## Statement of Basis of the Federal Operating Permit

LyondellBasell Acetyls, LLC

Site Name: LyondellBasell Syngas Physical Location: 11603b Strang Rd Nearest City: La Porte County: Harris

Permit Number: O2290 Project Type: Significant Revision

The North American Industry Classification System (NAICS) Code: 325120 NAICS Name: Industrial Gas Manufacturing

This Statement of Basis sets forth the legal and factual basis for the draft changes to the permit conditions resulting from the significant revision project in accordance with 30 TAC §122.201(a)(4). The applicant has submitted an application for a significant permit revision per §§ 122.219-221. This document may include the following information:

A description of the facility/area process description;

A description of the revision project;

A basis for applying permit shields;

A list of the federal regulatory applicability determinations;

A table listing the determination of applicable requirements;

A list of the New Source Review Requirements;

The rationale for periodic monitoring methods selected;

The rationale for compliance assurance methods selected;

A compliance status; and

A list of available unit attribute forms.

Prepared on: November 13, 2020

# Operating Permit Basis of Determination

## **Description of Revisions**

The following changes were made to the application/permit:

- 1. Add MACT DDDDD applicability to existing boiler SH23-50-1.
- 2. Add MACT DDDDD applicability to existing heater SG23-51-1.
- 3. Add NSPS Db applicability to new boiler SG23-51-1.
- 4. Add MACT G and Chapter 115 applicability to new tank SG13-20-1.
- 5. Add MACT G applicability and update Chapter 115 applicability to existing tank SG13-25-1.
- 6. Add Chapter 115 applicability to new tank SG13-6-10.
- 7. Update Chapter 115 applicability to existing tanks 38-3-5A and 38-3-5B.
- 8. Add MACT G and Chapter 115 applicability to new loading rack SG41-31-1.
- 9. Add MACT Subpart A applicability to existing flares SH21-1-1, SG-20-2-2, and SG-20-3-2.
- 10. Add MACT G applicability and updated Chapter 115 applicability for existing vent SG2111VENT.
- 11. Add MACT G and Chapter 115 applicability to new vents SG2022VENT and SG2032VENT.
- 12. Add MACT H applicability to new fugitive unit SGFUG.
- 13. Add MACT F applicability to new cooling tower unit SGCT.
- 14. Update of OP-REQ1 information/permit terms and conditions.
- 15. Add MACT G negative applicability and permit shield to existing tanks 38-3-5A and 38-3-5B.
- 16. Remove Chapter 115 HRVOC requirements from flare POXNH3FLARE and add to negative applicability with permit shield.
- 17. Remove applicability to MACT EEEE from unit SG13-25-1 and add to negative applicability with permit shield.
- 18. Add negative applicability to NSPS VV and permit shield to unit SG31PSA1.
- 19. Add negative applicability and permit shield for NSPS VVa to unit SGFUG1C3C.
- 20. Change site ownership to LyondellBasell Acetyls, LLC.
- 21. Add a compliance plan with a schedule for implementing MACT G requirements to site wastewater units.

## **Permit Area Process Description**

The Linde La Port Synthesis Gas Plant produces crude synthesis gas (syngas). Syngas is a mixture of carbon monoxide (CO), carbon dioxide (CO2), hydrogen (H2), nitrogen (N2), unreacted methane and trace amounts of water and formic acid. The Syngas Unit produces crude syngas through the partial oxidation of a hydrocarbon feedstock mixture with pure oxygen at elevated temperature and pressure. The feedstock generally consists of 85-100% methane, 0-10% tail gas from an adjacent ethylene facility, approximately 5% acetylene off gas from a nearby acetylene facility, and 5% liquid hydrocarbon from an adjacent methanol facility. The feedstock is combined and reacted in the partial oxidation generator (POX) to produce syngas. The natural gas portion of the feedstock is treated in catalyst beds to remove sulfur prior to being introduced into the partial oxidation generator.

Upon exiting the POX generator, the syngas stream is split, with part of the gas used to generate steam and the remainder cooled in a water bath. The streams are further cooled and process condensate is removed and routed to the wastewater treatment facility. Part of the syngas is routed to an offsite methanol production facility for use as feedstock. The remainder of the syngas is introduced into a membrane separation unit which separates the stream into permeate and non-permeate streams. The permeate stream is primarily hydrogen and is low pressure. The non-permeate stream is primarily carbon monoxide and is higher pressure. The permeate stream is used as feedstock in the offsite methanol production facility. The non-permeate stream is cooled and routed to the Rectisol unit, where H2S, CO2, and water are removed from the syngas using a cold methanol stream circulated through a series of heat exchangers and columns. Once the cold methanol has circulated through the equipment and picked up H2S, CO2, and water, it is warmed and the CO2 is removed (stripped). The CO2 is either routed to the flare or recycled to the offsite methanol production facility. The methanol is cooled and recycled back to the Rectisol unit to be reused.

Syngas exiting the Rectisol wash column is routed through molecular sieves, which removes any trace quantities of methanol vapor, water, or CO2. The syngas then enters the cold box where cryogenic separation of CO occurs. In the cold box a series of heat exchangers combined with refrigeration from pressure reduction cools the syngas below the

condensation temperature of CO. The CO is separated from the hydrogen and is re vaporized, compressed, and routed to customers. The hydrogen is routed to the offsite methanol production facility. Syngas is distributed to customers via pipeline

#### **FOPs at Site**

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

Additional FOPs: None

## **Major Source Pollutants**

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

Major Pollutants	VOC, NOX, HAPS, CO

## 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
  - o Compliance Requirements
  - Protection of Stratosphere Ozone
  - Permit Location
  - Permit Shield (30 TAC § 122.148)
- Attachments
  - o Applicable Requirements Summary
    - Unit Summary
    - Applicable Requirements Summary
  - Additional Monitoring Requirements
  - Permit Shield
  - New Source Review Authorization References
  - Compliance Plan
  - Alternative Requirements
- Appendix A
  - o Acronym list

