

Statement of Basis of the Federal Operating Permit

Equistar Chemicals, LP

Site/Area Name: Industrial Organic Chemicals

Physical location: 1501 McKinzie Road

Nearest City: Corpus Christi

County: Nueces

Permit Number: O1486

Project Type: Minor Revision

Standard Industrial Classification (SIC) Code: 2869

SIC Name: Industrial Organic Chemicals

This Statement of Basis sets forth the legal and factual basis for the draft changes to the permit conditions resulting from the minor revision project in accordance with 30 TAC §122.201(a)(4). The applicant has submitted an application for a minor permit revision per §§ 122.215-217. This document may include the following information:

- A description of the facility/area process description;
- A description of the revision project;
- A basis for applying permit shields;
- A list of the federal regulatory applicability determinations;
- A table listing the determination of applicable requirements;
- A list of the New Source Review Requirements;
- The rationale for periodic monitoring methods selected;
- The rationale for compliance assurance methods selected;
- A compliance status; and
- A list of available unit attribute forms.

Prepared on: March 4, 2015

Operating Permit Basis of Determination

Description of Revisions

Added two new distillation towers E-1719 and E-1720; re-grouped units to define appropriate applicable requirements; and corrected periodic monitoring for tanks F-2002A, F-2002B, F-2003, F-2007, and D90004 since the units are controlled by a flare and not carbon canisters.

Permit Area Process Description

Feedstocks consisting of petroleum liquids and liquefied petroleum gases are imported to the site via pipeline and stored prior to processing in pyrolysis furnaces. Emissions from storage tanks are VOCs and HAPs.

In these furnaces (called USCs or VMRs and represented on the OP-SUM as GRPFURN) steam is added to the hydrocarbons and heated with no oxygen present to about 2000°F. At this temperature, complex hydrocarbons “crack” to smaller molecules, ranging from hydrogen to compounds with over 20 carbon atoms. Combustion by-products of the furnaces are NO_x, CO and VOCs. Periodically, carbon deposits on the inside (process side) of the furnace tubes must be removed by isolating the hydrocarbon feed flow and introducing steam and air to burn-off the carbon. Furnaces exhaust during this phase of operation is routed to the Decoke Cyclones (GRPDECOKE) which limit particulate matter and carbon monoxide.

This mix of hydrocarbons is cooled and separated in the Primary Fractionation and Cracked Gas Separation areas. Ethylene, propylene and hydrogen finished products leave this area and are shipped off-site by pipeline. Light and heavy fuel oil products are exported by truck and any wastewater that is generated is biologically treated on-site. A small routine flow and any upset emissions are routed to flares. Fuel oil loading-emissions (L-43) are balanced back to their respective storage tanks, although not regulatory required due to the low vapor pressure of the oil (<1 psia). Flared gases are VOCs and HAPs.

Intermediate products from the Primary Fractionation and Cracked Gas Separation areas include Raw Pyrolysis Gasoline (RPG) and Mixed C₄S.

EPA issued PSDTX761GHG on 04/16/2014 for GHG emissions associated with units at this facility.

FOPs at Site

The “application area” consists of the emission units and that portion of the site included in the application and this permit. Multiple FOPs may be issued to a site in accordance with 30 TAC § 122.201(e). When there is only one area for the site, then the application information and permit will include all units at the site. Additional FOPs that exist at the site, if any, are listed below.

Additional FOPs: None

Major Source Pollutants

The table below specifies the pollutants for which the site is a major source:

| | |
|------------------|--|
| Major Pollutants | VOC, SO ₂ , NO _x , HAPS, CO, GHG |
|------------------|--|

Reading State of Texas’s Federal Operating Permit

The Title V Federal Operating Permit (FOP) lists all state and federal air emission regulations and New Source Review (NSR) authorizations (collectively known as “applicable requirements”) that apply at a particular site or permit area (in the event a site has multiple FOPs). **The FOP does not authorize new emissions or new construction activities.** The FOP begins with an introductory page which is common to all Title V permits. This page gives the details of the company, states the authority of the issuing agency, requires the company to

operate in accordance with this permit and 30 Texas Administrative Code (TAC) Chapter 122, requires adherence with NSR requirements of 30 TAC Chapter 116, and finally indicates the permit number and the issuance date.

This is followed by the table of contents, which is generally composed of the following elements. Not all permits will have all of the elements.

- General Terms and Conditions
- Special Terms and Conditions
 - Emissions Limitations and Standards, Monitoring and Testing, and Recordkeeping and Reporting
 - Additional Monitoring Requirements
 - New Source Review Authorization Requirements
 - Compliance Requirements
 - Protection of Stratosphere Ozone
 - Permit Location
 - Permit Shield (30 TAC § 122.148)
- Attachments
 - Applicable Requirements Summary
 - Unit Summary
 - Applicable Requirements Summary
 - Additional Monitoring Requirements
 - Permit Shield
 - New Source Review Authorization References
 - Compliance Plan
 - Alternative Requirements
- Appendix A
 - Acronym list
- Appendix B
 - Copies of major NSR authorizations

General Terms and Conditions

The General Terms and Conditions are the same and appear in all permits. The first paragraph lists the specific citations for 30 TAC Chapter 122 requirements that apply to all Title V permit holders. The second paragraph describes the requirements for record retention. The third paragraph provides details for voiding the permit, if applicable. The fourth paragraph states that the permit holder shall comply with the requirements of 30 TAC Chapter 116 by obtaining a New Source Review authorization prior to new construction or modification of emission units located in the area covered by this permit. The fifth paragraph provides details on submission of reports required by the permit.

Special Terms and Conditions

Emissions Limitations and Standards, Monitoring and Testing, and Recordkeeping and Reporting. The TCEQ has designated certain applicable requirements as site-wide requirements. A site-wide requirement is a requirement that applies uniformly to all the units or activities at the site. Units with only site-wide requirements are addressed on Form OP-REQ1 and are not required to be listed separately on a OP-UA Form or Form OP-SUM. Form OP-SUM must list all units addressed in the application and provide identifying information, applicable OP-UA Forms, and preconstruction authorizations. The various OP-UA Forms provide the characteristics of each unit from which applicable requirements are established. Some exceptions exist as a few units may have both site-wide requirements and unit specific requirements.

Other conditions. The other entries under special terms and conditions are in general terms referring to compliance with the more detailed data listed in the attachments.

Attachments

Applicable Requirements Summary. The first attachment, the Applicable Requirements Summary, has two tables, addressing unit specific requirements. The first table, the Unit Summary, includes a list of units with applicable requirements, the unit type, the applicable regulation, and the requirement driver. The intent of the requirement driver is to inform the reader that a given unit may have several different operating scenarios and the differences between those operating scenarios.

The applicable requirements summary table provides the detailed citations of the rules that apply to the various units. For each unit and operating scenario, there is an added modifier called the “index number,” detailed citations specifying monitoring and testing requirements, recordkeeping requirements, and reporting requirements. The data for this table are based on data supplied by the applicant on the OP-SUM and various OP-UA forms.

Additional Monitoring Requirement. The next attachment includes additional monitoring the applicant must perform to ensure compliance with the applicable standard. Compliance assurance monitoring (CAM) is often required to provide a reasonable assurance of compliance with applicable emission limitations/standards for large emission units that use control devices to achieve compliance with applicant requirements. When necessary, periodic monitoring (PM) requirements are specified for certain parameters (i.e. feed rates, flow rates, temperature, fuel type and consumption, etc.) to determine if a term and condition or emission unit is operating within specified limits to control emissions. These additional monitoring approaches may be required for two reasons. First, the applicable rules do not adequately specify monitoring requirements (exception- Maximum Achievable Control Technology Standards (MACTs) generally have sufficient monitoring), and second, monitoring may be required to fill gaps in the monitoring requirements of certain applicable requirements. In situations where the NSR permit is the applicable requirement requiring extra monitoring for a specific emission unit, the preferred solution is to have the monitoring requirements in the NSR permit updated so that all NSR requirements are consolidated in the NSR permit.

Permit Shield. A permit may or may not have a permit shield, depending on whether an applicant has applied for, and justified the granting of, a permit shield. A permit shield is a special condition included in the permit document stating that compliance with the conditions of the permit shall be deemed compliance with the specified potentially applicable requirement(s) or specified applicable state-only requirement(s).

New Source Review Authorization References. All activities which are related to emissions in the state of Texas must have a NSR authorization prior to beginning construction. This section lists all units in the permit and the NSR authorization that allowed the unit to be constructed or modified. Units that do not have unit specific applicable requirements other than the NSR authorization do not need to be listed in this attachment. While NSR permits are not physically a part of the Title V permit, they are legally incorporated into the Title V permit by reference. Those NSR permits whose emissions exceed certain PSD/NA thresholds must also undergo a Federal review of federally regulated pollutants in addition to review for state regulated pollutants.

Compliance Plan. A permit may have a compliance schedule attachment for listing corrective actions plans for any emission unit that is out of compliance with an applicable requirement.

Alternative Requirements. This attachment will list any alternative monitoring plans or alternative means of compliance for applicable requirements that have been approved by the EPA Administrator and/or the TCEQ Executive Director.

Appendix A

Acronym list. This attachment lists the common acronyms used when discussing the FOPs.

Appendix B

Copies of major NSR authorizations applicable to the units covered by this permit have been included in this Appendix, to ensure that all interested persons can access those authorizations.

Stationary vents subject to 30 TAC Chapter 111, Subchapter A, § 111.111(a)(1)(B) addressed in the Special Terms and Conditions

The site contains stationary vents with a flowrate less than 100,000 actual cubic feet per minute (acfm) and constructed after January 31, 1972 which are limited, over a six-minute average, to 20% opacity as required by 30 TAC § 111.111(a)(1)(B). As a site may have a large number of stationary vents that fall into this category, they are not required to be listed individually in the permit's Applicable Requirement Summary. This is consistent with EPA's White Paper for Streamlined Development of Part 70 Permit Applications, July 10, 1995, that states that requirements that apply identically to emission units at a site can be treated on a generic basis such as source-wide opacity limits.

Periodic monitoring is specified in Special Term and Condition 3 for stationary vents subject to 30 TAC § 111.111(a)(1)(B) to verify compliance with the 20% opacity limit. These vents are not expected to produce visible emissions during normal operation. The TCEQ evaluated the probability of these sources violating the opacity standards and determined that there is a very low potential that an opacity standard would be exceeded. It was determined that continuous monitoring for these sources is not warranted as there would be very limited environmental benefit in continuously monitoring sources that have a low potential to produce visible emissions. Therefore, the TCEQ set the visible observation monitoring frequency for these sources to once per calendar quarter.

The TCEQ has exempted vents that are not capable of producing visible emissions from periodic monitoring requirements. These vents include sources of colorless VOCs, non-fuming liquids, and other materials that cannot produce emissions that obstruct the transmission of light. Passive ventilation vents, such as plumbing vents, are also included in this category. Since this category of vents are not capable of producing opacity due to the physical or chemical characteristics of the emission source, periodic monitoring is not required as it would not yield any additional data to assure compliance with the 20% opacity standard of 30 TAC § 111.111(a)(1)(B).

In the event that visible emissions are detected, either through the quarterly observation or other credible evidence, such as observations from company personnel, the permit holder shall either report a deviation or perform a Test Method 9 observation to determine the opacity consistent with the 6-minute averaging time specified in 30 TAC § 111.111(a)(1)(B). An additional provision is included to monitor combustion sources more frequently than quarterly if alternate fuels are burned for periods greater than 24 consecutive hours. This will address possible emissions that may arise when switching fuel types.

Stationary Vents subject to 30 TAC Chapter 111 not addressed in the Special Terms and Conditions

All other stationary vents subject to 30 TAC Chapter 111 not covered in the Special Terms and Conditions are listed in the permit's Applicable Requirement Summary. The basis for the applicability determinations for these vents are listed in the Determination of Applicable Requirements table.

Federal Regulatory Applicability Determinations

The following chart summarizes the applicability of the principal air pollution regulatory programs to the permit area:

| Regulatory Program | Applicability (Yes/No) |
|---|-------------------------------|
| Prevention of Significant Deterioration (PSD) | Yes |
| Nonattainment New Source Review (NNSR) | No |
| Minor NSR | Yes |
| 40 CFR Part 60 - New Source Performance Standards | Yes |
| 40 CFR Part 61 - National Emission Standards for Hazardous Air Pollutants (NESHAPs) | Yes |
| 40 CFR Part 63 - NESHAPs for Source Categories | Yes |
| Title IV (Acid Rain) of the Clean Air Act (CAA) | No |
| Title V (Federal Operating Permits) of the CAA | Yes |
| Title VI (Stratospheric Ozone Protection) of the CAA | Yes |
| CAIR (Clean Air Interstate Rule) | No |

Basis for Applying Permit Shields

An operating permit applicant has the opportunity to specifically request a permit shield to document that specific applicable requirements do not apply to emission units in the permit. A permit shield is a special condition stating that compliance with the conditions of the permit shall be deemed compliance with the specified potentially applicable requirements or specified potentially applicable state-only requirements. A permit shield has been requested in the application for specific emission units. For the permit shield requests that have been approved, the basis of determination for regulations that the owner/operator need not comply with are located in the “Permit Shield” attachment of the permit.

Insignificant Activities

In general, units not meeting the criteria for inclusion on either Form OP-SUM or Form OP-REQ1 are not required to be addressed in the operating permit application. Examples of these types of units include, but are not limited to, the following:

1. Office activities such as photocopying, blueprint copying, and photographic processes.
2. Sanitary sewage collection and treatment facilities other than those used to incinerate wastewater treatment plant sludge. Stacks or vents for sanitary sewer plumbing traps are also included.
3. Food preparation facilities including, but not limited to, restaurants and cafeterias used for preparing food or beverages primarily for consumption on the premises.
4. Outdoor barbecue pits, campfires, and fireplaces.
5. Laundry dryers, extractors, and tumblers processing bedding, clothing, or other fabric items generated primarily at the premises. This does not include emissions from dry cleaning systems using perchloroethylene or petroleum solvents.
6. Facilities storing only dry, sweet natural gas, including natural gas pressure regulator vents.
7. Any air separation or other industrial gas production, storage, or packaging facility. Industrial gases, for purposes of this list, include only oxygen, nitrogen, helium, neon, argon, krypton, and xenon.
8. Storage and handling of sealed portable containers, cylinders, or sealed drums.

9. Vehicle exhaust from maintenance or repair shops.
10. Storage and use of non-VOC products or equipment for maintaining motor vehicles operated at the site (including but not limited to, antifreeze and fuel additives).
11. Air contaminant detectors and recorders, combustion controllers and shut-off devices, product analyzers, laboratory analyzers, continuous emissions monitors, other analyzers and monitors, and emissions associated with sampling activities. Exception to this category includes sampling activities that are deemed fugitive emissions and under a regulatory leak detection and repair program.
12. Bench scale laboratory equipment and laboratory equipment used exclusively for chemical and physical analysis, including but not limited to, assorted vacuum producing devices and laboratory fume hoods.
13. Steam vents, steam leaks, and steam safety relief valves, provided the steam (or boiler feedwater) has not contacted other materials or fluids containing regulated air pollutants other than boiler water treatment chemicals.
14. Storage of water that has not contacted other materials or fluids containing regulated air pollutants other than boiler water treatment chemicals.
15. Well cellars.
16. Fire or emergency response equipment and training, including but not limited to, use of fire control equipment including equipment testing and training, and open burning of materials or fuels associated with firefighting training.
17. Crucible or pot furnaces with a brim full capacity of less than 450 cubic inches of any molten metal.
18. Equipment used exclusively for the melting or application of wax.
19. All closed tumblers used for the cleaning or deburring of metal products without abrasive blasting, and all open tumblers with a batch capacity of 1,000 lbs. or less.
20. Shell core and shell mold manufacturing machines.
21. Sand or investment molds with a capacity of 100 lbs. or less used for the casting of metals;
22. Equipment used for inspection of metal products.
23. Equipment used exclusively for rolling, forging, pressing, drawing, spinning, or extruding either hot or cold metals by some mechanical means.
24. Instrument systems utilizing air, natural gas, nitrogen, oxygen, carbon dioxide, helium, neon, argon, krypton, and xenon.
25. Battery recharging areas.
26. Brazing, soldering, or welding equipment.

Determination of Applicable Requirements

The tables below include the applicability determinations for the emission units, the index number(s) where applicable, and all relevant unit attribute information used to form the basis of the applicability determination. The unit attribute information is a description of the physical properties of an emission unit which is used to determine the requirements to which the permit holder must comply. For more information about the descriptions of the unit attributes specific Unit Attribute Forms may be viewed at www.tceq.texas.gov/permitting/air/nav/air_all_ua_forms.html.

A list of unit attribute forms is included at the end of this document. Some examples of unit attributes include construction date; product stored in a tank; boiler fuel type; etc.. Generally, multiple attributes are needed to determine the requirements for a given emission unit and index number. The table below lists these attributes in the column entitled "Basis of Determination." Attributes that demonstrate that an applicable requirement applies will be the factual basis for the specific citations in an applicable requirement that apply to a unit for that index number. The TCEQ Air Permits Division has developed flowcharts for determining applicability of state and federal regulations based on the unit attribute information in a Decision Support System (DSS). These flowcharts can be accessed via the internet at www.tceq.texas.gov/permitting/air/nav/air_supportsys.html. The Air Permits Division staff may also be contacted for assistance at (512) 239-1250.

The attributes for each unit and corresponding index number provide the basis for determining the specific legal citations in an applicable requirement that apply, including emission limitations or standards, monitoring, recordkeeping, and reporting. The rules were found to apply or not apply by using the unit attributes as answers to decision questions found in the flowcharts of the DSS. Some additional attributes indicate which legal citations of a rule apply. The legal citations that apply to each emission unit may be found in the Applicable Requirements Summary table of the draft permit. There may be some entries or rows of units and rules not found in the permit, or if the permit contains a permit shield, repeated in the permit shield area. These are sets of attributes that describe negative applicability, or; in other words, the reason why a potentially applicable requirement does not apply.

If applicability determinations have been made which differ from the available flowcharts, an explanation of the decisions involved in the applicability determination is specified in the column “Changes and Exceptions to RRT.” If there were no exceptions to the DSS, then this column has been removed.

The draft permit includes all emission limitations or standards, monitoring, recordkeeping and reporting required by each applicable requirement. If an applicable requirement does not require monitoring, recordkeeping, or reporting, the word “None” will appear in the Applicable Requirements Summary table. If additional periodic monitoring is required for an applicable requirement, it will be explained in detail in the portion of this document entitled “Rationale for Compliance Assurance Monitoring (CAM)/ Periodic Monitoring Methods Selected.”

When attributes demonstrate that a unit is not subject to an applicable requirement, the applicant may request a permit shield for those items. The portion of this document entitled “Basis for Applying Permit Shields” specifies which units, if any, have a permit shield.

Operational Flexibility

When an emission unit has multiple operating scenarios, it will have a different index number associated with each operating condition. This means that units are permitted to operate under multiple operating conditions. The applicable requirements for each operating condition are determined by a unique set of unit attributes. For example, a tank may store two different products at different points in time. The tank may, therefore, need to comply with two distinct sets of requirements, depending on the product that is stored. Both sets of requirements are included in the permit, so that the permit holder may store either product in the tank.

