 | N | | 0.08 grain/dscf exhaust concentration of SO3 and H2SO4, expressed as 100% H2SO4 | BAAQMD Condition 19278 Part 2 | P/A | Source Test |
| SO3, H2SO4 | SIP 6-330 | Y | | 0.08 grain/dscf exhaust concentration of SO3 and H2SO4, expressed as 100% H2SO4 | BAAQMD Condition 19278 Part 3 | P/A | Source Test |
| SO2 | 40 CFR 60.102a(f)(1) | Y | | 250 ppm at 0% excess air, dry, 12-hr rolling average | 40 CFR 60.106a | C | CEM on thermal oxidizer stack |
| SO2 | 40 CFR 63.1568(a)(1)(i) | Y | | 250 ppm at 0% excess air, 12-hr rolling average | 40 CFR 63.1572 | C | CEM on thermal oxidizer stack |
| Throughput (S1002 only) | BAAQMD Condition 19278, part 6 | Y | | 106.3 long ton/day; 31,390 long ton/yr | BAAQMD Condition 19278, Part 6 | P/D | records |
| Throughput (S1003 only) | BAAQMD Condition 19278, part 6 | Y | | 134.5 long ton/day; 41,975 long ton/yr | BAAQMD Condition 19278, Part 6 | P/D | records |
| throughput | BAAQMD Condition 19278, part 6 | Y | | 73,365 long ton/yr 201 long ton/day for S1002 and S1003 | BAAQMD Condition 19278, Part 6 | P/A P/D | records |

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S1002 - SULFUR PLANT UNIT 236;
S1003 - SULFUR PLANT UNIT 238; S301 - MOLTEN SULFUR PIT 234;
S302 - MOLTEN SULFUR PIT 236; S303 - MOLTEN SULFUR PIT 238

| Type of Limit | Citation of Limit | FE Y/N | Future Effective Date | Limit | Monitoring Requirement Citation | Monitoring Frequency (P/C/N) | Monitoring Type |
|--------------------------------------|--------------------------------|--------|-----------------------|--|---------------------------------|------------------------------|-----------------|
| throughput | BAAQMD Condition 22964, Part 1 | Y | | 98,915 long ton/yr for S301, S302, S303 | BAAQMD Condition 22964, Part 8 | P/M | records |
| Maintenance allowance for sulfur pit | 40 CFR 60.102a(f) (3) | Y | | S301-S303 only: 40 CFR 60.102a(f)(1) shall not apply to the sulfur pit for 240 hours/yr during maintenance | 40 CFR 60.102a(f) (3) | P/E | records |