# Appendix P: Statement of Compliance

**6.0 Statement of Compliance**

*6.1 Air District Regulations, New Source Performance Standards (NSPS), and National Emission Standards for Hazardous Air Pollutants (NESHAP) Applicability by Source*

The changes do not result in any increase in emissions that is a "major modification" as per Regulation 2-1-234.2, as demonstrated in Appendix P. To demonstrate this, the "Federal Backstop" test was performed to compare the emissions difference between the actual 2-year average baseline emissions prior to the changes with the projected actual emissions that will occur as a result of the changes against the federal "significance" thresholds. Permit Condition #27646 has been imposed for the owner/operator to verify that this project is not a major modification using actual emissions 5 years after the implementation of this project.

**Sources S-11, S-12, and S-13 (Heaters not subject to BACT, with CEMS)**

Sources S-11, S-12, and S-13 (referred to as "the heaters not subject to BACT, with CEMS") are currently subject to and expected to continue to comply with the following regulations:

- Regulation 1 – General Provisions and Definitions, including:
  - 1-520 – Continuous Emission Monitoring
    - Install continuous emission monitoring as required by Regulations 10, 12 and 2-1-403
  - 1-522 – Continuous Emission Monitoring and Recordkeeping Procedures
    - Continuous emission monitors shall comply with monitoring and recordkeeping procedures, and shall report to the APCO on excess of any emission standard to which the source is required to conform.
      - 1-522.3 – CEM Performance Testing
      - 1-522.4 – Reporting of Inoperative CEMS
      - 1-522.5 – CEM Calibration Requirements
      - 1-522.6 – CEM Accuracy Requirements
      - 1-522.7 – Emission Limit Exceedance Reporting Requirements
      - 1-522.8 – Monitoring Data Submittal Requirements
      - 1-522.9 – Recordkeeping Requirements
      - 1-522.10 – Regulation 1-521 Monitors Shall Meet Requirements Specified by District
  - 1-602 – Area and Continuous Monitoring Requirements
    - The procedures for selection and placement, installation scheduling, performance testing, reporting, records retention and instrument calibration are detailed in the Manual of Procedures.
- Regulation 6, Rule 1 – General Requirements for Particulate Matter, including:
  - 6-1-114 – Exemption from 6-1-310.2 and 6-1-311.2 emission limits. Total Suspended Particulate (TSP) Emission Limits for Fuel Combustion Sections 6-1-310.2 and 311.2 shall not apply to particulate matter emissions from gas, liquid and solid fuel fired indirect heat exchanger, including furnaces, heaters, boilers, gas turbines and supplemental fuel-fired heat recovery steam generators and gas fuel fired control devices that control only gaseous emissions
  - 6-1-301 – Ringelmann No. 1 Limitation
    - The facility shall not emit from any source for a period or aggregate periods of more than three minutes in any hour, a visible emission that is as dark or darker than No. 1 on the Ringelmann Chart, or of such opacity as to obscure an observer's view to an equivalent or greater degree.
  - 6-1-305 – Visible Particles

        - The facility shall not emit particles from any operation in sufficient number to cause annoyance to any other person where the particles are large enough to be visible as individual particles at the emission point, or of such size and nature as to be visible individually as incandescent particles.
    - 6-1-310.1 – Total Suspended Particulate (TSP) Concentration Limits. No person shall emit TSP from any source in excess of 343 mg per sdcm (0.15 gr/dscf) of exhaust gas volume

Below is a table demonstrating compliance with Regulation 6-1-310 (Total Suspended Particulate (TSP) Concentration Limits). Detailed calculations are provided in Appendix A.

**Total Suspended Particulate (TSP) Emission Concentration Limit Comparison**

| Source No | Process Exhaust (Rate dscf/min) | TSP Emission (gr/dscf) | TSP Emission Rate limit (gr TSP/dscf) Reg 6-1-310.1 | Comply with TSP Emission Weights limit (Y/N) |
|---|---|---|---|---|
| S-11 | 1,142 | 0.08 | 0.15 | Y |
| S-12 | 444 | 0.08 | 0.15 | Y |
| S-13 | 2,052 | 0.08 | 0.15 | Y |

    - 6-1-401 – Appearance of Emissions
        - The facility shall comply with the requirements of Regulation 6-102: Any violation of any of the requirements in the Regulation 6 Rules is subject to enforcement action under the applicable provisions of the California Health & Safety Code.
    - 6-1-500 Monitoring and Records
        - The facility shall comply with all applicable monitoring and records contained in this section.
    - 6-1-601 – Applicability of Test Methods
        - The common test methods cited in Regulation 6 shall apply to this Rule, including the methods cited in Regulation 6-601: Assessment of Visible Emissions, and Regulation 6-602: Assessment of Opacity.

- Regulation 9, Rule 10 – Nitrogen Oxides and Carbon Monoxide from Boilers, Steam Generators, and Process Heaters in Refineries, including:
    - 9-10-301 – Refinery-wide NOx Emission Limit of 0.033 lb NOx/MMBtu
        - The facility shall not exceed a refinery-wide emission rate from boilers, steam generators and process heaters, excluding CO boilers, of 0.033 pounds NOx per million BTU of heat input, based on an operating day average.
            - 9-10-301.3 – Units Test-Fired on Non-Gaseous Fuel
            - 9-10-301.5 – Units Temporarily Out of Service
    - 9-10-303 – Federal Refinery-wide and CO Boiler NOx Emission Limits
        - The facility shall not exceed a refinery-wide emission rate from boilers, steam generators or process heaters, excluding CO boilers, of 0.20 pounds NOx per million BTU of heat input, based on an operating day average.
    - 9-10-305 – CO Emission Limit
        - Except during start-up, shutdown or curtailed operation, the facility shall not operate a boiler, steam generator or process heater, including CO boilers, unless carbon monoxide emissions of 400 ppmv, dry at 3% oxygen, based on an operating day average, are not exceeded.
    - 9-10-406 – Determination of Compliance
        - CEMs or parametric monitoring

- 9-10-407 – Boiler, Steam Generator, and Process Heater Status Report
  - Update make, model and emission rates for all burners no later than 30 days after any non-identical burner change or replacement

- 9-10-502 – Monitoring
  - The facility shall maintain good working order and operate in-stack nitrogen oxide (NOx), carbon monoxide (CO), and oxygen (O2) continuous emission monitoring system (CEMS), or equivalent parametric monitoring system as specified in a Permit to Operate, and fuel-flow meter in each fuel line for each boiler, steam generator and process heater, including each CO boiler.
    - 9-10-502.1 – Parametric Monitor or Equivalent
    - 9-10-502.2 – Fuel-Flow Meter
- 9-10-504 – Records
  - The owner/operator of a source subject to this rule shall keep the following records, in a form suitable for inspection for a period of at least five (5) years: (1) The continuous emission monitoring system (CEMS) measurements for NOx and CO (ppmv corrected to 3% oxygen) and O2 (percent by volume on a dry basis) or equivalent parametric monitoring system parameters; and hourly (lb/hour) and daily (lb/day) NOx emissions for each source. (2) The type, heat input (BTU/hr and BTU/day), and higher heating value of each fuel burned, and the injection rate for any reactant chemicals used by the emission control system(s) on a daily basis, (3) the date, time, and duration of any startup, shutdown or malfunction in the operation of any unit, emission control equipment or emission monitoring equipment, (4) the results of performance testing, evaluations, calibrations, checks, adjustments, and maintenance of any CEMS required by this rule, (5) a list of all sources subject to the NOx refinery-wide emission rate limits, (6) total NOx emissions and total heat input for all sources on a daily basis, (7) the date, time and duration of all start-up and shutdown periods, and (8) the results of source tests.
    - 9-10-504.1 – Recordkeeping Requirements
- 9-10-505 – Reporting Requirements
  - The facility shall report to the APCO any violation of this Rule, submit a written report for each calendar quarter to the APCO, and submit to the APCO a permit application to amend the Alternate NOx Compliance Plan whenever Section 9-10-308.4 is triggered.
- 9-10-601 – Determination of Nitrogen Oxides
  - Compliance with the nitrogen oxide emission requirements shall be determined by a continuous emission monitoring system (CEMS) that meets the requirements of Regulation 1-522, or by an equivalent parametric monitoring system that is authorized in a Permit to Operate and that meets the requirements of Regulation 1-523. CEMS operation and compliance with Section 9-10-404.3 shall be verified by source test as set forth in the District Manual of Procedures or any other method approved by the APCO.
- 9-10-602 – Determination of Carbon Monoxide and Stack-Gas Oxygen
  - Compliance with the carbon monoxide emission requirements shall be determined by a continuous emission monitoring system (CEMS) that meets the requirements of Regulation 1-522, or by an equivalent parametric monitoring system that is authorized in a Permit to Operate and that meets the requirements of Regulation 1-523. CEMS operation and compliance with Section 9-10-404.3 shall be verified by source test as set forth in the District Manual of Procedures or any other method approved by the APCO.
- 9-10-603 – Compliance Determination
  - All emission determinations shall be made in the as-found operating condition, except during periods of start-up or shutdown.

- S-11, S-12 and S-13 are currently subject to and will continue to comply with 40 CFR Part 63, Subpart DDDDD – National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers, and Process Heaters.

- S-11, S-12 and S-13 are currently subject to 40 CFR 60, Subpart J, NSPS for Petroleum Refineries by date of construction, reconstruction, modification, but it will no longer apply as a result of the Rodeo Renewed Project, as the Facility will no longer be considered a "petroleum refinery" under the definitions of NSPS Subpart J (40 CFR Part 60, Subpart J – Standards of Performance for Petroleum Refineries). The heaters not subject to BACT, with CEMS will no longer be subject to NSPS J. The heaters not subject to BACT, with CEMS will not be subject to MACT FFFF after the project, as it will not be in HAP service. However, a requirement in Permit Condition #1694 will be added to retain both the H2S standard specified in NSPS J and the corresponding monitoring requirements.

**Source S-22 (Heater without CEMS)**

Source S-22 (referred to as "the heater without CEMS") is currently subject to and expected to continue to comply with the following regulations:

- Regulation 1 – General Provisions and Definitions, including:
  - 1-521 – Monitoring May Be Required
  - 1-523 – Parametric Monitoring and Recordkeeping Procedures
    - Continuous parametric monitors shall comply with monitoring and recordkeeping procedures, and shall report to the APCO on any violation of permit conditions or District regulations to which the source is required to conform.
      - 1-523.1 – Parametric Monitor Periods of Inoperation
      - 1-523.2 – Limits on Periods of Inoperation
      - 1-523.3 – Reports of Violations
      - 1-523.4 – Records
      - 1-523.5 – Maintenance and Calibration
- Regulation 6, Rule 1 – General Requirements for Particulate Matter, including:
  - 6-1-114 – Limited Exemption from 6-1-310.2 and 6-1-311.2 emission limits. Total Suspended Particulate (TSP) Emission Limits for Fuel Combustion Sections 6-1-310.2 and 311.2 shall not apply to particulate matter emissions from gas, liquid and solid fuel fired indirect heat exchanger, including furnaces, heaters, boilers, gas turbines and supplemental fuel-fired heat recovery steam generators and gas fuel fired control devices that control only gaseous emissions
  - 6-1-301 – Ringelmann No. 1 Limitation
    - The facility shall not emit from any source for a period or aggregate periods of more than three minutes in any hour, a visible emission that is as dark or darker than No. 1 on the Ringelmann Chart, or of such opacity as to obscure an observer's view to an equivalent or greater degree.
  - 6-1-305 – Visible Particles
    - The facility shall not emit particles from any operation in sufficient number to cause annoyance to any other person where the particles are large enough to be visible as individual particles at the emission point, or of such size and nature as to be visible individually as incandescent particles.
  - 6-1-310.1 – Total Suspended Particulate (TSP) Concentration Limits. No person shall emit TSP from any source in excess of 343 mg per sdcm (of 0.15 gr/dscf) of exhaust gas volume

Below is a table demonstrating compliance with Regulation 6-1-310 (Total Suspended Particulate (TSP) Concentration Limits). Detailed calculations are provided in Appendix A.

- **Total Suspended Particulate (TSP) Emission Concentration Limit Comparison**

| Source No | Process Exhaust (Rate dscf/min) | TSP Emission (gr/dscf) | TSP Emission Rate limit (gr TSP/dscf) Reg 6-1-310.1 | Comply with TSP Emission Weights limit (Y/N) |
|---|---|---|---|---|
| S-22 | 328 | 0.08 | 0.15 | Y |

- 6-1-401 – Appearance of Emissions
  - The facility shall comply with the requirements of Regulation 6-102: Any violation of any of the requirements in the Regulation 6 Rules is subject to enforcement action under the applicable provisions of the California Health & Safety Code.
- 6-1-500 Monitoring and Records
  - The facility shall comply with all applicable monitoring and records contained in this section.
- 6-1-601 – Applicability of Test Methods
  - The common test methods cited in Regulation 6 shall apply to this Rule, including the methods cited in Regulation 6-601: Assessment of Visible Emissions, and Regulation 6-602: Assessment of Opacity.

- Regulation 9, Rule 10 – Nitrogen Oxides and Carbon Monoxide from Boilers, Steam Generators, and Process Heaters in Refineries, including:
  - 9-10-301 – Refinery-wide NOx Emission Limit of 0.033 lb NOx/MMBtu
    - The facility shall not exceed a refinery-wide emission rate from boilers, steam generators and process heaters, excluding CO boilers, of 0.033 pounds NOx per million BTU of heat input, based on an operating day average.
      - 9-10-301.3 – Units Test-Fired on Non-Gaseous Fuel
      - 9-10-301.5 – Units Temporarily Out of Service
  - 9-10-303 – Federal Refinery-wide and CO Boiler NOx Emission Limits
    - The facility shall not exceed a refinery-wide emission rate from boilers, steam generators or process heaters, excluding CO boilers, of 0.20 pounds NOx per million BTU of heat input, based on an operating day average.
  - 9-10-305 – CO Emission Limit
    - Except during start-up, shutdown or curtailed operation, the facility shall not operate a boiler, steam generator or process heater, including CO boilers, unless carbon monoxide emissions of 400 ppmv, dry at 3% oxygen, based on an operating day average, are not exceeded.
  - 9-10-406 – Determination of Compliance
    - CEMs or parametric monitoring
  - 9-10-407 – Boiler, Steam Generator, and Process Heater Status Report
    - Update make, model and emission rates for all burners no later than 30 days after any non-identical burner change or replacement
  - 9-10-502 – Monitoring
    - The facility shall maintain good working order and operate in-stack nitrogen oxide (NOx), carbon monoxide (CO), and oxygen (O2) continuous emission monitoring system (CEMS), or equivalent parametric monitoring system as specified in a Permit to Operate, and fuel-flow meter in each fuel line for each boiler, steam generator and process heater, including each CO boiler.
      - 9-10-502.1 – Parametric Monitor or Equivalent
      - 9-10-502.2 – Fuel-Flow Meter
  - 9-10-504 – Records
    - The owner/operator of a source subject to this rule shall keep the following records, in a form suitable for inspection for a period of at least five (5) years: (1) The continuous

emission monitoring system (CEMS) measurements for NOx and CO (ppmv corrected to 3% oxygen) and O2 (percent by volume on a dry basis) or equivalent parametric monitoring system parameters; and hourly (lb/hour) and daily (lb/day) NOx emissions for each source. (2) The type, heat input (BTU/hr and BTU/day), and higher heating value of each fuel burned, and the injection rate for any reactant chemicals used by the emission control system(s) on a daily basis, (3) the date, time, and duration of any startup, shutdown or malfunction in the operation of any unit, emission control equipment or emission monitoring equipment, (4) the results of performance testing, evaluations, calibrations, checks, adjustments, and maintenance of any CEMS required by this rule, (5) a list of all sources subject to the NOx refinery-wide emission rate limits, (6) total NOx emissions and total heat input for all sources on a daily basis, (7) the date, time and duration of all start-up and shutdown periods, and (8) the results of source tests.

- 9-10-504.1 – Recordkeeping Requirements

- 9-10-505 – Reporting Requirements
  - The facility shall report to the APCO any violation of this Rule, submit a written report for each calendar quarter to the APCO, and submit to the APCO a permit application to amend the Alternate NOx Compliance Plan whenever Section 9-10-308.4 is triggered.
- 9-10-601 – Determination of Nitrogen Oxides
  - Compliance with the nitrogen oxide emission requirements shall be determined by a continuous emission monitoring system (CEMS) that meets the requirements of Regulation 1-522, or by an equivalent parametric monitoring system that is authorized in a Permit to Operate and that meets the requirements of Regulation 1-523. CEMS operation and compliance with Section 9-10-404.3 shall be verified by source test as set forth in the District Manual of Procedures or any other method approved by the APCO.
- 9-10-602 – Determination of Carbon Monoxide and Stack-Gas Oxygen
  - Compliance with the carbon monoxide emission requirements shall be determined by a continuous emission monitoring system (CEMS) that meets the requirements of Regulation 1-522, or by an equivalent parametric monitoring system that is authorized in a Permit to Operate and that meets the requirements of Regulation 1-523. CEMS operation and compliance with Section 9-10-404.3 shall be verified by source test as set forth in the District Manual of Procedures or any other method approved by the APCO.
- 9-10-603 – Compliance Determination
  - All emission determinations shall be made in the as-found operating condition, except during periods of start-up or shutdown.
- 9-10-604 – Determination of Higher Heating Value
  - If certification of the higher heating value is not provided by the third-party fuel supplier, it shall be determined by one of the specified test methods.

- S-22 is currently subject to and will continue to comply with 40 CFR Part 63, Subpart DDDDD – National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers, and Process Heaters.

- S-22 is currently subject to 40 CFR 60, Subpart J, NSPS for Petroleum Refineries by date of construction, reconstruction, modification, but it will no longer apply as a result of the Rodeo Renewed Project, as the Facility will no longer be considered a “petroleum refinery” under the definitions of NSPS Subpart J (40 CFR Part 60, Subpart J – Standards of Performance for Petroleum Refineries). The heater without CEMS will no longer be subject to NSPS J. The heater without CEMS will not be subject to MACT FFFF after the project, as it will not be in HAP service. However, a requirement in Permit Condition #1694 will be added to retain both the H2S standard specified in NSPS J and the corresponding monitoring requirements.

**Sources S-45 and S-438 (Heaters subject to BACT)**

Sources S-45 and S-438 (collectively referred to as "the heaters subject to BACT") are currently subject to and expected to continue to comply with the following regulations:

- Regulation 1 – General Provisions and Definitions, including:
  - 1-520 – Continuous Emission Monitoring **(applies to S-45 only)**
    - Install continuous emission monitoring as required by Regulations 10, 12 and 2-1-403
  - 1-522 – Continuous Emission Monitoring and Recordkeeping Procedures
    - Continuous emission monitors shall comply with monitoring and recordkeeping procedures, and shall report to the APCO on excess of any emission standard to which the source is required to conform.
      - 1-522.1 – approval of plans and specifications (applies to S-45 only)
      - 1-522.2 – scheduling requirements (applies to S-45 only)
      - 1-522.3 – CEM Performance Testing
      - 1-522.4 – Reporting of Inoperative CEMS
      - 1-522.5 – CEM Calibration Requirements
      - 1-522.6 – CEM Accuracy Requirements
      - 1-522.7 – Emission Limit Exceedance Reporting Requirements
      - 1-522.8 – Monitoring Data Submittal Requirements
      - 1-522.9 – Recordkeeping Requirements
      - 1-522.10 – Regulation 1-521 Monitors Shall Meet Requirements Specified by District
  - 1-602 – Area and Continuous Monitoring Requirements
    - The procedures for selection and placement, installation scheduling, performance testing, reporting, records retention and instrument calibration are detailed in the Manual of Procedures.
- Regulation 6, Rule 1 – General Requirements for Particulate Matter, including:
  - 6-1-114 – Exemption from 6-1-310.2 and 6-1-311.2 emission limits. Total Suspended Particulate (TSP) Emission Limits for Fuel Combustion Sections 6-1-310.2 and 311.2 shall not apply to particulate matter emissions from gas, liquid and solid fuel fired indirect heat exchanger, including furnaces, heaters, boilers, gas turbines and supplemental fuel-fired heat recovery steam generators and gas fuel fired control devices that control only gaseous emissions
  - 6-1-301 – Ringelmann No. 1 Limitation
    - The facility shall not emit from any source for a period or aggregate periods of more than three minutes in any hour, a visible emission that is as dark or darker than No. 1 on the Ringelmann Chart, or of such opacity as to obscure an observer's view to an equivalent or greater degree.
  - 6-1-305 – Visible Particles
    - The facility shall not emit particles from any operation in sufficient number to cause annoyance to any other person where the particles are large enough to be visible as individual particles at the emission point, or of such size and nature as to be visible individually as incandescent particles.
  - 6-1-310.1 – Total Suspended Particulate (TSP) Concentration Limits. No person shall emit TSP from any source in excess of 343 mg per sdcm (0.15 gr/dscf) of exhaust gas volume

Below is a table demonstrating compliance with Regulation 6-1-310 (Total Suspended Particulate (TSP) Concentration Limits). Detailed calculations are provided in Appendix A.

**Total Suspended Particulate (TSP) Emission Concentration Limit Comparison**

| Source No | Process Exhaust (Rate dscf/min) | TSP Emission (gr/dscf) | TSP Emission Rate limit (gr TSP/dscf) Reg 6-1-310.1 | Comply with TSP Emission Weights limit (Y/N) |
|---|---|---|---|---|
| S-45 | 889 | 0.06 | 0.15 | Y |
| S-438 | 2,621 | 0.08 | 0.15 | Y |

- 6-1-401 – Appearance of Emissions
  - The facility shall comply with the requirements of Regulation 6-102: Any violation of any of the requirements in the Regulation 6 Rules is subject to enforcement action under the applicable provisions of the California Health & Safety Code.
- 6-1-500 Monitoring and Records
  - The facility shall comply with all applicable monitoring and records contained in this section.
- 6-1-601 – Applicability of Test Methods
  - The common test methods cited in Regulation 6 shall apply to this Rule, including the methods cited in Regulation 6-601: Assessment of Visible Emissions, and Regulation 6-602: Assessment of Opacity.

- Regulation 9, Rule 10 – Nitrogen Oxides and Carbon Monoxide from Boilers, Steam Generators, and Process Heaters in Refineries, including:
  - 9-10-110.6 – Exemption as heater is subject to BACT requirements

- S-45 and S-438 are currently subject to and will continue to comply with 40 CFR Part 63, Subpart DDDDD – National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers, and Process Heaters

- S-45 and S-438 are currently subject to 40 CFR 60, Subpart J, NSPS for Petroleum Refineries by date of construction, reconstruction, modification, but will no longer apply as a result of the Rodeo Renewed Project, as the Facility will no longer be considered a "petroleum refinery" under the definitions of NSPS Subpart J (40 CFR Part 60, Subpart J – Standards of Performance for Petroleum Refineries). The heaters subject to BACT will no longer be subject to NSPS J.
- S-45 and S-438 will be subject to MACT FFFF after the project

**Sources S-70 (Rail Renewable Feedstock Unloading Rack)**

Source S-70 will be subject to the following regulations after the completion of the Project:

- Regulation 8, Rule 6 – Organic Compounds – Terminals and Bulk Plants
  - S-70 meets the Section 8-6-110 Exemption, Low Vapor Pressure Organic Liquids
    - The requirements of Regulation 8, Rule 6 are not applicable to loading and delivery of any organic liquid having a true vapor pressure less than 25.8 mmHg (0.5 psia).
- Regulation 8, Rule 2 – Miscellaneous Operations, including:
  - 8-2-301 – Miscellaneous operations: emission shall not exceed 15 lb/day and 300 ppm carbon on a dry basis
    - The facility shall not discharge into the atmosphere from any miscellaneous operation an emission containing more than 15 lbs. per day and containing a concentration of more than 300 PPM total carbon on a dry basis.

**Source S-90, S-105, and S-50007 (NSPS K Exempt Tanks Subject to MACT Recordkeeping)**

Sources S-90, S-105, and S-50007 (collectively referred to as "the NSPS K Exempt Tanks Subject to MACT Recordkeeping") are currently subject to and expected to continue to comply with the following regulations:

- Regulation 8, Rule 5 – Organic Compounds, Storage of Organic Liquids, including:
    - 8-5-117 – Limited exemption, low vapor pressure
        - The provisions of this rule, except for Section 8-5-307.3, shall not apply to tanks storing organic liquids with a true vapor pressure of less than or equal to 0.5 psi.
    - Regulation 8-5-307.3 – Requirements for Fixed Roof Tanks, Pressure Tanks and Blanketed Tanks
        - The sealing mechanism on pressure relief devices located on pressure tanks and on tanks blanketed with organic gases other than natural gas shall be maintained in a gas tight condition except when operating pressure exceeds the valve set pressure, or except when the sealing mechanism is vented to a vapor recovery or disposal system that has an overall abatement efficiency of at least 95% by weight.
    - Regulation 8-5-501 – Records
        - The facility shall keep an accurate record of the type and amount of liquids stored, type of blanket gases used, and the true vapor pressure ranges of such liquids and gases. A tank operator shall keep an accurate record of primary/secondary seal replacements.
- 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, including:
    - 60.110(a) – Applicability and designation of affected facility; affected facility
    - 60.110(c)(2) – Applicability and designation of affected facility->65,000 gal after 6/11/1973 and before 5/19/1978
- 40 CFR Part 63, Subpart G – National Emission Standards for Organic Hazardous Air Pollutants from the Synthetic Organic Chemical Manufacturing Industry for Process Vents, Storage Vessels, Transfer Operations, and Wastewater
    - 63.119(a)(3) – Storage vessel provisions – reference control technology – Group 2 storage vessels comply only with recordkeeping requirements in 63.123(a)
    - 63.123(a) – Storage vessel provisions – recordkeeping – Group 2 storage vessels only required to keep tank dimensions and capacity analysis. Retain for life of source

Sources S-90, S-105, and S-50007 tanks will no longer be considered a source having a "petroleum refining process unit" at a refinery after the Rodeo Renewed Project. As such, MACT CC will no longer apply to the NSPS K Exempt Tanks Subject to MACT Recordkeeping. MACT FFFF will also not apply to the Exempt NSPS K Exempt Tanks Subject to MACT Recordkeeping as they will not be in HAP service after the project.

**Sources S-110, S-111, S-112, S-114, S-122, S-150, S-254, and S-256 (MACT Zero-Gap External Floating Roof Tanks)**
Sources S-110, S-111, S-112, S-114, S-122, S-150, S-254, and S-256 (collectively referred to as "the MACT Zero-Gap External Floating Roof Tanks") are currently subject to and will continue to comply with the following regulations:

- Regulation 8, Rule 5 – Organic Compounds, Storage of Organic Liquids, including:
    - 8-5-111 - Limited Exemption, Tank Removal From and Return to Service
        - The requirements of Sections 8-5-304, 305, 306 and 307 shall not apply to storage tanks during or after tank decommissioning, and shall not apply during temporary removal from service.
            - 8-5-111.1 - Limited Exemption, Tank Removal From and Return to Service, Notification
            - 8-5-111.1.1 - Limited Exemption, Tank Removal From and Return to Service, Notification, 3 day prior notification
            - 8-5-111.1.2 - Limited Exemption, Tank Removal From and Return to Service, Notification, Telephone notification
            - 8-5-111.2 - Limited Exemption, Tank Removal From and Return to Service, Tank in compliance prior to notification
            - 8-5-111.3 - Limited Exemption, Tank Removal From and Return to Service, Floating roof tanks
            - 8-5-111.5 - Limited Exemption, Tank Removal From and Return to Service, Minimize emissions
            - 8-5-111.6 - Limited Exemption, Tank Removal From and Return to Service; Notification and reporting are not required when returning a tank to service
    - 8-5-112 - Limited Exemption, Preventative Maintenance and Inspection of Tanks in Operation
        - The requirements of Sections 8-5-304, 305, 306, 307.2, 307.3 and 328 shall not apply to storage tanks during preventative maintenance of a vapor control device, tank roof, roof fitting or tank seal; during primary seal inspection; or during removal and installation of a secondary seal.
            - 8-5-112.1 – Limited Exemption, Tanks in Operation, Notification
            - 8-5-112.1.1 – Limited Exemption, Tanks in Operation, Notification, 3 day prior notification
            - 8-5-112.1.2 - Limited Exemption, Tanks in Operation, Notification, Telephone notification
            - 8-5-112.2 - Limited Exemption, Tanks in Operation, Tank in compliance prior to start of work. Certified per 8-5-404
            - 8-5-112.3 - Limited Exemption, Tanks in Operation, No product movement, Minimize emissions
            - 8-5-112.4 - Limited Exemption, Tanks in Operation, Not to exceed 7 days
            - 8-5-112.6 - Tank Records
    - 8-5-118 Limited Exemption, Gas Tight Requirements
    - 8-5-119 - Limited Exemption, Repair Period
        - A tank operator who has implemented an Enhanced Monitoring Program and who discovers equipment that fails to meet a requirement listed in Section 8-5-119.1 shall not be deemed in violation of that requirement, provided the operator complies with all of the conditions listed in Sections 8-5-119.2 and 119.3.
            - 8-5-119.1 Limited Exemption, Repair Period; Exemption available for certain requirements
            - 8-5-119.2 Limited Exemption, Repair Period; Conditions for the exemption
            - 8-5-119.3 Limited Exemption, Repair Period; Report use of exemption within 60 days
    - 8-5-301 - Storage Tank Control Requirements (internal floating roof, external floating roof, or approved emission control system)

        - The facility shall not store organic liquid in any storage tank unless such tank is equipped with a vapor loss control device that is specified for the tank capacity, or for a higher capacity, and for the true vapor pressure of the tank organic liquid contents, or for a higher true vapor pressure.
    - 8-5-304 - Requirements for External Floating Roofs
        - An external floating roof must meet the requirements for floating roof fittings, primary and secondary seals, and roof/shell must be in good operating condition.
            - 8-5-304.1 - Requirements for External Floating Roofs; Tank fitting requirements
            - 8-5-304.2 - Requirements for External Floating Roofs; Primary seal requirements
            - 8-5-304.3 - Requirements for External Floating Roofs; Secondary seal requirements
            - 8-5-304.4 - Requirements for External Floating Roofs; Floating roof requirements
            - 8-5-304.5 - Requirements for External Floating Roofs; Shell in good condition
            - 8-5-304.6 - Requirements for External Floating Roofs; tank pontoons
    - 8-5-320 - Floating Roof Tank Fitting Requirements
        - All openings through the floating roof, solid sampling or gauging wells, slotted sampling or gauging wells, and emergency roof drain shall meet conditions specified.
            - 8-5-320.2 - Tank Fitting Requirements; Floating roof tanks, Projection below liquid surface
            - 8-5-320.3 - Tank Fitting Requirements; Floating roof tanks, Gasketed covers, seals, lids
            - 8-5-320.3.1 - Tank Fitting Requirements; Floating roof tanks, Gasketed covers, seals, lids - Gap requirements
            - 8-5-320.4 - Tank Fitting Requirements; Solid sampling or gauging well requirements in floating roof tanks
            - 8-5-320.4.1 - Tank Fitting Requirements; Solid sampling or gauging well requirements-projection below liquid surface
            - 8-5-320.4.2 - Tank Fitting Requirements; Solid sampling or gauging well requirements-cover, seal, or lid
            - 8-5-320.4.3 - Tank Fitting Requirements; Solid sampling or gauging well requirements-gap between well and roof
            - 8-5-320.6 – Tank Fitting Requirements; Emergency roof drain
    - 8-5-321 - Primary Seal Requirements
        - The facility shall not operate a storage tank equipped with a primary seal unless such tank meets the conditions specified.
            - 8-5-321.1 – Primary Seal Requirements; No holes, tears, other openings
            - 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
            - 8-5-321.3 - Primary Seal Requirements; Metallic-shoe-type seal requirements
            - 8-5-321.3.1 - Primary Seal Requirements; Metallic-shoe-type seal requirements- geometry of shoe
            - 8-5-321.3.2 - Primary Seal Requirements; Metallic-shoe-type seal requirements-welded tanks
    - 8-5-322 - Secondary Seal Requirements
        - The facility shall not operate a storage tank equipped with a secondary seal unless such tank meets the requirements specified.
            - 8-5-322.1 - Secondary Seal Requirements; No holes, tears, other openings
            - 8-5-322.2 - Secondary Seal Requirements; Insertion of probes
            - 8-5-322.3 - Secondary Seal Requirements; Gaps and cumulative length

- 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
- 8-5-322.6 - Secondary Seal Requirements; Extent of seal

- 8-5-328 - Tank Degassing Requirements
  - A tank operator shall not open the interior vapor space of a tank to the atmosphere through a hatch or manway, except to connect or disconnect degassing equipment or to conduct tank contents or emissions sampling, unless such tank meets the conditions specified.
    - 8-5-328.1 - Tank Degassing Requirements; Tanks > 75 cubic meters Approved Emission Control System
    - 8-5-328.2 - Tank Degassing Requirements; Ozone Excess Day Prohibition
    - 8-5-328.3 - Notification of degassing
- 8-5-331 - Tank Cleaning Requirements
  - Tank interior cleaning agents must meet the requirements specified, unless all organic vapors and gases emitted during tank cleaning are collected and processed at an abatement device that has an abatement efficiency of at least 90% by weight.
- 8-5-332 - Sludge Handling Requirements
  - The operator of a tank shall place sludge removed from that tank directly into a sludge container that meets the requirements specified.
- 8-5-401 - Inspection Requirements for External Floating Roof Tanks
  - The operator shall inspect each primary and secondary seal, and fittings at the frequency specified.
    - 8-5-401.1 - Inspection Requirements for External Floating Roof Tanks; Primary and Secondary Seal Inspections
    - 8-5-401.2 - Inspection Requirements for External Floating Roof Tanks; Tank Fittings Inspections
- 8-5-404 - Inspection, Abatement Efficiency Determination and Source Test Reports
  - A report shall be submitted to the APCO that certifies compliance with each individual requirement associated with the inspection, abatement efficiency determination or source test, and that includes data, supported by necessary calculations, to support this certification.
- 8-5-411 - Enhanced Monitoring Program
  - Selected tanks for enhanced monitoring must be subject to Section 8-5-401, 402, or 403. The operator shall perform enhanced monitoring as specified in Sections 8-5-401, 402 and 403.
- 8-5-412 - Monitoring of Leaking Pontoons
  - The operator of a floating roof tank on which a leaking pontoon has been discovered shall inspect the lids and other openings on any leaking pontoon for compliance with the requirements of Section 8-5-304.6.1 once per calendar quarter beginning the quarter after the leaking pontoon is discovered until a repair of the leak is completed.
- 8-5-501 – Records
  - The facility shall keep an accurate record of the type and amount of liquids stored, type of blanket gases used, and the true vapor pressure ranges of such liquids and gases. A tank operator shall keep an accurate record of primary/secondary seal replacements.
    - 8-5-501.1 - Records; Type and amounts of liquid, type of blanket gas, TVP – Retain 24 months
    - 8-5-501.2 - Records; Internal and External Floating Roof Tanks, Seal Replacement Records – Retain 10 years
    - 8-5-501.3 - Records retained for 24 months
- 8-5-602 - Analysis of Samples, True Vapor Pressure

  - 8-5-604 - Determination of Applicability
  - 8-5-605 - Measurement of Leak Concentrations and Residual Concentrations
  - 8-5-605.1 -Measurement of Leak Concentration and Residual Concentrations; EPA method 21 Instruments
  - 8-5-605.2 -Measurement of Leak Concentration and Residual Concentrations; Method 21 and tank degassing residual organic concentration measurement method
- 40 CFR Part 60, Subpart Kb – Standards of Performance for Storage Vessels for Volatile Organic Liquid Storage Vessels for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984, including:
  - 60.112b(a)(2) -Standards for Volatile Organic Compounds (VOC); External floating roof option
  - 60.112b(a)(2)(i) -Standards for Volatile Organic Compounds (VOC); External floating roof seal requirements
  - 60.112b(a)(2)(i)(A) -Standards for Volatile Organic Compounds (VOC); External floating roof primary seal requirements
  - 60.112b(a)(2)(i)(B) -Standards for Volatile Organic Compounds (VOC); External floating roof secondary seal requirements
  - 60.112b(a)(2)(ii) -Standards for Volatile Organic Compounds (VOC); External floating roof openings requirements
  - 60.112b(a)(2)(iii) -Standards for Volatile Organic Compounds (VOC); External floating roof floating requirements
  - 60.113b(b)(1) -Testing and Procedures; External floating roof seal gap measurement frequency
  - 60.113b(b)(1)(i) -Testing and Procedures; External floating roof primary seal gaps measurement frequency
  - 60.113b(b)(1)(ii) -Testing and Procedures; External floating roof secondary seal gaps measurement frequency
  - 60.113b(b)(1)(iii) -Testing and Procedures; External floating roof reintroduction of VOL
  - 60.113b(b)(2) -Testing and Procedures; External floating roof seal gap measurement procedures
  - 60.113b(b)(2)(i) -Testing and Procedures; External floating roof measure seal gaps when roof is floating
  - 60.113b(b)(2)(ii) -Testing and Procedures; External floating roof measure seal gaps around entire circumference
  - 60.113b(b)(2)(iii) -Testing and Procedures; External floating roof seal method to determine surface area of seal gaps
  - 60.113b(b)(3) -Testing and Procedures; External floating roof method to calculate total surface area ratio
  - 60.113b(b)(4) -Testing and Procedures; External floating roof seal gap repair requirements
  - 60.113b(b)(4)(i) -Testing and Procedures; External floating roof primary seal gap limitations
  - 60.113b(b)(4)(i)(A) -Testing and Procedures; External floating roof mechanical shoe primary seal requirements
  - 60.113b(b)(4)(i)(B) -Testing and Procedures; External floating roof primary seals no holes, tears, openings
  - 60.113b(b)(4)(ii) -Testing and Procedures; External floating roof secondary seal gap limitations
  - 60.113b(b)(4)(ii)(A) -Testing and Procedures; External floating roof secondary seal installation
  - 60.113b(b)(4)(ii)(B) -Testing and Procedures; External floating roof secondary seal gap
  - 60.113b(b)(4)(ii)(C) -Testing and Procedures; External floating roof secondary seals no holes, tears, openings
  - 60.113b(b)(4)(iii) -Testing and Procedures; External floating roof 30-day extension request for seal gap repairs
  - 60.113b(b)(5) -Testing and Procedures; External floating roof seal gap inspections 30 day notification

  - 60.113b(b)(6) -Testing and Procedures; External floating roof visual inspection when emptied and degassed
  - 60.113b(b)(6)(i) -Testing and Procedures; External floating roof—roof or seal defect repairs
  - 60.113b(b)(6)(ii) -Testing and Procedures; External floating roof notification prior to filling
  - 60.115b(b) -Reporting and Recordkeeping Requirements; 60.112b(a) external floating roof
- 40 CFR Part 63, Subpart G – National Emission Standards for Organic Hazardous Air Pollutants From the Synthetic Organic Chemical Manufacturing Industry for Process Vents, Storage Vessels, Transfer Operations, and Wastewater, including:
  - 63.119(a) - Storage Vessel Provisions – Reference Control Technology
  - 63.119(a)(1) -Storage Vessel Provisions – Reference Control Technology— Group 1, TVP < 76.6 kPa
  - 63.119(c) -Storage Vessel Provisions – Reference Control Technology—External floating roof
  - 63.119(c)(1) -Storage Vessel Provisions – Reference Control Technology— External floating roof seals
  - 63.119(c)(1)(i) -Storage Vessel Provisions – Reference Control Technology—External floating roof double seals required
  - 63.119(c)(1)(ii) -Storage Vessel Provisions – Reference Control Technology— External floating roof primary seal requirements – metallic shoe or liquid-mounted
  - 63.119(c)(1)(iii) -Storage Vessel Provisions – Reference Control Technology—External floating roof seal requirements
  - 63.119(c)(3) -Storage Vessel Provisions – Reference Control Technology— External floating roof—Must float on liquid
  - 63.119(c)(3)(i) -Storage Vessel Provisions – Reference Control Technology—External floating roof –Must float on liquid except during initial fill
  - 63.119(c)(3)(ii) -Storage Vessel Provisions – Reference Control Technology— External floating roof—Must float on liquid except after completely emptied and degassed
  - 63.119(c)(3)(iii) -Storage Vessel Provisions – Reference Control Technology— External floating roof – Must float on liquid except when completely emptied before refilling
  - 63.119(c)(4) -Storage Vessel Provisions – Reference Control Technology— External Floating Roof Operations, when not floating
  - 63.120(b) -Storage Vessel Provisions – Procedures to Determine Compliance—Compliance Demonstration—External floating roof
  - 63.120(b)(1) -Storage Vessel Provisions – Procedures to Determine Compliance—External FR seal gap measurement
  - 63.120(b)(1)(i) -Storage Vessel Provisions – Procedures to Determine Compliance—External FR with double seals – primary seal gap measurement – 5 year intervals
  - 63.120(b)(1)(iii) -Storage Vessel Provisions – Procedures to Determine Compliance—External FR with double seals – secondary seal gap measurement – annual requirement
  - 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
  - 63.120(b)(2) -Storage Vessel Provisions – Procedures to Determine Compliance—External FR seal gap determination methods
  - 63.120(b)(2)(i) -Storage Vessel Provisions – Procedures to Determine Compliance—External FR seal gap determination methods – roof not resting on legs
  - 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
  - 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

- 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 cm2 per meter of vessel diameter. Maximum width <= 3.81 cm
- 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 cm2 per meter of vessel diameter. Maximum width <= 1.27 cm
- 63.120(b)(5) -Storage Vessel Provisions – Procedures to Determine Compliance—External FR primary seal additional requirements
- 63.120(b)(5)(i) -Storage Vessel Provisions – Procedures to Determine Compliance—External FR primary seal additional requirements – metallic shoe seal – shoe geometry
- 63.120(b)(5)(ii) -Storage Vessel Provisions – Procedures to Determine Compliance—External FR primary seal additional requirements – no holes, tears, or openings
- 63.120(b)(6) -Storage Vessel Provisions – Procedures to Determine Compliance—External FR secondary seal requirements
- 63.120(b)(6)(i) -Storage Vessel Provisions – Procedures to Determine Compliance—External FR secondary seal requirements – location and extent
- 63.120(b)(6)(ii) -Storage Vessel Provisions – Procedures to Determine Compliance—External FR secondary seal requirements – no holes, tears or openings
- 63.120(b)(7) -Storage Vessel Provisions – Procedures to Determine Compliance—External FR unsafe to perform seal measurements or inspect the tank
- 63.120(b)(7)(i) -Storage Vessel Provisions – Procedures to Determine Compliance—External FR unsafe to perform seal measurements or inspect the tank – complete measurements or inspection within 30 days after determining roof is unsafe or comply with 40 CFR 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 40 CFR 63.120(b)(7)(i). Two 30 day extensions are allowed to empty the tank. Decision to use extension must be documented.
- 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.
- 63.120(b)(9) -Storage Vessel Provisions – Procedures to Determine Compliance External FR seal gap measurement 30 day notification
- 63.120(b)(10) -Storage Vessel Provisions – Procedures to Determine Compliance—External FR and seals visual inspection each time emptied
- 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 40 CFR 63.646(e)]
- 63.120(b)(10)(ii) -Storage Vessel Provisions – Procedures to Determine Compliance—External FR and seal visual inspection each time emptied – 30 day notification
- 63.120(b)(10)(iii) -Storage Vessel Provisions – Procedures to Determine Compliance—External FR and seal visual inspection each time emptied –-Notification for unplanned
- 63.123(a) -Storage Vessel Provisions – Recordkeeping—Group 1 and Group 2 storage vessel dimensions and capacity. Keep for life of source.
- 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)
- 63.123(g) -Storage Vessel Provisions – Recordkeeping, Extensions for emptying storage vessel – keep documentation specified

The Facility will no longer be considered a source having a “petroleum refining process unit” under the definitions of NESHAP Subpart CC (40 CFR Part 63, Subpart CC – National Emission Standards for Hazardous Air Pollutants From Petroleum Refineries) after the Project. As such, MACT CC will no longer apply to the MACT Zero-Gap External Floating Roof Tanks. MACT FFFF will also not apply to the MACT Zero-Gap External Floating Roof Tanks (except for S-122 and S-150) as they will not be in HAP service after the project. Please see the MACT FFFF section for the statement of compliance for S-122 and S-150.

