

Statement of Basis of the Federal Operating Permit

Exxon Mobil Corporation

Site/Area Name: King Ranch Gas Plant

Physical location: From Intersection Of US 77 Business And SR 141 In Kingsville, Go West On SR 141 Appx 7.3 Mi To King Ranch Entrance Gate. Turn South On Private Rd And Follow Signs Appx 7 Mi To Plant Entrance.

Nearest City: Kingsville

County: Kleberg

Permit Number: O3134

Project Type: Minor Revision

Standard Industrial Classification (SIC) Code: 1321

SIC Name: Natural Gas Liquids

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

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

Prepared on: March 10, 2014

Operating Permit Basis of Determination

Description of Revisions

This minor revision is to revise the Title V Site Operating Permit to apply the correct Preconstruction Authorizations to six emergency flare units (KRGP1, KRGP3, KRGP4, KRGP7, KRGP9, and KRGP11) and to delete unit KRGP10. Also, the revision is to update the site wide NSR authorization to 106.359, 09/10/2013.

Permit Area Process Description

A demethanized mix of natural gas enters the plant via pipelines and is fractionated into five products: ethane, propane, isobutane, normal butane and natural gasoline. The mix is first treated for the removal of H₂S and CO₂ in two amine contactors. The rich amine from the contactors is fed to the Amine Unit. The flash off and the vent from the regeneration unit are routed to heaters H-1, H-2, and H-3. The treated feed is then sent to one of two deethanizers (large and small). The deethanizers separate ethane as an overhead product and C₃+ as a bottoms product. Water is removed from the ethane in two glycol dehydration (dehy) units (TEG-1, 2). The dry ethane exits the facility via pipeline and the C₃+ stream is routed to the depropanizer for further fractionation.

The bottoms product from both deethanizers is sent to the depropanizer. The separated propane is an overhead product delivered to storage in four high-pressure bullet tanks and later delivery via pipeline. The C₄+ bottoms stream is routed to the debutanizer for further fractionation.

The depropanizer bottoms is sent to the debutanizer and separated into a C₄ cut as an overhead product and natural gasoline (a C₅+ stream, pentanes and heavier hydrocarbons) as a bottoms product. The natural gasoline is treated for sulfur removal using air, caustic, and a catalyst in the MINALK Unit and is then delivered to storage in bullet tanks for delivery via pipeline.

The butanes are treated for sulfur by converting the sulfur compounds into disulfide oil and then are removed. The butanes are then sent to the Deisobutanizer (DIB) to separate the iso-butane and normal butane products which are then delivered to bullet tank storage for delivery via their respective pipelines.

There are no boilers at this facility. All heat is supplied by three natural gas fired heaters that heat a medium oil which is then routed throughout the facility and back to a hot oil tank. These units comprise the Hot Oil System.

Waste gases are collected throughout the plant and routed to the flare header, a closed-vent system. Rather than sending all waste gases to the flare, some of the vapors are routed to a Flue Gas Recovery Unit (FGRU). The FGRU is composed of two electric compressors which recover vapors and either route them to the heaters for use as fuel or to the flare (FL-1).

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
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Reading State of Texas's Federal Operating Permit

The Title V Federal Operating Permit (FOP) lists all state and federal air emission regulations and New Source Review (NSR) authorizations (collectively known as “applicable requirements”) that apply at a particular site or permit area (in the event a site has multiple FOPs). **The FOP does not authorize new emissions or new construction activities.** The FOP begins with an introductory page which is common to all Title V permits. This page gives the details of the company, states the authority of the issuing agency, requires the company to operate in accordance with this permit and 30 Texas Administrative Code (TAC) Chapter 122, requires adherence with NSR requirements of 30 TAC Chapter 116, and finally indicates the permit number and the issuance date.

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

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

General Terms and Conditions

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

Special Terms and Conditions

Emissions Limitations and Standards, Monitoring and Testing, and Recordkeeping and Reporting. The TCEQ has designated certain applicable requirements as site-wide requirements. A site-wide requirement is a requirement that applies uniformly to all the units or activities at the site. Units with only site-wide

requirements are addressed on Form OP-REQ1 and are not required to be listed separately on a OP-UA Form or Form OP-SUM. Form OP-SUM must list all units addressed in the application and provide identifying information, applicable OP-UA Forms, and preconstruction authorizations. The various OP-UA Forms provide the characteristics of each unit from which applicable requirements are established. Some exceptions exist as a few units may have both site-wide requirements and unit specific requirements.

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

Attachments

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

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

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

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

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

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

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

Appendix A

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

Stationary vents subject to 30 TAC Chapter 111, Subchapter A, § 111.111(a)(1)(A) 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 before January 31, 1972 which are limited, over a six-minute average, to 30% opacity as required by 30 TAC § 111.111(a)(1)(A). 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.A. for stationary vents subject to 30 TAC § 111.111(a)(1)(A) to verify compliance with the 30% 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)(A).

