Statement of Basis of the Federal Operating Permit

Braskem America, Inc.

Site/Area Name: La Porte Plant
Physical location: 8811 Strang Rd
Nearest City: La Porte
County: Harris

Permit Number: O1424
Project Type: Renewal

Standard Industrial Classification (SIC) Code: 2821
SIC Name: Plastics Materials

This Statement of Basis sets forth the legal and factual basis for the draft permit conditions in accordance with 30 TAC §122.201(a)(4). Per 30 TAC §§ 122.241 and 243, the permit holder has submitted an application under § 122.134 for permit renewal. This document may include the following information:

A description of the facility/area process description;
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 19, 2015

Operating Permit
Basis of Determination

Permit Area Process Description

The Polypropylene La Porte Plant consists of three production lines. The first two produce homopolymer and copolymer polypropylene pellets based on the Himont Slurry Process. The process is based on the polymerization in hexane of propylene or ethylene and propylene utilizing a high efficiency catalyst. The polymers obtained cover a wide range of products. The third production line that was constructed after January 10, 1989 and subject to NSPS Subpart DDD, uses a slightly different process as the first two production lines.

Homopolymer is manufactured by distilling propylene and hexane, separating atactic, drying the product using nitrogen, and pelletizing it. In the atactic separation process, process vents from the propylene distillation columns are routed to the flare or to the boilers. In the pelletizing process, the blanketing system exhausts to the atmosphere through bag filters on top of the powder storage silos in order to minimize emissions. Process vents from these two production lines are routed to the flare or the Flare Gas Recovery System with the exception of the propylene distillation column vents. Process vents from the propylene distillation columns are routed either to the boilers or the A and B line Flare. Copolymer production is similar to homopolymer. Three reactors are used and the feed consists of ethylene, propylene, hexane, hydrogen, and catalysts.

In the third production line, purification, drying, and pelletization occurs. Continuous and intermittent process vents from the third production line are routinely routed to boiler C and to the C Line Flare. These process vents can also be routed to the first two production line's systems.

In the purification process of the third production line, it is sent through a steam reboiled Demethanizer to remove ethane and lighter components before being sent to the propylene dryer. Overhead vapor from the Demethanizer is sent to the Deethanizer for recovery of propylene and propane. Chemical grade propylene received is heated with steam and sent to a Chem Grade COS Destruct Reactor. Next, it goes to a steam reboiled Deethanizer where lighter compounds are removed and sent to a fuel gas system. Purified propylene is then compressed, heated, and pumped to the Propylene Dryer. Water is removed from the stream via mole sieve prior to removing traces of arsine/phosphine in a final Arsine Guard Bed. A bed of Selexsorb in the Dryers also removes carbon dioxide traces.

The purified propylene is then sent to the Propylene Feed Drum where it is further dried and sent through loop reactors. Vapor from the flash drum overhead is scrubbed in the recycle propylene scrubber, condensed, and recycled to the feed drum. Concentrated polymer slurry is fed to the recycle gas filters from the bottom of the scrubber. Heat removal is accomplished with an internal water cooled exchanger bundle at the top of the Scrubber. Wet polymer from the steamer is contacted with hot nitrogen in the dryer to remove the surface water remaining on the polymer. Dryer overhead vapor is sent to the Dryer Scrubber for nitrogen cleanup prior to re circulation via nitrogen blowers.

The propylene is then pelletized and/or stored in pellet storage silos. From the silos, the pellets are transferred via a pneumatic system to the railcar loading area.

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, NOX, HAPS

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

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.

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.

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)	No
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)	No
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*
46010D103	30 TAC Chapter 115, Storage of VOCs	R5112-1	Today's Date = Today's date is March 1, 2013 or later. 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 1,000 gallons but less than or equal to 25,000 gallons Control Device Type = Flare
46010D103	40 CFR Part 60, Subpart Ka	60Ka	Product Stored = Stored product other than a petroleum liquid
GRPTK1	30 TAC Chapter 115, Storage of VOCs	R5112-1	Today's Date = Today's date is March 1, 2013 or later. 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
GRPTK1	40 CFR Part 60, Subpart Ka	60Ka	Product Stored = Stored product other than a petroleum liquid
GRPTK2	30 TAC Chapter 115, Storage of VOCs	R5112-1	Today's Date = Today's date is March 1, 2013 or later. 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
GRPTK2	40 CFR Part 60, Subpart Ka	60Ka	Product Stored = Stored product other than a petroleum liquid
GRPTK2	40 CFR Part 63, Subpart FFFF	63FFFF	Designated HAL = The emission stream is not designated as halogenated. Emission Standard = HAP vapor pressure is less than 76.6 and a flare is being used for control per § 63.2470(a)-Table 4.1.b.iii. Determined HAL = The emission stream is determined not to be halogenated. Prior Eval = The data from a prior evaluation or assessment is used. Negative Pressure = The closed vent system is operated and maintained at or above atmospheric pressure. Bypass Line = The closed vent system does not contain a bypass line that could divert the vent stream away from the control device.

Unit ID	Regulation	Index Number	Basis of Determination*
C3-LOAD	30 TAC Chapter 115, Loading and Unloading of VOC	R5211-01	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 = Liquefied petroleum gas (LPG) Transfer Type = Loading and unloading.
TRUCKD709	30 TAC Chapter 115, Loading and Unloading of VOC	R5211-01	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 and gasoline. Transfer Type = Only loading. True Vapor Pressure = True vapor pressure greater than or equal to 0.5 psia. Daily Throughput = Loading less than 20,000 gallons per day.
TRUCKD709	40 CFR Part 63, Subpart FFFF	63FFFF	Emission Standard = None of the above standards apply.
30013	30 TAC Chapter 117, Subchapter B	117B	NOx Emission Limitation = Title 30 TAC § 117.310(d)(3) [relating to mass emissions cap and trade in 30 TAC Chapter 101, Subchapter H, Division 3 and Emission Specifications for Attainment Demonstration]. Unit Type = Other industrial, commercial, or institutional boiler. Maximum Rated Capacity = MRC is greater than or equal to 40 MMBtu/hr but less than 100 MMBtu/hr. NOx Monitoring System = Maximum emission rate testing. Fuel Flow Monitoring = Fuel flow is monitored with a totalizing fuel flow meter per 30 TAC §§ 117.140(a), 117.340(a) or 117.440(a). CO Emission Limitation = Title 30 TAC § 117.310(c)(1) 400 ppmv option. CO Monitoring System = Monitored by method other than CEMS or PEMS. EGF System Cap Unit = The unit is not used as an electric generating facility to generate electricity for sale to the electric grid. Fuel Type #1 = Natural gas. Fuel Type #2 = Gaseous fuel other than natural gas landfill gas or renewable non-fossil fuel gases. NOx Emission Limit Average = Emission limit in pounds/MMBtu on a rolling 30-day average. NOx Reductions = No NO_x reduction. Annual Heat Input = Annual heat input is greater than $2.8(10^{11})$ Btu/yr, based on rolling 12-month average.