#### General Terms and Conditions

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

## Special Terms and Conditions

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

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

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

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

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

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

#### **Federal Regulatory Applicability Determinations**

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

Regulatory Program	Applicability (Yes/No)
Prevention of Significant Deterioration (PSD)	No
Nonattainment New Source Review (NNSR)	No
Minor NSR	Yes
40 CFR Part 60 - New Source Performance Standards	Yes
40 CFR Part 61 - National Emission Standards for Hazardous Air Pollutants (NESHAPs)	No
40 CFR Part 63 - NESHAPs for Source Categories	Yes
Title IV (Acid Rain) of the Clean Air Act (CAA)	No
Title V (Federal Operating Permits) of the CAA	Yes
Title VI (Stratospheric Ozone Protection) of the CAA	Yes
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.
- 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 <a href="https://www.tceq.texas.gov/permitting/air/nav/air\_all\_ua\_forms.html">www.tceq.texas.gov/permitting/air/nav/air\_all\_ua\_forms.html</a>.

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 <a href="https://www.tceq.texas.gov/permitting/air/nav/air\_supportsys.html">www.tceq.texas.gov/permitting/air/nav/air\_supportsys.html</a>. 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*
PW310-50-1	30 TAC Chapter 117, Subchapter B	R117	Type of Service = Used exclusively in emergency situations [claiming the emergency service exemption under 30 TAC §§ 117.103(a)(6)(D), 117.203(a)(6)(D), 117.303(a)(6)(D) or 117.403(a)(7)(D)]
			Fuel Fired = Petroleum-based diesel fuel
PW310-50-1	40 CFR Part 63, Subpart	63ZZZZ	HAP Source = The site is an area source of hazardous air pollutants as defined in 40 CFR § 63.2
	ZZZZ		Brake HP = Stationary RICE with a brake HP greater than 500 HP.
			Construction/Reconstruction Date = Commenced construction or reconstruction before December 19, 2002.
			Nonindustrial Emergency Engine = Stationary RICE is not defined in 40 CFR §63.6675 as a residential emergency RICE, a commercial emergency RICE, or an institutional emergency RICE.
			Service Type = Emergency use where the RICE operates for the purpose specified in 40 CFR §63.6640(f)(4)(ii).
			Stationary RICE Type = Compression ignition engine
			Displacement = The stationary CI RICE has a displacement of less than 30 liters per cylinder and uses diesel fuel.
ROCGEN	40 CFR Part 60, Subpart	60JJJJ-1	Construction/Reconstruction/Modification Date = The stationary spark ignition (SI) internal combustion engine (ICE) commenced construction, reconstruction or modification after June 12, 2006.
			Test Cell = The SI ICE is not being tested at an engine test cell/stand.
			Temp Replacement = The SI ICE is not acting as a temporary replacement.
			Horsepower = Maximum engine power greater than 25 HP and less than or equal to 100 HP.
			Fuel = SI ICE that uses natural gas.
			Commencing = SI ICE that is commencing new construction.
			Manufactured Date = Date of manufacture is on or after January 1, 2009.
			Certified = Purchased a certified SI ICE.
			Operation = Operating and maintaining the certified SI ICE and control device according to manufacturer's written instructions.
			Service = SI ICE is an emergency engine.
ROCGEN	40 CFR Part 63, Subpart	63ZZZZ	HAP Source = The site is an area source of hazardous air pollutants as defined in 40 CFR § 63.2
	ZZZZ		Brake HP = Stationary RICE with a brake HP less than 100 HP.
			Construction/Reconstruction Date = Commenced construction or reconstruction on or after June 12, 2006.
38-3-5A	30 TAC Chapter 115, Storage of VOCs	R115-1	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 greater than or equal to 1.5 psia
			Control Device Type = Flare

Unit ID	Regulation	Index Number	Basis of Determination*
38-3-5B	30 TAC Chapter 115, Storage of VOCs	R115-1	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 greater than or equal to 1.5 psia
			Control Device Type = Flare
SG13-20-1	30 TAC Chapter 115, Storage of VOCs	R115-1	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 greater than or equal to 1.5 psia
			Control Device Type = Flare
SG13-20-1	40 CFR Part 63, Subpart G	63G-1	MACT Subpart F/G Applicability = The unit is a Group 1 vessel (as defined in Table 5 for existing sources or Table 6 for new sources of 40 CFR 63, Subpart G).
			NESHAP Subpart Y Applicability = The unit is not subject to 40 CFR Part 61, Subpart Y.
			Maximum TVP = Maximum true vapor pressure of the total organic HAP in the liquid is less than 11.11 psi (76.6 kPa)
			Emission Control Type = Closed vent system (CVS) and control device (fixed roof)
			Closed Vent System = Closed vent system is routing emissions to a process or fuel gas system, or is subject to § 63.148 of Subpart G.
			Hard Piping = The closed vent system is constructed of hard piping.
			Bypass Lines = Closed vent system has no by-pass lines.
			Control Device Type = Flare
SG13-25-1	30 TAC Chapter 115, Storage of VOCs	R115-2	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 greater than or equal to 1.5 psia
SG13-25-1	40 CFR Part 60, Subpart Ka	60Ka-1	Product Stored = Stored product other than a petroleum liquid
SG13-25-1	40 CFR Part 63, Subpart G	63G-2	MACT Subpart F/G Applicability = The unit is a Group 1 vessel (as defined in Table 5 for existing sources or Table 6 for new sources of 40 CFR 63, Subpart G).
			NESHAP Subpart Y Applicability = The unit is not subject to 40 CFR Part 61, Subpart Y.