**Source S-97 (Exempt Fixed Roof Tank with proposed vapor controls for odors)**
Source S-97 (referred to as "the exempt fixed roof tank") will be subject to and will comply with the following regulations after completion of the Project:

- Regulation 8, Rule 5 – Organic Compounds, Storage of Organic Liquids, including:
  - 8-5-111 -Limited Exemption, Tank Removal From and Return to Service
    - The requirements of Sections 8-5-304, 305, 306 and 307 shall not apply to storage tanks during or after tank decommissioning, and shall not apply during temporary removal from service.
      - 8-5-111.1 -Limited Exemption, Tank Removal From and Return to Service; Notice to the APCO
      - 8-5-111.1.1 -Limited Exemption, Tank Removal From and Return to Service; Notice to the APCO; 3 day prior notification
      - 8-5-111.1.2 -Limited Exemption, Tank Removal From and Return to Service; Notice to the APCO; Telephone notification
      - 8-5-111.2 -Limited Exemption, Tank Removal From and Return to Service; Compliance before notification
      - 8-5-111.4 -Limited Exemption, Tank Removal From and Return to Service; Use of vapor recovery
      - 8-5-111.5 -Limited Exemption, Tank Removal From and Return to Service; Minimization of emissions
      - 8-5-111.6 - Limited Exemption, Tank Removal From and Return to Service; Notification and reporting are not required when returning a tank to service
  - 8-5-112 -Limited Exemption, Preventative Maintenance and Inspection of Tanks in Operation
    - The requirements of Sections 8-5-304, 305, 306, 307.2, 307.3 and 328 shall not apply to storage tanks during preventative maintenance of a vapor control device, tank roof, roof fitting or tank seal; during primary seal inspection; or during removal and installation of a secondary seal.
      - 8-5-112.1 -Limited Exemption, Tanks in Operation; Notice to the APCO
      - 8-5-112.1.1 -Limited Exemption, Tanks in Operation; Notice to the APCO; 3 day prior notification
      - 8-5-112.1.2 -Limited Exemption, Tanks in Operation; Notice to the APCO; Telephone notification
      - 8-5-112.2 -Limited Exemption, Tanks in Operation; Compliance and certification before commencement of work
      - 8-5-112.3 -Limited Exemption, Tanks in Operation; No product movement; minimization of emissions
      - 8-5-112.4 -Limited Exemption, Tanks in Operation; Exemption does not exceed 7 days
      - 8-5-112.6 -Tank Records
  - 8-5-118 Limited Exemption, Gas Tight Requirements
  - 8-5-119 Limited Exemption, Repair Period
    - A tank operator who has implemented an Enhanced Monitoring Program and who discovers equipment that fails to meet a requirement listed in Section 8-5-119.1 shall not be deemed in violation of that requirement, provided the operator complies with all of the conditions listed in Sections 8-5-119.2 and 119.3.
      - 8-5-119.1 Limited Exemption, Repair Period; Exemption available for certain requirements
      - 8-5-119.2 Limited Exemption, Repair Period; Conditions for the exemption
      - 8-5-119.3 Limited Exemption, Repair Period; Report use of exemption within 60 days

- 8-5-301 -Storage Tank Control Requirements (internal floating roof, external floating roof, or approved emission control system)
  - The facility shall not store organic liquid in any storage tank unless such tank is equipped with a vapor loss control device that is specified for the tank capacity, or for a higher capacity, and for the true vapor pressure of the tank organic liquid contents, or for a higher true vapor pressure.
- 8-5-303 -Requirements for Pressure Vacuum Valves
- 8-5-303.1 -Requirements for Pressure Vacuum Valves; Set pressure
- 8-5-303.2 -Requirements for Pressure Vacuum Valves; Installation, maintenance, operation
- 8-5-306 -Requirements for Approved Emission Control Systems
  - An Approved Emission Control System must provide an abatement efficiency of at least 95% by weight and must be gas tight.
- 8-5-307 -Requirements for Fixed Roof Tanks, Pressure Tanks, and Blanketed Tanks
  - Tank shells must be in good operating condition, pressure tank must maintain working pressures to prevent loss to the atmosphere, and sealing mechanism on pressure relief devices shall be maintained in a gas tight condition.
    - 8-5-307.1 -Shell in good condition with no leakage
    - 8-5-307.3 – Requirements for fixed roof tanks, pressure tanks, and blanketed tanks; Pressure tanks and blanketed tanks PRD requirements
      - The sealing mechanism on pressure relief devices located on pressure tanks and on tanks blanketed with organic gases other than natural gas shall be maintained in a gas tight condition except when operating pressure exceeds the valve set pressure, or except when the sealing mechanism is vented to a vapor recovery or disposal system that has an overall abatement efficiency of at least 95% by weight.
- 8-5-328 -Tank Degassing Requirements
  - A tank operator shall not open the interior vapor space of a tank to the atmosphere through a hatch or manway, except to connect or disconnect degassing equipment or to conduct tank contents or emissions sampling, unless such tank meets the conditions specified.
    - 8-5-328.1 -Tank Degassing Requirements; Tanks > 75 cubic meters; Concentration of <10,000 ppm as methane after degassing
    - 8-5-328.2 -Tank degassing requirements; Ozone excess day prohibition
    - 8-5-328.3 -Notification of degassing
- 8-5-331 -Tank Cleaning Requirements
  - Tank interior cleaning agents must meet the requirements specified, unless all organic vapors and gases emitted during tank cleaning are collected and processed at an abatement device that has an abatement efficiency of at least 90% by weight.
- 8-5-332 -Sludge Handling Requirements
  - The operator of a tank shall place sludge removed from that tank directly into a sludge container that meets the requirements specified.
- 8-5-403 -Inspection Requirements for Pressure Relief Devices
- 8-5-404 -Inspection, Abatement Efficiency Determination and Source Test Reports
  - A report shall be submitted to the APCO that certifies compliance with each individual requirement associated with the inspection, abatement efficiency determination or source test, and that includes data, supported by necessary calculations, to support this certification.
- 8-5-501 -Records
  - The facility shall keep an accurate record of the type and amount of liquids stored, type of blanket gases used, and the true vapor pressure ranges of such liquids and gases. A tank operator shall keep an accurate record of primary/secondary seal replacements.

        - 8-5-501.1 -Records; Type and amounts of liquid; true vapor pressure; Retain 24 months
        - 8-5-501.3 -Records retained for 24 months
        - 8-5-501.4 -Engineering data sheets showing setpoints for pressure vacuum valves installed after 6/1/07
    - 8-5-602 -Analysis of Samples, True Vapor Pressure
    - 8-5-603 -Determination of emissions
    - 8-5-603.1 -Determination of Emissions; Organic compounds specified in 8-5-306
    - 8-5-604 -Determination of Applicability
    - 8-5-605 - Measurement of Leak Concentrations and Residual Concentrations
- Regulation 7 Odorous Substances
    - 7-301- General Limit on Odorous Substances: A person shall not discharge any odorous substance which remains odorous after dilution with odor-free air
    - 7-302- Limit on Odorous Substances at or Beyond Property Line

- 40 CFR Part 60, Subpart Kb– Standards of Performance for Storage Vessels for Volatile Organic Liquid Storage Vessels for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984, including:
    - 60.110b(a) -Applicability and Designation of Affected Facility; Volatile organic liquid storage vessels > or = to 40 cu m, after 7/23/1984
    - 60.112b(a)(3) -Standard for Volatile Organic Compounds (VOC); Closed vent system and control device
    - 60.112b(a)(3)(i) -Standard for Volatile Organic Compounds (VOC); Closed vent system and control device no detectable emissions per 60.485(b) (Subpart VV)
    - 60.112b(a)(3)(ii) -Standard for Volatile Organic Compounds (VOC); Closed vent system and control device >= 95% inlet VOC emission reduction
    - 60.112b(b) -Standard for Volatile Organic Compounds (VOC); Closed vent system and control device
    - 60.112b(b)(1) -Standard for Volatile Organic Compounds (VOC); Closed vent system and control device as specified in 60.112b(a)(3)
    - 60.113b(c) -Testing and Procedures; Closed vent system and control device (not flare)
    - 60.113b(c)(1) -Testing and Procedures; Closed vent system and control device (not flare) operating plan submission
    - 60.113b(c)(1)(i) -Testing and Procedures; Closed vent system and control device (not flare) operating plan--efficiency demonstration
    - 60.113b(c)(1)(ii) -Testing and Procedures; Closed vent system and control device (not flare) operating plan--monitoring parameters
    - 60.113b(c)(2) -Testing and Procedures; Closed vent system and control device (not flare) operate in accordance with operating plan
    - 60.115b -Reporting and Recordkeeping Requirements; 60.112b(a) tanks; Record retention
    - 60.115b(c) -Reporting and Recordkeeping Requirements; Closed vent system and control device (not flare)
    - 60.115b(c)(1) -Reporting and Recordkeeping Requirements; Closed vent system and control device (not flare) operating plan copy – Retain for life of control device
    - 60.115b(c)(2) -Reporting and Recordkeeping Requirements; Closed vent system and control device (not flare) operating records – Retain for at least 2 years
    - 60.116b(a) -Monitoring of Operations; Record retention
    - 60.116b(b) -Monitoring of Operations; Permanent record requirements
    - 60.116b(e) -Monitoring of Operations; Determine TVP
    - 60.116b(e)(2) -Monitoring of Operations; Determine TVP-crude oil or refined petroleum products

- 60.116b(g) -Monitoring of Operations; Exemption from 60.116b(c) and 60.116b(d) for tanks with closed vent system and control device

The Facility will no longer be considered a source having a “petroleum refining process unit” under the definitions of NESHAP Subpart CC (40 CFR Part 63, Subpart CC – National Emission Standards for Hazardous Air Pollutants From Petroleum Refineries) after the Project. As such, MACT CC will no longer apply to the exempt fixed roof tank. Additionally, MACT G will not apply to the exempt fixed roof tank, as it will no longer be in HAP service after the project. MACT FFFF will also not apply to the exempt fixed roof tank as it will not be in HAP service after the project.

**Sources S-99, S-103, S-204, S-205, S-262, and S-263 (Exempt Tanks Subject to MACT Recordkeeping)**

Tanks S-99, S-103, S-204, S-205, S-262, and S-263 (collectively referred to as "the Exempt Tanks Subject to MACT Recordkeeping") are currently subject to and expected to continue to comply with the following regulations:

- Regulation 8, Rule 5 – Organic Compounds, Storage of Organic Liquids, including:
    - 8-5-117 – Limited exemption, low vapor pressure
        - The provisions of this rule, except for Section 8-5-307.3, shall not apply to tanks storing organic liquids with a true vapor pressure of less than or equal to 0.5 psi.
    - 8-5-307.3 – Requirements for fixed roof tanks, pressure tanks, and blanketed tanks; Pressure tanks and blanketed tanks PRD requirements
        - The sealing mechanism on pressure relief devices located on pressure tanks and on tanks blanketed with organic gases other than natural gas shall be maintained in a gas tight condition except when operating pressure exceeds the valve set pressure, or except when the sealing mechanism is vented to a vapor recovery or disposal system that has an overall abatement efficiency of at least 95% by weight.
- 40 CFR Part 63, Subpart G – National Emission Standards for Organic Hazardous Air Pollutants From the Synthetic Organic Chemical Manufacturing Industry for Process Vents, Storage Vessels, Transfer Operations, and Wastewater
    - 63.119(a)(3) – Storage vessel provisions – reference control technology – Group 2 storage vessels comply only with recordkeeping requirements in 63.123(a)
    - 63.123(a) – Storage vessel provisions – recordkeeping – Group 2 storage vessels only required to keep tank dimensions and capacity analysis. Retain for life of source

The Facility will no longer be considered a source having a "petroleum refining process unit" under the definitions of NESHAP Subpart CC (40 CFR Part 63, Subpart CC – National Emission Standards for Hazardous Air Pollutants From Petroleum Refineries) after the Project. As such, MACT CC will no longer apply to Exempt Tanks Subject to MACT Recordkeeping. MACT FFFF will also not apply to the Exempt Tanks Subject to MACT Recordkeeping as they will not be in HAP service after the project.

**Sources S-113, S-125, and S-261 (MACT External Floating Roof Tanks w/o Zero Gap Seals)**

Sources S-113, S-125, and S-261 (collectively referred to as "MACT External Floating Roof Tanks w/o Zero Gap Seals") are currently subject to and expected to continue to comply with the following regulations:

- Regulation 8, Rule 5 – Organic Compounds, Storage of Organic Liquids, including:
  - 8-5-111 - Limited Exemption, Tank Removal From and Return to Service
    - The requirements of Sections 8-5-304, 305, 306 and 307 shall not apply to storage tanks during or after tank decommissioning, and shall not apply during temporary removal from service.
      - 8-5-111.1 - Limited Exemption, Tank Removal From and Return to Service, Notification
      - 8-5-111.1.1 - Limited Exemption, Tank Removal From and Return to Service, Notification, 3 day prior notification
      - 8-5-111.1.2 - Limited Exemption, Tank Removal From and Return to Service, Notification, Telephone notification
      - 8-5-111.2 - Limited Exemption, Tank Removal From and Return to Service; Tank in compliance at time of notification
      - 8-5-111.3 - Limited Exemption, Tank Removal From and Return to Service; Filling, emptying, refilling floating roof tanks
      - 8-5-111.5 - Limited Exemption, Tank Removal From and Return to Service; Minimize emissions and, if required, degas per 8-5-328
      - 8-5-111.6 - Limited Exemption, Tank Removal From and Return to Service; Notification and reporting are not required when returning a tank to service
  - 8-5-112 - Limited Exemption, Preventative Maintenance and Inspection of Tanks in Operation
    - The requirements of Sections 8-5-304, 305, 306, 307.2, 307.3 and 328 shall not apply to storage tanks during preventative maintenance of a vapor control device, tank roof, roof fitting or tank seal; during primary seal inspection; or during removal and installation of a secondary seal.
      - 8-5-112.1 - Limited Exemption, Preventative Maintenance and Inspection of Tanks in Operation; Notification
      - 8-5-112.1.1 – Limited Exemption, Tanks in Operation, Notification, 3 day prior notification
      - 8-5-112.1.2 - Limited Exemption, Tanks in Operation, Notification, Telephone notification
      - 8-5-112.2 - Limited Exemption, Preventative Maintenance and Inspection of Tanks in Operation; Tank in compliance at time of notification
      - 8-5-112.3 - Limited Exemption, Preventative Maintenance and Inspection of Tanks in Operation; No product movement, Minimize emissions
      - 8-5-112.4 - Limited Exemption, Preventative Maintenance and Inspection of Tanks in Operation; Not to exceed 7 days
      - 8-5-112.6 - Limited Exemption, Preventative Maintenance and Inspection of Tanks in Operation; Keep records for each exemption
  - 8-5-119 - Limited Exemption, Repair Period for Enhanced Monitoring Program
    - A tank operator who has implemented an Enhanced Monitoring Program and who discovers equipment that fails to meet a requirement listed in Section 8-5-119.1 shall not be deemed in violation of that requirement, provided the operator complies with all of the conditions listed in Sections 8-5-119.2 and 119.3.
      - 8-5-119.1 Limited Exemption, Repair Period; Exemption available for certain requirements
      - 8-5-119.2 Limited Exemption, Repair Period; Conditions for the exemption

- 8-5-119.3 Limited Exemption, Repair Period; Report use of exemption within 60 days

- 8-5-301 - Storage Tank Control Requirements
  - The facility shall not store organic liquid in any storage tank unless such tank is equipped with a vapor loss control device that is specified for the tank capacity, or for a higher capacity, and for the true vapor pressure of the tank organic liquid contents, or for a higher true vapor pressure.
- 8-5-304 - Requirements for External Floating Roof Tanks
  - An external floating roof must meet the requirements for floating roof fittings, primary and secondary seals, and roof/shell must be in good operating condition.
    - 8-5-304.1 - Requirements for External Floating Roofs; Tank fittings
    - 8-5-304.2 - Requirements for External Floating Roofs; Primary seal (8-5-321)
    - 8-5-304.3 - Requirements for External Floating Roofs; Secondary seal (8-5-322)
    - 8-5-304.4 - Requirements for External Floating Roofs; Floating roof
    - 8-5-304.5 - Requirements for External Floating Roofs; Tank shell
    - 8-5-304.6 - Requirements for External Floating Roofs; Pontoons – no leaks
    - 8-5-304.6.1 - Requirements for External Floating Roofs; Pontoons – make gas tight if leaking
    - 8-5-304.6.2 - Requirements for External Floating Roofs; Pontoons-repair all leaks at next removal from service
- 8-5-320 - Floating Roof Tank Fitting Requirements
  - All openings through the floating roof, solid sampling or gauging wells, slotted sampling or gauging wells, and emergency roof drain shall meet conditions specified.
    - 8-5-320.2 - Floating Roof Tank Fitting Requirements; Projection below liquid surface
    - 8-5-320.3 - Floating Roof Tank Fitting Requirements; Gasketed covers, seals, lids
    - 8-5-320.3.1 - Floating Roof Tank Fitting Requirements; Gasketed covers, seals, lids - Gap requirements
    - 8-5-320.4 - Floating Roof Tank Fitting Requirements; Solid sampling or gauging wells--
    - 8-5-320.4.1 - Floating Roof Tank Fitting Requirements; Solid sampling or gauging wells--projection below liquid surface
    - 8-5-320.4.2 - Floating Roof Tank Fitting Requirements; Solid sampling or gauging wells--cover, seal, or lid
    - 8-5-320.4.3 - Floating Roof Tank Fitting Requirements; Solid sampling or gauging wells-- total secondary seal gap must include well gap
    - 8-5-320.6 - Floating Roof Tank Fitting Requirements; emergency roof drains must be 90% covered
- 8-5-321 - Primary seal requirements
  - The facility shall not operate a storage tank equipped with a primary seal unless such tank meets the conditions specified.
    - 8-5-321.1 - Primary seal requirements; No holes, tears, or other openings
    - 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
    - 8-5-321.3 - Primary seal requirements; Metallic-shoe-type seal requirements
    - 8-5-321.3.1 - Primary seal requirements; Metallic-shoe-type seal requirements - geometry of shoe

- 8-5-321.3.2 - Primary seal requirements; Metallic-shoe-type seal requirements - welded tanks gap requirements

- 8-5-322 - Secondary seal requirements
  - The facility shall not operate a storage tank equipped with a secondary seal unless such tank meets the requirements specified.
    - 8-5-322.1 - Secondary seal requirements; No holes, tears, or other openings
    - 8-5-322.2 - Secondary seal requirements; Insertion of probes
    - 8-5-322.3 - Secondary seal requirements; Gap requirements for all tanks
    - 8-5-322.5 - Secondary seal requirements; Gap requirements for welded external floating roof tanks with seal installed after September 4, 1985
    - 8-5-322.6 - Secondary seal requirements; extent of seal
- 8-5-328 - Tank degassing requirements
  - A tank operator shall not open the interior vapor space of a tank to the atmosphere through a hatch or manway, except to connect or disconnect degassing equipment or to conduct tank contents or emissions sampling, unless such tank meets the conditions specified.
    - 8-5-328.1 - Tank degassing requirements; Tanks > 75 cubic meters
    - 8-5-328.2 - Tank degassing requirements; Ozone Excess Day Prohibition
    - 8-5-328.3 - Tank degassing requirements; BAAQMD notification required
- 8-5-331 - Tank Cleaning Requirements
  - Tank interior cleaning agents must meet the requirements specified, unless all organic vapors and gases emitted during tank cleaning are collected and processed at an abatement device that has an abatement efficiency of at least 90% by weight.
- 8-5-401 - Inspection Requirements for External Floating Roof Tanks
  - The operator shall inspect each primary and secondary seal, and fittings at the frequency specified.
    - 8-5-401.1 - Inspection Requirements for External Floating Roof Tanks; Primary and Secondary Seal Inspections
    - 8-5-401.2 - Inspection Requirements for External Floating Roof Tanks; Tank Fittings Inspections
- 8-5-404 - Inspection, Abatement Efficiency Determination, and Source Test Reports
  - A report shall be submitted to the APCO that certifies compliance with each individual requirement associated with the inspection, abatement efficiency determination or source test, and that includes data, supported by necessary calculations, to support this certification.
- 8-5-411 - Enhanced Monitoring Program (Optional)
  - Selected tanks for enhanced monitoring must be subject to Section 8-5-401, 402, or 403. The operator shall perform enhanced monitoring as specified in Sections 8-5-401, 402 and 403.
    - 8-5-411.1 - Enhanced Monitoring Program (Optional); Notify BAAQMD of tanks selected for enhanced monitoring program
    - 8-5-411.2 - Enhanced Monitoring Program (Optional); Criteria for operating enhanced monitoring program
    - 8-5-411.3 - Enhanced Monitoring Program (Optional); Performance requirements
- 8-5-412 - Monitoring of Leaking Pontoons
  - The operator of a floating roof tank on which a leaking pontoon has been discovered shall inspect the lids and other openings on any leaking pontoon for compliance with the requirements of Section 8-5-304.6.1 once per calendar quarter beginning the quarter after the leaking pontoon is discovered until a repair of the leak is completed.

- 8-5-501 – Records
  - The facility shall keep an accurate record of the type and amount of liquids stored, type of blanket gases used, and the true vapor pressure ranges of such liquids and gases. A tank operator shall keep an accurate record of primary/secondary seal replacements.
    - 8-5-501.1 - Records; Type and amount of liquid, type of blanket gas, TVP- Retain 24 months
    - 8-5-501.2 - Records; Internal and External Floating Roof Tanks, Seal Replacement Records- Retain 10 years
    - 8-5-501.3 - Records; Retention
- 8-5-602 - Analysis of Samples, True Vapor Pressure
- 8-5-604 - Determination of Applicability Based on True Vapor Pressure
- 8-5-605 -Measurement of Leak Concentration and Residual Concentrations
- 8-5-605.1 -Measurement of Leak Concentration and Residual Concentrations; EPA method 21 Instruments
- 8-5-605.2 -Measurement of Leak Concentration and Residual Concentrations; Method 21 and tank degassing residual organic concentration measurement method

- 40 CFR Part 63, Subpart G – National Emission Standards for Organic Hazardous Air Pollutants From the Synthetic Organic Chemical Manufacturing Industry for Process Vents, Storage Vessels, Transfer Operations, and Wastewater, including:
  - 63.119(a) - Storage Vessel Provisions -- Reference Control Technology
  - 63.119(a)(1) - Storage Vessel Provisions -- Reference Control Technology—Group 1, TVP < 76.6 kPa
  - 63.119(c) - Storage Vessel Provisions -- Reference Control Technology-- External floating roof
  - 63.119(c)(1) - Storage Vessel Provisions -- Reference Control Technology-- External floating roof seals
  - 63.119(c)(1)(i) - Storage Vessel Provisions -- Reference Control Technology-- External floating roof double seals required
  - 63.119(c)(1)(ii) - Storage Vessel Provisions -- Reference Control Technology-- External floating roof primary seal requirements – metallic shoe or liquid-mounted
  - 63.119(c)(1)(iii) - Storage Vessel Provisions -- Reference Control Technology-- External floating roof seal requirements
  - 63.119(c)(3) - Storage Vessel Provisions -- Reference Control Technology-- External floating roof-- Must float on liquid
  - 63.119(c)(3)(i) - Storage Vessel Provisions -- Reference Control Technology-- External floating roof --Must float on liquid except during initial fill
  - 63.119(c)(3)(ii) - Storage Vessel Provisions -- Reference Control Technology-- External floating roof-- Must float on liquid except after completely emptied and degassed
  - 63.119(c)(3)(iii) - Storage Vessel Provisions -- Reference Control Technology-- External floating roof -- Must float on liquid except when completely emptied before refilling
  - 63.119(c)(4) - Storage Vessel Provisions -- Reference Control Technology-- External Floating Roof Operations, when not floating
  - 63.120(b) - Storage Vessel Provisions -- Procedures to Determine Compliance-- Compliance Demonstration--External floating roof
  - 63.120(b)(1) - Storage Vessel Provisions -- Procedures to Determine Compliance-- External FR seal gap measurement
  - 63.120(b)(1)(i) - Storage Vessel Provisions -- Procedures to Determine Compliance-- External FR with double seals - primary seal gap measurement – 5 year intervals
  - 63.120(b)(1)(iii) - Storage Vessel Provisions -- Procedures to Determine Compliance-- External FR with double seals - secondary seal gap measurement – annual requirement

- 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
- 63.120(b)(2) - Storage Vessel Provisions -- Procedures to Determine Compliance-- External FR seal gap determination methods
- 63.120(b)(2)(i) - Storage Vessel Provisions -- Procedures to Determine Compliance-- External FR seal gap determination methods – roof not resting on legs
- 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
- 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
- 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 cm2 per meter of vessel diameter. Maximum width <= 3.81 cm
- 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 cm2 per meter of vessel diameter. Maximum width <= 1.27 cm
- 63.120(b)(5) - Storage Vessel Provisions -- Procedures to Determine Compliance-- External FR primary seal additional requirements
- 63.120(b)(5)(i) - Storage Vessel Provisions -- Procedures to Determine Compliance-- External FR primary seal additional requirements – metallic shoe seal – shoe geometry
- 63.120(b)(5)(ii) - Storage Vessel Provisions -- Procedures to Determine Compliance-- External FR primary seal additional requirements – no holes, tears, or openings
- 63.120(b)(6) - Storage Vessel Provisions -- Procedures to Determine Compliance-- External FR secondary seal requirements
- 63.120(b)(6)(i) - Storage Vessel Provisions -- Procedures to Determine Compliance-- External FR secondary seal requirements – location and extent
- 63.120(b)(6)(ii) - Storage Vessel Provisions -- Procedures to Determine Compliance-- External FR secondary seal requirements - no holes, tears or openings
- 63.120(b)(7) - Storage Vessel Provisions -- Procedures to Determine Compliance-- External FR unsafe to perform seal measurements or inspect the tank
- 63.120(b)(7)(i) - Storage Vessel Provisions -- Procedures to Determine Compliance-- External FR unsafe to perform seal measurements or inspect the 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.
- 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.
- 63.120(b)(9) - Storage Vessel Provisions -- Procedures to Determine Compliance External FR seal gap measurement 30 day notification
- 63.120(b)(10) - Storage Vessel Provisions -- Procedures to Determine Compliance-- External FR and seals visual inspection each time emptied

- 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)]-
- 63.120(b)(10)(ii) - Storage Vessel Provisions -- Procedures to Determine Compliance-- External FR and seal visual inspection each time emptied – 30 day notification
- 63.120(b)(10)(iii) - Storage Vessel Provisions -- Procedures to Determine Compliance-- External FR and seal visual inspection each time emptied –- Notification for unplanned
- 63.123(a) - Storage Vessel Provisions -- Recordkeeping--Group 1 and Group 2 storage vessel dimensions and capacity. Keep for life of source.
- 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)
- 63.123(g) - Storage Vessel Provisions -- Recordkeeping, Extensions for emptying storage vessel – keep documentation specified

The Facility will no longer be considered a source having a “petroleum refining process unit” under the definitions of NESHAP Subpart CC (40 CFR Part 63, Subpart CC – National Emission Standards for Hazardous Air Pollutants From Petroleum Refineries) after the Project. As such, MACT CC will no longer apply to the MACT External Floating Roof Tanks w/o Zero Gap Seals. MACT FFFF will also not apply to the MACT External Floating Roof Tanks w/o Zero Gap Seals as they will not be in HAP service after the project.

**Sources S-126 and S-257 (Internal Floating Roof Tanks with Dome Roofs)**

Sources S-126 and S-257 (collectively referred to as "the internal floating roof tanks with dome roofs") are currently subject to and will continue to comply with the following regulations:

- Regulation 8, Rule 5 – Organic Compounds – Storage of Organic Liquids, including:
    - 8-5-111 -Limited Exemption, Tank Removal From and Return to Service
        - The requirements of Sections 8-5-304, 305, 306 and 307 shall not apply to storage tanks during or after tank decommissioning, and shall not apply during temporary removal from service.
            - 8-5-111.1 -Limited Exemption, Tank Removal From and Return to Service, Notification
            - 8-5-111.2 -Limited Exemption, Tank Removal From and Return to Service; Tank in compliance at time of notification
            - 8-5-111.3 -Limited Exemption, Tank Removal From and Return to Service; Filling, emptying, refilling floating roof tanks
            - 8-5-111.5 -Limited Exemption, Tank Removal From and Return to Service; Minimize emissions and, if required, degas per 8-5-328
            - 8-5-111.6 -Limited Exemption, Tank Removal From and Return to Service; Notification and reporting are not required when returning a tank to service
    - 8-5-112 -Limited Exemption, Preventative Maintenance and Inspection of Tanks in Operation
        - The requirements of Sections 8-5-304, 305, 306, 307.2, 307.3 and 328 shall not apply to storage tanks during preventative maintenance of a vapor control device, tank roof, roof fitting or tank seal; during primary seal inspection; or during removal and installation of a secondary seal.
            - 8-5-112.1 -Limited Exemption, Preventative Maintenance and Inspection of Tanks in Operation; Notification
            - 8-5-112.2 -Limited Exemption, Preventative Maintenance and Inspection of Tanks in Operation; Tank in compliance at time of notification
            - 8-5-112.3 -Limited Exemption, Preventative Maintenance and Inspection of Tanks in Operation; No product movement, Minimize emissions
            - 8-5-112.4 -Limited Exemption, Preventative Maintenance and Inspection of Tanks in Operation; Not to exceed 7 days
            - 8-5-112.5 -Limited Exemption, Preventative Maintenance and Inspection of Tanks in Operation; Self report if out of compliance during exemption period
            - 8-5-112.6 -Limited Exemption, Preventative Maintenance and Inspection of Tanks in Operation; Keep records for each exemption
    - 8-5-119 -Limited Exemption, Repair Period for Enhanced Monitoring Program
        - A tank operator who has implemented an Enhanced Monitoring Program and who discovers equipment that fails to meet a requirement listed in Section 8-5-119.1 shall not be deemed in violation of that requirement, provided the operator complies with all of the conditions listed in Sections 8-5-119.2 and 119.3.
            - 8-5-119.1 Limited Exemption, Repair Period; Exemption available for certain requirements
            - 8-5-119.2 Limited Exemption, Repair Period; Conditions for the exemption
            - 8-5-119.3 Limited Exemption, Repair Period; Report use of exemption within 60 days
    - 8-5-301 -Storage Tank Control Requirements
        - The facility shall not store organic liquid in any storage tank unless such tank is equipped with a vapor loss control device that is specified for the tank capacity, or for a higher capacity, and for the true vapor pressure of the tank organic liquid contents, or for a higher true vapor pressure.

- 8-5-305 -Requirements for Internal Floating Roof Tanks
  - An internal floating roof must meet the requirements for primary and secondary seals, viewports, floating roof fittings, and roof/shell must be in good operating condition.
    - 8-5-305.2 -Requirements for Internal Floating roof tanks; Seals installed after 2/1/1993
    - 8-5-305.3 -Requirements for Internal Floating roof tanks; Viewports in fixed roof tank; not required if dome roof has translucent panels
    - 8-5-305.4 -Requirements for Internal Floating roof tanks; Tank fitting requirements
    - 8-5-305.5 -Requirements for Internal Floating roof tanks; Floating roof requirements
- 8-5-320 -Floating Roof Tank Fitting Requirements
  - All openings through the floating roof, solid sampling or gauging wells, slotted sampling or gauging wells, and emergency roof drain shall meet conditions specified.
    - 8-5-320.2 -Floating Roof Tank Fitting Requirements; Projection below liquid surface
    - 8-5-320.3 -Floating Roof Tank Fitting Requirements; Gasketed covers, seals, lids
    - 8-5-320.3.1 -Floating Roof Tank Fitting Requirements; Gasketed covers, seals, lids - Gap requirements
    - 8-5-320.3.2 -Floating Roof Tank Fitting Requirements; Gasketed covers, seals, lids – Inaccessible openings on internal floating roof tanks
    - 8-5-320.4 -Floating Roof Tank Fitting Requirements; Solid sampling or gauging wells--
    - 8-5-320.4.1 -Floating Roof Tank Fitting Requirements; Solid sampling or gauging wells--projection below liquid surface
    - 8-5-320.4.2 -Floating Roof Tank Fitting Requirements; Solid sampling or gauging wells--cover, seal, or lid
    - 8-5-320.4.3 -Floating Roof Tank Fitting Requirements; Solid sampling or gauging wells-- total secondary seal gap must include well gap
    - 8-5-320.6 -Floating Roof Tank Fitting Requirements; emergency roof drains must be 90% covered
- 8-5-321 -Primary seal requirements
  - The facility shall not operate a storage tank equipped with a primary seal unless such tank meets the conditions specified.
    - 8-5-321.1 -Primary seal requirements; No holes, tears, or other openings
    - 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
    - 8-5-321.3 -Primary seal requirements; Metallic-shoe-type seal requirements
    - 8-5-321.3.1 -Primary seal requirements; Metallic-shoe-type seal requirements – geometry of shoe
    - 8-5-321.3.2 -Primary seal requirements; Metallic-shoe-type seal requirements - welded tanks gap requirements
- 8-5-322 -Secondary seal requirements
  - The facility shall not operate a storage tank equipped with a secondary seal unless such tank meets the requirements specified.
    - 8-5-322.1 -Secondary seal requirements; No holes, tears, or other openings
    - 8-5-322.2 -Secondary seal requirements; Insertion of probes
    - 8-5-322.5 -Secondary seal requirements; Gap requirements for welded external floating roof tanks with seal installed after September 4, 1985
    - 8-5-322.6 -Secondary seal requirements; extent of seal
- 8-5-328 -Tank degassing requirements

        - A tank operator shall not open the interior vapor space of a tank to the atmosphere through a hatch or manway, except to connect or disconnect degassing equipment or to conduct tank contents or emissions sampling, unless such tank meets the conditions specified.
            - 8-5-328.1 -Tank degassing requirements; Tanks > 75 cubic meters
            - 8-5-328.2 -Tank degassing requirements; Ozone Excess Day Prohibition
            - 8-5-328.3 -Tank degassing requirements; BAAQMD notification required
    - 8-5-331 - Tank Cleaning Requirements
        - Tank interior cleaning agents must meet the requirements specified, unless all organic vapors and gases emitted during tank cleaning are collected and processed at an abatement device that has an abatement efficiency of at least 90% by weight.
    - 8-5-332 - Sludge Handling Requirements
        - The operator of a tank shall place sludge removed from that tank directly into a sludge container that meets the requirements specified.
    - 8-5-402 -Inspection Requirements for Internal Floating Roof Tanks
    - 8-5-402.1 -Inspection Requirements for Internal Floating Roof Tanks; Primary and Secondary Seal Inspections
    - 8-5-402.2 -Inspection Requirements for Internal Floating Roof Tanks; Visual Inspection of Outer Most Seal
    - 8-5-402.3 -Inspection Requirements for Internal Floating Roof Tanks; Tank Fitting Inspection
    - 8-5-404 -Inspection, Abatement Efficiency Determination, and Source Test Reports
        - A report shall be submitted to the APCO that certifies compliance with each individual requirement associated with the inspection, abatement efficiency determination or source test, and that includes data, supported by necessary calculations, to support this certification.
    - 8-5-411 -Enhanced Monitoring Program (Optional)
        - Selected tanks for enhanced monitoring must be subject to Section 8-5-401, 402, or 403. The operator shall perform enhanced monitoring as specified in Sections 8-5-401, 402 and 403.
            - 8-5-411.1 -Enhanced Monitoring Program (Optional); Notify BAAQMD of tanks selected for enhanced monitoring program
            - 8-5-411.2 -Enhanced Monitoring Program (Optional); Criteria for operating enhanced monitoring program
            - 8-5-411.3 -Enhanced Monitoring Program (Optional); Performance requirements
    - 8-5-501 -Records
        - The facility shall keep an accurate record of the type and amount of liquids stored, type of blanket gases used, and the true vapor pressure ranges of such liquids and gases. A tank operator shall keep an accurate record of primary/secondary seal replacements.
            - 8-5-501.1 -Records; Type and amount of liquid, type of blanket gas, TVP-Retain 24 months
            - 8-5-501.2 -Records; Internal and External Floating Roof Tanks, Seal Replacement Records- Retain 10 years
            - 8-5-501.3 -Records; Retention
    - 8-5-602 -Analysis of Samples, True Vapor Pressure
    - 8-5-604 -Determination of Applicability Based on True Vapor Pressure
    - 8-5-605 -Measurement of Leak Concentration and Residual Concentrations
    - 8-5-605.1 -Measurement of Leak Concentration and Residual Concentrations; EPA method 21 Instruments
    - 8-5-605.2 -Measurement of Leak Concentration and Residual Concentrations; Method 21 and tank degassing residual organic concentration measurement method

- 40 CFR Part 63, Subpart G– National Emission Standards for Organic Hazardous Air Pollutants From the Synthetic Organic Chemical Manufacturing Industry for Process Vents, Storage Vessels, Transfer Operations, and Wastewater, including:
    - 63.119(a) -Storage Vessel Provisions – Reference Control Technology
    - 63.119(a)(1) -Storage Vessel Provisions -- Reference Control Technology—Group 1, TVP < 76.6 kPa
    - 63.119(b) -Storage Vessel Provisions -- Reference Control Technology— Internal floating roof
    - 63.119(b)(1) -Storage Vessel Provisions -- Reference Control Technology-- Internal floating roof--Must float on liquid
    - 63.119(b)(1)(i) -Storage Vessel Provisions -- Reference Control Technology-- Internal floating roof --Must float on liquid except during initial fill
    - 63.119(b)(1)(ii) -Storage Vessel Provisions -- Reference Control Technology-- Internal floating roof-- Must float on liquid except after completely emptied and degassed
    - 63.119(b)(1)(iii) -Storage Vessel Provisions -- Reference Control Technology-- Internal floating roof -- Must float on liquid except when completely emptied before refilling
    - 63.119(b)(2) -Storage Vessel Provisions -- Reference Control Technology-- Internal Floating Roof Operations, when not floating
    - 63.119(b)(3) -Storage Vessel Provisions -- Reference Control Technology-- Internal floating roof – seals; must have at least one seal
    - 63.119(b)(3)(i) -Storage Vessel Provisions -- Reference Control Technology-- Internal floating roof – seal option; single liquid-mounted seal
    - 63.119(b)(3)(ii) -Storage Vessel Provisions – Reference Control Technology–Internal floating roof – seal option; single metallic shoe seal
    - 63.119(b)(3)(iii) -Storage Vessel Provisions -- Reference Control Technology-- Internal floating roof - seal option; double seal, lower can be vapor mounted
    - 63.119(b)(4) -Storage Vessel Provisions -- Reference Control Technology-- Internal floating roof – automatic bleeder valve requirements
    - 63.120(a) -Storage Vessel Provisions -- Procedures to Determine Compliance-- Compliance Demonstration--Internal floating roof
    - 63.120(a)(1) -Storage Vessel Provisions -- Procedures to Determine Compliance—Internal FR tank inspection schedule
    - 63.120(a)(3) -Storage Vessel Provisions -- Procedures to Determine Compliance—Internal FR tank inspections – tanks with double seals
    - 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.
    - 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).
    - 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.
    - 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))
    - 63.120(a)(6) -Storage Vessel Provisions -- Procedures to Determine Compliance-- External FR and seal visual inspection each time emptied –- Notification for unplanned

- 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)]
- 63.123(a) -Storage Vessel Provisions -- Recordkeeping--Group 1 and Group 2 storage vessel dimensions and capacity. Keep for life of source.
- 63.123(c) -Storage Vessel Provisions -- Recordkeeping--Group 1 Internal floating roof tank requirements - records of each tank inspection
- 63.123(g) -Storage Vessel Provisions -- Recordkeeping, Extensions for emptying storage vessel – keep documentation specified

The Facility will no longer be considered a source having a “petroleum refining process unit” under the definitions of NESHAP Subpart CC (40 CFR Part 63, Subpart CC – National Emission Standards for Hazardous Air Pollutants From Petroleum Refineries) after the Project. As such, MACT CC will no longer apply to the internal floating roof tanks with dome roofs. MACT FFFF will also not apply to S-257 as it will not be in HAP service after the project. MACT FFFF will apply to S-126, as it will be in HAP service after the project. S-126 will comply with MACT FFFF through complying with MACT R – please refer to the MACT R section of this document.