Unit ID	Regulation	Index Number	Basis of Determination*
C-BOILER	30 TAC Chapter 117, Subchapter B	R7ICI-01	NOx Emission Limitation = Title 30 TAC § 117.310(d)(3) [relating to mass emissions cap and trade in 30 TAC Chapter 101, Subchapter H, Division 3 and Emission Specifications for Attainment Demonstration]. Unit Type = Other industrial, commercial, or institutional boiler. Maximum Rated Capacity = MRC is greater than or equal to 100 MMBtu/hr but less than 200 MMBtu/hr. NOx Monitoring System = Continuous emissions monitoring system. Fuel Flow Monitoring = Fuel flow is monitored with a totalizing fuel flow meter per 30 TAC §§ 117.140(a), 117.340(a) or 117.440(a). CO Emission Limitation = Title 30 TAC § 117.310(c)(1) 400 ppmv option. CO Monitoring System = Monitored by method other than CEMS or PEMS. EGF System Cap Unit = The unit is not used as an electric generating facility to generate electricity for sale to the electric grid. Fuel Type #1 = Natural gas. Fuel Type #2 = Gaseous fuel other than natural gas landfill gas or renewable non-fossil fuel gases. NOx Emission Limit Average = Emission limit in pounds/MMBtu on a rolling 30-day average. NOx Reductions = No NO_x reduction. Annual Heat Input = Annual heat input is greater than $2.2(10^{11})$ Btu/yr, based on rolling 12-month average.

Unit ID	Regulation	Index Number	Basis of Determination*
C-BOILER	40 CFR Part 60, Subpart Db	NSPSDb-1	Construction/Modification Date = Constructed or reconstructed after July 9, 1997, and on or before February 28, 2005. 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 = Continuous emission monitoring system. Electrical or Mechanical Output = 10% or less of the annual output is electrical or mechanical. SO2 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 Part 60, Subpart Ea, Eb or AAAA. Subpart J = The affected facility does not meet applicability requirements of 40 CFR Part 60, Subpart J. Subpart E = The affected facility does not meet applicability requirements of 40 CFR Part 60, Subpart E. 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. Technology Type = None. ACF Option - SO2 = Other ACF or no ACF. 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. Unit Type = OTHER UNIT TYPE ACF Option - PM = Other ACF or no ACF. Heat Release Rate = Natural gas with a heat release rate less than or equal to 70 MBtu/hr/ft^3. 60.49Da(n) Alternative = The facility is not using the § 60.49Da(n) alternative. ACF Option - NOx = Other ACF or no ACF. 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. 60.49Da(m) Alternative = The facility is not using the § 60.49Da(m) alternative.

Unit ID	Regulation	Index Number	Basis of Determination*
C-BOILER	40 CFR Part 60, Subpart Db	NSPSDb-2	Alternate Emission Limit (AEL) = The facility combusts byproduct/waste with either natural gas or oil and did not petition the EPA Administrator to establish a NO_x emission limit that applies specifically when the byproduct/waste is combusted. Construction/Modification Date = Constructed or reconstructed after July 9, 1997, and on or before February 28, 2005. D-Series Fuel Type #1 = Byproduct/waste. D-Series Fuel Type #2 = 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 = Continuous emission monitoring system. Electrical or Mechanical Output = 10% or less of the annual output is electrical or mechanical. SO2 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 Part 60, Subpart Ea, Eb or AAAA. Subpart J = The affected facility does not meet applicability requirements of 40 CFR Part 60, Subpart J. Subpart E = The affected facility does not meet applicability requirements of 40 CFR Part 60, Subpart E. 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. Technology Type = None. ACF Option - SO2 = Other ACF or no ACF. 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. Unit Type = OTHER UNIT TYPE ACF Option - PM = Other ACF or no ACF. Heat Release Rate = Natural gas with a heat release rate less than or equal to 70 MBtu/hr/ft^3. 60.49Da(n) Alternative = The facility is not using the § 60.49Da(n) alternative. ACF Option - NOx = Other ACF or no ACF. 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. 60.49Da(m) Alternative = The facility is not using the § 60.49Da(m) alternative.
FLARE-1	30 TAC Chapter 111, Visible Emissions	R1111-01	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.

Unit ID	Regulation	Index Number	Basis of Determination*
FLARE-1	30 TAC Chapter 115, HRVOC Vent Gas	R5HRVOC	Monitoring Requirements = Flare is complying with the continuous monitoring requirements of § 115.725(d). Out of Service = Flare was not permanently out of service by April 1, 2006. Total Gas Stream = Flare receives a total gas stream with greater than 100 ppmv HRVOC at some time. Gas Stream Concentration = Flare receives a gas stream containing 5% or greater HRVOC by weight at some time. Exempt Date = Flare has not become exempt. Alternative Monitoring = No alternative monitoring and test methods are used. Minor Modificaiton = No minor modifications to the monitoring and test methods are used. Tank Service = Flare is not in dedicated service for storage tanks with 95% or greater of an individual HRVOC. Flare Type = Flare is in multi-purpose service.
FLARE-1	40 CFR Part 60, Subpart A	60A-01	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)
FLARE-1	40 CFR Part 63, Subpart A	63A-01	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).
FLARE-2	30 TAC Chapter 111, Visible Emissions	R1111-01	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.
FLARE-2	30 TAC Chapter 115, HRVOC Vent Gas	R5HRVOC	Monitoring Requirements = Flare is complying with the continuous monitoring requirements of § 115.725(d). Out of Service = Flare was not permanently out of service by April 1, 2006. Total Gas Stream = Flare receives a total gas stream with greater than 100 ppmv HRVOC at some time. Gas Stream Concentration = Flare receives a gas stream containing 5% or greater HRVOC by weight at some time. Exempt Date = Flare has not become exempt. Alternative Monitoring = No alternative monitoring and test methods are used. Minor Modificaiton = No minor modifications to the monitoring and test methods are used. Tank Service = Flare is not in dedicated service for storage tanks with 95% or greater of an individual HRVOC. Flare Type = Flare is in multi-purpose service.
FLARE-2	40 CFR Part 60, Subpart A	60A-01	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 = Air-assisted

Unit ID	Regulation	Index Number	Basis of Determination*
FLARE-2	40 CFR Part 63, Subpart A	63A-01	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 = Air assisted
49	30 TAC Chapter 115, HRVOC Fugitive Emissions	115HRVOC	Agitators = The fugitive unit does not contain agitators. Alternative Work Practice in § 115.358 = No components are complying with the alternative work practice requirements in 30 TAC § 115.358. Compressor Seals = The fugitive unit contains compressor seals. Open-ended Valves or Lines = The fugitive unit contains open-ended valves or lines. Process Drains = The fugitive unit contains process drains. Title 30 TAC §115.780 Applicable = The fugitive unit contains a defined process and Highly Reactive VOC. Valves (not pressure relief, open-ended or bypass line valves) = The fugitive unit contains valves other than pressure relief, open-ended or bypass line valves. Less Than 250 Components at Site = The fugitive unit is located at a site with at least 250 fugitive components in VOC service. Weight Percent HRVOC = All components contact only a process fluid that contains at least 5.0% HRVOC by weight on an annual average basis. Complying with § 115.781(b)(9) = Process drains are complying with the requirements of § 115.781(b)(9). Pumps with Shaft Seal System = No pumps are equipped with a shaft sealing system that prevents or detects emission of VOC from the seal. Bypass Line Valves = The fugitive unit does not contain bypass line valves. Compressors with Shaft Seal System = No compressors are equipped with a shaft sealing system that prevents or detects emission of VOC from the seal. Flanges or Other Connectors = The fugitive unit contains flanges or other connectors. Heat Exchanger Heads, etc. = The fugitive unit contains heat exchanger heads, sight glasses, meters, gauges, sampling connections, bolter manways, hatches, sump covers, junction vent boxes or covers and seals on VOC water separators. Pressure Relief Valves = The fugitive unit contains pressure relief valves. Pump Seals = The fugitive unit contains pump seals. Agitators with Shaft Seal System = No agitators are equipped with a shaft sealing system that prevents or detects emission of VOC from the seal. Complying with § 115.781(b)(9) = Pressure relief valves are complying with the requirements of § 115.781(b)(9).