Unit ID	Regulation	Index Number	Basis of Determination*
			Maximum TVP = Maximum true vapor pressure of the total organic HAP in the liquid is less than 11.11 psi (76.6 kPa)  Emission Control Type = Internal floating roof  Seal Type = Metallic shoe seal (as defined in 40 CFR § 63.111)
SG13-6-10	30 TAC Chapter 115, Storage of VOCs	R115-1	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 greater than or equal to 1.5 psia  Control Device Type = Flare
SG21-6-1	30 TAC Chapter 115, Storage of VOCs	R115	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
SG21-6-1	40 CFR Part 60, Subpart Ka	60Ka-1	Product Stored = Stored product other than a petroleum liquid
SG5-1-1	30 TAC Chapter 115, Storage of VOCs	R115	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 does not require emission controls  True Vapor Pressure = True vapor pressure is less than 1.0 psia
SG5-1-1	40 CFR Part 60, Subpart Ka	60Ka-1	Product Stored = Stored product other than a petroleum liquid
SG5-1-11	30 TAC Chapter 115, Storage of VOCs	R115	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

Unit ID	Regulation	Index Number	Basis of Determination*
SG5-1-14	30 TAC Chapter 115, Storage of VOCs	R115	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 does not require emission controls
			True Vapor Pressure = True vapor pressure is less than 1.0 psia
SG5-1-14	40 CFR Part 60, Subpart Ka	60Ka-1	Product Stored = Stored product other than a petroleum liquid
SG5-1-17	30 TAC Chapter 115, Storage of VOCs	R115	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 does not require emission controls
			True Vapor Pressure = True vapor pressure is less than 1.0 psia
SG5-1-17	40 CFR Part 60, Subpart Ka	60Ka-1	Product Stored = Stored product other than a petroleum liquid
SG5-7-1	30 TAC Chapter 115, Storage of VOCs	R115	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 does not require emission controls
			True Vapor Pressure = True vapor pressure is less than 1.0 psia
SG5-7-1	40 CFR Part 60, Subpart Ka	60Ka-1	Product Stored = Stored product other than a petroleum liquid
SG7-7-11	30 TAC Chapter 115, Storage of VOCs	R115	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
SG7-7-11	40 CFR Part 60, Subpart Ka	60Ka-1	Product Stored = Stored product other than a petroleum liquid
SG810-21-1	30 TAC Chapter 115, Storage of VOCs	R115	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.

Unit ID	Regulation	Index Number	Basis of Determination*
			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
SG810-21-1	40 CFR Part 60, Subpart Ka	60Ka-1	Product Stored = Stored product other than a petroleum liquid
SG810-22-1	30 TAC Chapter 115, Storage of VOCs	R115	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 does not require emission controls  True Vapor Pressure = True vapor pressure is less than 1.0 psia
SG810-22-1	40 CFR Part 60, Subpart Ka	60Ka-1	Product Stored = Stored product other than a petroleum liquid
SG810-27-1	30 TAC Chapter 115, Storage of VOCs	R115	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 does not require emission controls  True Vapor Pressure = True vapor pressure is less than 1.0 psia
SG811-1-1	30 TAC Chapter 115, Storage of VOCs	R115	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
SG811-1-1	40 CFR Part 60, Subpart Ka	60Ka-1	Storage Capacity = Capacity is 40,000 gallons (151,416 liters) or less
SG811-1-1	40 CFR Part 60, Subpart Kb	60Kb-1	Product Stored = Volatile organic liquid Storage Capacity = Capacity is less than 10,600 gallons (40,000 liters)
SG811-3-1	30 TAC Chapter 115, Storage of VOCs	R115	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

Unit ID	Regulation	Index Number	Basis of Determination*
			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
SG811-3-1	40 CFR Part 60, Subpart Ka	60Ka-1	Storage Capacity = Capacity is 40,000 gallons (151,416 liters) or less
SG811-3-1	40 CFR Part 60, Subpart Kb	60Kb-1	Product Stored = Volatile organic liquid Storage Capacity = Capacity is less than 10,600 gallons (40,000 liters)
SG41-31-1	30 TAC Chapter 115, Loading and Unloading of VOC	R115	Chapter 115 Facility Type = Facility type other than a gasoline terminal, gasoline bulk plant, motor vehicle fuel dispensing facility or marine terminal.  Alternate Control Requirement (ACR) = No alternate control requirements are being utilized.  Product Transferred = Volatile organic compounds other than liquefied petroleum gas and gasoline.  Transfer Type = Loading and unloading.  True Vapor Pressure = True vapor pressure greater than or equal to 0.5 psia.  Daily Throughput = Loading less than 20,000 gallons per day.
SG41-31-1	40 CFR Part 63, Subpart G	63G	Transfer Rack Type = Group 2 transfer rack (as defined in 40 CFR § 63.111).  Subject to Subpart BB = The transfer rack is not subject to 40 CFR Part 61, Subpart BB.
SG23-51-1	30 TAC Chapter 117, Subchapter B	R117	Unit Type = Process heater  Maximum Rated Capacity = Maximum rated capacity is at least 100 MMBtu/hr, but less than 200 MMBtu/hr.  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 (10¹¹) Btu/yr, based on a rolling 12-month average.  NOx Emission Limitation = Title 30 TAC §§ 117.310(d)(3) and 117.310(a)(8)  Diluent CEMS = The process heater does not use a carbon dioxide CEMS to monitor diluent.  NOx Emission Limit Basis = Emission limit basis is not a rolling 30-day average or a block one-hour average  NOx Reduction = No NO <sub>x</sub> reduction  Fuel Type Heat Input = Process heater is fired with a single fuel type.  NOx Monitoring System = Continuous emissions monitoring system  Fuel Flow Monitoring = Fuel flow is monitored with a totalizing fuel flow meter per 30 TAC §§ 117.140(a), 117.340(a) or 117.440(a).  CO Emission Limitation = Title 30 TAC § 117.310(c)(1) 400 ppmv option  CO Monitoring System = Continuous emissions monitoring system
SG23-51-1	40 CFR Part 63, Subpart DDDDD	63DDDDD-1	CONSTRUCTION/RECONSTRUCTION DATE = Construction or reconstruction began after June 4, 2010.