**Sources S-108 and S-127 (Exempt External Floating Roof Tanks Subject to MACT Recordkeeping with Group I MACT Flexibility)**

Sources S-108 and S-127 (collectively referred to as "Exempt External Floating Roof Tanks Subject to MACT Recordkeeping with Group I MACT Flexibility") are currently subject to and are expected to continue to comply with the following regulations (while storing low vapor pressure liquids and falling under MACT Group II):

- Regulation 8, Rule 5 – Organic Compounds, Storage of Organic Liquids, including:
    - 8-5-117 - Exemption, Low Vapor Pressure
        - The provisions of this rule, except for Section 8-5-307.3, shall not apply to tanks storing organic liquids with a true vapor pressure of less than or equal to 0.5 psi.
    - 8-5-307.3 – Requirements for fixed roof tanks, pressure tanks, and blanketed tanks; Pressure tanks and blanketed tanks PRD requirements
        - The sealing mechanism on pressure relief devices located on pressure tanks and on tanks blanketed with organic gases other than natural gas shall be maintained in a gas tight condition except when operating pressure exceeds the valve set pressure, or except when the sealing mechanism is vented to a vapor recovery or disposal system that has an overall abatement efficiency of at least 95% by weight.
- Regulation 7 Odorous Substances (S-108 only)
    - 7-301- General Limit on Odorous Substances: A person shall not discharge any odorous substance which remains odorous after dilution with odor-free air
    - 7-302- Limit on Odorous Substances at or Beyond Property Line

Sources S-108 and S-127 (referred to as "Exempt External Floating Roof Tanks Subject to MACT Recordkeeping with Group I MACT Flexibility") are currently subject to and are expected to continue to comply with the following regulations (while storing liquids such that the tanks become MACT Group I tanks):

- Regulation 8, Rule 5 – Organic Compounds, Storage of Organic Liquids, including:
    - 8-5-111 - Limited Exemption, Tank Removal From and Return to Service
        - The requirements of Sections 8-5-304, 305, 306 and 307 shall not apply to storage tanks during or after tank decommissioning, and shall not apply during temporary removal from service.
            - 8-5-111.1 - Limited Exemption, Tank Removal From and Return to Service, Notification
            - 8-5-111.1.1 - Limited Exemption, Tank Removal From and Return to Service, Notification, 3 day prior notification
            - 8-5-111.1.2 - Limited Exemption, Tank Removal From and Return to Service, Notification, Telephone notification
            - 8-5-111.2 - Limited Exemption, Tank Removal From and Return to Service; Tank in compliance at time of notification
            - 8-5-111.3 - Limited Exemption, Tank Removal From and Return to Service; Filling, emptying, refilling floating roof tanks
            - 8-5-111.5 - Limited Exemption, Tank Removal From and Return to Service; Minimize emissions and, if required, degas per 8-5-328
            - 8-5-111.6 - Limited Exemption, Tank Removal From and Return to Service; Notification and reporting are not required when returning a tank to service
    - 8-5-112 - Limited Exemption, Preventative Maintenance and Inspection of Tanks in Operation
        - The requirements of Sections 8-5-304, 305, 306, 307.2, 307.3 and 328 shall not apply to storage tanks during preventative maintenance of a vapor control device, tank roof, roof fitting or tank seal; during primary seal inspection; or during removal and installation of a secondary seal.
            - 8-5-112.1 - Limited Exemption, Preventative Maintenance and Inspection of Tanks in Operation; Notification

- 8-5-112.1.2 - Limited Exemption, Tanks in Operation, Notification, Telephone notification
- 8-5-112.2 - Limited Exemption, Preventative Maintenance and Inspection of Tanks in Operation; Tank in compliance at time of notification
- 8-5-112.3 - Limited Exemption, Preventative Maintenance and Inspection of Tanks in Operation; No product movement, Minimize emissions
- 8-5-112.4 - Limited Exemption, Preventative Maintenance and Inspection of Tanks in Operation; Not to exceed 7 days
- 8-5-112.6 - Limited Exemption, Preventative Maintenance and Inspection of Tanks in Operation; Keep records for each exemption

- 8-5-119 - Limited Exemption, Repair Period for Enhanced Monitoring Program
  - A tank operator who has implemented an Enhanced Monitoring Program and who discovers equipment that fails to meet a requirement listed in Section 8-5-119.1 shall not be deemed in violation of that requirement, provided the operator complies with all of the conditions listed in Sections 8-5-119.2 and 119.3.
    - 8-5-119.1 Limited Exemption, Repair Period; Exemption available for certain requirements
    - 8-5-119.2 Limited Exemption, Repair Period; Conditions for the exemption
    - 8-5-119.3 Limited Exemption, Repair Period; Report use of exemption within 60 days
- 8-5-301 - Storage Tank Control Requirements
  - The facility shall not store organic liquid in any storage tank unless such tank is equipped with a vapor loss control device that is specified for the tank capacity, or for a higher capacity, and for the true vapor pressure of the tank organic liquid contents, or for a higher true vapor pressure.
- 8-5-304 - Requirements for External Floating Roof Tanks
  - An external floating roof must meet the requirements for floating roof fittings, primary and secondary seals, and roof/shell must be in good operating condition.
    - 8-5-304.1 - Requirements for External Floating Roofs; Tank fittings
    - 8-5-304.2 - Requirements for External Floating Roofs; Primary seal (8-5-321)
    - 8-5-304.3 - Requirements for External Floating Roofs; Secondary seal (8-5-322)
    - 8-5-304.4 - Requirements for External Floating Roofs; Floating roof
    - 8-5-304.5 - Requirements for External Floating Roofs; Tank shell
    - 8-5-304.6 - Requirements for External Floating Roofs; Pontoons – no leaks
    - 8-5-304.6.1 - Requirements for External Floating Roofs; Pontoons – make gas tight if leaking
    - 8-5-304.6.2 - Requirements for External Floating Roofs; Pontoons-repair all leaks at next removal from service
- 8-5-320 - Floating Roof Tank Fitting Requirements
  - All openings through the floating roof, solid sampling or gauging wells, slotted sampling or gauging wells, and emergency roof drain shall meet conditions specified.
    - 8-5-320.2 - Floating Roof Tank Fitting Requirements; Projection below liquid surface
    - 8-5-320.3 - Floating Roof Tank Fitting Requirements; Gasketed covers, seals, lids
    - 8-5-320.3.1 - Floating Roof Tank Fitting Requirements; Gasketed covers, seals, lids - Gap requirements
    - 8-5-320.4 - Floating Roof Tank Fitting Requirements; Solid sampling or gauging wells--

- 8-5-320.4.1 - Floating Roof Tank Fitting Requirements; Solid sampling or gauging wells--projection below liquid surface
- 8-5-320.4.2 - Floating Roof Tank Fitting Requirements; Solid sampling or gauging wells--cover, seal, or lid
- 8-5-320.4.3 - Floating Roof Tank Fitting Requirements; Solid sampling or gauging wells-- total secondary seal gap must include well gap
- 8-5-320.6 - Floating Roof Tank Fitting Requirements; emergency roof drains must be 90% covered

- 8-5-321 - Primary seal requirements
  - The facility shall not operate a storage tank equipped with a primary seal unless such tank meets the conditions specified.
    - 8-5-321.1 - Primary seal requirements; No holes, tears, or other openings
    - 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
    - 8-5-321.3 - Primary seal requirements; Metallic-shoe-type seal requirements
    - 8-5-321.3.1 - Primary seal requirements; Metallic-shoe-type seal requirements - geometry of shoe
    - 8-5-321.3.2 - Primary seal requirements; Metallic-shoe-type seal requirements - welded tanks gap requirements
- 8-5-322 - Secondary seal requirements
  - The facility shall not operate a storage tank equipped with a secondary seal unless such tank meets the requirements specified.
    - 8-5-322.1 - Secondary seal requirements; No holes, tears, or other openings
    - 8-5-322.2 - Secondary seal requirements; Insertion of probes
    - 8-5-322.5 - Secondary seal requirements; Gap requirements for welded external floating roof tanks with seal installed after September 4, 1985
    - 8-5-322.6 - Secondary seal requirements; extent of seal
- 8-5-328 - Tank degassing requirements
  - A tank operator shall not open the interior vapor space of a tank to the atmosphere through a hatch or manway, except to connect or disconnect degassing equipment or to conduct tank contents or emissions sampling, unless such tank meets the conditions specified.
    - 8-5-328.1 - Tank degassing requirements; Tanks > 75 cubic meters
    - 8-5-328.2 - Tank degassing requirements; Ozone Excess Day Prohibition
    - 8-5-328.3 - Tank degassing requirements; BAAQMD notification required
- 8-5-331 - Tank Cleaning Requirements
  - Tank interior cleaning agents must meet the requirements specified, unless all organic vapors and gases emitted during tank cleaning are collected and processed at an abatement device that has an abatement efficiency of at least 90% by weight.
- 8-5-332 - Sludge Handling Requirements
  - The operator of a tank shall place sludge removed from that tank directly into a sludge container that meets the requirements specified.
- 8-5-401 - Inspection Requirements for External Floating Roof Tanks
  - The operator shall inspect each primary and secondary seal, and fittings at the frequency specified.
    - 8-5-401.1 - Inspection Requirements for External Floating Roof Tanks; Primary and Secondary Seal Inspections
    - 8-5-401.2 - Inspection Requirements for External Floating Roof Tanks; Tank Fittings Inspections

- 8-5-404 - Inspection, Abatement Efficiency Determination, and Source Test Reports
  - A report shall be submitted to the APCO that certifies compliance with each individual requirement associated with the inspection, abatement efficiency determination or source test, and that includes data, supported by necessary calculations, to support this certification.
- 8-5-411 - Enhanced Monitoring Program (Optional)
  - Selected tanks for enhanced monitoring must be subject to Section 8-5-401, 402, or 403. The operator shall perform enhanced monitoring as specified in Sections 8-5-401, 402 and 403.
    - 8-5-411.1 - Enhanced Monitoring Program (Optional); Notify BAAQMD of tanks selected for enhanced monitoring program
    - 8-5-411.2 - Enhanced Monitoring Program (Optional); Criteria for operating enhanced monitoring program
    - 8-5-411.3 - Enhanced Monitoring Program (Optional); Performance requirements
- 8-5-412 - Monitoring of Leaking Pontoons
  - The operator of a floating roof tank on which a leaking pontoon has been discovered shall inspect the lids and other openings on any leaking pontoon for compliance with the requirements of Section 8-5-304.6.1 once per calendar quarter beginning the quarter after the leaking pontoon is discovered until a repair of the leak is completed.
- 8-5-501 – Records
  - The facility shall keep an accurate record of the type and amount of liquids stored, type of blanket gases used, and the true vapor pressure ranges of such liquids and gases. A tank operator shall keep an accurate record of primary/secondary seal replacements.
    - 8-5-501.1 - Records; Type and amount of liquid, type of blanket gas, TVP- Retain 24 months
    - 8-5-501.2 - Records; Internal and External Floating Roof Tanks, Seal Replacement Records- Retain 10 years
    - 8-5-501.3 - Records; Retention
- 8-5-602 - Analysis of Samples, True Vapor Pressure
- 8-5-604 - Determination of Applicability Based on True Vapor Pressure
- 8-5-605 – Measurement of leak concentration and residual concentrations
- 8-5-605.1 – Measurement of leak concentration and residual concentrations; EPA Method 21 Instruments
- 8-5-605.2 – Measurement of leak concentration and residual concentrations; Method 21 and tank degassing residual organic concentration measurement method

- 40 CFR Part 63, Subpart G – National Emission Standards for Organic Hazardous Air Pollutants From the Synthetic Organic Chemical Manufacturing Industry for Process Vents, Storage Vessels, Transfer Operations, and Wastewater, including:
  - 63.119(a) – Storage Vessel Provisions – Reference Control Technology
  - 63.119(a)(1) – Storage Vessel Provisions – Reference Control Technology— Group 1, TVP < 76.6 kPa
  - 63.119(c) – Storage Vessel Provisions – Reference Control Technology—External floating roof
  - 63.119(c)(1) – Storage Vessel Provisions – Reference Control Technology— External floating roof seals
  - 63.119(c)(1)(i) – Storage Vessel Provisions – Reference Control Technology—External floating roof double seals required
  - 63.119(c)(1)(ii) – Storage Vessel Provisions – Reference Control Technology— External floating roof primary seal requirements – metallic shoe or liquid-mounted
  - 63.119(c)(1)(iii) – Storage Vessel Provisions – Reference Control Technology—External floating roof seal requirements

- 63.119(c)(3) – Storage Vessel Provisions – Reference Control Technology— External floating roof—Must float on liquid
- 63.119(c)(3)(i) – Storage Vessel Provisions – Reference Control Technology—External floating roof –Must float on liquid except during initial fill
- 63.119(c)(3)(ii) – Storage Vessel Provisions – Reference Control Technology— External floating roof—Must float on liquid except after completely emptied and degassed
- 63.119(c)(3)(iii) – Storage Vessel Provisions – Reference Control Technology— External floating roof – Must float on liquid except when completely emptied before refilling
- 63.119(c)(4) – Storage Vessel Provisions – Reference Control Technology— External Floating Roof Operations, when not floating
- 63.120(b) – Storage Vessel Provisions – Procedures to Determine Compliance—Compliance Demonstration—External floating roof
- 63.120(b)(1) – Storage Vessel Provisions – Procedures to Determine Compliance—External FR seal gap measurement
- 63.120(b)(1)(i) – Storage Vessel Provisions – Procedures to Determine Compliance—External FR with double seals – primary seal gap measurement – 5 year intervals
- 63.120(b)(1)(iii) – Storage Vessel Provisions – Procedures to Determine Compliance—External FR with double seals – secondary seal gap measurement – annual requirement
- 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
- 63.120(b)(2) – Storage Vessel Provisions – Procedures to Determine Compliance—External FR seal gap determination methods
- 63.120(b)(2)(i) – Storage Vessel Provisions – Procedures to Determine Compliance—External FR seal gap determination methods – roof not resting on legs
- 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
- 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
- 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 cm2 per meter of vessel diameter. Maximum width <= 3.81 cm
- 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 cm2 per meter of vessel diameter. Maximum width <= 1.27 cm
- 63.120(b)(5) – Storage Vessel Provisions – Procedures to Determine Compliance—External FR primary seal additional requirements
- 63.120(b)(5)(i) – Storage Vessel Provisions – Procedures to Determine Compliance—External FR primary seal additional requirements – metallic shoe seal – shoe geometry
- 63.120(b)(5)(ii) – Storage Vessel Provisions – Procedures to Determine Compliance—External FR primary seal additional requirements – no holes, tears, or openings
- 63.120(b)(6) – Storage Vessel Provisions – Procedures to Determine Compliance—External FR secondary seal requirements
- 63.120(b)(6)(i) – Storage Vessel Provisions – Procedures to Determine Compliance—External FR secondary seal requirements – location and extent
- 63.120(b)(6)(ii) – Storage Vessel Provisions – Procedures to Determine Compliance—External FR secondary seal requirements – no holes, tears or openings
- 63.120(b)(7) – Storage Vessel Provisions – Procedures to Determine Compliance—External FR unsafe to perform seal measurements or inspect the tank

- 63.120(b)(7)(i) – Storage Vessel Provisions – Procedures to Determine Compliance—External FR unsafe to perform seal measurements or inspect the tank – complete measurements or inspection within 30 days after determining roof is unsafe or comply with 40 CFR 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 40 CFR 63.120(b)(7)(i). Two 30 day extensions are allowed to empty the tank. Decision to use extension must be documented.
- 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.
- 63.120(b)(9) – Storage Vessel Provisions – Procedures to Determine Compliance External FR seal gap measurement 30 day notification
- 63.120(b)(10) – Storage Vessel Provisions – Procedures to Determine Compliance—External FR and seals visual inspection each time emptied
- 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 40 CFR 63.646(e)]
- 63.120(b)(10)(ii) – Storage Vessel Provisions – Procedures to Determine Compliance—External FR and seal visual inspection each time emptied – 30 day notification
- 63.120(b)(10)(iii) – Storage Vessel Provisions – Procedures to Determine Compliance—External FR and seal visual inspection each time emptied –-Notification for unplanned
- 63.123(a) – Storage Vessel Provisions – Recordkeeping—Group 1 and Group 2 storage vessel dimensions and capacity. Keep for life of source.
- 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)
- 63.123(g) – Storage Vessel Provisions – Recordkeeping, Extensions for emptying storage vessel – keep documentation specified

The Facility will no longer be considered a source having a “petroleum refining process unit” under the definitions of NESHAP Subpart CC (40 CFR Part 63, Subpart CC – National Emission Standards for Hazardous Air Pollutants From Petroleum Refineries) after the Project. As such, MACT CC will no longer apply to the Exempt External Floating Roof Tanks Subject to MACT Recordkeeping with Group I MACT Flexibility. MACT FFFF will not apply to the Exempt External Floating Roof Tanks Subject to MACT Recordkeeping with Group I MACT Flexibility, as they will not be in HAP service after the project.

**Sources S-135, S-360, S-445, S-449, and S-506 (NSPS Kb Fixed Roof Tanks with Vapor Recovery to Fuel Gas)**

Tanks S-135, S-449, and S-506 (collectively referred to as "the NSPS Kb fixed roof tanks with vapor recovery to fuel gas") are currently subject to and will continue to comply with the following regulations:

- Regulation 1 – General Provisions and Definitions, including:
  - 1-523 – Parametric Monitoring and Recordkeeping Procedures
    - Continuous parametric monitors shall comply with monitoring and recordkeeping procedures, and shall report to the APCO on any violation of permit conditions or District regulations to which the source is required to conform.
      - 1-523.1 – Parametric Monitor Periods of Inoperation
      - 1-523.2 – Limits on Periods of Inoperation
      - 1-523.3 – Reports of Violations
      - 1-523.4 – Records
      - 1-523.5 – Maintenance and Calibration
- Regulation 8, Rule 5 – Organic Compounds, Storage of Organic Liquids, including:
  - 8-5-111 -Limited Exemption, Tank Removal From and Return to Service
    - The requirements of Sections 8-5-304, 305, 306 and 307 shall not apply to storage tanks during or after tank decommissioning, and shall not apply during temporary removal from service.
      - 8-5-111.1 -Limited Exemption, Tank Removal From and Return to Service; Notice to the APCO
      - 8-5-111.1.1 -Limited Exemption, Tank Removal From and Return to Service; Notice to the APCO; 3 day prior notification
      - 8-5-111.1.2 -Limited Exemption, Tank Removal From and Return to Service; Notice to the APCO; Telephone notification
      - 8-5-111.2 -Limited Exemption, Tank Removal From and Return to Service; Compliance before notification
      - 8-5-111.4 -Limited Exemption, Tank Removal From and Return to Service; Use of vapor recovery
      - 8-5-111.5 -Limited Exemption, Tank Removal From and Return to Service; Minimization of emissions
      - 8-5-111.6 - Limited Exemption, Tank Removal From and Return to Service; Notification and reporting are not required when returning a tank to service
  - 8-5-112 -Limited Exemption, Preventative Maintenance and Inspection of Tanks in Operation
    - The requirements of Sections 8-5-304, 305, 306, 307.2, 307.3 and 328 shall not apply to storage tanks during preventative maintenance of a vapor control device, tank roof, roof fitting or tank seal; during primary seal inspection; or during removal and installation of a secondary seal.
      - 8-5-112.1 -Limited Exemption, Tanks in Operation; Notice to the APCO
      - 8-5-112.1.1 -Limited Exemption, Tanks in Operation; Notice to the APCO; 3 day prior notification
      - 8-5-112.1.2 -Limited Exemption, Tanks in Operation; Notice to the APCO; Telephone notification
      - 8-5-112.2 -Limited Exemption, Tanks in Operation; Compliance and certification before commencement of work
      - 8-5-112.3 -Limited Exemption, Tanks in Operation; No product movement; minimization of emissions
      - 8-5-112.4 -Limited Exemption, Tanks in Operation; Exemption does not exceed 7 days
      - 8-5-112.6 -Tank Records
  - 8-5-118 Limited Exemption, Gas Tight Requirements

- 8-5-119 Limited Exemption, Repair Period
  - A tank operator who has implemented an Enhanced Monitoring Program and who discovers equipment that fails to meet a requirement listed in Section 8-5-119.1 shall not be deemed in violation of that requirement, provided the operator complies with all of the conditions listed in Sections 8-5-119.2 and 119.3.
    - 8-5-119.1 -Limited Exemption, Repair Period; Exemption available for certain requirements
    - 8-5-119.2 -Limited Exemption, Repair Period; Conditions for the exemption
    - 8-5-119.3- Limited Exemption, Repair Period; Report use of exemption within 60 days
- 8-5-301 -Storage Tank Control Requirements (internal floating roof, external floating roof, or approved emission control system)
  - The facility shall not store organic liquid in any storage tank unless such tank is equipped with a vapor loss control device that is specified for the tank capacity, or for a higher capacity, and for the true vapor pressure of the tank organic liquid contents, or for a higher true vapor pressure.
- 8-5-303 -Requirements for Pressure Vacuum Valves
- 8-5-303.1 -Requirements for Pressure Vacuum Valves; Set pressure
- 8-5-303.2 -Requirements for Pressure Vacuum Valves; Installation, maintenance, operation
- 8-5-306 -Requirements for Approved Emission Control Systems
  - An Approved Emission Control System must provide an abatement efficiency of at least 95% by weight and must be gas tight.
- 8-5-307 -Requirements for Fixed Roof Tanks, Pressure Tanks, and Blanketed Tanks
  - Tank shells must be in good operating condition, pressure tank must maintain working pressures to prevent loss to the atmosphere, and sealing mechanism on pressure relief devices shall be maintained in a gas tight condition.
    - 8-5-307.1 -Shell in good condition with no leakage
    - 8-5-307.3 – Requirements for fixed roof tanks, pressure tanks, and blanketed tanks; Pressure tanks and blanketed tanks PRD requirements
- 8-5-328 -Tank Degassing Requirements
  - A tank operator shall not open the interior vapor space of a tank to the atmosphere through a hatch or manway, except to connect or disconnect degassing equipment or to conduct tank contents or emissions sampling, unless such tank meets the conditions specified.
    - 8-5-328.1 -Tank Degassing Requirements; Tanks > 75 cubic meters; Concentration of <10,000 ppm as methane after degassing
    - 8-5-328.2 -Tank degassing requirements; Ozone excess day prohibition
    - 8-5-328.3 -Notification of degassing
- 8-5-331 -Tank Cleaning Requirements
  - Tank interior cleaning agents must meet the requirements specified, unless all organic vapors and gases emitted during tank cleaning are collected and processed at an abatement device that has an abatement efficiency of at least 90% by weight.
- 8-5-332 -Sludge Handling Requirements
  - The operator of a tank shall place sludge removed from that tank directly into a sludge container that meets the requirements specified.
- 8-5-403 -Inspection Requirements for Pressure Relief Devices
- 8-5-404 -Inspection, Abatement Efficiency Determination and Source Test Reports
  - A report shall be submitted to the APCO that certifies compliance with each individual requirement associated with the inspection, abatement efficiency determination or source test, and that includes data, supported by necessary calculations, to support this certification.

- 8-5-411 – Enhanced Monitoring Program
  - Selected tanks for enhanced monitoring must be subject to Section 8-5-401, 402, or 403. The operator shall perform enhanced monitoring as specified in Sections 8-5-401, 402 and 403.
- 8-5-501 -Records
  - The facility shall keep an accurate record of the type and amount of liquids stored, type of blanket gases used, and the true vapor pressure ranges of such liquids and gases. A tank operator shall keep an accurate record of primary/secondary seal replacements.
    - 8-5-501.1 -Records; Type and amounts of liquid; true vapor pressure; Retain 24 months
    - 8-5-501.3 -Records retained for 24 months
    - 8-5-501.4 -Engineering data sheets showing setpoints for pressure vacuum valves installed after 6/1/07
- 8-5-603 -Determination of emissions
- 8-5-603.1 -Determination of Emissions; Organic compounds specified in 8-5-306
- 8-5-604 -Determination of Applicability
- 8-5-605 - Measurement of Leak Concentrations and Residual Concentrations

- 40 CFR Part 60, Subpart Kb– Standards of Performance for Storage Vessels for Volatile Organic Liquid Storage Vessels for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984, including:
  - 60.110b(a) -Applicability and Designation of Affected Facility; Volatile organic liquid storage vessels > or = to 40 cu m, after 7/23/1984
  - 60.112b(a)(3) -Standard for Volatile Organic Compounds (VOC); Closed vent system and control device
  - 60.112b(a)(3)(i) -Standard for Volatile Organic Compounds (VOC); Closed vent system and control device no detectable emissions per 60.485(b) (Subpart VV)
  - 60.112b(a)(3)(ii) -Standard for Volatile Organic Compounds (VOC); Closed vent system and control device >= 95% inlet VOC emission reduction
  - 60.112b(b) -Standard for Volatile Organic Compounds (VOC); Closed vent system and control device
  - 60.112b(b)(1) -Standard for Volatile Organic Compounds (VOC); Closed vent system and control device as specified in 60.112b(a)(3)
  - 60.113b(c) -Testing and Procedures; Closed vent system and control device (not flare)
  - 60.113b(c)(1) -Testing and Procedures; Closed vent system and control device (not flare) operating plan submission
  - 60.113b(c)(1)(i) -Testing and Procedures; Closed vent system and control device (not flare) operating plan--efficiency demonstration
  - 60.113b(c)(1)(ii) -Testing and Procedures; Closed vent system and control device (not flare) operating plan--monitoring parameters
  - 60.113b(c)(2) -Testing and Procedures; Closed vent system and control device (not flare) operate in accordance with operating plan
  - 60.115b -Reporting and Recordkeeping Requirements; 60.112b(a) tanks; Record retention
  - 60.115b(c) -Reporting and Recordkeeping Requirements; Closed vent system and control device (not flare)
  - 60.115b(c)(1) -Reporting and Recordkeeping Requirements; Closed vent system and control device (not flare) operating plan copy – Retain for life of control device
  - 60.115b(c)(2) -Reporting and Recordkeeping Requirements; Closed vent system and control device (not flare) operating records – Retain for at least 2 years
  - 60.116b(a) -Monitoring of Operations; Record retention
  - 60.116b(b) -Monitoring of Operations; Permanent record requirements
  - 60.116b(e) -Monitoring of Operations; Determine TVP

- 60.116b(e)(2) -Monitoring of Operations; Determine TVP-crude oil or refined petroleum products
- 60.116b(g) -Monitoring of Operations; Exemption from 60.116b(c) and 60.116b(d) for tanks with closed vent system and control device

The Facility will no longer be considered a source having a “petroleum refining process unit” under the definitions of NESHAP Subpart CC (40 CFR Part 63, Subpart CC – National Emission Standards for Hazardous Air Pollutants From Petroleum Refineries) after the Project. As such, MACT CC will no longer apply to the NSPS Kb fixed roof tanks with vapor recovery to fuel gas. MACT FFFF will not apply to the NSPS Kb fixed roof tanks with vapor recovery to fuel gas, as they will not be in HAP service after the project.

**Source S-137 (MACT Fixed Roof Tank with Vapor Recovery to Fuel Gas)**

Source S-137 (referred to as "MACT Fixed Roof Tank with Vapor Recovery to Fuel Gas") is currently subject to and is expected to continue to comply with the following regulations:

- Regulation 1 – General Provisions and Definitions, including:
    - 1-523 – Parametric Monitoring and Recordkeeping Procedures
        - Continuous parametric monitors shall comply with monitoring and recordkeeping procedures, and shall report to the APCO on any violation of permit conditions or District regulations to which the source is required to conform.
            - 1-523.1 – Parametric Monitor Periods of Inoperation
            - 1-523.2 – Limits on Periods of Inoperation
            - 1-523.3 – Reports of Violations
            - 1-523.4 – Records
            - 1-523.5 – Maintenance and Calibration
- Regulation 8, Rule 5 – Organic Compounds, Storage of Organic Liquids, including:
    - 8-5-111 – Limited Exemption, Tank Removal From and Return to Service
        - The requirements of Sections 8-5-304, 305, 306 and 307 shall not apply to storage tanks during or after tank decommissioning, and shall not apply during temporary removal from service.
            - 8-5-111.1 – Limited Exemption, Tank Removal From and Return to Service, Notification to the APCO
            - 8-5-111.1.1 – Limited Exemption, Tank Removal From and Return to Service; Notice to the APCO; 3 day prior notification
            - 8-5-111.1.2 – Limited Exemption, Tank Removal From and Return to Service; Notice to the APCO; Telephone notification
            - 8-5-111.2 – Limited Exemption, Tank Removal From and Return to Service; Compliance before notification
            - 8-5-111.4 – Limited Exemption, Tank Removal From and Return to Service; Use of vapor recovery
            - 8-5-111.5 – Limited Exemption, Tank Removal From and Return to Service; Minimization of emissions
            - 8-5-111.6 – Limited Exemption, Tank Removal From and Return to Service; Notification and reporting are not required when returning a tank to service
    - 8-5-112 – Limited Exemption, Preventative Maintenance and Inspection of Tanks in Operation
        - The requirements of Sections 8-5-304, 305, 306, 307.2, 307.3 and 328 shall not apply to storage tanks during preventative maintenance of a vapor control device, tank roof, roof fitting or tank seal; during primary seal inspection; or during removal and installation of a secondary seal.
            - 8-5-112.1 – Limited Exemption, Preventative Maintenance and Inspection of Tanks in Operation; Notice to the APCO
            - 8-5-112.1.1 – Limited Exemption, Preventative Maintenance and Inspection of Tanks in Operation; Notice to the APCO; 3 day prior notification
            - 8-5-112.1.2 – Limited Exemption, Preventative Maintenance and Inspection of Tanks in Operation; Notice to the APCO; telephone notification
            - 8-5-112.2 – Limited Exemption, Preventative Maintenance and Inspection of Tanks in Operation; Compliance and certification before commencement of work
            - 8-5-112.3 – Limited Exemption, Preventative Maintenance and Inspection of Tanks in Operation; No product movement, Minimization of emissions
            - 8-5-112.4 – Limited Exemption, Preventative Maintenance and Inspection of Tanks in Operation; Exemption does not exceed 7 days

- 8-5-112.6 – Records for 24 months

- 8-5-118 – Limited Exemption, Gas Tight Requirements
- 8-5-119 – Limited Exemption, Repair Period
  - A tank operator who has implemented an Enhanced Monitoring Program and who discovers equipment that fails to meet a requirement listed in Section 8-5-119.1 shall not be deemed in violation of that requirement, provided the operator complies with all of the conditions listed in Sections 8-5-119.2 and 119.3.
    - 8-5-119.1 – Limited Exemption, Repair Period; Exemption available for certain requirements
    - 8-5-119.2 – Limited Exemption, Repair Period; Conditions for the exemption
    - 8-5-119.3 – Limited Exemption, Repair Period; Report use of exemption within 60 days
- 8-5-301 – Storage Tank Control Requirements (internal floating roof, external floating roof, or approved emission control system)
  - The facility shall not store organic liquid in any storage tank unless such tank is equipped with a vapor loss control device that is specified for the tank capacity, or for a higher capacity, and for the true vapor pressure of the tank organic liquid contents, or for a higher true vapor pressure.
- 8-5-303 – Requirements for pressure vacuum relief valves
- 8-5-303.1 – Requirements for pressure vacuum relief valves; set pressure
- 8-5-303.2 – Requirements for pressure vacuum relief valves; installation, maintenance, operation
- 8-5-306 – Requirements for Approved Emission Control Systems
  - An Approved Emission Control System must provide an abatement efficiency of at least 95% by weight and must be gas tight.
- 8-5-307 – Requirements for fixed roof tanks, pressure tanks, and blanketed tanks
  - Tank shells must be in good operating condition, pressure tank must maintain working pressures to prevent loss to the atmosphere, and sealing mechanism on pressure relief devices shall be maintained in a gas tight condition.
    - 8-5-307.1 – Shell in good condition with no leakage
    - 8-5-307.3 – Requirements for fixed roof tanks, pressure tanks, and blanketed tanks; Pressure tanks and blanketed tanks PRD requirements
- 8-5-328 – Tank degassing requirements
  - A tank operator shall not open the interior vapor space of a tank to the atmosphere through a hatch or manway, except to connect or disconnect degassing equipment or to conduct tank contents or emissions sampling, unless such tank meets the conditions specified.
    - 8-5-328.1 – Tank degassing requirements; Tanks > 75 cubic meters; Concentration of <10,000 ppm as methane after degassing
    - 8-5-328.2 – Tank degassing requirements; Ozone Excess Day Prohibition
    - 8-5-328.3 – Notification of degassing
- 8-5-331 – Tank cleaning requirements
  - Tank interior cleaning agents must meet the requirements specified, unless all organic vapors and gases emitted during tank cleaning are collected and processed at an abatement device that has an abatement efficiency of at least 90% by weight.
- 8-5-332 – Sludge handling requirements
  - The operator of a tank shall place sludge removed from that tank directly into a sludge container that meets the requirements specified.
- 8-5-403 – Inspection Requirements for Pressure Relief Devices
- 8-5-404 – Inspection, Abatement Efficiency Determination, and Source Test Reports
  - A report shall be submitted to the APCO that certifies compliance with each individual requirement associated with the inspection, abatement efficiency determination or

source test, and that includes data, supported by necessary calculations, to support this certification.

- 8-5-411 – Enhanced Monitoring Program
  - Selected tanks for enhanced monitoring must be subject to Section 8-5-401, 402, or 403. The operator shall perform enhanced monitoring as specified in Sections 8-5-401, 402 and 403.
- 8-5-501 – Records
  - The facility shall keep an accurate record of the type and amount of liquids stored, type of blanket gases used, and the true vapor pressure ranges of such liquids and gases. A tank operator shall keep an accurate record of primary/secondary seal replacements.
    - 8-5-501.1 – Records; Type and amount of liquid; True Vapor Pressure; Retain 24 months
    - 8-5-501.3 -Records retained for 24 months
    - 8-5-501.4 -Engineering data sheets showing setpoints for pressure vacuum valves installed after 6/1/07
- 8-5-603 – Determination of emissions
- 8-5-603.1 – Determination of emissions; Organic compounds specified in 8-5-306
- 8-5-604 – Determination of Applicability
- 8-5-605 – Measurement of Leak Concentrations and Residual Concentrations

The Facility will no longer be considered a source having a “petroleum refining process unit” under the definitions of NESHAP Subpart CC (40 CFR Part 63, Subpart CC – National Emission Standards for Hazardous Air Pollutants From Petroleum Refineries) after the Project. As such, MACT CC will no longer apply to the MACT Fixed Roof Tank with Vapor Recovery to Fuel Gas. MACT FFFF will not apply to the MACT Fixed Roof Tank with Vapor Recovery to Fuel Gas, as it will not be in HAP service after the project.