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)(A). An additional provision is included to monitor combustion sources more frequently than quarterly if alternate fuels are burned for periods greater than 24 consecutive hours. This will address possible emissions that may arise when switching fuel types.

Stationary vents subject to 30 TAC Chapter 111, 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.B. for stationary vents subject to 30 TAC § 111.111(a)(1)(B) to verify compliance with the 20% opacity limit. These vents are not expected to produce visible emissions during normal operation. The TCEQ evaluated the probability of these sources violating the opacity standards and determined that there is a very low potential that an opacity standard would be exceeded. It was determined that continuous monitoring for these sources is not warranted as there would be very limited environmental benefit in continuously monitoring sources that have a low potential to produce visible emissions. Therefore, the TCEQ set the visible observation monitoring frequency for these sources to once per calendar quarter.

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

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

Federal Regulatory Applicability Determinations

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

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

Basis for Applying Permit Shields

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

Insignificant Activities

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

1. Office activities such as photocopying, blueprint copying, and photographic processes.
2. Sanitary sewage collection and treatment facilities other than those used to incinerate wastewater treatment plant sludge. Stacks or vents for sanitary sewer plumbing traps are also included.
3. Food preparation facilities including, but not limited to, restaurants and cafeterias used for preparing food or beverages primarily for consumption on the premises.
4. Outdoor barbecue pits, campfires, and fireplaces.
5. Laundry dryers, extractors, and tumblers processing bedding, clothing, or other fabric items generated primarily at the premises. This does not include emissions from dry cleaning systems using perchloroethylene or petroleum solvents.
6. Facilities storing only dry, sweet natural gas, including natural gas pressure regulator vents.
7. Any air separation or other industrial gas production, storage, or packaging facility. Industrial gases, for purposes of this list, include only oxygen, nitrogen, helium, neon, argon, krypton, and xenon.
8. Storage and handling of sealed portable containers, cylinders, or sealed drums.
9. Vehicle exhaust from maintenance or repair shops.
10. Storage and use of non-VOC products or equipment for maintaining motor vehicles operated at the site (including but not limited to, antifreeze and fuel additives).
11. Air contaminant detectors and recorders, combustion controllers and shut-off devices, product analyzers, laboratory analyzers, continuous emissions monitors, other analyzers and monitors, and emissions associated with sampling activities. Exception to this category includes sampling activities that are deemed fugitive emissions and under a regulatory leak detection and repair program.
12. Bench scale laboratory equipment and laboratory equipment used exclusively for chemical and physical analysis, including but not limited to, assorted vacuum producing devices and laboratory fume hoods.
13. Steam vents, steam leaks, and steam safety relief valves, provided the steam (or boiler feedwater) has not contacted other materials or fluids containing regulated air pollutants other than boiler water treatment chemicals.
14. Storage of water that has not contacted other materials or fluids containing regulated air pollutants other than boiler water treatment chemicals.
15. Well cellars.
16. Fire or emergency response equipment and training, including but not limited to, use of fire control equipment including equipment testing and training, and open burning of materials or fuels associated with firefighting training.
17. Crucible or pot furnaces with a brim full capacity of less than 450 cubic inches of any molten metal.
18. Equipment used exclusively for the melting or application of wax.

19. All closed tumblers used for the cleaning or deburring of metal products without abrasive blasting, and all open tumblers with a batch capacity of 1,000 lbs. or less.
20. Shell core and shell mold manufacturing machines.
21. Sand or investment molds with a capacity of 100 lbs. or less used for the casting of metals;
22. Equipment used for inspection of metal products.
23. Equipment used exclusively for rolling, forging, pressing, drawing, spinning, or extruding either hot or cold metals by some mechanical means.
24. Instrument systems utilizing air, natural gas, nitrogen, oxygen, carbon dioxide, helium, neon, argon, krypton, and xenon.
25. Battery recharging areas.
26. Brazing, soldering, or welding equipment.

