

Statement of Basis of the Federal Operating Permit

Luminant Generation Company LLC

Site/Area Name: Martin Lake Steam Electric Station
Physical location: 8850 FM 2658, 5 Miles Southwest Of Tatum
Nearest City: Tatum
County: Rusk

Permit Number: O53
Project Type: Minor Revision

Standard Industrial Classification (SIC) Code: 4911
SIC Name: Electric Services

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.

Revised on: February 9, 2015

Operating Permit Basis of Determination

Description of Revisions

Luminant Generation Company submitted multiple revision applications to add MACT DDDDD, for GRPAUX auxiliary boilers, MACT ZZZZ applicability, for the SRIC emergency engines, deleted an SRIC engine and the engine grouping GRPENGINES, added maintenance, startup and shutdown (MSS) activities, and updated several NSR authorizations for the Martin Lake Steam Electric Station. Project 13437, related to incorporation of MACT DDDDD, was received on 12/08/2008 and was put on management delay due to extended delay in promulgation of that rule by EPA. Project 13437 was rolled into this project, 17240, and voided as unnecessary. MACT UUUUU compliance extension was also added for GRPBOIL123. Project 17240 was on management delay from 12/16/2011 through 01/08/2014, since it could not be worked simultaneously with renewal project 15052, which had received public comment.

Permit Area Process Description

The Martin Lake Steam Electric Station is an electric utility site consisting of three (3) solid fossil-fuel-fired steam generating units and their ancillary equipment. It is located in Rusk County near the city of Tatum, Texas.

The three steam generators, Units 1, 2, and 3, each provide steam to a turbine/generator set. Each of the three turbine/generator sets is capable of generating approximately 780 megawatts (net). The units fire coal, which is lignite supplied by the Texas mines and/or subbituminous coal delivered from western coal mines. Fuel oil is used as a start-up/stabilization fuel and is introduced into the boiler by igniters, not the main burners. Two auxiliary boilers, Boilers A and B, are used to provide start-up steam during start-ups, shutdowns, and maintenance. The auxiliary boilers are fueled by fuel oil.

Lignite and subbituminous coals undergo primary crushing at the mine sites before they are delivered to the site by railcar. The coal is unloaded into underground hoppers and is transported via the coal handling system (i.e., conveyors, storage silos, stockpiles, stacker/reclaimers, and secondary crushers) to the boilers, where it is pulverized prior to being pneumatically conveyed into the boiler through the primary burners. The pulverized coal particles, combined with air, are combusted in the boiler to provide heat. The heat from the combustion of the coal is transferred into a closed system of high purity water tubing where the water is converted into steam, providing the energy required to rotate turbine blades within a steam turbine. The steam turbine turns a shaft attached to a generator which produces electrical energy which is transmitted through transformers and transmission lines into the electrical grid.

The flue gas from each steam generator boiler is routed through an electrostatic precipitator (ESP 1, 2, or 3), which removes most of the fly ash from the flue gas stream. The fly ash collected by the ESP is pneumatically transported to fly ash storage silos prior to loading for disposal or sales. The fly ash silos are equipped with fabric filter baghouses, which are inherent fly ash transport process equipment.

The flue gas stream from the ESP is routed through a flue gas desulfurization (FGD) system. This system removes sulfur dioxide from the flue gas. Sludge from the FGD system is prepared for disposal or sales at solids handling buildings.

Limestone is used to make the scrubbing slurry for the FGD system. The limestone is delivered by railcar to the limestone handling system. This system stores limestone and conveys the limestone to the ball mill grinder, where it is crushed and mixed with water to form the reagent feed slurry for the FGD system.

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, SO ₂ , PM, NOX, HAPS, CO, YES - PM
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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)(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.A. (iv) 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 Requirement 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)	Yes
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
CAIR (Clean Air Interstate Rule)	Yes

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.