Determination of Applicable Requirements

| Unit ID | Regulation | Index Number | Basis of Determination* | Changes and Exceptions to DSS** |
|---------|-------------------------------------|--------------|---|---------------------------------|
| AC1 | 40 CFR Part 60, Subpart IIII | 60IIII-01 | <p>Applicability Date = Stationary CI ICE commenced construction, reconstruction, or modification after July 11, 2005.</p> <p>Diesel = Diesel fuel is used.</p> <p>Kilowatts = Power rating is greater than or equal to 130 KW and less than or equal to 2237 KW.</p> <p>Exemptions = The CI ICE is not exempt due to national security, testing at an engine test cell/stand or as a temporary replacement.</p> <p>Filter = The CI ICE is not equipped with a diesel particulate filter.</p> <p>Displacement = Displacement is greater than or equal to 10 and less than 15 liters per cylinder.</p> <p>Service = CI ICE is a non-emergency engine.</p> <p>Commencing = CI ICE that is commencing new construction.</p> <p>Compliance Option = Records are being kept of manufacturer data according to §60.4211(b)(3).</p> <p>Manufacture Date = Date of manufacture is after 04/01/2006.</p> <p>Model Year = CI ICE was manufactured prior to model year 2007.</p> | |
| AC1 | 40 CFR Part 63, Subpart ZZZZ | 63ZZZZ | <p>Brake HP = Stationary RICE with a brake hp greater than or equal to 100 and less than 250 hp.</p> <p>Construction/Reconstruction Date = Commenced construction or reconstruction on or after June 12, 2006.</p> <p>Service Type = Normal use.</p> <p>Stationary RICE Type = Compression ignition engine</p> | |
| AC2 | 40 CFR Part 60, Subpart IIII | 60IIII-02 | <p>Applicability Date = Stationary CI ICE commenced construction, reconstruction, or modification after July 11, 2005.</p> <p>Diesel = Diesel fuel is used.</p> <p>Kilowatts = Power rating is greater than or equal to 130 KW and less than or equal to 2237 KW.</p> <p>Exemptions = The CI ICE is not exempt due to national security, testing at an engine test cell/stand or as a temporary replacement.</p> <p>Filter = The CI ICE is not equipped with a diesel particulate filter.</p> <p>Displacement = Displacement is greater than or equal to 10 and less than 15 liters per cylinder.</p> <p>Service = CI ICE is a non-emergency engine.</p> <p>Commencing = CI ICE that is commencing new construction.</p> <p>Compliance Option = Records are being kept of manufacturer data according to §60.4211(b)(3).</p> <p>Manufacture Date = Date of manufacture is after 04/01/2006.</p> <p>Model Year = CI ICE was manufactured prior to model year 2007.</p> | |
| AC2 | 40 CFR Part 63, Subpart ZZZZ | 63ZZZZ | <p>Brake HP = Stationary RICE with a brake hp greater than or equal to 250 hp and less than 300 hp.</p> <p>Construction/Reconstruction Date = Commenced construction or reconstruction on or after June 12, 2006.</p> <p>Service Type = Normal use.</p> <p>Stationary RICE Type = Compression ignition engine</p> | |
| D50003 | 30 TAC Chapter 115, Storage of VOCs | R5111 | <p>Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.</p> | |

| Unit ID | Regulation | Index Number | Basis of Determination* | Changes and Exceptions to DSS** |
|---------|-------------------------------------|--------------|---|---------------------------------|
| | | | Tank Description = Tank does not require emission controls True Vapor Pressure = True vapor pressure is greater than or equal to 1.0 psia but less than 1.5 psia Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons | |
| D50003 | 40 CFR Part 60, Subpart Ka | 60Kb | Product Stored = Stored product other than a petroleum liquid Storage Capacity = Capacity is 40,000 gallons (151,416 liters) or less | |
| D50009 | 30 TAC Chapter 115, Storage of VOCs | R5112 | Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank using a vapor recovery system (VRS) True Vapor Pressure = True vapor pressure is greater than or equal to 1.5 psia Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons Control Device Type = Carbon adsorption system | |
| D50009 | 40 CFR Part 60, Subpart Ka | 60Ka | Product Stored = Stored product other than a petroleum liquid | |
| D50501 | 30 TAC Chapter 115, Storage of VOCs | R5112 | Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls True Vapor Pressure = True vapor pressure is greater than or equal to 1.0 psia but less than 1.5 psia Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons | |
| D50501 | 40 CFR Part 60, Subpart Ka | 60Ka | Product Stored = Stored product other than a petroleum liquid | |
| D9.0006 | 30 TAC Chapter 115, Storage of VOCs | R5112 | Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls True Vapor Pressure = True vapor pressure is less than 1.0 psia Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons | |
| D9.0006 | 40 CFR Part 60, Subpart Ka | 60Ka | Product Stored = Stored product other than a petroleum liquid | |
| D9.0006 | 40 CFR Part 63, Subpart G | 63G | MACT Subpart F/G Applicability = The unit is a Group 2 vessel. NESHAP Subpart Y Applicability = The unit is not subject to 40 CFR Part 61, Subpart Y. NSPS Subpart Kb Applicability = The unit is not subject to 40 CFR Part 60, Subpart Kb. | |
| D90004 | 30 TAC Chapter 115, Storage of VOCs | STORE | Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. | |

| Unit ID | Regulation | Index Number | Basis of Determination* | Changes and Exceptions to DSS** |
|---------|-------------------------------------|--------------|---|---------------------------------|
| | | | Tank Description = Tank using a vapor recovery system (VRS) True Vapor Pressure = True vapor pressure is greater than or equal to 1.5 psia Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is greater than 40,000 gallons Control Device Type = Flare | |
| D90004 | 40 CFR Part 60, Subpart Ka | 60Ka | Product Stored = Stored product other than a petroleum liquid | |
| DMF9006 | 30 TAC Chapter 115, Storage of VOCs | R5111 | Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls True Vapor Pressure = True vapor pressure is greater than or equal to 1.0 psia but less than 1.5 psia Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons | |
| F-1608 | 30 TAC Chapter 115, Storage of VOCs | R5111 | Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Welded tank using an external floating roof True Vapor Pressure = True vapor pressure is greater than or equal to 1.5 psia Primary Seal = Mechanical shoe Product Stored = VOC other than crude oil or condensate Secondary Seal = Secondary seal not determined since 30 TAC §§ 115.117(a)(4) or 115.117(b)(4) exemption is not utilized Storage Capacity = Capacity is greater than 40,000 gallons | |
| F-1608 | 40 CFR Part 60, Subpart Kb | 60Kb | Product Stored = Volatile organic liquid Storage Capacity = Capacity is greater than or equal to 39,900 gallons (151,000 liters) Maximum True Vapor Pressure = True vapor pressure is greater than or equal to 0.75 psia but less than 11.1 psia Storage Vessel Description = Pontoon-type or double-deck-type external floating roof with mechanical shoe primary seal | |
| F-1608 | 40 CFR Part 61, Subpart FF | 61FF | Waste Treatment Tank = The tank manages, treats or stores a waste stream subject to 40 CFR Part 61, Subpart FF. Alternative Standard for Tanks = The tank is complying with the alternative standards in 40 CFR § 61.351. Kb Tank Type = Using an external floating roof that meets the requirements of 40 CFR § 60.112b(a)(2) Seal Type = Mechanical shoe primary seal | |
| F-1609 | 30 TAC Chapter 115, Storage of VOCs | R5111 | Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls True Vapor Pressure = True vapor pressure is greater than or equal to 1.0 psia but less than 1.5 psia Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons | |

| Unit ID | Regulation | Index Number | Basis of Determination* | Changes and Exceptions to DSS** |
|---------|-------------------------------------|--------------|---|---|
| F-1609 | 40 CFR Part 61, Subpart FF | 61FF-1 | <p>Bypass Line = The closed vent system does not contain any by-pass line that could divert the vent stream away from the control device.</p> <p>Tank Control Requirements = The tank has a fixed roof and closed vent system routing vapors to either a fuel gas system or control device.</p> <p>Waste Treatment Tank = The tank manages, treats or stores a waste stream subject to 40 CFR Part 61, Subpart FF.</p> <p>Alternative Standard for Tanks = The tank is not complying with the alternative standards in 40 CFR § 61.351.</p> <p>Fuel Gas System = Gaseous emissions from the tank or enclosure are not routed to a fuel gas system.</p> <p>Control Device Type/Operations = Flare</p> <p>Cover and Closed Vent = The cover and closed vent system are not operated such that the tank is maintained at a pressure less than atmospheric pressure and meets the conditions of 40 CFR § 61.343(a)(1)(i)(C)(1) - (3).</p> <p>Closed Vent System and Control Device AMOC = Not using an alternate means of compliance</p> <p>Alternative Means of Compliance = Not using an alternate means of compliance to meet the requirements of 40 CFR § 61.343 for tanks.</p> | Manually added Recordkeeping Requirements 61.356(f)(2)(i)(D) (this is an applicability statement) and 61.356(j)(11) (provisions for alternative monitoring) |
| F-1762 | 30 TAC Chapter 115, Storage of VOCs | R5111 | <p>Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.</p> <p>Tank Description = Tank does not require emission controls</p> <p>True Vapor Pressure = True vapor pressure is greater than or equal to 1.0 psia but less than 1.5 psia</p> <p>Product Stored = VOC other than crude oil or condensate</p> <p>Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons</p> | |
| F-1762 | 40 CFR Part 61, Subpart FF | 61FF-1 | <p>Bypass Line = The closed vent system does not contain any by-pass line that could divert the vent stream away from the control device.</p> <p>Tank Control Requirements = The tank has a fixed roof and closed vent system routing vapors to either a fuel gas system or control device.</p> <p>Waste Treatment Tank = The tank manages, treats or stores a waste stream subject to 40 CFR Part 61, Subpart FF.</p> <p>Alternative Standard for Tanks = The tank is not complying with the alternative standards in 40 CFR § 61.351.</p> <p>Fuel Gas System = Gaseous emissions from the tank or enclosure are not routed to a fuel gas system.</p> <p>Control Device Type/Operations = Flare</p> <p>Cover and Closed Vent = The cover and closed vent system are not operated such that the tank is maintained at a pressure less than atmospheric pressure and meets the conditions of 40 CFR § 61.343(a)(1)(i)(C)(1) - (3).</p> <p>Closed Vent System and Control Device AMOC = Not using an alternate means of compliance</p> <p>Alternative Means of Compliance = Not using an alternate means of compliance to meet the requirements of 40 CFR § 61.343 for tanks.</p> | Manually added Recordkeeping Requirements 61.356(f)(2)(i)(D) (this is an applicability statement) and 61.356(j)(11) (provisions for alternative monitoring) |

| Unit ID | Regulation | Index Number | Basis of Determination* | Changes and Exceptions to DSS** |
|---------|-------------------------------------|--------------|---|---------------------------------|
| F-1789X | 30 TAC Chapter 115, Storage of VOCs | R5112 | Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Welded tank using an external floating roof True Vapor Pressure = True vapor pressure is greater than or equal to 1.5 psia Primary Seal = Mechanical shoe Product Stored = VOC other than crude oil or condensate Secondary Seal = Secondary seal not determined since 30 TAC §§ 115.117(a)(4) or 115.117(b)(4) exemption is not utilized Storage Capacity = Capacity is greater than 40,000 gallons | |
| F-1789X | 40 CFR Part 60, Subpart K | 60K | Construction/Modification Date = After March 8, 1974 and on or before May 19, 1978 Product Stored = Stored product other than petroleum liquid (as defined in 40 CFR Part 60, Subpart K) | |
| F-1789X | 40 CFR Part 63, Subpart YY | 63YY | Source Type = Tank is located at an ethylene production facility and meets the size and vapor pressure requirements of Table 7 to be subject to § 63.1103. | |
| F-1790 | 30 TAC Chapter 115, Storage of VOCs | R5111 | Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls True Vapor Pressure = True vapor pressure is greater than or equal to 1.0 psia but less than 1.5 psia Product Stored = VOC other than crude oil or condensate | |
| F-1790 | 40 CFR Part 63, Subpart YY | 63YY | Source Type = Tank is located at an ethylene production facility and meets the size and vapor pressure requirements of Table 7 to be subject to § 63.1103. | |
| F-1791 | 30 TAC Chapter 115, Storage of VOCs | R5112 | Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank using a submerged fill pipe True Vapor Pressure = True vapor pressure is greater than or equal to 1.5 psia Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons | |
| F-1791 | 40 CFR Part 60, Subpart K | 60K | Construction/Modification Date = After March 8, 1974 and on or before May 19, 1978 Storage Capacity = Capacity is 40,000 gallons (151,416 liters) or less | |
| F-1791 | 40 CFR Part 63, Subpart YY | 63YY | Source Type = Tank is located at an ethylene production facility and meets the size and vapor pressure requirements of Table 7 to be subject to § 63.1103. | |
| F-1826 | 30 TAC Chapter 115, Storage of VOCs | R5111 | Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls True Vapor Pressure = True vapor pressure is greater than or equal to 1.0 psia but less than 1.5 psia Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons | |
| F-1826 | 40 CFR Part 60, | 60K | Construction/Modification Date = After March 8, 1974 and on or before May 19, 1978 | |

| Unit ID | Regulation | Index Number | Basis of Determination* | Changes and Exceptions to DSS** |
|---------|-------------------------------------|--------------|--|---------------------------------|
| | Subpart K | | Storage Capacity = Capacity is 40,000 gallons (151,416 liters) or less | |
| F-2002A | 30 TAC Chapter 115, Storage of VOCs | R5112-01 | Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank using a vapor recovery system (VRS) True Vapor Pressure = True vapor pressure is greater than or equal to 1.5 psia Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons Control Device Type = Flare | |
| F-2002A | 40 CFR Part 63, Subpart YY | 63YY | Source Type = Tank is located at an ethylene production facility and meets the size and vapor pressure requirements of Table 7 to be subject to § 63.1103. | |
| F-2002B | 30 TAC Chapter 115, Storage of VOCs | R5112-01 | Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank using a vapor recovery system (VRS) True Vapor Pressure = True vapor pressure is greater than or equal to 1.5 psia Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is greater than 40,000 gallons Control Device Type = Flare | |
| F-2002B | 40 CFR Part 63, Subpart YY | 63YY | Source Type = Tank is located at an ethylene production facility and meets the size and vapor pressure requirements of Table 7 to be subject to § 63.1103. | |
| F-2003 | 30 TAC Chapter 115, Storage of VOCs | R5112-01 | Construction Date = On or after May 12, 1973 Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank using a submerged fill pipe and vapor recovery system True Vapor Pressure = True vapor pressure is greater than or equal to 1.5 psia Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is greater than 40,000 gallons Control Device Type = Flare | |
| F-2003 | 40 CFR Part 63, Subpart YY | 63YY | Source Type = Tank is located at an ethylene production facility and meets the size and vapor pressure requirements of Table 7 to be subject to § 63.1103. | |

| Unit ID | Regulation | Index Number | Basis of Determination* | Changes and Exceptions to DSS** |
|---------|-------------------------------------|--------------|--|---------------------------------|
| F-2005 | 30 TAC Chapter 115, Storage of VOCs | R5112 | <p>Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.</p> <p>Tank Description = Welded tank using an external floating roof</p> <p>True Vapor Pressure = True vapor pressure is greater than or equal to 1.5 psia</p> <p>Primary Seal = Mechanical shoe</p> <p>Product Stored = VOC other than crude oil or condensate</p> <p>Secondary Seal = Secondary seal not determined since 30 TAC §§ 115.117(a)(4) or 115.117(b)(4) exemption is not utilized</p> <p>Storage Capacity = Capacity is greater than 40,000 gallons</p> | |
| F-2005 | 40 CFR Part 60, Subpart K | 60K | <p>Construction/Modification Date = After March 8, 1974 and on or before May 19, 1978</p> <p>Product Stored = Stored product other than petroleum liquid (as defined in 40 CFR Part 60, Subpart K)</p> | |
| F-2005 | 40 CFR Part 63, Subpart YY | 63YY | Source Type = Tank is located at an ethylene production facility and meets the size and vapor pressure requirements of Table 7 to be subject to § 63.1103. | |
| F-2007 | 30 TAC Chapter 115, Storage of VOCs | R5112-01 | <p>Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.</p> <p>Tank Description = Tank using a vapor recovery system (VRS)</p> <p>True Vapor Pressure = True vapor pressure is greater than or equal to 1.5 psia</p> <p>Product Stored = VOC other than crude oil or condensate</p> <p>Storage Capacity = Capacity is greater than 40,000 gallons</p> <p>Control Device Type = Flare</p> | |
| F-2007 | 40 CFR Part 60, Subpart Kb | 60Kb-1 | <p>Product Stored = Volatile organic liquid</p> <p>Storage Capacity = Capacity is greater than or equal to 39,900 gallons (151,000 liters)</p> <p>Maximum True Vapor Pressure = True vapor pressure is greater than or equal to 11.1 psia</p> <p>Storage Vessel Description = Closed vent system (CVS) with a flare used as the control device (fixed roof)</p> | |
| F-2008 | 30 TAC Chapter 115, Storage of VOCs | R5112 | <p>Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.</p> <p>Tank Description = Welded tank using an external floating roof</p> <p>True Vapor Pressure = True vapor pressure is greater than or equal to 1.5 psia</p> <p>Primary Seal = Mechanical shoe</p> <p>Product Stored = VOC other than crude oil or condensate</p> <p>Secondary Seal = Secondary seal not determined since 30 TAC §§ 115.117(a)(4) or 115.117(b)(4) exemption is not utilized</p> <p>Storage Capacity = Capacity is greater than 40,000 gallons</p> | |
| F-2008 | 40 CFR Part 63, Subpart YY | 63YY | Source Type = Tank is located at an ethylene production facility and meets the size and vapor pressure requirements of Table 7 to be subject to § 63.1103. | |

| Unit ID | Regulation | Index Number | Basis of Determination* | Changes and Exceptions to DSS** |
|---------|-------------------------------------|--------------|--|---------------------------------|
| F-2009A | 30 TAC Chapter 115, Storage of VOCs | R5112 | Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank using an internal floating roof (IFR) True Vapor Pressure = True vapor pressure is greater than or equal to 1.5 psia Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is greater than 40,000 gallons | |
| F-2009A | 40 CFR Part 63, Subpart G | 63G | MACT Subpart F/G Applicability = The unit is a Group 1 vessel (as defined in Table 5 for existing sources or Table 6 for new sources of 40 CFR 63, Subpart G). Seal Type = Metallic shoe seal (as defined in 40 CFR § 63.111) NESHAP Subpart Y Applicability = The unit is subject to 40 CFR Part 61, Subpart Y. Maximum TVP = Maximum true vapor pressure of the total organic HAP in the liquid is less than 11.11 psi (76.6 kPa) Emission Control Type = Internal floating roof | |
| F-2009B | 30 TAC Chapter 115, Storage of VOCs | R5112 | Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank using an internal floating roof (IFR) True Vapor Pressure = True vapor pressure is greater than or equal to 1.5 psia Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is greater than 40,000 gallons | |
| F-2009B | 40 CFR Part 63, Subpart G | 63G | MACT Subpart F/G Applicability = The unit is a Group 1 vessel (as defined in Table 5 for existing sources or Table 6 for new sources of 40 CFR 63, Subpart G). Seal Type = Metallic shoe seal (as defined in 40 CFR § 63.111) NESHAP Subpart Y Applicability = The unit is subject to 40 CFR Part 61, Subpart Y. Maximum TVP = Maximum true vapor pressure of the total organic HAP in the liquid is less than 11.11 psi (76.6 kPa) Emission Control Type = Internal floating roof | |
| F-2010A | 30 TAC Chapter 115, Storage of VOCs | R5111 | Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls True Vapor Pressure = True vapor pressure is greater than or equal to 1.0 psia but less than 1.5 psia Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is greater than 40,000 gallons | |
| F-2010A | 40 CFR Part 60, Subpart K | 60K | Construction/Modification Date = After March 8, 1974 and on or before May 19, 1978 Storage Capacity = Capacity is greater than 65,000 gallons (246,052 liters) Product Stored = Stored product other than petroleum liquid (as defined in 40 CFR Part 60, Subpart K) | |
| F-2010A | 40 CFR Part 63, Subpart YY | 63YY | Source Type = Tank is located at an ethylene production facility and meets the size and vapor pressure requirements of Table 7 to be subject to § 63.1103. | |
| F-2010B | 30 TAC Chapter 115, Storage of | R5111 | Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. | |

| Unit ID | Regulation | Index Number | Basis of Determination* | Changes and Exceptions to DSS** |
|---------|-------------------------------------|--------------|--|---------------------------------|
| | VOCs | | Tank Description = Tank does not require emission controls True Vapor Pressure = True vapor pressure is greater than or equal to 1.0 psia but less than 1.5 psia Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is greater than 40,000 gallons | |
| F-2010B | 40 CFR Part 60, Subpart K | 60K | Construction/Modification Date = After March 8, 1974 and on or before May 19, 1978 Storage Capacity = Capacity is greater than 65,000 gallons (246,052 liters) Product Stored = Stored product other than petroleum liquid (as defined in 40 CFR Part 60, Subpart K) | |
| F-2010B | 40 CFR Part 63, Subpart YY | 63YY | Source Type = Tank is located at an ethylene production facility and meets the size and vapor pressure requirements of Table 7 to be subject to § 63.1103. | |
| F-2017A | 30 TAC Chapter 115, Storage of VOCs | R5111 | Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Product Stored = Other than crude oil, condensate, or VOC | |
| F-2017A | 40 CFR Part 60, Subpart Kb | 60Kb | Product Stored = Stored product other than volatile organic liquid or petroleum liquid | |
| F-2017B | 30 TAC Chapter 115, Storage of VOCs | R5111 | Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Product Stored = Other than crude oil, condensate, or VOC | |
| F-2017B | 40 CFR Part 60, Subpart Kb | 60Kb | Product Stored = Stored product other than volatile organic liquid or petroleum liquid | |
| F-2102A | 30 TAC Chapter 115, Storage of VOCs | R5112 | Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Welded tank using an external floating roof True Vapor Pressure = True vapor pressure is greater than or equal to 1.5 psia Primary Seal = Mechanical shoe Product Stored = VOC other than crude oil or condensate Secondary Seal = Secondary seal not determined since 30 TAC §§ 115.117(a)(4) or 115.117(b)(4) exemption is not utilized Storage Capacity = Capacity is greater than 25,000 gallons but less than or equal to 40,000 gallons | |
| F-2102A | 40 CFR Part 60, Subpart K | 60K | Construction/Modification Date = After March 8, 1974 and on or before May 19, 1978 Storage Capacity = Capacity is 40,000 gallons (151,416 liters) or less | |
| F-2102A | 40 CFR Part 61, Subpart FF | 61FF | Waste Treatment Tank = The tank manages, treats or stores a waste stream subject to 40 CFR Part 61, Subpart FF. Alternative Standard for Tanks = The tank is complying with the alternative standards in 40 CFR § 61.351. Kb Tank Type = Using an external floating roof that meets the requirements of 40 CFR § 60.112b(a)(2) Seal Type = Mechanical shoe primary seal | |
| F-2102A | 40 CFR Part 63, Subpart YY | 63YY | Source Type = Tank is located at an ethylene production facility and meets the size and vapor pressure requirements of Table 7 to be subject to § 63.1103. | |