Determination of Applicable Requirements

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

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

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

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

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

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

Operational Flexibility

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

Determination of Applicable Requirements

Unit ID	Regulation	Index Number	Basis of Determination*
GRPGMVA-10	40 CFR Part 63, Subpart ZZZZ	63ZZZZ-NA	Brake HP = Stationary RICE with a brake hp greater than 500. Construction/Reconstruction Date = Commenced construction or reconstruction before December 19, 2002. Stationary RICE Type = 2 stroke spark ignited lean burn engine
GRPGMWA-8	40 CFR Part 63, Subpart ZZZZ	63ZZZZ-NA	Brake HP = Stationary RICE with a brake hp greater than 500. Construction/Reconstruction Date = Commenced construction or reconstruction before December 19, 2002. Stationary RICE Type = 2 stroke spark ignited lean burn engine
GRPPRESTK	40 CFR Part 60, Subpart K	60K-NA	Construction/Modification Date = On or before June 11, 1973
GRPPRESTK	40 CFR Part 63, Subpart HH	63HH-008	Alternate Means of Emission Limitation (AMEL) = The EPA Administrator has not approved an AMEL in accordance with 40 CFR § 63.777. Subject to Another Regulation = Storage vessel is complying with the requirements of Subpart HH. Vessel Type = Pressure storage vessel designed to operate as a closed system.
GRPPROTK	40 CFR Part 60, Subpart K	60K-NA	Construction/Modification Date = On or before June 11, 1973
GRPPROTK	40 CFR Part 63, Subpart HH	63HH-008	Alternate Means of Emission Limitation (AMEL) = The EPA Administrator has not approved an AMEL in accordance with 40 CFR § 63.777. Subject to Another Regulation = Storage vessel is complying with the requirements of Subpart HH. Vessel Type = Pressure storage vessel designed to operate as a closed system.
SUMP	40 CFR Part 60, Subpart K	60K-NA	Construction/Modification Date = On or before June 11, 1973
TANK21	40 CFR Part 60, Subpart K	60K-NA	Construction/Modification Date = On or before June 11, 1973
TANK22	40 CFR Part 60, Subpart K	60K-NA	Construction/Modification Date = On or before June 11, 1973
TANK23	40 CFR Part 60, Subpart K	60K-NA	Construction/Modification Date = On or before June 11, 1973
TANK24	40 CFR Part 60, Subpart K	60K-NA	Construction/Modification Date = On or before June 11, 1973
TANKCOND	40 CFR Part 60, Subpart Kb	60KB-NA1	Product Stored = Petroleum (other than crude oil) or condensate stored, processed, and/or treated prior to custody transfer Storage Capacity = Capacity is less than or equal to 420,000 gallons (1,589,874 liters)
TANKDIESEL	40 CFR Part 60, Subpart Kb	60KB-NA2	Product Stored = Petroleum liquid (other than petroleum or condensate) Storage Capacity = Capacity is less than 10,600 gallons (40,000 liters)
TANKEG1	40 CFR Part 60, Subpart K	60K-NA	Construction/Modification Date = On or before June 11, 1973
TANKEG2	40 CFR Part 60, Subpart K	60K-NA	Construction/Modification Date = On or before June 11, 1973

Unit ID	Regulation	Index Number	Basis of Determination*
TANKGASOLN	40 CFR Part 60, Subpart Kb	60KB-NA2	Product Stored = Petroleum liquid (other than petroleum or condensate) Storage Capacity = Capacity is less than 10,600 gallons (40,000 liters)
TANKGB1	40 CFR Part 60, Subpart K	60K-NA	Construction/Modification Date = On or before June 11, 1973
TANKGB2	40 CFR Part 60, Subpart Ka	60KA-01	Product Stored = Petroleum (other than crude oil) or condensate stored, processed, and/or treated prior to custody transfer Storage Capacity = Capacity is less than 420,000 gallons (1,589,873 liters)
TANKLO	40 CFR Part 60, Subpart K	60K-NA	Construction/Modification Date = On or before June 11, 1973
TANKSO1	40 CFR Part 60, Subpart K	60K-NA	Construction/Modification Date = On or before June 11, 1973
TANKSO11	40 CFR Part 60, Subpart K	60K-NA	Construction/Modification Date = On or before June 11, 1973
TANKSO12	40 CFR Part 60, Subpart K	60K-NA	Construction/Modification Date = On or before June 11, 1973
TANKSO13	40 CFR Part 60, Subpart K	60K-NA	Construction/Modification Date = On or before June 11, 1973
TANKSO14	40 CFR Part 60, Subpart K	60K-NA	Construction/Modification Date = On or before June 11, 1973
TANKSO15	40 CFR Part 60, Subpart K	60K-NA	Construction/Modification Date = On or before June 11, 1973
TANKTEG	40 CFR Part 60, Subpart K	60K-NA	Construction/Modification Date = On or before June 11, 1973
TANKV	40 CFR Part 60, Subpart K	60K-NA	Construction/Modification Date = On or before June 11, 1973
TKAMINE	40 CFR Part 60, Subpart K	60K-NA	Construction/Modification Date = On or before June 11, 1973
TKMETHANOL	40 CFR Part 60, Subpart K	60K-NA	Construction/Modification Date = On or before June 11, 1973
AGREBV-1	40 CFR Part 60, Subpart D	60DC-NA	CONSTRUCTION/MODIFICATION DATE = After September 18, 1978. COVERED UNDER SUBPART DA = The steam generating unit is not covered under 40 CFR Part 60, Subpart Da. 40 CFR 60 (NSPS) D CHANGES TO EXISTING AFFECTED FACILITY [NSPS D] = No change has been made to the existing fossil fuel-fired steam generating unit. 40 CFR 60 (NSPS) SUBPART D HEAT INPUT RATE = Heat input rate is less than or equal to 250 MMBtu/hr (73 MW).
AGREBV-1	40 CFR Part 60, Subpart Db	60DC-NA	CONSTRUCTION/MODIFICATION DATE = Constructed or reconstructed after July 9, 1997, and on or before February 28, 2005. 40 CFR 60 (NSPS) SUBPART DB HEAT INPUT CAPACITY = Heat input capacity is less than or equal to 100 MMBtu/hr (29 MW).
AGREBV-1	40 CFR Part 60, Subpart Dc	60DC-NA	MAXIMUM DESIGN HEAT INPUT CAPACITY = Maximum design heat input capacity is less than 10 MMBtu/hr (2.9 MW).