Unit ID	Regulation	Index Number	Basis of Determination*
49	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	115PRP	Agitators = The fugitive unit does not contain agitators. Components Utilizing Alternative Work Practice in § 115.358 = No components in the fugitive unit are using the alternative work practice under § 115.358. Compressor Seals = The fugitive unit contains compressor seals. Flanges = The fugitive unit contains flanges. Open-ended Valves = The fugitive unit contains open-ended valves. Pressure Relief Valves = The fugitive unit contains pressure relief valves. Process Drains = The fugitive unit has process drains. Pump Seals = The fugitive unit contains pump seals. Rupture Disks = The fugitive unit has no pressure relief valves equipped with rupture disks. Title 30 TAC § 115.352 Applicable = Site is a petroleum refinery, synthetic organic chemical, polymer resin or methyl tert-butyl ether manufacturing process or a natural gas/gasoline processing operation as defined in 30 TAC 115.10. Valves (other than pressure relief and open-ended) = The fugitive unit contains valves other than pressure relief valves or open-ended valves or lines. Alternate Control Requirement = The TCEQ Executive Director has not approved an alternate method for demonstrating and documenting continuous compliance with an alternate control requirement or exemption criteria for process drains or no alternate has been requested. Instrumentation Systems = The fugitive unit has instrumentation systems, as defined in 40 CFR § 63.161, that meet 40 CFR § 63.169. Less Than 250 Components at Site = Fugitive unit not located at site with less than 250 fugitive components. Sampling Connection Systems = The fugitive unit has sampling connection systems, as defined in 40 CFR § 63.161, that meet 40 CFR § 63.169. Weight Percent VOC = All components contact a process fluid that contains greater than or equal to 10% VOC by weight. 50% by Volume = Compressors are not in hydrogen service or are in hydrogen service and the hydrogen content cannot be reasonably expected to always exceed 50% by volume. Complying wIth § 115.352(1) = Valves are complying with § 115.352(1). Complying With § 115.352(1) = Open-ended valves and lines are complying with § 115.352(1). Complying with 30 TAC § 115.352(1) = Flanges are complying with the requirements in 30 TAC § 115.352(1). Reciprocating Compressors Or Positive Displacement Pumps = The fugitive unit has reciprocating compressors or positive displacement pumps used in natural gas/gasoline processing operations. Shaft Seal System = Pump seals are not equipped with a shaft seal system that prevents or detects emission of VOC from the seal. TVP 0.002 PSIA or Less = The fugitive unit does not have components or systems that contact a process fluid containing VOC having a true vapor pressure less than or equal to 0.002 psia at 68 degrees Fahrenheit. Shaft Seal System = Compressors are not equipped with a shaft sealing system that prevents or detects emission of VOC from the seal. TVP of Process Fluid VOC <= 0.044 psia at 68° F = Pressure relief valves contact a process fluid with a TVP of less than or equal to 0.044 psia at 68° F. TVP of Process Fluid VOC <= 0.044 PSIA AT 68° F = Process drains contact a process fluid containing VOC having a true vapor pressures less than or equal to 0.044 psia at 68 degrees Fahrenheit. TVP of Process Fluid VOC <= 0.044 PSIA AT 68□° F = Pump seals do not contact a process fluid containing VOC having a true vapor pressures less than or equal to 0.044 psia at 68 degrees Fahrenheit. TVP of Process Fluid VOC <= 0.044 PSIA AT 68□° F = Flanges contact a process fluid containing VOC having a true vapor pressures less than or equal to 0.044 psia at 68 degrees Fahrenheit.

Unit ID	Regulation	Index Number	Basis of Determination*
49	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	115PRP (continued)	Complying with 30 TAC § 115.352(1) = Pump seals are complying with the requirements in 30 TAC § 115.352(1). TVP of Process Fluid VOC <= 0.044 PSIA AT 68□° F = Compressor seals do not contact a process fluid containing VOC having a true vapor pressures less than or equal to 0.044 psia at 68 degrees Fahrenheit. TVP of Process Fluid VOC > 0.044 psia at 68° F = Valves contact a process fluid with a TVP greater than 0.044 psia at 68° F. TVP of Process Fluid VOC > 0.044 PSIA AT 68° F = Flanges contact a process fluid containing VOC having a TVP greater than 0.044 psia at 68 degrees Fahrenheit. Complying With § 115.352(1) = Compressor seals are complying with the requirements in 30 TAC § 115.352(1).
49	40 CFR Part 63, Subpart FFFF	63FFFF	Existing Source = Fugitive unit contains equipment in an existing Miscellaneous Chemical Processing Unit.
CFUGS	30 TAC Chapter 115, HRVOC Fugitive Emissions	115HRVOC	Agitators = The fugitive unit does not contain agitators. Alternative Work Practice in § 115.358 = No components are complying with the alternative work practice requirements in 30 TAC § 115.358. Compressor Seals = The fugitive unit contains compressor seals. Open-ended Valves or Lines = The fugitive unit contains open-ended valves or lines. Process Drains = The fugitive unit contains process drains. Title 30 TAC §115.780 Applicable = The fugitive unit contains a defined process and Highly Reactive VOC. Valves (not pressure relief, open-ended or bypass line valves) = The fugitive unit contains valves other than pressure relief, open-ended or bypass line valves. Less Than 250 Components at Site = The fugitive unit is located at a site with at least 250 fugitive components in VOC service. Weight Percent HRVOC = All components contact only a process fluid that contains at least 5.0% HRVOC by weight on an annual average basis. Complying with § 115.781(b)(9) = Process drains are complying with the requirements of § 115.781(b)(9). Pumps with Shaft Seal System = No pumps are equipped with a shaft sealing system that prevents or detects emission of VOC from the seal. Bypass Line Valves = The fugitive unit does not contain bypass line valves. Compressors with Shaft Seal System = No compressors are equipped with a shaft sealing system that prevents or detects emission of VOC from the seal. Flanges or Other Connectors = The fugitive unit contains flanges or other connectors. Heat Exchanger Heads, etc. = The fugitive unit contains heat exchanger heads, sight glasses, meters, gauges, sampling connections, bolter manways, hatches, sump covers, junction vent boxes or covers and seals on VOC water separators. Pressure Relief Valves = The fugitive unit contains pressure relief valves. Pump Seals = The fugitive unit contains pump seals. Agitators with Shaft Seal System = No agitators are equipped with a shaft sealing system that prevents or detects emission of VOC from the seal. Complying with § 115.781(b)(9) = Pressure relief valves are complying with the requirements of § 115.781(b)(9).

