Statement of Basis of the Federal Operating Permit

San Miguel Electric Cooperative, Inc.

Site Name: San Miguel Plant Physical Location: 6200 FM 3387 Nearest City: Christine County: Atascosa

> Permit Number: O85 Project Type: Renewal

The North American Industry Classification System (NAICS) Code: 22112 NAICS Name: Electric Power Transmission, Control, and Distribution

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

A description of the facility/area process description;

A basis for applying permit shields;

A list of the federal regulatory applicability determinations;

A table listing the determination of applicable requirements:

A list of the New Source Review Requirements;

The rationale for periodic monitoring methods selected;

The rationale for compliance assurance methods selected;

A compliance status; and

A list of available unit attribute forms.

Prepared on: August 28, 2017

Revised on: June 30, 2023

Operating Permit Basis of Determination

Permit Area Process Description

The San Miguel Plant is a single unit lignite-fired steam generating electric utility located about 6 miles south of Christine, Texas off FM 3387 in Atascosa County. The power plant consists of one lignite fired electric generating unit and is rated at 450 MW Gross. The lignite is mined from deposits in Atascosa and McMullen counties and transported by haul trucks to the plant site lignite handling system. The lignite handling system is comprised of conveyors and crushers that transport the fuel to the boiler storage silos. The wall-fired boiler produces steam to rotate the electric generator that generates electricity. The unit is equipped with an electrostatic precipitator (ESP) to remove fly ash. A flue gas desulfurization (FGD) process removes sulfur compounds and fine particulates. The FGD process is an inhibited wet limestone scrubber. The flue gas from the scrubber is reheated by an indirect method utilizing steam coil heated air. The final stack temperature is controlled to approximately 165° F. For nitrogen oxide (NOx) control, the boiler is equipped with Low NOx burners (LNB), over-fire air (OFA), and a Selective Non-Catalytic Reduction (SNCR) system using urea injection. Sorbent injection is used for mercury removal.

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	SO2, PM, 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
 - Applicable Requirements Summary
 - Unit Summary

- Applicable Requirements Summary
- Additional Monitoring Requirements
- Permit Shield
- New Source Review Authorization References
- Compliance Plan
- o 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 Requirements Summary. This is consistent with EPA's White Paper for Streamlined Development of Part 70 Permit Applications, July 10, 1995, that states that requirements that apply identically to emission units at a site can be treated on a generic basis such as source-wide opacity limits.

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

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

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

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

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

Federal Regulatory Applicability Determinations

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

Regulatory Program	Applicability (Yes/No)
Prevention of Significant Deterioration (PSD)	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)	Yes
Title V (Federal Operating Permits) of the CAA	Yes
Title VI (Stratospheric Ozone Protection) of the CAA	Yes
CSAPR (Cross-State Air Pollution Rule)	Yes
Federal Implementation Plan for Regional Haze (Texas SO ₂ Trading Program)	Yes

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.

Acid Rain Permit

The permitted area is subject to Federal Clean Air Act Title IV Acid Rain rules for Phase II units, as codified in 40 CFR Parts 72 through 78, because it meets the definition of "affected source." Applicability of affected sources are defined in 40 CFR § 72.6 and include those sources that burn fossil fuel and generates electricity for sale. Under 40 CFR Part 72, incorporated by reference into 30 TAC Chapter 122, all acid rain permits must contain specific terms and conditions, including monitoring, reporting, recordkeeping and excess emission requirements, established by the U.S. EPA. The Title IV permitting procedures are described within 30 TAC Chapter 122, Subchapter E. The applicable requirements of the Acid Rain Permit are contained in the Special Terms and Conditions of the FOP. The Acid Rain permit is effective as of the date of the issuance of the FOP and has a term ending in concurrence with the FOP.

Cross-State Air Pollution Rule

The Cross-State Air Pollution Rule (CSAPR) was established to mitigate the interstate transport of NO_x and SO_2 which contribute to the formation of fine particles (PM_{2.5}) and ground-level ozone and has replaced the previous Clean Air Interstate Rule (CAIR) program. The EPA has promulgated a model cap and trade program in 40 CFR Part 97 to

implement CSAPR. While Texas is no longer included in the CSAPR NO_X or SO₂ Annual Trading Programs, Texas remains included in the CSAPR NO_X Ozone Season Group 2 Trading Program for the 2008 Ozone National Ambient Air Quality Standards. This rule has been adopted by reference into 30 TAC Chapter 122 as part of an effective rulemaking (Rule Project No. 2016-012-122-AI), which included the repeal of 30 TAC Chapter 122, Subchapter E, Division 2: Clean Air Interstate Rule.

The permitted area is subject to CSAPR as it contains units that meet a definition of a CSAPR unit in 40 CFR Part 97 (CSAPR NO_x and SO₂ Trading Programs). The applicable CSAPR requirements are contained in the Special Terms and Conditions of the FOP.

Federal Implementation Plan for Regional Haze (Texas SO₂ Trading Program)

EPA finalized a federal implementation plan creating a Texas-only trading program as an alternative to best available retrofit technology (BART) for SO₂ for electric generating units (EGUs) in the state of Texas and to address visibility transport in addition to partially addressing regional haze requirements for reasonable progress.

The permitted area is subject to the Texas SO₂ Trading Program as it contains units that meet the definition of a Texas SO₂ Trading Program unit in 40 CFR §52.2312 and Part 97, Subpart FFFFF (Texas SO₂ Trading Program). The applicable Texas SO₂ Trading Program requirements are contained in the Special Terms and Conditions of the FOP.