| Unit ID | Regulation | Index Number | Basis of Determination* | Changes and Exceptions to DSS** |
|---------|-------------------------------------|--------------|---|---------------------------------|
| F-2102B | 30 TAC Chapter 115, Storage of VOCs | R5112 | <p>Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.</p> <p>Tank Description = Welded tank using an external floating roof</p> <p>True Vapor Pressure = True vapor pressure is greater than or equal to 1.5 psia</p> <p>Primary Seal = Mechanical shoe</p> <p>Product Stored = VOC other than crude oil or condensate</p> <p>Secondary Seal = Secondary seal not determined since 30 TAC §§ 115.117(a)(4) or 115.117(b)(4) exemption is not utilized</p> <p>Storage Capacity = Capacity is greater than 25,000 gallons but less than or equal to 40,000 gallons</p> | |
| F-2102B | 40 CFR Part 60, Subpart K | 60K | <p>Construction/Modification Date = After March 8, 1974 and on or before May 19, 1978</p> <p>Storage Capacity = Capacity is 40,000 gallons (151,416 liters) or less</p> | |
| F-2102B | 40 CFR Part 61, Subpart FF | 61FF | <p>Waste Treatment Tank = The tank manages, treats or stores a waste stream subject to 40 CFR Part 61, Subpart FF.</p> <p>Alternative Standard for Tanks = The tank is complying with the alternative standards in 40 CFR § 61.351.</p> <p>Kb Tank Type = Using an external floating roof that meets the requirements of 40 CFR § 60.112b(a)(2)</p> <p>Seal Type = Mechanical shoe primary seal</p> | |
| F-2102B | 40 CFR Part 63, Subpart YY | 63YY | <p>Source Type = Tank is located at an ethylene production facility and meets the size and vapor pressure requirements of Table 7 to be subject to § 63.1103.</p> | |
| F-2102C | 30 TAC Chapter 115, Storage of VOCs | R5112 | <p>Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.</p> <p>Tank Description = Welded tank using an external floating roof</p> <p>True Vapor Pressure = True vapor pressure is greater than or equal to 1.5 psia</p> <p>Primary Seal = Mechanical shoe</p> <p>Product Stored = VOC other than crude oil or condensate</p> <p>Secondary Seal = Secondary seal not determined since 30 TAC §§ 115.117(a)(4) or 115.117(b)(4) exemption is not utilized</p> <p>Storage Capacity = Capacity is greater than 25,000 gallons but less than or equal to 40,000 gallons</p> | |
| F-2102C | 40 CFR Part 60, Subpart Kb | 60Kb | <p>Product Stored = Volatile organic liquid</p> <p>Storage Capacity = Capacity is greater than or equal to 19,800 gallons (75,000 liters) but less than 39,900 gallons (151,000 liters)</p> <p>Maximum True Vapor Pressure = True vapor pressure is less than 2.2 psia</p> | |
| F-2102C | 40 CFR Part 63, Subpart YY | 63YY | <p>Source Type = Tank is located at an ethylene production facility and meets the size and vapor pressure requirements of Table 7 to be subject to § 63.1103.</p> | |
| F-2104 | 30 TAC Chapter 115, Storage of VOCs | R5112-01 | <p>Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.</p> <p>Tank Description = Welded tank using an external floating roof</p> <p>True Vapor Pressure = True vapor pressure is greater than or equal to 1.5 psia</p> <p>Primary Seal = Mechanical shoe</p> | |

| Unit ID | Regulation | Index Number | Basis of Determination* | Changes and Exceptions to DSS** |
|---------|-------------------------------------|--------------|---|---------------------------------|
| | | | Product Stored = VOC other than crude oil or condensate Secondary Seal = Secondary seal not determined since 30 TAC §§ 115.117(a)(4) or 115.117(b)(4) exemption is not utilized Storage Capacity = Capacity is greater than 40,000 gallons | |
| F-2104 | 40 CFR Part 60, Subpart K | 60K | Construction/Modification Date = After March 8, 1974 and on or before May 19, 1978 Product Stored = Stored product other than petroleum liquid (as defined in 40 CFR Part 60, Subpart K) | |
| F-2104 | 40 CFR Part 61, Subpart FF | 61FF | Waste Treatment Tank = The tank manages, treats or stores a waste stream subject to 40 CFR Part 61, Subpart FF. Alternative Standard for Tanks = The tank is complying with the alternative standards in 40 CFR § 61.351. Kb Tank Type = Using an external floating roof that meets the requirements of 40 CFR § 60.112b(a)(2) Seal Type = Mechanical shoe primary seal | |
| F-2113 | 30 TAC Chapter 115, Storage of VOCs | R5112 | Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Welded tank using an external floating roof True Vapor Pressure = True vapor pressure is greater than or equal to 1.5 psia Primary Seal = Mechanical shoe Product Stored = VOC other than crude oil or condensate Secondary Seal = Secondary seal not determined since 30 TAC §§ 115.117(a)(4) or 115.117(b)(4) exemption is not utilized Storage Capacity = Capacity is greater than 40,000 gallons | |
| F-2113 | 40 CFR Part 60, Subpart K | 60K | Construction/Modification Date = After March 8, 1974 and on or before May 19, 1978 Storage Capacity = Capacity is greater than 40,000 gallons (151,416 liters) and less than or equal to 65,000 gallons (246,052 liters) Product Stored = Stored product other than petroleum liquid (as defined in 40 CFR Part 60, Subpart K) | |
| F-2113 | 40 CFR Part 63, Subpart YY | 63YY | Source Type = Tank is located at an ethylene production facility and meets the size and vapor pressure requirements of Table 7 to be subject to § 63.1103. | |
| F-2301 | 30 TAC Chapter 115, Storage of VOCs | R5112 | Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank using an internal floating roof (IFR) True Vapor Pressure = True vapor pressure is greater than or equal to 1.5 psia Primary Seal = Primary seal not determined since 30 TAC §§ 115.117(a)(6), 115.117(a)(7), 115.117(b)(6), or 115.117(b)(7) exemptions are not utilized Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is greater than 40,000 gallons | |
| F-2301 | 40 CFR Part 61, Subpart FF | 61FF | Waste Treatment Tank = The tank manages, treats or stores a waste stream subject to 40 CFR Part 61, Subpart FF. Alternative Standard for Tanks = The tank is complying with the alternative standards in 40 CFR § 61.351. Kb Tank Type = Using a fixed roof and internal floating roof, that meets the requirements of 40 CFR § 60.112b(a)(1) Seal Type = Mechanical shoe seal | |

| Unit ID | Regulation | Index Number | Basis of Determination* | Changes and Exceptions to DSS** |
|---------|-------------------------------------|--------------|--|---------------------------------|
| F-2301 | 40 CFR Part 63, Subpart YY | 63YY | Source Type = Tank is located at an ethylene production facility and meets the size and vapor pressure requirements of Table 7 to be subject to § 63.1103. | |
| F-2305 | 30 TAC Chapter 115, Storage of VOCs | R5112 | Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank using an internal floating roof (IFR) True Vapor Pressure = True vapor pressure is greater than or equal to 1.5 psia Primary Seal = Primary seal not determined since 30 TAC §§ 115.117(a)(6), 115.117(a)(7), 115.117(b)(6), or 115.117(b)(7) exemptions are not utilized Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is greater than 25,000 gallons but less than or equal to 40,000 gallons | |
| F-2305 | 40 CFR Part 61, Subpart FF | 61FF | Waste Treatment Tank = The tank manages, treats or stores a waste stream subject to 40 CFR Part 61, Subpart FF. Alternative Standard for Tanks = The tank is complying with the alternative standards in 40 CFR § 61.351. Kb Tank Type = Using a fixed roof and internal floating roof, that meets the requirements of 40 CFR § 60.112b(a)(1) Seal Type = Mechanical shoe seal | |
| F-2305 | 40 CFR Part 63, Subpart YY | 63YY | Source Type = Tank is located at an ethylene production facility and meets the size and vapor pressure requirements of Table 7 to be subject to § 63.1103. | |
| F-2603 | 30 TAC Chapter 115, Storage of VOCs | R5111 | Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls Product Stored = Gasoline from a storage container in motor vehicle fuel dispensing service (as defined in 30 TAC Chapter 115) Storage Capacity = Capacity is less than 25,000 gallons | |
| F-2603 | 40 CFR Part 60, Subpart K | 60K | Construction/Modification Date = After March 8, 1974 and on or before May 19, 1978 Storage Capacity = Capacity is 40,000 gallons (151,416 liters) or less | |
| FA-1663 | 30 TAC Chapter 115, Storage of VOCs | R5111 | Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls True Vapor Pressure = True vapor pressure is greater than or equal to 1.0 psia but less than 1.5 psia Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is greater than 40,000 gallons | |
| FA-1663 | 40 CFR Part 60, Subpart K | 60K | Construction/Modification Date = After March 8, 1974 and on or before May 19, 1978 Storage Capacity = Capacity is greater than 65,000 gallons (246,052 liters) Product Stored = Stored product other than petroleum liquid (as defined in 40 CFR Part 60, Subpart K) | |
| FA-1663 | 40 CFR Part 63, Subpart YY | 63YY | Source Type = Tank is located at an ethylene production facility and meets the size and vapor pressure requirements of Table 7 to be subject to § 63.1103. | |
| FA-1783 | 30 TAC Chapter 115, Storage of VOCs | R5111 | Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. | |

| Unit ID | Regulation | Index Number | Basis of Determination* | Changes and Exceptions to DSS** |
|---------|-------------------------------------|--------------|---|---------------------------------|
| | | | Tank Description = Tank does not require emission controls True Vapor Pressure = True vapor pressure is greater than or equal to 1.0 psia but less than 1.5 psia Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons | |
| FA-1783 | 40 CFR Part 60, Subpart K | 60K | Construction/Modification Date = After March 8, 1974 and on or before May 19, 1978 Storage Capacity = Capacity is 40,000 gallons (151,416 liters) or less | |
| FA-1784 | 30 TAC Chapter 115, Storage of VOCs | R5111 | Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls True Vapor Pressure = True vapor pressure is greater than or equal to 1.0 psia but less than 1.5 psia Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons | |
| FA-1784 | 40 CFR Part 60, Subpart K | 60K | Construction/Modification Date = After March 8, 1974 and on or before May 19, 1978 Storage Capacity = Capacity is 40,000 gallons (151,416 liters) or less | |
| GRP2TKK | 30 TAC Chapter 115, Storage of VOCs | 60K-HVP-1 | Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Welded tank using an external floating roof True Vapor Pressure = True vapor pressure is greater than or equal to 1.5 psia Primary Seal = Mechanical shoe Product Stored = VOC other than crude oil or condensate Secondary Seal = Secondary seal not determined since 30 TAC §§ 115.117(a)(4) or 115.117(b)(4) exemption is not utilized Storage Capacity = Capacity is greater than 40,000 gallons | |
| GRP2TKK | 30 TAC Chapter 115, Storage of VOCs | 60K-HVP-2 | Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Welded tank using an external floating roof True Vapor Pressure = True vapor pressure is greater than or equal to 1.5 psia Primary Seal = Mechanical shoe Product Stored = Crude oil and/or condensate Secondary Seal = Secondary seal not determined since 30 TAC §§ 115.117(a)(4) or 115.117(b)(4) exemption is not utilized Storage Capacity = Capacity is greater than 40,000 gallons | |

| Unit ID | Regulation | Index Number | Basis of Determination* | Changes and Exceptions to DSS** |
|---------|-------------------------------------|--------------|---|---------------------------------|
| GRP2TKK | 30 TAC Chapter 115, Storage of VOCs | 60K-LOVP-1 | <p>Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.</p> <p>Tank Description = Welded tank using an external floating roof</p> <p>True Vapor Pressure = True vapor pressure is greater than or equal to 1.0 psia but less than 1.5 psia</p> <p>Primary Seal = Mechanical shoe</p> <p>Product Stored = VOC other than crude oil or condensate</p> <p>Secondary Seal = Secondary seal not determined since 30 TAC §§ 115.117(a)(4) or 115.117(b)(4) exemption is not utilized</p> <p>Storage Capacity = Capacity is greater than 40,000 gallons</p> | |
| GRP2TKK | 30 TAC Chapter 115, Storage of VOCs | 60K-LOVP-2 | <p>Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.</p> <p>Tank Description = Welded tank using an external floating roof</p> <p>True Vapor Pressure = True vapor pressure is greater than or equal to 1.0 psia but less than 1.5 psia</p> <p>Primary Seal = Mechanical shoe</p> <p>Product Stored = Crude oil and/or condensate</p> <p>Secondary Seal = Secondary seal not determined since 30 TAC §§ 115.117(a)(4) or 115.117(b)(4) exemption is not utilized</p> <p>Storage Capacity = Capacity is greater than 40,000 gallons</p> | |
| GRP2TKK | 40 CFR Part 60, Subpart K | 60K-HIVP | <p>Construction/Modification Date = After March 8, 1974 and on or before May 19, 1978</p> <p>Storage Capacity = Capacity is greater than 65,000 gallons (246,052 liters)</p> <p>Product Stored = Petroleum (other than crude oil) or condensate</p> <p>True Vapor Pressure = True vapor pressure is at least 1.5 psia and less than 11.1 psia</p> <p>Storage Vessel Description = Floating roof (internal or external)</p> <p>Reid Vapor Pressure = Reid vapor pressure not determined</p> <p>Maximum True Vapor Pressure = Maximum true vapor pressure is not determined</p> | |
| GRP2TKK | 40 CFR Part 60, Subpart K | 60K-LOVP | <p>Construction/Modification Date = After March 8, 1974 and on or before May 19, 1978</p> <p>Storage Capacity = Capacity is greater than 65,000 gallons (246,052 liters)</p> <p>Product Stored = Petroleum (other than crude oil) or condensate</p> <p>True Vapor Pressure = True vapor pressure is less than 1.5 psia</p> <p>Storage Vessel Description = Floating roof (internal or external)</p> <p>Reid Vapor Pressure = Reid vapor pressure not determined</p> <p>Maximum True Vapor Pressure = Maximum true vapor pressure is not determined</p> | |
| GRP2TKK | 40 CFR Part 63, Subpart YY | 63YY | <p>Source Type = Tank is located at an ethylene production facility and meets the size and vapor pressure requirements of Table 7 to be subject to § 63.1103.</p> | |

| Unit ID | Regulation | Index Number | Basis of Determination* | Changes and Exceptions to DSS** |
|----------|-------------------------------------|--------------|---|---------------------------------|
| GRPLHPTK | 30 TAC Chapter 115, Storage of VOCs | R5112 | <p>Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.</p> <p>Tank Description = Welded tank using an external floating roof</p> <p>True Vapor Pressure = True vapor pressure is greater than or equal to 1.5 psia</p> <p>Primary Seal = Mechanical shoe</p> <p>Product Stored = VOC other than crude oil or condensate</p> <p>Secondary Seal = Secondary seal not determined since 30 TAC §§ 115.117(a)(4) or 115.117(b)(4) exemption is not utilized</p> <p>Storage Capacity = Capacity is greater than 40,000 gallons</p> | |
| GRPLHPTK | 40 CFR Part 60, Subpart K | 60K | <p>Construction/Modification Date = After March 8, 1974 and on or before May 19, 1978</p> <p>Product Stored = Stored product other than petroleum liquid (as defined in 40 CFR Part 60, Subpart K)</p> | |
| GRPLHPTK | 40 CFR Part 63, Subpart YY | 63YY | Source Type = Tank is located at an ethylene production facility and meets the size and vapor pressure requirements of Table 7 to be subject to § 63.1103. | |
| GRPLLPTK | 30 TAC Chapter 115, Storage of VOCs | R5111 | <p>Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.</p> <p>Tank Description = Tank does not require emission controls</p> <p>True Vapor Pressure = True vapor pressure is greater than or equal to 1.0 psia but less than 1.5 psia</p> <p>Product Stored = VOC other than crude oil or condensate</p> <p>Storage Capacity = Capacity is greater than 40,000 gallons</p> | |
| GRPLLPTK | 40 CFR Part 60, Subpart K | 60K | <p>Construction/Modification Date = After March 8, 1974 and on or before May 19, 1978</p> <p>Storage Capacity = Capacity is greater than 65,000 gallons (246,052 liters)</p> <p>Product Stored = Stored product other than petroleum liquid (as defined in 40 CFR Part 60, Subpart K)</p> | |
| GRPLLPTK | 40 CFR Part 63, Subpart YY | 63YY | Source Type = Tank is located at an ethylene production facility and meets the size and vapor pressure requirements of Table 7 to be subject to § 63.1103. | |
| GRPMHPTK | 30 TAC Chapter 115, Storage of VOCs | R5112 | <p>Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.</p> <p>Tank Description = Welded tank using an external floating roof</p> <p>True Vapor Pressure = True vapor pressure is greater than or equal to 1.5 psia</p> <p>Primary Seal = Mechanical shoe</p> <p>Product Stored = VOC other than crude oil or condensate</p> <p>Secondary Seal = Secondary seal not determined since 30 TAC §§ 115.117(a)(4) or 115.117(b)(4) exemption is not utilized</p> <p>Storage Capacity = Capacity is greater than 25,000 gallons but less than or equal to 40,000 gallons</p> | |
| GRPMHPTK | 40 CFR Part 60, Subpart K | 60K | <p>Construction/Modification Date = After March 8, 1974 and on or before May 19, 1978</p> <p>Storage Capacity = Capacity is 40,000 gallons (151,416 liters) or less</p> | |

| Unit ID | Regulation | Index Number | Basis of Determination* | Changes and Exceptions to DSS** |
|-----------|--|--------------|--|---------------------------------|
| GRPMHPTK | 40 CFR Part 61, Subpart FF | 61FF | <p>Waste Treatment Tank = The tank manages, treats or stores a waste stream subject to 40 CFR Part 61, Subpart FF.</p> <p>Alternative Standard for Tanks = The tank is complying with the alternative standards in 40 CFR § 61.351.</p> <p>Kb Tank Type = Using an external floating roof that meets the requirements of 40 CFR § 60.112b(a)(2)</p> <p>Seal Type = Mechanical shoe primary seal</p> | |
| GRPMHPTK | 40 CFR Part 63, Subpart YY | 63YY | <p>Source Type = Tank is located at an ethylene production facility and meets the size and vapor pressure requirements of Table 7 to be subject to § 63.1103.</p> | |
| GRPSMPTK | 30 TAC Chapter 115, Storage of VOCs | R5111 | <p>Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.</p> <p>Tank Description = Tank does not require emission controls</p> <p>True Vapor Pressure = True vapor pressure is greater than or equal to 1.0 psia but less than 1.5 psia</p> <p>Product Stored = VOC other than crude oil or condensate</p> <p>Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons</p> | |
| GRPSMPTK | 40 CFR Part 60, Subpart K | 60K | <p>Construction/Modification Date = After March 8, 1974 and on or before May 19, 1978</p> <p>Storage Capacity = Capacity is 40,000 gallons (151,416 liters) or less</p> | |
| N81504 | 30 TAC Chapter 115, Storage of VOCs | R5111 | <p>Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.</p> <p>Tank Description = Tank does not require emission controls</p> <p>True Vapor Pressure = True vapor pressure is greater than or equal to 1.0 psia but less than 1.5 psia</p> <p>Product Stored = VOC other than crude oil or condensate</p> <p>Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons</p> | |
| N81504 | 40 CFR Part 60, Subpart K | 60K | <p>Construction/Modification Date = After March 8, 1974 and on or before May 19, 1978</p> <p>Storage Capacity = Capacity is 40,000 gallons (151,416 liters) or less</p> | |
| BIPHNLTRK | 30 TAC Chapter 115, Loading and Unloading of VOC | R5211 | <p>Chapter 115 Facility Type = Facility type other than a gasoline terminal, gasoline bulk plant, motor vehicle fuel dispensing facility or marine terminal.</p> <p>Alternate Control Requirement (ACR) = No alternate control requirements are being utilized.</p> <p>Product Transferred = Volatile organic compounds other than liquefied petroleum gas, crude oil, condensate and gasoline.</p> <p>Transfer Type = Only loading.</p> <p>True Vapor Pressure = True vapor pressure is less than 1.5 psia.</p> | |
| BIPHNLTRK | 40 CFR Part 63, Subpart YY | 63YY | <p>Source Type = Ethylene production.</p> <p>True Vapor Pressure = The true vapor pressure of the loaded material is at least 3.4 kPa (0.5 psi).</p> <p>Average Volume Transferred = Volume transferred is at least 76 m³ per day (20,077 gallons per day), averaged over any 30 consecutive days.</p> | |

| Unit ID | Regulation | Index Number | Basis of Determination* | Changes and Exceptions to DSS** |
|------------|--|--------------|--|---------------------------------|
| L43 | 30 TAC Chapter 115, Loading and Unloading of VOC | R5131 | Chapter 115 Facility Type = Facility type other than a gasoline terminal, gasoline bulk plant, motor vehicle fuel dispensing facility or marine terminal. Alternate Control Requirement (ACR) = No alternate control requirements are being utilized. Product Transferred = Volatile organic compounds other than liquefied petroleum gas, crude oil, condensate and gasoline. Transfer Type = Only loading. True Vapor Pressure = True vapor pressure is less than 1.5 psia. | |
| L43 | 40 CFR Part 63, Subpart YY | 63YY | Source Type = Ethylene production. True Vapor Pressure = The true vapor pressure of the loaded material is at least 3.4 kPa (0.5 psi). Average Volume Transferred = Volume transferred is at least 76 m ³ per day (20,077 gallons per day), averaged over any 30 consecutive days. | |
| REGVUNLOAD | 30 TAC Chapter 115, Loading and Unloading of VOC | D5211-1 | Chapter 115 Facility Type = Facility type other than a gasoline terminal, gasoline bulk plant, motor vehicle fuel dispensing facility or marine terminal. Alternate Control Requirement (ACR) = No alternate control requirements are being utilized. Product Transferred = Volatile organic compounds other than liquefied petroleum gas, crude oil, condensate and gasoline. Transfer Type = Loading and unloading. True Vapor Pressure = True vapor pressure is less than 1.5 psia. | |
| REGVUNLOAD | 30 TAC Chapter 115, Loading and Unloading of VOC | R5211-2 | Chapter 115 Facility Type = Facility type other than a gasoline terminal, gasoline bulk plant, motor vehicle fuel dispensing facility or marine terminal. Alternate Control Requirement (ACR) = No alternate control requirements are being utilized. Vapor Tight = All liquid and vapor lines are equipped with fittings which make vapor-tight connections that close automatically when disconnected. Product Transferred = Volatile organic compounds other than liquefied petroleum gas, crude oil, condensate and gasoline. Transfer Type = Only unloading. True Vapor Pressure = True vapor pressure is greater than or equal to 1.5 psia. | |
| B-1601A | 40 CFR Part 63, Subpart DDDDD | 63DDDD | CONSTRUCTION/RECONSTRUCTION DATE = Construction or reconstruction began on or before June 4, 2010. | |
| B-1601B | 40 CFR Part 63, Subpart DDDDD | 63DDDD | CONSTRUCTION/RECONSTRUCTION DATE = Construction or reconstruction began on or before June 4, 2010. | |
| B-1601C | 40 CFR Part 63, Subpart DDDDD | 63DDDD | CONSTRUCTION/RECONSTRUCTION DATE = Construction or reconstruction began on or before June 4, 2010. | |
| B-1601D | 40 CFR Part 63, Subpart DDDDD | 63DDDD | CONSTRUCTION/RECONSTRUCTION DATE = Construction or reconstruction began on or before June 4, 2010. | |
| B-1601E | 40 CFR Part 63, Subpart DDDDD | 63DDDD | CONSTRUCTION/RECONSTRUCTION DATE = Construction or reconstruction began on or before June 4, 2010. | |
| B-1601F | 40 CFR Part 63, Subpart DDDDD | 63DDDD | CONSTRUCTION/RECONSTRUCTION DATE = Construction or reconstruction began on or before June 4, 2010. | |