Unit ID	Regulation	Index Number	Basis of Determination*
CFUGS	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	115PRP	Agitators = The fugitive unit does not contain agitators. Components Utilizing Alternative Work Practice in § 115.358 = No components in the fugitive unit are using the alternative work practice under § 115.358. Compressor Seals = The fugitive unit contains compressor seals. Flanges = The fugitive unit contains flanges. Open-ended Valves = The fugitive unit contains open-ended valves. Pressure Relief Valves = The fugitive unit contains pressure relief valves. Process Drains = The fugitive unit has process drains. Pump Seals = The fugitive unit contains pump seals. Rupture Disks = The fugitive unit has no pressure relief valves equipped with rupture disks. Title 30 TAC § 115.352 Applicable = Site is a petroleum refinery, synthetic organic chemical, polymer resin or methyl tert-butyl ether manufacturing process or a natural gas/gasoline processing operation as defined in 30 TAC 115.10. Valves (other than pressure relief and open-ended) = The fugitive unit contains valves other than pressure relief valves or open-ended valves or lines. Alternate Control Requirement = The TCEQ Executive Director has not approved an alternate method for demonstrating and documenting continuous compliance with an alternate control requirement or exemption criteria for open-ended valves or no alternate has been requested. Instrumentation Systems = The fugitive unit has instrumentation systems, as defined in 40 CFR § 63.161, that meet 40 CFR § 63.169. Less Than 250 Components at Site = Fugitive unit not located at site with less than 250 fugitive components. Sampling Connection Systems = The fugitive unit has sampling connection systems, as defined in 40 CFR § 63.161, that meet 40 CFR § 63.169. Weight Percent VOC = All components contact a process fluid that contains greater than or equal to 10% VOC by weight. 50% by Volume = Compressors are not in hydrogen service or are in hydrogen service and the hydrogen content cannot be reasonably expected to always exceed 50% by volume. Complying wIth § 115.352(1) = Valves are complying with § 115.352(1). Complying With § 115.352(1) = Open-ended valves and lines are complying with § 115.352(1). Complying with 30 TAC § 115.352(1) = Flanges are complying with the requirements in 30 TAC § 115.352(1). Reciprocating Compressors Or Positive Displacement Pumps = The fugitive unit has reciprocating compressors or positive displacement pumps used in natural gas/gasoline processing operations. Shaft Seal System = Pump seals are not equipped with a shaft seal system that prevents or detects emission of VOC from the seal. TVP 0.002 PSIA or Less = The fugitive unit does not have components or systems that contact a process fluid containing VOC having a true vapor pressure less than or equal to 0.002 psia at 68 degrees Fahrenheit. Shaft Seal System = Compressors are not equipped with a shaft sealing system that prevents or detects emission of VOC from the seal. TVP of Process Fluid VOC <= 0.044 psia at 68° F = Pressure relief valves contact a process fluid with a TVP of less than or equal to 0.044 psia at 68° F. TVP of Process Fluid VOC <= 0.044 PSIA AT 68° F = Process drains contact a process fluid containing VOC having a true vapor pressures less than or equal to 0.044 psia at 68 degrees Fahrenheit. TVP of Process Fluid VOC <= 0.044 PSIA AT 68□° F = Pump seals do not contact a process fluid containing VOC having a true vapor pressures less than or equal to 0.044 psia at 68 degrees Fahrenheit. TVP of Process Fluid VOC <= 0.044 PSIA AT 68□° F = Open-ended valves or lines contact a process fluid containing VOC having a true vapor pressures less than or equal to 0.044 psia at 68 degrees Fahrenheit.

Unit ID	Regulation	Index Number	Basis of Determination*
CFUGS	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	115PRP (continued)	Complying with 30 TAC § 115.352(1) = Pump seals are complying with the requirements in 30 TAC § 115.352(1). TVP of Process Fluid VOC <= 0.044 PSIA AT 68□° F = Compressor seals do not contact a process fluid containing VOC having a true vapor pressures less than or equal to 0.044 psia at 68 degrees Fahrenheit. TVP of Process Fluid VOC > 0.044 psia at 68° F = Valves contact a process fluid with a TVP greater than 0.044 psia at 68° F. TVP of Process Fluid VOC > 0.044 PSIA AT 68° F = Open-ended valves contact a process fluid containing VOC having a TVP greater than 0.044 psia at 68 degrees Fahrenheit. Complying With § 115.352(1) = Compressor seals are complying with the requirements in 30 TAC § 115.352(1).

Unit ID	Regulation	Index Number	Basis of Determination*
CFUGS	40 CFR Part 60, Subpart DDD	60DDD-ALL	SOP Index No. = Owner of operator assumes fugitive control requirements for all components in VOC service subject to 40 CFR Part 60, Subpart DDD with no alternate control or control device. FLANGES AND OTHER CONNECTORS (ANY SERVICE) [NSPS DDD] = FLANGES OR CONNECTORS IN ANY SERVICE ADDRESSED IN 40 CFR 60 (NSPS) SUBPART DDD INCLUDED IN THE FUGITIVE UNIT. FLARE = USING A FLARE FOR CONTROL MANUFACTURED PRODUCT [NSPS DDD] = POLYPROPYLENE OR POLYETHYLENE OPEN-ENDED VALVES OR LINES (ANY SERVICE) [NSPS DDD] = OPEN-ENDED VALVES OR LINES IN ANY SERVICE ADDRESSED IN 40 CFR 60 (NSPS) SUBPART DDD INCLUDED IN THE FUGITIVE UNIT. PRESSURE RELIEF DEVICES IN GAS/VAPOR SERVICE [NSPS DDD] = PRESSURE RELIEF DEVICES IN GAS/VAPOR SERVICE ADDRESSED IN 40 CFR 60 (NSPS) SUBPART DDD INCLUDED IN THE FUGITIVE UNIT. PUMPS IN LIGHT LIQUID SERVICE [NSPS DDD] = PUMPS IN LIGHT LIQUID SERVICE ADDRESSED IN 40 CFR 60 (NSPS) SUBPART DDD INCLUDED IN THE FUGITIVE UNIT. VALVES IN GAS/VAPOR OR LIGHT LIQUID SERVICE [NSPS DDD] = VALVES IN GAS/VAPOR OR LIGHT LIQUID SERVICE ADDRESSED IN 40 CFR 60 (NSPS) SUBPART DDD INCLUDED IN THE FUGITIVE UNIT. VAPOR RECOVERY SYSTEM = NOT USING A VAPOR RECOVERY SYSTEM FOR CONTROL CONTINUOUS PROCESS [NSPS DDD] = THE AFFECTED FACILITY IS A CONTINUOUS PROCESS EEL = NOT USING EQUIVALENT EMISSION LIMITATION (EEL). EQUIVALENT EMISSION LIMITATION (EEL)--FLANGES AND OTHER CONNECTORS [NSPS DDD] = NOT USING EQUIVALENT EMISSION LIMITATION (EEL). EQUIVALENT EMISSION LIMITATION (EEL)--OPEN-ENDED VALVES OR LINES [NSPS DDD] = NOT USING EQUIVALENT EMISSION LIMITATION (EEL). EQUIVALENT EMISSION LIMITATION (EEL)--PUMPS LIGHT LIQUID SERVICE [NSPS DDD] = NOT USING EQUIVALENT EMISSION LIMITATION (EEL). EQUIVALENT EMISSION LIMITATION (EEL)--VALVES GAS/VAPOR, LIGHT LIQUID SVC [NSPS DDD] = NOT USING EQUIVALENT EMISSION LIMITATION (EEL). 40 CFR 60 (NSPS) SUBPART DDD CONSTRUCTION/MODIFICATION (RECONSTRUCTION) DATE = AFTER JANUARY 10, 1989 COMPLYING WITH § 60.482-2 = YES COMPLYING WITH § 60.482-6 = YES COMPLYING WITH § 60.482-7 = YES COMPLYING WITH § 60.482-8 = YES COMPLYING WITH §60.482-10 = YES VOC Service = Some of the equipment comes into contact with a fluid containing < 10% by weight VOC. 40 CFR 60 (NSPS) SUBPART DDD DESIGN CAPACITY = FACILITY HAS DESIGN CAPACITY TO PRODUCE GREATER THAN OR EQUAL TO 1,000 MEGAGRAMS PER YEAR CLOSED VENT SYSTEMS AND CONTROL DEVICES (ANY SERVICE) [NSPS DDD] = CLOSED VENT SYSTEM AND CONTROL DEVICES IN ANY SERVICE ADDRESSED IN 40 CFR 60 (NSPS) SUBPART DDD INCLUDED IN THE FUGITIVE UNIT. COMPLYING WITH § 60.482-8 = YES COMPRESSORS (ANY SERVICE) [NSPS DDD] = COMPRESSORS IN ANY SERVICE ADDRESSED IN 40 CFR 60 (NSPS) SUBPART DDD INCLUDED IN THE FUGITIVE UNIT.