CAIR Permit

The Clean Air Interstate Rule (CAIR) was established to mitigate the interstate transport of NO_x and SO₂ which contribute to the formation of fine particles (PM 2.5) and ground-level ozone. The EPA has promulgated a model cap and trade program in 40 CFR Part 96 to implement CAIR. This rule has been adopted by reference into 30 TAC Chapter 122, Subchapter E, Division 2: Clean Air Interstate Rule.

The permitted area is subject to CAIR as it contains units that meet the definition of a NO_x budget unit in 40 CFR § 96.4(a)(1)-(2) and a CAIR SO₂ unit in 40 CFR § 96.204(a)(1)-(2). The applicable requirements of the

CAIR permit are contained in the Special Terms and Conditions of the FOP. The CAIR permit is effective as of the date of the issuance of this revision and has a term ending in concurrence with the FOP.

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*	Changes and Exceptions to DSS**
GRPBOIL123	30 TAC Chapter 111, Non Agricultural Sources	R1153	UNIT TYPE = SOLID FOSSIL FUEL FIRED STEAM GENERATOR HEAT INPUT = > 2500 MILLION BTU/HR	MANUALLY DEVELOPED REQUIREMENTS AND MONITORING USING RULE INTERPRETATION AND BOILER ATTRIBUTES GIVEN
GRPCOAL	40 CFR Part 60, Subpart Y	60Y-74-08	Affected Facility = Coal processing and conveying equipment (including breakers and crushers), coal storage systems (excluding open storage piles), or coal transfer and loading systems. Construction/Reconstruction/Modification Date = After October 24, 1974 and before April 28, 2008. Compliance Option = Affected facility is complying with §60.255(a). Digital Opacity = The affected facility is not using a monitoring plan for a digital opacity compliance system.	
GRPFAS	30 TAC Chapter 111, NonAgricultural Sources	R1151	UNIT TYPE = FLY ASH HANDLING SYSTEM (SILOS) POTENTIAL TO EMIT OF EACH CONTROLLED SILO < 100TPY PM.	MANUALLY DEVELOPED REQUIREMENTS AND MONITORING USING RULE INTERPRETATION AND FLY ASH HANDLING ATTRIBUTES GIVEN.
GRPPBR262	30 TAC Chapter 106	PBR262	UNIT TYPE = ECONOMIZER ASH HANDLING SYSTEM	MANUALLY DEVELOPED 30 TAC CHAPTER 106 APPLICABILITY AND PERIODIC MONITORING REQUIREMENTS, AT APPLICANT REQUEST.
GRPPBR472	30 TAC Chapter 106	PBR472	UNIT TYPE(S) = LOADING AND UNLOADING OF FUEL OIL, DIESEL FUEL, DIBASIC ACID, DUST SUPPRESSANTS, ANTIFREEZE, OR LUBRICATING AND HYDRAULIC OILS (NEW OR USED) AUTHORIZED BY PERMIT BY RULE 106.472.	MANUALLY DEVELOPED 30 TAC CHAPTER 106 APPLICABILITY AND PERIODIC MONITORING REQUIREMENTS, AT APPLICANT REQUEST.
BSTRPMPB	40 CFR Part 63, Subpart ZZZZ	63ZZZZ	HAP Source = Any stationary source or group of stationary sources of hazardous air pollutants meeting the definition of a major source as described in 40 CFR § 63.2. Brake HP = Stationary RICE with a brake hp greater than or equal to 250 hp and less than 300 hp. Construction/Reconstruction Date = Commenced construction or reconstruction before December 19, 2002. Service Type = Emergency use where the RICE does not operate or is not contractually obligated to be available for more than 15 hours per calendar year as specified in 40 CFR §63.6640(f)(2)(ii)-(iii) or does not operate as specified in 40 CFR §63.6640(f)(4)(ii). Stationary RICE Type = Compression ignition engine	MANUALLY DELETED 60.6640(f)(2)(ii) AND (iii) SINCE THE ENGINE IS ONLY USED FOR TAINTER GATE OPERATIONS.