Unit ID	Regulation	Index Number	Basis of Determination*
SG23-50-1	23-50-1 30 TAC Chapter 117,		Unit Type = Other industrial, commercial, or institutional boiler.
	Subchapter B		Maximum Rated Capacity = MRC is greater than or equal to 250 MMBtu/hr.
			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 § 117.310(d)(3) [relating to mass emissions cap and trade in 30 TAC Chapter 101, Subchapter H, Division 3 and Emission Specifications for Attainment Demonstration].
			EGF System Cap Unit = The unit is not used as an electric generating facility to generate electricity for sale to the electric grid.
			NOx Emission Limit Average = Comply with the applicable emission limit in pounds/hour on a using block one-hour average.
			NOx Reductions = Forced flue gas recirculation.
			NOx Monitoring System = Continuous emissions monitoring system.
			Fuel Flow Monitoring = Fuel flow is monitored with a totalizing fuel flow meter per 30 TAC §§ 117.140(a), 117.340(a) or 117.440(a).
			CO Emission Limitation = Title 30 TAC § 117.310(c)(1) 400 ppmv option.
			CO Monitoring System = Continuous emissions monitoring system.
SG23-50-1	SG23-50-1 40 CFR Part 60, Subpart	Part 60, Subpart 60Db-1	Construction/Modification Date = Constructed or reconstructed after July 9, 1997, and on or before 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 or AAAA = The affected facility does not meet applicability requirements of and is subject to 40 CFR Part 60, Subpart Ea, Eb or AAAA.
			Subpart 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.
			D-Series Fuel Type #1 = Natural gas.
			D-Series Fuel Type #2 = Nonsolid non fossil fuel other than nonsolid byproduct/waste or hazardous waste.
			Subpart J = The affected facility does not meet applicability requirements of 40 CFR Part 60, Subpart J.
			Subpart E = The affected facility does not meet applicability requirements of 40 CFR Part 60, Subpart E.
			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 = 10% or less of the annual output is electrical or mechanical.

Unit ID	Regulation	Index Number	Basis of Determination*
			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.
			PM Monitoring Type = No particulate monitoring.
			Opacity Monitoring Type = No particulate (opacity) monitoring.
			NOx Monitoring Type = Continuous emission monitoring system.
			SO2 Monitoring Type = No $SO_2$ monitoring.
			Technology Type = None.
			Unit Type = OTHER UNIT TYPE
			Heat Release Rate = Natural gas with a heat release rate less than or equal to 70 MBtu/hr/ft <sup>3</sup> .
			Heat Input Gas/Oil = The facility does not combust natural gas or distillate oil in excess of 30 % of the heat input from the combustion of all fuels.
SG23-50-1	40 CFR Part 60, Subpart	60Dc-1	Construction/Modification Date = After June 9, 1989 but on or before February 28, 2005.
	Dc		Maximum Design Heat Input Capacity = Maximum design heat input capacity is greater than 100 MMBtu/hr (29 MW).
SG23-50-1	40 CFR Part 63, Subpart DDDDD	63DDDD-1	Construction/Reconstruction Date = Construction or reconstruction began on or before June 4, 2010.
SG23-51-1	40 CFR Part 60, Subpart	R Part 60, Subpart 60DB-1	Construction/Modification Date = Modified after 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 or AAAA = The affected facility does not meet applicability requirements of and is subject to 40 CFR Part 60, Subpart Ea, Eb or AAAA.
			Subpart 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.
			D-Series Fuel Type #1 = Natural gas.
			D-Series Fuel Type #2 = Byproduct/waste.
			Subpart J = The affected facility does not meet applicability requirements of 40 CFR Part 60, Subpart J.
			Subpart E = The affected facility does not meet applicability requirements of 40 CFR Part 60, Subpart E.
			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.
			60.49Da(n) Alternative = The facility is not using the § 60.49Da(n) alternative.

Unit ID	Regulation	Index Number	Basis of Determination*
			60.49Da(m) Alternative = The facility is not using the § 60.49Da(m) alternative.
			PM Monitoring Type = No particulate monitoring.
			Opacity Monitoring Type = No particulate (opacity) monitoring.
			NOx Monitoring Type = Continuous emission monitoring system.
			SO2 Monitoring Type = Fuel certification (maintaining receipts per § 60.49b(r)(1)).
			Technology Type = None.
			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> .
			Heat Input Wood = The facility combusts no wood or less than 30% wood by heat input.
			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.
POXNH3FLARE	30 TAC Chapter 111,	R111	Acid Gases Only = Flare is not used only as an acid gas flare as defined in 30 TAC § 101.1.
	Visible Emissions		Emergency/Upset Conditions Only = Flare is used under conditions other than emergency or upset conditions.
POXNH3FLARE	40 CFR Part 60, Subpart A	60A	Subject to 40 CFR § 60.18 = Flare is not subject to 40 CFR § 60.18.
POXNH3FLARE	40 CFR Part 63, Subpart A	63A	Required Under 40 CFR Part 63 = Flare is not required by a Subpart under 40 CFR Part 63.
SG20-2-2	30 TAC Chapter 111,	R111	Acid Gases Only = Flare is not used only as an acid gas flare as defined in 30 TAC § 101.1.
	Visible Emissions		Emergency/Upset Conditions Only = Flare is used under conditions other than emergency or upset conditions.
SG20-2-2	40 CFR Part 63, Subpart	63A	Required Under 40 CFR Part 63 = Flare is required by a Subpart under 40 CFR Part 63.
	A		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 = Non-assisted
			Flare Exit Velocity = Flare exit velocity is less than 60 ft/s (18.3 m/sec)
SG20-3-2	30 TAC Chapter 111,	R111	Acid Gases Only = Flare is not used only as an acid gas flare as defined in 30 TAC § 101.1.
	Visible Emissions		Emergency/Upset Conditions Only = Flare is used under conditions other than emergency or upset conditions.
SG20-3-2	30 TAC Chapter 115,	R5720-01	Out of Service = Flare was not permanently out of service by April 1, 2006.
	HRVOC Vent Gas		Total Gas Stream = Flare receives a total gas stream with greater than 100 ppmv HRVOC at some time.
			Gas Stream Concentration = Flare receives a gas stream containing 5% or greater HRVOC by weight at some time.
			Alternative Monitoring Approach = No alternative monitoring approaches as outlined in 115.725(m)(1) or 115.725(m)(2) are used.
			Modifications to Testing/Monitoring = No modifications to test methods or monitoring methods specified in this section.
			Flare Type = Flare is in multi-purpose service.