Unit ID	Regulation	Index Number	Basis of Determination*
CFUGS	40 CFR Part 60, Subpart DDD	60DDD-ALL (continued)	PUMPS IN HEAVY LIQUID SERVICE [NSPS DDD] = PUMPS IN HEAVY LIQUID SERVICE ADDRESSED IN 40 CFR 60 (NSPS) SUBPART DDD INCLUDED IN THE FUGITIVE UNIT. VALVES IN HEAVY LIQUID SERVICE [NSPS DDD] = VALVES IN HEAVY LIQUID SERVICE ADDRESSED IN 40 CFR 60 (NSPS) SUBPART DDD INCLUDED IN THE FUGITIVE UNIT. ENCLOSED COMBUSTION DEV. = USING AN ENCLOSED COMBUSTION DEVICE FOR CONTROL EQUIPMENT IN VACUUM SERVICE = YES EQUIVALENT EMISSION LIMITATION (EEL)-[NSPS DDD] = NOT USING EQUIVALENT EMISSION LIMITATION (EEL). EQUIVALENT EMISSION LIMITATION (EEL)--COMPRESSORS [NSPS DDD] = NOT USING EQUIVALENT EMISSION LIMITATION (EEL). EQUIVALENT EMISSION LIMITATION (EEL)--PUMPS HEAVY LIQUID SERVICE [NSPS DDD] = NOT USING EQUIVALENT EMISSION LIMITATION (EEL). EQUIVALENT EMISSION LIMITATION (EEL)--VALVES HEAVY LIQUID SERVICE [NSPS DDD] = NOT USING EQUIVALENT EMISSION LIMITATION (EEL). SAMPLING CONNECTION SYST EMS (ANY SERVICE) [NSPS DDD] = SAMPLING CONNECTION SYSTEMS IN ANY SERVICE ADDRESSED IN 40 CFR 60 (NSPS) SUBPART DDD INCLUDED IN THE FUGITIVE UNIT. EEL = NOT USING EQUIVALENT EMISSION LIMITATION (EEL). EQUIVALENT EMISSION LIMITATION (EEL)--SAMPLING CONNECTION SYSTEMS [NSPS DDD] = NOT USING EQUIVALENT EMISSION LIMITATION (EEL). Complying with § 60.482-3 = YES Complying with § 60.482-8 = YES Complying with §60.482-10 = YES Complying with § 60.482-5 = YES Complying with §60.482-10 = YES
33011	30 TAC Chapter 115, HRVOC Cooling Towers	R5HRVOC-1	Cooling Tower Heat Exchange System Exemptions = The cooling tower heat exchange system does not qualify for an exemption. Jacketed Reactor = The cooling tower heat exchange system is not in dedicated service to a jacketed reactor. Alternative Monitoring = Complying with the specified monitoring in 30 TAC § 115.764. Design Capacity = Design capacity to circulate 8000 gpm or greater. Finite Volume System = The cooling tower heat exchange system is complying with the requirements in § 115.764(a). Modified Monitoring = NOT USING MINOR MODIFICATIONS TO THE MONITORING AND TESTING METHODS IN 30 TAC § 115.764. Flow Monitoring/Testing Method = Choosing to monitor cooling water flow rate at a location representative of the total flow rate to the cooling tower in accordance with § 115.764(g)(2). Total Strippalbe VOC = The cooling tower heat exchange system is complying with the requirements of § 115.764(a). On-Line Monitor = Speciated strippable HRVOC concentration is being determined by sampling.
33011	40 CFR Part 63, Subpart FFFF	63FFFF	Monitoring = The cooling water is being monitored for the presence of HAPs or other representative substances that would indicate a leak.

Unit ID	Regulation	Index Number	Basis of Determination*
C-TOWER	30 TAC Chapter 115, HRVOC Cooling Towers	R5HRVOC-1	Cooling Tower Heat Exchange System Exemptions = The cooling tower heat exchange system does not qualify for an exemption. Jacketed Reactor = The cooling tower heat exchange system is not in dedicated service to a jacketed reactor. Alternative Monitoring = Complying with the specified monitoring in 30 TAC § 115.764. Design Capacity = Design capacity to circulate 8000 gpm or greater. Finite Volume System = The cooling tower heat exchange system is complying with the requirements in § 115.764(a). Modified Monitoring = NOT USING MINOR MODIFICATIONS TO THE MONITORING AND TESTING METHODS IN 30 TAC § 115.764. Flow Monitoring/Testing Method = Choosing to monitor cooling water flow rate at a location representative of the total flow rate to the cooling tower in accordance with § 115.764(g)(2). Total Strippalbe VOC = The cooling tower heat exchange system is complying with the requirements of § 115.764(a). On-Line Monitor = Speciated strippable HRVOC concentration is being determined by sampling.
19	30 TAC Chapter 115, HRVOC Vent Gas	R5HRVOC-A	HRVOC Concentration = The vent gas stream has a HRVOC concentration of at least 100 ppmv at some times. Max Flow Rate = The vent gas stream has a maximum potential flow rate less than or equal to 100 dry standard cubic feet per hour (ft3/hr). Exempt Date = The vent gas stream is not exempt.
19	30 TAC Chapter 115, Vent Gas Controls	R5121-1	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. 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. Vent Type = Vent gas stream is emitted from a liquid phase polypropylene manufacturing process. Combined 24-Hour VOC Weight = Combined VOC weight is less than or equal to 100 pounds (45.4 kg). VOC Concentration/Emission Rate @ Max Operating Conditions = The VOC concentration or emission rate is less than the applicable exemption limit at maximum actual operating conditions and the alternate recordkeeping requirements of 30 TAC § 115.126(4) are being selected.
20	30 TAC Chapter 115, HRVOC Vent Gas	R5HRVOC-A	HRVOC Concentration = The vent gas stream has a HRVOC concentration of at least 100 ppmv at some times. Max Flow Rate = The vent gas stream has a maximum potential flow rate less than or equal to 100 dry standard cubic feet per hour (ft3/hr). Exempt Date = The vent gas stream is not exempt.
20	30 TAC Chapter 115, Vent Gas Controls	R5121-1	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. 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. Vent Type = Vent gas stream is emitted from a liquid phase polypropylene manufacturing process. Combined 24-Hour VOC Weight = Combined VOC weight is less than or equal to 100 pounds (45.4 kg). VOC Concentration/Emission Rate @ Max Operating Conditions = The VOC concentration or emission rate is less than the applicable exemption limit at maximum actual operating conditions and the alternate recordkeeping requirements of 30 TAC § 115.126(4) are being selected.