**Sources S-139 and S-140 (MACT Fixed Roof Tanks with Vapor Recovery to Fuel Gas)**

Sources S-139 and S-140 (referred to as "MACT Fixed Roof Tanks with Vapor Recovery to Fuel Gas") are currently subject to and is expected to continue to comply with the following regulations:

- Regulation 1 – General Provisions and Definitions, including:
    - 1-523 – Parametric Monitoring and Recordkeeping Procedures
        - Continuous parametric monitors shall comply with monitoring and recordkeeping procedures, and shall report to the APCO on any violation of permit conditions or District regulations to which the source is required to conform.
            - 1-523.1 – Parametric Monitor Periods of Inoperation
            - 1-523.2 – Limits on Periods of Inoperation
            - 1-523.3 – Reports of Violations
            - 1-523.4 – Records
            - 1-523.5 – Maintenance and Calibration
- Regulation 8, Rule 5 – Organic Compounds, Storage of Organic Liquids, including:
    - 8-5-111 – Limited Exemption, Tank Removal From and Return to Service
        - The requirements of Sections 8-5-304, 305, 306 and 307 shall not apply to storage tanks during or after tank decommissioning, and shall not apply during temporary removal from service.
            - 8-5-111.1 – Limited Exemption, Tank Removal From and Return to Service; Notice to the APCO
            - 8-5-111.1.1 – Limited Exemption, Tank Removal From and Return to Service; Notice to the APCO; 3 day prior notification
            - 8-5-111.1.2 – Limited Exemption, Tank Removal From and Return to Service; Notice to the APCO; Telephone notification
            - 8-5-111.2 – Limited Exemption, Tank Removal From and Return to Service; Compliance before notification
            - 8-5-111.4 – Limited Exemption, Tank Removal From and Return to Service; Use of vapor recovery
            - 8-5-111.5 – Limited Exemption, Tank Removal From and Return to Service; Minimization of emissions
            - 8-5-111.6 – Limited Exemption, Tank Removal From and Return to Service; Notification and reporting are not required when returning a tank to service
    - 8-5-112 – Limited Exemption, Preventative Maintenance and Inspection of Tanks in Operation
        - The requirements of Sections 8-5-304, 305, 306, 307.2, 307.3 and 328 shall not apply to storage tanks during preventative maintenance of a vapor control device, tank roof, roof fitting or tank seal; during primary seal inspection; or during removal and installation of a secondary seal.
            - 8-5-112.1 – Limited Exemption, Tanks in Operation; Notice to the APCO
            - 8-5-112.1.1 – Limited Exemption, Tanks in Operation; Notice to the APCO; 3 day prior notification
            - 8-5-112.1.2 – Limited Exemption, Tanks in Operation; Notice to the APCO; Telephone notification
            - 8-5-112.2 – Limited Exemption, Tanks in Operation; Compliance and certification before commencement of work
            - 8-5-112.3 – Limited Exemption, Tanks in Operation; No product movement; minimization of emissions
            - 8-5-112.4 – Limited Exemption, Tanks in Operation; Exemption does not exceed 7 days
            - 8-5-112.6 – Tank Records
    - 8-5-118 Limited Exemption, Gas Tight Requirements

- 8-5-119 Limited Exemption, Repair Period
  - A tank operator who has implemented an Enhanced Monitoring Program and who discovers equipment that fails to meet a requirement listed in Section 8-5-119.1 shall not be deemed in violation of that requirement, provided the operator complies with all of the conditions listed in Sections 8-5-119.2 and 119.3.
    - 8-5-119.1 Limited Exemption, Repair Period; Exemption available for certain requirements
    - 8-5-119.2 Limited Exemption, Repair Period; Conditions for the exemption
    - 8-5-119.3 Limited Exemption, Repair Period; Report use of exemption within 60 days
- 8-5-301 – Storage Tank Control Requirements (internal floating roof, external floating roof, or approved emission control system)
  - The facility shall not store organic liquid in any storage tank unless such tank is equipped with a vapor loss control device that is specified for the tank capacity, or for a higher capacity, and for the true vapor pressure of the tank organic liquid contents, or for a higher true vapor pressure.
- 8-5-303 – Requirements for Pressure Vacuum Valves
- 8-5-303.1 – Requirements for Pressure Vacuum Valves; Set pressure
- 8-5-303.2 – Requirements for Pressure Vacuum Valves; Installation, maintenance, operation
- 8-5-306 – Requirements for Approved Emission Control Systems
  - An Approved Emission Control System must provide an abatement efficiency of at least 95% by weight and must be gas tight.
- 8-5-307 – Requirements for Fixed Roof Tanks, Pressure Tanks, and Blanketed Tanks
  - Tank shells must be in good operating condition, pressure tank must maintain working pressures to prevent loss to the atmosphere, and sealing mechanism on pressure relief devices shall be maintained in a gas tight condition.
    - 8-5-307.1 – Shell in good condition with no leakage
    - 8-5-307.3 – Requirements for fixed roof tanks, pressure tanks, and blanketed tanks; Pressure tanks and blanketed tanks PRD requirements
- 8-5-328 – Tank Degassing Requirements
  - A tank operator shall not open the interior vapor space of a tank to the atmosphere through a hatch or manway, except to connect or disconnect degassing equipment or to conduct tank contents or emissions sampling, unless such tank meets the conditions specified.
    - 8-5-328.1 – Tank Degassing Requirements; Tanks > 75 cubic meters
    - 8-5-328.1.2 – Tank Degassing Requirements; Tanks > 75 cubic meters; Concentration of <10,000 ppm as methane after degassing
    - 8-5-328.2 – Tank degassing requirements; Ozone excess day prohibition
    - 8-5-328.3 – Notification of degassing
- 8-5-331 – Tank Cleaning Requirements
  - Tank interior cleaning agents must meet the requirements specified, unless all organic vapors and gases emitted during tank cleaning are collected and processed at an abatement device that has an abatement efficiency of at least 90% by weight.
- 8-5-332 – Sludge Handling Requirements
  - The operator of a tank shall place sludge removed from that tank directly into a sludge container that meets the requirements specified.
- 8-5-403 – Inspection Requirements for Pressure Relief Devices
- 8-5-404 – Inspection, Abatement Efficiency Determination and Source Test Reports
  - A report shall be submitted to the APCO that certifies compliance with each individual requirement associated with the inspection, abatement efficiency determination or

source test, and that includes data, supported by necessary calculations, to support this certification.

- 8-5-411 – Enhanced Monitoring Program
  - Selected tanks for enhanced monitoring must be subject to Section 8-5-401, 402, or 403. The operator shall perform enhanced monitoring as specified in Sections 8-5-401, 402 and 403.
- 8-5-501 – Records
  - The facility shall keep an accurate record of the type and amount of liquids stored, type of blanket gases used, and the true vapor pressure ranges of such liquids and gases. A tank operator shall keep an accurate record of primary/secondary seal replacements.
    - 8-5-501.1 – Records; Type and amounts of liquid; true vapor pressure; Retain 24 months
    - 8-5-501.3 – Records retained for 24 months
    - 8-5-501.4 – Engineering data sheets showing setpoints for pressure vacuum valves installed after 6/1/07
- 8-5-603 – Determination of emissions
- 8-5-603.1 – Determination of Emissions; Organic compounds specified in 8-5-306
- 8-5-604 – Determination of Applicability Based on True Vapor Pressure
- 8-5-605 – Measurement of Leak Concentrations and Residual Concentrations

- Regulation 8, Rule 8 – Organic Compounds, Wastewater (Oil-Water Separators), including:
  - 8-8-302 – Wastewater Separators Larger than or Equal to 18.9 Liters per Second
    - The facility shall not operate any wastewater separator and/or forebay with a rated or maximum allowable capacity larger than or equal to 300 gals per min. unless such wastewater separator and/or forebay is operated within its design rated or maximum allowable capacity and is equipped with one of the specified requirements.
      - 8-8-302.3 – Requirements for separators with fixed roofs and control device
        - A vapor-tight fixed cover with an organic compound vapor recovery system which has a combined collection and destruction efficiency of at least 95 percent, by weight, inspection and access hatches shall be closed except when the opening is being used for inspection, maintenance, or wastewater sampling.
  - 8-8-303 – Gauging and Sampling Devices
    - Any compartment or access hatch shall have a vapor tight cover. Any gauging and sampling device in the compartment cover shall be equipped with a vapor tight cover, seal, or lid. The compartment cover and gauging or sampling device cover shall at all times be in a closed position, except when the device is in use for inspection, maintenance, or wastewater sampling.
  - 8-8-312 – Controlled Wastewater Collection System Components at Refineries
    - All controlled wastewater collection system components at refineries shall be vapor tight except when in use for active inspection, maintenance, repair or sampling.
  - 8-8-503 – Inspection and Repair Records
    - Records of inspections and repairs shall be retained and made available for Inspection by the APCO.
  - 8-8-504 – Portable Hydrocarbon Detector
    - Any instrument used for the measurement of organic compounds shall be a gas detector that meets the specifications and performance criteria of and has been calibrated in accordance with EPA Reference Method 21.
  - 8-8-505 – Records for Wastewater Collection System Components at Petroleum Refineries
  - 8-8-603 – Inspection procedures
    - Leaks shall be measured using a portable gas detector as prescribed in EPA Reference Method 21.

- 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, including:
    - 40 CFR 60.111(b) – Definitions: Petroleum liquids
- 40 CFR 61, Subpart FF – National Emission Standards for Benzene Waste Operations, including:
    - 40 CFR 61.343(a) – Standards: Tanks
    - 40 CFR 61.343(a)(1) – Standards: Tanks
    - 40 CFR 61.343(a)(1)(i) – Standards: Tanks, Fixed roof requirements
    - 40 CFR 61.343(a)(1)(ii) – Standards: Tanks, Closed vent systems comply with 61.349
    - 40 CFR 61.343© – Quarterly visual inspections
    - 40 CFR 61.343(d) – First efforts at repair
    - 40 CFR 61.349 – Standards: Closed-vent systems and control devices
    - 40 CFR 61.349(a) – Standards: Closed-vent systems and control devices
    - 40 CFR 61.349(a)(1) – Closed vent system operation
    - 40 CFR 61.349(a)(2) – Control device requirements
    - 40 CFR 61.349(a)(2)(i) – Control device requirements: enclosed combustion device
    - 40 CFR 61.349(b) – Operate at all times when waste is placed in waste management unit
    - 40 CFR 61.349(c) – Control device (except flare) demonstration
    - 40 CFR 61.349(f) – Visual inspection quarterly
    - 40 CFR 61.349(g) – Repair period requirements
    - 40 CFR 61.349(h) – Monitor control device in accordance with 61.354(c)
    - 40 CFR 61.354(c) – Monitoring of Operations: Control device

The Facility will no longer be considered a source having a “petroleum refining process unit” under the definitions of NESHAP Subpart CC (40 CFR Part 63, Subpart CC – National Emission Standards for Hazardous Air Pollutants From Petroleum Refineries) after the Project. As such, MACT CC will no longer apply to the MACT Fixed Roof Tanks with Vapor Recovery to Fuel Gas. MACT FFFF will not apply to the MACT Fixed Roof Tanks with Vapor Recovery to Fuel Gas, as they will not be in HAP service after the project.

**Sources S-173, S-174, and S-175 (Low Vapor Pressure Permitted Tanks Vented to Fuel Gas)**

Sources S-173, S-174, and S-175 (collectively referred to as "the Low Vapor Pressure Permitted Tanks Vented to Fuel Gas") are currently subject to and will continue to comply with the following regulations:

- Regulation 1 – General Provisions and Definitions, including:
  - 1-523 – Parametric Monitoring and Recordkeeping Procedures **(applies to S-175 only)**
    - Continuous parametric monitors shall comply with monitoring and recordkeeping procedures, and shall report to the APCO on any violation of permit conditions or District regulations to which the source is required to conform.
      - 1-523.1 – Parametric Monitor Periods of Inoperation **(applies to S-175 only)**
      - 1-523.2 – Limits on Periods of Inoperation **(applies to S-175 only)**
      - 1-523.3 – Reports of Violations **(applies to S-175 only)**
      - 1-523.4 – Records **(applies to S-175 only)**
      - 1-523.5 – Maintenance and Calibration **(applies to S-175 only)**
- Regulation 8, Rule 5 – Organic Compounds – Storage of Organic Liquids, including:
  - 8-5-1–7 - Limited Exemption, Low Vapor Pressure
    - The provisions of this rule, except for Section 8-5-307.3, shall not apply to tanks storing organic liquids with a true vapor pressure of less than or equal to 0.5 psi.
  - 8-5-307.3 – Requirements for fixed roof tanks, pressure tanks, and blanketed tanks; Pressure tanks and blanketed tanks PRD requirements
    - The sealing mechanism on pressure relief devices located on pressure tanks and on tanks blanketed with organic gases other than natural gas shall be maintained in a gas tight condition except when operating pressure exceeds the valve set pressure, or except when the sealing mechanism is vented to a vapor recovery or disposal system that has an overall abatement efficiency of at least 95% by weight.

The Facility will no longer be considered a source having a "petroleum refining process unit" under the definitions of NESHAP Subpart CC (40 CFR Part 63, Subpart CC – National Emission Standards for Hazardous Air Pollutants From Petroleum Refineries) after the Project. As such, MACT CC will no longer apply to the Low Vapor Pressure Permitted Tanks Vented to Fuel Gas. MACT FFFF will not apply to the Low Vapor Pressure Permitted Tanks Vented to Fuel Gas, as they will not be in HAP service after the project.

**Sources S-188, S-189, S-190, and S-253 (Exempt Butane Spheres)**

Tanks S-188, S-189, S-190, and S-253 (collectively referred to as "Exempt Butane Spheres") are currently subject to and are expected to continue to comply with the following regulations:

- Regulation 8, Rule 5 – Organic Compounds, Storage of Organic Liquids, including:
  - 8-5-1–1 - Limited Exemption, Tank Removal From and Return to Service
    - The requirements of Sections 8-5-304, 305, 306 and 307 shall not apply to storage tanks during or after tank decommissioning, and shall not apply during temporary removal from service.
      - 8-5-111–1 - Limited Exemption, Tank Removal From and Return to Service, Notification to the APCO
      - 8-5-111.1–1 - Limited Exemption, Tank Removal From and Return to Service; Notice to the APCO; 3 day prior notification
      - 8-5-111.1–2 - Limited Exemption, Tank Removal From and Return to Service; Notice to the APCO; Telephone notification
      - 8-5-111–2 - Limited Exemption, Tank Removal From and Return to Service; Tank in compliance at time of notification
      - 8-5-111–4 - Limited Exemption, Tank Removal From and Return to Service; Use vapor recovery during filling and emptying tanks
      - 8-5-111–5 - Limited Exemption, Tank Removal From and Return to Service; Minimize emissions and, if required, degas per 8-5-328
      - 8-5-111–6 - Limited Exemption, Tank Removal From and Return to Service; Notification and reporting are not required when returning a tank to service
  - 8-5-1–2 - Limited Exemption, Preventative Maintenance and Inspection of Tanks in Operation
    - The requirements of Sections 8-5-304, 305, 306, 307.2, 307.3 and 328 shall not apply to storage tanks during preventative maintenance of a vapor control device, tank roof, roof fitting or tank seal; during primary seal inspection; or during removal and installation of a secondary seal.
      - 8-5-112–1 - Limited Exemption, Preventative Maintenance and Inspection of Tanks in Operation; Notification
      - 8-5-112.1–1 - Limited Exemption, Preventative Maintenance and Inspection of Tanks in Operation; Notice to the APCO; 3 day prior notification
      - 8-5-112.1–2 - Limited Exemption, Preventative Maintenance and Inspection of Tanks in Operation; Notice to the APCO; telephone notification
      - 8-5-112–2 - Limited Exemption, Preventative Maintenance and Inspection of Tanks in Operation; Tank in compliance at time of notification
      - 8-5-112–3 - Limited Exemption, Preventative Maintenance and Inspection of Tanks in Operation; No product movement, Minimize emissions
      - 8-5-112–4 - Limited Exemption, Preventative Maintenance and Inspection of Tanks in Operation; Not to exceed 7 days
      - 8-5-112–6 - Limited Exemption, Preventative Maintenance and Inspection of Tanks in Operation; Keep records for each exemption
  - 8-5-118 Limited Exemption, Gas Tight Requirements
  - 8-5-1–9 - Limited Exemption, Repair Period for Enhanced Monitoring Program
    - A tank operator who has implemented an Enhanced Monitoring Program and who discovers equipment that fails to meet a requirement listed in Section 8-5-119.1 shall not be deemed in violation of that requirement, provided the operator complies with all of the conditions listed in Sections 8-5-119.2 and 119.3.
      - 8-5-119.1 Limited Exemption, Repair Period; Exemption available for certain requirements

- 8-5-119.2 Limited Exemption, Repair Period; Conditions for the exemption
- 8-5-119.3 Limited Exemption, Repair Period; Report use of exemption within 60 days

- 8-5-3–1 - Storage Tank Control Requirements
  - The facility shall not store organic liquid in any storage tank unless such tank is equipped with a vapor loss control device that is specified for the tank capacity, or for a higher capacity, and for the true vapor pressure of the tank organic liquid contents, or for a higher true vapor pressure.
- 8-5-303 – Requirements for pressure vacuum relief valves
- 8-5-303.1 – Requirements for pressure vacuum relief valves; set pressure
- 8-5-303.2 – Requirements for pressure vacuum relief valves; gas tight requirement
- 8-5-307 – Requirements for fixed roof tanks, pressure tanks, and blanketed tanks
  - Tank shells must be in good operating condition, pressure tank must maintain working pressures to prevent loss to the atmosphere, and sealing mechanism on pressure relief devices shall be maintained in a gas tight condition.
    - 8-5-307.1 – Requirements for fixed roof tanks, pressure tanks, and blanketed tanks; no liquid leakage through shell
    - 8-5-307.2 – Requirements for fixed roof tanks, pressure tanks, and blanketed tanks; Pressure tank working pressure
      - Pressure tank must maintain working pressures to prevent loss to the atmosphere.
    - 8-5-307.3 – Requirements for fixed roof tanks, pressure tanks, and blanketed tanks; Pressure tanks and blanketed tanks PRD requirements
      - The sealing mechanism on pressure relief devices located on pressure tanks and on tanks blanketed with organic gases other than natural gas shall be maintained in a gas tight condition except when operating pressure exceeds the valve set pressure, or except when the sealing mechanism is vented to a vapor recovery or disposal system that has an overall abatement efficiency of at least 95% by weight.
- 8-5-3–8 - Tank degassing requirements
  - A tank operator shall not open the interior vapor space of a tank to the atmosphere through a hatch or manway, except to connect or disconnect degassing equipment or to conduct tank contents or emissions sampling, unless such tank meets the conditions specified.
    - 8-5-328–1 - Tank degassing requirements; Tanks > 75 cubic meters; Concentration of <10,000 ppm as methane after degassing
    - 8-5-328–2 - Tank degassing requirements; Ozone Excess Day Prohibition
    - 8-5-328–3 - Tank degassing requirements; BAAQMD notification required
- 8-5-403 – Inspection Requirements for Pressure Relief Devices
- 8-5-4–4 - Inspection, Abatement Efficiency Determination, and Source Test Reports
  - A report shall be submitted to the APCO that certifies compliance with each individual requirement associated with the inspection, abatement efficiency determination or source test, and that includes data, supported by necessary calculations, to support this certification.
- 8-5-4–1 - Enhanced Monitoring Program (Optional)
  - Selected tanks for enhanced monitoring must be subject to Section 8-5-401, 402, or 403. The operator shall perform enhanced monitoring as specified in Sections 8-5-401, 402 and 403.
    - 8-5-411–1 - Enhanced Monitoring Program (Optional); Notify BAAQMD of tanks selected for enhanced monitoring program
    - 8-5-411–2 - Enhanced Monitoring Program (Optional); Criteria for operating enhanced monitoring program

        - 8-5-411–3 - Enhanced Monitoring Program (Optional); Performance requirements
    - 8-5-501 – Records
        - The facility shall keep an accurate record of the type and amount of liquids stored, type of blanket gases used, and the true vapor pressure ranges of such liquids and gases. A tank operator shall keep an accurate record of primary/secondary seal replacements.
            - 8-5-501–1 - Records; Type and amount of liquid, type of blanket gas, TVP-Retain 24 months
            - 8-5-501–3 - Records; Retention
            - 8-5-501.4 – Records; New pressure vacuum valve setpoints
    - 8-5-6–4 - Determination of Applicability Based on True Vapor Pressure
    - 8-5-605 – Measurement of leak concentration and residual concentrations
    - 8-5-605–1 - Measurement of leak concentration and residual concentrations; EPA method 21 instruments
    - 8-5-605–2 - Measurement of leak concentration and residual concentrations; EPA method 21 and tank degassing residual organic concentration measurement method
- 40 CFR Part 60, Subpart Kb – Standards of Performance for Storage Vessels for Volatile Organic Liquid Storage Vessels for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984, including:
    - 60.110b(d)(2) – Exemption for pressure vessels designed to operate in excess of 204.9 kPa and without emissions to the atmosphere **(applies to S-188 only)**

The Facility will no longer be considered a source having a “petroleum refining process unit” under the definitions of NESHAP Subpart CC (40 CFR Part 63, Subpart CC – National Emission Standards for Hazardous Air Pollutants From Petroleum Refineries) after the Project. As such, MACT CC will no longer apply to the Exempt Butane Spheres. MACT FFFF will apply to the Exempt Butane Spheres, as they will be in HAP service after the project. Please refer to the MACT FFFF section below.

**Source S-195 (NSPS Kb Low Vapor Pressure Wastewater Sludge Tank)**

Tank S-195 (referred to as "the NSPS Kb Low Vapor Pressure Fixed Roof Wastewater Sludge Tank") is currently subject to and will continue to comply with the following regulations:

- Regulation 8, Rule 5 – Organic Compounds – Storage of Organic Liquids, including:
    - 8-5-1–7 - Limited Exemption, Low Vapor Pressure
        - The provisions of this rule, except for Section 8-5-307.3, shall not apply to tanks storing organic liquids with a true vapor pressure of less than or equal to 0.5 psi.
    - 8-5-307.3 – Requirements for fixed roof tanks, pressure tanks, and blanketed tanks; Pressure tanks and blanketed tanks PRD requirements
        - The sealing mechanism on pressure relief devices located on pressure tanks and on tanks blanketed with organic gases other than natural gas shall be maintained in a gas tight condition except when operating pressure exceeds the valve set pressure, or except when the sealing mechanism is vented to a vapor recovery or disposal system that has an overall abatement efficiency of at least 95% by weight.
- Regulation 8, Rule 8 – Organic Compounds, Wastewater (Oil-Water Separators), including:
    - 8-8-1–3 - Exemption, Secondary Wastewater Treatment Processes and Stormwater Sewer Systems
        - The requirements of Sections 8-8-301, 302, 306, and 308 shall not apply to any secondary wastewater treatment processes or stormwater sewer systems that are used as a wastewater polishing step or for collection of stormwater that is segregated from the process wastewater collection system.
    - 8-8-3–3 - Standards: Gauging and Sampling Devices
        - Any compartment or access hatch shall have a vapor tight cover. Any gauging and sampling device in the compartment cover shall be equipped with a vapor tight cover, seal, or lid. The compartment cover and gauging or sampling device cover shall at all times be in a closed position, except when the device is in use for inspection, maintenance, or wastewater sampling.
    - 8-8-5–4 - Monitoring and Records: Portable Hydrocarbon Detector
        - Any instrument used for the measurement of organic compounds shall be a gas detector that meets the specifications and performance criteria of and has been calibrated in accordance with EPA Reference Method 21.
    - 8-8-6–3 - Manual of Procedures: Inspection Procedures
        - Leaks shall be measured using a portable gas detector as prescribed in EPA Reference Method 21.
- Regulation 8, Rule 18 – Equipment Leaks, including:
    - 8-18-100 General/Applicability
    - 8-18-200 Definitions
    - 8-18-301 General Standard
    - 8-18-302 Valves
    - 8-18-303 Pumps and compressors
    - 8-18-304 Connections
    - 8-18-305 Pressure relief devices
    - 8-18-306 Non-repairable equipment
    - 8-18-307 Liquid Leaks
    - 8-18-308 Alternate compliance
    - 8-18-309 Open-Ended Valve or Line
    - 8-18-310 Recurrent Leaks
    - 8-18-311 Mass Emissions
    - 8-18-401 Inspection
    - 8-18-402 Identification
    - 8-18-403 Visual inspection schedule

  - 8-18-404 Alternate inspection schedule
  - 8-18-405 Alternate inspection reduction plan
  - 8-18-406 Interim Compliance
  - 8-18-407 Recurrent Leak Schedule
  - 8-18-501 Portable Hydrocarbon Detector
  - 8-18-502 Records
  - 8-18-503 Reports
  - 8-18-503.1 Quarterly Reports to the APCO
  - 8-18-503.2 Annual component inventory submittal to the District
  - 8-18-503.4 Inspection records of all equipment during a turnaround
  - 8-18-503.5 Submit records of all changes since last submittal
  - 8-18-602 Inspection Procedures
  - 8-18-604 Determination of Mass Emissions
- Regulation 8, Rule 28 – Episodic Releases From Pressure Relief Devices at Refineries and Chemical Plants, including:
  - 8-28-100 General/Applicability
  - 8-28-200 Definitions
  - 8-28-303 Pressure Relief Devices at Existing Sources at Refineries
  - 8-28-304 Repeat Releas–s - Pressure Relief Devices at Refineries
  - 8-28-401 Reporting at Refineries and Chemical Plants
  - 8-28-402 Inspection
  - 8-28-404 Identification
  - 8-28-405 Process Safety Requirements
  - 8-28-406 Monitoring System Demonstration Report
  - 8-28-407 Process Unit Identification Report
  - 8-28-502 Records
  - 8-28-503 Monitoring
- 40 CFR Part 60, Subpart Kb – Standards of Performance for Storage Vessels for Volatile Organic Liquid Storage Vessels for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984, including:
  - 60.110b(–) - Applicability and Designation of Affected Facility
  - 60.110b(–) - Applicability and Designation of Affected Facility – Exemption

The Facility will no longer be considered a source having a “petroleum refining process unit” under the definitions of NESHAP Subpart CC (40 CFR Part 63, Subpart CC – National Emission Standards for Hazardous Air Pollutants From Petroleum Refineries) after the Project. As such, MACT CC will no longer apply to the NSPS Kb Low Vapor Pressure Fixed Roof Wastewater Sludge Tank. MACT FFFF will apply to the NSPS Kb Low Vapor Pressure Fixed Roof Wastewater Sludge Tank, as it will be in HAP service after the project. Please refer to the MACT FFFF section below.

**Source S-296 and S-398 (Flares)**

Sources S-296 and S-398 (collectively referred to as "the flares") are currently subject to and will continue to comply with the following regulations:

- Regulation 6, Rule 1 – General Requirements for Particulate Matter, including:
  - 6-1-114.2 – Exemption from 6-1-310.2 and 6-1-311.2 emission limits
  - 6-1-114.3 – Exemption from 6-1-504 source testing requirements
  - 6-1-301 – Ringelmann No. 1 Limitation
    - The facility shall not emit from any source for a period or aggregate periods of more than three minutes in any hour, a visible emission that is as dark or darker than No. 1 on the Ringelmann Chart, or of such opacity as to obscure an observer's view to an equivalent or greater degree.
  - 6-1-305 – Visible Particles
    - The facility shall not emit particles from any operation in sufficient number to cause annoyance to any other person where the particles are large enough to be visible as individual particles at the emission point, or of such size and nature as to be visible individually as incandescent particles.
  - 6-1-310.1 – Total Suspended Particulate (TSP) Concentration Limit Limitation of 0.15 gr/dscf
  - 6-1-401 – Appearance of Emissions
    - The facility shall comply with the requirements of Regulation 6-102: Any violation of any of the requirements in the Regulation 6 Rules is subject to enforcement action under the applicable provisions of the California Health & Safety Code.
- Regulation 8, Rule 18 – Equipment Leaks, including:
  - 8-18-100 General/Applicability
  - 8-18-200 Definitions
  - 8-18-301 General Standard
  - 8-18-302 Valves
  - 8-18-303 Pumps and compressors
  - 8-18-304 Connections
  - 8-18-305 Pressure relief devices
  - 8-18-306 Non-repairable equipment
  - 8-18-307 Liquid Leaks
  - 8-18-308 Alternate compliance
  - 8-18-309 Open-Ended Valve or Line
  - 8-18-310 Recurrent Leaks
  - 8-18-311 Mass Emissions
  - 8-18-401 Inspection
  - 8-18-402 Identification
  - 8-18-403 Visual inspection schedule
  - 8-18-404 Alternate inspection schedule
  - 8-18-405 Alternate inspection reduction plan
  - 8-18-406 Interim Compliance
  - 8-18-407 Recurrent Leak Schedule
  - 8-18-501 Portable Hydrocarbon Detector
  - 8-18-502 Records
  - 8-18-503 Reports
  - 8-18-503.1 Quarterly Reports to the APCO
  - 8-18-503.2 Annual component inventory submittal to the District
  - 8-18-503.4 Inspection records of all equipment during a turnaround
  - 8-18-503.5 Submit records of all changes since last submittal
  - 8-18-602 Inspection Procedures

    - 8-18-604 Determination of Mass Emissions
- Regulation 8, Rule 28 – Episodic Releases From Pressure Relief Devices at Refineries and Chemical Plants, including:
    - 8-28-100 General/Applicability
    - 8-28-200 Definitions
    - 8-28-303 Pressure Relief Devices at Existing Sources at Refineries
    - 8-28-304 Repeat Releases - Pressure Relief Devices at Refineries
    - 8-28-401 Reporting at Refineries and Chemical Plants
    - 8-28-402 Inspection
    - 8-28-404 Identification
    - 8-28-405 Process Safety Requirements
    - 8-28-406 Monitoring System Demonstration Report
    - 8-28-407 Process Unit Identification Report
    - 8-28-502 Records
    - 8-28-503 Monitoring
- Regulation 12, Rule 11 – Flare Monitoring at Refineries, including:
    - 12-11-401 – Flare Data Reporting Requirements
        - The owner or operator of a flare shall submit a monthly report to the APCO on or before 30 days after the end of each month for each flare subject to this rule.
    - 12-11-402 – Flow Verification Report
        - The owner or operator of a flare shall submit a flow verification report to the APCO for each flare subject to the rule.
    - 12-11-501 – Vent Gas Flow Monitoring
        - The owner or operator of a refinery shall not operate a flare unless vent gas to the flare is continuously monitored for volumetric flow by a device that meets the specified requirements.
    - 12-11-502 – Vent Gas Composition Monitoring
        - The owner or operator of a refinery shall not operate a flare unless the specified requirements are met.
            - 12-11-502.3 – Vent Gas Composition Monitoring
                - The owner or operator shall monitor vent gas composition.
    - 12-11-503 – Pilot Monitoring
        - Any flare subject to this rule must be equipped and operated with an automatic igniter or a continuous burning pilot, which must be maintained in good working order.
    - 12-11-504 – Pilot and Purge Gas Monitoring
        - The owner or operator of a refinery shall not operate a flare unless (1) volumetric flows of purge and pilot gases are monitored by flow measuring devices, or (2) other parameters are monitored so that volumetric flows of pilot and purge gas may be calculated based on pilot design and the parameters monitored.
    - 12-11-505 – Recordkeeping Requirements
        - The owner or operator of a flare shall maintain records for all the information required to be monitored for a period of five years and make such records available to the APCO upon request.
    - 12-11-506 – General Monitoring Requirements
        - Facilities responsible for monitoring subject to this rule shall comply with the specified requirements.
    - 12-11-506.1 – Periods of Inoperation and Vent Gas Monitoring
        - Periods of flare monitoring system inoperation greater than 24 continuous hours shall be reported by the following working day, followed by notification of resumption of monitoring.
    - 12-11-507 – Video Monitoring

        - The owner or operator of a flare subject to this rule shall install and maintain equipment that records a real-time digital image of the flare and flame at a frame rate of no less than 1 frame per minute.
- Regulation 12, Rule 12 – Flares at Refineries, including:
    - 12-12-301 – Flare Minimization
        - Flaring is prohibited unless it is consistent with an approved FMP and all commitments due under that plan have been met.
    - 12-12-401 – Flare Minimization Plan Requirements
    - 12-12-402 – Submission of Flare Minimization Plans
    - 12-12-403 – Review and Approval of Flare Minimization Plans
    - 12-12-404 – Update of Flare Minimization Plans
        - The FMP shall be updated following the specified requirements.
    - 12-12-405 – Notification of Flaring
        - The owner or operator of a flare subject to this rule shall notify the APCO as soon as possible, consistent with safe operation of the refinery, if the volume of vent gas flared exceeds 500,000 standard cubic feet per calendar day.
    - 12-12-406 – Determination and Report of Cause
        - The owner or operator of a flare subject to this rule shall submit a report to the APCO within 60 days following the end of the month in which a reportable flaring event occurs.
    - 12-12-408 – Designation of Confidential Information
        - If a document is submitted that contains information designated confidential in accordance with this Section, the owner or operator shall provide a justification for this designation and shall submit a separate copy of the document with the information designated confidential redacted.
    - 12-12-501 – Water Seal Integrity Monitoring
        - The owner or operator of a flare subject to this rule with a water seal shall continuously monitor and record the water level and pressure of the water seal that services each flare.
- 40 CFR Part 60, Subpart VV – Standards of Performance for Equipment Leaks (Fugitive Emission Sources), including:
    - 60.480 Applicability and designation of affected facility
    - 60.481 Definitions
    - 60.482-1 Standards: General
    - 60.482-2 Standards: Pumps in light liquid service
    - 60.482-2(a)(1) Monthly monitoring of each pump, except for 60.482-1(c), 60.482-2(d), (e), or (f)
    - 60.482-2(a)(2) Weekly visual inspection of each pump, except for (e), (f), or (g)
    - 60.482-2(b) Air measurement >10,000 ppm or dripping liquid indicates leak
    - 60.482-2(c) Pump leak repair period
    - 60.482-2(d) Requirements for Dual-Mechanical seal pump
    - 60.482-2(e) No detectable emission designation: <500 ppm
    - 60.482-2(f) Requirements for Closed Vent Systems
    - 60.482-3 Standards: Compressors
    - 60.482-4 – Standards: Pressure Relief Devices in gas/vapor service
    - 60.482-4(c) – Leakage routed to control device
    - 60.482-5 Standards: Sampling connecting systems
    - 60.482-6 Standards: Open-ended valves or lines Y
    - 60.482-7 Standards: Valves in gas/vapor service and in light liquid service Y
    - 60.482-7(a)-(c) Monitor monthly unless 2 successive months <10,000 ppm, then monitor first month of each quarter. If leak >10,000 ppm is detected, resume monthly monitoring
    - 60.482-7(d) Valve leak repair period

  - 60.482-7(e) Methods for first attempts or minimizing valve leaks
  - 60.482-7(f) Designated no-emissions (<500 ppm) valves with no external actuating mechanisms in contact with process fluid, may revert to annual monitoring, or that requested by the Administrator
  - 60.482-8 Standards: Pumps and valves in heavy liquid service, pressure relief devices in light liquid or heavy liquid service, and connectors
  - 60.482-9 Standards: Delay in repair
  - 60.482-9(b) Repair may be delayed for isolated equipment
  - 60.482-9(c) Delay of repair for valves is only allowed under certain circumstances
  - 60.482-9(d)(1) Only dual-mechanical seal pumps qualify for delay of repair
  - 60.482-9(d)(2) Pump leaks must be repaired within 6 months
  - 60.482-10 – Standards: Closed vent systems and control devices
  - 60.482-10 Standards: Closed vent systems and control devices
  - 60.483-1,60.483-2, and BAAQMD 8-18-404.1 - Alternative standards for valves--allowable percentage of valves leaking and Alternative standards for valves--skip period leak detection and repair If a process unit has 5 consecutive quarters with <2% of valves leaking at >10,000 ppm, then any individual valve which measures <100 ppm for 5 consecutive quarters may be monitored annually
  - 60.485 Test Methods and Procedures
  - 60.486 Recordkeeping Requirements
  - 60.487 Reporting Requirements
- 40 CFR Part 60, Subpart VVa – Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry for Which Construction, Reconstruction, or Modification Commenced After November 7, 2006, including:
  - 60.480a Applicability and designation of affected facility
  - 60.481a Definitions
    - Equipment: each valve, pump, pressure relief device, sampling connection system, open-ended valve or line, and flange or other connector in VOC service. For the purposes of recordkeeping and reporting only, compressors are considered equipment.
  - 60.482-1a Standards: General
  - 60.482-2a Standards: Pumps in light liquid service
  - 60.482-2a(a)(1) Monthly monitoring of each pump, except for 60.482-1a(c) and (f), 60.482-2(d), (e), or (f)
  - 60.482-2a(a)(2) Weekly visual inspection of each pump, except for 60.482-1a(f)
  - 60.482-2a(b)(1) Air measurement >2,000 ppm or dripping liquid indicates leak
  - 60.482-2a(b)(2) Procedure for liquid drips
  - 60.482-2a(c) Pump leak repair period
  - 60.482-2a(d) Requirements for Dual-Mechanical seal pump
  - 60.482-2a(e) No detectable emission designation: <500 ppm
  - 60.482-2a(f) Requirements for Closed Vent Systems
  - 60.482-2a(g) Unsafe to monitor pumps
  - 60.482-3a Standards: Compressors
  - 60.482-4a – Standards: Pressure Relief Devices in gas/vapor service
  - 60.482-4a(c) – Leakage routed to control device
  - 60.482-5a Standards: Sampling connecting systems
  - 60.482-6a Standards: Open-ended valves or lines
  - 60.482-7a Standards: Valves in gas/vapor service and in light liquid service
  - 60.482-7a(a)(1) Monthly monitoring of valves
  - 60.482-7a(b) Leak standard > 500 ppm
  - 60.482-7a(c) Reduction in monitoring frequency
  - 60.482-7a(d) Valve leak repair period

- 60.482-7a(e) Methods for first attempts or minimizing valve leaks
- 60.482-7a(f) Designated no-emissions (<500 ppm) valves with no external actuating mechanisms in contact with process fluid, may revert to annual monitoring, or that requested by the Administrator
- 60.482-8a Standards: Pumps, valves, and connectors in heavy liquid service and pressure relief devices in light liquid or heavy liquid service
- 60.482-9a Standards: Delay of repair
- 60.482.10a – Standards: closed vent system and control devices
- 60.483-1a Alternative standards for valves--allowable percentage of valves leaking (must notify EPA administrator and BAAQMD)
- 60.483-2a Alternative standards for valves--skip period leak detection and repair (must notify EPA administrator and BAAQMD)
- 60.485a Test Methods and Procedures
- 60.486a Recordkeeping Requirements
- 60.487a Reporting Requirements

The Facility will no longer be considered a "petroleum refinery" under the definitions in the following federal regulations after the Project; thus, the flares will no longer be subject to NSPS Ja, GGG, and GGGa:

- NSPS Subpart Ja (40 CFR Part 60, Subpart Ja – Standards of Performance for Petroleum Refineries for Which Construction, Reconstruction, or Modification Commenced After May 14, 2007)
- NSPS Subpart GGG (40 CFR Part 60, Subpart GGG - Standards of Performance for Equipment Leaks of VOC in Petroleum Refineries for which Construction, Reconstruction, or Modification Commenced After January 4, 1983, and on or Before November 7, 2006)
- NSPS Subpart GGGa (40 CFR Part 60, Subpart GGGa – Standards of Performance for Equipment Leaks of VOC in Petroleum Refineries for Which Construction, Reconstruction, or Modification Commenced After November 7, 2006)

The Facility will no longer be considered a source having a "petroleum refining process unit" under the definitions of NESHAP Subpart CC (40 CFR Part 63, Subpart CC – National Emission Standards for Hazardous Air Pollutants From Petroleum Refineries) after the Project. As such, MACT CC will no longer apply to the flares. However, the flares will be subject to 40 CFR 63 Subpart EEEE, NESHAP for Organic Liquids Distribution (Non-Gasoline), which requires compliance with 40 CFR 63 Subpart CC.

MACT FFFF will apply to the flares, as they will be in HAP service after the project. Please refer to the MACT FFFF section below.