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.
- 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.
- Sources authorized by §106.163: All animal racing facilities, domestic animal shelters, zoos, and their associated confinement areas, stables, feeding areas, and waste collection and treatment facilities, other than incineration units.
- 24. Sources authorized by §106.229: Equipment used exclusively for the dyeing or stripping of textiles.
- 25. Sources authorized by §106.241: Any facility where animals or poultry are slaughtered and prepared for human consumption provided that waste products such as blood, offal, and feathers are stored in such a manner as to prevent the creation of a nuisance condition and these waste products are removed from the premises daily or stored under refrigeration.
- 26. Sources authorized by §106.242: Equipment used in eating establishments for the purpose of preparing food for human consumption.
- 27. Sources authorized by §106.243: Smokehouses in which the maximum horizontal inside cross-sectional area does not exceed 100 square feet.
- 28. Sources authorized by §106.244: Ovens, mixers, blenders, barbecue pits, and cookers if the products are edible and intended for human consumption.
- 29. Sources authorized by §106.266: Vacuum cleaning systems used exclusively for industrial, commercial, or residential housekeeping purposes.
- 30. Sources authorized by §106.301: Aqueous fertilizer storage tanks.
- 31. Sources authorized by §106.313: All closed tumblers used for the cleaning or deburring of metal products without abrasive blasting, and all open tumblers with a batch capacity of 1,000 lbs. or less.
- 32. Sources authorized by §106.316: Equipment used for inspection of metal products.
- 33. Sources authorized by §106.317: Equipment used exclusively for rolling, forging, pressing, drawing, spinning, or extruding either hot or cold metals by some mechanical means.
- 34. Sources authorized by §106.318: Die casting machines.
- 35. Sources authorized by §106.319: Foundry sand mold forming equipment to which no heat is applied.
- 36. Sources authorized by §106.331: Equipment used exclusively to package pharmaceuticals and cosmetics or to coat pharmaceutical tablets.
- 37. Sources authorized by §106.333: Equipment used exclusively for the mixing and blending of materials at ambient temperature to make water-based adhesives.
- 38. Sources authorized by §106.372: Any air separation or other industrial gas production, storage, or packaging facility. Industrial gases, for purposes of this list, include only oxygen, nitrogen, helium, neon, argon, krypton, and xenon.
- 39. Sources authorized by §106.391: Presses used for the curing of rubber products and plastic products.
- 40. Sources authorized by §106.394: Equipment used for compression molding and injection molding of plastics.
- 41. Sources authorized by §106.414: Equipment used exclusively for the packaging of lubricants or greases.
- 42. Sources authorized by §106.415: Laundry dryers, extractors, and tumblers used for fabrics cleaned with water solutions of bleach or detergents.
- 43. Sources authorized by §106.431: Equipment used exclusively to mill or grind coatings and molding compounds where all materials charged are in paste form.
- 44. Sources authorized by §106.432: Containers, reservoirs, or tanks used exclusively for dipping operations for coating objects with oils, waxes, or greases where no organic solvents, diluents, or thinners are used; or dipping operations for applying coatings of natural or synthetic resins which contain no organic solvents.

- 45. Sources authorized by §106.451: Blast cleaning equipment using a suspension of abrasives in water.
- 46. Sources authorized by §106.453: Equipment used for washing or drying products fabricated from metal or glass, provided no volatile organic materials are used in the process and no oil or solid fuel is burned.
- 47. Sources authorized by §106.471: Equipment used exclusively to store or hold dry natural gas.
- 48. Sources authorized by §106.531: Sewage treatment facilities, excluding combustion or incineration equipment, land farms, or grease trap waste handling or treatment facilities.

Determination of Applicable Requirements

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

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

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

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

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

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

Operational Flexibility

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

Determination of Applicable Requirements

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
EDG-1	40 CFR Part 60, Subpart IIII	601111-1	Applicability Date = Stationary CI ICE commenced construction, reconstruction, or modification on or before 07/11/2005.	
EDG-1	40 CFR Part 63, Subpart ZZZZ	63ZZZZ-2	HAP Source = The site is a major source of hazardous air pollutants as defined in 40 CFR § 63.2 Brake HP = Stationary RICE with a brake HP greater than 500 HP. Construction/Reconstruction Date = Commenced construction or reconstruction before December 19, 2002. Service Type = Emergency use where the RICE does not operate as specified in 40 CFR §63.6640(f)(2)(ii) and (iii) or does not operate as specified in 40 CFR §63.6640(f)(4)(ii).	
FWP-1	40 CFR Part 60, Subpart IIII	60IIII-1	Applicability Date = Stationary CI ICE commenced construction, reconstruction, or modification on or before 07/11/2005.	
FWP-1	40 CFR Part 63, Subpart ZZZZ	63ZZZZ-1	HAP Source = The site is a major source of hazardous air pollutants as defined in 40 CFR § 63.2 Brake HP = Stationary RICE with a brake HP greater than or equal to 100 HP and less than 250 HP. Construction/Reconstruction Date = Commenced construction or reconstruction before December 19, 2002. Service Type = Emergency use where the RICE does not operate as specified in 40 CFR §63.6640(f)(2)(ii) and (iii) or does not operate as specified in 40 CFR §63.6640(f)(4)(ii). Stationary RICE Type = Compression ignition engine	
FWP-2	40 CFR Part 60, Subpart IIII	601111-1	Applicability Date = Stationary CI ICE commenced construction, reconstruction, or modification on or before 07/11/2005.	
FWP-2	40 CFR Part 63, Subpart ZZZZ	63ZZZZ-1	HAP Source = The site is a major source of hazardous air pollutants as defined in 40 CFR § 63.2 Brake HP = Stationary RICE with a brake HP greater than or equal to 100 HP and less than 250 HP. Construction/Reconstruction Date = Commenced construction or reconstruction before December 19, 2002. Service Type = Emergency use where the RICE does not operate as specified in 40 CFR §63.6640(f)(2)(ii) and (iii) or does not operate as specified in 40 CFR §63.6640(f)(4)(ii). Stationary RICE Type = Compression ignition engine	
BOILER 1	30 TAC Chapter 111,	R1153-1	Source Type = Solid fossil fuel-fired steam generator.	