Unit ID	Regulation	Index Number	Basis of Determination*
52	30 TAC Chapter 115, HRVOC Vent Gas	R5HRVOC-A	Alternative Monitoring = Not using alternative monitoring and testing methods. HRVOC Concentration = The vent gas stream has a HRVOC concentration of at least 100 ppmv at some times. Max Flow Rate = The vent gas stream has a maximum potential flow rate greater than 100 dry standard cubic feet per hour (ft3/hr). Minor Modification = Not using any minor modification to the monitoring and testing methods of the rule. Vent Gas Stream Control = Vent gas stream is uncontrolled. Process Knowledge = Process knowledge and engineering calculations are used to determine HRVOC emissions during emission events and scheduled startup, shutdown, and maintenance activities. Waived Testing = The executive director has not waived testing for identical vents. Testing Requirements = Meeting § 115.725(a).
52	40 CFR Part 63, Subpart FFFF	63FFFF	Emission Standard = The vent stream is Group 2 (not designated as Group 1 and determined to not be Group 1). Recovery Device = The TRE index is maintained without a recovery device.
56/57	30 TAC Chapter 115, Vent Gas Controls	R5121-1	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. 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. Vent Type = Vent gas stream is emitted from a liquid phase polypropylene manufacturing process. Combined 24-Hour VOC Weight = Combined VOC weight is less than or equal to 100 pounds (45.4 kg). VOC Concentration/Emission Rate @ Max Operating Conditions = The VOC concentration or emission rate is less than the applicable exemption limit at maximum actual operating conditions and the alternate recordkeeping requirements of 30 TAC § 115.126(4) are being selected.
CTLCTNVNTB	40 CFR Part 63, Subpart FFFF	63FFFF	Designated Grp1 = The emission stream is designated as Group 1. Emission Standard = The TRE index is not maintained above the threshold (5.0 for a new source and 1.9 for an existing source) and a flare is being used for control. Designated Hal = The emission stream is not designated as halogenated. Determined Hal = The emission stream is determined to be non-halogenated. Prior Eval = The data from a prior evaluation or assessment is used. Negative Pressure = The closed vent system is operated and maintained at or above atmospheric pressure. Bypass Line = The closed vent system contains no bypass line.
CTLCTNVNTC	30 TAC Chapter 115, HRVOC Vent Gas	R5HRVOC-A	HRVOC Concentration = The vent gas stream has a HRVOC concentration of at least 100 ppmv at some times. Max Flow Rate = The vent gas stream has a maximum potential flow rate greater than 100 dry standard cubic feet per hour (ft3/hr). Vent Gas Stream Control = Vent gas stream is controlled by a flare.
CTLCTNVNTC	30 TAC Chapter 115, Vent Gas Controls	R5121-1	Alternate Control Requirement = Alternate control is not used. 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. 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. Control Device Type = Boiler in which the vent gas stream is burned at a temperature of at least 1300° F (704 C). Vent Type = Vent gas stream is emitted from a liquid phase polypropylene manufacturing process.

Unit ID	Regulation	Index Number	Basis of Determination*
CTLCTNVNTC	30 TAC Chapter 115, Vent Gas Controls	R5121-2	Alternate Control Requirement = Alternate control is not used. 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. 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. Control Device Type = Smokeless flare Vent Type = Vent gas stream is emitted from a liquid phase polypropylene manufacturing process.
CTLCTNVNTC	30 TAC Chapter 115, Vent Gas Controls	R5121-3	Alternate Control Requirement = Alternate control is not used. 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. 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. Control Device Type = Smokeless flare Vent Type = Vent gas stream is emitted from a liquid phase polypropylene manufacturing process.
CTLCTNVNTC	30 TAC Chapter 115, Vent Gas Controls	R5121-4	Alternate Control Requirement = Alternate control is not used. 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. 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. Control Device Type = Boiler in which the vent gas stream is burned at a temperature of at least 1300° F (704 C). Vent Type = Vent gas stream is emitted from a liquid phase polypropylene manufacturing process.
CTLINTVNTC	30 TAC Chapter 115, HRVOC Vent Gas	R5HRVOC-A	HRVOC Concentration = The vent gas stream has a HRVOC concentration of at least 100 ppmv at some times. Max Flow Rate = The vent gas stream has a maximum potential flow rate greater than 100 dry standard cubic feet per hour (ft3/hr). Vent Gas Stream Control = Vent gas stream is controlled by a flare.
CTLINTVNTC	30 TAC Chapter 115, Vent Gas Controls	R5121-1	Alternate Control Requirement = Alternate control is not used. 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. 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. Control Device Type = Boiler in which the vent gas stream is burned at a temperature of at least 1300° F (704 C). Vent Type = Vent gas stream is emitted from a liquid phase polypropylene manufacturing process.
CTLINTVNTC	30 TAC Chapter 115, Vent Gas Controls	R5121-2	Alternate Control Requirement = Alternate control is not used. 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. 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. Control Device Type = Smokeless flare Vent Type = Vent gas stream is emitted from a liquid phase polypropylene manufacturing process.