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
ML-TGDG	40 CFR Part 63, Subpart ZZZZ	63ZZZZ	<p>HAP Source = Any stationary source or group of stationary sources of hazardous air pollutants meeting the definition of a major source as described in 40 CFR § 63.2.</p> <p>Brake HP = Stationary RICE with a brake hp less than 100 hp.</p> <p>Construction/Reconstruction Date = Commenced construction or reconstruction on or after December 19, 2002, but before June 12, 2006.</p> <p>Service Type = Emergency use where the RICE does not operate or is not contractually obligated to be available for more than 15 hours per calendar year as specified in 40 CFR §63.6640(f)(2)(ii)-(iii) or does not operate as specified in 40 CFR §63.6640(f)(4)(ii).</p> <p>Stationary RICE Type = Compression ignition engine</p>	MANUALLY DELETED 60.6640(f)(2)(ii) AND (iii) SINCE THE ENGINE IS ONLY USED FOR TAINTER GATE OPERATIONS.
GRPAUX	30 TAC Chapter 112, Sulfur Compounds	R200	<p>30 TAC CHAPTER 112 (REG II) FUEL TYPE = Liquid fuel.</p> <p>30 TAC CHAPTER 112 (REG II) HEAT INPUT = Design heat input is less than or equal to 250 MMBtu/hr.</p> <p>STACK HEIGHT [REG II] = The effective stack height is at least the standard effective stack height for each stack to which the unit routes emissions.</p>	
GRPAUX	40 CFR Part 63, Subpart DDDDD	63DDDDD-1	CONSTRUCTION/RECONSTRUCTION DATE = Construction or reconstruction began on or before June 4, 2010.	
GRPBOIL123	30 TAC Chapter 112, Sulfur Compounds	R200	<p>30 TAC CHAPTER 112 (REG II) FUEL TYPE = Solid fossil fuel.</p> <p>30 TAC CHAPTER 112 (REG II) HEAT INPUT = Design heat input is greater than 1500 MMBtu/hr.</p> <p>CONTROL EQUIPMENT [REG II] = Unit equipped with SO₂ control equipment.</p> <p>FEDERAL CLEAN AIR ACT (FCAA) SECTION 412(C) [REG II] = The unit is subject to the Federal Clean Air Act § 412(c) [FCAA § 412(c)] as amended in 1990.</p>	
GRPBOIL123	30 TAC Chapter 117, Subchapter E, Division 1	R73000	<p>DATE PLACED IN SERVICE = Before December 31, 1995.</p> <p>NOX EMISSION LIMITATION = Unit is complying with the System Cap under 30 TAC § 117.3020.</p> <p>UNIT EXEMPT = The unit does not qualify for any exemptions under the rule.</p> <p>LOCATION = The unit is not a gas-fired steam generator located in Palo Pinto County as specified in 30 TAC § 117.3005(a).</p> <p>NOX MONITORING = A continuous emissions monitoring system is used to monitor NO_x emissions.</p> <p>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 NO_x monitor is off-line.</p> <p>AMMONIA USE = Ammonia injection is not used to control NO_x emissions.</p>	