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
	Nonagricultural Processes			
BOILER 1	30 TAC Chapter 112, Sulfur Compounds	R112-1	Fuel Type = Solid fossil fuel. Heat Input = Design heat input is greater than 1500 MMBtu/hr. Control Equipment = Unit equipped with SO_2 control equipment. FCAA § 412(c) = The unit is subject to the Federal Clean Air Act § 412(c) [FCAA § 412(c)] as amended in 1990.	
BOILER 1	30 TAC Chapter 112, Sulfur Compounds	R112-2	Fuel Type = Liquid fuel. Heat Input = Design heat input is greater than 250 MMBtu/hr. Control Equipment = Unit equipped with SO_2 control equipment. FCAA § 412(c) = The unit is subject to the Federal Clean Air Act § 412(c) [FCAA § 412(c)] as amended in 1990. Stack Height = The effective stack height is at least the standard effective stack height for each stack to which the unit routes emissions.	
BOILER 1	30 TAC Chapter 117, Subchapter E, Division 1	R117-1	Date Placed in Service = Before December 31, 1995. Unit Exempt = The unit does not qualify for any exemptions under the rule. Location = The unit is not a gas-fired steam generator located in Palo Pinto County as specified in 30 TAC § 117.3005(a). Capacity = The unit has the capacity to generate more than 1,100,000 lb/hr of steam continuously. 30 % of the Maximum = The total steam generated from the unit is greater than 30% of the maximum continuous steam capacity times the number of hours in a year. Firing Method = The unit is an opposed-fire steam generating unit. NOx Emission Limitation = Title 30 TAC § 117.3010(1). Fuel = The unit is a coal fired electric power boiler. NOx Monitoring = A continuous emissions monitoring system is used to monitor NOx emissions. Maximum Emission Rate = The owner or operator is using one of the other allowed methods under § 117.3020(e)(1) - (3) to provide substitute emissions compliance when the NOx monitor is off-line.	Affected Pollutant - NOX: Deleted Related Standard and Added Monitoring/Testing § 117.3040(k) — This requirement was moved from Related Standards to Monitoring/Testing requirements since it specifies compliance determination methods. Added Monitoring/Testing § 117.3035(b) — This citation specifies initial compliance determination requirements. Deleted Monitoring/Testing [G]§ 117.3040(d)(2) — This requirement only applies if a CEMS is shared by multiple units.
BOILER 1	40 CFR Part 60, Subpart D	60D-1	Construction/Modification Date = After December 22, 1976, and on or before September 18, 1978. Covered Under Subpart Da or KKKK = The steam generating unit is not covered under 40 CFR Part 60, Subpart Da or 40 CFR Part 60, Subpart KKKK. Changes to Existing Affected Facility = No change has been made to the existing fossil fuel-fired steam generating unit. Heat Input Rate = Heat input rate is greater than 250 MMBtu/hr (73 MW). Alternate 42C = The facility is meeting the requirements of § 60.42(a) for PM.	Affected Pollutant - PM (Opacity): Added Related Standards § 60.45(g) and § 60.45(g)(1) – These requirements include the definition of excess emissions. Added Monitoring/Testing § 60.11(e)(5) – This requirement specifies that a COMS can be used in lieu of Method 9, and is referenced in applicable Monitoring Testing requirement § 60.46(b)(3).

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
			PM CEMS = The facility does not use a CEMS to measure PM.	Added Reporting § 60.45(g)(1) – This requirement
			Opacity Monitoring = Continuous opacity monitoring system for measuring the opacity of emissions.	specifies that one six minute average/hour of up to 27% opacity is not considered excess emissions and does not need to be reported.
			Gas/Liquid Fuel = The facility does not burn only gaseous or liquid fossil fuel (excluding residual oil) with potential SO_2 emissions rates of 0.060 lb/MMBtu or less and does not use post combustion technology to reduce emissions of SO_2 or PM.	Affected Pollutant - SO ₂ : Added Related Standards § 60.45(g), § 60.45(g)(2),
			Fuels with 0.30 Percent or Less Sulfur = Facility uses post combustion technology (except a wet scrubber) for reducing PM, SO ₂ , or CO, burns gaseous fuels or fuel oils	and § 60.45(g)(2)(i) – These requirements include the definition of excess emissions.
			that contain more than 0.30 % sulfur by weight or other fuels, or operates so CO emissions are > 0.15 lb/MMBtu average.	Added Monitoring/Testing § 60.45(g)(2) – This requirement is included as part of the requirement
			Specific Site = The facility is not Southwestern Public Service Company's Harrington Station #1 in Amarillo, TX.	established by § 60.45(g)(2)(i). Added Reporting § 60.45(g)(2) and § 60.45(g)(2)(i) –
			D-Series Fuel Type #1 = Lignite.	These requirements specify the excess emissions that must be reported as required by § 60.45(g).
			Alternate 43D = No alternative requirement is used for SO ₂ , unit is complying with requirements of § 60.43(a) and (b).	Affected Pollutant - NO _X :
			Alternate 44E = The facility is meeting the requirements of \S 60.44(a), (b), and (d) for NO _x .	Added Related Standard § 60.44(a) – This requirement specifies the emission standard that is related to the numerical emission limit in §
			Flue Gas Desulfurization = The unit utilizes a flue gas desulfurization device.	60.44(a)(4).
			SO2 Monitoring = Continuous emissions monitoring system.	Added Related Standard § 60.45(g), 60.45(g)(3), and § 60.45(g)(3)(i) – These requirements include
			Cyclone-Fired Unit = The unit is not a cyclone-fired unit.	the definition of excess emissions.
			NOx Monitoring Type = It was not demonstrated during the performance test that emissions of NO_x are less than 70% of applicable standards in 40 CFR § 60.44.	Added Reporting § 60.45(g)(3) and § 60.45(g)(3)(i) — These requirements specify the excess emissions that must be reported as required by § 60.45(g).
BOILER 1	40 CFR Part 60, Subpart D	60D-2	Construction/Modification Date = After December 22, 1976, and on or before September 18, 1978.	Affected Pollutant - PM (Opacity):
			Covered Under Subpart Da or KKKK = The steam generating unit is not covered under 40 CFR Part 60, Subpart Da or 40 CFR Part 60, Subpart KKKK.	Added Related Standards § 60.45(g) and § 60.45(g)(1) – These requirements include the definition of excess emissions.
			Changes to Existing Affected Facility = No change has been made to the existing fossil fuel-fired steam generating unit.	Added Monitoring/Testing § 60.11(e)(5) – This requirement specifies that a COMS can be used in
			Heat Input Rate = Heat input rate is greater than 250 MMBtu/hr (73 MW).	lieu of Method 9, and is referenced in applicable Monitoring Testing requirement § 60.46(b)(3).
			Alternate 42C = The facility is meeting the requirements of § 60.42(a) for PM.	Added Reporting § 60.45(g)(1) – This requirement
			PM CEMS = The facility does not use a CEMS to measure PM.	specifies that one six minute average/hour of up to
			Opacity Monitoring = Continuous opacity monitoring system for measuring the opacity of emissions.	27% opacity is not considered excess emissions and does not need to be reported.
			Gas/Liquid Fuel = The facility does not burn only gaseous or liquid fossil fuel (excluding	Affected Pollutant - SO ₂ :
			residual oil) with potential SO ₂ emissions rates of 0.060 lb/MMBtu or less and does not use post combustion technology to reduce emissions of SO ₂ or PM.	Added Related Standard § 60.43(a) – This requirement specifies the emission standard that is
			Fuels with 0.30 Percent or Less Sulfur = Facility uses post combustion technology (except a wet scrubber) for reducing PM, SO ₂ , or CO, burns gaseous fuels or fuel oils	related to the numerical emission limit in § 60.43(a)(1).
			that contain more than 0.30 % sulfur by weight or other fuels, or operates so CO emissions are > 0.15 lb/MMBtu average.	Added Related Standards § 60.45(g), § 60.45(g)(2), and § 60.45(g)(2)(i) – These requirements include the definition of excess emissions.