Unit ID	Regulation	Index Number	Basis of Determination*
GRPBLR	40 CFR Part 60, Subpart D	60NSPS-NA	CONSTRUCTION/MODIFICATION DATE = On or before August 17, 1971.
GRPWHRUNIT	40 CFR Part 60, Subpart D	60NSPS-NA	CONSTRUCTION/MODIFICATION DATE = On or before August 17, 1971.
LOHM	40 CFR Part 60, Subpart D	60DB-01	<p>CONSTRUCTION/MODIFICATION DATE = After September 18, 1978.</p> <p>COVERED UNDER SUBPART DA = The steam generating unit is not covered under 40 CFR Part 60, Subpart Da.</p> <p>40 CFR 60 (NSPS) D CHANGES TO EXISTING AFFECTED FACILITY [NSPS D] = No change has been made to the existing fossil fuel-fired steam generating unit.</p> <p>40 CFR 60 (NSPS) SUBPART D HEAT INPUT RATE = Heat input rate is less than or equal to 250 MMBtu/hr (73 MW).</p>

Unit ID	Regulation	Index Number	Basis of Determination*
LOHM	40 CFR Part 60, Subpart Db	60DB-01	<p>40 CFR 60 (NSPS) SUBPART DB FUEL TYPE #1 = Natural gas.</p> <p>CONSTRUCTION/MODIFICATION DATE = After June 19, 1984, and on or before June 19, 1986.</p> <p>40 CFR 60 (NSPS) SUBPART 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).</p> <p>PM MONITORING TYPE = No particulate monitoring.</p> <p>40 CFR 60 (NSPS) SUBPART DA CORRESPONDING APPLICABILITIES [NSPS DB] = The affected facility does not meet applicability requirements of 40 CFR Part 60, Subpart Da.</p> <p>OPACITY MONITORING TYPE = No particulate (opacity) monitoring.</p> <p>40 CFR 60 (NSPS) SUBPART DB CHANGES TO EXISTING AFFECTED FACILITY = No change has been made to the existing steam generating unit, which was not previously subject to 40 CFR Part 60, Subpart Db, for the sole purpose of combusting gases containing totally reduced sulfur as defined under 40 CFR § 60.281.</p> <p>60.43B(H)(2) ALTERNATIVE = The facility is not electing to use the alternative requirements of § 60.43b(h)(2) for PM.</p> <p>NOX MONITORING TYPE = No NO_x monitoring.</p> <p>SUBPART D CORRESPONDING APPLICABILITIES = The affected facility does not meet the applicability requirements of 40 CFR Part 60, Subpart D.</p> <p>SO₂ MONITORING TYPE = No SO₂ monitoring.</p> <p>SUBPART EA, EB OR AAAA = The affected facility does not meet applicability requirements of and is subject to 40 CFR Part 60, Subpart Ea, Eb or AAAA.</p> <p>SUBPART J CORRESPONDING APPLICABILITIES = The affected facility does not meet applicability requirements of 40 CFR Part 60, Subpart J.</p> <p>SUBPART E CORRESPONDING APPLICABILITIES = The affected facility does not meet applicability requirements of 40 CFR Part 60, Subpart E.</p> <p>SUBPART KKKK = The affected facility is not a heat recovery steam generator associated with combined cycle gas turbines and that meets applicability requirements of and is subject to 40 CFR Part 60, Subpart KKKK.</p> <p>TECHNOLOGY TYPE = Other conventional technology.</p> <p>ACF OPTION - SO₂ = Other ACF or no ACF.</p> <p>SUBPART CB OR BBBB = The affected facility is not covered by an EPA approved State or Federal section 111(d)/129 plan implementing 40 CFR Part 60, Subpart Cb or BBBB emission guidelines.</p> <p>UNIT TYPE = Duct burner as part of combined cycle system (compliance with NO_x limitations is determined by conducting a performance test).</p> <p>ACF OPTION - PM = Other ACF or no ACF.</p> <p>60.49DA(N) ALTERNATIVE = The facility is not using the § 60.49Da(n) alternative.</p> <p>ACF OPTION - NOX = Other ACF or no ACF.</p> <p>60.49DA(M) ALTERNATIVE = The facility is not using the § 60.49Da(m) alternative.</p> <p>FUEL HEAT INPUT = The heat input is greater than 30% from combustion of coal and oil in the duct burner and heat input is less than 70% from the exhaust gases entering the duct burner.</p>

