# **Statement of Basis of the Federal Operating Permit**

## **BASF TOTALEnergies Petrochemicals LLC**

Site Name: NAFTA Regional Olefins Complex Area Name: Ethylene / Propylene Cracker and Cogeneration Physical Location: Intersection of Highway 73 and Highway 366, Gate 99 Nearest City: Port Arthur County: Jefferson

> Permit Number: O2551 Project Type: Renewal

The North American Industry Classification System (NAICS) Code: 325110 NAICS Name: Petrochemical Manufacturing

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: May 16, 2025

# Operating Permit Basis of Determination

#### **Permit Area Process Description**

Cracking Furnace No.9 is capable of cracking naphtha, diesel, butane, propane, ethane and a mixed feed of naphtha and diesel (co-cracking). The furnace is designed to produce ethylene from naphtha feed and diesel feed. The furnace is fueled by natural gas and/or cracker off-gas generated within the Ethylene Plant. A selective catalytic reduction (SCR) system is used to control NOx emissions from the furnace.

The site also has two natural gas-fired combined-cycle combustion turbines as prime movers for commercial electric generators ("A" and "B"). The site is classified as a "cogeneration" facility since it produces steam for off-site uses as well as electricity. The system includes heat recovery steam generators (HRSGs) that recover the heat from the turbines' exhaust, to which fuel gas is added and burned for supplemental energy, to power steam turbines. There are miscellaneous internal combustion engines and smaller sources of emissions scattered around the site that are covered by site-wide requirements.

The two package boilers (Emission Unit ID Nos. B-7280 and B-7290) are capable of producing a nominal 250,000 lb/hr of superheated steam, for the purpose of increasing steam production flexibility at the site. The firing rate is limited to 425 MMBtu/hr for each boiler. The boilers are fueled by natural gas or High-Pressure Fuel Gas (HPFG), or a combination of natural gas/HPFG and either C4-Acethylene fuel (C4-A) or C4 Vapor Stream fuel (C4VS). HPFG, C4-A and C4VS are fuel streams generated at the existing plant. A selective catalytic reduction (SCR) system is used to control NOx emissions from each boiler.

#### 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: 02629

#### Major Source Pollutants

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

Major Pollutants	VOC, PM, NOX, HAPS, CO
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#### **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
- o Permit Location
- Permit Shield (30 TAC § 122.148)
- Attachments
  - Applicable Requirements Summary
    - Unit Summary
    - Applicable Requirements Summary
  - Additional Monitoring Requirements
  - Permit Shield
  - o New Source Review Authorization References
  - o Compliance Plan
  - o Alternative Requirements
- Appendix A
  - o Acronym list
- Appendix B
  - o Copies of major NSR authorizations

#### General Terms and Conditions

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

#### Special Terms and Conditions

Emissions Limitations and Standards, Monitoring and Testing, and Recordkeeping and Reporting. The TCEQ has designated certain applicable requirements as site-wide requirements. A site-wide requirement is a requirement that applies uniformly to all the units or activities at the site. Units with only site-wide requirements are addressed on Form OP-REQ1 and are not required to be listed separately on an 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 is based on data supplied by the applicant on the OP-SUM and various OP-UA forms.

Additional Monitoring Requirement. The next attachment includes additional monitoring the applicant must perform to ensure compliance with the applicable standard. Compliance assurance monitoring (CAM) is often required to provide a reasonable assurance of compliance with applicable emission limitations/standards for large emission units that use control devices to achieve compliance with applicant requirements. When necessary, periodic monitoring (PM) requirements are specified for certain parameters (i.e. feed rates, flow rates, temperature, fuel type and consumption, etc.) to determine if a term and condition or emission unit is operating within specified limits to control emissions. These additional monitoring approaches may be required for two reasons. First, the applicable rules do not adequately specify

monitoring requirements (exception- Maximum Achievable Control Technology Standards (MACTs) generally have sufficient monitoring), and second, monitoring may be required to fill gaps in the monitoring requirements of certain applicable requirements. In situations where the NSR permit is the applicable requirement requiring extra monitoring for a specific emission unit, the preferred solution is to have the monitoring requirements in the NSR permit updated so that all NSR requirements are consolidated in the NSR permit.

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

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

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

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

#### Appendix A

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

#### Appendix B

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

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

The site contains stationary vents with a flowrate less than 100,000 actual cubic feet per minute (acfm) and constructed after January 31, 1972 which are limited, over a six-minute average, to 20% opacity as required by 30 TAC § 111.11(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 Requirements Summary. This is consistent with EPA's White Paper for Streamlined Development of Part 70 Permit Applications, July 10, 1995, that states that requirements that apply identically to emission units at a site can be treated on a generic basis such as source-wide opacity limits.

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

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

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

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

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

#### Federal Regulatory Applicability Determinations

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

Regulatory Program	Applicability (Yes/No)
Prevention of Significant Deterioration (PSD)	Yes
Nonattainment New Source Review (NNSR)	Yes
Minor NSR	Yes
40 CFR Part 60 - New Source Performance Standards	Yes
40 CFR Part 61 - National Emission Standards for Hazardous Air Pollutants (NESHAPs)	Yes
40 CFR Part 63 - NESHAPs for Source Categories	Yes
Title IV (Acid Rain) of the Clean Air Act (CAA)	No
Title V (Federal Operating Permits) of the CAA	Yes
Title VI (Stratospheric Ozone Protection) of the CAA	Yes
CSAPR (Cross-State Air Pollution Rule)	No
Federal Implementation Plan for Regional Haze (Texas SO <sub>2</sub> Trading Program)	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 and Emission Units**

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:

#### **De Minimis Sources**

1. Sources identified in the "De Minimis Facilities or Sources" list maintained by TCEQ. The list is available at https://www.tceq.texas.gov/permitting/air/newsourcereview/de\_minimis.html.

#### **Miscellaneous Sources**

- 2. Office activities such as photocopying, blueprint copying, and photographic processes.
- 3. Outdoor barbecue pits, campfires, and fireplaces.
- 4. Storage and handling of sealed portable containers, cylinders, or sealed drums.
- 5. Vehicle exhaust from maintenance or repair shops.
- 6. 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).
- 7. 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.
- 8. 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.
- 9. Storage of water that has not contacted other materials or fluids containing regulated air pollutants other than boiler water treatment chemicals.
- 10. Well cellars.
- 11. 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.
- 12. Equipment used exclusively for the melting or application of wax.
- 13. Instrument systems utilizing air, natural gas, nitrogen, oxygen, carbon dioxide, helium, neon, argon, krypton, and xenon.
- 14. Battery recharging areas.

Sources Authorized by 30 TAC Chapter 106, Permits by Rule

- 15. Sources authorized by §106.102: Combustion units designed and used exclusively for comfort heating purposes employing liquid petroleum gas, natural gas, solid wood, or distillate fuel oil.
- 16. Sources authorized by §106.122: 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.
- 17. Sources authorized by §106.141: Batch mixers with rated capacity of 27 cubic feet or less for mixing cement, sand, aggregate, lime, gypsum, additives, and/or water to produce concrete, grout, stucco, mortar, or other similar products.
- 18. Sources authorized by §106.143: Wet sand and gravel production facilities that obtain material from subterranean and subaqueous beds where the deposits of sand and gravel are consolidated granular materials resulting from natural disintegration of rock and stone and have a production rate of 500 tons per hour or less.
- 19. Sources authorized by §106.148: Railcar or truck unloading of wet sand, gravel, aggregate, coal, lignite, and scrap iron or scrap steel (but not including metal ores, metal oxides, battery parts, or fine dry materials) into trucks or other railcars for transportation to other locations.
- 20. Sources authorized by §106.149: Sand and gravel production facilities that obtain material from deposits of sand and gravel consisting of natural disintegration of rock and stone, provided that crushing or breaking operations are not used and no blasting is conducted to obtain the material.
- 21. Sources authorized by §106.161: Animal feeding operations which confine animals in numbers specified and any associated on-site feed handling and/or feed millings operations, not including caged laying and caged pullet operations.
- 22. Sources authorized by §106.162: Livestock auction sales facilities.

- 23. Sources authorized by §106.163: All animal racing facilities, domestic animal shelters, zoos, and their associated confinement areas, stables, feeding areas, and waste collection and treatment facilities, other than incineration units.
- 24. Sources authorized by §106.229: Equipment used exclusively for the dyeing or stripping of textiles.
- 25. Sources authorized by §106.241: Any facility where animals or poultry are slaughtered and prepared for human consumption provided that waste products such as blood, offal, and feathers are stored in such a manner as to prevent the creation of a nuisance condition and these waste products are removed from the premises daily or stored under refrigeration.
- 26. Sources authorized by §106.242: Equipment used in eating establishments for the purpose of preparing food for human consumption.
- 27. Sources authorized by §106.243: Smokehouses in which the maximum horizontal inside cross-sectional area does not exceed 100 square feet.
- 28. Sources authorized by §106.244: Ovens, mixers, blenders, barbecue pits, and cookers if the products are edible and intended for human consumption.
- 29. Sources authorized by §106.266: Vacuum cleaning systems used exclusively for industrial, commercial, or residential housekeeping purposes.
- 30. Sources authorized by §106.301: Aqueous fertilizer storage tanks.
- 31. Sources authorized by §106.313: 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.
- 32. Sources authorized by §106.316: Equipment used for inspection of metal products.
- 33. Sources authorized by §106.317: Equipment used exclusively for rolling, forging, pressing, drawing, spinning, or extruding either hot or cold metals by some mechanical means.
- 34. Sources authorized by §106.318: Die casting machines.
- 35. Sources authorized by §106.319: Foundry sand mold forming equipment to which no heat is applied.
- 36. Sources authorized by §106.331: Equipment used exclusively to package pharmaceuticals and cosmetics or to coat pharmaceutical tablets.
- 37. Sources authorized by §106.333: Equipment used exclusively for the mixing and blending of materials at ambient temperature to make water-based adhesives.
- 38. Sources authorized by §106.372: 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.
- 39. Sources authorized by §106.391: Presses used for the curing of rubber products and plastic products.
- 40. Sources authorized by §106.394: Equipment used for compression molding and injection molding of plastics.
- 41. Sources authorized by §106.414: Equipment used exclusively for the packaging of lubricants or greases.
- 42. Sources authorized by §106.415: Laundry dryers, extractors, and tumblers used for fabrics cleaned with water solutions of bleach or detergents.
- 43. Sources authorized by §106.431: Equipment used exclusively to mill or grind coatings and molding compounds where all materials charged are in paste form.
- 44. Sources authorized by §106.432: Containers, reservoirs, or tanks used exclusively for dipping operations for coating objects with oils, waxes, or greases where no organic solvents, diluents, or thinners are used; or dipping operations for applying coatings of natural or synthetic resins which contain no organic solvents.
- 45. Sources authorized by §106.451: Blast cleaning equipment using a suspension of abrasives in water.
- 46. Sources authorized by §106.453: Equipment used for washing or drying products fabricated from metal or glass, provided no volatile organic materials are used in the process and no oil or solid fuel is burned.
- 47. Sources authorized by §106.471: Equipment used exclusively to store or hold dry natural gas.
- 48. Sources authorized by §106.531: Sewage treatment facilities, excluding combustion or incineration equipment, land farms, or grease trap waste handling or treatment facilities.