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
			Specific Site = The facility is not Southwestern Public Service Company's Harrington Station #1 in Amarillo, TX. D-Series Fuel Type #1 = Liquid fossil fuel.	Added Monitoring/Testing § 60.45(g)(2) – This requirement is included as part of the requirement established by § 60.45(g)(2)(i).
			Alternate 43D = No alternative requirement is used for SO_2 , unit is complying with requirements of § 60.43(a) and (b).	Added Reporting § 60.45(g)(2) and § 60.45(g)(2)(i) – These requirements specify the excess emissions that must be reported as required by § 60.45(g).
			Alternate 44E = The facility is meeting the requirements of § 60.44(a), (b), and (d) for NO _x . Flue Gas Desulfurization = The unit utilizes a flue gas desulfurization device. SO2 Monitoring = Continuous emissions monitoring system.	Deleted Monitoring/Testing [G]§ 60.46(d)(3) – This requirement has been excluded since the specified alternative compliance determination method will not be used.
			Cyclone-Fired Unit = The unit is not a cyclone-fired unit.	Affected Pollutant - NO _X :
			NOx Monitoring Type = It was not demonstrated during the performance test that emissions of NO_x are less than 70% of applicable standards in 40 CFR § 60.44.	Added Related Standard § 60.44(a) – This requirement specifies the emission standard that is related to the numerical emission limit in § 60.44(a)(2).
				Added Related Standard § 60.45(g), 60.45(g)(3), and § 60.45(g)(3)(i) – These requirements include the definition of excess emissions.
				Added Reporting § 60.45(g)(3) and § 60.45(g)(3)(i) — These requirements specify the excess emissions that must be reported as required by § 60.45(g).
BOILER 1	40 CFR Part 60, Subpart D	60D-3	Construction/Modification Date = After December 22, 1976, and on or before September 18, 1978.	Affected Pollutant - PM (Opacity):
			Covered Under Subpart Da or KKKK = The steam generating unit is not covered under 40 CFR Part 60, Subpart Da or 40 CFR Part 60, Subpart KKKK.	Added Related Standards § 60.45(g) and § 60.45(g)(1) – These requirements include the definition of excess emissions.
			Changes to Existing Affected Facility = No change has been made to the existing fossil fuel-fired steam generating unit.	Added Monitoring/Testing § 60.11(e)(5) – This requirement specifies that a COMS can be used in
			Heat Input Rate = Heat input rate is greater than 250 MMBtu/hr (73 MW).	lieu of Method 9, and is referenced in applicable Monitoring Testing requirement § 60.46(b)(3).
			Alternate 42C = The facility is meeting the requirements of § 60.42(a) for PM.	Added Reporting § 60.45(g)(1) – This requirement
			PM CEMS = The facility does not use a CEMS to measure PM.	specifies that one six minute average/hour of up to 27% opacity is not considered excess emissions and
			Opacity Monitoring = Continuous opacity monitoring system for measuring the opacity of emissions.	does not need to be reported.
			Gas/Liquid Fuel = The facility does not burn only gaseous or liquid fossil fuel (excluding	Affected Pollutant - SO ₂ :
			residual oil) with potential SO_2 emissions rates of 0.060 lb/MMBtu or less and does not use post combustion technology to reduce emissions of SO_2 or PM.	Added Related Standards § 60.45(g), § 60.45(g)(2), and § 60.45(g)(2)(i) – These requirements include the definition of excess emissions.
			Fuels with 0.30 Percent or Less Sulfur = Facility uses post combustion technology (except a wet scrubber) for reducing PM, SO ₂ , or CO, burns gaseous fuels or fuel oils that contain more than 0.30 % sulfur by weight or other fuels, or operates so CO emissions are > 0.15 lb/MMBtu average.	Added Monitoring/Testing § 60.45(g)(2) – This requirement is included as part of the requirement established by § 60.45(g)(2)(i).
			Specific Site = The facility is not Southwestern Public Service Company's Harrington Station #1 in Amarillo, TX.	Added Reporting § 60.45(g)(2) and § 60.45(g)(2)(i) – These requirements specify the excess emissions
			D-Series Fuel Type #1 = Lignite.	that must be reported as required by § 60.45(g). Deleted Monitoring/Testing [G]§ 60.46(d)(3) – This
			D-Series Fuel Type #2 = Liquid fossil fuel.	requirement has been excluded since the specified