Unit ID	Regulation	Index Number	Basis of Determination*
RGREBV-1	40 CFR Part 60, Subpart D	60DC-NA	CONSTRUCTION/MODIFICATION DATE = After September 18, 1978. COVERED UNDER SUBPART DA = The steam generating unit is not covered under 40 CFR Part 60, Subpart Da. 40 CFR 60 (NSPS) D CHANGES TO EXISTING AFFECTED FACILITY [NSPS D] = No change has been made to the existing fossil fuel-fired steam generating unit. 40 CFR 60 (NSPS) SUBPART D HEAT INPUT RATE = Heat input rate is less than or equal to 250 MMBtu/hr (73 MW).
RGREBV-1	40 CFR Part 60, Subpart Db	60DC-NA	CONSTRUCTION/MODIFICATION DATE = Constructed or reconstructed after July 9, 1997, and on or before February 28, 2005. 40 CFR 60 (NSPS) SUBPART DB HEAT INPUT CAPACITY = Heat input capacity is less than or equal to 100 MMBtu/hr (29 MW).
RGREBV-1	40 CFR Part 60, Subpart Dc	60DC-NA	MAXIMUM DESIGN HEAT INPUT CAPACITY = Maximum design heat input capacity is less than 10 MMBtu/hr (2.9 MW).
SPO-1	40 CFR Part 60, Subpart D	60DC-01	CONSTRUCTION/MODIFICATION DATE = After September 18, 1978. COVERED UNDER SUBPART DA = The steam generating unit is not covered under 40 CFR Part 60, Subpart Da. 40 CFR 60 (NSPS) D CHANGES TO EXISTING AFFECTED FACILITY [NSPS D] = No change has been made to the existing fossil fuel-fired steam generating unit. 40 CFR 60 (NSPS) SUBPART D HEAT INPUT RATE = Heat input rate is less than or equal to 250 MMBtu/hr (73 MW).
SPO-1	40 CFR Part 60, Subpart Db	60DC-01	CONSTRUCTION/MODIFICATION DATE = Constructed or reconstructed after July 9, 1997, and on or before February 28, 2005. 40 CFR 60 (NSPS) SUBPART DB HEAT INPUT CAPACITY = Heat input capacity is less than or equal to 100 MMBtu/hr (29 MW).
SPO-1	40 CFR Part 60, Subpart Dc	60DC-01	PM MONITORING TYPE = No particulate monitoring. MAXIMUM DESIGN HEAT INPUT CAPACITY = Maximum design heat input capacity is greater than or equal to 10 MMBtu/hr (2.9 MW) but less than or equal to 100 MMBtu (29 MW). SO ₂ INLET MONITORING TYPE = No SO ₂ monitoring. SO ₂ OUTLET MONITORING TYPE = No SO ₂ monitoring. HEAT INPUT CAPACITY = Heat input capacity is greater than or equal to 30 MMBtu/hr (8.7 MW) but less than or equal to 75 MMBtu/hr (22 MW). TECHNOLOGY TYPE = Other conventional technology. D-SERIES FUEL TYPE = Natural gas. ACF OPTION - SO ₂ = Other ACF or no ACF. ACF OPTION - PM = Other ACF or no ACF.
GRPFLARE	30 TAC Chapter 111, Visible Emissions	111-NA	ACID GASES ONLY [REG I] = Flare is not used only as an acid gas flare as defined in 30 TAC § 101.1. EMERGENCY/UPSET CONDITIONS ONLY [REG I] = Flare is used only under emergency or upset conditions.
GRPFLARE	40 CFR Part 60, Subpart A	60A-NA	SUBJECT TO 40 CFR 60.18 = Flare is not subject to 40 CFR § 60.18.
GRPFLARE	40 CFR Part 63, Subpart A	63A-NA	REQUIRED UNDER 40 CFR 63 = Flare is not required by a Subpart under 40 CFR Part 63.
AREG-1	30 TAC Chapter 112, Sulfur Compounds	TAC112-001	SULFUR RECOVERY PLANT [REG II] = The gas sweetening unit is using sulfur recovery. STACK HEIGHT [REG II] = Effective stack height greater than or equal to the standard effective stack height.