Unit ID	Regulation	Index Number	Basis of Determination*
			Monitoring Requirements = Flare is complying with rule base requirements other than the continuous monitoring requirements of § 115.725(d).
			Multi-Purpose Usage = Flare is used for abatement of emissions from marine loading or transport vessel loading and unloading operations AND for abatement of emissions from scheduled or unscheduled maintenance, startup or shutdown activities AND as an emergency flare.
			Flow Rate = Flow rate of the gas routed to the flare is determined using the requirements of § 115.725(d)(1).
			Physical Seal = Flare is equipped with a flow monitor or indicator.
SG20-3-2	40 CFR Part 60, Subpart	60A	Subject to 40 CFR § 60.18 = Flare is subject to 40 CFR § 60.18.
	A		Adhering to Heat Content Specifications = Adhering to the heat content specifications in 40 CFR § 60.18(c)(3)(ii) and the maximum tip velocity specifications in 40 CFR § 60.18(c)(4)(i)-(iii) or (c)(5).
			Flare Assist Type = Non-assisted
			Flare Exit Velocity = Flare exit velocity is less than 60 ft/s (18.3 m/sec)
			Heating Value of Gas = Heating value is less than or equal to 1000 Btu/scf (37.3 MJ/scm).
SG20-3-2	40 CFR Part 63, Subpart	63A	Required Under 40 CFR Part 63 = Flare is required by a Subpart under 40 CFR Part 63.
	A		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 = Non-assisted
			Flare Exit Velocity = Flare exit velocity is less than 60 ft/s (18.3 m/sec)
SG21-1-1	30 TAC Chapter 111,	R111	Acid Gases Only = Flare is not used only as an acid gas flare as defined in 30 TAC § 101.1.
	Visible Emissions		Emergency/Upset Conditions Only = Flare is used under conditions other than emergency or upset conditions.
SG21-1-1	30 TAC Chapter 115,	R5720-01	Out of Service = Flare was not permanently out of service by April 1, 2006.
	HRVOC Vent Gas		Total Gas Stream = Flare receives a total gas stream with greater than 100 ppmv HRVOC at some time.
			Gas Stream Concentration = Flare receives a gas stream containing 5% or greater HRVOC by weight at some time.
			Alternative Monitoring Approach = No alternative monitoring approaches as outlined in 115.725(m)(1) or 115.725(m)(2) are used.
			Modifications to Testing/Monitoring = No modifications to test methods or monitoring methods specified in this section.
			Flare Type = Flare is in multi-purpose service.
			Monitoring Requirements = Flare is complying with rule base requirements other than the continuous monitoring requirements of § 115.725(d).
			Multi-Purpose Usage = Flare is used for abatement of emissions from marine loading or transport vessel loading and unloading operations AND for abatement of emissions from scheduled or unscheduled maintenance, startup or shutdown activities AND as an emergency flare.
			Flow Rate = Flow rate of the gas routed to the flare is determined using the requirements of § 115.725(d)(1).
			Physical Seal = Flare is equipped with a flow monitor or indicator.
SG21-1-1	40 CFR Part 60, Subpart A	60A	Subject to 40 CFR § 60.18 = Flare is subject to 40 CFR § 60.18.

Unit ID	Regulation	Index Number	Basis of Determination*
			Adhering to Heat Content Specifications = Adhering to the heat content specifications in 40 CFR § 60.18(c)(3)(ii) and the maximum tip velocity specifications in 40 CFR § 60.18(c)(4)(i)-(iii) or (c)(5).
			Flare Assist Type = Non-assisted
			Flare Exit Velocity = Flare exit velocity is less than 60 ft/s (18.3 m/sec)
			Heating Value of Gas = Heating value is less than or equal to 1000 Btu/scf (37.3 MJ/scm).
SG21-1-1	40 CFR Part 63, Subpart	63A	Required Under 40 CFR Part 63 = Flare is required by a Subpart under 40 CFR Part 63.
	A		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 = Non-assisted
			Flare Exit Velocity = Flare exit velocity is less than 60 ft/s (18.3 m/sec)
SG31PSA1	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	R115	Title 30 TAC § 115.352 Applicable = Site is not a petroleum refinery, synthetic organic chemical, polymer resin or methyl tert-butyl ether manufacturing process nor a natural gas/gasoline processing operation as defined in 30 TAC 115.10.
SG31PSA1	40 CFR Part 60, Subpart VV	R115	Produces Chemicals = The fugitive unit is not part of a facility that produces as an intermediate or final product one or more of the chemicals listed in 40 CFR § 60.489.
SGFUG	30 TAC Chapter 115, Pet. Refinery &	R115	Title 30 TAC § 115.352 Applicable = Site is a petroleum refinery, synthetic organic chemical, polymer resin or methyl tert-butyl ether manufacturing process or a natural gas/gasoline processing operation as defined in 30 TAC 115.10.
	Petrochemicals		Less Than 250 Components at Site = Fugitive unit not located at site with less than 250 fugitive components.
			Weight Percent VOC = All components contact a process fluid that contains greater than or equal to 10% VOC by weight.
			Reciprocating Compressors Or Positive Displacement Pumps = The fugitive unit does not have reciprocating compressors or positive displacement pumps used in natural gas/gasoline processing operations.
			Rupture Disks = The fugitive unit has pressure relief valves equipped with rupture disks.
			Instrumentation Systems = The fugitive unit has instrumentation systems, as defined in 40 CFR § 63.161, that meet 40 CFR § 63.169.
			Sampling Connection Systems = The fugitive unit has sampling connection systems, as defined in 40 CFR § 63.161, that meet 40 CFR § 63.169.
			TVP 0.002 PSIA or Less = The fugitive unit does not have components or systems that contact a process fluid containing VOC having a true vapor pressure less than or equal to 0.002 psia at 68 degrees Fahrenheit.
			Process Drains = The fugitive unit has process drains.
			Alternate Control Requirement = The TCEQ Executive Director has not approved an alternate method for demonstrating and documenting continuous compliance with an alternate control requirement or exemption criteria for process drains or no alternate has been requested.
			Complying with 30 TAC § 115.352(1) = Process drains are complying with the requirements in 30 TAC § 115.352(1).
			TVP of Process Fluid VOC <= 0.044 PSIA AT 68° F = Process drains contact a process fluid containing VOC having a true vapor pressures less than or equal to 0.044 psia at 68 degrees Fahrenheit.
			TVP of Process Fluid VOC > 0.044 PSIA AT 68° F = Process drains contact a process fluid containing VOC having a TVP greater than 0.044 psia at 68 degrees Fahrenheit.
			Pressure Relief Valves = The fugitive unit contains pressure relief valves.