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
GRPBOIL123	40 CFR Part 60, Subpart D	60D-LG	<p>40 CFR 60 (NSPS) SUBPART D FUEL TYPE #1 = Lignite.</p> <p>CONSTRUCTION/MODIFICATION DATE = After August 17, 1971, and on or before December 22, 1976.</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 greater than 250 MMBtu/hr (73 MW).</p> <p>ALTERNATE 43D = No alternative requirement is used for SO₂, unit is complying with requirements of § 60.43(a) and (b).</p> <p>ALTERNATE 42C = The facility is meeting the requirements of § 60.42(a) for PM.</p> <p>ALTERNATE 44E = The facility is meeting the requirements of § 60.44(a), (b), and (d) for NO_x.</p> <p>FLUE GAS DESULFURIZATION [NSPS D] = The unit utilizes a flue gas desulfurization device.</p> <p>PM CEMS = The facility does not use a CEMS to measure PM.</p> <p>FUEL SAMPLING AND ANALYSIS = The unit does not use fuel sampling and analysis for monitoring of sulfur dioxide emissions.</p> <p>GAS OR LIQUID FUEL ONLY = Burns gaseous or liquid fossil fuel with potential SO₂ emissions rates greater than 0.060 lb/MMBtu, or other fuels, or uses post combustion technology to reduce of SO₂ or PM, or does not monitor SO₂ emissions by sampling or fuel receipts.</p> <p>CYCLONE-FIRED UNIT [NSPS D] = The unit is not a cyclone-fired unit.</p> <p>FUELS WITH 0.3 PERCENT OR LESS SULFUR = Facility uses post combustion technology (except a wet scrubber) for reducing PM, SO₂, 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.</p> <p>NOX MONITORING TYPE [NSPS D] = 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.</p> <p>PM CEMS PETITION = No petition has been granted to install a PM CEMS as an alternative to the CEMS for monitoring opacity emissions.</p>	

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
GRPBOIL123	40 CFR Part 60, Subpart D	60D-LG&SFF	<p>40 CFR 60 (NSPS) SUBPART D FUEL TYPE #1 = Lignite. CONSTRUCTION/MODIFICATION DATE = After August 17, 1971, and on or before December 22, 1976.</p> <p>40 CFR 60 (NSPS) SUBPART D FUEL TYPE #2 = Solid fossil fuel. 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 greater than 250 MMBtu/hr (73 MW). ALTERNATE 43D = No alternative requirement is used for SO₂, unit is complying with requirements of § 60.43(a) and (b). ALTERNATE 42C = The facility is meeting the requirements of § 60.42(a) for PM. ALTERNATE 44E = The facility is meeting the requirements of § 60.44(a), (b), and (d) for NO_x. FLUE GAS DESULFURIZATION [NSPS D] = The unit utilizes a flue gas desulfurization device. PM CEMS = The facility does not use a CEMS to measure PM. FUEL SAMPLING AND ANALYSIS = The unit does not use fuel sampling and analysis for monitoring of sulfur dioxide emissions. GAS OR LIQUID FUEL ONLY = Burns gaseous or liquid fossil fuel with potential SO₂ emissions rates greater than 0.060 lb/MMBtu, or other fuels, or uses post combustion technology to reduce of SO₂ or PM, or does not monitor SO₂ emissions by sampling or fuel receipts. CYCLONE-FIRED UNIT [NSPS D] = The unit is not a cyclone-fired unit. FUELS WITH 0.3 PERCENT OR LESS SULFUR = Facility uses post combustion technology (except a wet scrubber) for reducing PM, SO₂, 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. NOX MONITORING TYPE [NSPS D] = 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. PM CEMS PETITION = No petition has been granted to install a PM CEMS as an alternative to the CEMS for monitoring opacity emissions.</p>	