#### **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*
GTGENG-1	30 TAC Chapter 117, Subchapter B	R-117	Horsepower Rating = HP is greater than or equal to 300 RACT Date Placed in Service = After June 9, 1993 and on or after the final compliance date specified in 30 TAC §§ 117.9000, 117.9010 or 117.9020
			Functionally Identical Replacement = Unit is not a functionally identical replacement
GTGENG-1	40 CFR Part 63, Subpart ZZZZ	63ZZZZ-1	HAP Source = The site is a major source of hazardous air pollutants as defined in 40 CFR § 63.2 Brake HP = Stationary RICE with a brake HP greater than 500 HP.
			Construction/Reconstruction Date = Commenced construction or reconstruction before December 19, 2002. Service Type = Limited use.
GTGENG-2	30 TAC Chapter 117,	R-117	Horsepower Rating = HP is greater than or equal to 300
	Subchapter B		RACT Date Placed in Service = After June 9, 1993 and on or after the final compliance date specified in 30 TAC §§ 117.9000, 117.9010 or 117.9020
			Functionally Identical Replacement = Unit is not a functionally identical replacement
GTGENG-2	40 CFR Part 63, Subpart ZZZZ	part 63ZZZ-1	HAP Source = The site is a major source of hazardous air pollutants as defined in 40 CFR § 63.2 Brake HP = Stationary RICE with a brake HP greater than 500 HP.
			Construction/Reconstruction Date = Commenced construction or reconstruction before December 19, 2002. Service Type = Limited use.
D-8001R	40 CFR Part 61, Subpart	61FF-343	Waste Treatment Tank = The tank manages, treats or stores a waste stream subject to 40 CFR Part 61, Subpart FF.
	FF		Alternative Standard for Tanks = The tank is not complying with the alternative standards in 40 CFR § 61.351.
			Alternative Means of Compliance = Not using an alternate means of compliance to meet the requirements of 40 CFR § 61.343 for tanks.
			Tank Control Requirements = The tank has a fixed roof and closed vent system routing vapors to either a fuel gas system or control device.
			Fuel Gas System = Gaseous emissions from the tank or enclosure are not routed to a fuel gas system.
			Cover and Closed Vent = The cover and closed vent system are not operated such that the tank is maintained at a pressure less than atmospheric pressure and meets the conditions of 40 CFR § $61.343(a)(1)(i)(C)(1)-(3)$ .
			Closed Vent System and Control Device AMOC = Not using an alternate means of compliance
			Bypass Line = The closed vent system contains any by-pass line that could divert the vent stream away from the control device.
			Bypass Line Valve = A flow indicator is used to monitor the by-pass line.
			Control Device Type/Operation = Flare
			Engineering Calculations = Engineering calculations show that the control device is proven to achieve its emission limitation.
			Alternate Monitoring Parameters = Alternate monitoring parameters not requested

Unit ID	Regulation	Index Number	Basis of Determination*
DSL-TK	30 TAC Chapter 115, Storage of VOCs	R5112	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.
			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
			Tank Description = Tank does not require emission controls
			True Vapor Pressure = True vapor pressure is less than 1.0 psia
T241176	30 TAC Chapter 115, Storage of VOCs	R5112	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.
			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
			Tank Description = Tank does not require emission controls
			True Vapor Pressure = True vapor pressure is less than 1.0 psia
TK-1501	30 TAC Chapter 115, Storage of VOCs	R5112	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.
			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
			Tank Description = Tank does not require emission controls
			True Vapor Pressure = True vapor pressure is less than 1.0 psia
TK-1701	30 TAC Chapter 115, Storage of VOCs	R5112	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.
			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
			Tank Description = Tank does not require emission controls
			True Vapor Pressure = True vapor pressure is less than 1.0 psia
TK-1702	30 TAC Chapter 115, Storage of VOCs	R5112	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.
			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
			Tank Description = Tank does not require emission controls
			True Vapor Pressure = True vapor pressure is less than 1.0 psia
TK-1703	30 TAC Chapter 115, Storage of VOCs	R5112	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.
			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
			Tank Description = Tank does not require emission controls

Unit ID	Regulation	Index Number	Basis of Determination*
			True Vapor Pressure = True vapor pressure is less than 1.0 psia
TK-1704	30 TAC Chapter 115, Storage of VOCs	R5112	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.
			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
			Tank Description = Tank using a vapor recovery system (VRS)
			True Vapor Pressure = True vapor pressure is less than 1.0 psia
			Control Device Type = Carbon adsorption system
TK-2210	30 TAC Chapter 115, Storage of VOCs	R5112	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.
			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
			Tank Description = Tank does not require emission controls
			True Vapor Pressure = True vapor pressure is less than 1.0 psia
TK-2210X	30 TAC Chapter 115, Storage of VOCs	R5112	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.
			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
			Tank Description = Tank does not require emission controls
			True Vapor Pressure = True vapor pressure is less than 1.0 psia
TK-2501	30 TAC Chapter 115, Storage of VOCs	R5112	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.
			Product Stored = VOC other than crude oil or condensate
			Storage Capacity = Capacity is greater than 40,000 gallons
			Tank Description = Tank using an internal floating roof (IFR)
			True Vapor Pressure = True vapor pressure is less than 1.0 psia
TK-2501	40 CFR Part 60, Subpart	60Kb-A	Product Stored = Waste mixture of indeterminate or variable composition
	Kb		Storage Capacity = Capacity is greater than or equal to 39,890 gallons (151,000 liters)
			Maximum True Vapor Pressure = True vapor pressure is less than 0.5 psia
TK-2501	40 CFR Part 61, Subpart FF	61FF-351	Waste Treatment Tank = The tank manages, treats or stores a waste stream subject to 40 CFR Part 61, Subpart FF. Alternative Standard for Tanks = The tank is complying with the alternative standards in 40 CFR § 61.351. Kb Tank Type = Using a fixed roof and internal floating roof, that meets the requirements of 40 CFR § 60.112b(a)(1) Seal Type = Mechanical shoe seal

Unit ID	Regulation	Index Number	Basis of Determination*
TK-2501	40 CFR Part 63, Subpart YY	63YY	Source Type = Tank is at an ethylene production facility.
TK-2501B	30 TAC Chapter 115, Storage of VOCs	R5112	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is greater than 40,000 gallons Tank Description = Tank using an internal floating roof (IFR)
			True Vapor Pressure = True vapor pressure is less than 1.0 psia
TK-2501B	40 CFR Part 60, Subpart Kb	60Kb-A	Product Stored = Waste mixture of indeterminate or variable composition Storage Capacity = Capacity is greater than or equal to 39,890 gallons (151,000 liters) Maximum True Vapor Pressure = True vapor pressure is less than 0.5 psia
TK-2501B	40 CFR Part 61, Subpart FF	61FF-351	Waste Treatment Tank = The tank manages, treats or stores a waste stream subject to 40 CFR Part 61, Subpart FF. Alternative Standard for Tanks = The tank is complying with the alternative standards in 40 CFR § 61.351. Kb Tank Type = Using a fixed roof and internal floating roof, that meets the requirements of 40 CFR § 60.112b(a)(1) Seal Type = Mechanical shoe seal
TK-2501B	40 CFR Part 63, Subpart YY	63YY	Source Type = Tank is at an ethylene production facility.
TK-2620	30 TAC Chapter 115, Storage of VOCs	R5112	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. 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 Tank Description = Tank does not require emission controls True Vapor Pressure = True vapor pressure is less than 1.0 psia
TK-3110X	30 TAC Chapter 115, Storage of VOCs	R5112	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. 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 Tank Description = Tank does not require emission controls True Vapor Pressure = True vapor pressure is less than 1.0 psia
TK-3710X	30 TAC Chapter 115, Storage of VOCs	R5112	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons

Unit ID	Regulation	Index Number	Basis of Determination*
			Tank Description = Tank does not require emission controls
			True Vapor Pressure = True vapor pressure is less than 1.0 psia
TK-4020	30 TAC Chapter 115, Storage of VOCs	R5112	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.
			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
			Tank Description = Tank does not require emission controls
			True Vapor Pressure = True vapor pressure is less than 1.0 psia
TK-7403X	30 TAC Chapter 115, Storage of VOCs	R5112	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.
			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
			Tank Description = Tank does not require emission controls
			True Vapor Pressure = True vapor pressure is less than 1.0 psia
TK-8001	30 TAC Chapter 115, Storage of VOCs	R5112	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.
			Product Stored = VOC other than crude oil or condensate
			Storage Capacity = Capacity is greater than 40,000 gallons
			Tank Description = Tank using an internal floating roof (IFR)
			True Vapor Pressure = True vapor pressure is less than 1.0 psia
TK-8001	40 CFR Part 60, Subpart	60Kb-A	Product Stored = Waste mixture of indeterminate or variable composition
	Kb		Storage Capacity = Capacity is greater than or equal to 39,890 gallons (151,000 liters)
			Maximum True Vapor Pressure = True vapor pressure is less than 0.5 psia
TK-8101	30 TAC Chapter 115, Storage of VOCs	R5112	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.
			Product Stored = VOC other than crude oil or condensate
			Storage Capacity = Capacity is greater than 40,000 gallons
			Tank Description = Tank (other than welded) using an external floating roof (EFR)
			True Vapor Pressure = True vapor pressure is less than 1.0 psia
			Primary Seal = Mechanical shoe
TK-9603X	30 TAC Chapter 115, Storage of VOCs	R5112	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.
			Product Stored = VOC other than crude oil or condensate
			Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons

Unit ID	Regulation	Index Number	Basis of Determination*
			Tank Description = Tank does not require emission controls
			True Vapor Pressure = True vapor pressure is less than 1.0 psia
N-12	40 CFR Part 63, Subpart DDDDD	63DDDDD	Commence = Source is existing (commenced construction or reconstruction on or before June 4, 2010)
			Table Applicability = The unit is designed to burn Gas 1 fuel AND has no continuous oxygen trim AND has heat input equal to or greater than 10 MMBtu/hr
N-13	40 CFR Part 63, Subpart	63DDDDD	Commence = Source is existing (commenced construction or reconstruction on or before June 4, 2010)
	DDDDD		Table Applicability = The unit is designed to burn Gas 1 fuel AND has no continuous oxygen trim AND has heat input equal to or greater than 10 MMBtu/hr
B-7240	30 TAC Chapter 117,	R-117	Unit Type = Other industrial, commercial, or institutional boiler.
	Subchapter B		Maximum Rated Capacity = MRC is greater than or equal to 250 MMBtu/hr.
			RACT Date Placed in Service = On or after the final compliance date specified in 30 TAC § 117.9000.
			Functionally Identical Replacement = Unit is not a functionally identical replacement.
			Fuel Type #1 = Natural gas.
			Fuel Type #2 = Gaseous fuel other than natural gas landfill gas or renewable non-fossil fuel gases.
			Annual Heat Input = Annual heat input is greater than 2.2(10 <sup>11</sup> ) Btu/yr, based on rolling 12-month average.
			NOx Emission Limitation = Title 30 TAC § 117.105 (relating to Emission Specifications for Reasonably Available Control Technology).
B-7240	40 CFR Part 60, Subpart	60Db-A	Construction/Modification Date = Constructed after July 9, 1997, and on or before February 28, 2005
	Db		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).
			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.
			Subpart Ea, Eb, AAAA, or CCCC = The affected facility does not meet applicability requirements of and is subject to 40 CFR Part 60, Subpart Ea, Eb or AAAA.
			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.
			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.
			Temporary Boiler = The steam-generating unit is not a temporary boiler
			D-Series Fuel Type #1 = Natural gas.
			D-Series Fuel Type #2 = Gaseous fossil fuel other than natural gas and coal-derived synthetic fuel meeting the definition of natural gas.
			D-Series Fuel Type #3 = Byproduct/waste
			Subpart D = The affected facility does not meet the applicability requirements of 40 CFR Part 60, Subpart D.