Unit ID	Regulation	Index Number	Basis of Determination*
AREG-1	40 CFR Part 60, Subpart LLL	60LLL-001	<p>ONSHORE [NSPS LLL] = The sweetening unit is located onshore at a gas processing plant.</p> <p>ACID GAS VENTED [NSPS LLL] = Acid gas is vented (acid gas is not completely reinjected in oil and gas-bearing strata or is otherwise released into the atmosphere).</p> <p>CONSTRUCTION (MODIFICATION RECONSTRUCTION) DATE [NSPS LLL] = After January 20, 1984.</p> <p>DESIGN CAPACITY [NSPS LLL] = Design capacity is less than 2 long tons/day.</p>
TURBS	40 CFR Part 60, Subpart GG	60GG-001	<p>DUCT BURNER = The turbine is part of a combined cycle turbine system equipped with supplemental heat (duct burner).</p> <p>NITROGEN OXIDES (NOX) CONTROL METHOD [NSPS GG] = NO_x control method other than water or steam injection or selective catalytic reduction.</p> <p>PEAK LOAD HEAT INPUT [NSPS GG] = Heat Input is greater than 100 MMBtu/hr (107.2 GJ/hr)</p> <p>CONSTRUCTION/MODIFICATION DATE [NSPS GG] = On or after October 3, 1982 and before July 8, 2004.</p> <p>NOX ALLOWANCE = The owner or operator is not electing to use a NO_x allowance in determining emission limits in 40 CFR § 60.332(a).</p> <p>NOX MONITORING METHOD = Previously approved alternate for continuous monitoring of compliance with the applicable NO_x limit under 40 CFR § 60.332.</p> <p>SULFUR CONTENT [NSPS GG] = Compliance is demonstrated by determining the sulfur content of the fuel.</p> <p>TURBINE CYCLE = Unit recovers heat from the gas turbine exhaust to heat water or generate steam.</p> <p>40 CFR 60 (NSPS) SUBPART GG SERVICE TYPE = Type of service other than research and development, emergency, military or electrical utility generation.</p> <p>FUEL TYPE FIRED = Natural gas meeting the definition in § 60.331(u).</p> <p>FUEL SUPPLY [NSPS GG] = Stationary gas turbine is supplied its fuel without intermediate bulk storage.</p> <p>FUEL MONITORING SCHEDULE = Fuel meets the definition of natural gas in 40 CFR § 60.331(u) and is not monitored.</p> <p>MANUFACTURER'S BASE LOAD [NSPS GG] = Base load is less than or equal to 30 MW.</p>
TURBS	40 CFR Part 63, Subpart YYYY	63YYYY-NA	CONSTRUCTION/RECONSTRUCTION DATE = Turbine was constructed, modified or reconstructed on or before 1/14/2003.
WHRUNIT	40 CFR Part 60, Subpart GG	60GG-NA	<p>PEAK LOAD HEAT INPUT [NSPS GG] = Heat Input is greater than 100 MMBtu/hr (107.2 GJ/hr)</p> <p>CONSTRUCTION/MODIFICATION DATE [NSPS GG] = On or before October 3, 1977.</p>
WHRUNIT	40 CFR Part 63, Subpart YYYY	63YYYY-NA	CONSTRUCTION/RECONSTRUCTION DATE = Turbine was constructed, modified or reconstructed on or before 1/14/2003.
KRGPG/L	40 CFR Part 60, Subpart KKK	60KKK-NA	<p>Facility Type = Affected facility is the group of all equipment except compressors within a process unit.</p> <p>Construction/Modification Date = On/Before January 20, 1984.</p>
KRGPG/L	40 CFR Part 63, Subpart HH	63HH-NA	<p>ALTERNATE MEANS OF EMISSION LIMITATION = NO APPROVED ALTERNATE MEANS OF EMISSION LIMITATION</p> <p>SUBJECT TO ANOTHER REGULATION = FUGITIVE UNIT SUBJECT TO AND COMPLYING WITH 40 CFR PART 63, SUBPART HH</p> <p>VHAP WEIGHT PERCENT = NO COMPRESSOR AND/OR ANCILLARY EQUIPMENT CONTACTS A PROCESS FLUID WITH A VHAP CONCENTRATION OF AT LEAST 10% BY WEIGHT.</p>

Unit ID	Regulation	Index Number	Basis of Determination*
KRGPG/V	40 CFR Part 60, Subpart KKK	60KKK-NA	Facility Type = Affected facility is the group of all equipment except compressors within a process unit. Construction/Modification Date = On/Before January 20, 1984.
KRGPG/V	40 CFR Part 63, Subpart HH	63HH-NA	ALTERNATE MEANS OF EMISSION LIMITATION = NO APPROVED ALTERNATE MEANS OF EMISSION LIMITATION SUBJECT TO ANOTHER REGULATION = FUGITIVE UNIT SUBJECT TO AND COMPLYING WITH 40 CFR PART 63, SUBPART HH VHAP WEIGHT PERCENT = NO COMPRESSOR AND/OR ANCILLARY EQUIPMENT CONTACTS A PROCESS FLUID WITH A VHAP CONCENTRATION OF AT LEAST 10% BY WEIGHT.
KRGPLL	40 CFR Part 60, Subpart KKK	60KKK-NA	Facility Type = Affected facility is the group of all equipment except compressors within a process unit. Construction/Modification Date = On/Before January 20, 1984.
KRGPLL	40 CFR Part 63, Subpart HH	63HH-001	ALTERNATE MEANS OF EMISSION LIMITATION = NO APPROVED ALTERNATE MEANS OF EMISSION LIMITATION PUMPS = COMPONENT PRESENT DESIGN CAPACITY LESS THAN 283,000 = PLANT IS FRACTIONATING OR NON-FRACTIONATING WITH DESIGN CAPACITY GREATER THAN 283,000 SCM/DAY AMEL = NO APPROVED ALTERNATE MEANS OF EMISSION LIMITATION SUBJECT TO ANOTHER REGULATION = FUGITIVE UNIT SUBJECT TO AND COMPLYING WITH 40 CFR PART 63, SUBPART HH VHAP WEIGHT PERCENT = COMPRESSOR AND/OR ANCILLARY EQUIPMENT CONTACT A PROCESS FLUID WITH A VHAP CONCENTRATION OF AT LEAST 10% BY WEIGHT. LESS THAN 300 OPERATING HOURS = ALL COMPRESSORS OR ANCILLARY EQUIPMENT OPERATE 300 HOURS OR MORE PER YEAR IN VHAP SERVICE. PUMPS COMPLYING WITH § 61.242-2 = YES VACUUM SERVICE = NO COMPRESSORS OR ANCILLARY EQUIPMENT OPERATE IN VACUUM SERVICE.
KRGPLL	40 CFR Part 63, Subpart HH	63HH-002	ALTERNATE MEANS OF EMISSION LIMITATION = NO APPROVED ALTERNATE MEANS OF EMISSION LIMITATION OPEN-ENDED VALVES OR LINES = COMPONENT PRESENT AMEL = NO APPROVED ALTERNATE SUBJECT TO ANOTHER REGULATION = FUGITIVE UNIT SUBJECT TO AND COMPLYING WITH 40 CFR PART 63, SUBPART HH COMPLYING WITH § 61.242-6 = YES VHAP WEIGHT PERCENT = COMPRESSOR AND/OR ANCILLARY EQUIPMENT CONTACT A PROCESS FLUID WITH A VHAP CONCENTRATION OF AT LEAST 10% BY WEIGHT. LESS THAN 300 OPERATING HOURS = ALL COMPRESSORS OR ANCILLARY EQUIPMENT OPERATE 300 HOURS OR MORE PER YEAR IN VHAP SERVICE. VACUUM SERVICE = NO COMPRESSORS OR ANCILLARY EQUIPMENT OPERATE IN VACUUM SERVICE.