| Unit ID | Regulation | Index Number | Basis of Determination* | Changes and Exceptions to DSS** |
|----------|--|--------------|---|---------------------------------|
| B-1601G | 40 CFR Part 63, Subpart DDDDD | 63DDDD | CONSTRUCTION/RECONSTRUCTION DATE = Construction or reconstruction began on or before June 4, 2010. | |
| B-1601H | 40 CFR Part 63, Subpart DDDDD | 63DDDD | CONSTRUCTION/RECONSTRUCTION DATE = Construction or reconstruction began on or before June 4, 2010. | |
| B-1601J | 40 CFR Part 63, Subpart DDDDD | 63DDDD | CONSTRUCTION/RECONSTRUCTION DATE = Construction or reconstruction began on or before June 4, 2010. | |
| B-1601K | 40 CFR Part 63, Subpart DDDDD | 63DDDD | CONSTRUCTION/RECONSTRUCTION DATE = Construction or reconstruction began on or before June 4, 2010. | |
| B-1601L | 40 CFR Part 63, Subpart DDDDD | 63DDDD | CONSTRUCTION/RECONSTRUCTION DATE = Construction or reconstruction began on or before June 4, 2010. | |
| B-1601M | 40 CFR Part 63, Subpart DDDDD | 63DDDD | CONSTRUCTION/RECONSTRUCTION DATE = Construction or reconstruction began on or before June 4, 2010. | |
| B-1601N | 40 CFR Part 63, Subpart DDDDD | 63DDDD | CONSTRUCTION/RECONSTRUCTION DATE = Construction or reconstruction began on or before June 4, 2010. | |
| B-1602A | 40 CFR Part 63, Subpart DDDDD | 63DDDD | CONSTRUCTION/RECONSTRUCTION DATE = Construction or reconstruction began on or before June 4, 2010. | |
| B-1602B | 40 CFR Part 63, Subpart DDDDD | 63DDDD | CONSTRUCTION/RECONSTRUCTION DATE = Construction or reconstruction began on or before June 4, 2010. | |
| B-1851 | 40 CFR Part 63, Subpart DDDDD | 63DDDD | CONSTRUCTION/RECONSTRUCTION DATE = Construction or reconstruction began on or before June 4, 2010. | |
| GRP-FURN | 40 CFR Part 63, Subpart DDDDD | 63DDDD | CONSTRUCTION/RECONSTRUCTION DATE = Construction or reconstruction began on or before June 4, 2010. | |
| 44A | 30 TAC Chapter 117, Subchapter E, Division 1 | R7DIV-E | Date Placed in Service = Before December 31, 1995. Unit Exempt = The unit has an annual heat input of $2.2(10^{11})$ Btu/yr or less, averaged over the three most recent calendar years. | |
| 44A | 40 CFR Part 60, Subpart Db | 60GG-1 | Construction/Modification Date = On or after November 25, 1986, and on or before July 9, 1997. D-Series Fuel Type #1 = Natural gas. Heat Input Capacity = Heat input capacity is greater than 100 MMBtu/hr (29 MW) but less than or equal to 250 MMBtu/hr (73 MW). PM Monitoring Type = No particulate monitoring. Opacity Monitoring Type = No particulate (opacity) monitoring. Subpart Da = The affected facility does not meet applicability requirements of 40 CFR Part 60, Subpart Da. Changes to Existing Affected Facility = No change has been made to the existing steam generating unit, which was not previously subject to 40 CFR Part 60, Subpart Db, for the sole purpose of combusting gases containing totally reduced sulfur as defined under 40 CFR § 60.281. NOx Monitoring Type = No NO _x monitoring. Subpart D = The affected facility meets the applicability requirements of 40 CFR Part 60, Subpart D. SO ₂ Monitoring Type = No SO ₂ monitoring. Subpart Ea, Eb or AAAA = The affected facility does not meet applicability requirements of and is subject to 40 CFR | |

| Unit ID | Regulation | Index Number | Basis of Determination* | Changes and Exceptions to DSS** |
|---------|----------------------------|--------------|---|---------------------------------|
| | | | <p>Part 60, Subpart Ea, Eb or AAAA.</p> <p>Subpart J = The affected facility does not meet applicability requirements of 40 CFR Part 60, Subpart J.</p> <p>Subpart E = The affected facility does not meet applicability requirements of 40 CFR Part 60, Subpart E.</p> <p>Subpart KKKK = The affected facility is not a heat recovery steam generator associated with combined cycle gas turbines and that meets applicability requirements of and is subject to 40 CFR Part 60, Subpart KKKK.</p> <p>Technology Type = Other conventional technology.</p> <p>ACF Option - SO₂ = Other ACF or no ACF.</p> <p>Subpart Cb or BBBB = The affected facility is not covered by an EPA approved State or Federal section 111(d)/129 plan implementing 40 CFR Part 60, Subpart Cb or BBBB emission guidelines.</p> <p>Unit Type = Duct burner as part of combined cycle system (compliance with NO_x limitations is determined by conducting a performance test).</p> <p>ACF Option - PM = Other ACF or no ACF.</p> <p>ACF Option - NO_x = Natural gas, distillate oil, and residual oil with a nitrogen content less than or equal to 0.30% combined ACF less than or equal to 10%.</p> <p>Heat Input Gas/Oil = The facility combusts natural gas or distillate oil in excess of 30% of the heat input from the combustion of all fuels.</p> <p>Fuel Heat Input = The heat input is less than or equal to 30% from combustion of coal and oil in the duct burner and heat input is greater than or equal to 70% from the exhaust gases entering the duct burner.</p> | |
| 44B | 40 CFR Part 60, Subpart Db | 60Db-1 | <p>Construction/Modification Date = On or after November 25, 1986, and on or before July 9, 1997.</p> <p>D-Series Fuel Type #1 = Byproduct/waste.</p> <p>Heat Input Capacity = Heat input capacity is greater than 100 MMBtu/hr (29 MW) but less than or equal to 250 MMBtu/hr (73 MW).</p> <p>PM Monitoring Type = No particulate monitoring.</p> <p>Opacity Monitoring Type = No particulate (opacity) monitoring.</p> <p>Subpart Da = The affected facility does not meet applicability requirements of 40 CFR Part 60, Subpart Da.</p> <p>Changes to Existing Affected Facility = No change has been made to the existing steam generating unit, which was not previously subject to 40 CFR Part 60, Subpart Db, for the sole purpose of combusting gases containing totally reduced sulfur as defined under 40 CFR § 60.281.</p> <p>NO_x Monitoring Type = No NO_x monitoring.</p> <p>SO₂ Monitoring Type = No SO₂ monitoring.</p> <p>Subpart Ea, Eb or AAAA = The affected facility does not meet applicability requirements of and is subject to 40 CFR Part 60, Subpart Ea, Eb or AAAA.</p> <p>Subpart J = The affected facility does not meet applicability requirements of 40 CFR Part 60, Subpart J.</p> <p>Subpart E = The affected facility does not meet applicability requirements of 40 CFR Part 60, Subpart E.</p> <p>Subpart KKKK = The affected facility is not a heat recovery steam generator associated with combined cycle gas turbines and that meets applicability requirements of and is subject to 40 CFR Part 60, Subpart KKKK.</p> <p>Technology Type = None.</p> <p>ACF Option - SO₂ = Other ACF or no ACF.</p> <p>Subpart Cb or BBBB = The affected facility is not covered by an EPA approved State or Federal section 111(d)/129 plan implementing 40 CFR Part 60, Subpart Cb or BBBB emission guidelines.</p> <p>Unit Type = Duct burner as part of combined cycle system (compliance with NO_x limitations is determined by</p> | |

| Unit ID | Regulation | Index Number | Basis of Determination* | Changes and Exceptions to DSS** |
|-----------|--------------------------------------|--------------|--|---------------------------------|
| | | | <p>conducting a performance test).</p> <p>ACF Option - PM = Other ACF or no ACF.</p> <p>ACF Option - NOx = Other ACF or no ACF.</p> <p>Fuel Heat Input = The heat input is less than or equal to 30% from combustion of coal and oil in the duct burner and heat input is greater than or equal to 70% from the exhaust gases entering the duct burner.</p> | |
| GRPBOILER | 30 TAC Chapter 112, Sulfur Compounds | R112 | <p>Fuel Type = Liquid fuel.</p> <p>Date of Operation = Began operation on or after January 1, 1955.</p> <p>Heat Input = Design heat input is greater than 250 MMBtu/hr.</p> <p>Control Equipment = Unit not equipped with SO₂ control equipment.</p> <p>Stack Height = The effective stack height is less than the standard effective stack height for each stack to which the unit routes emissions.</p> | |
| GRPBOILER | 40 CFR Part 60, Subpart D | 60D-1 | <p>Construction/Modification Date = After December 22, 1976, and on or before September 18, 1978.</p> <p>D-Series Fuel Type #1 = Gaseous fossil fuel.</p> <p>Covered Under Subpart Da = The steam generating unit is not covered under 40 CFR Part 60, Subpart Da.</p> <p>Changes to Existing Affected Facility = No change has been made to the existing fossil fuel-fired steam generating unit.</p> <p>Alternate 43D = No alternative requirement is used for SO₂, unit is complying with requirements of § 60.43(a) and (b).</p> <p>Heat Input Rate = Heat input rate is greater than 250 MMBtu/hr (73 MW).</p> <p>Alternate 42C = The facility is meeting the requirements of § 60.42(a) for PM.</p> <p>Alternate 44E = The facility is meeting the requirements of § 60.44(a), (b), and (d) for NO_x.</p> <p>Flue Gas Desulfurization = The unit does not utilize a flue gas desulfurization device.</p> <p>PM CEMS = The facility does not use a CEMS to measure PM.</p> <p>Fuel Sampling and Analysis = The unit does not use fuel sampling and analysis for monitoring of sulfur dioxide emissions.</p> <p>Gas or Liquid Fuel Only = Burns only gaseous or liquid fossil fuel (not residual oil) with potential SO₂ emissions rates of 0.060 lb/MMBtu or less, does not use post combustion technology to reduce of SO₂ or PM, and monitors SO₂ emissions by sampling or fuel receipts.</p> <p>Cyclone-Fired Unit = The unit is not a cyclone-fired unit.</p> <p>Fuels with 0.33 Percent or Less Sulfur = Facility uses post combustion technology (except a wet scrubber) for reducing PM, SO₂, or CO, burns gaseous fuels or fuel oils that contain more than 0.30 % sulfur by weight or other fuels, or operates so CO emissions are > 0.15 lb/MMBtu average.</p> <p>NOx Monitoring Type = It was demonstrated during the performance test that emissions of NO_x are less than 70% of applicable standards in 40 CFR § 60.44.</p> <p>PM CEMS Petition = No petition has been granted to install a PM CEMS as an alternative to the CEMS for monitoring opacity emissions.</p> | |
| GRPBOILER | 40 CFR Part 60, Subpart D | 60D-2 | <p>Construction/Modification Date = After December 22, 1976, and on or before September 18, 1978.</p> <p>D-Series Fuel Type #1 = Nonfossil fuel.</p> <p>Covered Under Subpart Da = The steam generating unit is not covered under 40 CFR Part 60, Subpart Da.</p> <p>D-Series Fuel Type #2 = Nonfossil fuel.</p> <p>Changes to Existing Affected Facility = No change has been made to the existing fossil fuel-fired steam generating unit.</p> | |

| Unit ID | Regulation | Index Number | Basis of Determination* | Changes and Exceptions to DSS** |
|-----------|---------------------------------------|--------------|---|---------------------------------|
| | | | Heat Input Rate = Heat input rate is greater than 250 MMBtu/hr (73 MW). | |
| GRPBOILER | 40 CFR Part 63, Subpart DDDDD | 63DDDDD | Construction/Reconstruction Date = Construction or reconstruction began on or before June 4, 2010. | |
| BX001FL | 30 TAC Chapter 111, Visible Emissions | NA | Acid Gases Only = Flare is not used only as an acid gas flare as defined in 30 TAC § 101.1. Emergency/Upset Conditions Only = Flare is used under conditions other than emergency or upset conditions. Alternate Opacity Limitation = Not complying with an alternate opacity limit under 30 TAC § 111.113. | |
| BX001FL | 40 CFR Part 60, Subpart A | <60FPS | Subject to 40 CFR § 60.18 = Flare is subject to 40 CFR § 60.18. Adhering to Heat Content Specifications = Adhering to the heat content specifications in 40 CFR § 60.18(c)(3)(ii) and the maximum tip velocity specifications in 40 CFR § 60.18(c)(4). Flare Assist Type = Steam-assisted Flare Exit Velocity = Flare exit velocity is less than 60 ft/s (18.3 m/sec) | |
| BX001FL | 40 CFR Part 60, Subpart A | >60FPS | Subject to 40 CFR § 60.18 = Flare is subject to 40 CFR § 60.18. Adhering to Heat Content Specifications = Adhering to the heat content specifications in 40 CFR § 60.18(c)(3)(ii) and the maximum tip velocity specifications in 40 CFR § 60.18(c)(4). Flare Assist Type = Steam-assisted Flare Exit Velocity = Flare exit velocity is greater than or equal to 60 ft/s (18.3 m/sec) but less than 400 ft/s (122 m/sec). Heating Value of Gas = Heating value is greater than 1000 Btu/scf (37.3 MJ/scm) | |
| BX001FL | 40 CFR Part 63, Subpart A | <60FPS | Required Under 40 CFR Part 63 = Flare is required by a Subpart under 40 CFR Part 63. Heat Content Specification = Adhering to the heat content specifications in 40 CFR § 63.11(b)(6)(ii) and the maximum tip velocity specifications in 40 CFR § 63.11(b)(7) or 40 CFR § 63.11(b)(8). Flare Assist Type = Steam assisted Flare Exit Velocity = Flare exit velocity is less than 60 ft/s (18.3 m/sec) | |
| BX001FL | 40 CFR Part 63, Subpart A | >60FPS | Required Under 40 CFR Part 63 = Flare is required by a Subpart under 40 CFR Part 63. Heat Content Specification = Adhering to the heat content specifications in 40 CFR § 63.11(b)(6)(ii) and the maximum tip velocity specifications in 40 CFR § 63.11(b)(7) or 40 CFR § 63.11(b)(8). Flare Assist Type = Steam assisted Flare Exit Velocity = Flare exit velocity is greater than or equal to 60 ft/s (18.3 m/sec) but less than 400 ft/s (122 m/sec). Heating Value of Gas = Heating value is greater than 1000 Btu/scf (37.3 MJ/scm). | |
| L-2019A | 30 TAC Chapter 111, Visible Emissions | R1111 | Acid Gases Only = Flare is not used only as an acid gas flare as defined in 30 TAC § 101.1. Emergency/Upset Conditions Only = Flare is used under conditions other than emergency or upset conditions. Alternate Opacity Limitation = Not complying with an alternate opacity limit under 30 TAC § 111.113. | |
| L-2019A | 40 CFR Part 60, Subpart A | <60FPS | Subject to 40 CFR § 60.18 = Flare is subject to 40 CFR § 60.18. Adhering to Heat Content Specifications = Adhering to the heat content specifications in 40 CFR § 60.18(c)(3)(ii) and the maximum tip velocity specifications in 40 CFR § 60.18(c)(4). Flare Assist Type = Steam-assisted | |

| Unit ID | Regulation | Index Number | Basis of Determination* | Changes and Exceptions to DSS** |
|---------|---------------------------------------|--------------|---|---------------------------------|
| | | | Flare Exit Velocity = Flare exit velocity is less than 60 ft/s (18.3 m/sec) | |
| L-2019A | 40 CFR Part 60, Subpart A | >60FPS | Subject to 40 CFR § 60.18 = Flare is subject to 40 CFR § 60.18. Adhering to Heat Content Specifications = Adhering to the heat content specifications in 40 CFR § 60.18(c)(3)(ii) and the maximum tip velocity specifications in 40 CFR § 60.18(c)(4). Flare Assist Type = Steam-assisted Flare Exit Velocity = Flare exit velocity is greater than or equal to 60 ft/s (18.3 m/sec) but less than 400 ft/s (122 m/sec). Heating Value of Gas = Heating value is greater than 1000 Btu/scf (37.3 MJ/scm) | |
| L-2019A | 40 CFR Part 63, Subpart A | <60FPS | Required Under 40 CFR Part 63 = Flare is required by a Subpart under 40 CFR Part 63. Heat Content Specification = Adhering to the heat content specifications in 40 CFR § 63.11(b)(6)(ii) and the maximum tip velocity specifications in 40 CFR § 63.11(b)(7) or 40 CFR § 63.11(b)(8). Flare Assist Type = Steam assisted Flare Exit Velocity = Flare exit velocity is less than 60 ft/s (18.3 m/sec) | |
| L-2019A | 40 CFR Part 63, Subpart A | >60FPS | Required Under 40 CFR Part 63 = Flare is required by a Subpart under 40 CFR Part 63. Heat Content Specification = Adhering to the heat content specifications in 40 CFR § 63.11(b)(6)(ii) and the maximum tip velocity specifications in 40 CFR § 63.11(b)(7) or 40 CFR § 63.11(b)(8). Flare Assist Type = Steam assisted Flare Exit Velocity = Flare exit velocity is greater than or equal to 60 ft/s (18.3 m/sec) but less than 400 ft/s (122 m/sec). Heating Value of Gas = Heating value is greater than 1000 Btu/scf (37.3 MJ/scm). | |
| L-2019B | 30 TAC Chapter 111, Visible Emissions | R1111 | Acid Gases Only = Flare is not used only as an acid gas flare as defined in 30 TAC § 101.1. Emergency/Upset Conditions Only = Flare is used under conditions other than emergency or upset conditions. Alternate Opacity Limitation = Not complying with an alternate opacity limit under 30 TAC § 111.113. | |
| L-2019B | 40 CFR Part 60, Subpart A | <60FPS | Subject to 40 CFR § 60.18 = Flare is subject to 40 CFR § 60.18. Adhering to Heat Content Specifications = Adhering to the heat content specifications in 40 CFR § 60.18(c)(3)(ii) and the maximum tip velocity specifications in 40 CFR § 60.18(c)(4). Flare Assist Type = Steam-assisted Flare Exit Velocity = Flare exit velocity is less than 60 ft/s (18.3 m/sec) Heating Value of Gas = Heating value is less than or equal to 1000 Btu/scf (37.3 MJ/scm). | |
| L-2019B | 40 CFR Part 60, Subpart A | >60FPS | Subject to 40 CFR § 60.18 = Flare is subject to 40 CFR § 60.18. Adhering to Heat Content Specifications = Adhering to the heat content specifications in 40 CFR § 60.18(c)(3)(ii) and the maximum tip velocity specifications in 40 CFR § 60.18(c)(4). Flare Assist Type = Steam-assisted Flare Exit Velocity = Flare exit velocity is greater than or equal to 60 ft/s (18.3 m/sec) but less than 400 ft/s (122 m/sec). Heating Value of Gas = Heating value is greater than 1000 Btu/scf (37.3 MJ/scm) | |
| L-2019B | 40 CFR Part 63, Subpart A | <60FPS | Required Under 40 CFR Part 63 = Flare is not required by a Subpart under 40 CFR Part 63. | |

| Unit ID | Regulation | Index Number | Basis of Determination* | Changes and Exceptions to DSS** |
|----------------|--------------------------------------|---------------------|--|--|
| L-2019B | 40 CFR Part 63, Subpart A | >60FPS | Required Under 40 CFR Part 63 = Flare is not required by a Subpart under 40 CFR Part 63. | |
| 44A | 40 CFR Part 60, Subpart GG | 60GG-1 | NOx Control Method = Water or steam injection only. Peak Load Heat Input = Heat Input is greater than 100 MMBtu/hr (107.2 GJ/hr) Construction/Modification Date = On or after October 3, 1982 and before July 8, 2004. Sulfur Content = Compliance is demonstrated by determining the sulfur content of the fuel. Subpart GG Service Type = Type of service other than research and development, emergency, military or electrical utility generation. Fuel Monitoring Schedule = Previously approved custom fuel monitoring schedule. Manufacturer's Rated Base Load = Base load is greater than 30 MW. | |
| FUGITIVES | 40 CFR Part 60, Subpart VV | 60VV | Produces Chemicals = The fugitive unit is part of a facility that produces as an intermediate or final product one or more of the chemicals listed in 40 CFR § 60.489. Affected Facility = The fugitive unit is part of a facility that is an affected facility as defined in 40 CFR § 60.480(a)(2). Construction/Modification Date = On or before January 5, 1981. | |
| FUGITIVES | 40 CFR Part 61, Subpart J | 61JALL | SOP Index No. = OWNER/OPERATOR ASSUMES FUGITIVE CONTROL REQUIREMENTS FOR ALL COMPONENTS IN BENZENE SERVICE SUBJECT TO NESHAPS J WITH NO ALTERNATE CONTROL OR CONTROL DEVICE | |
| FUGITIVES | 40 CFR Part 61, Subpart V | 61VALL | SOP Index No. = Owner or operator assumes fugitive unit control requirements for all components in benzene service subject to 40 CFR Part 61, Subpart V with no alternate control or control device. | |
| FUGITIVES | 40 CFR Part 63, Subpart H | 63HALL | SOP Index No. = Owner/Operator assumes fugitive control requirements for all components in VOC or VHAP service subject to 40 CFR Part 63, Subpart H with no alternated control or control device. | |
| FUGITIVES | 40 CFR Part 63, Subpart YY | 63YY | Source Type = Ethylene Production. Equipment Type = The fugitive unit contains equipment, as defined in § 63.1101, contactin hazardous air pollutants in Tables 1 through 7 or Table 9, as appropriate. | |
| D6.0001 | 40 CFR Part 63, Subpart Q | 63Q | Used Compounds Containing Chromium on or After September 8, 1994 = The industrial process cooling tower has not used compounds containing chromium on or after September 8, 1994. | |
| L-2010 | 40 CFR Part 63, Subpart Q | 63Q | Used Compounds Containing Chromium on or After September 8, 1994 = The industrial process cooling tower has not used compounds containing chromium on or after September 8, 1994. | |
| D8.0505 | 30 TAC Chapter 115, Water Separation | R5131 | Alternate Control Requirement = The executive director (or the EPA Administrator) has not approved an ACR or exemption criteria in accordance with 30 TAC § 115.910. Exemption = Water separator does not qualify for exemption. Emission Control Option = Vapor recovery system which satisfies the provisions of 30 TAC § 115.131. Control Device = Control device or vapor recovery system other than a chiller, carbon adsorber, or incinerator. | |
| D8.0505 | 40 CFR Part 63, Subpart VV | 63VV | Control = No subpart of 40 CFR Parts 60, 61, or 63 references the use of 40 CFR Part 63, Subpart VV for control of emissions from the separator. | |