Unit ID	Regulation	Index Number	Basis of Determination*
			Additional Applicability Requirement = The affected facility does not meet the applicability requirements of 40 CFR Part 60, Subparts J, Ja, E, or BB
			ACF Option - SO2 = Other ACF or no ACF.
			ACF Option - PM = Other ACF or no ACF.
			ACF Option - NOx = Other ACF or no ACF.
			Electrical or Mechanical Output = More than 10% of the annual output is electrical or mechanical.
			Output Based Limit = The facility is not electing to comply with the output based limit in § 60.44b(I)(3).
			60.49Da(n) Alternative = The facility is not using the § 60.49Da(n) alternative.
			60.49Da(m) Alternative = The facility is not using the § 60.49Da(m) alternative.
			Monitoring Type PM = No particulate monitoring.
			Monitoring Type PM (Opacity) = No particulate (opacity) monitoring.
			Monitoring Type NOx = Continuous emission monitoring system.
			Monitoring Type SO2 = No SO <sub>2</sub> monitoring.
			Technology Type = No emerging or conventional technology is used to reduce or control SO2 emissions
			Unit Type = OTHER UNIT TYPE
			Heat Release Rate = Natural gas oil with a heat release rate greater than 70 MBtu/hr/ft <sup>3</sup> .
			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 <sub>x</sub> emission limit that applies specifically when the byproduct/waste is combusted.
B-7240	40 CFR Part 63, Subpart DDDDD	63DDDDD	Commence = Source is existing (commenced construction or reconstruction on or before June 4, 2010)
			Table Applicability = The unit is designed to burn Gas 1 fuel AND has no continuous oxygen trim AND has heat input equal to or greater than 10 MMBtu/hr
B-7280	30 TAC Chapter 117,	R-117	Unit Type = Other industrial, commercial, or institutional boiler.
	Subchapter B		Maximum Rated Capacity = MRC is greater than or equal to 250 MMBtu/hr.
			RACT Date Placed in Service = On or after the final compliance date specified in 30 TAC § 117.9000.
			Functionally Identical Replacement = Unit is not a functionally identical replacement.
			Fuel Type #1 = Natural gas.
			Fuel Type #2 = Gaseous fuel other than natural gas landfill gas or renewable non-fossil fuel gases.
			Annual Heat Input = Annual heat input is greater than 2.2(10 <sup>11</sup> ) Btu/yr, based on rolling 12-month average.
			NOx Emission Limitation = Title 30 TAC § 117.105 (relating to Emission Specifications for Reasonably Available Control Technology).
B-7280	40 CFR Part 60, Subpart	60Db-B	Construction/Modification Date = Constructed or reconstructed after February 28, 2005.
	Db		Heat Input Capacity = Heat input capacity is greater than 250 MMBtu/hr (73 MW).
			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.

Unit ID	Regulation	Index Number	Basis of Determination*
			Subpart Ea, Eb, AAAA, or CCCC = The affected facility does not meet applicability requirements of and is subject to 40 CFR Part 60, Subpart Ea, Eb or AAAA.
			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.
			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.
			Temporary Boiler = The steam-generating unit is not a temporary boiler
			D-Series Fuel Type #1 = Natural gas.
			D-Series Fuel Type #2 = Gaseous fossil fuel other than natural gas and coal-derived synthetic fuel meeting the definition of natural gas.
			D-Series Fuel Type #3 = Byproduct/waste
			Subpart D = The affected facility does not meet the applicability requirements of 40 CFR Part 60, Subpart D.
			Additional Applicability Requirement = The affected facility does not meet the applicability requirements of 40 CFR Part 60, Subparts J, Ja, E, or BB
			ACF Option - SO2 = Other ACF or no ACF.
			ACF Option - PM = Other ACF or no ACF.
			ACF Option - NOx = Other ACF or no ACF.
			60.42b(k)(2) Low Sulfur Exemption = The § 60.42b(k)(2) exemption applies.
			Electrical or Mechanical Output = More than 10% of the annual output is electrical or mechanical.
			Output Based Limit = The facility is not electing to comply with the output based limit in § 60.44b(l)(3).
			60.49Da(n) Alternative = The facility is not using the § 60.49Da(n) alternative.
			60.49Da(m) Alternative = The facility is not using the § 60.49Da(m) alternative.
			Monitoring Type PM = No particulate monitoring.
			Monitoring Type PM (Opacity) = No particulate (opacity) monitoring.
			Monitoring Type NOx = Continuous emission monitoring system.
			Monitoring Type SO2 = Fuel certification (based on fuel analysis per $ 60.49b(r)(2) $ ).
			Technology Type = No emerging or conventional technology is used to reduce or control SO2 emissions
			Unit Type = OTHER UNIT TYPE
			Heat Release Rate = Natural gas oil with a heat release rate greater than 70 MBtu/hr/ft <sup>3</sup> .
			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.
B-7280	40 CFR Part 63, Subpart	63DDDDD	Commence = Source is existing (commenced construction or reconstruction on or before June 4, 2010)
	DDDDD		Table Applicability = The unit is designed to burn Gas 1 fuel AND has no continuous oxygen trim AND has heat input equal to or greater than 10 MMBtu/hr
B-7290	30 TAC Chapter 117,	R-117	Unit Type = Other industrial, commercial, or institutional boiler.
	Subchapter B		Maximum Rated Capacity = MRC is greater than or equal to 250 MMBtu/hr.
			RACT Date Placed in Service = On or after the final compliance date specified in 30 TAC § 117.9000.

Unit ID	Regulation	Index Number	Basis of Determination*
			Functionally Identical Replacement = Unit is not a functionally identical replacement.
			Fuel Type #1 = Natural gas.
			Fuel Type #2 = Gaseous fuel other than natural gas landfill gas or renewable non-fossil fuel gases.
			Annual Heat Input = Annual heat input is greater than 2.2(10 <sup>11</sup> ) Btu/yr, based on rolling 12-month average.
			NOx Emission Limitation = Title 30 TAC § 117.105 (relating to Emission Specifications for Reasonably Available Control Technology).
B-7290	40 CFR Part 60, Subpart	60Db-B	Construction/Modification Date = Constructed or reconstructed after February 28, 2005.
	Db		Heat Input Capacity = Heat input capacity is greater than 250 MMBtu/hr (73 MW).
			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.
			Subpart Ea, Eb, AAAA, or CCCC = The affected facility does not meet applicability requirements of and is subject to 40 CFR Part 60, Subpart Ea, Eb or AAAA.
			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.
			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.
			Temporary Boiler = The steam-generating unit is not a temporary boiler
			D-Series Fuel Type #1 = Natural gas.
			D-Series Fuel Type #2 = Gaseous fossil fuel other than natural gas and coal-derived synthetic fuel meeting the definition of natural gas.
			D-Series Fuel Type #3 = Byproduct/waste
			Subpart D = The affected facility does not meet the applicability requirements of 40 CFR Part 60, Subpart D.
			Additional Applicability Requirement = The affected facility does not meet the applicability requirements of 40 CFR Part 60, Subparts J, Ja, E, or BB
			ACF Option - SO2 = Other ACF or no ACF.
			ACF Option - PM = Other ACF or no ACF.
			ACF Option - NOx = Other ACF or no ACF.
			60.42b(k)(2) Low Sulfur Exemption = The § 60.42b(k)(2) exemption applies.
			Electrical or Mechanical Output = More than 10% of the annual output is electrical or mechanical.
			Output Based Limit = The facility is not electing to comply with the output based limit in § 60.44b(l)(3).
			60.49Da(n) Alternative = The facility is not using the § 60.49Da(n) alternative.
			60.49Da(m) Alternative = The facility is not using the § 60.49Da(m) alternative.
			Monitoring Type PM = No particulate monitoring.
			Monitoring Type PM (Opacity) = No particulate (opacity) monitoring.
			Monitoring Type NOx = Continuous emission monitoring system.
			Monitoring Type SO2 = Fuel certification (based on fuel analysis per § 60.49b(r)(2)).

Unit ID	Regulation	Index Number	Basis of Determination*
			Technology Type = No emerging or conventional technology is used to reduce or control SO2 emissions Unit Type = OTHER UNIT TYPE Heat Release Rate = Natural gas oil with a heat release rate greater than 70 MBtu/hr/ft <sup>3</sup> . 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 <sub>x</sub> emission limit that applies specifically when the byproduct/waste is combusted.
B-7290	40 CFR Part 63, Subpart DDDDD	63DDDDD	Commence = Source is existing (commenced construction or reconstruction on or before June 4, 2010) Table Applicability = The unit is designed to burn Gas 1 fuel AND has no continuous oxygen trim AND has heat input equal to or greater than 10 MMBtu/hr
X-8501	30 TAC Chapter 111, Visible Emissions	R1111-A	Acid Gases Only = Flare is not used only as an acid gas flare as defined in 30 TAC § 101.1. Emergency/Upset Conditions Only = Flare is used under conditions other than emergency or upset conditions. Alternate Opacity Limitation = Not complying with an alternate opacity limit under 30 TAC § 111.113. Construction Date = Newest source routing emissions to the flare began construction after January 31, 1972.
X-8502	30 TAC Chapter 111, Visible Emissions	R1111-A	Acid Gases Only = Flare is not used only as an acid gas flare as defined in 30 TAC § 101.1. Emergency/Upset Conditions Only = Flare is used under conditions other than emergency or upset conditions. Alternate Opacity Limitation = Not complying with an alternate opacity limit under 30 TAC § 111.113. Construction Date = Newest source routing emissions to the flare began construction after January 31, 1972.
X-8502	40 CFR Part 63, Subpart A	63A-1	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)(i).
X-8502	40 CFR Part 63, Subpart A	63A-2	Required Under 40 CFR Part 63 = Flare is required by a Subpart under 40 CFR Part 63. Heat Content Specification = Adhering to the heat content specifications in 40 CFR § 63.11(b)(6)(ii) and the maximum tip velocity specifications in 40 CFR § 63.11(b)(7) or 40 CFR § 63.11(b)(8). Flare Assist Type = Steam assisted Flare Exit Velocity = Flare exit velocity is less than 60 ft/s (18.3 m/sec)
GTG-1	30 TAC Chapter 117, Subchapter B	R-117	Megawatt Rating = MR is greater than or equal to 30 MW. RACT Date Placed in Service (ICI) = On or after the final compliance date specified in 30 TAC §§ 117.9000, 117.9010 or 117.9020. Functionally Identical Replacement (ICI) = The stationary gas turbine is not a functionally identical replacement for a unit or group of units. Service Type (ICI) = Stationary gas turbine NOx Emission Limitation (ICI) = Title 30 TAC §§ 117.105 or 117.305.
GTG-1	40 CFR Part 60, Subpart GG	60GG-C	Peak Load Heat Input = Heat Input is greater than 100 MMBtu/hr (107.2 GJ/hr) Construction/Modification Date = On or after October 3, 1982 and before July 8, 2004. Turbine Cycle = Unit recovers heat from the gas turbine exhaust to heat water or generate steam.