**Sources S-307, S-322, and S-434 (Process Vessels)**

Sources S-307, S-322, and S-434 (collectively referred to as "the process vessels") are currently subject to and expected to continue to comply with the following regulations:

- Regulation 8, Rule 10 – Process Vessel Depressurization, including:
  - 8-10-301 – Depressurization control options
    - Emissions of organic compounds from depressurizing any process vessel at a refinery or a chemical plant shall be controlled by venting them to a fuel gas system, firebox, incinerator, thermal oxidizer, flare, or otherwise containing and treating them so as to prevent their emissions to the atmosphere.
  - 8-10-302 – Opening of process vessels
    - No process vessel may be opened to the atmosphere except as provided in 302.1 or 302.2.
      - 8-10-302.1 – Organic compounds cannot exceed 10,000 ppm (methane) prior to release to atmosphere
        - 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), expressed as methane (C1).
      - 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%
        - A process vessel at a refinery or chemical plant may be opened when the internal concentration of total organic compounds is 10,000 ppm or greater provided that specified requirements are met.
  - 8-10-401 – Turnaround records. Annual report due February 1 of each year with initial report of process vessels due 4/1/2004
    - The annual report shall be submitted by February 1 of each year.
  - 8-10-501 – Monitoring prior to and during process vessel opening
    - Any vessel subject to this rule shall be monitored for the concentration of total organic compounds prior to opening and once per day during the time the vessel is open to the atmosphere.
  - 8-10-502 – Concentration measurement using EPA Method 21
    - The meter used to measure the concentration of total organic compound emissions shall meet the accuracy requirements specified in EPA Method 21.
  - 8-10-503 – Recordkeeping
    - Any facility subject to the provisions of this rule shall keep records of (1) date, time, type of activity, and duration of depressurization and vessel opening, (2) the type of service, size and name or vessel identification number, (3) the measured total organic compound concentration and calculated mass emissions from each depressurized vessel, and (4) the number and size of any air movers used to assure compliance with confined space entry requirements.
  - 8-10-601 – Monitoring procedures
    - The procedures used to monitor emissions are set forth in EPA Method 21.
- Regulation 8, Rule 18 – Equipment Leaks, including:
  - 8-18-100 General/Applicability
  - 8-18-200 Definitions
  - 8-18-301 General Standard
  - 8-18-302 Valves
  - 8-18-303 Pumps and compressors
  - 8-18-304 Connections
  - 8-18-305 Pressure relief devices

  - 8-18-306 Non-repairable equipment
  - 8-18-307 Liquid Leaks
  - 8-18-308 Alternate compliance
  - 8-18-309 Open-Ended Valve or Line
  - 8-18-310 Recurrent Leaks
  - 8-18-311 Mass Emissions
  - 8-18-401 Inspection
  - 8-18-402 Identification
  - 8-18-403 Visual inspection schedule
  - 8-18-404 Alternate inspection schedule
  - 8-18-405 Alternate inspection reduction plan
  - 8-18-406 Interim Compliance
  - 8-18-407 Recurrent Leak Schedule
  - 8-18-501 Portable Hydrocarbon Detector
  - 8-18-502 Records
  - 8-18-503 Reports
  - 8-18-503.1 Quarterly Reports to the APCO
  - 8-18-503.2 Annual component inventory submittal to the District
  - 8-18-503.4 Inspection records of all equipment during a turnaround
  - 8-18-503.5 Submit records of all changes since last submittal
  - 8-18-602 Inspection Procedures
  - 8-18-604 Determination of Mass Emissions
- Regulation 8, Rule 28 – Episodic Releases From Pressure Relief Devices at Refineries and Chemical Plants, including:
  - 8-28-100 General/Applicability
  - 8-28-200 Definitions
  - 8-28-302 Pressure Relief Devices at New or Modified Sources at Refineries
  - 8-28-304 Repeat Releases - Pressure Relief Devices at Refineries
  - 8-28-401 Reporting at Refineries and Chemical Plants
  - 8-28-402 Inspection
  - 8-28-404 Identification
  - 8-28-405 Process Safety Requirements
  - 8-28-406 Monitoring System Demonstration Report
  - 8-28-407 Process Unit Identification Report
  - 8-28-502 Records
  - 8-28-503 Monitoring
- 40 CFR Part 60, Subpart VVa – Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry for Which Construction, Reconstruction, or Modification Commenced After November 7, 2006, including:
  - 60.480a Applicability and designation of affected facility
  - 60.481a Definitions
    - Equipment: each valve, pump, pressure relief device, sampling connection system, open-ended valve or line, and flange or other connector in VOC service. For the purposes of recordkeeping and reporting only, compressors are considered equipment.
  - 60.482-1a Standards: General
  - 60.482-2a Standards: Pumps in light liquid service
  - 60.482-2a(a)(1) Monthly monitoring of each pump, except for 60.482-1a(c) and (f), 60.482-2(d), (e), or (f)
  - 60.482-2a(a)(2) Weekly visual inspection of each pump, except for 60.482-1a(f)
  - 60.482-2a(b)(1) Air measurement >2,000 ppm or dripping liquid indicates leak
  - 60.482-2a(b)(2) Procedure for liquid drips

- 60.482-2a(c) Pump leak repair period
- 60.482-2a(d) Requirements for Dual-Mechanical seal pump
- 60.482-2a(e) No detectable emission designation: <500 ppm
- 60.482-2a(f) Requirements for Closed Vent Systems
- 60.482-2a(g) Unsafe to monitor pumps
- 60.482-3a Standards: Compressors
- 60.482-4a Standards: Pressure Relief Devices in gas/vapor service
- 60.482-5a Standards: Sampling connecting systems
- 60.482-6a Standards: Open-ended valves or lines
- 60.482-7a Standards: Valves in gas/vapor service and in light liquid service
- 60.482-7a(a)(1) Monthly monitoring of valves
- 60.482-7a(b) Leak standard > 500 ppm
- 60.482-7a(c) Reduction in monitoring frequency
- 60.482-7a(d) Valve leak repair period
- 60.482-7a(e) Methods for first attempts or minimizing valve leaks
- 60.482-7a(f) Designated no-emissions (<500 ppm) valves with no external actuating mechanisms in contact with process fluid, may revert to annual monitoring, or that requested by the Administrator
- 60.482-8a Standards: Pumps, valves, and connectors in heavy liquid service and pressure relief devices in light liquid or heavy liquid service
- 60.482-9a Standards: Delay of repair
- 60.483-1a Alternative standards for valves--allowable percentage of valves leaking (must notify EPA administrator and BAAQMD)
- 60.483-2a Alternative standards for valves--skip period leak detection and repair (must notify EPA administrator and BAAQMD)
- 60.485a Test Methods and Procedures
- 60.486a Recordkeeping Requirements
- 60.487a Reporting Requirements

As the Facility will no longer be considered a “petroleum refinery” under the definitions of in the following federal regulations after the Project; thus, the process vessels will no longer be subject to NSPS QQQ and GGGa:

- NSPS Subpart QQQ (40 CFR Part 60, Subpart QQQ – Standards of Performance for VOC Emissions from Petroleum Refinery Wastewater Systems)
- NSPS Subpart GGGa (40 CFR Part 60, Subpart GGGa – Standards of Performance for Equipment Leaks of VOC in Petroleum Refineries for Which Construction, Reconstruction, or Modification Commenced After November 7, 2006)

The Facility will no longer be considered a source having a “petroleum refining process unit” under the definitions of NESHAP Subpart CC (40 CFR Part 63, Subpart CC – National Emission Standards for Hazardous Air Pollutants From Petroleum Refineries) after the Project. As such, MACT CC will no longer apply to the process vessels.

The process vessels will be subject to the MACT FFFF requirements after the Project as they are in HAP service.

**Source S-309 (Process Vessel)**

Source S-309 (referred to as "the process vessel") is currently subject to and expected to continue to comply with the following regulations:

- Regulation 8, Rule 10 – Process Vessel Depressurization, including:
    - 8-10-301 – Depressurization control options
        - Emissions of organic compounds from depressurizing any process vessel at a refinery or a chemical plant shall be controlled by venting them to a fuel gas system, firebox, incinerator, thermal oxidizer, flare, or otherwise containing and treating them so as to prevent their emissions to the atmosphere.
    - 8-10-302 – Opening of process vessels
        - No process vessel may be opened to the atmosphere except as provided in 302.1 or 302.2.
            - 8-10-302.1 – Organic compounds cannot exceed 10,000 ppm (methane) prior to release to atmosphere
                - 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), expressed as methane (C1).
            - 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%
                - A process vessel at a refinery or chemical plant may be opened when the internal concentration of total organic compounds is 10,000 ppm or greater provided that specified requirements are met.
    - 8-10-401 – Turnaround records. Annual report due February 1 of each year with initial report of process vessels due 4/1/2004
        - The annual report shall be submitted by February 1 of each year.
    - 8-10-501 – Monitoring prior to and during process vessel opening
        - Any vessel subject to this rule shall be monitored for the concentration of total organic compounds prior to opening and once per day during the time the vessel is open to the atmosphere.
    - 8-10-502 – Concentration measurement using EPA Method 21
        - The meter used to measure the concentration of total organic compound emissions shall meet the accuracy requirements specified in EPA Method 21.
    - 8-10-503 – Recordkeeping
        - Any facility subject to the provisions of this rule shall keep records of (1) date, time, type of activity, and duration of depressurization and vessel opening, (2) the type of service, size and name or vessel identification number, (3) the measured total organic compound concentration and calculated mass emissions from each depressurized vessel, and (4) the number and size of any air movers used to assure compliance with confined space entry requirements.
    - 8-10-601 – Monitoring procedures
        - The procedures used to monitor emissions are set forth in EPA Method 21.
- Regulation 8, Rule 18 – Equipment Leaks, including:
    - 8-18-100 General/Applicability
    - 8-18-200 Definitions
    - 8-18-301 General Standard
    - 8-18-302 Valves
    - 8-18-303 Pumps and compressors
    - 8-18-304 Connections

  - 8-18-305 Pressure relief devices
  - 8-18-306 Non-repairable equipment
  - 8-18-307 Liquid Leaks
  - 8-18-308 Alternate compliance
  - 8-18-309 Open-Ended Valve or Line
  - 8-18-310 Recurrent Leaks
  - 8-18-311 Mass Emissions
  - 8-18-401 Inspection
  - 8-18-402 Identification
  - 8-18-403 Visual inspection schedule
  - 8-18-404 Alternate inspection schedule
  - 8-18-405 Alternate inspection reduction plan
  - 8-18-406 Interim Compliance
  - 8-18-407 Recurrent Leak Schedule
  - 8-18-501 Portable Hydrocarbon Detector
  - 8-18-502 Records
  - 8-18-503 Reports
  - 8-18-503.1 Quarterly Reports to the APCO
  - 8-18-503.2 Annual component inventory submittal to the District
  - 8-18-503.4 Inspection records of all equipment during a turnaround
  - 8-18-503.5 Submit records of all changes since last submittal
  - 8-18-602 Inspection Procedures
  - 8-18-604 Determination of Mass Emissions
- Regulation 8, Rule 28 – Episodic Releases From Pressure Relief Devices at Refineries and Chemical Plants, including:
  - 8-28-100 General/Applicability
  - 8-28-200 Definitions
  - 8-28-303 Pressure Relief Devices at Existing Sources at Refineries
  - 8-28-304 Repeat Releases - Pressure Relief Devices at Refineries
  - 8-28-401 Reporting at Refineries and Chemical Plants
  - 8-28-402 Inspection
  - 8-28-404 Identification
  - 8-28-405 Process Safety Requirements
  - 8-28-406 Monitoring System Demonstration Report
  - 8-28-407 Process Unit Identification Report
  - 8-28-502 Records
  - 8-28-503 Monitoring

The Facility will no longer be considered a source having a “petroleum refining process unit” under the definitions of NESHAP Subpart CC (40 CFR Part 63, Subpart CC – National Emission Standards for Hazardous Air Pollutants From Petroleum Refineries) after the Project. As such, MACT CC will no longer apply to the process vessel.

The process vessel will be subject to the MACT FFFF requirements after the Project as it is in HAP service

**Source S-318 (Unit 76)**

Source S-318 (referred to as "the process unit") is currently subject to and expected to continue to comply with the following regulations:

- Regulation 8, Rule 10 – Process Vessel Depressurization, including:
    - 8-10-301 – Depressurization control options because emissions of organic compounds from depressurizing are controlled by venting them to a fuel gas system, firebox, incinerator, thermal oxidizer, flare, or otherwise containing and treating them so as to prevent their emissions to the atmosphere.
    - 8-10-302 – Opening of process vessels
        - No process vessel may be opened to the atmosphere except as provided in 302.1 or 302.2.
            - 8-10-302.1 – Organic compounds cannot exceed 10,000 ppm (methane) prior to release to atmosphere.
                - 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), expressed as methane (C1).
            - 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%
                - A process vessel at a refinery or chemical plant may be opened when the internal concentration of total organic compounds is 10,000 ppm or greater provided that specified requirements are met.
    - 8-10-401 – Turnaround records. Annual report due February 1 of each year with initial report of process vessels due 4/1/2004
        - The annual report shall be submitted by February 1 of each year.
    - 8-10-501 – Monitoring prior to and during process vessel opening
        - Any vessel subject to this rule shall be monitored for the concentration of total organic compounds prior to opening and once per day during the time the vessel is open to the atmosphere.
    - 8-10-502 – Concentration measurement using EPA Method 21
        - The meter used to measure the concentration of total organic compound emissions shall meet the accuracy requirements specified in EPA Method 21.
    - 8-10-503 – Recordkeeping
        - Any facility subject to the provisions of this rule shall keep records of (1) date, time, type of activity, and duration of depressurization and vessel opening, (2) the type of service, size and name or vessel identification number, (3) the measured total organic compound concentration and calculated mass emissions from each depressurized vessel, and (4) the number and size of any air movers used to assure compliance with confined space entry requirements.
    - 8-10-601 – Monitoring procedures
        - The procedures used to monitor emissions are set forth in EPA Method 21.

**Source S-334 (NSPS K and NSPS Ka Zero-Gap External Floating Roof Tank)**

Tank S-334 (referred to as "NSPS K and NSPS Ka Zero-Gap External Floating Roof Tank") is currently subject to and is expected to continue to comply with the following regulations:

- Regulation 8, Rule 5 – Organic Compounds – Storage of Organic Liquids, Requirements for External Floating Roof Tanks, including:
    - 8-5-111 – Limited Exemption, Tank Removal From and Return to Service

        - The requirements of Sections 8-5-304, 305, 306 and 307 shall not apply to storage tanks during or after tank decommissioning, and shall not apply during temporary removal from service.
            - 8-5-111.1 – Limited Exemption, Tank Removal From and Return to Service, Notification
            - 8-5-111.1.1 – Limited Exemption, Tank Removal From and Return to Service, Notification, 3 day prior notification
            - 8-5-111.1.2 – Limited Exemption, Tank Removal From and Return to Service, Notification, telephone notification
            - 8-5-111.2 – Limited Exemption, Tank Removal From and Return to Service; Tank in compliance at time of notification
            - 8-5-111.3 – Limited Exemption, Tank Removal From and Return to Service; Filling, emptying, refilling floating roof tanks
            - 8-5-111.5 – Limited Exemption, Tank Removal From and Return to Service; Minimize emissions
            - 8-5-111.6 - Limited Exemption, Tank Removal From and Return to Service; Notification and reporting are not required when returning a tank to service
    - 8-5-112 – Limited Exemption, Preventative Maintenance and Inspection of Tanks in Operation
        - The requirements of Sections 8-5-304, 305, 306, 307.2, 307.3 and 328 shall not apply to storage tanks during preventative maintenance of a vapor control device, tank roof, roof fitting or tank seal; during primary seal inspection; or during removal and installation of a secondary seal.
            - 8-5-112.1 – Limited Exemption, Preventative Maintenance and Inspection of Tanks in Operation; Notification
            - 8-5-112.1.1 – Limited Exemption, Preventative Maintenance and Inspection of Tanks in Operation; Notification, 3 day prior notification
            - 8-5-112.1.2 – Limited Exemption, Preventative Maintenance and Inspection of Tanks in Operation; Notification, telephone notification
            - 8-5-112.2 – Limited Exemption, Preventative Maintenance and Inspection of Tanks in Operation; Tank in compliance prior to start of work. Certified per 8-5-404.
            - 8-5-112.3 – Limited Exemption, Preventative Maintenance and Inspection of Tanks in Operation; No product movement, Minimize emissions
            - 8-5-112.4 – Limited Exemption, Preventative Maintenance and Inspection of Tanks in Operation; Not to exceed 7 days
            - 8-5-112.6 – Tank records
    - 8-5-119 - Limited Exemption, Repair Period
        - A tank operator who has implemented an Enhanced Monitoring Program and who discovers equipment that fails to meet a requirement listed in Section 8-5-119.1 shall not be deemed in violation of that requirement, provided the operator complies with all of the conditions listed in Sections 8-5-119.2 and 119.3.
            - 8-5-119.1 Limited Exemption, Repair Period; Exemption available for certain requirements
            - 8-5-119.2 Limited Exemption, Repair Period; Conditions for the exemption
            - 8-5-119.3 Limited Exemption, Repair Period; Report use of exemption within 60 days
    - 8-5-301 – Storage Tank Control Requirements (internal floating roof, external floating roof, or approved emission control system)
        - The facility shall not store organic liquid in any storage tank unless such tank is equipped with a vapor loss control device that is specified for the tank capacity, or for a higher

capacity, and for the true vapor pressure of the tank organic liquid contents, or for a higher true vapor pressure.

- 8-5-304 – Requirements for External Floating Roof Tanks
  - An external floating roof must meet the requirements for floating roof fittings, primary and secondary seals, and roof/shell must be in good operating condition.
    - 8-5-304.1 – Requirements for External Floating Roofs; Tank fitting requirements
    - 8-5-304.2 – Requirements for External Floating Roofs; Primary seal requirements
    - 8-5-304.3 – Requirements for External Floating Roofs; Secondary seal requirements
    - 8-5-304.4 – Requirements for External Floating Roofs; Floating roof requirements
    - 8-5-304.5 – Requirements for External Floating Roofs; Shell in good condition
    - 8-5-304.6 – Requirements for External Floating Roofs; tank pontoons
- 8-5-320 –Tank Fitting Requirements; Floating roof tanks
  - All openings through the floating roof, solid sampling or gauging wells, slotted sampling or gauging wells, and emergency roof drain shall meet conditions specified.
    - 8-5-320.2 –Tank Fitting Requirements; Floating roof tanks; Projection below liquid surface
    - 8-5-320.3 –Tank Fitting Requirements; Floating roof tanks; Gasketed covers, seals, lids
    - 8-5-320.3.1 –Tank Fitting Requirements; Floating roof tanks; Gasketed covers, seals, lids - Gap requirements
    - 8-5-320.4 –Tank Fitting Requirements; Solid sampling or gauging well—requirements in floating roof tanks
    - 8-5-320.4.1 –Tank Fitting Requirements; Solid sampling or gauging well requirements--projection below liquid surface
    - 8-5-320.4.2 –Tank Fitting Requirements; Solid sampling or gauging well requirements--cover, seal, or lid
    - 8-5-320.4.3 –Tank Fitting Requirements; Solid sampling or gauging well requirements-- gap between well and roof
    - 8-5-320.6 –Tank Fitting Requirements; emergency roof drain
    - 8-5-320.7 –Tank Fitting Requirements; pressure relief devices
- 8-5-321 – Primary seal requirements
  - The facility shall not operate a storage tank equipped with a primary seal unless such tank meets the conditions specified.
    - 8-5-321.1 – Primary seal requirements; No holes, tears, or other openings
    - 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
    - 8-5-321.3 – Primary seal requirements; Metallic-shoe-type seal requirements
    - 8-5-321.3.1 – Primary seal requirements; Metallic-shoe-type seal requirements - geometry of shoe
    - 8-5-321.3.2 – Primary seal requirements; Metallic-shoe-type seal requirements - welded tanks gap requirements
- 8-5-322 – Secondary seal requirements
  - The facility shall not operate a storage tank equipped with a secondary seal unless such tank meets the requirements specified.
    - 8-5-322.1 – Secondary seal requirements; No holes, tears, or other openings
    - 8-5-322.2 – Secondary seal requirements; Insertion of probes

- 8-5-322.5 – Secondary seal requirements; Gap requirements for welded external floating roof tanks with seal installed after September 4, 1985 or welded internal floating roof tanks with seals installed after 2/1/1993
- 8-5-322.6 – Secondary seal requirements; extent of seal

- 8-5-328 – Tank degassing requirements
  - A tank operator shall not open the interior vapor space of a tank to the atmosphere through a hatch or manway, except to connect or disconnect degassing equipment or to conduct tank contents or emissions sampling, unless such tank meets the conditions specified.
    - 8-5-328.1– Tank degassing requirements; Tanks > 75 cubic meters, Approved emission control system
    - 8-5-328.2 – Tank degassing requirements; Ozone Excess Day Prohibition
    - 8-5-328.3 – Notification of degassing
- 8-5-331 – Tank cleaning requirements
  - Tank interior cleaning agents must meet the requirements specified, unless all organic vapors and gases emitted during tank cleaning are collected and processed at an abatement device that has an abatement efficiency of at least 90% by weight.
- 8-5-332 – Sludge handling requirements
  - The operator of a tank shall place sludge removed from that tank directly into a sludge container that meets the requirements specified.
- 8-5-401 – Inspection Requirements for External Floating Roof Tanks
  - The operator shall inspect each primary and secondary seal, and fittings at the frequency specified.
    - 8-5-401.1 – Inspection Requirements for External Floating Roof Tanks; Primary and Secondary Seal Inspections
    - 8-5-401.2 – Inspection Requirements for External Floating Roof Tanks; Tank Fittings Inspections
- 8-5-404 – Inspection, Abatement Efficiency Determination, and Source Test Reports
  - A report shall be submitted to the APCO that certifies compliance with each individual requirement associated with the inspection, abatement efficiency determination or source test, and that includes data, supported by necessary calculations, to support this certification.
- 8-5-411 – Enhanced Monitoring Program (Applies to list of tanks chosen by facility)
  - Selected tanks for enhanced monitoring must be subject to Section 8-5-401, 402, or 403. The operator shall perform enhanced monitoring as specified in Sections 8-5-401, 402 and 403.
- 8-5-412 – Monitoring of Leaking Pontoons
  - The operator of a floating roof tank on which a leaking pontoon has been discovered shall inspect the lids and other openings on any leaking pontoon for compliance with the requirements of Section 8-5-304.6.1 once per calendar quarter beginning the quarter after the leaking pontoon is discovered until a repair of the leak is completed.
- 8-5-501 – Records
  - The facility shall keep an accurate record of the type and amount of liquids stored, type of blanket gases used, and the true vapor pressure ranges of such liquids and gases. A tank operator shall keep an accurate record of primary/secondary seal replacements.
    - 8-5-501.1 – Records; Type and amount of liquid, type of blanket gas, TVP- Retain 24 months
    - 8-5-501.2 – Records; Internal and External Floating Roof Tanks, Seal Replacement Records- Retain 10 years
    - 8-5-501.3 - Records retained for 24 months
- 8-5-602 – Analysis of Samples, True Vapor Pressure

  - 8-5-604 – Determination of Applicability
  - 8-5-605 - Measurement of Leak Concentrations and Residual Concentrations
- 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, including:
  - 60.110(a) – Applicability and Designation of Affected Facility
  - 60.110(c)(2) – Applicability and Designation of Affected facility --> 65,000 gal after 6/11/1973 and before 5/19/1978
  - 60.112(a)(1) – Standard for petroleum liquids above 1.5 psia and below 11.1 psia
  - 60.113(a) – Records of petroleum liquids, period of storage, and maximum true vapor pressure
  - 60.113(b) – Nomographs may be used
- 40 CFR 63, Subpart G – National Emission Standards for Organic Hazardous Air Pollutants From the Synthetic Organic Chemical Manufacturing Industry for Process Vents, Storage Vessels, Transfer Operations, and Wastewater, including:
  - 63.119(a) Storage Vessel Provisions -- Reference Control Technology
  - 63.119(a)(1) Storage Vessel Provisions -- Reference Control Technology—Group 1, TVP < 76.6 kPa
  - 63.119(c) Storage Vessel Provisions -- Reference Control Technology-- External floating roof
  - 63.119(c)(1) Storage Vessel Provisions -- Reference Control Technology-- External floating roof seals
  - 63.119(c)(1)(i) Storage Vessel Provisions -- Reference Control Technology-- External floating roof double seals required
  - 63.119(c)(1)(ii) Storage Vessel Provisions -- Reference Control Technology-- External floating roof primary seal requirements – metallic shoe or liquid-mounted
  - 63.119(c)(1)(iii) Storage Vessel Provisions -- Reference Control Technology-- External floating roof seal requirements
  - 63.119(c)(3) Storage Vessel Provisions -- Reference Control Technology-- External floating roof--Must float on liquid
  - 63.119(c)(3)(i) Storage Vessel Provisions -- Reference Control Technology-- External floating roof--Must float on liquid except during initial fill
  - 63.119(c)(3)(ii) Storage Vessel Provisions -- Reference Control Technology-- External floating roof--Must float on liquid except after completely emptied and degassed
  - 63.119(c)(3)(iii) Storage Vessel Provisions -- Reference Control Technology-- External floating roof -- Must float on liquid except when completely emptied before refilling
  - 63.119(c)(4) Storage Vessel Provisions -- Reference Control Technology-- External Floating Roof Operations, when not floating
  - 63.120(b) Storage Vessel Provisions -- Procedures to Determine Compliance-- Demonstration-- External floating roof
  - 63.120(b)(1) Storage Vessel Provisions -- Procedures to Determine Compliance-- External FR seal gap measurement
  - 63.120(b)(1)(i) Storage Vessel Provisions -- Procedures to Determine Compliance-- External FR with double seals - primary seal gap measurement – 5 year intervals
  - 63.120(b)(1)(iii) Storage Vessel Provisions -- Procedures to Determine Compliance-- External FR with double seals - secondary seal gap measurement – annual requirement
  - 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
  - 63.120(b)(2) Storage Vessel Provisions -- Procedures to Determine Compliance-- External FR seal gap determination methods
  - 63.120(b)(2)(i) Storage Vessel Provisions -- Procedures to Determine Compliance-- External FR seal gap determination methods – roof not resting on legs

- 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
- 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
- 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 cm2 per meter of vessel diameter. Maximum width <= 3.81 cm
- 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 cm2 per meter of vessel diameter. Maximum width <= 1.27 cm
- 63.120(b)(5) Storage Vessel Provisions -- Procedures to Determine Compliance-- External FR primary seal additional requirements
- 63.120(b)(5)(i) Storage Vessel Provisions -- Procedures to Determine Compliance-- External FR primary seal additional requirements – metallic shoe seal – shoe geometry
- 63.120(b)(5)(ii) Storage Vessel Provisions -- Procedures to Determine Compliance-- External FR primary seal additional requirements – no holes, tears, or openings
- 63.120(b)(6) Storage Vessel Provisions -- Procedures to Determine Compliance-- External FR secondary seal requirements
- 63.120(b)(6)(i) Storage Vessel Provisions -- Procedures to Determine Compliance-- External FR secondary seal requirements – location and extent
- 63.120(b)(6)(ii) Storage Vessel Provisions -- Procedures to Determine Compliance-- External FR secondary seal requirements - no holes, tears or openings
- 63.120(b)(7) Storage Vessel Provisions -- Procedures to Determine Compliance-- External FR unsafe to perform seal measurements or inspect the tank
- 63.120(b)(7)(i) Storage Vessel Provisions -- Procedures to Determine Compliance-- External FR unsafe to perform seal measurements or inspect the 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.
- 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.
- 63.120(b)(9) Storage Vessel Provisions -- Procedures to Determine Compliance External FR seal gap measurement 30 day notification
- 63.120(b)(10) Storage Vessel Provisions -- Procedures to Determine Compliance-- External FR and seals visual inspection each time emptied
- 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)
- 63.120(b)(10)(ii) Storage Vessel Provisions -- Procedures to Determine Compliance-- External FR and seal visual inspection each time emptied – 30 day Notification
- 63.120(b)(10)(iii) Storage Vessel Provisions -- Procedures to Determine Compliance-- External FR and seal visual inspection each time emptied –- Notification for unplanned
- 63.123(a) Storage Vessel Provisions -- Recordkeeping--Group 1 and Group 2 storage vessel dimensions and capacity. Keep for life of source.
- 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)

- 63.123(g) Storage Vessel Provisions -- Recordkeeping, Extensions for emptying storage vessel – keep documentation specified

The Facility will no longer be considered a source having a “petroleum refining process unit” under the definitions of NESHAP Subpart CC (40 CFR Part 63, Subpart CC – National Emission Standards for Hazardous Air Pollutants From Petroleum Refineries) after the Project. As such, MACT CC will no longer apply to the NSPS K and NSPS Ka Zero-Gap External Floating Roof Tank. The NSPS K and NSPS Ka Zero-Gap External Floating Roof Tank will not be subject to MACT FFFF after the project, as it will not be in HAP service.

**Source S-338 (U233 Fuel Gas Center)**

Source S-338 (referred to as "Unit 233") is currently subject to and will continue to comply with the following regulations:

- BAAQMD Regulation 8, Rule 18
    - 8-18-100 General/Applicability
    - 8-18-200 Definitions
    - 8-18-301 General Standard
    - 8-18-302 Valves
    - 8-18-303 Pumps and compressors
    - 8-18-304 Connections
    - 8-18-305 Pressure relief devices
    - 8-18-306 Non-repairable equipment
    - 8-18-307 Liquid Leaks
    - 8-18-308 Alternate compliance
    - 8-18-309 Open-Ended Valve or Line
    - 8-18-310 Recurrent Leaks
    - 8-18-311 Mass Emissions
    - 8-18-401 Inspection
    - 8-18-402 Identification
    - 8-18-403 Visual inspection schedule
    - 8-18-404 Alternate inspection schedule
    - 8-18-405 Alternate inspection reduction plan
    - 8-18-406 Interim Compliance
    - 8-18-407 Recurrent Leak Schedule
    - 8-18-501 Portable Hydrocarbon Detector
    - 8-18-502 Records
    - 8-18-503 Reports
    - 8-18-503.1 Quarterly Reports to the APCO
    - 8-18-503.2 Annual component inventory submittal to the District
    - 8-18-503.4 Inspection records of all equipment during a turnaround
    - 8-18-503.5 Submit records of all changes since last submittal
    - 8-18-602 Inspection Procedures
    - 8-18-604 Determination of Mass Emissions
- Regulation 8, Rule 28 – Episodic Releases From Pressure Relief Devices at Refineries and Chemical Plants, including:
    - 8-28-100 General/Applicability
    - 8-28-200 Definitions
    - 8-28-303 Pressure Relief Devices at Existing Sources at Refineries
    - 8-28-304 Repeat Releases - Pressure Relief Devices at Refineries
    - 8-28-401 Reporting at Refineries and Chemical Plants
    - 8-28-402 Inspection
    - 8-28-404 Identification
    - 8-28-405 Process Safety Requirements
    - 8-28-406 Monitoring System Demonstration Report
    - 8-28-407 Process Unit Identification Report
    - 8-28-502 Records
    - 8-28-503 Monitoring

The U233 Fuel Gas Center will be subject to the MACT FFFF requirements after the Project as it is in HAP service.

**Source S-340 (NSPS Ka External Floating Roof Tank w/ Zero-Gap Seals)**

Source S-340 (referred to as "NSPS Ka External Floating Roof Tank w/ Zero-Gap Seals") is currently subject to and is expected to continue to comply with the following regulations:

- Regulation 8, Rule 5 – Organic Compounds – Storage of Organic Liquids, Requirements for External Floating Roof Tanks, including:
    - 8-5-111 – Limited Exemption, Tank Removal From and Return to Service
        - The requirements of Sections 8-5-304, 305, 306 and 307 shall not apply to storage tanks during or after tank decommissioning, and shall not apply during temporary removal from service.
            - 8-5-111.1 – Limited Exemption, Tank Removal From and Return to Service, Notification
            - 8-5-111.2 – Limited Exemption, Tank Removal From and Return to Service; Tank in compliance at time of notification
            - 8-5-111.3 – Limited Exemption, Tank Removal From and Return to Service; Filling, emptying, refilling floating roof tanks
            - 8-5-111.5 – Limited Exemption, Tank Removal From and Return to Service; Minimize emissions and, if required, degas per 8-5-328
            - 8-5-111.6 – Limited Exemption, Tank Removal From and Return to Service; Notification and reporting are not required when returning a tank to service
    - 8-5-112 – Limited Exemption, Preventative Maintenance and Inspection of Tanks in Operation
        - The requirements of Sections 8-5-304, 305, 306, 307.2, 307.3 and 328 shall not apply to storage tanks during preventative maintenance of a vapor control device, tank roof, roof fitting or tank seal; during primary seal inspection; or during removal and installation of a secondary seal.
            - 8-5-112.1 – Limited Exemption, Preventative Maintenance and Inspection of Tanks in Operation; Notification
            - 8-5-112.1.1 – Limited Exemption, Tanks in Operation, Notification, 3 day prior notification
            - 8-5-112.1.2 - Limited Exemption, Tanks in Operation, Notification, Telephone notification
            - 8-5-112.2 – Limited Exemption, Preventative Maintenance and Inspection of Tanks in Operation; Tank in compliance at time of notification
            - 8-5-112.3 – Limited Exemption, Preventative Maintenance and Inspection of Tanks in Operation; No product movement, Minimize emissions
            - 8-5-112.4 – Limited Exemption, Preventative Maintenance and Inspection of Tanks in Operation; Not to exceed 7 days
            - 8-5-112.6 – Limited Exemption, Preventative Maintenance and Inspection of Tanks in Operation; Keep records for each exemption
    - 8-5-119 – Limited Exemption, Repair Period for Enhanced Monitoring Program
        - A tank operator who has implemented an Enhanced Monitoring Program and who discovers equipment that fails to meet a requirement listed in Section 8-5-119.1 shall not be deemed in violation of that requirement, provided the operator complies with all of the conditions listed in Sections 8-5-119.2 and 119.3.
            - 8-5-119.1 Limited Exemption, Repair Period; Exemption available for certain requirements
            - 8-5-119.2 Limited Exemption, Repair Period; Conditions for the exemption
            - 8-5-119.3 Limited Exemption, Repair Period; Report use of exemption within 60 days
    - 8-5-301 – Storage Tank Control Requirements

        - The facility shall not store organic liquid in any storage tank unless such tank is equipped with a vapor loss control device that is specified for the tank capacity, or for a higher capacity, and for the true vapor pressure of the tank organic liquid contents, or for a higher true vapor pressure.
    - 8-5-304 – Requirements for External Floating Roof Tanks
        - An external floating roof must meet the requirements for floating roof fittings, primary and secondary seals, and roof/shell must be in good operating condition.
            - 8-5-304.1 – Requirements for External Floating Roofs; Tank fittings
            - 8-5-304.2 – Requirements for External Floating Roofs; Primary seal (8-5-321)
            - 8-5-304.3 – Requirements for External Floating Roofs; Secondary seal (8-5- 322)
            - 8-5-304.4 – Requirements for External Floating Roofs; Floating roof
            - 8-5-304.5 – Requirements for External Floating Roofs; Tank shell
            - 8-5-304.6 – Requirements for External Floating Roofs; Pontoons – no leaks
            - 8-5-304.6.1 – Requirements for External Floating Roofs; Pontoons – make gas tight if leaking
            - 8-5-304.6.2 – Requirements for External Floating Roofs; Pontoons-repair all leaks at next removal from service
    - 8-5-320 – Floating Roof Tank Fitting Requirements
        - All openings through the floating roof, solid sampling or gauging wells, slotted sampling or gauging wells, and emergency roof drain shall meet conditions specified.
            - 8-5-320.2 – Floating Roof Tank Fitting Requirements; Projection below liquid surface
            - 8-5-320.3 – Floating Roof Tank Fitting Requirements; Gasketed covers, seals, – lids
            - 8-5-320.3.1 – Floating Roof Tank Fitting Requirements; Gasketed covers, seals, lids - Gap requirements
            - 8-5-320.4 – Floating Roof Tank Fitting Requirements; Solid sampling or gauging wells--
            - 8-5-320.4.1 – Floating Roof Tank Fitting Requirements; Solid sampling or gauging wells--projection below liquid surface
            - 8-5-320.4.2 – Floating Roof Tank Fitting Requirements; Solid sampling or gauging wells--cover, seal, or lid
            - 8-5-320.4.3 – Floating Roof Tank Fitting Requirements; Solid sampling or gauging wells-- total secondary seal gap must include well gap
            - 8-5-320.6 – Floating Roof Tank Fitting Requirements; emergency roof drains must be 90% covered
    - 8-5-321 – Primary seal requirements
        - The facility shall not operate a storage tank equipped with a primary seal unless such tank meets the conditions specified.
            - 8-5-321.1 – Primary seal requirements; No holes, tears, or other openings
            - 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
            - 8-5-321.3 – Primary seal requirements; Metallic-shoe-type seal requirements
            - 8-5-321.3.1 – Primary seal requirements; Metallic-shoe-type seal requirements - geometry of shoe
            - 8-5-321.3.2 – Primary seal requirements; Metallic-shoe-type seal requirements - welded tanks gap requirements
    - 8-5-322 – Secondary seal requirements
        - The facility shall not operate a storage tank equipped with a secondary seal unless such tank meets the requirements specified.
            - 8-5-322.1 – Secondary seal requirements; No holes, tears, or other openings

- 8-5-322.2 – Secondary seal requirements; Insertion of probes
- 8-5-322.3 – Secondary seal requirements; Gap requirements for all tanks
- 8-5-322.5 – Secondary seal requirements; Gap requirements for welded external floating roof tanks with seal installed after September 4, 1985
- 8-5-322.6 – Secondary seal requirements; extent of seal

- 8-5-328 – Tank degassing requirements
  - A tank operator shall not open the interior vapor space of a tank to the atmosphere through a hatch or manway, except to connect or disconnect degassing equipment or to conduct tank contents or emissions sampling, unless such tank meets the conditions specified.
    - 8-5-328.1 – Tank degassing requirements; Tanks > 75 cubic meters; Approved Emission Control System
    - 8-5-328.2 – Tank degassing requirements; Ozone Excess Day Prohibition
    - 8-5-328.3 – Tank degassing requirements; BAAQMD notification required
- 8-5-331 - Tank Cleaning Requirements
  - Tank interior cleaning agents must meet the requirements specified, unless all organic vapors and gases emitted during tank cleaning are collected and processed at an abatement device that has an abatement efficiency of at least 90% by weight.
- 8-5-332 - Sludge Handling Requirements
  - The operator of a tank shall place sludge removed from that tank directly into a sludge container that meets the requirements specified.
- 8-5-401 – Inspection Requirements for External Floating Roof Tanks
  - The operator shall inspect each primary and secondary seal, and fittings at the frequency specified.
    - 8-5-401.1 – Inspection Requirements for External Floating Roof Tanks; Primary and Secondary Seal Inspections
    - 8-5-401.2 – Inspection Requirements for External Floating Roof Tanks; Tank Fittings Inspections
- 8-5-404 – Inspection, Abatement Efficiency Determination, and Source Test Reports
  - A report shall be submitted to the APCO that certifies compliance with each individual requirement associated with the inspection, abatement efficiency determination or source test, and that includes data, supported by necessary calculations, to support this certification.
- 8-5-411 – Enhanced Monitoring Program (Optional)
  - Selected tanks for enhanced monitoring must be subject to Section 8-5-401, 402, or 403. The operator shall perform enhanced monitoring as specified in Sections 8-5-401, 402 and 403.
    - 8-5-411.1 – Enhanced Monitoring Program (Optional); Notify BAAQMD of tanks selected for enhanced monitoring program
    - 8-5-411.2 – Enhanced Monitoring Program (Optional); Criteria for operating enhanced monitoring program
    - 8-5-411.3 – Enhanced Monitoring Program (Optional); Performance requirements
- 8-5-412 – Monitoring of Leaking Pontoons
  - The operator of a floating roof tank on which a leaking pontoon has been discovered shall inspect the lids and other openings on any leaking pontoon for compliance with the requirements of Section 8-5-304.6.1 once per calendar quarter beginning the quarter after the leaking pontoon is discovered until a repair of the leak is completed.
- 8-5-501 – Records

        - The facility shall keep an accurate record of the type and amount of liquids stored, type of blanket gases used, and the true vapor pressure ranges of such liquids and gases. A tank operator shall keep an accurate record of primary/secondary seal replacements.
            - 8-5-501.1 – Records; Type and amount of liquid, type of blanket gas, TVP- Retain 24 months
            - 8-5-501.2 – Records; Internal and External Floating Roof Tanks, Seal Replacement Records- Retain 10 years
            - 8-5-501.3 – Records; Retention
    - 8-5-602 – Analysis of Samples, True Vapor Pressure
    - 8-5-604 – Determination of Applicability Based on True Vapor Pressure
    - 8-5-605 – Measurement of Leak Concentration and Residual Concentrations
    - 8-5-605.1 – Measurement of Leak Concentration and Residual Concentrations; EPA method 21 Instruments
    - 8-5-605.2 – Measurement of Leak Concentration and Residual Concentrations; Method 21 and tank degassing residual organic concentration measurement method
- 40 CFR 60, Subpart Ka – Standards of Performance for Storage Vessels for Volatile Organic Liquid Storage Vessels for Which Construction, Reconstruction, or Modification Commenced After May 18, 1978, and Prior to July 23, 1984, including:
    - 60.110a(a) – Applicability and Designation of Affected Facility
- 40 CFR Part 63, Subpart G – National Emission Standards for Organic Hazardous Air Pollutants From the Synthetic Organic Chemical Manufacturing Industry for Process Vents, Storage Vessels, Transfer Operations, and Wastewater, including:
    - 63.119(a) – Storage Vessel Provisions -- Reference Control Technology
    - 63.119(a)(1) – Storage Vessel Provisions -- Reference Control Technology-- Group 1, TVP < 76.6 kPa
    - 63.119(c) – Storage Vessel Provisions -- Reference Control Technology-- External floating roof
    - 63.119(c)(1) – Storage Vessel Provisions -- Reference Control Technology-- External floating roof seals
    - 63.119(c)(1)(i) – Storage Vessel Provisions -- Reference Control Technology-- External floating roof double seals required
    - 63.119(c)(1)(ii) – Storage Vessel Provisions -- Reference Control Technology-- External floating roof primary seal requirements – metallic shoe or liquid-mounted
    - 63.119(c)(1)(iii) – Storage Vessel Provisions -- Reference Control Technology-- External floating roof seal requirements
    - 63.119(c)(3) – Storage Vessel Provisions -- Reference Control Technology-- External floating roof-- Must float on liquid
    - 63.119(c)(3)(i) – Storage Vessel Provisions -- Reference Control Technology-- External floating roof --Must float on liquid except during initial fill
    - 63.119(c)(3)(ii) – Storage Vessel Provisions -- Reference Control Technology-- External floating roof-- Must float on liquid except after completely emptied and degassed
    - 63.119(c)(3)(iii) – Storage Vessel Provisions -- Reference Control Technology-- External floating roof -- Must float on liquid except when completely emptied before refilling
    - 63.119(c)(4) – Storage Vessel Provisions -- Reference Control Technology-- External Floating Roof Operations, when not floating
    - 63.120(b) – Storage Vessel Provisions -- Procedures to Determine Compliance--Compliance Demonstration--External floating roof
    - 63.120(b)(1) – Storage Vessel Provisions -- Procedures to Determine Compliance--External FR seal gap measurement
    - 63.120(b)(1)(i) – Storage Vessel Provisions -- Procedures to Determine Compliance--External FR with double seals - primary seal gap measurement – 5 year intervals

- 63.120(b)(1)(iii) – Storage Vessel Provisions -- Procedures to Determine Compliance--External FR with double seals - secondary seal gap measurement – annual requirement
- 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
- 63.120(b)(2) – Storage Vessel Provisions -- Procedures to Determine Compliance--External FR seal gap determination methods
- 63.120(b)(2)(i) – Storage Vessel Provisions -- Procedures to Determine Compliance--External FR seal gap determination methods – roof not resting on legs
- 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
- 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
- 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 cm2 per meter of vessel diameter. Maximum width <= 3.81 cm
- 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 cm2 per meter of vessel diameter. Maximum width <= 1.27 cm
- 63.120(b)(5) – Storage Vessel Provisions -- Procedures to Determine Compliance--External FR primary seal additional requirements
- 63.120(b)(5)(i) – Storage Vessel Provisions -- Procedures to Determine Compliance--External FR primary seal additional requirements – metallic shoe seal – shoe geometry
- 63.120(b)(5)(ii) – Storage Vessel Provisions -- Procedures to Determine Compliance--External FR primary seal additional requirements – no holes, tears, or openings
- 63.120(b)(6) – Storage Vessel Provisions -- Procedures to Determine Compliance--External FR secondary seal requirements
- 63.120(b)(6)(i) – Storage Vessel Provisions -- Procedures to Determine Compliance--External FR secondary seal requirements – location and extent
- 63.120(b)(6)(ii) – Storage Vessel Provisions -- Procedures to Determine Compliance--External FR secondary seal requirements - no holes, tears or openings
- 63.120(b)(7) – Storage Vessel Provisions -- Procedures to Determine Compliance--External FR unsafe to perform seal measurements or inspect the tank
- 63.120(b)(7)(i) – Storage Vessel Provisions -- Procedures to Determine Compliance--External FR unsafe to perform seal measurements or inspect the 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.
- 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.
- 63.120(b)(9) – Storage Vessel Provisions -- Procedures to Determine Compliance External FR seal gap measurement 30 day notification
- 63.120(b)(10) – Storage Vessel Provisions -- Procedures to Determine Compliance--External FR and seals visual inspection each time emptied
- 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)]

- 63.120(b)(10)(ii) – Storage Vessel Provisions -- Procedures to Determine Compliance-- External FR and seal visual inspection each time emptied – 30 day notification
- 63.120(b)(10)(iii) – Storage Vessel Provisions -- Procedures to Determine Compliance-- External FR and seal visual inspection each time emptied –-Notification for unplanned
- 63.123(a) – Storage Vessel Provisions -- Recordkeeping--Group 1 and Group 2 storage vessel dimensions and capacity. Keep for life of source.
- 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)
- 63.123(g) – Storage Vessel Provisions -- Recordkeeping, Extensions for emptying storage vessel – keep documentation specified

The Facility will no longer be considered a source having a “petroleum refining process unit” under the definitions of NESHAP Subpart CC (40 CFR Part 63, Subpart CC – National Emission Standards for Hazardous Air Pollutants From Petroleum Refineries) after the Project. As such, MACT CC will no longer apply to the NSPS Ka External Floating Roof Tank w/ Zero-Gap Seals. The NSPS Ka External Floating Roof Tank w/ Zero-Gap Seals will not be subject to MACT FFFF after the project, as it will not be in HAP service.