| Unit ID | Regulation | Index Number | Basis of Determination* | Changes and Exceptions to DSS** |
|---------|---------------------------------------|--------------|--|---------------------------------|
| F-2101 | 30 TAC Chapter 115, Water Separation | R5131 | <p>Alternate Control Requirement = The executive director (or the EPA Administrator) has not approved an ACR or exemption criteria in accordance with 30 TAC § 115.910.</p> <p>Exemption = Water separator does not qualify for exemption.</p> <p>Emission Control Option = The compartment has all openings sealed and totally encloses the liquid contents with gauging and sampling devices that are vapor tight except when in use.</p> | |
| F-2101 | 40 CFR Part 63, Subpart VV | 63VV | Control = No subpart of 40 CFR Parts 60, 61, or 63 references the use of 40 CFR Part 63, Subpart VV for control of emissions from the separator. | |
| G-1704A | 40 CFR Part 61, Subpart FF | 61FF | <p>Alternate Means of Compliance = NO</p> <p>By-Pass Line = THE CLOSED VENT SYSTEM HAS NO BY-PASS LINE</p> <p>Alternative Standards for Oil-Water Separator = NO</p> <p>Control Device Type/Operation = FLARE</p> <p>Fuel Gas System = EMISSIONS ARE ROUTED TO A CONTROL DEVICE</p> <p>Cover and Closed Vent = CLOSED VENT SYSTEM IS OPERATED SUCH THAT THE OIL-WATER SEPARATOR IS MAINTAINED AT NON-NEGATIVE PRESSURE (GREATER THAN ATMOSPHERIC)</p> <p>Close Vent System and Control Device AMOC = COMPLYING WITH THE REQUIREMENTS OF § 61.349</p> | |
| G-1704B | 40 CFR Part 61, Subpart FF | 61FF | <p>Alternate Means of Compliance = NO</p> <p>By-Pass Line = THE CLOSED VENT SYSTEM HAS NO BY-PASS LINE</p> <p>Alternative Standards for Oil-Water Separator = NO</p> <p>Control Device Type/Operation = FLARE</p> <p>Fuel Gas System = EMISSIONS ARE ROUTED TO A CONTROL DEVICE</p> <p>Cover and Closed Vent = CLOSED VENT SYSTEM IS OPERATED SUCH THAT THE OIL-WATER SEPARATOR IS MAINTAINED AT NON-NEGATIVE PRESSURE (GREATER THAN ATMOSPHERIC)</p> <p>Close Vent System and Control Device AMOC = COMPLYING WITH THE REQUIREMENTS OF § 61.349</p> | |
| L-2101 | 30 TAC Chapter 115, Water Separation | R5131 | <p>Alternate Control Requirement = The executive director (or the EPA Administrator) has not approved an ACR or exemption criteria in accordance with 30 TAC § 115.910.</p> <p>Exemption = Water separator does not qualify for exemption.</p> <p>Emission Control Option = Vapor recovery system which satisfies the provisions of 30 TAC § 115.131.</p> <p>Control Device = Carbon adsorption system.</p> | |
| L-2101 | 40 CFR Part 63, Subpart VV | 63VV | Control = No subpart of 40 CFR Parts 60, 61, or 63 references the use of 40 CFR Part 63, Subpart VV for control of emissions from the separator. | |
| 44 | 30 TAC Chapter 111, Visible Emissions | R1-111 | <p>Alternate Opacity Limitation = Not complying with an alternate opacity limit under 30 TAC § 111.113.</p> <p>Vent Source = The source of the vent is not a steam generator fired by solid fossil fuel, oil or a mixture of oil and gas and is not a catalyst regenerator for a fluid bed catalytic cracking unit.</p> <p>Opacity Monitoring System = Optical instrument capable of measuring the opacity of emissions is not installed in the vent or optical instrumentation does not meet the requirements of § 111.111(a)(1)(D), or the vent stream does not qualify for the exemption in § 111.111(a)(3).</p> <p>Construction Date = After January 31, 1972</p> <p>Effluent Flow Rate = Effluent flow rate is at least 100,000 actual cubic feet per minute.</p> | |

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| 4A/B/C/D | 30 TAC Chapter 111, Visible Emissions | R111-2 | <p>Alternate Opacity Limitation = Not complying with an alternate opacity limit under 30 TAC § 111.113.</p> <p>SIP Violation = The source is able to comply with applicable PM and opacity regulations without the use of PM collection equipment and has not been found to be in violation of any visible emission standard in a State Implementation Plan.</p> <p>Vent Source = The source of the vent is a steam generator that burns oil or a mixture of oil and gas.</p> <p>Opacity Monitoring System = A continuous emissions monitoring system (CEMS) capable of measuring the opacity of emissions is installed in the vent in accordance with 30 TAC § 111.111(a)(1)(C).</p> <p>Construction Date = After January 31, 1972</p> <p>Effluent Flow Rate = Effluent flow rate is at least 100,000 actual cubic feet per minute.</p> | |
| BX001FLVNT | 30 TAC Chapter 115, Vent Gas Controls | R5112-1 | <p>Alternate Control Requirement = Alternate control is not used.</p> <p>Control Device Type = Smokeless flare</p> <p>Vent Type = Vent gas steam emissions of the specific VOCs ethylene, butadiene, isobutylene, styrene, isoprene, propylene, and/or methylstyrene.</p> | |
| BX001FLVNT | 40 CFR Part 63, Subpart G | 63G | <p>Alternate Monitoring Parameters = The EPA Administrator has not approved alternate monitoring parameters or alternate monitoring parameters are not used.</p> <p>Control Device = Flare</p> <p>Overlap = Title 40 CFR Part 63, Subpart G only</p> <p>Group 1 = The process vent meets the definition of a Group 1 process vent.</p> <p>Halogenated = Vent stream is not halogenated.</p> <p>By-pass Lines = The vent system does not contain by-pass lines that can divert the vent stream from the control device.</p> <p>Performance Test = No previous performance test was conducted.</p> | |
| GRP-FLGAS2 | 30 TAC Chapter 115, Vent Gas Controls | 115B-44B | <p>Alternate Control Requirement = Alternate control is not used.</p> <p>Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source.</p> <p>Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2.</p> <p>Control Device Type = Vapor recovery system, as defined in 30 TAC § 115.10, other than an afterburner, blast furnace combustion device, boiler, catalytic or direct flame incinerator, carbon adsorption system, chiller, flare or vapor combustor.</p> <p>Vent Type = Vent gas steam emissions of the specific VOCs ethylene, butadiene, isobutylene, styrene, isoprene, propylene, and/or methylstyrene.</p> | |

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|-------------|---------------------------------------|--------------|--|---------------------------------|
| GRP-FLGAS2 | 30 TAC Chapter 115, Vent Gas Controls | 115B-BLR | <p>Alternate Control Requirement = Alternate control is not used.</p> <p>Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source.</p> <p>Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2.</p> <p>Control Device Type = Vapor recovery system, as defined in 30 TAC § 115.10, other than an afterburner, blast furnace combustion device, boiler, catalytic or direct flame incinerator, carbon adsorption system, chiller, flare or vapor combustor.</p> <p>Vent Type = Vent gas steam emissions of the specific VOCs ethylene, butadiene, isobutylene, styrene, isoprene, propylene, and/or methylstyrene.</p> | |
| GRP-FLGAS2 | 30 TAC Chapter 115, Vent Gas Controls | 115B-FURN | <p>Alternate Control Requirement = Alternate control is not used.</p> <p>Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source.</p> <p>Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2.</p> <p>Control Device Type = Vapor recovery system, as defined in 30 TAC § 115.10, other than an afterburner, blast furnace combustion device, boiler, catalytic or direct flame incinerator, carbon adsorption system, chiller, flare or vapor combustor.</p> <p>Vent Type = Vent gas steam emissions of the specific VOCs ethylene, butadiene, isobutylene, styrene, isoprene, propylene, and/or methylstyrene.</p> | |
| GRP-FUELGAS | 30 TAC Chapter 115, Vent Gas Controls | 115B-44B | <p>Alternate Control Requirement = Alternate control is not used.</p> <p>Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source.</p> <p>Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2.</p> <p>Control Device Type = Vapor recovery system, as defined in 30 TAC § 115.10, other than an afterburner, blast furnace combustion device, boiler, catalytic or direct flame incinerator, carbon adsorption system, chiller, flare or vapor combustor.</p> <p>Vent Type = Vent gas steam emissions of the specific VOCs ethylene, butadiene, isobutylene, styrene, isoprene, propylene, and/or methylstyrene.</p> | |
| GRP-FUELGAS | 30 TAC Chapter 115, Vent Gas Controls | 115B-BLR | <p>Alternate Control Requirement = Alternate control is not used.</p> <p>Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source.</p> <p>Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2.</p> <p>Control Device Type = Vapor recovery system, as defined in 30 TAC § 115.10, other than an afterburner, blast furnace combustion device, boiler, catalytic or direct flame incinerator, carbon adsorption system, chiller, flare or vapor combustor.</p> <p>Vent Type = Vent gas steam emissions of the specific VOCs ethylene, butadiene, isobutylene, styrene, isoprene, propylene, and/or methylstyrene.</p> | |

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|-------------|--|--------------|--|---------------------------------|
| GRP-FUELGAS | 30 TAC Chapter 115, Vent Gas Controls | 115B-FURN | <p>Alternate Control Requirement = Alternate control is not used.</p> <p>Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source.</p> <p>Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2.</p> <p>Control Device Type = Vapor recovery system, as defined in 30 TAC § 115.10, other than an afterburner, blast furnace combustion device, boiler, catalytic or direct flame incinerator, carbon adsorption system, chiller, flare or vapor combustor.</p> <p>Vent Type = Vent gas steam emissions of the specific VOCs ethylene, butadiene, isobutylene, styrene, isoprene, propylene, and/or methylstyrene.</p> | |
| L-2019AVNT | 30 TAC Chapter 115, Vent Gas Controls | R5112-1 | <p>Alternate Control Requirement = Alternate control is not used.</p> <p>Control Device Type = Smokeless flare</p> <p>Vent Type = Vent gas steam emissions of the specific VOCs ethylene, butadiene, isobutylene, styrene, isoprene, propylene, and/or methylstyrene.</p> | |
| L-2019AVNT | 40 CFR Part 63, Subpart YY | 63YY | Source Type = Ethylene production | |
| L-2019BVNT | 30 TAC Chapter 115, Vent Gas Controls | R5112-1 | <p>Alternate Control Requirement = Alternate control is not used.</p> <p>Control Device Type = Smokeless flare</p> <p>Vent Type = Vent gas steam emissions of the specific VOCs ethylene, butadiene, isobutylene, styrene, isoprene, propylene, and/or methylstyrene.</p> | |
| L-2019BVNT | 40 CFR Part 63, Subpart YY | 63YY | Source Type = Ethylene production | |
| DEGREASER1 | 30 TAC Chapter 115, Degreasing Processes | R5412-1 | <p>Solvent Degreasing Machine Type = Cold solvent cleaning machine.</p> <p>Alternate Control Requirement = The TCEQ Executive Director has not approved an alternative control requirement as allowed under 30 TAC § 115.413 or not alternative has been requested.</p> <p>Solvent Sprayed = A solvent is sprayed.</p> <p>Solvent Vapor Pressure = Solvent vapor pressure is less than or equal to 0.6 psia as measured at 100 degrees Fahrenheit.</p> <p>Solvent Heated = The solvent is not heated to a temperature greater than 120° F.</p> <p>Parts Larger than Drainage = Cleaned parts for which the machine is authorized to clean are larger than the internal drainage facility of the machine.</p> <p>Drainage Area = Area is greater than or equal to 16 square inches.</p> <p>Disposal in Enclosed Containers = Waste solvent is properly disposed of in enclosed containers.</p> | |
| DEGREASER2 | 30 TAC Chapter 115, Degreasing Processes | NA | <p>Solvent Degreasing Machine Type = Remote reservoir cold solvent cleaning machine.</p> <p>Alternate Control Requirement = The TCEQ Executive Director has not approved an alternative control requirement as allowed under 30 TAC § 115.413 or not alternative has been requested.</p> <p>Solvent Sprayed = No solvent is sprayed.</p> <p>Solvent Vapor Pressure = Solvent vapor pressure is less than or equal to 0.6 psia as measured at 100 degrees Fahrenheit.</p> | |

| Unit ID | Regulation | Index Number | Basis of Determination* | Changes and Exceptions to DSS** |
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| | | | <p>Solvent Heated = The solvent is not heated to a temperature greater than 120° F.</p> <p>Parts Larger than Drainage = No cleaned parts for which the machine is authorized to clean are larger than the internal drainage facility of the machine.</p> <p>Drainage Area = Area is less than 16 square inches.</p> <p>Disposal in Enclosed Containers = Waste solvent is properly disposed of in enclosed containers.</p> | |
| GRPDIST | 40 CFR Part 60, Subpart NNN | 60NNN | <p>Subpart NNN Chemicals = The distillation unit produces any chemical listed in 40 CFR § 60.667 as a product, co-product, by-product, or intermediate.</p> <p>Construction/Modification Date = On or before December 30, 1983.</p> | |
| GRP-NNNTWR | 40 CFR Part 60, Subpart NNN | 65CAR-BLRHTR | <p>Subpart NNN Chemicals = The distillation unit produces any chemical listed in 40 CFR § 60.667 as a product, co-product, by-product, or intermediate.</p> <p>Total Resource Effectiveness = TRE index value less than 8.0 from a halogenated vent stream.</p> <p>Construction/Modification Date = After December 30, 1983.</p> <p>TOC Reduction = Compliance is achieved by reducing total organic compound emissions (less methane and ethane) by 98 weight-percent or to a concentration of 20 ppmv dry basis corrected to 3 percent oxygen using a VOC emissions non-flare combustion control device.</p> <p>Subpart NNN Control Device = Boiler or process heater design heat input capacity greater than or equal to 44 MW (150 MMBtu/hr).</p> <p>Vent Type = Distillation unit not discharging vent stream into a vapor recovery system.</p> <p>Distillation Unit Type = Does not qualify for any exemption under § 60.660(c)(1)-(3).</p> <p>Total Design Capacity = Less than 1 gigagram per year.</p> <p>Vent Stream Flow Rate = Flow rate less than 0.008 scm/min.</p> | The citations from 40 CFR Part 65 used to comply with 40 CFR 60, Subpart NNN were determined from an analysis of the rule text and the basis of determination. |
| GRP-NNNTWR | 40 CFR Part 60, Subpart NNN | 65CAR-FL | <p>Subpart NNN Chemicals = The distillation unit produces any chemical listed in 40 CFR § 60.667 as a product, co-product, by-product, or intermediate.</p> <p>Total Resource Effectiveness = TRE index value less than 8.0 from a halogenated vent stream.</p> <p>Construction/Modification Date = After December 30, 1983.</p> <p>TOC Reduction = Compliance is achieved by reducing total organic compound emissions (less methane and ethane) by 98 weight-percent or to a concentration of 20 ppmv dry basis corrected to 3 percent oxygen using a VOC emissions non-flare combustion control device.</p> <p>Subpart NNN Control Device = Flare.</p> <p>Vent Type = Distillation unit not discharging vent stream into a vapor recovery system.</p> <p>Distillation Unit Type = Does not qualify for any exemption under § 60.660(c)(1)-(3).</p> <p>Total Design Capacity = 1 gigagram per year or greater.</p> <p>Vent Stream Flow Rate = Flow rate greater than or equal to 0.008 scm/min.</p> | The citations from 40 CFR Part 65 used to comply with 40 CFR 60, Subpart NNN were determined from an analysis of the rule text and the basis of determination. |
| HC5444 | 40 CFR Part 60, Subpart NNN | 60NNN | <p>Subpart NNN Chemicals = The distillation unit produces any chemical listed in 40 CFR § 60.667 as a product, co-product, by-product, or intermediate.</p> <p>Construction/Modification Date = On or before December 30, 1983.</p> | |
| HCV5904 | 40 CFR Part 60, Subpart NNN | 60NNN | <p>Subpart NNN Chemicals = The distillation unit produces any chemical listed in 40 CFR § 60.667 as a product, co-product, by-product, or intermediate.</p> <p>Construction/Modification Date = On or before December 30, 1983.</p> | |

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| HCV5910 | 40 CFR Part 60, Subpart NNN | 60NNN | Subpart NNN Chemicals = The distillation unit produces any chemical listed in 40 CFR § 60.667 as a product, co-product, by-product, or intermediate. Construction/Modification Date = On or before December 30, 1983. | |
| HCV5915 | 40 CFR Part 60, Subpart NNN | 60NNN | Subpart NNN Chemicals = The distillation unit produces any chemical listed in 40 CFR § 60.667 as a product, co-product, by-product, or intermediate. Construction/Modification Date = On or before December 30, 1983. | |
| HCV5916 | 40 CFR Part 60, Subpart NNN | 60NNN | Subpart NNN Chemicals = The distillation unit produces any chemical listed in 40 CFR § 60.667 as a product, co-product, by-product, or intermediate. Construction/Modification Date = On or before December 30, 1983. | |
| PCV5659 | 40 CFR Part 60, Subpart NNN | 60NNN | Subpart NNN Chemicals = The distillation unit produces any chemical listed in 40 CFR § 60.667 as a product, co-product, by-product, or intermediate. Construction/Modification Date = On or before December 30, 1983. | |
| D-1701VNT | 40 CFR Part 60, Subpart RRR | 60RRR | Chemicals Listed in 40 CFR § 60.707 = The affected facility is part of a process unit that produces chemicals listed in 40 CFR § 60.707 as a product, co-product, by product, or intermediate. Construction/Modification Date = On or before June 29, 1990. | |
| D-1704VNT | 40 CFR Part 60, Subpart RRR | 60RRR | Chemicals Listed in 40 CFR § 60.707 = The affected facility is part of a process unit that produces chemicals listed in 40 CFR § 60.707 as a product, co-product, by product, or intermediate. Construction/Modification Date = On or before June 29, 1990. | |
| GRP-FLGAS2 | 40 CFR Part 60, Subpart RRR | 60RRR-1 | Chemicals Listed in 40 CFR § 60.707 = The affected facility is part of a process unit that produces chemicals listed in 40 CFR § 60.707 as a product, co-product, by product, or intermediate. Construction/Modification Date = On or before June 29, 1990. | |
| GRP-FLGAS2 | 40 CFR Part 60, Subpart RRR | 65CAR-BLRHTR | Chemicals Listed in 40 CFR § 60.707 = The affected facility is part of a process unit that produces chemicals listed in 40 CFR § 60.707 as a product, co-product, by product, or intermediate. Construction/Modification Date = After June 29, 1990. Affected Facility Type = Reactor process not discharging its vent stream into a recovery system. Subject to Title 40 CFR Part 60, Subpart DDD = The reactor process is not subject to the provisions of Title 40 CFR Part 60, Subpart DDD. Subject to Title 40 CFR Part 60, Subpart NNN = The vent stream is routed to a distillation unit subject to Title 40 CFR Part 60, Subpart NNN and has no other releases to the air except for a pressure relief valve. | The citations from 40 CFR Part 65 used to comply with 40 CFR 60, Subpart RRR were determined from an analysis of the rule text and the basis of determination. |
| GRP-FLGAS2 | 40 CFR Part 60, Subpart RRR | 65CAR-FL | Chemicals Listed in 40 CFR § 60.707 = The affected facility is part of a process unit that produces chemicals listed in 40 CFR § 60.707 as a product, co-product, by product, or intermediate. Construction/Modification Date = After June 29, 1990. Affected Facility Type = Reactor process not discharging its vent stream into a recovery system. Subject to Title 40 CFR Part 60, Subpart DDD = The reactor process is not subject to the provisions of Title 40 CFR Part 60, Subpart DDD. Subject to Title 40 CFR Part 60, Subpart NNN = The vent stream is routed to a distillation unit subject to Title 40 CFR Part 60, Subpart NNN and has no other releases to the air except for a pressure relief valve. | The citations from 40 CFR Part 65 used to comply with 40 CFR 60, Subpart RRR were determined from an analysis of the rule text and the basis of determination. |
| GRPREACT | 40 CFR Part 60, Subpart RRR | 60RRR | Chemicals Listed in 40 CFR § 60.707 = The affected facility is part of a process unit that produces chemicals listed in 40 CFR § 60.707 as a product, co-product, by product, or intermediate. | |