Unit ID	Regulation	Index Number	Basis of Determination*
			Subpart GG Service Type = Type of service other than research and development, emergency, military or electrical utility generation.
			Manufacturer's Rated Base Load = Base load is greater than 30 MW.
			NOx Control Method = Selective catalytic reduction.
			NOx Monitoring Method = Continuous emission monitoring system.
			Regulated Under Part 75 = Monitoring parameters are established under § 60.334(f) of Subpart GG.
			Turbine Combustion Process = Combustion process is lean-premix staged combustion.
			Duct Burner = The turbine is part of a combined cycle turbine system equipped with supplemental heat (duct burner).
			NOx Allowance = The owner or operator is not electing to use a NO <sub>x</sub> allowance in determining emission limits in 40 CFR § $60.332(a)$ .
			Sulfur Content = Compliance is demonstrated by determining the sulfur content of the fuel.
			Fuel Type Fired = Natural gas meeting the definition in § 60.331(u).
			Fuel Supply = Stationary gas turbine is supplied its fuel without intermediate bulk storage.
			Fuel Monitoring Schedule = Monitoring and recording the sulfur content once per unit operating day.
GTG-2	30 TAC Chapter 117,	R-117	Megawatt Rating = MR is greater than or equal to 30 MW.
	Subchapter B		RACT Date Placed in Service (ICI) = On or after the final compliance date specified in 30 TAC §§ 117.9000, 117.9010 or 117.9020.
			Functionally Identical Replacement (ICI) = The stationary gas turbine is not a functionally identical replacement for a unit or group of units.
			Service Type (ICI) = Stationary gas turbine
			NOx Emission Limitation (ICI) = Title 30 TAC §§ 117.105 or 117.305.
GTG-2	40 CFR Part 60, Subpart	60GG-C	Peak Load Heat Input = Heat Input is greater than 100 MMBtu/hr (107.2 GJ/hr)
	GG		Construction/Modification Date = On or after October 3, 1982 and before July 8, 2004.
			Turbine Cycle = Unit recovers heat from the gas turbine exhaust to heat water or generate steam.
			Subpart GG Service Type = Type of service other than research and development, emergency, military or electrical utility generation.
			Manufacturer's Rated Base Load = Base load is greater than 30 MW.
			NOx Control Method = Selective catalytic reduction.
			NOx Monitoring Method = Continuous emission monitoring system.
			Regulated Under Part 75 = Monitoring parameters are established under § 60.334(f) of Subpart GG.
			Turbine Combustion Process = Combustion process is lean-premix staged combustion.
			Duct Burner = The turbine is part of a combined cycle turbine system equipped with supplemental heat (duct burner).
			NOx Allowance = The owner or operator is not electing to use a NO <sub>x</sub> allowance in determining emission limits in 40 CFR § $60.332(a)$ .
			Sulfur Content = Compliance is demonstrated by determining the sulfur content of the fuel.
			Fuel Type Fired = Natural gas meeting the definition in § 60.331(u).
			Fuel Supply = Stationary gas turbine is supplied its fuel without intermediate bulk storage.

Unit ID	Regulation	Index Number	Basis of Determination*
			Fuel Monitoring Schedule = Monitoring and recording the sulfur content once per unit operating day.
F-1	30 TAC Chapter 115, Pet. Refinery &	R5352-ALL	SOP/GOP Index No. = Owner/Operator assumes VOC fugitive control requirements for all components subject to 30 TAC Chapter 115, Subchapter D, Division 3 with no alternate control or control device.
	Petrochemicals		Components Utilizing Alternative Work Practice in § 115.358 = No components in the fugitive unit are using the alternative work practice under § 115.358.
F-1	40 CFR Part 60, Subpart VV	60VV-ALL	SOP Index No. = Owner or operator assumes fugitive unit control requirements for all components in VOC service subject to 40 CFR Part 60, Subpart VV with no alternate control or control devices.
			Produces Chemicals = The fugitive unit is part of a facility that produces as an intermediate or final product one or more of the chemicals listed in 40 CFR § 60.489.
l			Affected Facility = The fugitive unit is part of a facility that is an affected facility as defined in 40 CFR § 60.480(a)(2).
			Construction/Modification Date = After January 5, 1981 and on or before November 7, 2006.
			Compliance Option = Choosing to comply with the provisions of 40 CFR Part 60, Subpart VV.
			Design Capacity = Site with a design capacity is greater than or equal to 1,000 Mg/yr.
			Produces Heavy Liquid Chemicals = The facility produces chemicals other than or in addition to heavy liquid chemicals only from heavy liquid feed or raw materials.
l			Beverage Alcohol Production = The facility does not produce only beverage alcohol.
			Equipment in VOC Service = The fugitive unit contains equipment designed to operate in VOC service.
			Vacuum Service = The fugitive unit does not contain equipment in vacuum service.
			VOC Service = Fugitive unit does not contain equipment designed to operate in VOC service less than 300 hours per year.
			Pumps in Light Liquid Service = The fugitive unit contains pumps in light liquid service.
			Equivalent Emission Limitation = No equivalent emission limitation is used for pumps in light liquid service.
			Complying with 40 CFR § 60.482-2 = Pumps in light liquid service are complying with § 60.482-2.
			Flare = The fugitive unit contains flares.
			Equivalent Emission Limitation = No equivalent emission limitation is used for flares.
			Complying with 40 CFR § 60.482-10 = Flares are complying with § 60.482-10.
			Closed Vent (or Vapor Collection) Systems = The fugitive unit contains closed vent or vapor collection systems.
			Equivalent Emission Limitation = No equivalent emission limitation is used for closed vent or vapor collection systems.
			Complying with 40 CFR § 60.482-10 = Closed vent or vapor collection systems are complying with § 60.482-10.
F-1	40 CFR Part 63, Subpart	63YY-A	Source Type = Ethylene Production.
	YY		Equipment Type = The fugitive unit contains equipment, as defined in § 63.1101, contacting hazardous air pollutants in Tables 1 through 7 or Table 9, as appropriate.
F-4	30 TAC Chapter 115, Pet. Refinery &	R5352-ALL	SOP/GOP Index No. = Owner/Operator assumes VOC fugitive control requirements for all components subject to 30 TAC Chapter 115, Subchapter D, Division 3 with no alternate control or control device.
	Petrochemicals		Components Utilizing Alternative Work Practice in § 115.358 = No components in the fugitive unit are using the alternative work practice under § 115.358.

Unit ID	Regulation	Index Number	Basis of Determination*
F-4	40 CFR Part 60, Subpart VV	60VV-ALL	SOP Index No. = Owner or operator assumes fugitive unit control requirements for all components in VOC service subject to 40 CFR Part 60, Subpart VV with no alternate control or control devices.
			Produces Chemicals = The fugitive unit is part of a facility that produces as an intermediate or final product one or more of the chemicals listed in 40 CFR § 60.489.
			Affected Facility = The fugitive unit is part of a facility that is an affected facility as defined in 40 CFR § 60.480(a)(2).
			Construction/Modification Date = After January 5, 1981 and on or before November 7, 2006.
			Compliance Option = Choosing to comply with the provisions of 40 CFR Part 60, Subpart VV.
			Design Capacity = Site with a design capacity is greater than or equal to 1,000 Mg/yr.
			Produces Heavy Liquid Chemicals = The facility produces chemicals other than or in addition to heavy liquid chemicals only from heavy liquid feed or raw materials.
			Beverage Alcohol Production = The facility does not produce only beverage alcohol.
			Equipment in VOC Service = The fugitive unit contains equipment designed to operate in VOC service.
			Vacuum Service = The fugitive unit does not contain equipment in vacuum service.
			VOC Service = Fugitive unit does not contain equipment designed to operate in VOC service less than 300 hours per year.
			Pumps in Light Liquid Service = The fugitive unit contains pumps in light liquid service.
			Equivalent Emission Limitation = No equivalent emission limitation is used for pumps in light liquid service.
			Complying with 40 CFR § 60.482-2 = Pumps in light liquid service are complying with § 60.482-2.
			Flare = The fugitive unit contains flares.
			Equivalent Emission Limitation = No equivalent emission limitation is used for flares.
			Complying with 40 CFR § 60.482-10 = Flares are complying with § 60.482-10.
			Closed Vent (or Vapor Collection) Systems = The fugitive unit contains closed vent or vapor collection systems.
			Equivalent Emission Limitation = No equivalent emission limitation is used for closed vent or vapor collection systems.
			Complying with 40 CFR § 60.482-10 = Closed vent or vapor collection systems are complying with § 60.482-10.
F-4	40 CFR Part 63, Subpart H	63H-1	EQUIPMENT TYPE = FUGITIVE UNIT CONTAINS EQUIPMENT LISTED IN 40 CFR § 63.160(A) WHICH IS OPERATED IN ORGANIC HAZARDOUS AIR POLLUTANT SERVICE
			NON RESEARCH AND DEVELOPMENT/BATCH PROCESSES = FUGITIVE UNIT CONTAINS PROCESSES OTHER THAN RESEARCH AND DEVELOPMENT FACILITIES AND BENCH-SCALE BATCH PROCESSES
			VACUUM SERVICE = NOT ALL OF THE EQUIPMENT IN THE FUGITIVE UNIT IS IN VACUUM SERVICE
			LESS THAN 300 OPERATING HOURS = THE FUGITIVE UNIT DOES NOT CONTAIN ANY EQUIPMENT IN ORGANIC HAZARDOUS AIR POLLUTANT (HAP) SERVICE THAT IS INTENDED TO OPERATE LESS THAN 300 HOURS PER CALENDAR YEAR
			AMEL = FUGITIVE UNIT SOURCE OWNER/OPERATOR IS NOT ELECTING TO COMPLY WITH AN ALTERNATIVE MEANS OF EMISSION LIMITATION (AMEL)
			LIGHT LIQUID SERVICE (PUMPS) = COMPONENT PRESENT
			HEAVY LIQUID SERVICE (PUMPS) = COMPONENT PRESENT
			ANY (COMPRESSORS) = COMPONENT PRESENT
			GAS VAPOR SERVICE (PRESSURE RELIEF DEVICES) = COMPONENT PRESENT