Unit ID	Regulation	Index Number	Basis of Determination*
			Alternate Control Requirement = The TCEQ Executive Director has not approved an alternate method for demonstrating and documenting continuous compliance with an alternate control requirement or exemption criteria for pressure relief valves or no alternate has been requested.
			Complying with § 115.352(1) = Pressure relief valves are complying with § 115.352(1).
			TVP of Process Fluid VOC <= 0.044 psia at 68° F = Pressure relief valves contact a process fluid with a TVP of less than or equal to 0.044 psia at 68° F.
			TVP of Process Fluid VOC > 0.044 psia at 68° F = Pressure relief valves contact a process fluid with a TVP > 0.044 psia at 68° F.
			Open-ended Valves = The fugitive unit contains open-ended valves.
			Alternate Control Requirement = The TCEQ Executive Director has not approved an alternate method for demonstrating and documenting continuous compliance with an alternate control requirement or exemption criteria for open-ended valves or no alternate has been requested.
			Complying with § 115.352(1) = Open-ended valves and lines are complying with § 115.352(1).
			TVP of Process Fluid VOC <= 0.044 PSIA AT 68• ° F = Open-ended valves or lines contact a process fluid containing VOC having a true vapor pressures less than or equal to 0.044 psia at 68 degrees Fahrenheit.
			TVP of Process Fluid VOC > 0.044 PSIA AT 68° F = Open-ended valves contact a process fluid containing VOC having a TVP greater than 0.044 psia at 68 degrees Fahrenheit.
			Valves (other than pressure relief and open-ended) = The fugitive unit contains valves other than pressure relief valves or open-ended valves or lines.
			Alternate Control Requirement = The TCEQ Executive Director has not approved an alternate method for demonstrating and documenting continuous compliance with an alternate control requirement or exemption criteria for valves or no alternate has been requested.
			Complying with § 115.352(1) = Valves are complying with § 115.352(1).
			TVP of Process Fluid VOC <= 0.044 psia at 68° F = Valves contact a process fluid with a TVP less than or equal to 0.044 psia at 68° F.
			TVP of Process Fluid VOC > 0.044 psia at 68° F = Valves contact a process fluid with a TVP greater than 0.044 psia at 68° F.
			Flanges = The fugitive unit contains flanges.
			Alternate Control Requirement = The TCEQ Executive Director has not approved an alternate method for demonstrating and documenting continuous compliance with an alternate control requirement or exemption criteria for flanges or no alternate has been requested.
			Complying with 30 TAC § 115.352(1) = Flanges are complying with the requirements in 30 TAC § 115.352(1).
			TVP of Process Fluid VOC <= 0.044 PSIA AT 68• ° F = Flanges contact a process fluid containing VOC having a true vapor pressures less than or equal to 0.044 psia at 68 degrees Fahrenheit.
			TVP of Process Fluid VOC > 0.044 PSIA AT 68° F = Flanges contact a process fluid containing VOC having a TVP greater than 0.044 psia at 68 degrees Fahrenheit.
			Agitators = The fugitive unit does not contain agitators.
			Alternate Control Requirement = The TCEQ Executive Director has not approved an alternate method for demonstrating and documenting continuous compliance with an alternate control requirement or exemption criteria for agitators or no alternate has been requested.
			Complying WIth § 115.352(1) = Agitators are complying with § 115.352(1).
			TVP of Process Fluid VOC <= 0.044 psia at 68° F = Agitators contact a process fluid with a TVP less than or equal to 0.044 psia at 68° F.