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| | | | Construction/Modification Date = On or before June 29, 1990. | |
| HX5902 | 40 CFR Part 60, Subpart RRR | 60RRR | Chemicals Listed in 40 CFR § 60.707 = The affected facility is part of a process unit that produces chemicals listed in 40 CFR § 60.707 as a product, co-product, by product, or intermediate. Construction/Modification Date = On or before June 29, 1990. | |
| PC8787 | 40 CFR Part 60, Subpart RRR | 60RRR | Chemicals Listed in 40 CFR § 60.707 = The affected facility is part of a process unit that produces chemicals listed in 40 CFR § 60.707 as a product, co-product, by product, or intermediate. Construction/Modification Date = On or before June 29, 1990. | |
| VT-ADBRX | 40 CFR Part 60, Subpart RRR | 60RRR | Chemicals Listed in 40 CFR § 60.707 = The affected facility is part of a process unit that produces chemicals listed in 40 CFR § 60.707 as a product, co-product, by product, or intermediate. Construction/Modification Date = On or before June 29, 1990. | |
| E-1606 | 40 CFR Part 61, Subpart FF | 61FF | AMOC = An alternate means of compliance (AMOC) to meet the requirements of 40 CFR § 61.348 for treatment processes is not used. By-Pass Line = The closed-vent system does not contain a by-pass line that could divert the vent stream away from the control device. Continuous Monitoring = Samples of the waste stream exiting the treatment process are collected monthly and analyzed for benzene concentration. Complying with § 61.342(e) = The facility is not complying with 40 CFR § 61.342(e). Control Device Type/Operation = Flare. Openings = The treatment process or wastewater treatment system unit has no openings. Fuel Gas System = Not all gaseous vent streams from the treatment process or wastewater treatment system are routed to a fuel gas system. Stream Combination = The process wastewater, product tank drawdown, or landfill leachate is not combined with other waste streams for the purpose of facilitating management or treatment in the wastewater treatment system. Benzene Removal = Benzene is removed from the waste stream to a level of less than 10 ppmw on a flow weighted annual average basis. Closed-Vent System and Control Device = A closed-vent system and control device is used. Process Or Stream Exemption = The treatment process or waste stream is not complying with 40 CFR §61.348(d). AMOC = No alternate means of compliance (AMOC) to meet the requirements of 40 CFR § 61.349 for a closed-vent system and control device is used. Treatment Process Engineering Calculations = Engineering calculations show that the treatment process or wastewater treatment system unit is proven to achieve its emission limitation. | |
| PRO-BDU | 40 CFR Part 63, Subpart F | 63F | Applicable Chemicals = The chemical manufacturing process unit manufactures, as a primary product, one or more of the chemicals listed in 40 CFR § 63.100(b)(1)(i) or 40 CFR § 63.100(b)(1)(ii). Intervening Cooling Fluid = There is no intervening cooling fluid containing less than 5 percent by weight of total HAPs listed in Table 4 of 40 CFR Part 63, Subpart F, between the process and cooling water. Table 2 HAP = The chemical manufacturing process unit uses as a reactant or manufactures, as a product or co-product, one or more of the organic hazardous air pollutants in Table 2. Table 4 HAP Content = The recirculating heat exchange system is not used exclusively to cool process fluids that contain less than 5 percent by weight of total HAPs listed in Table 4 of title 40 CFR Part 63, Subpart F. Alternate Means of Emission Limitation = No alternative means of emission limitation has been approved by the EPA Administrator to achieve a reduction in organic HAP emission or no alternate has been requested. | |

| Unit ID | Regulation | Index Number | Basis of Determination* | Changes and Exceptions to DSS** |
|------------|----------------------------|--------------|---|---------------------------------|
| | | | <p>NPDES Permit = The once-through heat exchange system is not subject to NPDES permit with an allowable discharge limit of 1 part per million or less above influent concentration or 10 percent or less above influent concentration.</p> <p>Meets 40 CFR 63.104(a)(4)(i)-(iv) = The once-through heat exchange system is not subject to an NPDES permit that meets 40 CFR § 63.104(a)(4)(i) - (iv).</p> <p>Heat Exchange System = A heat exchange system is utilized.</p> <p>Table 9 HAP Content = The once-through heat exchange system is not used exclusively to cool process fluids that contain less than 5 percent by weight of total HAPs listed in Table 9 of 40 CFR Part 63, Subpart G.</p> <p>Cooling Water Monitored = The cooling water is being monitored for the presence of one or more HAPs or other representative substances whose presence in cooling water indicates a leak.</p> <p>Cooling Water Pressure = The heat exchange system is not operated with the minimum pressure on the cooling water side at least 35 kilopascals greater than the maximum pressure on the process side.</p> | |
| PRO-GHU | 40 CFR Part 63, Subpart F | 63F | Applicable Chemicals = The chemical manufacturing process unit does not manufacture, as a primary product, one or more of the chemicals listed in 40 CFR § 63.100(b)(1)(i) or 40 CFR § 63.100(b)(1)(ii). | |
| PRO-HDA | 40 CFR Part 63, Subpart F | 63F | <p>Applicable Chemicals = The chemical manufacturing process unit manufactures, as a primary product, one or more of the chemicals listed in 40 CFR § 63.100(b)(1)(i) or 40 CFR § 63.100(b)(1)(ii).</p> <p>Intervening Cooling Fluid = There is no intervening cooling fluid containing less than 5 percent by weight of total HAPs listed in Table 4 of 40 CFR Part 63, Subpart F, between the process and cooling water.</p> <p>Table 2 HAP = The chemical manufacturing process unit uses as a reactant or manufactures, as a product or co-product, one or more of the organic hazardous air pollutants in Table 2.</p> <p>Table 4 HAP Content = The recirculating heat exchange system is not used exclusively to cool process fluids that contain less than 5 percent by weight of total HAPs listed in Table 4 of title 40 CFR Part 63, Subpart F.</p> <p>Alternate Means of Emission Limitation = No alternative means of emission limitation has been approved by the EPA Administrator to achieve a reduction in organic HAP emission or no alternate has been requested.</p> <p>NPDES Permit = The once-through heat exchange system is not subject to NPDES permit with an allowable discharge limit of 1 part per million or less above influent concentration or 10 percent or less above influent concentration.</p> <p>Meets 40 CFR 63.104(a)(4)(i)-(iv) = The once-through heat exchange system is not subject to an NPDES permit that meets 40 CFR § 63.104(a)(4)(i) - (iv).</p> <p>Heat Exchange System = A heat exchange system is utilized.</p> <p>Table 9 HAP Content = The once-through heat exchange system is not used exclusively to cool process fluids that contain less than 5 percent by weight of total HAPs listed in Table 9 of 40 CFR Part 63, Subpart G.</p> <p>Cooling Water Monitored = The cooling water is being monitored for the presence of one or more HAPs or other representative substances whose presence in cooling water indicates a leak.</p> <p>Cooling Water Pressure = The heat exchange system is not operated with the minimum pressure on the cooling water side at least 35 kilopascals greater than the maximum pressure on the process side.</p> | |
| PRO-OLEFIN | 40 CFR Part 63, Subpart YY | 63YY | <p>Research and Development = THE PROCESS UNIT IS USED IN PRODUCTION</p> <p>Flexible Unit = THE PROCESS UNIT IS DEDICATED TO ONE PRODUCT</p> <p>Primary Product = THE PRIMARY PRODUCT OF THE PROCESS UNIT IS A PRODUCT PRODUCED BY A REGULATED SOURCE CATEGORY</p> <p>Source Category = ETHYLENE PRODUCTION</p> | |

* - The "unit attributes" or operating conditions that determine what requirements apply

** - Notes changes made to the automated results from the DSS, and a brief explanation why

NSR Versus Title V FOP

The state of Texas has two Air permitting programs, New Source Review (NSR) and Title V Federal Operating Permits. The two programs are substantially different both in intent and permit content.

NSR is a preconstruction permitting program authorized by the Texas Clean Air Act and Title I of the Federal Clean Air Act (FCAA). The processing of these permits is governed by 30 Texas Administrative Code (TAC) Chapter 116.111. The Title V Federal Operating Program is a federal program authorized under Title V of the FCAA that has been delegated to the state of Texas to administer and is governed by 30 TAC Chapter 122. The major differences between the two permitting programs are listed in the table below:

| NSR Permit | Federal Operating Permit(FOP) |
|---|--|
| Issued Prior to new Construction or modification of an existing facility | For initial permit with application shield, can be issued after operation commences; significant revisions require approval prior to operation. |
| Authorizes air emissions | Codifies existing applicable requirements, does not authorize new emissions |
| Ensures issued permits are protective of the environment and human health by conducting a health effects review and that requirement for best available control technology (BACT) is implemented. | Applicable requirements listed in permit are used by the inspectors to ensure proper operation of the site as authorized. Ensures that adequate monitoring is in place to allow compliance determination with the FOP. |
| Up to two Public notices may be required. Opportunity for public comment and contested case hearings for some authorizations. | One public notice required. Opportunity for public comments. No contested case hearings. |
| Applies to all point source emissions in the state. | Applies to all major sources and some non-major sources identified by the EPA. |
| Applies to facilities: a portion of site or individual emission sources | One or multiple FOPs cover the entire site (consists of multiple facilities) |
| Permits include terms and conditions under which the applicant must construct and operate its various equipment and processes on a facility basis. | Permits include terms and conditions that specify the general operational requirements of the site; and also include codification of all applicable requirements for emission units at the site. |
| Opportunity for EPA review for Federal Prevention of Significant Deterioration (PSD) and Nonattainment (NA) permits for major sources. | Opportunity for EPA review, Affected states review, and a Public petition period for every FOP. |
| Permits have a table listing maximum emission limits for pollutants | Permit has an applicable requirements table and Periodic Monitoring (PM) / Compliance Assurance Monitoring (CAM) tables which document applicable monitoring requirements. |
| Permits can be altered or amended upon application by company. Permits must be issued before construction or modification of facilities can begin. | Permits can be revised through several revision processes, which provide for different levels of public notice and opportunity to comment. Changes that would be significant revisions require that a revised permit be issued before those changes can be operated. |
| NSR permits are issued independent of FOP requirements. | FOP are independent of NSR permits, but contain a list of all NSR permits incorporated by reference |

New Source Review Requirements

Below is a list of the New Source Review (NSR) permits for the permitted area. These NSR permits are incorporated by reference into the operating permit and are enforceable under it. These permits can be found in the main TCEQ file room, located on the first floor of Building E, 12100 Park 35 Circle, Austin, Texas. The Public Education Program may be contacted at 1-800-687-4040 or the Air Permits Division (APD) may be contacted at 1-512-239-1250 for help with any question.

Effective May 1, 2011, the Environmental Protection Agency became the permitting authority for, and began applying the Federal PSD requirements to, large GHG-emitting sources in accordance with the thresholds established under the Tailoring Rule. (76 *Fed. Reg.* 25178, May 3, 2011)

TCEQ amended the definition of ‘applicable requirement’ in 30 TAC Chapter 122, § 122.10(2) to add EPA issued PSD permits for GHG emissions at Title V sites. This rule change became effective April 17, 2014, and the NSR authorizations incorporated below are enforceable by EPA and TCEQ.

Additionally, the site contains emission units that are permitted by rule under the requirements of 30 TAC Chapter 106, Permits by Rule. The following table specifies the permits by rule that apply to the site. All current permits by rule are contained in Chapter 106. Outdated 30 TAC Chapter 106 permits by rule may be viewed at the following Web site:

www.tceq.texas.gov/permitting/air/permitbyrule/historical_rules/old106list/index106.html

Outdated Standard Exemption lists may be viewed at the following Web site:

www.tceq.texas.gov/permitting/air/permitbyrule/historical_rules/oldselist/se_index.html

| Prevention of Significant Deterioration (PSD) Permits | |
|---|------------------------------|
| PSD Permit No.: PSDTX1120 | Issuance Date: 11/02/2012 |
| PSD Permit No.: PSDTX732M1 | Issuance Date: 05/30/2013 |
| PSD Permit No.: PSDTX761M3 | Issuance Date: 04/16/2014 |
| Prevention of Significant Deterioration (PSD) Permit for GHG Emissions | |
| PSD Permit No.: PSDTX761GHG | Issuance Date: 04/16/2014 |
| Title 30 TAC Chapter 116 Permits, Special Permits, and Other Authorizations (Other Than Permits By Rule, PSD Permits, or NA Permits) for the Application Area. | |
| Authorization No.: 18358 | Issuance Date: 05/30/2013 |
| Authorization No.: 4682B | Issuance Date: 04/16/2014 |
| Authorization No.: 6745B | Issuance Date: 11/18/2008 |
| Authorization No.: 83864 | Issuance Date: 11/02/2012 |
| Permits By Rule (30 TAC Chapter 106) for the Application Area | |
| Number: 106.103 | Version No./Date: 09/04/2000 |
| Number: 106.261 | Version No./Date: 12/24/1998 |
| Number: 106.261 | Version No./Date: 11/01/2003 |
| Number: 106.262 | Version No./Date: 11/01/2003 |

| | |
|-----------------|------------------------------|
| Number: 106.263 | Version No./Date: 11/01/2001 |
| Number: 106.264 | Version No./Date: 09/04/2000 |
| Number: 106.355 | Version No./Date: 09/04/2000 |
| Number: 106.371 | Version No./Date: 09/04/2000 |
| Number: 106.373 | Version No./Date: 09/04/2000 |
| Number: 106.412 | Version No./Date: 09/04/2000 |
| Number: 106.433 | Version No./Date: 09/04/2000 |
| Number: 106.452 | Version No./Date: 03/14/1997 |
| Number: 106.452 | Version No./Date: 09/04/2000 |
| Number: 106.454 | Version No./Date: 07/08/1998 |
| Number: 106.454 | Version No./Date: 11/01/2001 |
| Number: 106.472 | Version No./Date: 09/04/2000 |
| Number: 106.473 | Version No./Date: 09/04/2000 |
| Number: 106.475 | Version No./Date: 09/04/2000 |
| Number: 106.476 | Version No./Date: 09/04/2000 |
| Number: 106.478 | Version No./Date: 09/04/2000 |
| Number: 106.511 | Version No./Date: 09/04/2000 |
| Number: 106.512 | Version No./Date: 06/13/2001 |
| Number: 106.532 | Version No./Date: 09/04/2000 |
| Number: 8 | Version No./Date: 05/05/1976 |

Emission Units and Emission Points

In air permitting terminology, any source capable of generating emissions (for example, an engine or a sandblasting area) is called an Emission Unit. For purposes of Title V, emission units are specifically listed in the operating permit when they have applicable requirements other than New Source Review (NSR), or when they are listed in the permit shield table.

The actual physical location where the emissions enter the atmosphere (for example, an engine stack or a sandblasting yard) is called an emission point. For New Source Review preconstruction permitting purposes, every emission unit has an associated emission point. Emission limits are listed in an NSR permit, associated with an emission point. This list of emission points and emission limits per pollutant is commonly referred to as the “Maximum Allowable Emission Rate Table”, or “MAERT” for short. Specifically, the MAERT lists the Emission Point Number (EPN) that identifies the emission point, followed immediately by the Source Name, identifying the emission unit that is the source of those emissions on this table.

Thus, by reference, an emission unit in a Title V operating permit is linked by reference number to an NSR authorization, and its related emission point.

Monitoring Sufficiency

Federal and state rules, 40 CFR § 70.6(a)(3)(i)(B) and 30 TAC § 122.142(c) respectively, require that each federal operating permit include additional monitoring for applicable requirements that lack periodic or instrumental monitoring (which may include recordkeeping that serves as monitoring) that yields reliable data from a relevant time period that are representative of the emission unit's compliance with the applicable emission limitation or standard. Furthermore, the federal operating permit must include compliance assurance monitoring (CAM) requirements for emission sources that meet the applicability criteria of 40 CFR Part 64 in accordance with 40 CFR § 70.6(a)(3)(i)(A) and 30 TAC § 122.604(b).

With the exception of any emission units listed in the Periodic Monitoring or CAM Summaries in the FOP, the TCEQ Executive Director has determined that the permit contains sufficient monitoring, testing, recordkeeping, and reporting requirements that assure compliance with the applicable requirements. If applicable, each emission unit that requires additional monitoring in the form of periodic monitoring or CAM is described in further detail under the Rationale for CAM/PM Methods Selected section following this paragraph.

Rationale for Compliance Assurance Monitoring (CAM)/ Periodic Monitoring Methods Selected

Periodic Monitoring:

The Federal Clean Air Act requires that each federal operating permit include monitoring sufficient to assure compliance with the terms and conditions of the permit. Most of the emission limits and standards applicable to emission units at Title V sources include adequate monitoring to show that the units meet the limits and standards. For those requirements that do not include monitoring, or where the monitoring is not sufficient to assure compliance, the federal operating permit must include such monitoring for the emission units affected. The following emission units are subject to periodic monitoring requirements because the emission units are subject to an emission limitation or standard for an air pollutant (or surrogate thereof) in an applicable requirement that does not already require monitoring, or the monitoring for the applicable requirement is not sufficient to assure compliance:

| Unit/Group/Process Information | |
|--|-----------------------------------|
| ID No.: 44 | |
| Control Device ID No.: N/A | Control Device Type: N/A |
| Applicable Regulatory Requirement | |
| Name: 30 TAC Chapter 111, Visible Emissions | SOP Index No.: R1-111 |
| Pollutant: OPACITY | Main Standard: § 111.111(a)(1)(C) |
| Monitoring Information | |
| Indicator: Opacity | |
| Minimum Frequency: Once per month | |
| Averaging Period: Six-minutes | |
| Deviation Limit: Maximum opacity = 15% | |
| <p>Basis of monitoring: The option to perform opacity readings or visible emissions to demonstrate compliance is consistent with EPA Reference Test Method 9 and 22. Opacity and visible emissions have been used as an indicator of particulate emissions in many federal rules including 40 CFR Part 60, Subpart F and Subpart HH. In addition, use of these indicators is consistent with the EPA's "Compliance Assurance Monitoring (CAM) Technical Guidance Document" (August 1998). Monitoring specifications and procedures for the opacity are consistent with federal requirements and include the EPA's Test Method 9 for determining opacity by visual observations and the requirements of 40 CFR § 60.13 for a continuous opacity monitoring system (COMS). The monitoring specifications and procedures for the visible emissions monitoring are similar to "EPA Reference Method 22" procedures.</p> | |

| Unit/Group/Process Information | |
|--|--------------------------------|
| ID No.: D50009 | |
| Control Device ID No.: N/A | Control Device Type: N/A |
| Applicable Regulatory Requirement | |
| Name: 30 TAC Chapter 115, Storage of VOCs | SOP Index No.: R5112 |
| Pollutant: VOC | Main Standard: § 115.112(b)(1) |
| Monitoring Information | |
| Indicator: VOC Concentration | |
| Minimum Frequency: Once per week | |
| Averaging Period: n/a* | |
| Deviation Limit: VOC concentration greater than 100 ppmv at outlet of initial canister. | |
| <p>Basis of monitoring: A common way to monitor a non-regenerative carbon adsorption system is by measuring the outlet VOC concentration with a portable analyzer with procedures such as EPA Test Method 25A or a VOC CEMS. An increase in VOC concentration demonstrates when the carbon canister needs to be replaced. This indicator is consistent with the EPA "CAM Technical Guidance Document" (August 1998) and "Periodic Monitoring Technical Reference Guidance Document" (April 1999). Outlet VOC concentration has been used as an indicator of VOC emissions in many federal and state rules, including: 40 CFR Part 60, Subparts III, NNN, and RRR; and 30 TAC Chapter 115.</p> | |

*The permit holder may elect to collect monitoring data on a more frequent basis and calculate the average as specified by the minimum frequency, for purposes of determining whether a deviation has occurred. However, the additional data points must be collected on a regular basis and shall not be collected and used in particular instances to avoid reporting deviations.