Unit ID	Regulation	Index Number	Basis of Determination*
			LIQUID SERVICE (PRESSURE RELIEF DEVICES) = COMPONENT PRESENT
			HEAVY LIQUID SERVICE (PRESSURE RELIEF DEVICES) = COMPONENT PRESENT
			ANY (SAMPLING CONNECTION SYSTEMS) = COMPONENT PRESENT
			HEAVY LIQUID SERVICE (SAMPLING CONNECTION SYSTEMS) = COMPONENT PRESENT
			ANY (OPEN-ENDED VALVES OR LINES) = COMPONENT PRESENT
			HEAVY LIQUID SERVICE (OPEN-ENDED VALVES OR LINES) = COMPONENT PRESENT
			GAS/VAPOR OR LIGHT LIQUID SERVICE (VALVES) = COMPONENT PRESENT
			HEAVY LIQUID SERVICE (VALVES) = COMPONENT PRESENT
			GAS/VAPOR OR LIGHT LIQUID SERVICE (CONNECTORS) = COMPONENT PRESENT
			HEAVY LIQUID SERVICE (CONNECTORS) = COMPONENT PRESENT
			GAS/VAPOR OR LIGHT LIQUID SERVICE (AGITATORS) = COMPONENT PRESENT
			HEAVY LIQUID SERVICE (AGITATORS) = COMPONENT PRESENT
			ANY (INSTRUMENTATION SYSTEMS) = COMPONENT PRESENT
			HEAVY LIQUID SERVICE (INSTRUMENTATION SYSTEMS = COMPONENT PRESENT
			ANY (SURGE CONTROL VESSELS OR BOTTOMS RECEIVERS) = COMPONENT PRESENT
			HEAVY LIQUID SERVICE (SURGE CONTROL VESSELS OR BOTTOMS RECEIVERS) = COMPONENT PRESENT
			ANY (CLOSED VENT SYSTEMS) = COMPONENT PRESENT
			RECOVERY OR RECAPTURE DEVICES (CLOSED VENT SYSTEMS) = COMPONENT NOT PRESENT
			ENCLOSED COMBUSTION DEVICES (CLOSED VENT SYSTEMS) = COMPONENT PRESENT
			FLARES (CLOSED VENT SYSTEMS) = COMPONENT PRESENT
			BYPASS LINES = FUGITIVE UNIT CONTAINS ANY CLOSED-VENT SYSTEMS CONTAINING BY-PASS LINES THAT COULD DIVERT A VENT STREAM AWAY FROM THE CONTROL DEVICE AND TO THE ATMOSPHERE
			UNSAFE TO INSPECT = FUGITIVE UNIT CONTAINS ANY CLOSED-VENT SYSTEM WITH PARTS DESIGNATED AS UNSAFE TO INSPECT
			DIFFICULT TO INSPECT = FUGITIVE UNIT CONTAINS ANY CLOSED-VENT SYSTEM WITH PARTS DESIGNATED AS DIFFICULT TO INSPECT
			EMPLOYEE NUMBER = THE CORPORATION EMPLOYS 100 OR MORE PERSONS
F-5	40 CFR Part 63, Subpart YY	63YY-A	Heat Exchange System = The cooling tower/heat exchange system is subject to the requirements of 40 CFR § 63.1100(e).
D-2503X	30 TAC Chapter 115, Water Separation	R5112-A	Alternate Control Requirement = The executive director (or the EPA Administrator) has not approved an ACR or exemption criteria in accordance with 30 TAC § 115.910.
			Exemption = Water separator does not qualify for exemption.
			Emission Control Option = Vapor recovery system which satisfies the provisions of 30 TAC § 115.131.
			Control Device = Direct flame incinerator.
D-2503X	30 TAC Chapter 115, Water Separation	R5112-B	Alternate Control Requirement = The executive director (or the EPA Administrator) has not approved an ACR or exemption criteria in accordance with 30 TAC § 115.910.

Unit ID	Regulation	Index Number	Basis of Determination*
			Exemption = Water separator does not qualify for exemption.
			Emission Control Option = Vapor recovery system which satisfies the provisions of 30 TAC § 115.131.
			Control Device = Carbon adsorption system.
GRPFURN28	30 TAC Chapter 111,	R111-1	Alternate Opacity Limitation = Not complying with an alternate opacity limit under 30 TAC § 111.113.
	Visible Emissions		Vent Source = The source of the vent is not a steam generator fired by solid fossil fuel, oil or a mixture of oil and gas and is not a catalyst regenerator for a fluid bed catalytic cracking unit.
			Opacity Monitoring System = Optical instrument capable of measuring the opacity of emissions is not installed in the vent or optical instrumentation does not meet the requirements of $ 111.111(a)(1)(D) $ , or the vent stream does not qualify for the exemption in $ 111.111(a)(3) $ .
			Construction Date = After January 31, 1972
			Effluent Flow Rate = Effluent flow rate is at least 100,000 actual cubic feet per minute.
N-10	30 TAC Chapter 115, Vent Gas Controls	R5121-G	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 = Title 30 TAC Chapter 115, Subchapter B, Vent Gas Control rules are applicable and the vent is not specifically classified under the rule.
			Combined 24-Hour VOC Weight = Combined VOC weight is less than or equal to 100 pounds (45.4 kg).
			VOC Concentration = VOC concentration is less than 612 ppmv.
			VOC Concentration or Emission Rate at Maximum 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.
N-15	30 TAC Chapter 115, Vent Gas Controls	R5121-A	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 = Title 30 TAC Chapter 115, Subchapter B, Vent Gas Control rules are applicable and the vent is not specifically classified under the rule.
			Alternate Control Requirement = Alternate control is not used.
			Control Device Type = Smokeless flare
N-15	30 TAC Chapter 115, Vent Gas Controls	R5121-AMOC	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 = Title 30 TAC Chapter 115, Subchapter B, Vent Gas Control rules are applicable and the vent is not specifically classified under the rule.

Unit ID	Regulation	Index Number	Basis of Determination*
			VOC Concentration or Emission Rate at Maximum Operating Conditions = Either the VOC concentration or emission rate is greater than the applicable exemption limit at maximum actual operating conditions or the alternate recordkeeping requirements of 30 TAC § 115.126(4) are not being selected.
			Alternate Control Requirement = Alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria and demonstrating substantially equivalent reduction efficiencies approved by the TCEQ Executive Director.
N-15A	30 TAC Chapter 115, Vent Gas Controls	R5121-A	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 = Title 30 TAC Chapter 115, Subchapter B, Vent Gas Control rules are applicable and the vent is not specifically classified under the rule.
			Alternate Control Requirement = Alternate control is not used.
			Control Device Type = Smokeless flare
N-15A	30 TAC Chapter 115, Vent Gas Controls	R5121-AMOC	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 = Title 30 TAC Chapter 115, Subchapter B, Vent Gas Control rules are applicable and the vent is not specifically classified under the rule.
			VOC Concentration or Emission Rate at Maximum Operating Conditions = Either the VOC concentration or emission rate is greater than the applicable exemption limit at maximum actual operating conditions or the alternate recordkeeping requirements of 30 TAC § 115.126(4) are not being selected.
			Alternate Control Requirement = Alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria and demonstrating substantially equivalent reduction efficiencies approved by the TCEQ Executive Director.
N-16	30 TAC Chapter 111,	R111-1	Alternate Opacity Limitation = Not complying with an alternate opacity limit under 30 TAC § 111.113.
	Visible Emissions		Vent Source = The source of the vent is not a steam generator fired by solid fossil fuel, oil or a mixture of oil and gas and is not a catalyst regenerator for a fluid bed catalytic cracking unit.
			Opacity Monitoring System = Optical instrument capable of measuring the opacity of emissions is not installed in the vent or optical instrumentation does not meet the requirements of § 111.111(a)(1)(D), or the vent stream does not qualify for the exemption in § 111.111(a)(3).
			Construction Date = After January 31, 1972
			Effluent Flow Rate = Effluent flow rate is at least 100,000 actual cubic feet per minute.
N-19	30 TAC Chapter 115, Vent Gas Controls	R5121-D	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.

Unit ID	Regulation	Index Number	Basis of Determination*
			Vent Type = Vent gas stream originates from a synthetic organic chemical manufacturing industry reactor process or distillation operation, as defined in 30 TAC § 115.10.
			Alternate Control Requirement = Alternate control is not used.
			Control Device Type = Direct flame incinerator in which the vent gas stream is burned at a temperature or at least 1300° F (704 C).
N-19	40 CFR Part 63, Subpart	63G-1	Overlap = Title 40 CFR Part 63, Subpart G only
	G		Group 1 = The process vent meets the definition of a Group 1 process vent.
			Control Device = Thermal incinerator.
			Halogenated = Vent stream is not halogenated.
			Performance Test = No previous performance test was conducted.
			Alternate Monitoring Parameters = The EPA Administrator has not approved alternate monitoring parameters or alternate monitoring parameters are not used.
			Continuous Monitoring = Complying with the continuous monitoring requirements of 40 CFR §§ 63.114, 63.117, and 63.118.
			By-pass Lines = The vent system does not contain by-pass lines that can divert the vent stream from the control device.
N-20A	30 TAC Chapter 111, Visible Emissions	R111-1	Alternate Opacity Limitation = Not complying with an alternate opacity limit under 30 TAC § 111.113.
			Vent Source = The source of the vent is not a steam generator fired by solid fossil fuel, oil or a mixture of oil and gas and is not a catalyst regenerator for a fluid bed catalytic cracking unit.
			Opacity Monitoring System = Optical instrument capable of measuring the opacity of emissions is not installed in the vent or optical instrumentation does not meet the requirements of $ 111.111(a)(1)(D) $ , or the vent stream does not qualify for the exemption in $ 111.111(a)(3) $ .
			Construction Date = After January 31, 1972
			Effluent Flow Rate = Effluent flow rate is at least 100,000 actual cubic feet per minute.
N-20B	30 TAC Chapter 111,	R111-1	Alternate Opacity Limitation = Not complying with an alternate opacity limit under 30 TAC § 111.113.
	Visible Emissions		Vent Source = The source of the vent is not a steam generator fired by solid fossil fuel, oil or a mixture of oil and gas and is not a catalyst regenerator for a fluid bed catalytic cracking unit.
			Opacity Monitoring System = Optical instrument capable of measuring the opacity of emissions is not installed in the vent or optical instrumentation does not meet the requirements of $ 111.111(a)(1)(D) $ , or the vent stream does not qualify for the exemption in $ 111.111(a)(3) $ .
			Construction Date = After January 31, 1972
			Effluent Flow Rate = Effluent flow rate is at least 100,000 actual cubic feet per minute.
N-22	30 TAC Chapter 115, Vent Gas Controls	R5121-P	Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source.
			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 originates from a synthetic organic chemical manufacturing industry reactor process or distillation operation, as defined in 30 TAC § 115.10.