Unit ID	Regulation	Index Number	Basis of Determination*
CTLINTVNTC	30 TAC Chapter 115, Vent Gas Controls	R5121-3	Alternate Control Requirement = Alternate control is not used. 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. 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. Control Device Type = Smokeless flare Vent Type = Vent gas stream is emitted from a liquid phase polypropylene manufacturing process.
CTLINTVNTC	30 TAC Chapter 115, Vent Gas Controls	R5121-4	Alternate Control Requirement = Alternate control is not used. 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. 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. Control Device Type = Boiler in which the vent gas stream is burned at a temperature of at least 1300° F (704 C). Vent Type = Vent gas stream is emitted from a liquid phase polypropylene manufacturing process.
CTRLVNTAB	30 TAC Chapter 115, HRVOC Vent Gas	R5HRVOC-A	HRVOC Concentration = The vent gas stream has a HRVOC concentration of at least 100 ppmv at some times. Max Flow Rate = The vent gas stream has a maximum potential flow rate greater than 100 dry standard cubic feet per hour (ft3/hr). Vent Gas Stream Control = Vent gas stream is controlled by a flare.
CTRLVNTAB	30 TAC Chapter 115, Vent Gas Controls	R5121-1	Alternate Control Requirement = Alternate control is not used. 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. 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. Control Device Type = Smokeless flare Vent Type = Vent gas stream is emitted from a liquid phase polypropylene manufacturing process.
CTRLVNTAB	30 TAC Chapter 115, Vent Gas Controls	R5121-2	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. 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. Vent Type = Vent gas stream is emitted from a liquid phase polypropylene manufacturing process.
CTRLVNTAB2	30 TAC Chapter 115, HRVOC Vent Gas	R5HRVOC-A	HRVOC Concentration = The vent gas stream has a HRVOC concentration of at least 100 ppmv at some times. Max Flow Rate = The vent gas stream has a maximum potential flow rate greater than 100 dry standard cubic feet per hour (ft3/hr). Vent Gas Stream Control = Vent gas stream is controlled by a flare.
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Unit ID	Regulation	Index Number	Basis of Determination*
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CTRLVNTAB2	30 TAC Chapter 115, Vent Gas Controls	R5121-4	Alternate Control Requirement = Alternate control is not used. 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. 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. Control Device Type = Boiler in which the vent gas stream is burned at a temperature of at least 1300° F (704 C). Vent Type = Vent gas stream is emitted from a liquid phase polypropylene manufacturing process.
GRPATMVNT	30 TAC Chapter 115, Vent Gas Controls	R5121-1	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. 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. Vent Type = Vent gas stream is emitted from a liquid phase polypropylene manufacturing process. Combined 24-Hour VOC Weight = Combined VOC weight is less than or equal to 100 pounds (45.4 kg). VOC Concentration/Emission Rate @ Max Operating Conditions = The VOC concentration or emission rate is less than the applicable exemption limit at maximum actual operating conditions and the alternate recordkeeping requirements of 30 TAC § 115.126(4) are being selected.
C-RV	40 CFR Part 60, Subpart DDD	NSPSDDD-1	Emergency Vent = Emissions are an emergency vent stream from a new, modified, or reconstructed facility. Manufactured Product = Polypropylene or polyethylene. Polyolefin Production = More than one polyolefin is produced. Continuous Process = The affected facility process is continuous. Process Emissions = Individual vent gas streams emit intermittent emissions. Construction/Modification Date = After January 10, 1989. Experimental Process Line = the affected facility is a producton process line. Table 2 Threshold Emission Rates = The uncontrolled emission rate is greater than the uncontrolled threshold emission rates in Table 2 of 40 CFR § 60.560.

Unit ID	Regulation	Index Number	Basis of Determination*
CTLCTNVNTC	40 CFR Part 60, Subpart DDD	NSPSDDD-1	Control of Continuous Emissions = Vent gas stream emissions are not controlled with an existing control device (as defined in 40 CFR § 60.561). Manufactured Product = Polypropylene or polyethylene. Polyolefin Production = More than one polyolefin is produced. Continuous Process = The affected facility process is continuous. Process Emissions = Individual vent gas streams emit continuous emissions. Construction/Modification Date = After January 10, 1989. Uncontrolled Annual Emissions = Uncontrolled annual emissions are 1.6 Mg/yr (1.76 tpy) or greater. Experimental Process Line = the affected facility is a producton process line. Weight Percent TOC = Weight percent of total organic compounds is 0.10% or greater. Table 3 Control Requirements = Calculations from Table 3 do not require controls. Table 2 Threshold Emission Rates = The uncontrolled emission rate is greater than the uncontrolled threshold emission rates in Table 2 of 40 CFR § 60.560.
CTLCTNVNTC	40 CFR Part 60, Subpart DDD	NSPSDDD-2	Control of Continuous Emissions = Vent gas stream emissions are not controlled with an existing control device (as defined in 40 CFR § 60.561). Manufactured Product = Polypropylene or polyethylene. Polyolefin Production = More than one polyolefin is produced. Continuous Process = The affected facility process is continuous. Process Emissions = Individual vent gas streams emit continuous emissions. Construction/Modification Date = After January 10, 1989. Uncontrolled Annual Emissions = Uncontrolled annual emissions are 1.6 Mg/yr (1.76 tpy) or greater. Experimental Process Line = the affected facility is a producton process line. Weight Percent TOC = Weight percent of total organic compounds is 0.10% or greater. Table 3 Control Requirements = Calculations from Table 3 do not require controls. Table 2 Threshold Emission Rates = The uncontrolled emission rate is greater than the uncontrolled threshold emission rates in Table 2 of 40 CFR § 60.560.

Unit ID	Regulation	Index Number	Basis of Determination*
CTLCTNVNTC	40 CFR Part 60, Subpart DDD	NSPSDDD-3	Control of Continuous Emissions = All continuous emissions are controlled in an existing control device (as defined in 40 CFR § 60.561). Manufactured Product = Polypropylene or polyethylene. Polyolefin Production = More than one polyolefin is produced. Continuous Control Device = Flare. Continuous Process = The affected facility process is continuous. Process Emissions = Individual vent gas streams emit continuous emissions. Construction/Modification Date = After January 10, 1989. Uncontrolled Annual Emissions = Uncontrolled annual emissions are 1.6 Mg/yr (1.76 tpy) or greater. Annual Emissions Entering the Control Device = Annual emissions entering the control device are greater than or equal to the calculated threshold emissions levels calculated in Table 3. Experimental Process Line = the affected facility is a producton process line. Weight Percent TOC = Weight percent of total organic compounds is 0.10% or greater. Emission Reduction from Control Device = Existing control device (as defined in 40 CFR § 60.561) reduces emissions by 98 percent or greater, or exit concentration is 20 ppmv or less. Table 2 Threshold Emission Rates = The uncontrolled emission rate is greater than the uncontrolled threshold emission rates in Table 2 of 40 CFR § 60.560.
CTLCTNVNTC	40 CFR Part 60, Subpart DDD	NSPSDDD-4	Control of Continuous Emissions = All continuous emissions are controlled in an existing control device (as defined in 40 CFR § 60.561). Manufactured Product = Polypropylene or polyethylene. Polyolefin Production = More than one polyolefin is produced. Continuous Control Device = Boiler or process heater with a design heat input capacity less than 150 MMBtu/hr. Continuous Process = The affected facility process is continuous. Process Emissions = Individual vent gas streams emit continuous emissions. Construction/Modification Date = After January 10, 1989. Uncontrolled Annual Emissions = Uncontrolled annual emissions are 1.6 Mg/yr (1.76 tpy) or greater. Annual Emissions Entering the Control Device = Annual emissions entering the control device are greater than or equal to the calculated threshold emissions levels calculated in Table 3. Experimental Process Line = the affected facility is a producton process line. Weight Percent TOC = Weight percent of total organic compounds is 0.10% or greater. Emission Reduction from Control Device = Existing control device (as defined in 40 CFR § 60.561) reduces emissions by 98 percent or greater, or exit concentration is 20 ppmv or less. Table 2 Threshold Emission Rates = The uncontrolled emission rate is greater than the uncontrolled threshold emission rates in Table 2 of 40 CFR § 60.560.