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
			Alternate 43D = No alternative requirement is used for SO ₂ , unit is complying with requirements of § 60.43(a) and (b).	alternative compliance determination method will not be used.
			Alternate 44E = The facility is meeting the requirements of § 60.44(a), (b), and (d) for	Affected Pollutant - NO _X :
			NO _x . Flue Gas Desulfurization = The unit utilizes a flue gas desulfurization device.	Added Related Standard § 60.45(g), 60.45(g)(3), and § 60.45(g)(3)(i) – These requirements include the definition of excess emissions.
			SO2 Monitoring = Continuous emissions monitoring system.	Added Reporting § 60.45(g)(3) and § 60.45(g)(3)(i) -
			Cyclone-Fired Unit = The unit is not a cyclone-fired unit.	These requirements specify the excess emissions that must be reported as required by § 60.45(g).
			NOx Monitoring Type = It was not demonstrated during the performance test that emissions of NO _x are less than 70% of applicable standards in 40 CFR § 60.44.	that must be reported as required by 3 66.46(g).
BOILER 1	40 CFR Part 63, Subpart UUUUU	63UUUUU-1	§63.9983(a) = The unit is not designated a stationary combustion turbine, other than an IGCC unit, covered by 40 CFR part 63, subpart YYYY, per §63.9983(a).	
			§63.9983(b) = The unit is coal- or oil-fired and combusts natural gas in accordance with §63.9983(b).	
			§63.9983(c) = The unit can not combust more than 25 MW of coal or oil or is not complying with §63.9983(c).	
			§63.9983(d) = The unit does not combust hazardous waste per §63.9983(d).	
			Limited-use Liquid = The unit does not qualify as a limited-use liquid oil-fired unit as defined in §63.10042.	
			Construction Status = The EGU is not new or reconstructed.	
			Start-Up = The start-up date of the affected source was before April 16, 2012.	
			Unit Fuel = The EGU is designed for low rank virgin coal.	
			Pollutant-a = Filterable PM is a surrogate for total HAP or total non-Hg HAP metals.	
			PM-Input = A heat input-based limit is used for PM.	
			Pollutant-b = Hydrogen chloride is a surrogate for acid gas HAP.	
			HCI-Input = A heat input-based limit is used for hydrogen chloride.	
			Hg-Input-c = A heat input-based limit is used for mercury.	
			Scrubber/Bypass = The EGU is not equipped with an acid gas scrubber or does not have a main stack and bypass stack exhaust configuration.	
			PM-LEE = The unit is not qualifying as a low emitting EGU (LEE) for filterable PM.	
			HCI-LEE = The unit is not qualifying as a low emitting EGU (LEE) for hydrogen chloride.	
			Hg-LEE-c = The unit is not qualifying as a low emitting EGU (LEE) for mercury.	
			Startup = Relying on paragraph (2) definition of "startup" in §63.10042.	
			Compliance Demo = CPMS or CEMS not used.	
			O2-CO2 CEMS = An oxygen or carbon dioxide CEMS is not used to convert measured pollutant concentrations.	
			Flow Monitor = A stack gas flow rate monitor is not used for routine operation of a sorbent trap monitoring system or to convert measured pollutant concentrations.	
			Gas Moisture = Not required to make corrections for stack gas moisture when converting pollutants.	

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
			Direct HAP = A CEMS or sorbent trap is not used to measure HAP directly.	
BOILER 1	40 CFR Part 63, Subpart UUUUU	63UUUUU-2	§63.9983(a) = The unit is not designated a stationary combustion turbine, other than an IGCC unit, covered by 40 CFR part 63, subpart YYYY, per §63.9983(a).	
			§63.9983(b) = The unit is coal- or oil-fired and combusts natural gas in accordance with §63.9983(b).	
			§63.9983(c) = The unit can not combust more than 25 MW of coal or oil or is not complying with §63.9983(c).	
			§63.9983(d) = The unit does not combust hazardous waste per §63.9983(d).	
			Limited-use Liquid = The unit does not qualify as a limited-use liquid oil-fired unit as defined in §63.10042.	
			Construction Status = The EGU is not new or reconstructed.	
			Start-Up = The start-up date of the affected source was before April 16, 2012.	
			Unit Fuel = The EGU is designed for low rank virgin coal.	
			Pollutant-a = Filterable PM is a surrogate for total HAP or total non-Hg HAP metals.	
			PM-Input = A heat input-based limit is not used for PM.	
			Pollutant-b = Hydrogen chloride is a surrogate for acid gas HAP.	
			HCI-Input = A heat input-based limit is not used for hydrogen chloride.	
			Hg-Input-c = A heat input-based limit is not used for mercury.	
			Scrubber/Bypass = The EGU is not equipped with an acid gas scrubber or does not have a main stack and bypass stack exhaust configuration.	
			PM-LEE = The unit is not qualifying as a low emitting EGU (LEE) for filterable PM.	
			HCI-LEE = The unit is not qualifying as a low emitting EGU (LEE) for hydrogen chloride.	
			Hg-LEE-c = The unit is not qualifying as a low emitting EGU (LEE) for mercury.	
			Startup = Relying on paragraph (2) definition of "startup" in §63.10042.	
			Compliance Demo = CPMS or CEMS not used.	
			O2-CO2 CEMS = An oxygen or carbon dioxide CEMS is not used to convert measured pollutant concentrations.	
			Flow Monitor = A stack gas flow rate monitor is not used for routine operation of a sorbent trap monitoring system or to convert measured pollutant concentrations.	
			Gas Moisture = Not required to make corrections for stack gas moisture when converting pollutants.	
			Direct HAP = A CEMS or sorbent trap is not used to measure HAP directly.	
LIGHAND1	40 CFR Part 60, Subpart Y	60Y-1	Affected Facility = Coal processing and conveying equipment (including breakers and crushers), coal storage systems (excluding open storage piles), or coal transfer and loading systems.	Affected Pollutant - PM (Opacity): Deleted Related Standard § 60.257(a) – This requirement was removed as a Related Standard
			Construction/Reconstruction/Modification Date = After October 24, 1974 and before April 28, 2008.	since it does not establish an emission limitation, standard or equipment specification; This requirement is included as an applicable Monitoring/Testing requirement.