**Source S-341 and S-342 (NSPS K and NSPS Ka Zero-Gap External Floating Roof Tanks)**

Sources S-341 and S-342 (referred to as "NSPS K and NSPS Ka Zero-Gap External Floating Roof Tanks") are currently subject to and are expected to continue to comply with the following regulations:

- Regulation 8, Rule 5 – Organic Compounds – Storage of Organic Liquids, Requirements for External Floating Roof Tanks, including:
    - 8-5-111 – Limited Exemption, Tank Removal From and Return to Service
        - The requirements of Sections 8-5-304, 305, 306 and 307 shall not apply to storage tanks during or after tank decommissioning, and shall not apply during temporary removal from service.
            - 8-5-111.1 – Limited Exemption, Tank Removal From and Return to Service, Notification
                - 8-5-111.1.1 – Limited Exemption, Tank Removal From and Return to Service, Notification, 3 day prior notification
                - 8-5-111.1.2 – Limited Exemption, Tank Removal From and Return to Service, Notification, Telephone notification
            - 8-5-111.2 – Limited Exemption, Tank Removal From and Return to Service, Tank in compliance prior to notification
            - 8-5-111.3 – Limited Exemption, Tank Removal From and Return to Service, Floating roof tanks
            - 8-5-111.5 – Limited Exemption, Tank Removal From and Return to Service, Minimize emissions
            - 8-5-111.6 - Limited Exemption, Tank Removal From and Return to Service; Notification and reporting are not required when returning a tank to service
    - 8-5-112 – Limited Exemption, Preventative Maintenance and Inspection of Tanks in Operation
        - The requirements of Sections 8-5-304, 305, 306, 307.2, 307.3 and 328 shall not apply to storage tanks during preventative maintenance of a vapor control device, tank roof, roof fitting or tank seal; during primary seal inspection; or during removal and installation of a secondary seal.
            - 8-5-112.1 – Limited Exemption, Tanks in Operation, Notification
                - 8-5-112.1.1 – Limited Exemption, Tanks in Operation, Notification, 3 day prior notification
                - 8-5-112.1.2 – Limited Exemption, Tanks in Operation, Notification, Telephone notification
            - 8-5-112.2 – Limited Exemption, Tanks in Operation, Tank in compliance prior to start of work. Certified per 8-5-404
            - 8-5-112.3 – Limited Exemption, Tanks in Operation, No product movement, Minimize emissions
            - 8-5-112.4 – Limited Exemption, Tanks in Operation, Not to exceed 7 days
            - 8-5-112.6 – Tank Records
    - 8-5-118 Limited Exemption, Gas Tight Requirements
    - 8-5-119 – Limited Exemption, Repair Period**)**
        - A tank operator who has implemented an Enhanced Monitoring Program and who discovers equipment that fails to meet a requirement listed in Section 8-5-119.1 shall not be deemed in violation of that requirement, provided the operator complies with all of the conditions listed in Sections 8-5-119.2 and 119.3.
            - 8-5-119.1 Limited Exemption, Repair Period; Exemption available for certain requirements
            - 8-5-119.2 Limited Exemption, Repair Period; Conditions for the exemption
            - 8-5-119.3 Limited Exemption, Repair Period; Report use of exemption within 60 days

- 8-5-301 – Storage Tank Control Requirements (internal floating roof, external floating roof, or approved emission control system)
  - The facility shall not store organic liquid in any storage tank unless such tank is equipped with a vapor loss control device that is specified for the tank capacity, or for a higher capacity, and for the true vapor pressure of the tank organic liquid contents, or for a higher true vapor pressure.
- 8-5-304 – Requirements for External Floating Roofs
  - An external floating roof must meet the requirements for floating roof fittings, primary and secondary seals, and roof/shell must be in good operating condition.
    - 8-5-304.1 – Requirements for External Floating Roofs; Tank fitting requirements
    - 8-5-304.2 – Requirements for External Floating Roofs; Primary seal requirements
    - 8-5-304.3 – Requirements for External Floating Roofs; Secondary seal requirements
    - 8-5-304.4 – Requirements for External Floating Roofs; Floating roof requirements
    - 8-5-304.5 – Requirements for External Floating Roofs; Shell in good condition
    - 8-5-304.6 – Requirements for External Floating Roofs; tank pontoons
- 8-5-320 – Tank Fitting Requirements; Floating roof tanks
  - All openings through the floating roof, solid sampling or gauging wells, slotted sampling or gauging wells, and emergency roof drain shall meet conditions specified.
    - 8-5-320.2 – Tank Fitting Requirements; Floating roof tanks, Projection below liquid surface
    - 8-5-320.3 – Tank Fitting Requirements; Floating roof tanks, Gasketed covers, seals, lids
      - 8-5-320.3.1 – Tank Fitting Requirements; Floating roof tanks, Gasketed covers, seals, lids – Gap requirements
    - 8-5-320.4 – Tank Fitting Requirements; Solid sampling or gauging well requirements in floating roof tanks
    - 8-5-320.4.1 – Tank Fitting Requirements; Solid sampling or gauging well requirements-projection below liquid surface
    - 8-5-320.4.2 – Tank Fitting Requirements; Solid sampling or gauging well requirements-cover, seal, or lid
    - 8-5-320.4.3 – Tank Fitting Requirements; Solid sampling or gauging well requirements-gap between well and roof
    - 8-5-320.6 – Tank Fitting Requirements; Emergency roof drain
    - 8-5-320.7 – Tank Fitting Requirements; Pressure relief devices
- 8-5-321 – Primary Seal Requirements
  - The facility shall not operate a storage tank equipped with a primary seal unless such tank meets the conditions specified.
    - 8-5-321.1 – Primary Seal Requirements; No holes, tears, other openings
    - 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
    - 8-5-321.3 – Primary Seal Requirements; Metallic-shoe-type seal requirements
      - 8-5-321.3.1 – Primary Seal Requirements; Metallic-shoe-type seal requirements- geometry of shoe
      - 8-5-321.3.2 – Primary Seal Requirements; Metallic-shoe-type seal requirements- welded tanks
- 8-5-322 – Secondary Seal Requirements
  - The facility shall not operate a storage tank equipped with a secondary seal unless such tank meets the requirements specified.

- 8-5-322.1 – Secondary Seal Requirements; No holes, tears, other openings
- 8-5-322.2 – Secondary Seal Requirements; Insertion of probes
- 8-5-322.3 – Secondary Seal Requirements; Secondary seal gaps
- 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
- 8-5-322.6 – Secondary Seal Requirements; Extent of seal

- 8-5-328 – Tank Degassing Requirements
  - A tank operator shall not open the interior vapor space of a tank to the atmosphere through a hatch or manway, except to connect or disconnect degassing equipment or to conduct tank contents or emissions sampling, unless such tank meets the conditions specified.
    - 8-5-328.1 – Tank Degassing Requirements; Tanks > 75 cubic meters, Approved Emission Control System
    - 8-5-328.2 – Tank Degassing Requirements; Ozone Excess Day Prohibition
    - 8-5-328.3 – Notification of degassing
- 8-5-331 – Tank Cleaning Requirements
  - Tank interior cleaning agents must meet the requirements specified, unless all organic vapors and gases emitted during tank cleaning are collected and processed at an abatement device that has an abatement efficiency of at least 90% by weight.
- 8-5-332 – Sludge Handling Requirements
  - The operator of a tank shall place sludge removed from that tank directly into a sludge container that meets the requirements specified.
- 8-5-401 – Inspection Requirements for External Floating Roof Tanks
  - The operator shall inspect each primary and secondary seal, and fittings at the frequency specified.
    - 8-5-401.1 – Inspection Requirements for External Floating Roof Tanks; Primary and Secondary Seal Inspections
    - 8-5-401.2 – Inspection Requirements for External Floating Roof Tanks; Tank Fittings Inspections
- 8-5-404 – Inspection, Abatement Efficiency Determination and Source Test Reports
  - A report shall be submitted to the APCO that certifies compliance with each individual requirement associated with the inspection, abatement efficiency determination or source test, and that includes data, supported by necessary calculations, to support this certification.
- 8-5-405 – Information Required
- 8-5-411 – Enhanced Monitoring Program (Applies to list of tanks chosen by facility)
  - Selected tanks for enhanced monitoring must be subject to Section 8-5-401, 402, or 403. The operator shall perform enhanced monitoring as specified in Sections 8-5-401, 402 and 403.
- 8-5-412 – Monitoring of Leaking Pontoons
  - The operator of a floating roof tank on which a leaking pontoon has been discovered shall inspect the lids and other openings on any leaking pontoon for compliance with the requirements of Section 8-5-304.6.1 once per calendar quarter beginning the quarter after the leaking pontoon is discovered until a repair of the leak is completed.
- 8-5-501 – Records
  - The facility shall keep an accurate record of the type and amount of liquids stored, type of blanket gases used, and the true vapor pressure ranges of such liquids and gases. A tank operator shall keep an accurate record of primary/secondary seal replacements.
    - 8-5-501.1 – Records; Type and amounts of liquid, type of blanket gas, TVP – Retain 24 months

        - 8-5-501.2 – Records; Internal and External Floating Roof Tanks, Seal Replacement Records – Retain 10 years
    - 8-5-602 – Analysis of Samples, True Vapor Pressure
    - 8-5-604 – Determination of Applicability
    - 8-5-605 - Measurement of Leak Concentrations and Residual Concentrations
- 40 CFR 60, Subpart Ka – Standards of Performance for Storage Vessels for Volatile Organic Liquid Storage Vessels for Which Construction, Reconstruction, or Modification Commenced After May 18, 1978, and Prior to July 23, 1984, including:
    - 60.110a(a) – Applicability and Designation of Affected Facility
- 40 CFR Part 63, Subpart G – National Emission Standards for Organic Hazardous Air Pollutants From the Synthetic Organic Chemical Manufacturing Industry for Process Vents, Storage Vessels, Transfer Operations, and Wastewater, including:
    - 63.119(a) – Storage Vessel Provisions -- Reference Control Technology
    - 63.119(a)(1) – Storage Vessel Provisions -- Reference Control Technology--Group 1, TVP < 76.6 kPa
    - 63.119(c) – Storage Vessel Provisions -- Reference Control Technology-- External floating roof
    - 63.119(c)(1) – Storage Vessel Provisions -- Reference Control Technology-- External floating roof seals
    - 63.119(c)(1)(i) – Storage Vessel Provisions -- Reference Control Technology-- External floating roof double seals required
    - 63.119(c)(1)(ii) – Storage Vessel Provisions -- Reference Control Technology-- External floating roof primary seal requirements – metallic shoe or liquid-mounted
    - 63.119(c)(1)(iii) – Storage Vessel Provisions -- Reference Control Technology-- External floating roof seal requirements
    - 63.119(c)(3) – Storage Vessel Provisions -- Reference Control Technology-- External floating roof-- Must float on liquid
    - 63.119(c)(3)(i) – Storage Vessel Provisions -- Reference Control Technology-- External floating roof --Must float on liquid except during initial fill
    - 63.119(c)(3)(ii) – Storage Vessel Provisions -- Reference Control Technology-- External floating roof-- Must float on liquid except after completely emptied and degassed
    - 63.119(c)(3)(iii) – Storage Vessel Provisions -- Reference Control Technology-- External floating roof -- Must float on liquid except when completely emptied before refilling
    - 63.119(c)(4) – Storage Vessel Provisions -- Reference Control Technology-- External Floating Roof Operations, when not floating
    - 63.120(b) – Storage Vessel Provisions -- Procedures to Determine Compliance-- Demonstration-- External floating roof
    - 63.120(b)(1) – Storage Vessel Provisions -- Procedures to Determine Compliance-- External FR seal gap measurement
    - 63.120(b)(1)(i) – Storage Vessel Provisions -- Procedures to Determine Compliance-- External FR with double seals - primary seal gap measurement – 5 year intervals
    - 63.120(b)(1)(iii) – Storage Vessel Provisions -- Procedures to Determine Compliance-- External FR with double seals - secondary seal gap measurement – annual requirement
    - 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
    - 63.120(b)(2) – Storage Vessel Provisions -- Procedures to Determine Compliance-- External FR seal gap determination methods
    - 63.120(b)(2)(i) – Storage Vessel Provisions -- Procedures to Determine Compliance-- External FR seal gap determination methods – roof not resting on legs

- 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
- 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
- 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 cm2 per meter of vessel diameter. Maximum width <= 3.81 cm
- 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 cm2 per meter of vessel diameter. Maximum width <= 1.27 cm
- 63.120(b)(5) – Storage Vessel Provisions -- Procedures to Determine Compliance-- External FR primary seal additional requirements
- 63.120(b)(5)(i) – Storage Vessel Provisions -- Procedures to Determine Compliance-- External FR primary seal additional requirements – metallic shoe seal – shoe geometry
- 63.120(b)(5)(ii) – Storage Vessel Provisions -- Procedures to Determine Compliance-- External FR primary seal additional requirements – no holes, tears, or openings
- 63.120(b)(6) – Storage Vessel Provisions -- Procedures to Determine Compliance-- External FR secondary seal requirements
- 63.120(b)(6)(i) – Storage Vessel Provisions -- Procedures to Determine Compliance-- External FR secondary seal requirements – location and extent
- 63.120(b)(6)(ii) – Storage Vessel Provisions -- Procedures to Determine Compliance-- External FR secondary seal requirements - no holes, tears or openings
- 63.120(b)(7) – Storage Vessel Provisions -- Procedures to Determine Compliance-- External FR unsafe to perform seal measurements or inspect the tank
- 63.120(b)(7)(i) – Storage Vessel Provisions -- Procedures to Determine Compliance-- External FR unsafe to perform seal measurements or inspect the 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.
- 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.
- 63.120(b)(9) – Storage Vessel Provisions -- Procedures to Determine Compliance External FR seal gap measurement 30 day notification
- 63.120(b)(10) – Storage Vessel Provisions -- Procedures to Determine Compliance-- External FR and seals visual inspection each time emptied
- 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)
- 63.120(b)(10)(ii) – Storage Vessel Provisions -- Procedures to Determine Compliance-- External FR and seal visual inspection each time emptied – 30 day notification
- 63.120(b)(10)(iii) – Storage Vessel Provisions -- Procedures to Determine Compliance-- External FR and seal visual inspection each time emptied –- Notification for unplanned
- 63.123(a) – Storage Vessel Provisions -- Recordkeeping--Group 1 and Group 2 storage vessel dimensions and capacity. Keep for life of source.
- 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)

- 63.123(g) – Storage Vessel Provisions -- Recordkeeping, Extensions for emptying storage vessel – keep documentation specified

The Facility will no longer be considered a source having a “petroleum refining process unit” under the definitions of NESHAP Subpart CC (40 CFR Part 63, Subpart CC – National Emission Standards for Hazardous Air Pollutants From Petroleum Refineries) after the Project. As such, MACT CC will no longer apply to the NSPS K and NSPS Ka Zero-Gap External Floating Roof Tanks. The NSPS K and NSPS Ka Zero-Gap External Floating Roof Tanks will not be subject to MACT FFFF after the project, as they will not be in HAP service.

**Sources S-352, S-353, and S-354 (Turbines)**

Turbines S-352, S-353, and S-354 (collectively referred to as "the turbines") are currently subject to and expected to continue to comply with the following regulations:

- Regulation 1 – General Provisions and Definitions, including:
  - 1-107 – Combination of Emissions
  - 1-520 – Continuous Emission Monitoring
  - 1-520.8 – Monitors Pursuant to Regulation 2-1-403
    - Install continuous emission monitoring as required by Regulations 10, 12, and 2-1-403.
  - 1-521 – Monitoring May Be Required
  - 1-522 – Continuous Emission Monitoring and Recordkeeping Procedures
    - Continuous emission monitors shall comply with monitoring and recordkeeping procedures, and shall report to the APCO on excess of any emission standard to which the source is required to conform.
  - 1-522.1 – Approval of plans and specifications
  - 1-522.2 – Scheduling requirements
  - 1-522.3 – CEM Performance Testing
  - 1-522.4 – Reporting of Inoperative CEMS
  - 1-522.5 – CEM Calibration Requirements
  - 1-522.6 – CEM Accuracy Requirements
  - 1-522.7 – Emission Limit Exceedance Reporting Requirements
  - 1-522.8 – Monitoring Data Submittal Requirements
  - 1-522.9 – Recordkeeping Requirements
  - 1-522.10 – Regulation 1-521 Monitors Shall Meet Requirements Specified by District
  - 1-523 – Parametric Monitoring and Recordkeeping Procedures
    - Continuous parametric monitors shall comply with monitoring and recordkeeping procedures, and shall report to the APCO on any violation of permit conditions or District regulations to which the source is required to conform.
      - 1-523.1 – Parametric Monitor Periods of Inoperation
      - 1-523.2 – Limits on Periods of Inoperation
      - 1-523.3 – Reports of Violations
      - 1-523.4 – Records
      - 1-523.5 – Maintenance and Calibration
  - 1-602 – Area and Continuous Monitoring Requirements
    - The procedures for selection and placement, installation scheduling, performance testing, reporting, records retention and instrument calibration are detailed in the Manual of Procedures.
- Regulation 2, Rule 1 – Permits, General Requirements, including:
  - 2-1-403 – Permit conditions – measurement of emissions
  - 2-1-501 – Monitors
- Regulation 6, Rule 1 – Particulate Matter, General Requirements, including:
  - 6-1-114.1 – Exemption from 6-1-310.2 and 6-1-311.2 emission limits
  - 6-1-114.3 – Exemption from 6-1-504 source testing requirements
  - 6-1-301 – Ringelmann No. 1 Limitation
    - The facility shall not emit from any source for a period or aggregate periods of more than three minutes in any hour, a visible emission that is as dark or darker than No. 1 on the Ringelmann Chart, or of such opacity as to obscure an observer's view to an equivalent or greater degree.
  - 6-1-305 – Visible Particles
    - The facility shall not emit particles from any operation in sufficient number to cause annoyance to any other person where the particles are large enough to be visible as

individual particles at the emission point, or of such size and nature as to be visible individually as incandescent particles.
    - 6-1-310.1 – Total Suspended Particulate (TSP) Concentration Limit of 0.15 gr/dscf
    - 6-1-310.3 – Concentration Correction
    - 6-1-401 – Appearance of Emissions
        - The facility shall comply with the requirements of Regulation 6-102: Any violation of any of the requirements in the Regulation 6 Rules is subject to enforcement action under the applicable provisions of the California Health & Safety Code.
- Regulation 9, Rule 9 – Nitrogen Oxides from Stationary Gas Turbines, including:
    - 9-9-113 – Exemption – Inspection/Maintenance
    - 9-9-114 – Exemption – Startup/Shutdown
    - 9-9-115 – Limited Exemption, Minor Inspection and Maintenance Work
    - 9-9-120 – Interchangeable Emission Reduction Credits
    - 9-9-301 – Emission Limits - General
    - 9-9-301.1.3 – Emission Limits
    - 9-9-301.2 – Emission limits effective on January 1, 2010
    - 9-9-401 – Efficiency Certification
    - 9-9-501 – Continuous Emission Monitoring (CEM)
    - 9-9-601 – Determination of Emissions
    - 9-9-602 – Determination of Stack Gas Oxygen
    - 9-9-603 – Continuous Emission Monitoring
    - 9-9-604 – Determination of HHV and LHV
    - 9-9-605 – Compliance With Output Based NOx Emission Standards
- 40 CFR Part 60, Subpart GG – Standards of Performance for Stationary Gas Turbines, including:
    - 60.330 – Applicability
    - 60.332(a)(2) – Alternative Standard, NOx (except when ice fog deemed a traffic hazard per 60.332(f)
    - 60.332(d) – Compliance with 60.332(a)(2) required
    - 60.332(f) – Exemption from 60.332(a)(2) when steam injection would result in ice fog which is deemed a traffic hazard
    - 60.332(k) – Exemption: Natural gas turbines >10 MMBtu/hr when firing emergency fuel
    - 60.333 – Performance Standards, SO2
    - 60.333(b) – Fuel Sulfur Limit (in lieu of SO2 concentration emission limit – 150 ppmv @ 15% O2 – in 60.333(a))
    - 60.334 – Monitoring Requirements
    - 60.334(h)(1) – Fuel Sulfur Content (for refinery fuel gas)
    - 60.334(h)(3) – Gas Quality Characteristics in current, valid purchase contract (for natural gas)
    - 60.334(i) – Fuel sulfur content monitoring frequency
    - 60.334(i)(3) – Custom schedules for determination of fuel sulfur content
    - 60.334(i)(3)(i) – Custom schedules for determination of fuel sulfur content
    - 60.334(j) – Excess emission reporting per 60.7(c)
    - 60.334(j)(2) – Excess emission definition for fuel sulfur content
    - 60.334(j)(2)(i) – Excess emission definition for fuel sulfur content
    - 60.334(j)(2)(iii) – Monitor downtime period definition
    - 60.334(j)(5) – Excess emission reports due the 30$^{th}$ day following end of each calendar quarter
    - 60.335 – Test Methods and Procedures

As the Facility will no longer be considered a “petroleum refinery” under the definitions of NSPS Subpart J (40 CFR Part 60, Subpart J – Standards of Performance for Petroleum Refineries), the turbines will no longer be subject to NSPS J.

Below is a table demonstrating compliance with Regulation 6-1-310 (Total Suspended Particulate (TSP) Concentration Limits). Detailed calculations are provided in Appendix A.

**Total Suspended Particulate (TSP) Emission Concentration Limit Comparison**

| Source No | Process Exhaust (Rate dscf/min) | TSP Emission (gr/dscf) | TSP Emission Rate limit (gr TSP/dscf) Reg 6-1-310.1 | Comply with TSP Emission Weights limit (Y/N) |
|---|---|---|---|---|
| S-352 | 3,671 | 0.07 | 0.15 | Y |
| S-353 | 3,671 | 0.07 | 0.15 | Y |
| S-354 | 3,671 | 0.07 | 0.15 | Y |

**Sources S-355, S-356, and S-357 (Duct Burners)**

Duct Burners S-355, S-356, and S-357 (collectively referred to as "the duct burners") are currently subject to and expected to continue to comply with the following regulations:

- Regulation 1 – General Provisions and Definitions, including:
    - 1-107 – Combination of Emissions
    - 1-520 – Continuous Emission Monitoring
    - 1-520.8 – Monitors Pursuant to Regulation 2-1-403
        - Install continuous emission monitoring as required by Regulations 10, 12, and 2-1-403.
    - 1-521 – Monitoring May Be Required
    - 1-522 – Continuous Emission Monitoring and Recordkeeping Procedures
        - Continuous emission monitors shall comply with monitoring and recordkeeping procedures, and shall report to the APCO on excess of any emission standard to which the source is required to conform.
            - 1-522.1 – Approval of plans and specifications
            - 1-522.2 – Scheduling requirements
            - 1-522.3 – CEM Performance Testing
            - 1-522.4 – Reporting of Inoperative CEMS
            - 1-522.5 – CEM Calibration Requirements
            - 1-522.6 – CEM Accuracy Requirements
            - 1-522.7 – Emission Limit Exceedance Reporting Requirements
            - 1-522.8 – Monitoring Data Submittal Requirements
            - 1-522.9 – Recordkeeping Requirements
            - 1-522.10 – Regulation 1-521 Monitors Shall Meet Requirements Specified by District
    - 1-602 – Area and Continuous Monitoring Requirements
        - The procedures for selection and placement, installation scheduling, performance testing, reporting, records retention and instrument calibration are detailed in the Manual of Procedures.
- Regulation 6, Rule 1 – Particulate Matter, General Requirements, including:
    - 6-1-114.1 – Exemption from 6-1-310.2 and 6-1-311.2 emission limits
    - 6-1-114.3 – Exemption from 6-1-504 source testing requirements
    - 6-1-301 – Ringelmann No. 1 Limitation
        - The facility shall not emit from any source for a period or aggregate periods of more than three minutes in any hour, a visible emission that is as dark or darker than No. 1 on the Ringelmann Chart, or of such opacity as to obscure an observer's view to an equivalent or greater degree.
    - 6-1-305 – Visible Particles
        - The facility shall not emit particles from any operation in sufficient number to cause annoyance to any other person where the particles are large enough to be visible as individual particles at the emission point, or of such size and nature as to be visible individually as incandescent particles.
    - 6-1-310.1 – Particulate Weight Limitation of 0.15 gr/dscf
    - 6-1-310.3 – Concentration Correction
    - 6-1-401 – Appearance of Emissions
        - The facility shall comply with the requirements of Regulation 6-102: Any violation of any of the requirements in the Regulation 6 Rules is subject to enforcement action under the applicable provisions of the California Health & Safety Code.
- Regulation 9, Rule 10 – Nitrogen Oxides and Carbon Monoxide From Boilers, Steam Generators, and Process Heaters in Refineries, including:
    - 9-10-110.3 – Exemption: Waste heat recovery boilers associated with gas turbines

- 40 CFR Part 60, Subpart Db – Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units , including:
    - 60.40b(a) – Applicability
    - 60.40b(c) – Affected facilities subject to Subpart J are subject to PM and NOx standards in Subpart Db and SO2 standards in Subpart J
    - 60.40b(f) – Modification for the sole purpose of combusting gases containing TRS is not a modification
    - 60.40b(j) - Units subject to Subpart Db are not subject to Subpart D
    - 60.44b(a) – NOx Standard
    - 60.44b(a)(4)(i) – NOx standard for duct burner used in combined cycle system for natural gas-firing only conditions
    - 60.44b(e) – NOx standard for refinery-produced byproduct (i.e., fuel gas) with oil or natural gas combustion
    - 60.44b(f) – NOx standard for refinery-produced byproduct with oil or natural gas combustion may be determined on a case-by-case basis (based on 25 ppmv NOx standard for PSD Permit Condition 18629, Part IX.E)
    - 60.44b(h) – NOx stand applicable at all times
    - 60.44b(i) – 30-day rolling average
    - 60.46b – Compliance/Performance test methods for NOx
    - 60.46b(b) – NOx standard applicable at all times
    - 60.48b – Emission monitoring for NOx
    - 60.48b(b)(1) – Install, calibrate, and operate CEM and record output for measuring NOx discharges
    - 60.48b(c) – Record data during all periods of operation of CEM except during breakdown and repairs
    - 60.48b(d) – Continuous NOx monitors measure 1-hr average emission rates
    - 60.48b(e) – Complies with 60.13
    - 60.48b(e)(2) – Span values for NOx
    - 60.48b(e)(3) – Span values for NOx rounded to nearest 500 ppm
    - 60.48b(f) – Standby monitoring system and test methods
    - 60.48b(g) – NOx CEM requirements for units with 250 MMBtu/hr heat input capacity or less
    - 60.48b(g)(1) – NOx CEM requirements for units with 250 MMBtu/hr heat input capacity or less
    - 60.48b(h) – NOx CEM not required if subject to §60.44b(a)(4) for natural gas firing-only conditions
    - 60.49b – Reporting and recordkeeping
    - 60.49b(d) – Record amounts of each fuel combusted/day and calculate annual capacity factors at a 12-month rolling average
    - 60.49b(g) – Recordkeeping – NOx data
    - 60.49b(h) – Excess emission reports
    - 60.49b(h)(2)(i) – Combusts natural gas, distillate oil, or residual oil with nitrogen content of 0.3 weight percent or less – for natural gas firing-only conditions
    - 60.49b(h)(2)(ii) – Heat input capacity of affected units is 250 MMbtu/hr or less and NOx CEM is required under 60.48b(g)(1)
    - 60.49b(h)(4) – Excess emission definition
    - 60.49b(i) – Reports of 60.49b(g) data
    - 60.49b(o) – Records retained for 2 years
    - 60.49b(v) – Electronic quarterly reports
    - 60.49(w) – Semi-annual reports

As the Facility will no longer be considered a “petroleum refinery” under the definitions of NSPS Subpart J (40 CFR Part 60, Subpart J – Standards of Performance for Petroleum Refineries), the duct burners will no longer be subject to NSPS J.

Below is a table demonstrating compliance with Regulation 6-1-310 (Total Suspended Particulate (TSP) Concentration Limits). Detailed calculations are provided in Appendix A.

**Total Suspended Particulate (TSP) Emission Concentration Limit Comparison**

| Source No | Process Exhaust (Rate dscf/min) | TSP Emission (gr/dscf) | TSP Emission Rate limit (gr TSP/dscf) Reg 6-1-310.1 | Comply with TSP Emission Weights limit (Y/N) |
|---|---|---|---|---|
| S-355 | 2,177 | 0.07 | 0.15 | Y |
| S-356 | 2,177 | 0.07 | 0.15 | Y |
| S-357 | 2,177 | 0.07 | 0.15 | Y |

**Sources S-101, S-102, S-106, S-324, S-381, S-382, S-383, S-384, S-385, S-386, S-387, S-390, S-400, S-401, S-1007, S-1008, and S-1009 (Miscellaneous Wastewater Sources)**

Miscellaneous wastewater sources S-101, S-102, S-106, S-324, S-381, S-382, S-383, S-384, S-385, S-386, S-387, S-390, S-400, S-401, S-1007, S-1008, and S-1009 (collectively referred to as "the miscellaneous wastewater sources") are currently only subject to BAAQMD-specific permit conditions. These sources are expected to comply with the specific permit conditions after the completion of the project. The Miscellaneous Wastewater Sources will be subject to MACT FFFF after the project, as they will be in HAP service. Refer to the MACT FFFF section.

**Source S-425 and S-426 (Marine Terminal Berths)**

Marine Terminal Berths S-425 and S-426 (collectively referred to as "the berths") are currently subject to and will continue to comply with the following regulations:

- Regulation 8, Rule 44 – Organic Compounds – Marine Tank Vessel Operations, including:
  - 8-44-110 – Exemption: Loading Events
    - Sections 8-44-301 through 305 of this rule shall not apply to loading events of less than 1,000 barrels.
  - 8-44-111 – Exemption: Marine Vessel Fueling
    - Sections 8-44-301 through 305 of this rule shall not apply to the loading of organic liquids associated with the fueling (bunkering) of marine vessels.
  - 8-44-115 – Exemption: Safety/Emergency Operations
    - Nothing in this rule shall be construed to require any act or omission that would be in violation of any regulation or other requirement of the United States Coast Guard or prevent any act or omission that is necessary to secure the safety of a vessel or for saving life at sea.
  - 8-44-116 – Limited Exemption, Equipment Leaks
    - The requirements of Section 8-44-305 shall not apply to any source that is subject to the leak standards of Regulation 8, Rule 18.
  - 8-44-301 – Limitation on Marine Tank Vessel Loading and Lightering
    - The facility shall not load a regulated organic liquid into a cargo tank of a marine tank vessel or load any liquid into a cargo tank of a marine tank vessel when the tank's prior cargo was a regulated organic liquid within the District or District Waters unless emissions from the loading event are controlled in accordance with the requirements of Section 8-44-304.
  - 8-44-302 – Limitation on Marine Tank Vessel Ballasting
    - The facility does not own any Vessels, so this section is not applicable.
  - 8-44-303 – Limitation on Marine Tank Vessel Venting
    - The facility does not own any Vessels, so this section is not applicable.
  - 8-44-304 – Emission Control Requirements
    - Within the District or District Waters, the facility shall not vent a cargo tank containing a regulated organic liquid or for which the prior cargo was a regulated organic liquid unless either of the specified requirements are met.
  - 8-44-305 – Equipment Leaks
    - The owner or operator of a marine terminal or marine vessel shall maintain all equipment associated with the operation up to, but not including, the first connection at the vessel being loaded such that three drops per minute of any liquid leak and 1,000 ppm for any gaseous leak are not exceeded.
      - 8-44-305.1 – Emission Limits
      - 8-44-305.3 – Inspection Requirements During Operation
      - 8-44-305.4 – Tagging, Minimization, and Repair Requirements
  - 8-44-403 – Notifications Regarding Safety/Emergency Exemption
    - The owner or operator of a marine terminal or marine tank vessel shall notify the APCO in writing within 48 hours to invoke the exemption in Section 8-44-115.
  - 8-44-501 – Recordkeeping
    - The owner or operator of a marine terminal shall maintain specified records of each loading event of any organic liquid, ballasting operation, and venting operation.
      - 8-44-501.1 – Records for Loading Events
        - 8-44-501.1.1 – Name of Vessel
      - 8-44-501.1.2 – Owner, Country, Operator, and Agent
      - 8-44-501.1.3 – Arrival and Departure

- 8-44-501.1.4 – Tank Identifying Designation, Type, and Amount
- 8-44-501.1.5 – Flash Point and Temperature
- 8-44-501.1.6 – Prior Cargo
- 8-44-501.1.7 – Source of Flash Point Data and Copy of Source Document or Analysis
- 8-44-501.1.8 – Condition of Each Tank
- 8-44-501.1.9 – Means Used to Comply with 8-44-304
- 8-44-501.1.10 – Date and Time of Inspections, Identification Equipment
- 8-44-501.2 – Records for Ballasting Operations
- 8-44-501.2.1 – Information in 8-44-501.1.1 through 8-44-501.1.3
- 8-44-501.2.2 – Tank Identifying Designation, Amount of Ballast Water
- 8-44-501.2.3 – Prior Cargo
- 8-44-501.2.4 – Means Used to Comply with 8-44-302
- 8-44-501.2.5 – Date and Time of Inspections, Identification Equipment
- 8-44-501.3 – Records for Venting Operations
- 8-44-501.3.1 – Information in 8-44-501.1.1 through 8-44-501.1.3
- 8-44-501.3.2 – Tank Identifying Designation, Prior Cargo
- 8-44-501.3.3 – Activity Leading to Venting
- 8-44-501.3.4 – Means Used to Comply with 8-44-303
- 8-44-501.3.5 – Date and Time of Inspections, Identification Equipment

  - 8-44-503 – Recordkeeping – Exemptions
    - A facility that performs an operation and that seeks exemption for that operation under Sections 8-44-110 or 111 shall maintain specified records of each loading event.
  - 8-44-504 – Burden of Proof
    - Facilities seeking to demonstrate compliance with Section 8-44-304 must maintain adequate test data and provide verification opportunities to the APCO on request.