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
GRPBOIL123	40 CFR Part 60, Subpart D	60D-SFF	<p>40 CFR 60 (NSPS) SUBPART D FUEL TYPE #1 = Solid fossil fuel.</p> <p>CONSTRUCTION/MODIFICATION DATE = After August 17, 1971, and on or before December 22, 1976.</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 greater than 250 MMBtu/hr (73 MW).</p> <p>ALTERNATE 43D = No alternative requirement is used for SO₂, unit is complying with requirements of § 60.43(a) and (b).</p> <p>ALTERNATE 42C = The facility is meeting the requirements of § 60.42(a) for PM.</p> <p>ALTERNATE 44E = The facility is meeting the requirements of § 60.44(a), (b), and (d) for NO_x.</p> <p>FLUE GAS DESULFURIZATION [NSPS D] = The unit utilizes a flue gas desulfurization device.</p> <p>PM CEMS = The facility does not use a CEMS to measure PM.</p> <p>FUEL SAMPLING AND ANALYSIS = The unit does not use fuel sampling and analysis for monitoring of sulfur dioxide emissions.</p> <p>GAS OR LIQUID FUEL ONLY = Burns gaseous or liquid fossil fuel with potential SO₂ emissions rates greater than 0.060 lb/MMBtu, or other fuels, or uses post combustion technology to reduce of SO₂ or PM, or does not monitor SO₂ emissions by sampling or fuel receipts.</p> <p>CYCLONE-FIRED UNIT [NSPS D] = The unit is not a cyclone-fired unit.</p> <p>FUELS WITH 0.3 PERCENT OR LESS SULFUR = Facility uses post combustion technology (except a wet scrubber) for reducing PM, SO₂, 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.</p> <p>NOX MONITORING TYPE [NSPS D] = 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.</p> <p>PM CEMS PETITION = No petition has been granted to install a PM CEMS as an alternative to the CEMS for monitoring opacity emissions.</p>	
GRPBOIL123	40 CFR Part 63, Subpart UUUUU	63UUUUU	Unit Type = Unit is a coal-fired electric utility steam generating unit as defined in 40 CFR § 63.10042.	
GRPFASVENT	30 TAC Chapter 111, Visible Emissions	R1111	<p>Alternate Opacity Limitation = Not complying with an alternate opacity limit under 30 TAC § 111.113.</p> <p>Vent Source = The source of the vent is not a steam generator fired by solid fossil fuel, oil or a mixture of oil and gas and is not a catalyst regenerator for a fluid bed catalytic cracking unit.</p> <p>Opacity Monitoring System = Optical instrument capable of measuring the opacity of emissions is not installed in the vent or optical instrumentation does not meet the requirements of § 111.111(a)(1)(D), or the vent stream does not qualify for the exemption in § 111.111(a)(3).</p> <p>Construction Date = After January 31, 1972</p> <p>Effluent Flow Rate = Effluent flow rate is less than 100,000 actual cubic feet per minute.</p>	

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
GRPSTACK	30 TAC Chapter 111, Visible Emissions	R1111	<p>Alternate Opacity Limitation = Not complying with an alternate opacity limit under 30 TAC § 111.113.</p> <p>Annual ACF = Annual average capacity factor is greater than 30%, but was not reportable to the Federal Power Commission for calendar year 1974.</p> <p>Heat Input = Heat Input is greater than 250 MMBtu/hr.</p> <p>Vent Source = The source of the vent is a steam generator fired by solid fossil fuel.</p> <p>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).</p> <p>Construction Date = After January 31, 1972</p> <p>Effluent Flow Rate = Effluent flow rate is at least 100,000 actual cubic feet per minute.</p>	
S1A&B	30 TAC Chapter 111, Visible Emissions	R1111	<p>Alternate Opacity Limitation = Not complying with an alternate opacity limit under 30 TAC § 111.113.</p> <p>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.</p> <p>Vent Source = The source of the vent is a steam generator that burns oil or a mixture of oil and gas.</p> <p>Opacity Monitoring System = Optical instrument capable of measuring the opacity of emissions is not installed in the vent or optical instrumentation does not meet the requirements of § 111.111(a)(1)(D), or the vent stream does not qualify for the exemption in § 111.111(a)(3).</p> <p>Construction Date = After January 31, 1972</p> <p>Effluent Flow Rate = Effluent flow rate is at least 100,000 actual cubic feet per minute.</p>	
A1-DA	40 CFR Part 61, Subpart M	61M	<p>WASTE DISPOSAL SITE = ACTIVE WASTE DISPOSAL SITE FOR MANUFACTURING , FABRICATING, DEMOLITION, RENOVATION, AND SPRAYING OPERATIONS, AN ASBESTOS MILL, OR OPERATIONS THAT CONVERT ASBESTOS-CONTAINING WASTE MATERIAL INTO NONASBESTOS (ASBESTOS-FREE) MATERIAL</p> <p>ALTERNATE CONTROL METHOD = NO</p> <p>EMISSIONS COMPLIANCE = ASBESTOS CONTAINING WASTE COVERED WITH AT LEAST 15 CENTIMETERS (6 IN.) OF COMPACTED NONASBESTOS CONTAINING MATERIAL</p>	
PDP3	40 CFR Part 61, Subpart M	61M	<p>WASTE DISPOSAL SITE = ACTIVE WASTE DISPOSAL SITE FOR MANUFACTURING , FABRICATING, DEMOLITION, RENOVATION, AND SPRAYING OPERATIONS, AN ASBESTOS MILL, OR OPERATIONS THAT CONVERT ASBESTOS-CONTAINING WASTE MATERIAL INTO NONASBESTOS (ASBESTOS-FREE) MATERIAL</p> <p>ALTERNATE CONTROL METHOD = NO</p> <p>EMISSIONS COMPLIANCE = ASBESTOS CONTAINING WASTE COVERED WITH AT LEAST 15 CENTIMETERS (6 IN.) OF COMPACTED NONASBESTOS CONTAINING MATERIAL</p>	