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
LSHAND1	40 CFR Part 60, Subpart OOO	60000	Underground Mines = The facility is not located in an underground mine. Subpart Applicability = The facility is not subject to 40 CFR Part 60, Subparts F or I, nor does the facility follow, in the plant process, another facility subject to Subparts F or I. Facility Type = Grinding mill.	
STACK1	30 TAC Chapter 111, Visible Emissions	R111-1	Construction/Modification Date = On or before August 31, 1983. Alternate Opacity Limitation = Not complying with an alternate opacity limit under 30 TAC § 111.113. Vent Source = The source of the vent is a steam generator fired by solid fossil fuel. Opacity Monitoring System = A continuous emissions monitoring system (CEMS) capable of measuring the opacity of emissions is installed in the vent in accordance with 30 TAC § 111.111(a)(1)(C). Construction Date = After January 31, 1972 Effluent Flow Rate = Effluent flow rate is at least 100,000 actual cubic feet per minute.	
			Annual ACF = Annual average capacity factor is greater than 30%, but was not reportable to the Federal Power Commission for calendar year 1974. Heat Input = Heat Input is greater than 250 MMBtu/hr. SIP Violation = The source is able to comply with applicable PM and opacity regulations without the use of PM collection equipment and has not been found to be in violation of any visible emission standard in a State Implementation Plan.	

^{* -} 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

Fitle 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.: 4180A	Issuance Date: 10/11/2013	
Authorization No.: 54118	Issuance Date: 09/25/2012	
Authorization No.: 99921	Issuance Date: 01/26/2012	
Authorization No.: 123647	Issuance Date: 10/31/2014	
Permits by Rule (30 TAC Chapter 106) for the	e Application Area	
Number: 106.102	Version No./Date: 09/04/2000	
Number: 106.227	Version No./Date: 09/04/2000	
Number: 106.262	Version No./Date: 11/01/2003	
Number: 106.263	Version No./Date: 11/01/2001	
Number: 106.265	Version No./Date: 09/04/2000	
Number: 106.371	Version No./Date: 09/04/2000	
Number: 106.454	Version No./Date: 11/01/2001	
Number: 106.472	Version No./Date: 09/04/2000	
Number: 106.473	Version No./Date: 09/04/2000	
Number: 106.478	Version No./Date: 09/04/2000	
Number: 106.511	Version No./Date: 09/04/2000	
Number: 106.531	Version No./Date: 09/04/2000	
Number: 106.532	Version No./Date: 09/04/2000	

Permits by Rule

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

This interpretation is consistent with how TCEQ has historically determined compliance with the emission limits prior to the addition of the "as applicable" language. The "as applicable" language was added in 2014 as part of changes to the sentence structure in a rulemaking that made other changes to address greenhouse gases and was not intended as a substantive rule change. This interpretation also provides for effective and practical enforcement of 30 TAC §106.4(a), since for the TCEQ to effectively enforce the emission limits in 30 TAC §106.4(a) as emission thresholds, all emission limits must apply. As provided by 30 TAC §106.4(a)(2) and (3), an owner/operator shall not claim a PBR authorization if the facility is subject to major New Source Review. The practical and legal effect of the language in 30 TAC § 106.4 is that

if a facility does not emit a pollutant, then the potential to emit for that particular pollutant is zero, and thus, the facility is not authorized to emit the pollutant pursuant to the PBR.

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

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

The application, or a previously submitted application, contains a PBR Supplemental Table. This table provides supplemental information for all PBR authorizations at the site or application area, including PBRs that are not listed on the OP-REQ1 form authorize emission units that the TCEQ has determined are insignificant sources of emissions (IEUs). PBRs are enforceable through permit condition number 9. The EPA gives States broad discretion in prescribing monitoring, recordkeeping, and reporting for generally applicable requirements that cover insignificant emission units. (see EPA White Paper Number 2 for Improved Implementation of the Part 70 Operating Permits Program). Federal regulations specifically identify recordkeeping as an appropriate level of monitoring necessary to assure compliance with the requirements applicable to an emissions unit. Permitting authorities have the best sense of where it is appropriate to conclude that periodic monitoring is not necessary for IEUs, when state program rules already provide sufficient monitoring for these units.

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

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

Emission Units and Emission Points

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

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

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

Monitoring Sufficiency

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

federal operating permit must include compliance assurance monitoring (CAM) requirements for emission sources that meet the applicability criteria of 40 CFR Part 64 in accordance with 40 CFR § 70.6(a)(3)(i)(A) and 30 TAC § 122.604(b).

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

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

Compliance Assurance Monitoring (CAM):

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

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

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

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

Unit/Group/Process Information				
ID No.: BOILER 1				
Control Device ID No.: ESP	Control Device Type: Wet or dry electrostatic precipitator			
Applicable Regulatory Requirement				
Name: 30 TAC Chapter 111, Nonagricultural Processes	SOP Index No.: R1153-1			
Pollutant: PM	Main Standard: § 111.153(b)			
Monitoring Information				
Indicator: Opacity				
Minimum Frequency: six times per minute				
Averaging Period: 2-hour block				

Deviation Limit: Maximum 20% opacity except for one six-minute period per hour of not more than 27% opacity

Basis of CAM: The 20% opacity deviation limit is consistent with the 20% opacity limit specified in 40 CFR Part 60, Subpart D. Because the particulate mass emission limit specified in 40 CFR Part 60, Subpart D is more stringent than the mass limit specified in 30 TAC §111.153(b), demonstrating compliance with the 20% opacity limit also demonstrates compliance with the lb/MMBtu limit in 30 TAC § 111.153(b).