Unit ID	Regulation	Index Number	Basis of Determination*
KRGPLL	40 CFR Part 63, Subpart HH	63HH-003	<p>ALTERNATE MEANS OF EMISSION LIMITATION = NO APPROVED ALTERNATE MEANS OF EMISSION LIMITATION</p> <p>VALVES = COMPONENT PRESENT</p> <p>DESIGN CAPACITY LESS THAN 283,000 = PLANT IS FRACTIONATING OR NON-FRACTIONATING WITH DESIGN CAPACITY GREATER THAN 283,000 SCM/DAY</p> <p>AMEL = NO APPROVED ALTERNATE</p> <p>SUBJECT TO ANOTHER REGULATION = FUGITIVE UNIT SUBJECT TO AND COMPLYING WITH 40 CFR PART 63, SUBPART HH</p> <p>VHAP WEIGHT PERCENT = COMPRESSOR AND/OR ANCILLARY EQUIPMENT CONTACT A PROCESS FLUID WITH A VHAP CONCENTRATION OF AT LEAST 10% BY WEIGHT.</p> <p>COMPLYING WITH § 61.242-7 = YES</p> <p>LESS THAN 300 OPERATING HOURS = ALL COMPRESSORS OR ANCILLARY EQUIPMENT OPERATE 300 HOURS OR MORE PER YEAR IN VHAP SERVICE.</p> <p>VACUUM SERVICE = NO COMPRESSORS OR ANCILLARY EQUIPMENT OPERATE IN VACUUM SERVICE.</p>
KRGPLL	40 CFR Part 63, Subpart HH	63HH-004	<p>ALTERNATE MEANS OF EMISSION LIMITATION = NO APPROVED ALTERNATE MEANS OF EMISSION LIMITATION</p> <p>FLANGES AND OTHER CONNECTORS = COMPONENT PRESENT</p> <p>PRESSURE RELIEF DEVICE IN LIQUID SERVICE = COMPONENT PRESENT</p> <p>AMEL = NO APPROVED ALTERNATE</p> <p>SUBJECT TO ANOTHER REGULATION = FUGITIVE UNIT SUBJECT TO AND COMPLYING WITH 40 CFR PART 63, SUBPART HH</p> <p>COMPLYING WITH § 61.242-8 = YES</p> <p>VHAP WEIGHT PERCENT = COMPRESSOR AND/OR ANCILLARY EQUIPMENT CONTACT A PROCESS FLUID WITH A VHAP CONCENTRATION OF AT LEAST 10% BY WEIGHT.</p> <p>LESS THAN 300 OPERATING HOURS = ALL COMPRESSORS OR ANCILLARY EQUIPMENT OPERATE 300 HOURS OR MORE PER YEAR IN VHAP SERVICE.</p> <p>VACUUM SERVICE = NO COMPRESSORS OR ANCILLARY EQUIPMENT OPERATE IN VACUUM SERVICE.</p>
KRGPNMLL	40 CFR Part 60, Subpart KKK	60KKK-NA	<p>Facility Type = Affected facility is the group of all equipment except compressors within a process unit.</p> <p>Construction/Modification Date = On/Before January 20, 1984.</p>
KRGPNMLL	40 CFR Part 63, Subpart HH	63HH-NA	<p>ALTERNATE MEANS OF EMISSION LIMITATION = NO APPROVED ALTERNATE MEANS OF EMISSION LIMITATION</p> <p>SUBJECT TO ANOTHER REGULATION = FUGITIVE UNIT SUBJECT TO AND COMPLYING WITH 40 CFR PART 63, SUBPART HH</p> <p>VHAP WEIGHT PERCENT = NO COMPRESSOR AND/OR ANCILLARY EQUIPMENT CONTACTS A PROCESS FLUID WITH A VHAP CONCENTRATION OF AT LEAST 10% BY WEIGHT.</p>
GRPCOOL	40 CFR Part 63, Subpart Q	63Q-NA	<p>USED CHROMIUM COMPOUNDS AFTER SEPT. 8 1994 (MACT Q) = The industrial process cooling tower has not used compounds containing chromium on or after September 8, 1994.</p>
AGREBV-1	40 CFR Part 63, Subpart HH	63HH-006	<p>ALTERNATE MEANS OF EMISSION LIMITATION (AMEL) = NO ALTERNATE MEANS OF EMISSION LIMITATION (AMEL) IN ACCORDANCE WITH 40 CFR § 63.777 HAS BEEN APPROVED.</p> <p>ANNUAL AVERAGE FLOWRATE = GREATER THAN OR EQUAL TO 85,000 STANDARD CUBIC METERS PER DAY</p> <p>AVERAGE BENZENE EMISSIONS = GREATER THAN OR EQUAL TO 0.90 MEGAGRAM PER YEAR</p> <p>PROCESS VENT CONTROL = PROCESS VENT IS CONNECTED TO A PROCESS NATURAL GAS LINE [40 CFR § 63.765(C)(1)]</p>