Unit ID	Regulation	Index Number	Basis of Determination*
			Alternate Control Requirement = Alternate control is not used.
			Control Device Type = Carbon adsorption system that replaces the carbon at a predetermined time interval.
N-22	40 CFR Part 63, Subpart	63G-1	Overlap = Title 40 CFR Part 63, Subpart G only
	G		Group 1 = The process vent meets the definition of a Group 1 process vent.
			Control Device = Absorber, condenser or carbon adsorber used as a recapture device and using an organic monitoring device as specified in 40 CFR § 63.114(b).
			Halogenated = Vent stream is not halogenated.
			Performance Test = No previous performance test was conducted.
			Alternate Monitoring Parameters = The EPA Administrator has not approved alternate monitoring parameters or alternate monitoring parameters are not used.
			Continuous Monitoring = Alternative to continuous monitoring as allowed under 40 CFR § 63.152(g).
			By-pass Lines = The vent system does not contain by-pass lines that can divert the vent stream from the control device.
N-24A	30 TAC Chapter 111,	R111-1	Alternate Opacity Limitation = Not complying with an alternate opacity limit under 30 TAC § 111.113.
	Visible Emissions		Vent Source = The source of the vent is not a steam generator fired by solid fossil fuel, oil or a mixture of oil and gas and is not a catalyst regenerator for a fluid bed catalytic cracking unit.
			Opacity Monitoring System = Optical instrument capable of measuring the opacity of emissions is not installed in the vent or optical instrumentation does not meet the requirements of  111.111(a)(1)(D), or the vent stream does not qualify for the exemption in § 111.111(a)(3).
			Construction Date = After January 31, 1972
			Effluent Flow Rate = Effluent flow rate is at least 100,000 actual cubic feet per minute.
N-24B	30 TAC Chapter 111,	R111-1	Alternate Opacity Limitation = Not complying with an alternate opacity limit under 30 TAC § 111.113.
	Visible Emissions		Vent Source = The source of the vent is not a steam generator fired by solid fossil fuel, oil or a mixture of oil and gas and is not a catalyst regenerator for a fluid bed catalytic cracking unit.
			Opacity Monitoring System = Optical instrument capable of measuring the opacity of emissions is not installed in the vent or optical instrumentation does not meet the requirements of  111.111(a)(1)(D), or the vent stream does not qualify for the exemption in § 111.111(a)(3).
			Construction Date = After January 31, 1972
			Effluent Flow Rate = Effluent flow rate is at least 100,000 actual cubic feet per minute.
N-9	30 TAC Chapter 111,	R111-1	Alternate Opacity Limitation = Not complying with an alternate opacity limit under 30 TAC § 111.113.
	Visible Emissions		Vent Source = The source of the vent is not a steam generator fired by solid fossil fuel, oil or a mixture of oil and gas and is not a catalyst regenerator for a fluid bed catalytic cracking unit.
			Opacity Monitoring System = Optical instrument capable of measuring the opacity of emissions is not installed in the vent or optical instrumentation does not meet the requirements of $ 111.111(a)(1)(D) $ , or the vent stream does not qualify for the exemption in $ 111.111(a)(3) $ .
			Construction Date = After January 31, 1972
			Effluent Flow Rate = Effluent flow rate is at least 100,000 actual cubic feet per minute.

Unit ID	Regulation	Index Number	Basis of Determination*
T-5702	40 CFR Part 63, Subpart	63G-1	Overlap = Title 40 CFR Part 60, Subpart NNN
	G		Group 1 = The process vent meets the definition of a Group 1 process vent.
			Control Device = Thermal incinerator.
			Halogenated = Vent stream is not halogenated.
			Performance Test = No previous performance test was conducted.
			Alternate Monitoring Parameters = The EPA Administrator has not approved alternate monitoring parameters or alternate monitoring parameters are not used.
			Continuous Monitoring = Complying with the continuous monitoring requirements of 40 CFR §§ 63.114, 63.117, and 63.118.
			By-pass Lines = The vent system does not contain by-pass lines that can divert the vent stream from the control device.
T-5703	40 CFR Part 63, Subpart	63G-1	Overlap = Title 40 CFR Part 63, Subpart G only
	G		Group 1 = The process vent meets the definition of a Group 1 process vent.
			Control Device = Thermal incinerator.
			Halogenated = Vent stream is not halogenated.
			Performance Test = No previous performance test was conducted.
			Alternate Monitoring Parameters = The EPA Administrator has not approved alternate monitoring parameters or alternate monitoring parameters are not used.
			Continuous Monitoring = Complying with the continuous monitoring requirements of 40 CFR §§ 63.114, 63.117, and 63.118.
			By-pass Lines = The vent system does not contain by-pass lines that can divert the vent stream from the control device.
T-3101	40 CFR Part 60, Subpart NNN	60NNN-G	Subpart NNN Chemicals = The distillation unit produces any chemical listed in 40 CFR § 60.667 as a product, co- product, by-product, or intermediate.
			Construction/Modification Date = After December 30, 1983.
			Vent Type = A single distillation unit discharging vent stream into a vapor recovery system.
			Distillation Unit Type = Does not qualify for any exemption under $ 60.660(c)(1)-(3) $ .
			Total Design Capacity = 1 gigagram per year or greater.
			Vent Stream Flow Rate = Flow rate greater than or equal to 0.008 scm/min.
			Total Resource Effectiveness = TRE index value less than 8.0 not from a halogenated vent stream.
			TOC Reduction = Compliance is achieved by reducing total organic compound emissions (less methane and ethane) by 98 weight-percent or to a concentration of 20 ppmv dry basis corrected to 3 percent oxygen using a VOC emissions non-flare combustion control device.
			Subpart NNN Control Device = Boiler or process heater design heat input capacity greater than or equal to 44 MW (150 MMBtu/hr).
N-22	<i>i</i>	61FF-3	Unit Type = Individual drain system
	FF		CLOSED VENT SYSTEM AND CONTROL DEVICE AMOC = Complying with the requirements of § 61.349
			By-pass Line = System does not contain by-pass lines

Unit ID	Regulation	Index Number	Basis of Determination*
			Control Device Type/Operation = Carbon adsorption system that does not regenerate the carbon bed directly in the control device.
			Engineering Calculations = Performance tests are used to demonstrate the control device achieves compliance.
			Carbon Replacement Interval = Carbon adsorber is monitored and carbon replaced on indication of breakthrough.
X-5702	40 CFR Part 61, Subpart	61FF-2	Unit Type = Individual drain system
	FF		CLOSED VENT SYSTEM AND CONTROL DEVICE AMOC = Complying with the requirements of § 61.349
			By-pass Line = System does not contain by-pass lines
			Control Device Type/Operation = Thermal vapor incinerator with a reduction of organics being greater than or equal to 95 weight percent.
			Engineering Calculations = Performance tests are used to demonstrate the control device achieves compliance.
			Alternate Monitoring Parameters = Complying with the monitoring parameters in § 61.354 for the control device.
X-8501	40 CFR Part 61, Subpart	61FF-1	Unit Type = Individual drain system
	FF		CLOSED VENT SYSTEM AND CONTROL DEVICE AMOC = Complying with the requirements of § 61.349
			By-pass Line = System does not contain by-pass lines
			Control Device Type/Operation = Flare.
X-8502	40 CFR Part 61, Subpart	61FF-1	Unit Type = Individual drain system
	FF		CLOSED VENT SYSTEM AND CONTROL DEVICE AMOC = Complying with the requirements of § 61.349
			By-pass Line = System does not contain by-pass lines
			Control Device Type/Operation = Flare.
F-2	40 CFR Part 63, Subpart F	63F-1	Applicable Chemicals = The chemical manufacturing process unit manufactures, as a primary product, one or more of the chemicals listed in 40 CFR § 63.100(b)(1)(i) or 40 CFR § 63.100(b)(1)(ii).
			Table 2 HAP = The chemical manufacturing process unit uses as a reactant or manufactures, as a product or co-product, one or more of the organic hazardous air pollutants in Table 2.
			Alternate Means of Emission Limitation = No alternative means of emission limitation has been approved by the EPA Administrator to achieve a reduction in organic HAP emission or no alternate has been requested.
			Heat Exchange System = A heat exchange system is utilized.
			Cooling Water Pressure = The heat exchange system is not operated with the minimum pressure on the cooling water side at least 35 kilopascals greater than the maximum pressure on the process side.
			Intervening Cooling Fluid = There is no intervening cooling fluid containing less than 5 percent by weight of total HAPs listed in Table 4 of 40 CFR Part 63, Subpart F, between the process and cooling water.
			Table 4 HAP Content = The recirculating heat exchange system is not used exclusively to cool process fluids that contain less than 5 percent by weight of total HAPs listed in Table 4 of title 40 CFR Part 63, Subpart F.
			NPDES Permit = The once-through heat exchange system is not subject to NPDES permit with an allowable discharge limit of 1 part per million or less above influent concentration or 10 percent or less above influent concentration.
			Meets 40 CFR $63.104(a)(4)(i)$ -(iv) = The once-through heat exchange system is not subject to an NPDES permit that meets 40 CFR § $63.104(a)(4)(i)$ - (iv).