- 40 CFR Part 63, Subpart Y – National Emission Standards for Marine Tank Vessel Loading Operations, including:
  - 63.560(a) – Maximum Achievable Control Technology (MACT) applicability
  - 63.560(a)(2) – MACT does not apply to existing sources with emissions <10 and 25 tons
  - 63.560(a)(3) – Recordkeeping in 63.567(j)(4) and emission estimation in 63.565(l) apply to existing sources < 10 and 25 tons
  - 63.560(b)(2) – Sources with throughput less than 10 million barrels of gasoline and 200 million barrels of crude oil are exempt from the emission standards of 63.562(c) and (d)
  - 63.365(l) – Emission estimation procedures
  - 63.567(j)(4) – Retain records of emission estimates per 63.565(l), and actual throughputs, by commodity, for 5 years

The Project will not affect regulatory applicability at the berths; therefore, the berths will not become subject to any new regulations and will not stop being subject to any current regulations.

**Sources S-437 (Hydrogen Plant)**

Hydrogen Plant S-437 is currently subject to and expected to continue to comply with the following regulations:

- Regulation 8, Rule 2 – Miscellaneous Operations, including:
  - 8-2-301 – Miscellaneous operations: emission shall not exceed 15 lb/day and 300 ppm carbon on a dry basis
    - The facility shall not discharge into the atmosphere from any miscellaneous operation an emission containing more than 15 lbs. per day and containing a concentration of more than 300 PPM total carbon on a dry basis.
- Regulation 8, Rule 9 – Vacuum Producing Systems, including:
  - 8-9-301 – Vacuum producing system POC emissions must be controlled by combustion or venting to fuel gas systems
  - 8-9-601 – Determination of emissions
- Regulation 8, Rule 10 – Process Vessel Depressurization, including:
  - 8-10-301 – Depressurization control options
    - Emissions of organic compounds from depressurizing any process vessel at a refinery or a chemical plant shall be controlled by venting them to a fuel gas system, firebox, incinerator, thermal oxidizer, flare, or otherwise containing and treating them so as to prevent their emissions to the atmosphere.
  - 8-10-302 – Opening of process vessels
    - No process vessel may be opened to the atmosphere except as provided in 302.1 or 302.2.
      - 8-10-302.1 – Organic compounds cannot exceed 10,000 ppm (methane) prior to release to atmosphere
      - 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%
  - 8-10-401 – Turnaround records. Annual report due February 1 of each year with initial report of process vessels due 4/1/2004
    - The annual report shall be submitted by February 1 of each year.
  - 8-10-501 – Monitoring prior to and during process vessel opening
    - Any vessel subject to this rule shall be monitored for the concentration of total organic compounds prior to opening and once per day during the time the vessel is open to the atmosphere.
  - 8-10-502 – Concentration measurement using EPA Method 21
    - The meter used to measure the concentration of total organic compound emissions shall meet the accuracy requirements specified in EPA Method 21.
  - 8-10-503 – Recordkeeping
    - Any facility subject to the provisions of this rule shall keep records of (1) date, time, type of activity, and duration of depressurization and vessel opening, (2) the type of service, size and name or vessel identification number, (3) the measured total organic compound concentration and calculated mass emissions from each depressurized vessel, and (4) the number and size of any air movers used to assure compliance with confined space entry requirements.
  - 8-10-601 – Monitoring procedures
    - The procedures used to monitor emissions are set forth in EPA Method 21.
- Regulation 8, Rule 18 – Equipment Leaks, including:
  - 8-18-100 General/Applicability
  - 8-18-200 Definitions
  - 8-18-301 General Standard
  - 8-18-302 Valves

  - 8-18-303 Pumps and compressors
  - 8-18-304 Connections
  - 8-18-305 Pressure relief devices
  - 8-18-306 Non-repairable equipment
  - 8-18-307 Liquid Leaks
  - 8-18-308 Alternate compliance
  - 8-18-309 Open-Ended Valve or Line
  - 8-18-310 Recurrent Leaks
  - 8-18-311 Mass Emissions
  - 8-18-401 Inspection
  - 8-18-402 Identification
  - 8-18-403 Visual inspection schedule
  - 8-18-404 Alternate inspection schedule
  - 8-18-405 Alternate inspection reduction plan
  - 8-18-406 Interim Compliance
  - 8-18-407 Recurrent Leak Schedule
  - 8-18-501 Portable Hydrocarbon Detector
  - 8-18-502 Records
  - 8-18-503 Reports
  - 8-18-503.1 Quarterly Reports to the APCO
  - 8-18-503.2 Annual component inventory submittal to the District
  - 8-18-503.4 Inspection records of all equipment during a turnaround
  - 8-18-503.5 Submit records of all changes since last submittal
  - 8-18-602 Inspection Procedures
  - 8-18-604 Determination of Mass Emissions
- Regulation 8, Rule 28 – Episodic Releases From Pressure Relief Devices at Refineries and Chemical Plants, including:
  - 8-28-100 General/Applicability
  - 8-28-200 Definitions
  - 8-28-303 Pressure Relief Devices at Existing Sources at Refineries
  - 8-28-304 Repeat Releases - Pressure Relief Devices at Refineries
  - 8-28-401 Reporting at Refineries and Chemical Plants
  - 8-28-402 Inspection
  - 8-28-404 Identification
  - 8-28-405 Process Safety Requirements
  - 8-28-406 Monitoring System Demonstration Report
  - 8-28-407 Process Unit Identification Report
  - 8-28-502 Records
  - 8-28-503 Monitoring
- 40 CFR Part 60, Subpart VV – Standards of Performance for Equipment Leaks (Fugitive Emission Sources), including:
  - 60.480 Applicability and designation of affected facility
  - 60.481 Definitions
  - 60.482-1 Standards: General
  - 60.482-2 Standards: Pumps in light liquid service
  - 60.482-2(a)(1) Monthly monitoring of each pump, except for 60.482-1(c), 60.482-2(d), (e), or (f)
  - 60.482-2(a)(2) Weekly visual inspection of each pump, except for (e), (f), or (g)
  - 60.482-2(b) Air measurement >10,000 ppm or dripping liquid indicates leak
  - 60.482-2(c) Pump leak repair period
  - 60.482-2(d) Requirements for Dual-Mechanical seal pump
  - 60.482-2(e) No detectable emission designation: <500 ppm

- 60.482-2(f) Requirements for Closed Vent Systems
- 60.482-3 Standards: Compressors
- 60.482-4 Standards: Pressure Relief Devices in gas/vapor service
- 60.482-5 Standards: Sampling connecting systems
- 60.482-6 Standards: Open-ended valves or lines Y
- 60.482-7 Standards: Valves in gas/vapor service and in light liquid service Y
- 60.482-7(a)-(c) Monitor monthly unless 2 successive months <10,000 ppm, then monitor first month of each quarter. If leak >10,000 ppm is detected, resume monthly monitoring
- 60.482-7(d) Valve leak repair period
- 60.482-7(e) Methods for first attempts or minimizing valve leaks
- 60.482-7(f) Designated no-emissions (<500 ppm) valves with no external actuating mechanisms in contact with process fluid, may revert to annual monitoring, or that requested by the Administrator
- 60.482-8 Standards: Pumps and valves in heavy liquid service, pressure relief devices in light liquid or heavy liquid service, and connectors
- 60.482-9 Standards: Delay in repair
- 60.482-9(b) Repair may be delayed for isolated equipment
- 60.482-9(c) Delay of repair for valves is only allowed under certain circumstances
- 60.482-9(d)(1) Only dual-mechanical seal pumps qualify for delay of repair
- 60.482-9(d)(2) Pump leaks must be repaired within 6 months
- 60.482-10 Standards: Closed vent systems and control devices
- 60.483-1,60.483-2, and BAAQMD 8-18-404.1 - Alternative standards for valves--allowable percentage of valves leaking and Alternative standards for valves--skip period leak detection and repair If a process unit has 5 consecutive quarters with <2% of valves leaking at >10,000 ppm, then any individual valve which measures <100 ppm for 5 consecutive quarters may be monitored annually
- 60.485 Test Methods and Procedures
- 60.486 Recordkeeping Requirements
- 60.487 Reporting Requirements

As the Facility will no longer be considered a “petroleum refinery” under the definitions of NSPS Subpart GGG (40 CFR Part 60, Subpart GGG – Standards of Performance for Equipment Leaks of VOC in Petroleum Refineries for Which Construction, Reconstruction, or Modification Commenced After November 7, 2006) after the Project.

The Facility will no longer be considered a source having a “petroleum refining process unit” under the definitions of NESHAP Subpart CC (40 CFR Part 63, Subpart CC – National Emission Standards for Hazardous Air Pollutants From Petroleum Refineries) after the Project. As such, MACT CC will no longer apply to the process vessels.

The Hydrogen Plant will be subject to MACT FFFF after the project, as it will be in HAP service. Refer to the MACT FFFF section.

**Source S-448 (NSPS Kb Zero-Gap Internal Floating Roof Tank)**

Source S-448 (referred to as "the NSPS Kb Zero-Gap internal floating roof tank") are currently subject to and will continue to comply with the following regulations:

- Regulation 8, Rule 5 – Organic Compounds – Storage of Organic Liquids, including:
  - 8-5-111 - Limited Exemption, Tank Removal From and Return to Service
    - The requirements of Sections 8-5-304, 305, 306 and 307 shall not apply to storage tanks during or after tank decommissioning, and shall not apply during temporary removal from service.
      - 8-5-111.1 - Limited Exemption, Tank Removal From and Return to Service, Notification
        - 8-5-111.1.1 - Limited Exemption, Tank Removal From and Return to Service; Notice to the APCO; 3 day prior notification
        - 8-5-111.1.2 - Limited Exemption, Tank Removal From and Return to Service; Notice to the APCO; Telephone notification
      - 8-5-111.2 - Limited Exemption, Tank Removal From and Return to Service; Tank in compliance at time of notification
      - 8-5-111.3 - Limited Exemption, Tank Removal From and Return to Service; Filling, emptying, refilling floating roof tanks
      - 8-5-111.5 - Limited Exemption, Tank Removal From and Return to Service; Minimize emissions and, if required, degas per 8-5-328
      - 8-5-111.6 - Limited Exemption, Tank Removal From and Return to Service; Self report if out of compliance during exemption period
  - 8-5-112 - Limited Exemption, Preventative Maintenance and Inspection of Tanks in Operation
    - The requirements of Sections 8-5-304, 305, 306, 307.2, 307.3 and 328 shall not apply to storage tanks during preventative maintenance of a vapor control device, tank roof, roof fitting or tank seal; during primary seal inspection; or during removal and installation of a secondary seal.
      - 8-5-112.1 - Limited Exemption, Preventative Maintenance and Inspection of Tanks in Operation; Notification
      - 8-5-112.2 - Limited Exemption, Preventative Maintenance and Inspection of Tanks in Operation; Tank in compliance at time of notification
      - 8-5-112.3 - Limited Exemption, Preventative Maintenance and Inspection of Tanks in Operation; No product movement, Minimize emissions
      - 8-5-112.4 - Limited Exemption, Preventative Maintenance and Inspection of Tanks in Operation; Not to exceed 7 days
      - 8-5-112.5 - Limited Exemption, Preventative Maintenance and Inspection of Tanks in Operation; Self report if out of compliance during exemption period
      - 8-5-112.6 - Limited Exemption, Preventative Maintenance and Inspection of Tanks in Operation; Keep records for each exemption
  - 8-5-117 - Limited Exemption, Low Vapor Pressure **(applies when storing materials exempt from NSPS Kb and BAAQMD Rule 8-5)**
    - The provisions of this rule, except for Section 8-5-307.3, shall not apply to tanks storing organic liquids with a true vapor pressure of less than or equal to 0.5 psi.
  - 8-5-118 Limited Exemption, Gas Tight Requirements
  - 8-5-119 - Limited Exemption, Repair Period for Enhanced Monitoring Program
    - A tank operator who has implemented an Enhanced Monitoring Program and who discovers equipment that fails to meet a requirement listed in Section 8-5-119.1 shall not be deemed in violation of that requirement, provided the operator complies with all of the conditions listed in Sections 8-5-119.2 and 119.3.

- 8-5-119.1 Limited Exemption, Repair Period; Exemption available for certain requirements
- 8-5-119.2 Limited Exemption, Repair Period; Conditions for the exemption
- 8-5-119.3 Limited Exemption, Repair Period; Report use of exemption within 60 days

- 8-5-301 - Storage Tank Control Requirements
  - The facility shall not store organic liquid in any storage tank unless such tank is equipped with a vapor loss control device that is specified for the tank capacity, or for a higher capacity, and for the true vapor pressure of the tank organic liquid contents, or for a higher true vapor pressure.
- 8-5-305 - Requirements for Internal Floating Roof Tanks
  - An internal floating roof must meet the requirements for primary and secondary seals, viewports, floating roof fittings, and roof/shell must be in good operating condition.
    - 8-5-305.2- Requirements for Internal Floating roof tanks; Seals installed after 2/1/1993
    - 8-5-305.3 - Requirements for Internal Floating roof tanks; Viewports in fixed roof tank; not required if dome roof has translucent panels
    - 8-5-305.4 - Requirements for Internal Floating roof tanks; Tank fitting requirements
    - 8-5-305.5 - Requirements for Internal Floating roof tanks; Floating roof requirements
    - 8-5-305.6 - Requirements for Internal Floating roof tanks; Tank shell in good operating condition
- 8-5-320 - Floating Roof Tank Fitting Requirements
  - All openings through the floating roof, solid sampling or gauging wells, slotted sampling or gauging wells, and emergency roof drain shall meet conditions specified.
    - 8-5-320.2 - Floating Roof Tank Fitting Requirements; Projection below liquid surface
    - 8-5-320.3 - Floating Roof Tank Fitting Requirements; Gasketed covers, seals, lids
      - 8-5-320.3.1 - Floating Roof Tank Fitting Requirements; Gasketed covers, seals, lids - Gap requirements
      - 8-5-320.3.2 - Floating Roof Tank Fitting Requirements; Gasketed covers, seals, lids – Inaccessible openings on internal floating roof tanks
    - 8-5-320.4 - Floating Roof Tank Fitting Requirements; Solid sampling or gauging wells--
      - 8-5-320.4.1 - Floating Roof Tank Fitting Requirements; Solid sampling or gauging wells--projection below liquid surface
      - 8-5-320.4.2 - Floating Roof Tank Fitting Requirements; Solid sampling or gauging wells--cover, seal, or lid
      - 8-5-320.4.3 - Floating Roof Tank Fitting Requirements; Solid sampling or gauging wells-- total secondary seal gap must include well gap
    - 8-5-320.6 - Floating Roof Tank Fitting Requirements; emergency roof drains must be 90% covered
- 8-5-321 - Primary seal requirements
  - The facility shall not operate a storage tank equipped with a primary seal unless such tank meets the conditions specified.
    - 8-5-321.1 - Primary seal requirements; No holes, tears, or other openings
    - 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

- 8-5-321.3 - Primary seal requirements; Metallic-shoe-type seal requirements
  - 8-5-321.3.1 - Primary seal requirements; Metallic-shoe-type seal requirements - geometry of shoe
  - 8-5-321.3.2 - Primary seal requirements; Metallic-shoe-type seal requirements - welded tanks gap requirements

- 8-5-322 - Secondary seal requirements
  - The facility shall not operate a storage tank equipped with a secondary seal unless such tank meets the requirements specified.
    - 8-5-322.1 – Secondary seal requirements; No holes, tears, or other openings
    - 8-5-322.2 - Secondary seal requirements; Insertion of probes
    - 8-5-322.5 - Secondary seal requirements; Gap requirements for welded external floating roof tanks with seal installed after September 4, 1985
    - 8-5-322.6 - Secondary seal requirements; extent of seal
- 8-5-328 – Tank degassing requirements
  - A tank operator shall not open the interior vapor space of a tank to the atmosphere through a hatch or manway, except to connect or disconnect degassing equipment or to conduct tank contents or emissions sampling, unless such tank meets the conditions specified.
    - 8-5-328.1 - Tank degassing requirements; Tanks > 75 cubic meters
    - 8-5-328.2 - Tank degassing requirements; Ozone Excess Day Prohibition
    - 8-5-328.3 - Tank degassing requirements; BAAQMD notification required
- 8-5-331 - Tank Cleaning Requirements
  - Tank interior cleaning agents must meet the requirements specified, unless all organic vapors and gases emitted during tank cleaning are collected and processed at an abatement device that has an abatement efficiency of at least 90% by weight.
- 8-5-332 - Sludge Handling Requirements
  - The operator of a tank shall place sludge removed from that tank directly into a sludge container that meets the requirements specified.
- 8-5-402 – Inspection Requirements for Internal Floating Roof Tanks
- 8-5-402.1 - Inspection Requirements for Internal Floating Roof Tanks; Primary and Secondary Seal Inspections
- 8-5-402.2 - Inspection Requirements for Internal Floating Roof Tanks; Visual Inspection of Outer Most Seal
- 8-5-402.3 - Inspection Requirements for Internal Floating Roof Tanks; Tank Fitting Inspection
- 8-5-404 - Inspection, Abatement Efficiency Determination, and Source Test Reports
  - A report shall be submitted to the APCO that certifies compliance with each individual requirement associated with the inspection, abatement efficiency determination or source test, and that includes data, supported by necessary calculations, to support this certification.
- 8-5-411 - Enhanced Monitoring Program (Optional)
  - Selected tanks for enhanced monitoring must be subject to Section 8-5-401, 402, or 403. The operator shall perform enhanced monitoring as specified in Sections 8-5-401, 402 and 403.
    - 8-5-411.1 - Enhanced Monitoring Program (Optional); Notify BAAQMD of tanks selected for enhanced monitoring program
    - 8-5-411.2 - Enhanced Monitoring Program (Optional); Criteria for operating enhanced monitoring program
    - 8-5-411.3 - Enhanced Monitoring Program (Optional); Performance requirements
- 8-5-501 - Records

        - The facility shall keep an accurate record of the type and amount of liquids stored, type of blanket gases used, and the true vapor pressure ranges of such liquids and gases. A tank operator shall keep an accurate record of primary/secondary seal replacements.
            - 8-5-501.1 - Records; Type and amount of liquid, type of blanket gas, TVP-Retain 24 months
            - 8-5-501.2 - Records; Internal and External Floating Roof Tanks, Seal Replacement Records- Retain 10 years
            - 8-5-501.3 - Records; Retention
    - 8-5-602 - Analysis of Samples, True Vapor Pressure
    - 8-5-604 - Determination of Applicability Based on True Vapor Pressure
    - 8-5-605 – Measurement of Leak Concentration and Residual Concentrations
    - 8-5-605.1 - Measurement of Leak Concentration and Residual Concentrations; EPA method 21 Instruments
    - 8-5-605.2 - Measurement of Leak Concentration and Residual Concentrations; Method 21 and tank degassing residual organic concentration measurement method
- 40 CFR Part 60, Subpart Kb– Standards of Performance for Storage Vessels for Volatile Organic Liquid Storage Vessels for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984, including:
    - 60.110b(a) - Applicability and Designation of Affected Facility; Volatile organic liquid storage vessels > or = to 40 cu m, after 7/23/1984
    - 60.110b(b) - Applicability and Designation of Affected Facility – Exemption for low vapor pressure; NSPS Kb does not apply to vessels with capacity > 151 cu m and TVP < 3.5 kPa or to vessels with capacity >= 75 cu m and <= 151 cu m and TVP < 15.0 kPa
    - 60.112b(a) - Standard for Volatile Organic Compounds (VOC); Requirement for tanks- > 151 cu m with maximum TVP >=5.2 kPa and <76.6; or >=75 cu m and < 151 cu m with maximum TVP >= 27.6 kPa and < 76.6 kPa
    - 60.112b(a)(1) - Standard for Volatile Organic Compounds (VOC); Fixed roof with internal floating roof option
    - 60.112b(a)(1)(i) - Standard for Volatile Organic Compounds (VOC); Internal floating roof requirements
    - 60.112b(a)(1)(ii) - Standard for Volatile Organic Compounds (VOC); Internal floating roof seal requirements
    - 60.112b(a)(1)(ii)(B) - Standard for Volatile Organic Compounds (VOC); Internal floating roof double seal option
    - 60.112b(a)(1)(iii) - Standard for Volatile Organic Compounds (VOC); Internal floating roof openings-projections below roof surface
    - 60.112b(a)(1)(iv) - Standard for Volatile Organic Compounds (VOC); Internal floating roof openings covers
    - 60.112b(a)(1)(v) - Standard for Volatile Organic Compounds (VOC); Internal floating roof automatic bleeder vents
    - 60.112b(a)(1)(vi) - Standard for Volatile Organic Compounds (VOC); Internal floating roof rim space vents
    - 60.112b(a)(1)(vii) - Standard for Volatile Organic Compounds (VOC); Internal floating roof sampling penetrations
    - 60.112b(a)(1)(viii) - Standard for Volatile Organic Compounds (VOC); Internal floating roof support column penetrations
    - 60.112b(a)(1)(ix) - Standard for Volatile Organic Compounds (VOC); Internal floating roof ladder penetrations
    - 60.113b(a)(1) - Testing and Procedures; Internal floating roof visual inspection before filling. Repair any defects found during inspection before filling.

- 60.113b(a)(2) - Testing and Procedures; Internal floating roof tanks with liquid mounted or mechanical shoe primary seal, annual visual inspection through manholes and hatches (if complying with 40 CFR 60.113b(a)(3)(ii))
- 60.113b(a)(3) - Testing and Procedures; Internal floating roof with double seal system, inspection requirements
- 60.113b(a)(3)(ii) - Testing and Procedures; Internal floating roof with double seal system, inspection requirements - visually inspect per 40 CFR 60.113b(a)(2) annually and per 40 CFR 60.113b(a)(4) every 10 years.
- 60.113b(a)(4) - Testing and Procedures; Internal floating roof inspection requirements each time tank is emptied and degassed (10 year intervals if complying with 40 CFR 60.113b(a)(3)(ii))
- 60.113b(a)(5) - Testing and Procedures; Internal floating roof, 30 day notification for filling after inspection
- 60.115b - Reporting and Recordkeeping Requirements; 60.112b(a) tanks; Record retention
- 60.115b(a) - Reporting and Recordkeeping Requirements; 60.112b(a) internal floating roof tanks
- 60.115b(a)(1) – Reporting and Recordkeeping Requirements; 60.112b(a) internal floating roof control equipment description and certification
- 60.115b(a)(2) - Reporting and Recordkeeping Requirements; 60.112b(a) internal floating roof inspection records
- 60.115b(a)(3) - Reporting and Recordkeeping Requirements; 60.112b(a) internal floating roof annual inspection defects report
- 60.115b(a)(4) - Reporting and Recordkeeping Requirements; 60.112b(a) internal floating roof double seal system inspection defects report
- 60.116b(a) - Monitoring of Operations; Record retention
- 60.116b(b) - Monitoring of Operations; Permanent record requirements
- 60.116b(c) - Monitoring of Operations; VOL storage record requirements
- 60.116b(e) - Monitoring of Operations; Determine TVP
- 60.116b(e)(2) - Monitoring of Operations; Determine TVP-crude oil and refined petroleum

The Facility will no longer be considered a source having a “petroleum refining process unit” under the definitions of NESHAP Subpart CC (40 CFR Part 63, Subpart CC – National Emission Standards for Hazardous Air Pollutants From Petroleum Refineries) after the Project. As such, MACT CC will no longer apply to the NSPS Kb Zero-Gap internal floating roof tank. The NSPS Kb Zero-Gap internal floating roof tank will not be subject to MACT FFFF after the project, as it will not be in HAP service.

**Sources S-453, S-455, S-456, and S-500 (Cooling Towers)**

Cooling towers S-453, S-455, S-456, and S-500 (collectively referred to as "the cooling towers") are currently subject to and expected to continue to comply with the following regulations:

- Regulation 6, Rule 1 – Particulate Matter, General Requirements, including:
  - 6-1-301 – Ringelmann #1 limitation
    - The facility shall not emit from any source for a period or aggregate periods of more than three minutes in any hour, a visible emission that is as dark or darker than No. 1 on the Ringelmann Chart, or of such opacity as to obscure an observer's view to an equivalent or greater degree.
  - 6-1-305 – Visible particles
    - The facility shall not emit particles from any operation in sufficient number to cause annoyance to any other person where the particles are large enough to be visible as individual particles at the emission point, or of such size and nature as to be visible individually as incandescent particles.
  - 6-1-310.1 – Total suspended particulate concentration limits (does not apply to S-455)
  - 6-1-310.2 – Total suspended particulate concentration limits (only applies to S-455 because it is a source with Potential To Emit TSP (as defined in Regulation 2-1-217) greater than 1,000 kg per year)
  - 6-1-311.1 – Total suspended particulate weight limits (does not apply to S-455)
  - 6-1-311.2 – Total suspended particulate weight limits (only applies to S-455 because it is a source with Potential To Emit TSP (as defined in Regulation 2-1-217) greater than 1,000 kg per year)
  - 6-1-401 – Appearance of emissions
    - The facility shall comply with the requirements of Regulation 6-102: Any violation of any of the requirements in the Regulation 6 Rules is subject to enforcement action under the applicable provisions of the California Health & Safety Code.
  - 6-1-602 – Methods of determining compliance (does not apply to S-456 because it is an exempt source)
- Regulation 8, Rule 2 – Miscellaneous Operations, including:
  - 8-2-114 – Exemption, miscellaneous plants
    - Emissions from cooling towers, railroad tank cars, marine vessels and crude oil production operations are exempt from this Rule, provided best modern practices are used.
- Regulation 11, Rule 10 – Hazardous Pollutants, Hexavalent Chromium Emissions from All Cooling Towers and Total Hydrocarbon Emission from Refinery Cooling Towers, including:
  - 11-10-107 – Limited exemption, cooling towers servicing hydrogen production **(only applies to S-456)**
  - 11-10-304 – Total hydrocarbon leak monitoring requirement
  - 11-10-305 – Leak action requirements
    - If any of the hydrocarbon leak detection methods result in cooling tower water containing total hydrocarbon concentrations greater than the applicable leak action level, the cooling tower owner/operator shall minimize the leak as soon as practicable or within seven calendar days, whichever is sooner, and conduct a leak repair and/or remove the defective piece of equipment from service within 21 calendar days of first detecting the leak.
  - 11-10-401 – Petroleum refinery cooling tower reporting requirements
    - When the sampling of cooling tower water exceeds the applicable leak action level the cooling tower owner/operator shall conduct sampling of total hydrocarbon concentration and chlorine concentration in the cooling water as soon as feasible, and no later than 24 hours from the time and date of leak discovery. If the leak has not been repaired after 21 days, the owner/operator shall notify the APCO regarding the

magnitude of the leak, the specific repairs performed to date, whether the leaking component was reinspected for leaks following the repair, the cause of the leak, whether further repair or replacement of equipment will be required at the next turnaround, whether the hydrocarbons associated with the leak were speciated and quantified.

- 11-10-504 – Operating records
  - The owner/operators shall retain records of the results of all sampling and/or monitoring conducted, leak minimizations and repairs made, and other required data on site for at least five years from the date of entry.

The Facility will no longer be considered a source having a "petroleum refining process unit" under the definitions of NESHAP Subpart CC (40 CFR Part 63, Subpart CC – National Emission Standards for Hazardous Air Pollutants From Petroleum Refineries) after the Project. As such, MACT CC will no longer apply to the cooling towers. The cooling towers (except S-453) will be subject to MACT FFFF after the project, as they will be in HAP service. Refer to the MACT FFFF section below.

Below are tables demonstrating compliance with Regulation 6-1-310 (Total Suspended Particulate (TSP) Concentration Limits) and Regulation 6-1-311 (Total Suspended Particulate (TSP) Emission Weights Limit). Detailed calculations are provided in Appendix A.

**Sources S-465 and S-1010 (Sulfur Recovery Unit and Sulfur Pit)**

Sources S-465 and S-1010 (collectively referred to as "the SRU and Sulfur Pit") are currently subject to and expected to continue to comply with the following regulations:

- Regulation 1 – General Provisions and Definitions, including:
  - 1-501 – Sampling Facilities
  - 1-520 – Continuous Emission Monitoring
  - 1-520.4 – CEMS for SO2
  - 1-522 – Continuous Emission Monitoring and Recordkeeping Procedures
    - Continuous emission monitors shall comply with monitoring and recordkeeping procedures, and shall report to the APCO on excess of any emission standard to which the source is required to conform.
      - 1-522.1 – Approval of Plans and Specifications
      - 1-522.2 – Scheduling Requirements
      - 1-522.3 – CEM Performance Testing
      - 1-522.4 – Reporting of Inoperative CEMS
      - 1-522.5 – CEM Calibration Requirements
      - 1-522.6 – CEM Accuracy Requirements
      - 1-522.7 – Emission Limit Exceedance Reporting Requirements
      - 1-522.8 – Monitoring Data Submittal Requirements
      - 1-522.9 – Recordkeeping Requirements
      - 1-522.10 – Regulation 1-521 Monitors Shall Meet Requirements Specified by District
  - 1-523 – Parametric Monitoring and Recordkeeping Procedures
    - Continuous parametric monitors shall comply with monitoring and recordkeeping procedures, and shall report to the APCO on any violation of permit conditions or District regulations to which the source is required to conform.
      - 1-523.1 – Parametric Monitor Periods of Inoperation
      - 1-523.2 – Limits on Periods of Inoperation
      - 1-523.3 – Reports of Violations
      - 1-523.4 – Records
      - 1-523.5 – Maintenance and Calibration
  - 1-602 – Area and Continuous Monitoring Requirements
    - The procedures for selection and placement, installation scheduling, performance testing, reporting, records retention and instrument calibration are detailed in the Manual of Procedures.
- Regulation 6, Rule 1 – General Requirements for Particulate Matter, including:
  - 6-1-114.2 – Exemption from 6-1-310.2 and 311.2 emission limits
  - 6-1-114.3 – Exemption from 6-1-504 source testing requirements because the sources have Potential To Emit TSP (as defined in Regulation 2-1-217) below 2,000 kg per year.
  - 6-1-301 – Ringelmann No. 1 Limitation
    - The facility shall not emit from any source for a period or aggregate periods of more than three minutes in any hour, a visible emission that is as dark or darker than No. 1 on the Ringelmann Chart, or of such opacity as to obscure an observer's view to an equivalent or greater degree.
  - 6-1-305 – Visible Particles
    - The facility shall not emit particles from any operation in sufficient number to cause annoyance to any other person where the particles are large enough to be visible as individual particles at the emission point, or of such size and nature as to be visible individually as incandescent particles.

  - 6-1-310.1 – Total Suspended Particulate Concentration Limits (S-1010 only because the source has a Potential To Emit TSP (as defined in Regulation 2-1-217) below 1,000 kg per year)
  - 6-1-311.1 – Total Suspended Particulate Weight Limits (S-1010 only because the source has a Potential To Emit TSP (as defined in Regulation 2-1-217) below 1,000 kg per year)
  - 6-1-330 – Sulfur Recovery Units (SO3, H2SO4 emission limitations)
  - 6-1-401 – Appearance of Emissions
    - The facility shall comply with the requirements of Regulation 6-102: Any violation of any of the requirements in the Regulation 6 Rules is subject to enforcement action under the applicable provisions of the California Health & Safety Code.
  - 6-1-505 – Determination of SO3 and Sulfuric Acid Mist Compliance (S-1010 only)
  - 6-1-602 – Methods for Determining Compliance (S-1010 only)
- Regulation 8, Rule 18 – Equipment Leaks, including:
  - 8-18-100 General/Applicability
  - 8-18-200 Definitions
  - 8-18-301 General Standard
  - 8-18-302 Valves
  - 8-18-303 Pumps and compressors
  - 8-18-304 Connections
  - 8-18-305 Pressure relief devices
  - 8-18-306 Non-repairable equipment
  - 8-18-307 Liquid Leaks
  - 8-18-308 Alternate compliance
  - 8-18-309 Open-Ended Valve or Line
  - 8-18-310 Recurrent Leaks
  - 8-18-311 Mass Emissions
  - 8-18-401 Inspection
  - 8-18-402 Identification
  - 8-18-403 Visual inspection schedule
  - 8-18-404 Alternate inspection schedule
  - 8-18-405 Alternate inspection reduction plan
  - 8-18-406 Interim Compliance
  - 8-18-407 Recurrent Leak Schedule
  - 8-18-501 Portable Hydrocarbon Detector
  - 8-18-502 Records
  - 8-18-503 Reports
  - 8-18-503.1 Quarterly Reports to the APCO
  - 8-18-503.2 Annual component inventory submittal to the District
  - 8-18-503.4 Inspection records of all equipment during a turnaround
  - 8-18-503.5 Submit records of all changes since last submittal
  - 8-18-602 Inspection Procedures
  - 8-18-604 Determination of Mass Emissions
- Regulation 8, Rule 28 – Episodic Releases From Pressure Relief Devices at Refineries and Chemical Plants, including:
  - 8-28-100 General/Applicability
  - 8-28-200 Definitions
  - 8-28-302 Pressure Relief Devices at New or Modified Sources at Refineries
  - 8-28-304 Repeat Releases - Pressure Relief Devices at Refineries
  - 8-28-401 Reporting at Refineries and Chemical Plants
  - 8-28-402 Inspection
  - 8-28-404 Identification
  - 8-28-405 Process Safety Requirements

  - 8-28-406 Monitoring System Demonstration Report
  - 8-28-407 Process Unit Identification Report
  - 8-28-502 Records
  - 8-28-503 Monitoring
- Regulation 9, Rule 1 – Inorganic Gaseous Pollutants – Sulfur Dioxide, including:
  - 9-1-301 – Limitations on ground level concentrations
  - 9-1-302 – General emission limitation
  - 9-1-307 – Emission limitations for Sulfur Recovery Plants
  - 9-1-313 – Sulfur removal operations at refineries
  - 9-1-313.2 – Operation of a sulfur removal and recovery system that moves and recovers 95% of H2S from refinery fuel gas, 95% of H2S and ammonia from process water streams (sulfur recovery is required when a facility removes 16.5 tons/day or more of elemental sulfur
  - 9-1-502 – Emission monitoring requirements
  - 9-1-605 – Emission monitoring
- 40 CFR Part 64, Compliance Assurance Monitoring, including:
  - 64.2(a) – General applicability
  - 64.3 – Monitoring design criteria
  - 64.3(a)(1) – One or more indicators or emissions
  - 64.3(a)(2) – Appropriate range
  - 64.3(a)(3)(i) – Indicator based on a single minimum value (for temperature monitoring)
  - 64.3(b) – Performance criteria
  - 64.3(b)(1) – Requirement for specifications that provide for obtaining data that are representative of the parameters (for temperature monitor)
  - 64.3(b)(1) – Requirement for specifications that provide for obtaining data that are representative of the emissions (for CO and SO2 CEMS, use BAAQMD Manual of Procedures Volume V, approval from District Source Test Group)
  - 64.3(b)(2) – Verification procedures
  - 64.3(b)(3) – Quality assurance and control practices
  - 64.3(b)(4) – Specifications for frequency
  - 64.3(c) – Evaluation factors
  - 64.3(d) – Special criteria for the use of continuous emission, opacity, or predictive monitoring systems
  - 64.4 – Submittal requirements
  - 64.4(a) – Submittal information (applies to temperature monitor)
  - 64.4(a)(1) – Indicators to be monitored (applies to temperature monitor)
  - 64.4(a)(2) – Ranges or designated conditions (applies to temperature monitor)
  - 64.4(a)(3) – Performance criteria (applies to temperature monitor)
  - 64.4(b) – Presumptively acceptable monitoring (applies to CO and SO2 CEMS)
  - 64.4(b)(2) – Use of CEMS (applies to CO and SO2 CEMS)
  - 64.4(c)(1) – Verification during source tests
  - 64.4(c)(2) – Documentation of no change to control device
  - 64.4(d) – Submittal of test plan
  - 64.4(e) – Implementation plan and schedule for installing, testing, and performing
  - 64.5 – Deadlines for submittals
  - 64.5(b) – Other pollutant-specific units
  - 64.6 – Approval of monitoring
  - 64.6(b) – Conditions for approval
  - 64.6(c) – Establishment of permit terms
  - 64.6(d) – Enforceable schedule
  - 64.7 – Operation of approved monitoring
  - 64.7(a) – Commencement of monitoring

- 64.7(b) – Maintenance
- 64.7(c) – Continued operation
- 64.7(d) – Response to exceedance or excursions
- 64.7(e) – Documentation of need for improved monitoring
- 64.9 – Reporting and recordkeeping requirements
- 64.10 – Savings provisions

As the Facility will no longer be considered a "petroleum refinery" under the definitions of NSPS Subpart Ja (40 CFR Part 60, Subpart Ja – Standards of Performance for Petroleum Refineries for which Construction, Reconstruction, or Modification Commenced After May 14, 2007), NSPS Subpart QQQ (40 CFR Part 60, Subpart QQQ – Standards of Performance for VOC Emissions from Petroleum Refinery Wastewater Systems), NESHAP Subpart UUU (40 CFR Part 63, Subpart UUU – National Emission Standards for Hazardous Pollutants for Petroleum Refineries: Catalytic Cracking Units, Catalytic Reforming Units, and Sulfur Recovery Units), the SRU and Sulfur Pit will not be subject to NSPS Ja, NSPS QQQ, and NESHAP UUU.

The SRU and Sulfur Pit will not be subject to MACT FFFF and NESHAP Subpart H (40 CFR 63, Subpart H - National Emission Standards for Organic Hazardous Air Pollutants for Equipment Leaks) after the project, as they will not be in HAP service.

Below are tables demonstrating compliance with Regulation 6-1-310 (Total Suspended Particulate (TSP) Concentration Limits) and Regulation 6-1-311 (Total Suspended Particulate (TSP) Emission Weights Limit). Detailed calculations are provided in Appendix A.

**Total Suspended Particulate (TSP) Emission Concentration Limit Comparison**

| Source No | Process Exhaust (Rate dscf/min) | TSP Emission (gr/dscf) | TSP Emission Rate limit (gr TSP/dscf) Reg 6-1-310.1 | Comply with TSP Emission Weights limit (Y/N) |
|---|---|---|---|---|
| S-1010 | 310 | 0.15 | 0.15 | Y |

**Total Suspended Particulate (TSP) Emission Weight Limit Comparison**

| Source No | Process Weight Rate (Throughput lbs/hour) | TSP Emission (lbs of TSP/hour) | TSP Emission Rate limit (lbs TSP/hour) Reg 6-1-311.1 | Comply with TSP Emission Weights limit (Y/N) |
|---|---|---|---|---|
| S-1010 | -- | 0.40 | 1.78* | Y |

* In lieu of process weight rates, the lowest TSP emission rate limit in Table 6-1-311.1 has been used. P66 is expected to not exceed the lowest TSP emissions rate within this section.

**Sources S-503, S-504, and S-505 (Sulfur Storage, Degassing and Loading)**

Sources S-503, S-504, and S-505 (collectively referred to as "the sulfur storage, degassing and loading") are currently subject to and expected to continue to comply with the following regulations:

- Regulation 6, Rule 1 – Particulate Matter, General Requirements, including:
    - 6-1-301 – Ringelmann #1 limitation
        - The facility shall not emit from any source for a period or aggregate periods of more than three minutes in any hour, a visible emission that is as dark or darker than No. 1 on the Ringelmann Chart, or of such opacity as to obscure an observer's view to an equivalent or greater degree.
    - 6-1-305 – Visible particles
        - The facility shall not emit particles from any operation in sufficient number to cause annoyance to any other person where the particles are large enough to be visible as individual particles at the emission point, or of such size and nature as to be visible individually as incandescent particles.
    - 6-1-310.1 – Total suspended particulate concentration limits (because the source has a Potential To Emit TSP (as defined in Regulation 2-1-217) below 1,000 kg per year)
    - 6-1-311.1 – Total suspended particulate weight limits (because the source has a Potential To Emit TSP (as defined in Regulation 2-1-217) below 1,000 kg per year)
    - 6-1-401 – Appearance of emissions
        - The facility shall comply with the requirements of Regulation 6-102: Any violation of any of the requirements in the Regulation 6 Rules is subject to enforcement action under the applicable provisions of the California Health & Safety Code.

The sulfur storage, degassing and loading will not be subject to MACT FFFF after the project, as they will not be in HAP service.