The option to perform opacity readings or visible emissions to demonstrate compliance is consistent with EPA Reference Test Method 9 and 22. Opacity and visible emissions have been used as an indicator of particulate emissions in many federal rules including 40 CFR Part 60, Subpart F and Subpart HH. In addition, use of these indicators is consistent with the EPA's "Compliance Assurance Monitoring (CAM) Technical Guidance Document" (August 1998). Monitoring specifications and procedures for the opacity are consistent with federal requirements and include the EPA's Test Method 9 for determining opacity by visual observations and the requirements of 40 CFR § 60.13 for a continuous opacity monitoring system (COMS). The monitoring specifications and procedures for the visible emissions monitoring are similar to "EPA Reference Method 22" procedures.

Unit/Group/Process Information ID No.: BOILER 1 Control Device ID No.: BOILER 1 Control Device Type: Wet scrubber Applicable Regulatory Requirement Name: 30 TAC Chapter 112, Sulfur Compounds SOP Index No.: R112-1 Pollutant: SO2 Main Standard: § 112.8(a)

Monitoring Information

Indicator: SO₂ emission rate

Minimum Frequency: The permit holder will collect at least four data values equally spaced over each hour, as required

Averaging Period: 3-hour rolling

Deviation Limit: Maximum SO₂ emission rate = 3.0 lb/MMBtu heat input, averaged over a three-hour period for solid fossil fuel only.

Basis of CAM: It is widely practiced and accepted to calibrate and use a portable analyzer or CEMS to measure SO2 concentration with procedures such as EPA Test Method 6C. The measured concentration along with stack flow rate or AP-42 factors and fuel consumption records may be used to demonstrate compliance with an underlying emission limit or standard.

Unit/Group/Process Information ID No.: BOILER 1 Control Device ID No.: BOILER 1 Control Device Type: Wet scrubber Applicable Regulatory Requirement Name: 30 TAC Chapter 112, Sulfur Compounds SOP Index No.: R112-2 Pollutant: SO2 Main Standard: § 112.9(a)

Monitoring Information

Indicator: SO₂ emission rate

Minimum Frequency: The permit holder will collect at least four data values equally spaced over each hour, as required

Averaging Period: 3-hour rolling

Deviation Limit: Maximum SO₂ emission rate = 440 ppmv, averaged over a three-hour period for liquid fossil fuel only.

Basis of CAM: It is widely practiced and accepted to calibrate and use a portable analyzer or CEMS to measure SO2 concentration with procedures such as EPA Test Method 6C. The measured concentration along with stack flow rate or AP-42 factors and fuel consumption records may be used to demonstrate compliance with an underlying emission limit or standard.

Unit/Group/Process Information		
ID No.: BOILER 1		
Control Device ID No.: ESP	Control Device Type: Wet or dry electrostatic precipitator	
Applicable Regulatory Requirement		
Name: 40 CFR Part 60, Subpart D	SOP Index No.: 60D-1	
Pollutant: PM	Main Standard: § 60.42(a)(1)	
Monitoring Information		

Indicator: Opacity

Minimum Frequency: six times per minute

Averaging Period: Six-minutes

Deviation Limit: Maximum 20% opacity except for one six-minute period per hour of not more than 27% opacity.

Basis of CAM: The option to perform opacity readings or visible emissions to demonstrate compliance is consistent with EPA Reference Test Method 9 and 22. Opacity and visible emissions have been used as an indicator of particulate emissions in many federal rules including 40 CFR Part 60, Subpart F and Subpart HH. In addition, use of these indicators is consistent with the EPA's "Compliance Assurance Monitoring (CAM) Technical Guidance Document" (August 1998). Monitoring specifications and procedures for the opacity are consistent with federal requirements and include the EPA's Test Method 9 for determining opacity by visual observations and the requirements of 40 CFR § 60.13 for a continuous opacity monitoring system (COMS). The monitoring specifications and procedures for the visible emissions monitoring are similar to "EPA Reference Method 22" procedures.

Unit/Group/Process Information		
ID No.: BOILER 1		
Control Device ID No.: ESP	Control Device Type: Wet or dry electrostatic precipitator	
Applicable Regulatory Requirement		
Name: 40 CFR Part 60, Subpart D	SOP Index No.: 60D-2	
Pollutant: PM	Main Standard: § 60.42(a)(1)	
Monitoring Information		

Monitoring Information

Indicator: Opacity

Minimum Frequency: six times per minute

Averaging Period: Six-minutes

Deviation Limit: Maximum 20% opacity except for one six-minute period per hour of not more than 27% opacity.

Basis of CAM: The option to perform opacity readings or visible emissions to demonstrate compliance is consistent with EPA Reference Test Method 9 and 22. Opacity and visible emissions have been used as an indicator of particulate emissions in many federal rules including 40 CFR Part 60, Subpart F and Subpart HH. In addition, use of these indicators is consistent with the EPA's "Compliance Assurance Monitoring (CAM) Technical Guidance Document" (August 1998). Monitoring specifications and procedures for the opacity are consistent with federal requirements and include the EPA's Test Method 9 for determining opacity by visual observations and the requirements of 40 CFR § 60.13 for a continuous opacity monitoring system (COMS). The monitoring specifications and procedures for the visible emissions monitoring are similar to "EPA Reference Method 22" procedures.

Unit/Group/Process Information		
ID No.: BOILER 1		
Control Device ID No.: ESP	Control Device Type: Wet or dry electrostatic precipitator	
Applicable Regulatory Requirement		
Name: 40 CFR Part 60, Subpart D	SOP Index No.: 60D-3	
Pollutant: PM	Main Standard: § 60.42(a)(1)	
Monitoring Information		

Indicator: Opacity

Minimum Frequency: six times per minute

Averaging Period: Six-minutes

Deviation Limit: Maximum 20% opacity except for one six-minute period per hour of not more than 27% opacity.

Basis of CAM: The option to perform opacity readings or visible emissions to demonstrate compliance is consistent with EPA Reference Test Method 9 and 22. Opacity and visible emissions have been used as an indicator of particulate emissions in many federal rules including 40 CFR Part 60, Subpart F and Subpart HH. In addition, use of these indicators is consistent with the EPA's "Compliance Assurance Monitoring (CAM) Technical Guidance Document" (August 1998). Monitoring specifications and procedures for the opacity are consistent with federal requirements and include the EPA's Test Method 9 for determining opacity by visual observations and the requirements of 40 CFR § 60.13 for a continuous opacity monitoring system (COMS). The monitoring specifications and procedures for the visible emissions monitoring are similar to "EPA Reference Method 22" procedures.