Unit ID	Regulation	Index Number	Basis of Determination*
			TVP of Process Fluid VOC > 0.044 psia at 68° F = Agitators contact a process fluid with a TVP greater than 0.044 psia at 68° F.
			Compressor Seals = The fugitive unit contains compressor seals.
			Alternate Control Requirement = The TCEQ Executive Director has not approved an alternate method for demonstrating and documenting continuous compliance with an alternate control requirement or exemption criteria for compressor seals or no alternate has been requested.
			50% by Volume = Compressors are in hydrogen service and the hydrogen content can be reasonably expected to always exceed 50% by volume.
			Shaft Seal System = Compressors are not equipped with a shaft sealing system that prevents or detects emission of VOC from the seal.
			TVP of Process Fluid VOC <= 0.044 PSIA AT 68• ° F = Compressor seals do not contact a process fluid containing VOC having a true vapor pressures less than or equal to 0.044 psia at 68 degrees Fahrenheit.
			Complying with § 115.352(1) = Compressor seals are complying with the requirements in 30 TAC § 115.352(1).
			Pump Seals = The fugitive unit contains pump seals.
			Alternate Control Requirement = The TCEQ Executive Director has not approved an alternate method for demonstrating and documenting continuous compliance with an alternate control requirement or exemption criteria for pump seals or no alternate has been requested.
			Shaft Seal System = Pump seals are not equipped with a shaft seal system that prevents or detects emission of VOC from the seal.
			TVP of Process Fluid VOC <= 0.044 PSIA AT 68• ° F = Pump seals contact a process fluid containing VOC having a true vapor pressures less than or equal to 0.044 psia at 68 degrees Fahrenheit.
			Complying with 30 TAC § 115.352(1) = Pump seals are complying with the requirements in 30 TAC § 115.352(1).
			Components Utilizing Alternative Work Practice in § 115.358 = No components in the fugitive unit are using the alternative work practice under § 115.358.
SGFUG	40 CFR Part 63, Subpart	63H	EQUIPMENT TYPE = FUGITIVE UNIT CONTAINS EQUIPMENT LISTED IN 40 CFR § 63.160(A) WHICH IS
	Н		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
			QIP = UNIT DOES NOT OPT TO COMPLY WITH A QUALITY IMPROVEMENT PROGRAM FOR PUMPS
			ANY (COMPRESSORS) = COMPONENT PRESENT
			GAS VAPOR SERVICE (PRESSURE RELIEF DEVICES) = COMPONENT PRESENT
			LIQUID SERVICE (PRESSURE RELIEF DEVICES) = COMPONENT PRESENT

Unit ID	Regulation	Index Number	Basis of Determination*
			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
			QIP = UNIT DOES NOT OPT TO COMPLY WITH A QUALITY IMPROVEMENT PROGRAM FOR VALVES
			GAS/VAPOR OR LIGHT LIQUID SERVICE (CONNECTORS) = COMPONENT PRESENT
			HEAVY LIQUID SERVICE (CONNECTORS) = COMPONENT PRESENT
			GAS/VAPOR OR LIGHT LIQUID SERVICE (AGITATORS) = COMPONENT NOT PRESENT
			HEAVY LIQUID SERVICE (AGITATORS) = COMPONENT NOT 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
			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 = FOR A FUGITIVE UNIT THAT CONTAINS ANY CLOSED-VENT SYSTEM, THERE ARE NO 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
SGFUG1C3C	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	R115	Title 30 TAC § 115.352 Applicable = Site is not a petroleum refinery, synthetic organic chemical, polymer resin or methyl tert-butyl ether manufacturing process nor a natural gas/gasoline processing operation as defined in 30 TAC 115.10.
SGFUG1C3C	40 CFR Part 60, Subpart VV	60VV-1	Produces Chemicals = The fugitive unit is not part of a facility that produces as an intermediate or final product one or more of the chemicals listed in 40 CFR § 60.489.
SGCT	30 TAC Chapter 115, HRVOC Cooling Towers	R115	Cooling Tower Heat Exchange System Exemptions = The cooling tower heat exchange system does not qualify for an exemption.
			Alternative Monitoring = Complying with the specified monitoring in 30 TAC § 115.764.
			Modified Monitoring = NOT USING MINOR MODIFICATIONS TO THE MONITORING AND TESTING METHODS IN 30 TAC § 115.764.
			Jacketed Reactor = The cooling tower heat exchange system is not in dedicated service to a jacketed reactor.
			Design Capacity = Design capacity to circulate 8000 gpm or greater.

Unit ID	Regulation	Index Number	Basis of Determination*
			Finite Volume System = The cooling tower heat exchange system is in dedicated service to a finite volume system and compliance with the requirements of § 115.764(h) in lieu of the requirements in § 115.764(a) is elected.
			Flow Monitoring/Testing Method = Choosing to use a continuous flow monitor on each inlet of each cooling tower in accordance with $\S 115.764(a)(1)$ , $(b)(1)$ , or $(h)(1)$ .
			Total Strippable VOC = The cooling tower heat exchange system is complying with the requirements of § 115.764(a).
			On-Line Monitor = Speciated strippable HRVOC concentration is being determined by sampling.
SGCT	40 CFR Part 63, Subpart Q	63Q-1	Used Compounds Containing Chromium on or After September 8, 1994 = The industrial process cooling tower has not used compounds containing chromium on or after September 8, 1994.
SG20-2-2	30 TAC Chapter 115, Vent Gas Controls	R115	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
SG2022VENT	30 TAC Chapter 115, Vent Gas Controls	R115-1	Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source.
			Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2.
			Vent Type = Vent gas stream 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 = Smokeless flare
			Total Design Capacity = Total design capacity is greater than or equal to 1,100 tons per year for all chemicals produced within that unit.
			Flow Rate or VOC Concentration = Flow rate is greater than or equal to 0.011 scm/min or the VOC concentration is greater than or equal to 500 ppmv.
SG2022VENT	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 = Flare
			Halogenated = Vent stream is not halogenated.
			Alternate Monitoring Parameters = The EPA Administrator has not approved alternate monitoring parameters or alternate monitoring parameters are not used.

Unit ID	Regulation	Index Number	Basis of Determination*
			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.
SG20-3-2	30 TAC Chapter 115,	R5720	HRVOC Concentration = The vent gas stream has a HRVOC concentration of at least 100 ppmv at some times.
	HRVOC Vent Gas		Max Flow Rate = The vent gas stream has a maximum potential flow rate less than or equal to 100 dry standard cubic feet per hour (ft3/hr).
			Exempt Date = The vent gas stream is not exempt.
			Vent Gas Stream Control = Vent gas stream is controlled by a flare.
SG2032VENT	30 TAC Chapter 115, Vent Gas Controls	R115-1	Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source.
			Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2.
			Vent Type = Vent gas stream 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 = Smokeless flare
			Total Design Capacity = Total design capacity is greater than or equal to 1,100 tons per year for all chemicals produced within that unit.
			Flow Rate or VOC Concentration = Flow rate is greater than or equal to 0.011 scm/min or the VOC concentration is greater than or equal to 500 ppmv.
SG2032VENT	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 = Flare
			Halogenated = Vent stream is not halogenated.
			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.
SG21-1-1	30 TAC Chapter 115,	R5720	HRVOC Concentration = The vent gas stream has a HRVOC concentration of at least 100 ppmv at some times.
	HRVOC Vent Gas		Max Flow Rate = The vent gas stream has a maximum potential flow rate less than or equal to 100 dry standard cubic feet per hour (ft3/hr).
			Exempt Date = The vent gas stream is not exempt.
			Vent Gas Stream Control = Vent gas stream is controlled by a flare.
SG2111VENT	30 TAC Chapter 115, Vent Gas Controls	R115-1	Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source.