**Source S-599 (Sulfur Treatment Unit)**

Source S-599 will be subject to the following regulations after the completion of the Project:

- Regulation 6, Rule 1 – General Requirements for Particulate Matter, including:
  - 6-1-114.2 – Exemption from 6-1-310.2 and 311.2 emission limits
  - 6-1-114.3 – Exemption from 6-1-504 source testing requirements
  - 6-1-301 – Ringelmann No. 1 Limitation
    - The facility shall not emit from any source for a period or aggregate periods of more than three minutes in any hour, a visible emission that is as dark or darker than No. 1 on the Ringelmann Chart, or of such opacity as to obscure an observer's view to an equivalent or greater degree.
  - 6-1-305 – Visible Particles
    - The facility shall not emit particles from any operation in sufficient number to cause annoyance to any other person where the particles are large enough to be visible as individual particles at the emission point, or of such size and nature as to be visible individually as incandescent particles.
  - 6-1-310.1 – Total Suspended Particulate Concentration Limits
  - 6-1-311.1 – Total Suspended Particulate Weight Limits
  - 6-1-401 – Appearance of Emissions
    - The facility shall comply with the requirements of Regulation 6-102: Any violation of any of the requirements in the Regulation 6 Rules is subject to enforcement action under the applicable provisions of the California Health & Safety Code.
  - 6-1-505 – Determination of SO3 and Sulfuric Acid Mist Compliance
  - 6-1-602 – Methods for Determining Compliance
- Regulation 8, Rule 18 – Equipment Leaks, including:
  - 8-18-100 General/Applicability
  - 8-18-200 Definitions
  - 8-18-301 General Standard
  - 8-18-302 Valves
  - 8-18-303 Pumps and compressors
  - 8-18-304 Connections
  - 8-18-305 Pressure relief devices
  - 8-18-306 Non-repairable equipment
  - 8-18-307 Liquid Leaks
  - 8-18-308 Alternate compliance
  - 8-18-309 Open-Ended Valve or Line
  - 8-18-310 Recurrent Leaks
  - 8-18-311 Mass Emissions
  - 8-18-401 Inspection
  - 8-18-402 Identification
  - 8-18-403 Visual inspection schedule
  - 8-18-404 Alternate inspection schedule
  - 8-18-405 Alternate inspection reduction plan
  - 8-18-406 Interim Compliance
  - 8-18-407 Recurrent Leak Schedule
  - 8-18-501 Portable Hydrocarbon Detector
  - 8-18-502 Records
  - 8-18-503 Reports
  - 8-18-503.1 Quarterly Reports to the APCO
  - 8-18-503.2 Annual component inventory submittal to the District
  - 8-18-503.4 Inspection records of all equipment during a turnaround
  - 8-18-503.5 Submit records of all changes since last submittal

  - 8-18-602 Inspection Procedures
  - 8-18-604 Determination of Mass Emissions
- Regulation 9, Rule 1 – Inorganic Gaseous Pollutants – Sulfur Dioxide
  - 9-1-301 – Limitations on ground level concentrations
  - 9-1-302 – General emission limitation
  - 9-1-307 – Emission limitations for Sulfur Recovery Plants
  - 9-1-313 – Sulfur removal operations at refineries
  - 9-1-313.2 – Operation of a sulfur removal and recovery system that moves and recovers 95% of H2S from refinery fuel gas, 95% of H2S and ammonia from process water streams (sulfur recovery is required when a facility removes 16.5 tons/day or more of elemental sulfur in any one day)
  - 9-1-502 – Emission monitoring requirements
  - 9-1-605 – Emission monitoring

As the Facility will no longer be considered a "petroleum refinery" under the definitions of NSPS Subpart Ja (40 CFR Part 60, Subpart Ja – Standards of Performance for Petroleum Refineries for which Construction, Reconstruction, or Modification Commenced After May 14, 2007), the sulfur treatment unit will not be subject to NSPS Ja.

The sulfur treatment unit will not be subject to MACT FFFF as it will not be in HAP service.

Below are tables demonstrating compliance with Regulation 6-1-310 (Total Suspended Particulate (TSP) Concentration Limits) and Regulation 6-1-311 (Total Suspended Particulate (TSP) Emission Weights Limit). Detailed calculations are provided in Appendix A.

**Total Suspended Particulate (TSP) Emission Concentration Limit Comparison**

| Source No | Process Exhaust (Rate dscf/min) | TSP Emission (gr/dscf) | TSP Emission Rate limit (gr TSP/dscf) Reg 6-1-310.1 | Comply with TSP Emission Weights limit (Y/N) |
|---|---|---|---|---|
| S-599 | 7,044 | 0.01 | 0.15 | Y |

**Total Suspended Particulate (TSP) Emission Weight Limit Comparison**

| Source No | Process Weight Rate (Throughput lbs/hour) | TSP Emission (lbs of TSP/hour) | TSP Emission Rate limit (lbs TSP/hour) Reg 6-1-311.1 | Comply with TSP Emission Weights limit (Y/N) |
|---|---|---|---|---|
| S-599 | -- | 0.95 | 1.78* | Y |

*In lieu of process weight rates, the lowest TSP emission rate limit in Table 6-1-311.1 has been used. P66 will not exceed the lowest TSP emissions rate from this section.

**Source S-600 (Pretreatment Unit)**

Source S-600 will be subject to the following regulations after the completion of the Project:

- Regulation 8, Rule 10 – Process Vessel Depressurization, including:
  - 8-10-301 – Depressurization Control Options
    - Emissions of organic compounds from depressurizing any process vessel at a refinery or a chemical plant shall be controlled by venting them to a fuel gas system, firebox, incinerator, thermal oxidizer, flare, or otherwise containing and treating them so as to prevent their emissions to the atmosphere.
  - 8-10-302 – Opening of Process Vessels
    - No process vessel may be opened to the atmosphere except as provided in 302.1 or 302.2.
      - 8-10-302.1 – Organic compounds cannot exceed 10,000 ppm (methane) prior to release to atmosphere
      - 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%
  - 8-10-401 – Turnaround Records. Annual report due February 1 of each year with initial report of process vessels due 4/1/2004.
    - The annual report shall be submitted by February 1 of each year.
  - 8-10-501 – Monitoring prior to and during process vessel opening
    - Any vessel subject to this rule shall be monitored for the concentration of total organic compounds prior to opening and once per day during the time the vessel is open to the atmosphere.
  - 8-10-502 – Concentration measurement using EPA Method 21
    - The meter used to measure the concentration of total organic compound emissions shall meet the accuracy requirements specified in EPA Method 21.
  - 8-10-503 – Recordkeeping
    - Any facility subject to the provisions of this rule shall keep records of (1) date, time, type of activity, and duration of depressurization and vessel opening, (2) the type of service, size and name or vessel identification number, (3) the measured total organic compound concentration and calculated mass emissions from each depressurized vessel, and (4) the number and size of any air movers used to assure compliance with confined space entry requirements.
  - 8-10-601 – Monitoring Procedures
    - The procedures used to monitor emissions are set forth in EPA Method 21.
  - Regulation 8, Rule 18 – Equipment Leaks, including:
    - 8-18-100 General/Applicability
    - 8-18-200 Definitions
    - 8-18-301 General Standard
    - 8-18-302 Valves
    - 8-18-303 Pumps and compressors
    - 8-18-304 Connections
    - 8-18-305 Pressure relief devices
    - 8-18-306 Non-repairable equipment
    - 8-18-307 Liquid Leaks
    - 8-18-308 Alternate compliance
    - 8-18-309 Open-Ended Valve or Line
    - 8-18-310 Recurrent Leaks
    - 8-18-311 Mass Emissions
    - 8-18-401 Inspection
    - 8-18-402 Identification

- 8-18-403 Visual inspection schedule
- 8-18-404 Alternate inspection schedule
- 8-18-405 Alternate inspection reduction plan
- 8-18-406 Interim Compliance
- 8-18-407 Recurrent Leak Schedule
- 8-18-501 Portable Hydrocarbon Detector
- 8-18-502 Records
- 8-18-503 Reports
- 8-18-503.1 Quarterly Reports to the APCO
- 8-18-503.2 Annual component inventory submittal to the District
- 8-18-503.4 Inspection records of all equipment during a turnaround
- 8-18-503.5 Submit records of all changes since last submittal
- 8-18-602 Inspection Procedures
- 8-18-604 Determination of Mass Emissions

As the Facility will no longer be considered a "petroleum refinery" under the definitions of NSPS Subpart Ja (40 CFR Part 60, Subpart Ja – Standards of Performance for Petroleum Refineries for which Construction, Reconstruction, or Modification Commenced After May 14, 2007), the pretreatment unit will not be subject to NSPS Ja.

The pretreatment unit will be subject to 40 CFR 63 Subpart FFFF, NESHAP for Miscellaneous Organic Chemical Manufacturing for any equipment in OHAP service greater than 5 percent by weight. The sources will comply with equipment leak requirements under Subpart FFFF by monitoring non-pressure relief device components according to 40 CFR 63 Subpart UU, NESHAP for Equipment Leaks – Control Level 2 Standards, and pressure relief devices according to Subpart FFFF as required by §63.2480(e).

**Sources S-602, S-603, S-605 (Silos and Hoppers)**

Sources S-602, S-603, and S-605 (collectively referred to as "the silos and hoppers") will be subject to the following regulations after the completion of the Project:

- Regulation 6, Rule 1 – General Requirements for Particulate Matter, including:
  - 6-1-301 – Ringelmann No. 1 Limitation
    - The facility shall not emit from any source for a period or aggregate periods of more than three minutes in any hour, a visible emission that is as dark or darker than No. 1 on the Ringelmann Chart, or of such opacity as to obscure an observer's view to an equivalent or greater degree.
  - 6-1-305 – Visible Particles
    - The facility shall not emit particles from any operation in sufficient number to cause annoyance to any other person where the particles are large enough to be visible as individual particles at the emission point, or of such size and nature as to be visible individually as incandescent particles.
  - 6-1-311.1 – Particulate Weight Limitation (because the source has a Potential To Emit TSP (as defined in Regulation 2-1-217) below 1,000 kg per year)
  - 6-1-401 – Appearance of Emissions
    - The facility shall comply with the requirements of Regulation 6-102: Any violation of any of the requirements in the Regulation 6 Rules is subject to enforcement action under the applicable provisions of the California Health & Safety Code.

The silos and hoppers will not be subject to MACT FFFF after the project, as they will not be in HAP service.

Below is a table demonstrating compliance Regulation 6-1-311 (Total Suspended Particulate (TSP) Emission Weights Limit). Detailed calculations are provided in Appendix A.

**Total Suspended Particulate (TSP) Emission Weight Limit Comparison**

| Source No | Process Weight Rate (Throughput lbs/hour) | TSP Emission (lbs of TSP/hour) | TSP Emission Rate limit (lbs TSP/hour) Reg 6-1-311.1 | Comply with TSP Emission Weights limit (Y/N) |
|---|---|---|---|---|
| S-602 | -- | 0.06 | 1.78* | Y |
| S-603 | -- | 0.06 | 1.78* | Y |
| S-605 | -- | 0.02 | 1.78* | Y |

*In lieu of process weight rates, the lowest TSP emission rate limit in Table 6-1-311.1 has been used.

**Source S-606 (Spent Water Tank)**

Source S-606 will be subject to the following regulations after the completion of the Project:

- Regulation 8, Rule 5 – Organic Compounds – Storage of Organic Liquids, including:
    - 8-5-117 – Limited exemption, low vapor pressure
        - The provisions of this rule, except for Section 8-5-307.3, shall not apply to tanks storing organic liquids with a true vapor pressure of less than or equal to 0.5 psi.
    - 8-5-307.3 – Requirements for fixed roof tanks, pressure tanks, and blanketed tanks; Pressure tanks and blanketed tanks PRD requirements
        - The sealing mechanism on pressure relief devices located on pressure tanks and on tanks blanketed with organic gases other than natural gas shall be maintained in a gas tight condition except when operating pressure exceeds the valve set pressure, or except when the sealing mechanism is vented to a vapor recovery or disposal system that has an overall abatement efficiency of at least 95% by weight.
- 40 CFR Part 60, Subpart Kb– Standards of Performance for Storage Vessels for Volatile Organic Liquid Storage Vessels for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984, including:
    - 60.110b(a) - Applicability and Designation of Affected Facility; Volatile organic liquid storage vessels > or = to 40 m3, after 7/23/1984
    - 60.110b(b) - Applicability and Designation of Affected Facility – Exemption for low vapor pressure; NSPS Kb does not apply to vessels with capacity > 151 m3 and TVP <3.5 kPa or to vessels with capacity >= 75 m3 and <= 151 m3 and TVP < 15.0 kPa

As the Facility will no longer be considered a “petroleum refinery” under the definitions of NSPS Subpart Ja (40 CFR Part 60, Subpart Ja – Standards of Performance for Petroleum Refineries for which Construction, Reconstruction, or Modification Commenced After May 14, 2007), NESHAP Subpart UUU(40 CFR Part 63, Subpart UUU – National Emission Standards for Hazardous Pollutants for Petroleum Refineries: Catalytic Cracking Units, Catalytic Reforming Units, and Sulfur Recovery Units), the sulfur pretreatment unit will not be subject to NSPS Ja and NESHAP UUU.

The spent water tank will not be subject to MACT FFFF after the project, as it will not be in HAP service.

**Source S-612 (DAF)**

Source S-612 will be subject to the following regulations after the completion of the Project:

- Regulation 8, Rule 8 – Wastewater Collection and Separation Systems, including:
    - While the DAF is subject to Regulation 8, Rule 8 by its unit type classification, it is not subject to any specific provision of this Rule. The DAF does not have any gauging or sampling devices; thus, Rule 8-8-303 does not apply. The DAF has a flow rate of less than 25.2 liters per second; thus, Rule 8-8-307 does not apply. The DAF is designed such that there is no bypass; thus, Rule 8-8-501 does not apply. Emissions from the DAF are routed to a biofilter/carbon.

The DAF will not be subject to MACT FFFF after the project, as it will not be in HAP service.

**Source S-613 (3 Process Tanks)**

Source S-613 will be subject to the following regulations after the completion of the Project:

- Regulation 8, Rule 5 – Organic Compounds – Storage of Organic Liquids, including:
  - 8-5-111 -Limited Exemption, Tank Removal From and Return to Service
    - The requirements of Sections 8-5-304, 305, 306 and 307 shall not apply to storage tanks during or after tank decommissioning, and shall not apply during temporary removal from service.
      - 8-5-111.1 -Limited Exemption, Tank Removal From and Return to Service; Notice to the APCO
      - 8-5-111.1.1 -Limited Exemption, Tank Removal From and Return to Service; Notice to the APCO; 3 day prior notification
      - 8-5-111.1.2 -Limited Exemption, Tank Removal From and Return to Service; Notice to the APCO; Telephone notification
      - 8-5-111.2 -Limited Exemption, Tank Removal From and Return to Service; Compliance before notification
      - 8-5-111.4 -Limited Exemption, Tank Removal From and Return to Service; Use of vapor recovery
      - 8-5-111.5 -Limited Exemption, Tank Removal From and Return to Service; Minimization of emissions
      - 8-5-111.6 - Limited Exemption, Tank Removal From and Return to Service; Notification and reporting are not required when returning a tank to service
  - 8-5-112 -Limited Exemption, Preventative Maintenance and Inspection of Tanks in Operation
    - The requirements of Sections 8-5-304, 305, 306, 307.2, 307.3 and 328 shall not apply to storage tanks during preventative maintenance of a vapor control device, tank roof, roof fitting or tank seal; during primary seal inspection; or during removal and installation of a secondary seal.
      - 8-5-112.1 -Limited Exemption, Tanks in Operation; Notice to the APCO
      - 8-5-112.1.1 -Limited Exemption, Tanks in Operation; Notice to the APCO; 3 day prior notification
      - 8-5-112.1.2 -Limited Exemption, Tanks in Operation; Notice to the APCO; Telephone notification
      - 8-5-112.2 -Limited Exemption, Tanks in Operation; Compliance and certification before commencement of work
      - 8-5-112.3 -Limited Exemption, Tanks in Operation; No product movement; minimization of emissions
      - 8-5-112.4 -Limited Exemption, Tanks in Operation; Exemption does not exceed 7 days
      - 8-5-112.6 -Tank Records
  - 8-5-118 Limited Exemption, Gas Tight Requirements
  - 8-5-119 Limited Exemption, Repair Period
    - A tank operator who has implemented an Enhanced Monitoring Program and who discovers equipment that fails to meet a requirement listed in Section 8-5-119.1 shall not be deemed in violation of that requirement, provided the operator complies with all of the conditions listed in Sections 8-5-119.2 and 119.3.
      - 8-5-119.1 Limited Exemption, Repair Period; Exemption available for certain requirements
      - 8-5-119.2 Limited Exemption, Repair Period; Conditions for the exemption
      - 8-5-119.3 Limited Exemption, Repair Period; Report use of exemption within 60 days

- 8-5-301 -Storage Tank Control Requirements (internal floating roof, external floating roof, or approved emission control system)
  - The facility shall not store organic liquid in any storage tank unless such tank is equipped with a vapor loss control device that is specified for the tank capacity, or for a higher capacity, and for the true vapor pressure of the tank organic liquid contents, or for a higher true vapor pressure.
- 8-5-303 -Requirements for Pressure Vacuum Valves
- 8-5-303.1 -Requirements for Pressure Vacuum Valves; Set pressure
- 8-5-303.2 -Requirements for Pressure Vacuum Valves; Installation, maintenance, operation
- 8-5-306 -Requirements for Approved Emission Control Systems
  - An Approved Emission Control System must provide an abatement efficiency of at least 95% by weight and must be gas tight.
- 8-5-307 -Requirements for Fixed Roof Tanks, Pressure Tanks, and Blanketed Tanks
  - Tank shells must be in good operating condition, pressure tank must maintain working pressures to prevent loss to the atmosphere, and sealing mechanism on pressure relief devices shall be maintained in a gas tight condition.
    - 8-5-307.1 -Shell in good condition with no leakage
    - 8-5-307.3 – Requirements for fixed roof tanks, pressure tanks, and blanketed tanks; Pressure tanks and blanketed tanks PRD requirements
      - The sealing mechanism on pressure relief devices located on pressure tanks and on tanks blanketed with organic gases other than natural gas shall be maintained in a gas tight condition except when operating pressure exceeds the valve set pressure, or except when the sealing mechanism is vented to a vapor recovery or disposal system that has an overall abatement efficiency of at least 95% by weight.
- 8-5-328 -Tank Degassing Requirements
  - A tank operator shall not open the interior vapor space of a tank to the atmosphere through a hatch or manway, except to connect or disconnect degassing equipment or to conduct tank contents or emissions sampling, unless such tank meets the conditions specified.
    - 8-5-328.1 -Tank Degassing Requirements; Tanks > 75 cubic meters; Concentration of <10,000 ppm as methane after degassing
    - 8-5-328.2 -Tank degassing requirements; Ozone excess day prohibition
    - 8-5-328.3 -Notification of degassing
- 8-5-331 -Tank Cleaning Requirements
  - Tank interior cleaning agents must meet the requirements specified, unless all organic vapors and gases emitted during tank cleaning are collected and processed at an abatement device that has an abatement efficiency of at least 90% by weight.
- 8-5-332 -Sludge Handling Requirements
  - The operator of a tank shall place sludge removed from that tank directly into a sludge container that meets the requirements specified.
- 8-5-403 -Inspection Requirements for Pressure Relief Devices
- 8-5-404 -Inspection, Abatement Efficiency Determination and Source Test Reports
  - A report shall be submitted to the APCO that certifies compliance with each individual requirement associated with the inspection, abatement efficiency determination or source test, and that includes data, supported by necessary calculations, to support this certification.
- 8-5-501 -Records
  - The facility shall keep an accurate record of the type and amount of liquids stored, type of blanket gases used, and the true vapor pressure ranges of such liquids and gases. A tank operator shall keep an accurate record of primary/secondary seal replacements.

        - 8-5-501.1 -Records; Type and amounts of liquid; true vapor pressure; Retain 24 months
        - 8-5-501.3 -Records retained for 24 months
        - 8-5-501.4 -Engineering data sheets showing setpoints for pressure vacuum valves installed after 6/1/07
    - 8-5-602 -Analysis of Samples, True Vapor Pressure
    - 8-5-603 -Determination of emissions
    - 8-5-603.1 -Determination of Emissions; Organic compounds specified in 8-5-306
    - 8-5-604 -Determination of Applicability
    - 8-5-605 - Measurement of Leak Concentrations and Residual Concentrations
- Regulation 7 Odorous Substances
    - 7-301- General Limit on Odorous Substances: A person shall not discharge any odorous substance which remains odorous after dilution with odor-free air
    - 7-302- Limit on Odorous Substances at or Beyond Property Line
- 40 CFR Part 60, Subpart Kb– Standards of Performance for Storage Vessels for Volatile Organic Liquid Storage Vessels for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984, including:
    - S-613 is a process tank; therefore, this subpart does not apply. "Process tank" is defined in 40 CFR 60.111b (Definitions).

The process tanks will not be subject to MACT FFFF after the project, as they will not be in HAP service.

**Sources S-607, S-609, S-610, and S-618 (Exempt Fixed Roof Inorganic Tanks)**

Sources S-607, S-609, S-610, and S-618 (collectively "Exempt Fixed Roof Inorganic Tanks") are expected to comply with the following regulations (while storing low vapor pressure liquids):

- The tanks are not subject to Regulation 8, Rule 5 per section 8-5-301 since they will not be storing organic materials.
- The tanks will be exempt from the requirements of 40 CFR 63, Subpart FFFF for Miscellaneous Organic Chemicals Manufacturing because they will not be storing organic materials.

**Sources S-608 and S-611 (Exempt Fixed Roof Tanks)**

Sources S-608 and S-611 (collectively "Exempt Fixed Roof Tanks") are expected to comply with the following regulations (while storing low vapor pressure liquids):

- Regulation 8, Rule 5 – Organic Compounds, Storage of Organic Liquids, including:
    - 8-5-117 - Exemption, Low Vapor Pressure
        - The provisions of this rule, except for Section 8-5-307.3, shall not apply to tanks storing organic liquids with a true vapor pressure of less than or equal to 0.5 psi.
    - 8-5-307.3 – Requirements for fixed roof tanks, pressure tanks, and blanketed tanks; Pressure tanks and blanketed tanks PRD requirements
        - The sealing mechanism on pressure relief devices located on pressure tanks and on tanks blanketed with organic gases other than natural gas shall be maintained in a gas tight condition except when operating pressure exceeds the valve set pressure, or except when the sealing mechanism is vented to a vapor recovery or disposal system that has an overall abatement efficiency of at least 95% by weight.
- These tanks will be exempt from the requirements of 40 CFR 63, Subpart FFFF for Miscellaneous Organic Chemicals Manufacturing because the tanks will not store materials containing HAPs.

**Source S-614 (Exempt Cooling Tower)**

Source S-614 ("Exempt Cooling Tower") is expected to comply with the following regulations (while storing low vapor pressure liquids):

- S-614 is not subject to Regulation 11, Rule 10 since there will not be any hexavalent chromium and organic emissions expected at S-614.
- Regulation 6, Rule 1 – General Requirements for Particulate Matter, including:
    - 6-1-301 – Ringelmann No. 1 Limitation
        - The facility shall not emit from any source for a period or aggregate periods of more than three minutes in any hour, a visible emission that is as dark or darker than No. 1 on the Ringelmann Chart, or of such opacity as to obscure an observer's view to an equivalent or greater degree.
    - 6-1-305 – Visible Particles
        - The facility shall not emit particles from any operation in sufficient number to cause annoyance to any other person where the particles are large enough to be visible as individual particles at the emission point, or of such size and nature as to be visible individually as incandescent particles.

**Sources S-617 (Exempt Truck Unloading Operation)**

Source S-617 ("Exempt Truck Unloading Operation") is expected to comply with the following regulations (while storing low vapor pressure liquids):

- S-617 is expected to be exempt from Regulation 8, Rule 6 per Section 8-6-110 since they will be storing organic materials with a vapor pressure of less than 0.5 psia.
- S-617 is not subject to 40 CFR 63 Subpart EEEE, NESHAP from Organic Liquids Distribution (Non-Gasoline) because renewable feedstocks do not meet the definition of organic liquid due to insufficient HAP concentration.
- S-617 is not subject to 40 CFR 63 Subpart FFFF, NESHAP from Miscellaneous Organic Chemical Manufacturing because the rule regulates loading activities, but not unloading activities.

**Sources S-619, S-620, and S-621 (Exempt Fixed Roof Tanks)**

Sources S-619, S-620, and S-621 (collectively "Exempt Fixed Roof Tanks") are expected to comply with the following regulations (while storing low vapor pressure liquids):

- Regulation 8, Rule 5 – Organic Compounds, Storage of Organic Liquids, including:
    - 8-5-117 - Exemption, Low Vapor Pressure
        - The provisions of this rule, except for Section 8-5-307.3, shall not apply to tanks storing organic liquids with a true vapor pressure of less than or equal to 0.5 psi.
    - 8-5-307.3 – Requirements for fixed roof tanks, pressure tanks, and blanketed tanks; Pressure tanks and blanketed tanks PRD requirements
        - The sealing mechanism on pressure relief devices located on pressure tanks and on tanks blanketed with organic gases other than natural gas shall be maintained in a gas tight condition except when operating pressure exceeds the valve set pressure, or except when the sealing mechanism is vented to a vapor recovery or disposal system that has an overall abatement efficiency of at least 95% by weight.
- These tanks are not subject to the requirements of 40 CFR 63, Subpart FFFF for Miscellaneous Organic Chemicals Manufacturing because the tanks will emit low levels of HAPs.

**MACT R Review**

Phillips 66 operates the following sources listed below that are potentially subject to 40 CFR Part 63, Subpart FFFF – National Emission Standards for Gasoline Distribution Facilities (MACT R). Phillips 66 will complete an in-depth

regulatory review upon submittal of the Initial Notification of Compliance Status (NOCS) as required by the regulation.

- S-126: Tank No. 172

The following provisions of MACT R are generally applicable to the unit above.

- 63.420 – Applicability
- 63.421 – Definitions
- 63.423 – Standards: Storage vessels
- 63.424 – Standards: Equipment leaks
- 63.425 – Test methods and procedures
- 63.427 – Continuous monitoring
- 63.428 – Reporting and recordkeeping

**MACT FFFF Review**

Phillips 66 operates the following sources listed below that are potentially subject to 40 CFR Part 63, Subpart FFFF – National Emission Standards for Hazardous Air Pollutants: Miscellaneous Organic Chemical Manufacturing (MACT FFFF). Phillips 66 will complete an in-depth regulatory review upon submittal of the Initial NOCS as required by the regulation.

- S-45: Heavy Gas Oil Feed Heater
- S-122: Tank 167
- S-125: Tank 170
- S-126: Tank No. 172 (complies with MACT FFFF via complying with MACT R)
- S-133: API Waste Oil Tank T-193
- S-150: Tank 241
- S-188: Tank 300
- S-189: Tank 301
- S-190: Tank 302
- S-195: Tank 501, Sludge
- S-253: Tank 833
- S-296: C-1 Flare
- S-307: U240 Unicracking Unit
- S-309: U248 Unisar Unit
- S-322: U40 Raw Materials Receiving
- S-338: U233 Fuel Gas Center
- S-381: Aeration Tank, Pact (F-201)
- S-382: Aeration Tank, Pact (F-202)
- S-383: Clarifier F-203
- S-384: Clarifier F-204
- S-385: Media Filter F-271 to F-278
- S-386: PAC Regeneration Sludge Thickener F-211
- S-387: Wet Air Regeneration P-202
- S-390: F-248 Thickened Sludge Storage
- S-398: MP-30 Flare
- S-434: U246 High Pressure Reactor Train
- S-437: Hydrogen Manufacturing Unit
- S-438: U110 H-1 Furnace

- S-455: U240 Cooling Tower
- S-456: U110 Cooling Tower
- S-460: Ultra Low Sulfur Diesel Hydrotreater
- S-461: Hydrotreater Charge Heater
- S-500: ULSD Cooling Tower

The following provisions of MACT FFFF are generally applicable to the units above.

- 63.2435(a) – Applicability
- 63.2435(b)(1) – MCPU defined
- 63.2435(b)(2) – MCPU defined
- 63.2440(a) – Applicable sources
- 63.2440(b) – Applicable sources
- 63.2445 – Compliance dates
- 63.2450(a) – General requirements
- 63.2450(e) – Requirements for control devices
- 63.2450(p) – Original safety device requirements
- 63.2450(t) – New safety device requirements
- 63.2450(u) – General duty
- 63.2450(v) – Maintenance vents
- 63.2455(a) – Continuous process vent requirements in Table 1
- 63.2455(b) – Continuous process vent requirements TRE determination
- 63.2470(a) – Requirements for storage tanks
- 63.2475(a) – Requirements for storage racks
- 63.2480(a) – Requirements for equipment leaks
- 63.2485(a) – Requirements for wastewater streams and liquid streams in open system within an MCPU
- 63.2490(a) – Requirements for heat exchange systems
- 63.2505 – Alternative standards
- 63.2515(a) – Notifications
- 63.2520(a) – Reporting requirements
- 63.2525 – Recordkeeping requirements
- 63.2535(b) – Compliance with 40 CFR 264 and 265, subparts AA, BB, and/or CC
- 63.2535(c) – Compliance with 40 CFR 60, Kb and 40 CFR 61, Y
- 63.2535(h) – Compliance with 40 CFR 60, Subparts DDD, III, NNN, or RRR
- 63.2535(i) – Compliance with 40 CFR 61, BB
- 63.2535(k) – Compliance with 40 CFR 60 VV, VVa and 40 CFR 61, V
- 63.2540 – General provisions
- 63.2550 – Definitions

**Exempt Sources**

The following list summarizes the various sources qualifying for one of the categorical exemptions listed in Regulation 2, Rule 1 and are exempt from permitting. The exemptions are listed below, with each applicable source listed as well.

These sources will also meet the backstop provisions in Regulation 2-1-319 as required under this exemption, including the 5 tons/yr backstop provision in Regulation 2-1-319.1 as demonstrated in the respective appendices.

Regulation 2-1-103 – Exemption, Source not subject to any District Rule and criteria pollutant emissions less than 10 lbs/highest day

- S-615

- Regulation 2-1-113.2.4 – Any abatement device which is used solely to abate equipment that does not require an Authority to Construct or Permit to Operate
  - A-627 through A-638
- Regulation 2-1-115.1.4.4 – Exemption, Particulate Sources at Quarries, Mineral Processing and Biomass Facilities: Operating, loading and unloading the following sources which process exclusively material with a moisture content greater than or equal to 5 percent by weight: Storage Silos
  - S-601
- Regulation 2-1-115.1.4.5 – Exemption, Particulate Sources at Quarries, Mineral Processing and Biomass Facilities: Operating, loading and unloading the following sources which process exclusively material with a moisture content greater than or equal to 5 percent by weight: Storage, or Weigh Hopper Bin/System
  - S-604
- Regulation 2-1-123.2 – Exemption, Liquid Storage and Loading Equipment: Tanks, vessels, and pumping equipment used exclusively for the storage or dispensing of any aqueous solution which contains less than 1 percent (wt) organic compounds
  - S-607 (2-1-123.2.1 Sulfuric acid with an acid strength of less than or equal to 99.0% by weight)
  - S-608
  - S-609
  - S-610
  - S-611
  - S-618 (2-1-123.2.1: Sulfuric acid with an acid strength of less than or equal to 99.0% by weight)_
  - S-619
  - S-620
  - S-621
- Regulation 2-1-123.3.1 – Exemption, Liquid Storage and Loading Equipment: Containers, reservoirs, tanks, or loading equipment used exclusively for storage or loading of liquefied gases
  - S-188
  - S-189
  - S-190
  - S-253
- Regulation 2-1-123.3.2 – Exemption, Liquid Storage and Loading Equipment: Storage of loading of organic liquids or mixtures containing organic liquids; where the initial boiling point of the organics is greater than 302°F and exceeds the actual storage temperature by at least 180°F
  - S-70
  - S-90
  - S-97
  - S-99
  - S-103

  - S-105
  - S-108
  - S-110
  - S-111
  - S-112
  - S-113
  - S-114
  - S-127
  - S-135
  - S-137
  - S-173
  - S-174
  - S-175
  - S-204
  - S-205
  - S-261
  - S-262
  - S-263
  - S-334
  - S-340
  - S-360
  - S-445
  - S-448
  - S-449
  - S-506
  - S-50007
- Regulation 2-1-123.3.6 – Exemption, Liquid Storage and Loading Equipment – Storage or loading of liquid soaps, liquid detergents, tallow, or vegetable oils, waxes, or wax emulsions
  - S-70
  - S-90
  - S-97
  - S-108
  - S-110
  - S-111
  - S-112
  - S-113
  - S-114
  - S-135
  - S-137
  - S-617
  - S-173
  - S-174
  - S-175
  - S-204
  - S-205
  - S-261
  - S-334
  - S-340
  - S-360
  - S-445
  - S-448
  - S-449

  - S-506
  - S-617
  - S-50007
- Regulation 2-1-123.3.4 – Exemption, Liquid Storage and Loading Equipment – The storage or loading of lubricating oils
  - S-204
  - S-205
- Regulation 2-1-128.4 – Exemption, Miscellaneous Equipment – Water cooling towers and water cooling ponds not used for evaporative cooling of process water, or not used for evaporative cooling of water from barometric jets or from barometric condensers
  - S-456
  - S-500
  - S-614

# Appendix A. Regulation 6 Calculations

**Table 1. Regulation 6-1-310.1: Total Suspended Particulate (TSP) Concentration Limits Review - Combustion Units**

| Source Number | Max Firing Rate [1] (Btu/hr) | Fuel HHV [1] (Btu/scf) | Process Exhaust Rate [2] (Dscf/min) | Emission Factor [1] (lb/Btu) | TSP Emission Rate [4,5] (gr/dscf) | TSP Emission Rate Limit [5] (gr TSP/dscf) | Complies with TSP Emission Weight Limit? (Y/N) |
|---|---|---|---|---|---|---|---|
| S-22 | 31,000,000 | 1,576 | 328 | 7.45E-09 | 0.08 | 0.15 | Y |
| S-11 | 108,000,000 | 1,576 | 1,142 | 7.45E-09 | 0.08 | 0.15 | Y |
| S-12 | 42,000,000 | 1,576 | 444 | 7.45E-09 | 0.08 | 0.15 | Y |
| S-13 | 194,000,000 | 1,576 | 2,052 | 7.45E-09 | 0.08 | 0.15 | Y |
| S-45 | 85,000,000 | 1,576 | 899 | 5.10E-09 | 0.06 | 0.15 | Y |
| S-438 | 250,000,000 | 1,590 | 2,621 | 7.45E-09 | 0.08 | 0.15 | Y |
| S-461 | 50,200,000 | 1,576 | 531 | 4.82E-09 | 0.05 | 0.15 | Y |
| S-296 [6] | | | | | | 0.15 | Y |
| S-398 [6] | | | | | | 0.15 | Y |
| S-352 | 291,000,000 | 1,321 | 3,671 | 7.45E-09 | 0.07 | 0.15 | Y |
| S-353 | 291,000,000 | 1,321 | 3,671 | 7.45E-09 | 0.07 | 0.15 | Y |
| S-354 | 291,000,000 | 1,321 | 3,671 | 7.45E-09 | 0.07 | 0.15 | Y |
| S-355 | 175,000,000 | 1,340 | 2,177 | 7.45E-09 | 0.07 | 0.15 | Y |
| S-356 | 175,000,000 | 1,340 | 2,177 | 7.45E-09 | 0.07 | 0.15 | Y |
| S-357 | 175,000,000 | 1,340 | 2,177 | 7.45E-09 | 0.07 | 0.15 | Y |
| S-1010 | 19,500,000 | 1,050 | 310 | 2.03E-08 | 0.15 | 0.15 | Y |
| S-503 [7] | | | | | | 0.15 | Y |
| S-504 [7] | | | | | | 0.15 | Y |
| S-505 [7] | | | | | | 0.15 | Y |
| S-599 [8,9] | | | 7,044 | 1.40E-06 | 0.01 | 0.15 | Y |

1. Per P66 PTE calculation workbook.
2. Process exhaust rate (dscf/min) = Max fixing rate (Btu/hr) / Fuel HHV (Btu/scf) / 60 (min/hr).
3. Assumes $PM_{10}$ emissions are equivalent to TSP emissions.
4. TSP emissions (gr/dscf) = Emission factor (lb/Btu) * Fuel HHV (Btu/scf) * 7000 (gr/lb).
5. Per BAAQMD Regulation 6-1-310.1.
6. Compliance with Regulation 6-1-310.1 is presumed due to the visual inspection requirements of Condition 18255, Part 4.
7. Compliance with Regulation 6-1-310.1 is presumed due to annual source testing required per Condition 23125, Part 20.
8. S-599 STU emission factor is in units of lb/scf exhausted.
9. TSP Emission Rate for STU (gr/dscf) = Emission factor (lb/scf) * 7000 (gr/lb).

**Table 2. Regulation 6-1-310.1&310.2: Total Suspended Particulate (TSP) Concentration Limits Review - Cooling Towers**

| Source Number | Process Exhaust Rate (Dscf/min) | TSP Emission Rate (gr/dscf) | TSP Emission Rate Limit [1] (gr TSP/dscf) | Complies with TSP Emission Weight Limit? [2] (Y/N) |
|---|---|---|---|---|
| S-453 | | | 0.15 | Y |
| S-455 | | | 0.01 | Y |
| S-456 | | | 0.15 | Y |
| S-500 | | | 0.15 | Y |

1. Per BAAQMD Regulation 6-1-310.1 & 6-1-310.2. In lieu of process exhaust rates, the lowest TSP emission rate limit in Table 6-1-310.2 has been used.
2. Compliance with Regulation 6-1-310.1 (for S-453, S-456, and S-500) & Regulation 6-1-310.2 is presumed per Engineering Evaluation for Application 17465.

**Table 3. Regulation 6-1-311.1: Total Suspended Particulate (TSP) Weight Limits Review**

| Source Number | Process Weight Rate (Throughput lb/hr) | TSP Emission (lb TSP/hr) | TSP Emission Rate Limit [1,2] (lb TSP/hr) | Complies with TSP Emission Weight Limit? (Y/N) |
|---|---|---|---|---|
| S-453 [3,5] | | 0.13 | 1.78 | Y |
| S-456 [4,5] | | | 1.78 | Y |
| S-500 [4,5] | | | 1.78 | Y |
| S-1010 [3] | | 0.40 | 1.78 | Y |
| S-503 [6] | | | 1.78 | Y |
| S-504 [6] | | | 1.78 | Y |
| S-505 [6] | | | 1.78 | Y |
| S-599 [7] | | 0.95 | 1.78 | Y |
| S-602 [7] | | 0.06 | 1.78 | Y |
| S-603 [7] | | 0.06 | 1.78 | Y |
| S-605 [7] | | 0.02 | 1.78 | Y |

1. In lieu of process weight rates, the lowest TSP emission rate limit in Table 6-1-311.1 has been used.
2. Assumes $PM_{10}$ emissions are equivalent to TSP emissions.
3. TSP emission per P66 PTE calculation workbook.
4. TSP emission presumed to be under the TSP emission rate limit as these sources are exempt from permitting per categorical exemption and requirements of 2-1-319.1.
5. Compliance with Regulation 6-1-311.1 is presumed per Engineering Evaluation for Application 17465.
6. Compliance with Regulation 6-1-311.1 is presumed due to annual source testing required per Condition 23125, Part 20.
7. TSP emission per ATC application submitted for Rodeo Renewed.

**Table 4. Regulation 6-1-311.2: Total Suspended Particulate (TSP) Weight Limits Review**

| Source Number | Process Weight Rate (Throughput lb/hr) | TSP Emission (lb TSP/hr) | TSP Emission Rate Limit (lb TSP/hr) | Complies with TSP Emission Weight Limit? (Y/N) |
|---|---|---|---|---|
| S-455 [1] | | 0.34 | 0.99 | Y |

1. Compliance with Regulation 6-1-311.2 is presumed per Engineering Evaluation for Application 17465. In lieu of process weight rates, the lowest TSP emission rate limit in Table 6-1-311.2 has been used.