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		
Control Device Type: Other control device type		
SOP Index No.: 60Y-1		
Main Standard: § 60.254(a)		

Basis of monitoring: The option to perform opacity readings or visible emissions to demonstrate compliance is consistent with EPA Reference Test Method 9 and 22. Opacity and visible emissions have been used as an indicator of particulate emissions in many federal rules including 40 CFR Part 60, Subpart F and Subpart HH. In addition, use of these indicators is consistent with the EPA's "Compliance Assurance Monitoring (CAM) Technical Guidance Document" (August 1998). Monitoring specifications and procedures for the opacity are consistent with federal requirements and include the EPA's Test Method 9 for determining opacity by visual observations and the requirements of 40 CFR § 60.13 for a continuous opacity monitoring system (COMS). The monitoring specifications and procedures for the visible emissions monitoring are similar to "EPA Reference Method 22" procedures.

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 (https://www.tceq.texas.gov/goto/cfr-online). 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 https://www.tceq.texas.gov/permitting/air/nav/air status permits.html

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

https://www.tceg.texas.gov/permitting/air/permitbyrule/air pbr index.html

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

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

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

www.tceq.texas.gov/permitting/air/permitbyrule/historical rules/oldselist/se index.html

Additional information concerning PBRs is available on the TCEQ website:

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

Compliance Review

- 1. In accordance with 30 TAC Chapter 60, the compliance history was reviewed on <u>July 20, 2017</u>. Site rating: <u>0.00 / High</u> Company rating: <u>0.00 / High</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

Were there any out-of-compliance units listed on Form OP-ACPS?

 Is a compliance plan and schedule included in the permit?

No

Available Unit Attribute Forms

- OP-UA1 Miscellaneous and Generic Unit Attributes
- OP-UA2 Stationary Reciprocating Internal Combustion Engine Attributes
- OP-UA3 Storage Tank/Vessel Attributes
- OP-UA4 Loading/Unloading Operations Attributes
- OP-UA5 Process Heater/Furnace Attributes
- OP-UA6 Boiler/Steam Generator/Steam Generating Unit Attributes
- **OP-UA7 Flare Attributes**
- OP-UA10 Gas Sweetening/Sulfur Recovery Unit Attributes
- OP-UA11 Stationary Turbine Attributes
- OP-UA12 Fugitive Emission Unit Attributes
- OP-UA13 Industrial Process Cooling Tower Attributes
- OP-UA14 Water Separator Attributes
- OP-UA15 Emission Point/Stationary Vent/Distillation Operation/Process Vent Attributes
- OP-UA16 Solvent Degreasing Machine Attributes
- OP-UA17 Distillation Unit Attributes
- **OP-UA18 Surface Coating Operations Attributes**
- OP-UA19 Wastewater Unit Attributes
- OP-UA20 Asphalt Operations Attributes
- OP-UA21 Grain Elevator Attributes
- OP-UA22 Printing Attributes
- OP-UA24 Wool Fiberglass Insulation Manufacturing Plant Attributes

- OP-UA25 Synthetic Fiber Production Attributes
- OP-UA26 Electroplating and Anodizing Unit Attributes
- OP-UA27 Nitric Acid Manufacturing Attributes
- OP-UA28 Polymer Manufacturing Attributes
- OP-UA29 Glass Manufacturing Unit Attributes
- OP-UA30 Kraft, Soda, Sulfite, and Stand-Alone Semichemical Pulp Mill Attributes
- OP-UA31 Lead Smelting Attributes
- OP-UA32 Copper and Zinc Smelting/Brass and Bronze Production Attributes
- OP-UA33 Mineral Processing Plant Attributes
- OP-UA34 Pharmaceutical Manufacturing
- **OP-UA35 Incinerator Attributes**
- OP-UA36 Steel Plant Unit Attributes
- OP-UA37 Basic Oxygen Process Furnace Unit Attributes
- OP-UA38 Lead-Acid Battery Manufacturing Plant Attributes
- OP-UA39 Sterilization Source Attributes
- OP-UA40 Ferroalloy Production Facility Attributes
- OP-UA41 Dry Cleaning Facility Attributes
- OP-UA42 Phosphate Fertilizer Manufacturing Attributes
- OP-UA43 Sulfuric Acid Production Attributes
- OP-UA44 Municipal Solid Waste Landfill/Waste Disposal Site Attributes
- OP-UA45 Surface Impoundment Attributes
- OP-UA46 Epoxy Resins and Non-Nylon Polyamides Production Attributes
- OP-UA47 Ship Building and Ship Repair Unit Attributes
- OP-UA48 Air Oxidation Unit Process Attributes
- OP-UA49 Vacuum-Producing System Attributes
- OP-UA50 Fluid Catalytic Cracking Unit Catalyst Regenerator/Fuel Gas Combustion Device/Claus Sulfur Recovery Plant Attributes
- OP-UA51 Dryer/Kiln/Oven Attributes
- OP-UA52 Closed Vent Systems and Control Devices
- OP-UA53 Beryllium Processing Attributes
- OP-UA54 Mercury Chlor-Alkali Cell Attributes
- OP-UA55 Transfer System Attributes
- OP-UA56 Vinyl Chloride Process Attributes
- OP-UA57 Cleaning/Depainting Operation Attributes
- **OP-UA58 Treatment Process Attributes**
- OP-UA59 Coke By-Product Recovery Plant Attributes
- OP-UA60 Chemical Manufacturing Process Unit Attributes
- OP-UA61 Pulp, Paper, or Paperboard Producing Process Attributes
- OP-UA62 Glycol Dehydration Unit Attributes
- OP-UA63 Vegetable Oil Production Attributes
- OP-UA64 Coal Preparation Plant Attributes