| Unit/Group/Process Information | |
|---|--------------------------------|
| ID No.: D8.0505 | |
| Control Device ID No.: N/A | Control Device Type: N/A |
| Applicable Regulatory Requirement | |
| Name: 30 TAC Chapter 115, Water Separation | SOP Index No.: R5131 |
| Pollutant: VOC | Main Standard: § 115.132(b)(3) |
| Monitoring Information | |
| Indicator: Pilot Flame | |
| Minimum Frequency: Once per hour | |
| Averaging Period: n/a | |
| Deviation Limit: The absence of a pilot flame consistent with 60.18 requirements, as determined by monitoring data and/or visual observation will be considered and reported as a deviation. | |
| <p>Basis of monitoring: It is widely practiced and accepted to monitor the flare pilot flame by closed circuit cameras, thermocouples and visual inspection. The presence of the pilot flame demonstrates that VOC emissions are combusted. Monitoring the presence of a pilot flame is required in many federal rules, including: 40 CFR Part 60, Subparts K, III, NNN, QQQ, and RRR; 40 CFR Part 61, Subparts BB and FF; and 40 CFR Part 63, Subparts G, R, W, DD, and HH.</p> | |

| Unit/Group/Process Information | |
|---|--------------------------------|
| ID No.: D90004 | |
| Control Device ID No.: BX001FL | Control Device Type: Flare |
| Applicable Regulatory Requirement | |
| Name: 30 TAC Chapter 115, Storage of VOCs | SOP Index No.: STORE |
| Pollutant: VOC | Main Standard: § 115.112(b)(1) |
| Monitoring Information | |
| Indicator: Pilot Flame | |
| Minimum Frequency: Once per hour | |
| Averaging Period: n/a | |
| Deviation Limit: No pilot flame | |
| <p>Basis of monitoring: It is widely practiced and accepted to monitor the flare pilot flame by closed circuit cameras, thermocouples and visual inspection. The presence of the pilot flame demonstrates that VOC emissions are combusted. Monitoring the presence of a pilot flame is required in many federal rules, including: 40 CFR Part 60, Subparts K, III, NNN, QQQ, and RRR; 40 CFR Part 61, Subparts BB and FF; and 40 CFR Part 63, Subparts G, R, W, DD, and HH.</p> | |

| Unit/Group/Process Information | |
|--|-----------------------------|
| ID No.: DEGREASER1 | |
| Control Device ID No.: N/A | Control Device Type: N/A |
| Applicable Regulatory Requirement | |
| Name: 30 TAC Chapter 115, Degreasing Processes | SOP Index No.: R5412-1 |
| Pollutant: VOC | Main Standard: § 115.412(1) |
| Monitoring Information | |
| Indicator: Visual Inspection | |
| Minimum Frequency: Monthly | |
| Averaging Period: n/a | |
| Deviation Limit: Monitoring data which indicates that the cold cleaner is not in compliance with the applicable requirements of 30 TAC 115.412(1)(A)-(F) shall be considered and reported as a deviation. | |
| <p>Basis of monitoring: The monitoring option to cover cold cleaner or the open-top vapor cleaner was included in the EPA "Periodic Monitoring Technical Reference Document" (April 1999) to monitor VOC sources. In addition to covering the cleaner records of monthly inspections of equipment is an effective way to ensure that the system is operating in accordance with its design.</p> | |

| Unit/Group/Process Information | |
|---|--------------------------------|
| ID No.: F-1791 | |
| Control Device ID No.: N/A | Control Device Type: N/A |
| Applicable Regulatory Requirement | |
| Name: 30 TAC Chapter 115, Storage of VOCs | SOP Index No.: R5112 |
| Pollutant: VOC | Main Standard: § 115.112(b)(1) |
| Monitoring Information | |
| Indicator: Structural Integrity of the Pipe | |
| Minimum Frequency: Emptied and degassed | |
| Averaging Period: n/a | |
| Deviation Limit: It shall be considered and reported as a deviation if repairs are not completed prior to refilling the storage vessel. | |
| <p>Basis of monitoring: The periodic monitoring option provided for emission units using a submerged fill pipe is location of the submerged fill pipe and structural integrity of the pipe. The location and the integrity of the pipe ensure that loading operations are controlled to prevent splash fill and reduce generated vapors; therefore, less emissions are released to the atmosphere. This approach was included as an option by the EPA in the "Periodic Monitoring Technical Reference Document" (April 1999) to monitor VOC sources.</p> | |

| Unit/Group/Process Information | |
|---|--------------------------------|
| ID No.: F-1791 | |
| Control Device ID No.: N/A | Control Device Type: N/A |
| Applicable Regulatory Requirement | |
| Name: 30 TAC Chapter 115, Storage of VOCs | SOP Index No.: R5112 |
| Pollutant: VOC | Main Standard: § 115.112(b)(1) |
| Monitoring Information | |
| Indicator: Record of Tank Construction Specifications | |
| Minimum Frequency: n/a | |
| Averaging Period: n/a | |
| Deviation Limit: Failure to keep records of tank specifications. | |
| <p>Basis of monitoring: The periodic monitoring option provided for emission units using a submerged fill pipe is location of the submerged fill pipe and structural integrity of the pipe. The location and the integrity of the pipe ensure that loading operations are controlled to prevent splash fill and reduce generated vapors; therefore, less emissions are released to the atmosphere. This approach was included as an option by the EPA in the "Periodic Monitoring Technical Reference Document" (April 1999) to monitor VOC sources.</p> | |

| Unit/Group/Process Information | |
|---|--------------------------------|
| ID No.: F-2002A | |
| Control Device ID No.: L-2019B | Control Device Type: Flare |
| Applicable Regulatory Requirement | |
| Name: 30 TAC Chapter 115, Storage of VOCs | SOP Index No.: R5112-01 |
| Pollutant: VOC | Main Standard: § 115.112(b)(1) |
| Monitoring Information | |
| Indicator: Pilot Flame | |
| Minimum Frequency: Once per hour | |
| Averaging Period: n/a | |
| Deviation Limit: No pilot flame | |
| <p>Basis of monitoring: It is widely practiced and accepted to monitor the flare pilot flame by closed circuit cameras, thermocouples and visual inspection. The presence of the pilot flame demonstrates that VOC emissions are combusted. Monitoring the presence of a pilot flame is required in many federal rules, including: 40 CFR Part 60, Subparts K, III, NNN, QQQ, and RRR; 40 CFR Part 61, Subparts BB and FF; and 40 CFR Part 63, Subparts G, R, W, DD, and HH.</p> | |

| Unit/Group/Process Information | |
|---|-----------------------------------|
| ID No.: F-2002A | |
| Control Device ID No.: N/A | Control Device Type: N/A |
| Applicable Regulatory Requirement | |
| Name: 40 CFR Part 60, Subpart Kb | SOP Index No.: 60Kb-1 |
| Pollutant: VOC | Main Standard: [G]§ 60.112b(a)(3) |
| Monitoring Information | |
| Indicator: VOC Concentration | |
| Minimum Frequency: Once per year | |
| Averaging Period: n/a | |
| Deviation Limit: VOC fugitive emissions measured from the closed vent system shall be less than 500 ppm above background. | |
| <p>Basis of monitoring: It is widely practiced and accepted to monitor the VOC concentration at the outlet of a control device by use of a portable analyzer with procedures such as EPA Test Method 25A or a VOC CEMS. The measured concentration along with stack flow rate or AP-42 factors and fuel consumption records may be used to demonstrate compliance with an underlying emission limit or standard. Outlet VOC concentration has been used as an indicator of VOC emissions in many federal rules including 40 CFR Part 60, Subpart III, 40 CFR Part 60, Subpart NNN, 40 CFR Part 60, Subpart RRR, 40 CFR Part 61, Subpart BB, 40 CFR Part 61, Subpart FF, 40 CFR Part 63, Subpart R, 40 CFR Part 63, Subpart DD, and 40 CFR Part 63, Subpart HH.</p> | |

| Unit/Group/Process Information | |
|---|-----------------------------------|
| ID No.: F-2002A | |
| Control Device ID No.: N/A | Control Device Type: N/A |
| Applicable Regulatory Requirement | |
| Name: 40 CFR Part 60, Subpart Kb | SOP Index No.: 60Kb-1 |
| Pollutant: VOC | Main Standard: [G]§ 60.112b(a)(3) |
| Monitoring Information | |
| Indicator: Visual Inspection | |
| Minimum Frequency: Once per year | |
| Averaging Period: n/a | |
| Deviation Limit: Failure to visually inspect all components of the vapor collection system for defects. | |
| <p>Basis of monitoring: It is widely practiced and accepted to use work practice as a monitoring option to demonstrate compliance. Preventive maintenance and visual inspections of control equipment, as recommended by the manufacturer, conducted by the owner or operator can ensure that the unit is operating properly. The work practice requirements prescribe that preventive maintenance and/or visual inspections be performed and a recorded in a log. This option assures that the owner or operator is adequately maintaining the control equipment.</p> | |

| Unit/Group/Process Information | |
|---|--------------------------------|
| ID No.: F-2002B | |
| Control Device ID No.: L-2019B | Control Device Type: Flare |
| Applicable Regulatory Requirement | |
| Name: 30 TAC Chapter 115, Storage of VOCs | SOP Index No.: R5112-01 |
| Pollutant: VOC | Main Standard: § 115.112(b)(1) |
| Monitoring Information | |
| Indicator: Pilot Flame | |
| Minimum Frequency: Once per hour | |
| Averaging Period: n/a | |
| Deviation Limit: No pilot flame | |
| <p>Basis of monitoring: It is widely practiced and accepted to monitor the flare pilot flame by closed circuit cameras, thermocouples and visual inspection. The presence of the pilot flame demonstrates that VOC emissions are combusted. Monitoring the presence of a pilot flame is required in many federal rules, including: 40 CFR Part 60, Subparts K, III, NNN, QQQ, and RRR; 40 CFR Part 61, Subparts BB and FF; and 40 CFR Part 63, Subparts G, R, W, DD, and HH.</p> | |

| Unit/Group/Process Information | |
|---|--------------------------------|
| ID No.: F-2003 | |
| Control Device ID No.: L-2019B | Control Device Type: Flare |
| Applicable Regulatory Requirement | |
| Name: 30 TAC Chapter 115, Storage of VOCs | SOP Index No.: R5112-01 |
| Pollutant: VOC | Main Standard: § 115.112(b)(1) |
| Monitoring Information | |
| Indicator: Pilot Flame | |
| Minimum Frequency: Once per hour | |
| Averaging Period: n/a | |
| Deviation Limit: No pilot flame | |
| <p>Basis of monitoring: It is widely practiced and accepted to monitor the flare pilot flame by closed circuit cameras, thermocouples and visual inspection. The presence of the pilot flame demonstrates that VOC emissions are combusted. Monitoring the presence of a pilot flame is required in many federal rules, including: 40 CFR Part 60, Subparts K, III, NNN, QQQ, and RRR; 40 CFR Part 61, Subparts BB and FF; and 40 CFR Part 63, Subparts G, R, W, DD, and HH.</p> | |

| Unit/Group/Process Information | |
|---|--------------------------------|
| ID No.: F-2007 | |
| Control Device ID No.: L-2019B | Control Device Type: Flare |
| Applicable Regulatory Requirement | |
| Name: 30 TAC Chapter 115, Storage of VOCs | SOP Index No.: R5112-01 |
| Pollutant: VOC | Main Standard: § 115.112(b)(1) |
| Monitoring Information | |
| Indicator: Pilot Flame | |
| Minimum Frequency: Once per hour | |
| Averaging Period: n/a | |
| Deviation Limit: No pilot flame | |
| <p>Basis of monitoring: It is widely practiced and accepted to monitor the flare pilot flame by closed circuit cameras, thermocouples and visual inspection. The presence of the pilot flame demonstrates that VOC emissions are combusted. Monitoring the presence of a pilot flame is required in many federal rules, including: 40 CFR Part 60, Subparts K, III, NNN, QQQ, and RRR; 40 CFR Part 61, Subparts BB and FF; and 40 CFR Part 63, Subparts G, R, W, DD, and HH.</p> | |

| Unit/Group/Process Information | |
|---|--------------------------------|
| ID No.: F-2007 | |
| Control Device ID No.: N/A | Control Device Type: N/A |
| Applicable Regulatory Requirement | |
| Name: 40 CFR Part 60, Subpart Kb | SOP Index No.: 60Kb-1 |
| Pollutant: VOC | Main Standard: § 60.112b(b)(1) |
| Monitoring Information | |
| Indicator: VOC Concentration | |
| Minimum Frequency: Once per year | |
| Averaging Period: n/a | |
| Deviation Limit: Failure to record fugitive emissions in accordance with 40 CFR Part 60, Appendix A, Method 21. | |
| <p>Basis of monitoring: It is widely practiced and accepted to monitor the VOC concentration at the outlet of a control device by use of a portable analyzer with procedures such as EPA Test Method 25A or a VOC CEMS. The measured concentration along with stack flow rate or AP-42 factors and fuel consumption records may be used to demonstrate compliance with an underlying emission limit or standard. Outlet VOC concentration has been used as an indicator of VOC emissions in many federal rules including 40 CFR Part 60, Subpart III, 40 CFR Part 60, Subpart NNN, 40 CFR Part 60, Subpart RRR, 40 CFR Part 61, Subpart BB, 40 CFR Part 61, Subpart FF, 40 CFR Part 63, Subpart R, 40 CFR Part 63, Subpart DD, and 40 CFR Part 63, Subpart HH.</p> | |

| Unit/Group/Process Information | |
|---|--------------------------------|
| ID No.: F-2007 | |
| Control Device ID No.: N/A | Control Device Type: N/A |
| Applicable Regulatory Requirement | |
| Name: 40 CFR Part 60, Subpart Kb | SOP Index No.: 60Kb-1 |
| Pollutant: VOC | Main Standard: § 60.112b(b)(1) |
| Monitoring Information | |
| Indicator: Visual Inspection | |
| Minimum Frequency: Once per year | |
| Averaging Period: n/a | |
| Deviation Limit: Failure to visually inspect all components of the vapor collection system. | |
| <p>Basis of monitoring: It is widely practiced and accepted to use work practice as a monitoring option to demonstrate compliance. Preventive maintenance and visual inspections of control equipment, as recommended by the manufacturer, conducted by the owner or operator can ensure that the unit is operating properly. The work practice requirements prescribe that preventive maintenance and/or visual inspections be performed and a recorded in a log. This option assures that the owner or operator is adequately maintaining the control equipment.</p> | |

| Unit/Group/Process Information | |
|---|--------------------------------|
| ID No.: F-2009A | |
| Control Device ID No.: N/A | Control Device Type: N/A |
| Applicable Regulatory Requirement | |
| Name: 30 TAC Chapter 115, Storage of VOCs | SOP Index No.: R5112 |
| Pollutant: VOC | Main Standard: § 115.112(b)(1) |
| Monitoring Information | |
| Indicator: Internal Floating Roof | |
| Minimum Frequency: annually | |
| Averaging Period: n/a | |
| Deviation Limit: Any monitoring data in which the roof is not floating on the surface of the VOC, if liquid has accumulated on the internal floating roof, the seals are detached, or if there are holes or tears in the seal fabric shall be reported as a deviation. | |
| <p>Basis of monitoring:</p> <p>The option to monitor VOC emissions by visually inspecting the external floating roof or the internal floating roof was included as an option by the EPA in the “Periodic Monitoring Technical Reference Document” (April 1999) to monitor VOC sources. If the external or internal floating roof is operating in accordance with its design it will meet its control efficiency. Visually inspecting the external floating roof or the internal floating roof is commonly required in federal and state rules, including: 40 CFR Part 60, Subpart Kb; 40 CFR Part 61, Subpart Y; and 30 TAC Chapter 115. Measuring and recording the accumulated area of gaps if the tank is equipped with primary seals is commonly required in federal and state rules, including: 40 CFR Part 60, Subpart Kb; 40 CFR Part 61, Subpart Y; 40 CFR 63 Subparts VV, DD, and MMM; and 30 TAC Chapter 115.</p> | |

| Unit/Group/Process Information | |
|---|--------------------------------|
| ID No.: F-2009B | |
| Control Device ID No.: N/A | Control Device Type: N/A |
| Applicable Regulatory Requirement | |
| Name: 30 TAC Chapter 115, Storage of VOCs | SOP Index No.: R5112 |
| Pollutant: VOC | Main Standard: § 115.112(b)(1) |
| Monitoring Information | |
| Indicator: Internal Floating Roof | |
| Minimum Frequency: annually | |
| Averaging Period: n/a | |
| Deviation Limit: Any monitoring data in which the roof is not floating on the surface of the VOC, if liquid has accumulated on the internal floating roof, the seals are detached, or if there are holes or tears in the seal fabric shall be reported as a deviation. | |
| <p>Basis of monitoring:</p> <p>The option to monitor VOC emissions by visually inspecting the external floating roof or the internal floating roof was included as an option by the EPA in the “Periodic Monitoring Technical Reference Document” (April 1999) to monitor VOC sources. If the external or internal floating roof is operating in accordance with its design it will meet its control efficiency. Visually inspecting the external floating roof or the internal floating roof is commonly required in federal and state rules, including: 40 CFR Part 60, Subpart Kb; 40 CFR Part 61, Subpart Y; and 30 TAC Chapter 115. Measuring and recording the accumulated area of gaps if the tank is equipped with primary seals is commonly required in federal and state rules, including: 40 CFR Part 60, Subpart Kb; 40 CFR Part 61, Subpart Y; 40 CFR 63 Subparts VV, DD, and MMM; and 30 TAC Chapter 115.</p> | |

| Unit/Group/Process Information | |
|--|--------------------------------|
| ID No.: F-2101 | |
| Control Device ID No.: N/A | Control Device Type: N/A |
| Applicable Regulatory Requirement | |
| Name: 30 TAC Chapter 115, Water Separation | SOP Index No.: R5131 |
| Pollutant: VOC | Main Standard: § 115.132(b)(1) |
| Monitoring Information | |
| Indicator: VOC Concentration | |
| Minimum Frequency: Quarterly | |
| Averaging Period: n/a* | |
| Deviation Limit: Any VOC monitoring data >500 ppmv for an interface other than a seal around a shaft that passes through a cover opening, or >10,000 ppmv for a seal around a shaft that passes through a cover opening shall be considered and reported as a deviation. | |
| <p>Basis of monitoring: It is widely practiced and accepted to monitor the VOC concentration at the outlet of a control device by use of a portable analyzer with procedures such as EPA Test Method 25A or a VOC CEMS. The measured concentration along with stack flow rate or AP-42 factors and fuel consumption records may be used to demonstrate compliance with an underlying emission limit or standard. Outlet VOC concentration has been used as an indicator of VOC emissions in many federal rules including 40 CFR Part 60, Subpart III, 40 CFR Part 60, Subpart NNN, 40 CFR Part 60, Subpart RRR, 40 CFR Part 61, Subpart BB, 40 CFR Part 61, Subpart FF, 40 CFR Part 63, Subpart R, 40 CFR Part 63, Subpart DD, and 40 CFR Part 63, Subpart HH.</p> | |

*The permit holder may elect to collect monitoring data on a more frequent basis and calculate the average as specified by the minimum frequency, for purposes of determining whether a deviation has occurred. However, the additional data points must be collected on a regular basis and shall not be collected and used in particular instances to avoid reporting deviations.

| Unit/Group/Process Information | |
|---|--------------------------------|
| ID No.: F-2301 | |
| Control Device ID No.: N/A | Control Device Type: N/A |
| Applicable Regulatory Requirement | |
| Name: 30 TAC Chapter 115, Storage of VOCs | SOP Index No.: R5112 |
| Pollutant: VOC | Main Standard: § 115.112(b)(1) |
| Monitoring Information | |
| Indicator: Internal Floating Roof | |
| Minimum Frequency: annually | |
| Averaging Period: n/a | |
| Deviation Limit: Any monitoring data in which the roof is not floating on the surface of the VOC, if liquid has accumulated on the internal floating roof, the seals are detached, or if there are holes or tears in the seal fabric shall be reported as a deviation. | |
| <p>Basis of monitoring:</p> <p>The option to monitor VOC emissions by visually inspecting the external floating roof or the internal floating roof was included as an option by the EPA in the “Periodic Monitoring Technical Reference Document” (April 1999) to monitor VOC sources. If the external or internal floating roof is operating in accordance with its design it will meet its control efficiency. Visually inspecting the external floating roof or the internal floating roof is commonly required in federal and state rules, including: 40 CFR Part 60, Subpart Kb; 40 CFR Part 61, Subpart Y; and 30 TAC Chapter 115. Measuring and recording the accumulated area of gaps if the tank is equipped with primary seals is commonly required in federal and state rules, including: 40 CFR Part 60, Subpart Kb; 40 CFR Part 61, Subpart Y; 40 CFR 63 Subparts VV, DD, and MMM; and 30 TAC Chapter 115.</p> | |

| Unit/Group/Process Information | |
|---|--------------------------------|
| ID No.: F-2305 | |
| Control Device ID No.: N/A | Control Device Type: N/A |
| Applicable Regulatory Requirement | |
| Name: 30 TAC Chapter 115, Storage of VOCs | SOP Index No.: R5112 |
| Pollutant: VOC | Main Standard: § 115.112(b)(1) |
| Monitoring Information | |
| Indicator: Internal Floating Roof | |
| Minimum Frequency: annually | |
| Averaging Period: n/a | |
| Deviation Limit: Any monitoring data in which the roof is not floating on the surface of the VOC, if liquid has accumulated on the internal floating roof, the seals are detached, or if there are holes or tears in the seal fabric shall be reported as a deviation. | |
| <p>Basis of monitoring:</p> <p>The option to monitor VOC emissions by visually inspecting the external floating roof or the internal floating roof was included as an option by the EPA in the “Periodic Monitoring Technical Reference Document” (April 1999) to monitor VOC sources. If the external or internal floating roof is operating in accordance with its design it will meet its control efficiency. Visually inspecting the external floating roof or the internal floating roof is commonly required in federal and state rules, including: 40 CFR Part 60, Subpart Kb; 40 CFR Part 61, Subpart Y; and 30 TAC Chapter 115. Measuring and recording the accumulated area of gaps if the tank is equipped with primary seals is commonly required in federal and state rules, including: 40 CFR Part 60, Subpart Kb; 40 CFR Part 61, Subpart Y; 40 CFR 63 Subparts VV, DD, and MMM; and 30 TAC Chapter 115.</p> | |

| Unit/Group/Process Information | |
|---|-------------------------------|
| ID No.: GRP2TKK | |
| Control Device ID No.: N/A | Control Device Type: N/A |
| Applicable Regulatory Requirement | |
| Name: 40 CFR Part 60, Subpart K | SOP Index No.: 60K-HIVP |
| Pollutant: VOC | Main Standard: § 60.112(a)(1) |
| Monitoring Information | |
| Indicator: Internal floating roof. | |
| Minimum Frequency: Annually | |
| Averaging Period: n/a | |
| Deviation Limit: Except during periods of start-up and shutdown, a deviation will be reported if the floating roof is not floating on the surface of the VOC, liquid has accumulated on top of the floating roof, seals are detached, or there are holes or tears, and... | |
| <p>Basis of monitoring: The option to monitor VOC emissions by visually inspecting the external floating roof or the internal floating roof was included as an option by the EPA in the "Periodic Monitoring Technical Reference Document" (April 1999) to monitor VOC sources. If the external or internal floating roof is operating in accordance with its design it will meet its control efficiency. Visually inspecting the external floating roof or the internal floating roof is commonly required in federal and state rules, including: 40 CFR Part 60, Subpart Kb; 40 CFR Part 61, Subpart Y; and 30 TAC Chapter 115. Measuring and recording the accumulated area of gaps if the tank is equipped with primary seals is commonly required in federal and state rules, including: 40 CFR Part 60, Subpart Kb; 40 CFR Part 61, Subpart Y; 40 CFR 63 Subparts VV, DD, and MMM; and 30 TAC Chapter 115.</p> | |

| Unit/Group/Process Information | |
|---|---------------------------|
| ID No.: GRPBOILER | |
| Control Device ID No.: N/A | Control Device Type: N/A |
| Applicable Regulatory Requirement | |
| Name: 30 TAC Chapter 112, Sulfur Compounds | SOP Index No.: R112 |
| Pollutant: SO ₂ | Main Standard: § 112.9(a) |
| Monitoring Information | |
| Indicator: Sulfur Content of Fuel | |
| Minimum Frequency: Quarterly and within 24 hours of any fuel change | |
| Averaging Period: n/a* | |
| Deviation Limit: Any monitoring data above 0.9 sulfur by weight percent in the fuel shall be considered and reported as a deviation. | |
| <p>Basis of monitoring: A common way to determine SO₂ emissions is by determining the amount (percentage) of sulfur in fuel combusted by an emission unit. This quantity along with stack flow rate and quantity of fuel combusted may be used to calculate the amount of SO₂ emitted to the atmosphere.</p> | |