* - 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 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.: 38456	Issuance Date: 07/28/2008
Authorization No.: 45428	Issuance Date: 06/22/2012
Authorization No.: 85302	Issuance Date: 12/05/2014
Authorization No.: 930	Issuance Date: 12/08/2008
Authorization No.: 932	Issuance Date: 08/10/2009
Authorization No.: 933	Issuance Date: 12/16/2011
Authorization No.: 95118	Issuance Date: 03/09/2011
Authorization No.: 97134	Issuance Date: 07/20/2011
Permits By Rule (30 TAC Chapter 106) for the Application Area	
Number: 106.124	Version No./Date: 09/04/2000
Number: 106.144	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: 106.412	Version No./Date: 09/04/2000
Number: 106.433	Version No./Date: 09/04/2000
Number: 106.452	Version No./Date: 03/14/1997
Number: 106.452	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: 106.511	Version No./Date: 09/04/2000
Number: 106.532	Version No./Date: 09/04/2000
Number: 5	Version No./Date: 05/12/1981

Number: 58	Version No./Date: 05/05/1976
Number: 58	Version No./Date: 05/12/1981

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.: GRPAUX	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 112, Sulfur Compounds	SOP Index No.: R200
Pollutant: SO ₂	Main Standard: § 112.9(a)
Monitoring Information	
Indicator: Fuel oil sulfur content	
Minimum Frequency: Annually, or whenever, # 2 fuel oil is added to storage tanks.	
Averaging Period: n/a	
Deviation Limit: Sulfur content = 0.7% maximum	
Basis of monitoring: A common way to determine SO ₂ emissions is by determining the amount (percentage) of sulfur in fuel combusted by an emission unit. This quantity along with stack flow rate and quantity of fuel combusted may be used to calculate the amount of SO ₂ emitted to the atmosphere. Minimum frequency dictated by infrequent operation of GRPAUX.	

Unit/Group/Process Information	
ID No.: GRPCOAL	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 40 CFR Part 60, Subpart Y	SOP Index No.: 60Y-74-08
Pollutant: OPACITY	Main Standard: § 60.254(a)
Monitoring Information	
Indicator: Opacity	
Minimum Frequency: Quarterly	
Averaging Period: Six minutes	
Deviation Limit: Maximum opacity = 20%	
<p>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. Minimum frequency dictated by coal feeder belts enclosed inside concrete coal silos or below grade in a tunnel.</p>	