Unit ID	Regulation	Index Number	Basis of Determination*
			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.
			Alternate Control Requirement = Alternate control is not used.
			Control Device Type = Smokeless flare
			Total Design Capacity = Total design capacity is greater than or equal to 1,100 tons per year for all chemicals produced within that unit.
			Flow Rate or VOC Concentration = Flow rate is greater than or equal to 0.011 scm/min or the VOC concentration is greater than or equal to 500 ppmv.
SG2111VENT	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 = Flare
			Halogenated = Vent stream is not halogenated.
			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.
DEGREASER	30 TAC Chapter 115,	R115	Solvent Degreasing Machine Type = Cold solvent cleaning machine.
	Degreasing Processes		Alternate Control Requirement = The TCEQ Executive Director has not approved an alternative control requirement as allowed under 30 TAC § 115.413 or not alternative has been requested.
			Solvent Sprayed = A solvent is sprayed.
			Solvent Vapor Pressure = Solvent vapor pressure is less than or equal to 0.6 psia as measured at 100 degrees Fahrenheit.
			Parts Larger than Drainage = No cleaned parts for which the machine is authorized to clean are larger than the internal drainage facility of the machine.
			Drainage Area = Area is less than 16 square inches.
			Disposal in Enclosed Containers = Waste solvent is properly disposed of in enclosed containers.
SGCT	40 CFR Part 63, Subpart	63F	Applicable Chemicals = The chemical manufacturing process unit manufactures, as a primary product, one or more of the chemicals listed in 40 CFR § 63.100(b)(1)(i) or 40 CFR § 63.100(b)(1)(ii).
			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.

Unit ID	Regulation	Index Number	Basis of Determination*
			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.

<sup>\* -</sup> The "unit attributes" or operating conditions that determine what requirements apply

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

## **NSR Versus Title V FOP**

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

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

NSR Permit	Federal Operating Permit (FOP)
Issued Prior to new Construction or modification of an existing facility	For initial permit with application shield, can be issued after operation commences; significant revisions require approval prior to operation.
Authorizes air emissions	Codifies existing applicable requirements, does not authorize new emissions
Ensures issued permits are protective of the environment and human health by conducting a health effects review and that requirement for best available control technology (BACT) is implemented.	Applicable requirements listed in permit are used by the inspectors to ensure proper operation of the site as authorized. Ensures that adequate monitoring is in place to allow compliance determination with the FOP.
Up to two Public notices may be required. Opportunity for public comment and contested case hearings for some authorizations.	One public notice required. Opportunity for public comments. No contested case hearings.
Applies to all point source emissions in the state.	Applies to all major sources and some non-major sources identified by the EPA.
Applies to facilities: a portion of site or individual emission sources	One or multiple FOPs cover the entire site (consists of multiple facilities)
Permits include terms and conditions under which the applicant must construct and operate its various equipment and processes on a facility basis.	Permits include terms and conditions that specify the general operational requirements of the site; and 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**

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.: 4773A	Issuance Date: 05/07/2013		
Permits by Rule (30 TAC Chapter 106) for the	Application Area		
Number: 106.261	Version No./Date: 11/01/2003		
Number: 106.371	Version No./Date: 09/04/2000		
Number: 106.372	Version No./Date: 09/04/2000		
Number: 106.412	Version No./Date: 09/04/2000		
Number: 106.454	Version No./Date: 07/08/1998		
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: 106.492	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 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

## **Periodic Monitoring:**

design.

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

Unit/Group/Process Information				
ID No.: DEGREASER				
Control Device ID No.: N/A	Control Device Type: N/A			
Applicable Regulatory Requirement				
Name: 30 TAC Chapter 115, Degreasing Processes	SOP Index No.: R115			
Pollutant: VOC	Main Standard: § 115.412(1)			
Monitoring Information				
Indicator: Visual Inspection				
Minimum Frequency: Monthly				
Averaging Period: n/a				
Deviation Limit: Any monitoring data indicating that the cleaner is not in compliance with applicable requirements of 30 TAC Chapter 115, 115.412(1)(A) - (F) shall be considered a deviation.				
Basis of monitoring: The monitoring option to cover cold cleaner or the open-top vapor cleaner was included in the EPA "Periodic Monitoring				

Technical Reference Document" (April 1999) to monitor VOC sources. In addition to covering the cleaner records of monthly inspections of equipment is an effective way to ensure that the system is operating in accordance with its

## **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 (<a href="https://www.tceq.texas.gov/goto/cfr-online">https://www.tceq.texas.gov/goto/cfr-online</a>). 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\_status\_permits.html">https://www.tceq.texas.gov/permitting/air/nav/air\_status\_permits.html</a>

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.tceg.texas.gov/permitting/air/nav/air pbr.html

## **Compliance Review**

- 1. In accordance with 30 TAC Chapter 60, the compliance history was reviewed on <u>June 5, 2020</u>. Site rating: <u>1.63 / Satisfactory</u> Company rating: <u>0.77 / Satisfactory</u> (High < 0.10; Satisfactory ≥ 0.10 and < 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

## Permit reviewer notes:

Compliance plan and schedule assesses applicability of MACT G provisions to wastewater.

#### **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