*The permit holder may elect to collect monitoring data on a more frequent basis and calculate the average as specified by the minimum frequency, for purposes of determining whether a deviation has occurred. However, the additional data points must be collected on a regular basis and shall not be collected and used in particular instances to avoid reporting deviations.

| Unit/Group/Process Information | |
|--|------------------------------|
| ID No.: GRPBOILER | |
| Control Device ID No.: N/A | Control Device Type: N/A |
| Applicable Regulatory Requirement | |
| Name: 40 CFR Part 60, Subpart D | SOP Index No.: 60D-1 |
| Pollutant: PM | Main Standard: § 60.42(a)(1) |
| Monitoring Information | |
| Indicator: Visible Emissions | |
| Minimum Frequency: Quarterly | |
| Averaging Period: n/a | |
| Deviation Limit: Maximum opacity = 20% while burning 100% fossil fuel. | |
| <p>Basis of monitoring: The option to perform opacity readings or visible emissions to demonstrate compliance is consistent with EPA Reference Test Method 9 and 22. Opacity and visible emissions have been used as an indicator of particulate emissions in many federal rules including 40 CFR Part 60, Subpart F and Subpart HH. In addition, use of these indicators is consistent with the EPA's "Compliance Assurance Monitoring (CAM) Technical Guidance Document" (August 1998). Monitoring specifications and procedures for the opacity are consistent with federal requirements and include the EPA's Test Method 9 for determining opacity by visual observations and the requirements of 40 CFR § 60.13 for a continuous opacity monitoring system (COMS). The monitoring specifications and procedures for the visible emissions monitoring are similar to "EPA Reference Method 22" procedures.</p> | |

| Unit/Group/Process Information | |
|--|------------------------------|
| ID No.: GRPBOILER | |
| Control Device ID No.: N/A | Control Device Type: N/A |
| Applicable Regulatory Requirement | |
| Name: 40 CFR Part 60, Subpart D | SOP Index No.: 60D-1 |
| Pollutant: NO _x | Main Standard: § 60.44(a)(1) |
| Monitoring Information | |
| Indicator: NO _x concentration | |
| Minimum Frequency: Monthly | |
| Averaging Period: N/A | |
| Deviation Limit: Any monitoring data above 0.21 lb/MMBtu derived from gaseous fossil fuel. | |
| <p>Basis of monitoring: It is widely practiced and accepted to calibrate and use a portable analyzer or NO_x CEMS/PEMS to measure NO_x concentration with procedures such as EPA Test Method 7. The measured concentration along with stack flow rate or AP-42 factors and fuel consumption records may be used to demonstrate compliance with an underlying emission limit or standard. Additionally, measuring the NO_x concentration is provided as a monitoring option for any control device because an increase in NO_x concentration may be indicative of the control device performance. Outlet NO_x concentration has been used as an indicator in many federal and state rules.</p> | |

| Unit/Group/Process Information | |
|--|--|
| ID No.: GRP-FLGAS2 | |
| Control Device ID No.: 44B | Control Device Type: Other Control Device Type |
| Applicable Regulatory Requirement | |
| Name: 30 TAC Chapter 115, Vent Gas Controls | SOP Index No.: 115B-44B |
| Pollutant: VOC | Main Standard: § 115.121(b) |
| Monitoring Information | |
| Indicator: Period of Operation | |
| Minimum Frequency: n/a | |
| Averaging Period: n/a | |
| Deviation Limit: It will be considered and reported as a deviation if monitoring data indicates that fuel gas was sent to the combustion unit while the combustion unit was not operating. | |
| <p>Basis of monitoring:</p> <p>A common way to control VOC emissions is to route emissions to a boiler or process heater with a design heat input capacity of 44 MW or greater with minimum temperatures of 1100 °C and residence times greater than one second. Boilers and process heaters with the stated design have demonstrated to meet 98% reduction efficiency; therefore, it is only necessary to document the period of operation of the control equipment. Additionally, in the October, 21, 1983 preamble to 40 CFR Part 60, Subpart III, (48 FR 48945), the EPA determined that installing a steam generating unit, with a design heat input capacity of 44 MW or greater, to control VOC emissions, is an acceptable means of demonstrating compliance with 40 CFR Part 60, Subpart III and waived the requirement for a performance test on such devices. Monitoring the period of operation of a boiler/process heater greater than 44 MW is commonly required in federal rules, including: 40 CFR Part 60, Subparts III and NNN; 40 CFR Part 61, Subpart BB; 40 CFR Part 63, Subpart G.</p> | |

| Unit/Group/Process Information | |
|--|---|
| ID No.: GRP-FLGAS2 | |
| Control Device ID No.: GRPBOILER | Control Device Type: Steam Generating Unit (Boiler)/Process Heater (Design heat input is greater than or equal to 44MW) |
| Applicable Regulatory Requirement | |
| Name: 30 TAC Chapter 115, Vent Gas Controls | SOP Index No.: 115B-BLR |
| Pollutant: VOC | Main Standard: § 115.121(b) |
| Monitoring Information | |
| Indicator: Period of Operation | |
| Minimum Frequency: n/a | |
| Averaging Period: n/a | |
| Deviation Limit: It will be considered and reported as a deviation if monitoring data indicates that fuel gas was sent to the combustion unit while the combustion unit was not operating. | |
| <p>Basis of monitoring:</p> <p>A common way to control VOC emissions is to route emissions to a boiler or process heater with a design heat input capacity of 44 MW or greater with minimum temperatures of 1100 °C and residence times greater than one second. Boilers and process heaters with the stated design have demonstrated to meet 98% reduction efficiency; therefore, it is only necessary to document the period of operation of the control equipment. Additionally, in the October, 21, 1983 preamble to 40 CFR Part 60, Subpart III, (48 FR 48945), the EPA determined that installing a steam generating unit, with a design heat input capacity of 44 MW or greater, to control VOC emissions, is an acceptable means of demonstrating compliance with 40 CFR Part 60, Subpart III and waived the requirement for a performance test on such devices. Monitoring the period of operation of a boiler/process heater greater than 44 MW is commonly required in federal rules, including: 40 CFR Part 60, Subparts III and NNN; 40 CFR Part 61, Subpart BB; 40 CFR Part 63, Subpart G.</p> | |

| Unit/Group/Process Information | |
|--|---|
| ID No.: GRP-FLGAS2 | |
| Control Device ID No.: 115B-FURN | Control Device Type: Steam Generating Unit (Boiler)/Process Heater (Design heat input is greater than or equal to 44MW) |
| Applicable Regulatory Requirement | |
| Name: 30 TAC Chapter 115, Vent Gas Controls | SOP Index No.: 115B-FURN |
| Pollutant: VOC | Main Standard: § 115.121(b) |
| Monitoring Information | |
| Indicator: Period of Operation | |
| Minimum Frequency: n/a | |
| Averaging Period: n/a | |
| Deviation Limit: It will be considered and reported as a deviation if monitoring data indicates that fuel gas was sent to the combustion unit while the combustion unit was not operating. | |
| <p>Basis of monitoring:</p> <p>A common way to control VOC emissions is to route emissions to a boiler or process heater with a design heat input capacity of 44 MW or greater with minimum temperatures of 1100 °C and residence times greater than one second. Boilers and process heaters with the stated design have demonstrated to meet 98% reduction efficiency; therefore, it is only necessary to document the period of operation of the control equipment. Additionally, in the October, 21, 1983 preamble to 40 CFR Part 60, Subpart III, (48 FR 48945), the EPA determined that installing a steam generating unit, with a design heat input capacity of 44 MW or greater, to control VOC emissions, is an acceptable means of demonstrating compliance with 40 CFR Part 60, Subpart III and waived the requirement for a performance test on such devices. Monitoring the period of operation of a boiler/process heater greater than 44 MW is commonly required in federal rules, including: 40 CFR Part 60, Subparts III and NNN; 40 CFR Part 61, Subpart BB; 40 CFR Part 63, Subpart G.</p> | |

| Unit/Group/Process Information | |
|--|--|
| ID No.: GRP-FUELGAS | |
| Control Device ID No.: 44B | Control Device Type: Other Control Device Type |
| Applicable Regulatory Requirement | |
| Name: 30 TAC Chapter 115, Vent Gas Controls | SOP Index No.: 115B-44B |
| Pollutant: VOC | Main Standard: § 115.121(b) |
| Monitoring Information | |
| Indicator: Period of Operation | |
| Minimum Frequency: n/a | |
| Averaging Period: n/a | |
| Deviation Limit: It will be considered and reported as a deviation if monitoring data indicates that fuel gas was sent to the combustion unit while the combustion unit was not operating. | |
| <p>Basis of monitoring:</p> <p>A common way to control VOC emissions is to route emissions to a boiler or process heater with a design heat input capacity of 44 MW or greater with minimum temperatures of 1100 °C and residence times greater than one second. Boilers and process heaters with the stated design have demonstrated to meet 98% reduction efficiency; therefore, it is only necessary to document the period of operation of the control equipment. Additionally, in the October, 21, 1983 preamble to 40 CFR Part 60, Subpart III, (48 FR 48945), the EPA determined that installing a steam generating unit, with a design heat input capacity of 44 MW or greater, to control VOC emissions, is an acceptable means of demonstrating compliance with 40 CFR Part 60, Subpart III and waived the requirement for a performance test on such devices. Monitoring the period of operation of a boiler/process heater greater than 44 MW is commonly required in federal rules, including: 40 CFR Part 60, Subparts III and NNN; 40 CFR Part 61, Subpart BB; 40 CFR Part 63, Subpart G.</p> | |

| Unit/Group/Process Information | |
|--|---|
| ID No.: GRP-FUELGAS | |
| Control Device ID No.: GRPBOILER | Control Device Type: Steam Generating Unit (Boiler)/Process Heater (Design heat input is greater than or equal to 44MW) |
| Applicable Regulatory Requirement | |
| Name: 30 TAC Chapter 115, Vent Gas Controls | SOP Index No.: 115B-BLR |
| Pollutant: VOC | Main Standard: § 115.121(b) |
| Monitoring Information | |
| Indicator: Period of Operation | |
| Minimum Frequency: n/a | |
| Averaging Period: n/a | |
| Deviation Limit: It will be considered and reported as a deviation if monitoring data indicates that fuel gas was sent to the combustion unit while the combustion unit was not operating. | |
| <p>Basis of monitoring:</p> <p>A common way to control VOC emissions is to route emissions to a boiler or process heater with a design heat input capacity of 44 MW or greater with minimum temperatures of 1100 °C and residence times greater than one second. Boilers and process heaters with the stated design have demonstrated to meet 98% reduction efficiency; therefore, it is only necessary to document the period of operation of the control equipment. Additionally, in the October, 21, 1983 preamble to 40 CFR Part 60, Subpart III, (48 FR 48945), the EPA determined that installing a steam generating unit, with a design heat input capacity of 44 MW or greater, to control VOC emissions, is an acceptable means of demonstrating compliance with 40 CFR Part 60, Subpart III and waived the requirement for a performance test on such devices. Monitoring the period of operation of a boiler/process heater greater than 44 MW is commonly required in federal rules, including: 40 CFR Part 60, Subparts III and NNN; 40 CFR Part 61, Subpart BB; 40 CFR Part 63, Subpart G.</p> | |

| Unit/Group/Process Information | |
|--|---|
| ID No.: GRP-FUELGAS | |
| Control Device ID No.: GRP-FURN | Control Device Type: Steam Generating Unit (Boiler)/Process Heater (Design heat input is greater than or equal to 44MW) |
| Applicable Regulatory Requirement | |
| Name: 30 TAC Chapter 115, Vent Gas Controls | SOP Index No.: 115B-FURN |
| Pollutant: VOC | Main Standard: § 115.121(b) |
| Monitoring Information | |
| Indicator: Period of Operation | |
| Minimum Frequency: n/a | |
| Averaging Period: n/a | |
| Deviation Limit: It will be considered and reported as a deviation if monitoring data indicates that fuel gas was sent to the combustion unit while the combustion unit was not operating. | |
| <p>Basis of monitoring:</p> <p>A common way to control VOC emissions is to route emissions to a boiler or process heater with a design heat input capacity of 44 MW or greater with minimum temperatures of 1100 °C and residence times greater than one second. Boilers and process heaters with the stated design have demonstrated to meet 98% reduction efficiency; therefore, it is only necessary to document the period of operation of the control equipment. Additionally, in the October, 21, 1983 preamble to 40 CFR Part 60, Subpart III, (48 FR 48945), the EPA determined that installing a steam generating unit, with a design heat input capacity of 44 MW or greater, to control VOC emissions, is an acceptable means of demonstrating compliance with 40 CFR Part 60, Subpart III and waived the requirement for a performance test on such devices. Monitoring the period of operation of a boiler/process heater greater than 44 MW is commonly required in federal rules, including: 40 CFR Part 60, Subparts III and NNN; 40 CFR Part 61, Subpart BB; 40 CFR Part 63, Subpart G.</p> | |

| Unit/Group/Process Information | |
|---|--------------------------------|
| ID No.: L-2101 | |
| Control Device ID No.: N/A | Control Device Type: N/A |
| Applicable Regulatory Requirement | |
| Name: 30 TAC Chapter 115, Water Separation | SOP Index No.: R5131 |
| Pollutant: VOC | Main Standard: § 115.132(b)(3) |
| Monitoring Information | |
| Indicator: Carbon Replacement Interval | |
| Minimum Frequency: At each replacement of carbon canister | |
| Averaging Period: n/a | |
| Deviation Limit: Any carbon replacement records indicating that the actual carbon replacement interval exceeds 36 months shall be considered and reported as a deviation. | |
| <p>Basis of monitoring: A common way to monitor a non-regenerative carbon adsorption system is by measuring the time intervals of the carbon canister replacement. The replacement interval may be determined by performance tests, manufacturer's recommendations, engineering calculations and/or historical data. Monitoring the carbon replacement interval of a carbon adsorption system is commonly required in federal and state rules, including: 40 CFR Part 60, Subpart QQQ; 40 CFR Part 61, Subpart FF; 40 CFR Part 63, Subparts EE, HH, and MMM; and 30 TAC Chapter 115.</p> | |

Compliance Assurance Monitoring (CAM):

Compliance Assurance Monitoring (CAM) is a federal monitoring program established under Title 40 Code of Federal Regulations Part 64 (40 CFR Part 64).

Emission units are subject to CAM requirements if they meet the following criteria:

1. the emission unit is subject to an emission limitation or standard for an air pollutant (or surrogate thereof) in an applicable requirement;
2. the emission unit uses a control device to achieve compliance with the emission limitation or standard specified in the applicable requirement; and
3. the emission unit has the pre-control device potential to emit greater than or equal to the amount in tons per year for a site to be classified as a major source.

The following table(s) identify the emission unit(s) that are subject to CAM:

| Unit/Group/Process Information | |
|--|-----------------------------|
| ID No.: BX001FLVNT | |
| Control Device ID No.: BX001FL | Control Device Type: Flare |
| Applicable Regulatory Requirement | |
| Name: 30 TAC Chapter 115, Vent Gas Controls | SOP Index No.: R5112-1 |
| Pollutant: VOC | Main Standard: § 115.121(b) |
| Monitoring Information | |
| Indicator: Pilot Flame | |
| Minimum Frequency: Continuous | |
| Averaging Period: n/a | |
| Deviation Limit: No pilot flame | |
| Basis of CAM: It is widely practiced and accepted to monitor the flare pilot flame by closed circuit cameras, thermocouples and visual inspection. The presence of the pilot flame demonstrates that VOC emissions are combusted. Monitoring the presence of a pilot flame is required in many federal rules, including: 40 CFR Part 60, Subparts K, III, NNN, QQQ, and RRR; 40 CFR Part 61, Subparts BB and FF; and 40 CFR Part 63, Subparts G, R, W, DD, and HH. | |

| Unit/Group/Process Information | |
|--|-----------------------------|
| ID No.: L-2019AVNT | |
| Control Device ID No.: L-2019A | Control Device Type: Flare |
| Applicable Regulatory Requirement | |
| Name: 30 TAC Chapter 115, Vent Gas Controls | SOP Index No.: R5112-1 |
| Pollutant: VOC | Main Standard: § 115.121(b) |
| Monitoring Information | |
| Indicator: Pilot Flame | |
| Minimum Frequency: Continuous | |
| Averaging Period: n/a | |
| Deviation Limit: No pilot flame | |
| Basis of CAM: It is widely practiced and accepted to monitor the flare pilot flame by closed circuit cameras, thermocouples and visual inspection. The presence of the pilot flame demonstrates that VOC emissions are combusted. Monitoring the presence of a pilot flame is required in many federal rules, including: 40 CFR Part 60, Subparts K, III, NNN, QQQ, and RRR; 40 CFR Part 61, Subparts BB and FF; and 40 CFR Part 63, Subparts G, R, W, DD, and HH. | |

| Unit/Group/Process Information | |
|--|-----------------------------|
| ID No.: L-2019BVNT | |
| Control Device ID No.: L-2019B | Control Device Type: Flare |
| Applicable Regulatory Requirement | |
| Name: 30 TAC Chapter 115, Vent Gas Controls | SOP Index No.: R5112-1 |
| Pollutant: VOC | Main Standard: § 115.121(b) |
| Monitoring Information | |
| Indicator: Pilot Flame | |
| Minimum Frequency: Continuous | |
| Averaging Period: n/a | |
| Deviation Limit: No pilot flame | |
| Basis of CAM: It is widely practiced and accepted to monitor the flare pilot flame by closed circuit cameras, thermocouples and visual inspection. The presence of the pilot flame demonstrates that VOC emissions are combusted. Monitoring the presence of a pilot flame is required in many federal rules, including: 40 CFR Part 60, Subparts K, III, NNN, QQQ, and RRR; 40 CFR Part 61, Subparts BB and FF; and 40 CFR Part 63, Subparts G, R, W, DD, and HH. | |

Available Unit Attribute Forms

OP-UA1 - Miscellaneous and Generic Unit Attributes
OP-UA2 - Stationary Reciprocating Internal Combustion Engine Attributes
OP-UA3 - Storage Tank/Vessel Attributes
OP-UA4 - Loading/Unloading Operations Attributes
OP-UA5 - Process Heater/Furnace Attributes
OP-UA6 - Boiler/Steam Generator/Steam Generating Unit Attributes
OP-UA7 - Flare Attributes
OP-UA8 - Coal Preparation Plant Attributes
OP-UA9 - Nonmetallic Mineral Process Plant Attributes
OP-UA10 - Gas Sweetening/Sulfur Recovery Unit Attributes
OP-UA11 - Stationary Turbine Attributes
OP-UA12 - Fugitive Emission Unit Attributes
OP-UA13 - Industrial Process Cooling Tower Attributes
OP-UA14 - Water Separator Attributes
OP-UA15 - Emission Point/Stationary Vent/Distillation Operation/Process Vent Attributes
OP-UA16 - Solvent Degreasing Machine Attributes
OP-UA17 - Distillation Unit Attributes
OP-UA18 - Surface Coating Operations Attributes
OP-UA19 - Wastewater Unit Attributes
OP-UA20 - Asphalt Operations Attributes
OP-UA21 - Grain Elevator Attributes
OP-UA22 - Printing Attributes
OP-UA24 - Wool Fiberglass Insulation Manufacturing Plant Attributes
OP-UA25 - Synthetic Fiber Production Attributes
OP-UA26 - Electroplating and Anodizing Unit Attributes
OP-UA27 - Nitric Acid Manufacturing Attributes
OP-UA28 - Polymer Manufacturing Attributes
OP-UA29 - Glass Manufacturing Unit Attributes
OP-UA30 - Kraft, Soda, Sulfite, and Stand-Alone Semicheical Pulp Mill Attributes
OP-UA31 - Lead Smelting Attributes
OP-UA32 - Copper and Zinc Smelting/Brass and Bronze Production Attributes
OP-UA33 - Metallic Mineral Processing Plant Attributes
OP-UA34 - Pharmaceutical Manufacturing
OP-UA35 - Incinerator Attributes
OP-UA36 - Steel Plant Unit Attributes
OP-UA37 - Basic Oxygen Process Furnace Unit Attributes
OP-UA38 - Lead-Acid Battery Manufacturing Plant Attributes
OP-UA39 - Sterilization Source Attributes
OP-UA40 - Ferroalloy Production Facility Attributes
OP-UA41 - Dry Cleaning Facility Attributes
OP-UA42 - Phosphate Fertilizer Manufacturing Attributes
OP-UA43 - Sulfuric Acid Production Attributes
OP-UA44 - Municipal Solid Waste Landfill/Waste Disposal Site Attributes
OP-UA45 - Surface Impoundment Attributes
OP-UA46 - Epoxy Resins and Non-Nylon Polyamides Production Attributes
OP-UA47 - Ship Building and Ship Repair Unit Attributes
OP-UA48 - Air Oxidation Unit Process Attributes
OP-UA49 - Vacuum-Producing System Attributes
OP-UA50 - Fluid Catalytic Cracking Unit Catalyst Regenerator/Fuel Gas Combustion Device/Claus Sulfur Recovery Plant Attributes

OP-UA51 - Dryer/Kiln/Oven Attributes
OP-UA52 - Closed Vent Systems and Control Devices
OP-UA53 - Beryllium Processing Attributes
OP-UA54 - Mercury Chlor-Alkali Cell Attributes
OP-UA55 - Transfer System Attributes
OP-UA56 - Vinyl Chloride Process Attributes
OP-UA57 - Cleaning/Depainting Operation Attributes
OP-UA58 - Treatment Process Attributes
OP-UA59 - Coke By-Product Recovery Plant Attributes
OP-UA60 - Chemical Manufacturing Process Unit Attributes
OP-UA61 - Pulp, Paper, or Paperboard Producing Process Attributes
OP-UA62 - Glycol Dehydration Unit Attributes
OP-UA63 - Vegetable Oil Production Attributes