Unit ID	Regulation	Index Number	Basis of Determination*
			Table 9 HAP Content = The once-through heat exchange system is not used exclusively to cool process fluids that contain less than 5 percent by weight of total HAPs listed in Table 9 of 40 CFR Part 63, Subpart G.
			Cooling Water Monitored = The cooling water is being monitored for the presence of one or more HAPs or other representative substances whose presence in cooling water indicates a leak.
F-2A	40 CFR Part 63, Subpart F	63F-1	Applicable Chemicals = The chemical manufacturing process unit manufactures, as a primary product, one or more of the chemicals listed in 40 CFR § 63.100(b)(1)(i) or 40 CFR § 63.100(b)(1)(ii).
			Table 2 HAP = The chemical manufacturing process unit uses as a reactant or manufactures, as a product or co-product, one or more of the organic hazardous air pollutants in Table 2.
			Alternate Means of Emission Limitation = No alternative means of emission limitation has been approved by the EPA Administrator to achieve a reduction in organic HAP emission or no alternate has been requested.
			Heat Exchange System = A heat exchange system is utilized.
			Cooling Water Pressure = The heat exchange system is not operated with the minimum pressure on the cooling water side at least 35 kilopascals greater than the maximum pressure on the process side.
			Intervening Cooling Fluid = There is no intervening cooling fluid containing less than 5 percent by weight of total HAPs listed in Table 4 of 40 CFR Part 63, Subpart F, between the process and cooling water.
			Table 4 HAP Content = The recirculating heat exchange system is not used exclusively to cool process fluids that contain less than 5 percent by weight of total HAPs listed in Table 4 of title 40 CFR Part 63, Subpart F.
			NPDES Permit = The once-through heat exchange system is not subject to NPDES permit with an allowable discharge limit of 1 part per million or less above influent concentration or 10 percent or less above influent concentration.
			Meets 40 CFR 63.104(a)(4)(i)-(iv) = The once-through heat exchange system is not subject to an NPDES permit that meets 40 CFR § 63.104(a)(4)(i) - (iv).
			Table 9 HAP Content = The once-through heat exchange system is not used exclusively to cool process fluids that contain less than 5 percent by weight of total HAPs listed in Table 9 of 40 CFR Part 63, Subpart G.
			Cooling Water Monitored = The cooling water is being monitored for the presence of one or more HAPs or other representative substances whose presence in cooling water indicates a leak.

\* - 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 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.	FOPs 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. In addition, many of the permits are accessible online through the link provided below. 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. Permit by Rule (PBR) registrations submitted by permittees are also available online through the link provided below. The following table specifies the PBRs that apply to the site.

The status of air permits, applications, and PBR registrations may be found by performing the appropriate search of the databases located at the following website:

#### www.tceq.texas.gov/permitting/air/nav/air\_status\_permits.html

Details on how to search the databases are available in the **Obtaining Permit Documents** section below.

#### **New Source Review Authorization References**

Prevention of Significant Deterioration (PSD) Permits		
PSD Permit No.: GHGPSDTX3	Issuance Date: 08/24/2012	
PSD Permit No.: PSDTX903M5	Issuance Date: 08/10/2023	
Nonattainment (NA) Permits		
NA Permit No.: N007M1	Issuance Date: 08/10/2023	
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.: 36644	Issuance Date: 08/10/2023	
Permits by Rule (30 TAC Chapter 106) for the Application Area		
Number: 106.227	Version No./Date: 09/04/2000	
Number: 106.261	Version No./Date: 09/04/2000	
Number: 106.261	Version No./Date: 11/01/2003	
Number: 106.262	Version No./Date: 09/04/2000	
Number: 106.262	Version No./Date: 11/01/2003	
Number: 106.263	Version No./Date: 11/01/2001	
Number: 106.371	Version No./Date: 09/04/2000	
Number: 106.454	Version No./Date: 09/04/2000	
Number: 106.472	Version No./Date: 09/04/2000	
Number: 106.473	Version No./Date: 09/04/2000	
Number: 106.478	Version No./Date: 09/04/2000	
Number: 106.511	Version No./Date: 09/04/2000	
Number: 106.532	Version No./Date: 09/04/2000	

#### Permits by Rule

The TCEQ has interpreted the emission limits prescribed in 30 TAC §106.4(a) as both emission thresholds and default emission limits. The emission limits in 30 TAC §106.4(a) are all considered applicable to each facility as a threshold matter to ensure that the owner/operator qualifies for the PBR authorization. Those same emission limits are also the default emission limits if the specific PBR does not further limit emissions or there is no lower, certified emission limit claimed by the owner/operator.

This interpretation is consistent with how TCEQ has historically determined compliance with the emission limits prior to the addition of the "as applicable" language. The "as applicable" language was added in 2014 as part of changes to the sentence structure in a rulemaking that made other changes to address greenhouse gases and was not intended as a substantive rule change. This interpretation also provides for effective and practical enforcement of 30 TAC §106.4(a),

since for the TCEQ to effectively enforce the emission limits in 30 TAC §106.4(a) as emission thresholds, all emission limits must apply. As provided by 30 TAC §106.4(a)(2) and (3), an owner/operator shall not claim a PBR authorization if the facility is subject to major New Source Review. The practical and legal effect of the language in 30 TAC § 106.4 is that if a facility does not emit a pollutant, then the potential to emit for that particular pollutant is zero, and thus, the facility is not authorized to emit the pollutant pursuant to the PBR.

The permit holder is required to keep records for demonstrating compliance with PBRs in accordance with 30 TAC § 106.8 for the following categories:

- As stated in 30 TAC § 106.8(a), the permit holder is not required to keep records for de minimis sources as designated in 30 TAC § 116.119.
- As stated in 30 TAC § 106.8(b) for PBRs on the insignificant activities list, the permit holder is required to provide information that would demonstrate compliance with the general requirements of 30 TAC § 106.4.
- As stated in 30 TAC § 106.8(c) for all other PBRs, the permit holder must maintain sufficient records to demonstrate compliance with the general requirements specified in 30 TAC § 106.4 and to demonstrate compliance with the emission limits and any specific conditions of the PBR as applicable.

The application, or a previously submitted application, contains a PBR Supplemental Table. This table provides supplemental information for all PBR authorizations at the site or application area, including PBRs that are not listed on the OP-REQ1 form authorize emission units that the TCEQ has determined are insignificant sources of emissions (IEUs). PBRs are enforceable through permit condition number 22. The EPA gives States broad discretion in prescribing monitoring, recordkeeping, and reporting for generally applicable requirements that cover insignificant emission units. (see EPA *White Paper Number 2 for Improved Implementation of the Part 70 Operating Permits Program*). Federal regulations specifically identify recordkeeping as an appropriate level of monitoring necessary to assure compliance with the requirements applicable to an emissions unit. Permitting authorities have the best sense of where it is appropriate to conclude that periodic monitoring is not necessary for IEUs, when state program rules already provide sufficient monitoring for these units.

In the case of IEUs in particular, the recordkeeping in 30 TAC §106.8 is sufficient because the units do not have the potential to violate emission limitations or other requirements under normal operating conditions. In particular, where the establishment of a regular program of monitoring would not significantly enhance the ability of the permit to assure compliance with the applicable requirement, the permitting authority can provide that the applicable requirement has monitoring sufficient to yield reliable data that is representative of the emission unit's compliance with the limitations. Therefore, for IEUs compliance with 30 TAC §106.8 is sufficient to meet federal monitoring requirements.

The PBR records may include, but are not limited to, production capacity and throughput, hours of operation, safety data sheets (SDS), chemical composition of raw materials, speciation of air contaminant data, engineering calculations, maintenance records, fugitive data, performance tests, capture/control device efficiencies, or parametric monitoring. The PBR records also satisfy the federal operating permit periodic monitoring requirements of 30 TAC § 122.142(c) as they are representative of the emission unit's compliance with 30 TAC Chapter 106.

#### **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

#### **Compliance Assurance Monitoring (CAM):**

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

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

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

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

Unit/Group/Process Information		
ID No.: N-19		
Control Device ID No.: X-5702	Control Device Type: Other control device type	
Applicable Regulatory Requirement		
Name: 30 TAC Chapter 115, Vent Gas Controls	SOP Index No.: R5121-D	
Pollutant: VOC	Main Standard: § 115.122(a)(2)	
Monitoring Information		
Indicator: Combustion Temperature / Exhaust Gas Temperature		
Minimum Frequency: four times per hour		
Averaging Period: one hour		
Deviation Limit: When receiving vent streams, it shall be considered a deviation if the combustion temperature is less than 1800 degrees F.		
Basis of CAM: It is widely practiced and accepted to use performance tests, manufacturer's recommendations, engineering calculations and/or historical data to establish a minimum temperature for thermal incinerators. This minimum temperature must be maintained in order for the proper destruction efficiency. Operation below the minimum combustion temperature will result in incomplete combustion and potential noncompliance with emission limitations and/or standards. The monitoring of the combustion temperature of a thermal incinerator is commonly required in federal and state rules, including: 40 CFR Part 60, Subparts III, NNN, QQQ, and RRR; 40 CFR Part 61, Subparts BB and FF; 40 CFR Part 63, Subparts G, R, DD, EE, and HH; and 30 TAC Chapter 115.		

#### **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/Grou	p/Process	Information
011100100	p/11000033	mormation

ID No.: GRPFURN28

Control Device ID No.: N/A

**Applicable Regulatory Requirement** 

Name: 30 TAC Chapter 111, Visible Emissions

Main Standard: § 111.111(a)(1)(C)

Control Device Type: N/A

SOP Index No.: R111-1

#### **Monitoring Information**

Indicator: Fuel Type

Pollutant: Opacity

Minimum Frequency: Annually or at any time an alternate fuel is used

Averaging Period: n/a

Deviation Limit: When alternate fuel is fired, alone or in combination with the specified gas (pipeline natural gas or fuel gas having Sulfur content <10 gr/100 cf of gas), for a period greater than or equal to 24 consecutive hours or visible emissions are observed.

Basis of monitoring: Industry has demonstrated through performance tests and historical data that opacity and particulate matter standards are consistently met when combustion units fire natural gas only. If the emission unit fires a different fuel for more than 24 hours, the permit holder may elect to perform opacity readings or visible emissions to demonstrate compliance is consistent with EPA Reference Test Method 9 and 22. Opacity and visible emissions have been used as an indicator of particulate emissions in many federal rules including 40 CFR Part 60, Subpart F and Subpart HH. In addition, use of these indicators is consistent with the EPA's "Compliance Assurance Monitoring (CAM) Technical Guidance Document" (August 1998). Monitoring specifications and procedures for the opacity are consistent with federal requirements and include the EPA's Test Method 9 for determining opacity by visual observations and the requirements of 40 CFR § 60.13 for a continuous opacity monitoring system (COMS). The monitoring specifications and procedures for the visible emissions monitoring are similar to "EPA Reference Method 22" procedures.

Unit/Group/Process Information		
ID No.: N-16		
Control Device ID No.: N/A	Control Device Type: N/A	
Applicable Regulatory Requirement		
Name: 30 TAC Chapter 111, Visible Emissions	SOP Index No.: R111-1	
Pollutant: Opacity	Main Standard: § 111.111(a)(1)(C)	
Monitoring Information		
Indicator: Fuel Type		
Minimum Frequency: Annually or at any time an alternate fuel is used		
Averaging Period: n/a		
Deviation Limit: When alternate fuel is fired, alone or in combination with the specified gas (pipeline natural gas or fuel gas having Sulfur content <10 gr/100 cf of gas), for a period greater than or equal to 24 consecutive hours or visible emissions are observed.		
Basis of monitoring: Industry has demonstrated through performance tests and historical data that opacity and particulate matter standards are consistently met when combustion units fire natural gas only. If the emission unit fires a different fuel for more than 24 hours, the permit holder may elect to perform opacity readings or visible emissions to demonstrate compliance is consistent with EPA Reference Test Method 9 and 22. Opacity and visible emissions have been used as an indicator of particulate emissions in many federal rules including 40 CFR Part 60, Subpart F and Subpart HH. In addition, use of these indicators is consistent with the EPA's "Compliance Assurance Monitoring (CAM) Technical Guidance Document" (August 1998). Monitoring specifications and procedures for the opacity are consistent with federal requirements and include the EPA's Test Method 9 for determining opacity by visual observations and the requirements of 40 CFR § 60.13 for a continuous opacity monitoring system (COMS). The monitoring specifications and procedures for the visible emissions monitoring are similar to "EPA Reference Method 22" procedures.		