Unit ID	Regulation	Index Number	Basis of Determination*
RGREBV-1	40 CFR Part 63, Subpart HH	63HH-007	ALTERNATE MEANS OF EMISSION LIMITATION (AMEL) = NO ALTERNATE MEANS OF EMISSION LIMITATION (AMEL) IN ACCORDANCE WITH 40 CFR § 63.777 HAS BEEN APPROVED. ANNUAL AVERAGE FLOWRATE = GREATER THAN OR EQUAL TO 85,000 STANDARD CUBIC METERS PER DAY AVERAGE BENZENE EMISSIONS = LESS THAN 0.90 MEGAGRAM PER YEAR

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

NSR Versus Title V FOP

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

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

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

New Source Review Requirements

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

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

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

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

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

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.: 48907	
Authorization No.: 72882	
Authorization No.: 73016	
Authorization No.: 73319	
Permits By Rule (30 TAC Chapter 106) for the Application Area	
Number: 106.263	Version No./Date: 11/01/2001
Number: 106.264	Version No./Date: 03/14/1997
Number: 106.352	Version No./Date: 03/14/1997
Number: 106.352	Version No./Date: 09/04/2000
Number: 106.371	Version No./Date: 09/04/2000
Number: 106.476	Version No./Date: 09/04/2000
Number: 106.492	Version No./Date: 09/04/2000
Number: 6	Version No./Date: 12/01/1972
Number: 6	Version No./Date: 03/15/1985
Number: 7	Version No./Date: 07/09/1973
Number: 7	Version No./Date: 09/17/1973
Number: 7	Version No./Date: 03/15/1985
Number: 51	Version No./Date: 03/15/1985
Number: 53	Version No./Date: 09/12/1989
Number: 66	Version No./Date: 04/25/1986

Number: 66	Version No./Date: 11/05/1986
Number: 66	Version No./Date: 09/12/1989
Number: 66	Version No./Date: 08/16/1993
Number: 72	Version No./Date: 05/08/1972
Number: 80	Version No./Date: 11/05/1986
Number: 86	Version No./Date: 09/12/1989
Number: 87	Version No./Date: 05/05/1976
Number: 103	Version No./Date: 09/23/1982

Emission Units and Emission Points

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

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

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

Monitoring Sufficiency

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

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

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

Periodic Monitoring:

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

Unit/Group/Process Information	
ID No.: AREG-1	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 112, Sulfur Compounds	SOP Index No.: TAC112-001
Pollutant: SO ₂	Main Standard: § 112.7(a)
Monitoring Information	
Indicator: H ₂ S content of vent	
Minimum Frequency: Weekly	
Averaging Period: N/A	
Deviation Limit: H ₂ S concentration in LO-CAT vent greater than 5 ppm	
Basis of monitoring: Equations in 30 TAC § 112.7 for stack flow rates of 4000 scfm or less are used to calculate effective stack height and allowable SO ₂ emissions in pounds per hour. Based on these calculations, the allowable emission rate of SO ₂ from the affected source is 10.3 lb/hr. The affected source emits sulfur in the form of H ₂ S. Assuming 100% conversion of sulfur in H ₂ S to SO ₂ , the potential emission rate of SO ₂ from the affected source is 0.08 lb/hr which is in compliance with 30 TAC § 112.7.	

Available Unit Attribute Forms

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

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