Unit ID	Regulation	Index Number	Basis of Determination*
CTLINTVNTC	40 CFR Part 60, Subpart DDD	NSPSDDD-1	Emergency Vent = Emissions are not an emergency vent stream from a new, modified, or reconstructed facility. Manufactured Product = Polypropylene or polyethylene. Polyolefin Production = More than one polyolefin is produced. Continuous Process = The affected facility process is continuous. Existing Control Device = The vent stream is not controlled in an existing control device (as defined in 40 CFR ‘ 60.561) which has not been reconstructed, replaced, or its operating conditions modified as a result of state or local regulations. Process Emissions = Individual vent gas streams emit intermittent emissions. Construction/Modification Date = After January 10, 1989. Intermittent Control Device = Boiler or process heater with a design heat input capacity of less than 150 MMBtu/hr. Experimental Process Line = the affected facility is a producton process line. Table 2 Threshold Emission Rates = The uncontrolled emission rate is greater than the uncontrolled threshold emission rates in Table 2 of 40 CFR § 60.560.
CTLINTVNTC	40 CFR Part 60, Subpart DDD	NSPSDDD-2	Emergency Vent = Emissions are not an emergency vent stream from a new, modified, or reconstructed facility. Manufactured Product = Polypropylene or polyethylene. Polyolefin Production = More than one polyolefin is produced. Continuous Process = The affected facility process is continuous. Existing Control Device = The vent stream is not controlled in an existing control device (as defined in 40 CFR ‘ 60.561) which has not been reconstructed, replaced, or its operating conditions modified as a result of state or local regulations. Process Emissions = Individual vent gas streams emit intermittent emissions. Construction/Modification Date = After January 10, 1989. Intermittent Control Device = Flare. Experimental Process Line = the affected facility is a producton process line. Table 2 Threshold Emission Rates = The uncontrolled emission rate is greater than the uncontrolled threshold emission rates in Table 2 of 40 CFR § 60.560.
CTLINTVNTC	40 CFR Part 60, Subpart DDD	NSPSDDD-3	Emergency Vent = Emissions are not an emergency vent stream from a new, modified, or reconstructed facility. Manufactured Product = Polypropylene or polyethylene. Polyolefin Production = More than one polyolefin is produced. Continuous Process = The affected facility process is continuous. Existing Control Device = The vent stream is controlled in an existing control device (as defined in 40 CFR ‘ 60.561) which has not been reconstructed, replaced, or its operating conditions modified as a result of state or local regulations. Process Emissions = Individual vent gas streams emit intermittent emissions. Construction/Modification Date = After January 10, 1989. Experimental Process Line = the affected facility is a producton process line. Table 2 Threshold Emission Rates = The uncontrolled emission rate is greater than the uncontrolled threshold emission rates in Table 2 of 40 CFR § 60.560.

Unit ID	Regulation	Index Number	Basis of Determination*
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N-PELSILO	40 CFR Part 60, Subpart DDD	NSPSDDD-1	Control of Continuous Emissions = Vent gas stream emissions are not controlled with an existing control device (as defined in 40 CFR § 60.561). Manufactured Product = Polypropylene or polyethylene. Polyolefin Production = More than one polyolefin is produced. Continuous Process = The affected facility process is continuous. Process Emissions = Individual vent gas streams emit continuous emissions. Construction/Modification Date = After January 10, 1989. Uncontrolled Annual Emissions = Uncontrolled annual emissions are less than 1.6 Mg/yr (1.76 tpy). Experimental Process Line = the affected facility is a production process line. Weight Percent TOC = Weight percent of total organic compounds is 0.10% or greater. Table 2 Threshold Emission Rates = The uncontrolled emission rate is greater than the uncontrolled threshold emission rates in Table 2 of 40 CFR § 60.560.
S-PELSILO	40 CFR Part 60, Subpart DDD	NSPSDDD-1	Control of Continuous Emissions = Vent gas stream emissions are not controlled with an existing control device (as defined in 40 CFR § 60.561). Manufactured Product = Polypropylene or polyethylene. Polyolefin Production = More than one polyolefin is produced. Continuous Process = The affected facility process is continuous. Process Emissions = Individual vent gas streams emit continuous emissions. Construction/Modification Date = After January 10, 1989. Uncontrolled Annual Emissions = Uncontrolled annual emissions are less than 1.6 Mg/yr (1.76 tpy). Experimental Process Line = the affected facility is a production process line. Weight Percent TOC = Weight percent of total organic compounds is 0.10% or greater. Table 2 Threshold Emission Rates = The uncontrolled emission rate is greater than the uncontrolled threshold emission rates in Table 2 of 40 CFR § 60.560.

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

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.

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

The status of air permits and applications and a link to the Air Permits Remote Document Server is located at the following Web site:

www.tceq.texas.gov/permitting/air/nav/air_status_permits.html

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.: 5572B	Issuance Date: 06/23/2014
Permits By Rule (30 TAC Chapter 106) for the Application Area	
Number: 106.183	Version No./Date: 06/18/1997
Number: 106.261	Version No./Date: 12/24/1998
Number: 106.262	Version No./Date: 12/24/1998
Number: 106.452	Version No./Date: 09/04/2000
Number: 106.472	Version No./Date: 03/14/1997
Number: 106.472	Version No./Date: 09/04/2000
Number: 106.492	Version No./Date: 03/14/1997
Number: 15	Version No./Date: 01/08/1980
Number: 34	Version No./Date: 05/04/1994
Number: 51	Version No./Date: 09/13/1993
Number: 53	Version No./Date: 07/20/1992
Number: 57	Version No./Date: 05/05/1976
Number: 58	Version No./Date: 01/08/1980
Number: 63	Version No./Date: 05/05/1976
Number: 63	Version No./Date: 01/08/1980

Number: 102	Version No./Date: 07/20/1992
Number: 106	Version No./Date: 07/20/1992

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 sand-blasting 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.: GRPTK1	
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.: R5112-1
Pollutant: VOC	Main Standard: § 115.112(e)(1)
Monitoring Information	
Indicator: Structural Integrity of the Pipe	
Minimum Frequency: Emptied and degassed	
Averaging Period: n/a	
Deviation Limit: Inspect to determine the structural integrity of the fill pipe and record each time the storage tank is emptied and degassed. If the structural integrity of the fill pipe is in question, repairs shall be made before the storage tank is refilled.	
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.	

Unit/Group/Process Information	
ID No.: GRPTK1	
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.: R5112-1
Pollutant: VOC	Main Standard: § 115.112(e)(1)
Monitoring Information	
Indicator: Record of Tank Construction Specifications	
Minimum Frequency: n/a	
Averaging Period: n/a	
Deviation Limit: Keep a record of tank construction specifications that show a fill pipe that extends from the top of the tank to have a maximum clearance of 6 inches from the bottom.	
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.	

Compliance Review

1. In accordance with 30 TAC Chapter 60, the compliance history was reviewed on 03/19/2015.
2. The compliance history review evaluated the period from 10/09/2008 to 10/09/2013.
   Site rating: 0.00 Company rating: 0.00
   (High < 0.10; Satisfactory > 0.10 and < 55; Unsatisfactory > 55)
3. Has the permit changed on the basis of the compliance history or site/company rating? .....No

Permit reviewer notes:
The 0.00 rating was confirmed to be correct by Mark Staedtler (TCEQ). The rating of 0.00 is a result of the total audits exceeding the Violation Points (104 vs 95.75).

Site/Permit Area Compliance Status Review

1. Were there any out-of-compliance units listed on Form OP-ACPS? .....No
2. Is a compliance plan and schedule included in the permit?.....No

Permit reviewer notes:
none

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 Semichemical 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