Unit/Group/Process Information		
ID No.: N-20A		
Control Device ID No.: N/A	Control Device Type: N/A	
Applicable Regulatory Requirement		
Name: 30 TAC Chapter 111, Visible Emissions	SOP Index No.: R111-1	
Pollutant: Opacity	Main Standard: § 111.111(a)(1)(C)	
Monitoring Information		
Indicator: Fuel Type		
Minimum Frequency: Annually or at any time an alternate fu	iel is used	
Averaging Period: n/a		
Deviation Limit: When alternate fuel is fired, alone or in combination with the specified gas (pipeline natural gas or fuel gas having Sulfur content <10 gr/100 cf of gas), for a period greater than or equal to 24 consecutive hours or visible emissions are observed.		
Basis of monitoring: Industry has demonstrated through performance tests and historical data that opacity and particulate matter standards are consistently met when combustion units fire natural gas only. If the emission unit fires a different fuel for more than 24 hours, the permit holder may elect to perform opacity readings or visible emissions to demonstrate compliance is consistent with EPA Reference Test Method 9 and 22. Opacity and visible emissions have been used as an indicator of particulate emissions in many federal rules including 40 CFR Part 60, Subpart F and Subpart HH. In addition, use of these indicators is consistent with the EPA's "Compliance Assurance Monitoring (CAM) Technical Guidance Document" (August 1998). Monitoring specifications and procedures for the opacity are consistent with federal requirements and include the EPA's Test Method 9 for determining opacity by visual observations and the requirements of 40 CFR § 60.13 for a continuous opacity monitoring system (COMS). The monitoring specifications and procedures for the visible emissions and procedures for the visible emissions and procedures for the visible emissions and the requirements of the visible emissions monitoring are similar to "EPA Reference Method 22" procedures.		

Unit/Group/Process Information		
ID No.: N-20B		
Control Device ID No.: N/A	Control Device Type: N/A	
Applicable Regulatory Requirement		
Name: 30 TAC Chapter 111, Visible Emissions	SOP Index No.: R111-1	
Pollutant: Opacity	Main Standard: § 111.111(a)(1)(C)	
Monitoring Information		
Indicator: Fuel Type		
Minimum Frequency: Annually or at any time an alternate fuel is used		
Averaging Period: n/a		
Deviation Limit: When alternate fuel is fired, alone or in combination with the specified gas (pipeline natural gas or fuel gas having Sulfur content <10 gr/100 cf of gas), for a period greater than or equal to 24 consecutive hours or visible emissions are observed.		
Basis of monitoring: Industry has demonstrated through performance tests and historical data that opacity and particulate matter standards are consistently met when combustion units fire natural gas only. If the emission unit fires a different fuel for more than 24 hours, the permit holder may elect to perform opacity readings or visible emissions to demonstrate compliance is consistent with EPA Reference Test Method 9 and 22. Opacity and visible emissions have been used as an indicator of particulate emissions in many federal rules including 40 CFR Part 60, Subpart F and Subpart HH. In addition, use of these indicators is consistent with the EPA's "Compliance Assurance Monitoring (CAM) Technical Guidance Document" (August 1998). Monitoring specifications and procedures for the opacity are consistent with federal requirements and include the EPA's Test Method 9 for determining opacity by visual observations and the requirements of 40 CFR § 60.13 for a continuous opacity monitoring system (COMS). The monitoring specifications and procedures for the visible emissions monitoring are similar to "EPA Reference Method 22" procedures.		

Unit/Group/Process Information		
ID No.: N-24A		
Control Device ID No.: N/A	Control Device Type: N/A	
Applicable Regulatory Requirement		
Name: 30 TAC Chapter 111, Visible Emissions	SOP Index No.: R111-1	
Pollutant: Opacity	Main Standard: § 111.111(a)(1)(C)	
Monitoring Information		
Indicator: Fuel Type		
Minimum Frequency: Annually or at any time an alternate fu	uel is used	
Averaging Period: n/a		
Deviation Limit: When alternate fuel is fired, alone or in combination with the specified gas (pipeline natural gas or fuel gas having Sulfur content <10 gr/100 cf of gas), for a period greater than or equal to 24 consecutive hours or visible emissions are observed.		
Basis of monitoring: Industry has demonstrated through performance tests and historical data that opacity and particulate matter standards are consistently met when combustion units fire natural gas only. If the emission unit fires a different fuel for more than 24 hours, the permit holder may elect to perform opacity readings or visible emissions to demonstrate compliance is consistent with EPA Reference Test Method 9 and 22. Opacity and visible emissions have been used as an indicator of particulate emissions in many federal rules including 40 CFR Part 60, Subpart F and Subpart HH. In addition, use of these indicators is consistent with the EPA's "Compliance Assurance Monitoring (CAM) Technical Guidance Document" (August 1998). Monitoring specifications and procedures for the opacity are consistent with federal requirements and include the EPA's Test Method 9 for determining opacity by visual observations and the requirements of 40 CFR § 60.13 for a continuous opacity monitoring system (COMS). The monitoring specifications and procedures for the visible emissions monitoring are similar to "EPA Reference Method 22" procedures.		

Unit/Group/Process Information		
ID No.: N-24B		
Control Device ID No.: N/A	Control Device Type: N/A	
Applicable Regulatory Requirement		
Name: 30 TAC Chapter 111, Visible Emissions	SOP Index No.: R111-1	
Pollutant: Opacity	Main Standard: § 111.111(a)(1)(C)	
Monitoring Information		
Indicator: Fuel Type		
Minimum Frequency: Annually or at any time an alternate fu	iel is used	
Averaging Period: n/a		
Deviation Limit: When alternate fuel is fired, alone or in combination with the specified gas (pipeline natural gas or fuel gas having Sulfur content <10 gr/100 cf of gas), for a period greater than or equal to 24 consecutive hours or visible emissions are observed.		
Basis of monitoring: Industry has demonstrated through performance tests and historical data that opacity and particulate matter standards are consistently met when combustion units fire natural gas only. If the emission unit fires a different fuel for more than 24 hours, the permit holder may elect to perform opacity readings or visible emissions to demonstrate compliance is consistent with EPA Reference Test Method 9 and 22. Opacity and visible emissions have been used as an indicator of particulate emissions in many federal rules including 40 CFR Part 60, Subpart F and Subpart HH. In addition, use of these indicators is consistent with the EPA's "Compliance Assurance Monitoring (CAM) Technical Guidance Document" (August 1998). Monitoring specifications and procedures for the opacity are consistent with federal requirements and include the EPA's Test Method 9 for determining opacity by visual observations and the requirements of 40 CFR § 60.13 for a continuous opacity monitoring system (COMS). The monitoring specifications and procedures for the visible emissions and procedures for the visible emissions monitoring are similar to "EPA Reference Method 22" procedures.		

Unit/Group/Process Information		
ID No.: N-9		
Control Device ID No.: N/A	Control Device Type: N/A	
Applicable Regulatory Requirement		
Name: 30 TAC Chapter 111, Visible Emissions	SOP Index No.: R111-1	
Pollutant: Opacity	Main Standard: § 111.111(a)(1)(C)	
Monitoring Information		
Indicator: Fuel Type		
Minimum Frequency: Annually or at any time an alternate fu	iel is used	
Averaging Period: n/a		
Deviation Limit: When alternate fuel is fired, alone or in combination with the specified gas (pipeline natural gas or fuel gas having Sulfur content <10 gr/100 cf of gas), for a period greater than or equal to 24 consecutive hours or visible emissions are observed.		
Basis of monitoring: Industry has demonstrated through performance tests and historical data that opacity and particulate matter standards are consistently met when combustion units fire natural gas only. If the emission unit fires a different fuel for more than 24 hours, the permit holder may elect to perform opacity readings or visible emissions to demonstrate compliance is consistent with EPA Reference Test Method 9 and 22. Opacity and visible emissions have been used as an indicator of particulate emissions in many federal rules including 40 CFR Part 60, Subpart F and Subpart HH. In addition, use of these indicators is consistent with the EPA's "Compliance Assurance Monitoring (CAM) Technical Guidance Document" (August 1998). Monitoring specifications and procedures for the opacity are consistent with federal requirements and include the EPA's Test Method 9 for determining opacity by visual observations and the requirements of 40 CFR § 60.13 for a continuous opacity monitoring system (COMS). The monitoring specifications and procedures for the visible emissions monitoring are similar to "EPA Reference Method 22" procedures.		

#### **Obtaining Permit Documents**

The New Source Review Authorization References table in the FOP specifies all NSR authorizations that apply at the permit area covered by the FOP. Individual NSR permitting files are located in the TCEQ Central File Room (TCEQ Main Campus located at 12100 Park 35 Circle, Austin, Texas, 78753, Building E, Room 103). They can also be obtained electronically from TCEQ's Central File Room Online (<u>https://www.tceq.texas.gov/goto/cfr-online</u>). Guidance documents that describe how to search electronic records, including Permits by Rule (PBRs) or NSR permits incorporated by reference into an FOP, archived in the Central File Room server are available at <a href="https://www.tceq.texas.gov/permitting/air/nav/air">https://www.tceq.texas.gov/permitting/air/nav/air</a> status permits.html

All current PBRs are contained in Chapter 106 and can be viewed at the following website:

https://www.tceq.texas.gov/permitting/air/permitbyrule/air\_pbr\_index.html

Previous versions of 30 TAC Chapter 106 PBRs may be viewed at the following website:

www.tceq.texas.gov/permitting/air/permitbyrule/historical\_rules/old106list/index106.html

Historical Standard Exemption lists may be viewed at the following website:

www.tceq.texas.gov/permitting/air/permitbyrule/historical\_rules/oldselist/se\_index.html

Additional information concerning PBRs is available on the TCEQ website:

https://www.tceq.texas.gov/permitting/air/nav/air\_pbr.html

#### **Compliance Review**

- 1. In accordance with 30 TAC Chapter 60, the compliance history was reviewed on May 7, 2025.
  - Site rating: <u>3.96 / Satisfactory</u> Company rating: <u>3.96 / Satisfactory</u>
  - (High < 0.10; Satisfactory  $\geq$  0.10 and  $\leq$  55; Unsatisfactory > 55)
- 2. Has the permit changed on the basis of the compliance history or site/company rating?.....No

#### **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

#### 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-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 - 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**
- **OP-UA64 Coal Preparation Plant Attributes**