Unit/Group/Process Information	
ID No.: GRPPBR262	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 106, Permits by Rule	SOP Index No.: PBR262
Pollutant: OPACITY	Main Standard: [G]§ 106.262
Monitoring Information	
Indicator: Visible emissions	
Minimum Frequency: Quarterly	
Averaging Period: Six minutes	
Deviation Limit: Maximum opacity = 5%	
<p>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.</p>	

Unit/Group/Process Information	
ID No.: GRPPBR472	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 106, Permits by Rule	SOP Index No.: PBR472
Pollutant: OPACITY	Main Standard: [G]§ 106.472
Monitoring Information	
Indicator: Liquid type or visible emissions	
Minimum Frequency: Monthly	
Averaging Period: n/a	
Deviation Limit: Liquid type or visible emissions	
<p>Basis of monitoring: 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 can not 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 opacity standard.</p>	

Unit/Group/Process Information	
ID No.: S1A&B	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 111, Visible Emissions	SOP Index No.: R1111
Pollutant: OPACITY	Main Standard: § 111.111(a)(1)(C)
Monitoring Information	
Indicator: Visible emissions	
Minimum Frequency: Monthly	
Averaging Period: n/a	
Deviation Limit: Maximum opacity = 15%	
<p>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. Minimum frequency dictated by infrequent operation of GRPAUX, and thus S1A&B.</p>	

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.: GRPBOIL123	
Control Device ID No.: ESP-1	Control Device Type: Wet or Dry Electrostatic Precipitator
Control Device ID No.: ESP-2	Control Device Type: Wet or Dry Electrostatic Precipitator
Control Device ID No.: ESP-3	Control Device Type: Wet or Dry Electrostatic Precipitator
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 111, Nonagricultural Processes	SOP Index No.: R1153
Pollutant: PM	Main Standard: § 111.153(b)
Monitoring Information	
Indicator: Opacity	
Minimum Frequency: 6 times per minute	
Averaging Period: 2-hour block	
Deviation Limit: Maximum opacity = 20%	

Basis of CAM: Opacity may be monitored as an indicator that Martin Lake Unit 1, 2 and 3 (ML123) are in compliance with the 0.10 lb/MMBtu PM emission rate limitation in 40 CFR §60.42(a)(1). This is confirmed by one-hour average PM emission rates determined by ML123 stack sampling tests versus the average of opacity readings recorded during the stack sampling tests. The data collected shows that PM emission rates are 50% or less of the NSPS D limitation when the average opacity is 20% or less.

Parameters that affect opacity measurements include particulate matter size and physical properties, presence of uncombined water in the exhaust gas, the continuous opacity monitoring system (COMS) itself, and stack exit diameter.

ML123 fires Texas lignite, subbituminous coal, or a combination of these. The units pulverize the coal, inject it into the combustion zone through low-NOX burners, and utilize staged over-fire air injection to further reduce NOX formation. ML123 utilizes electrostatic precipitators (ESP) to control PM emissions and wet flue gas desulfurization (FGD) scrubbers to control sulfur dioxide (SO₂) emissions.

Sufficiently high temperatures are maintained in the ML123 stacks to prevent water from condensing within the stacks. Therefore, the presence of uncombined water in the stack gas is not a significant factor in opacity measurements at ML123. The COMS at ML123 comply with regulatory requirements and performance standards in 40 CFR Part 75.

The ML123 data shows total PM (i.e., front-half and back-half) emission rates and corresponding opacity data. The data collected shows that when average opacity is 20% or less the corresponding total PM emission rates are less than 50% of the NSPS D limitation, which applies to only front-half PM emissions.

Considering that (1) three units (ML123) achieve relatively low total PM emission rates at 20% stack exit opacity, (2) and , that front-half PM rates are less than total PM rates, the deviation limit of 20% opacity provides sufficient continuous assurance that Martin Lake Units 1, 2 and 3 emissions comply with the NSPS D emission rate limitation.

Based on assessment of the data above, the continuous opacity monitoring ensures compliance with PM emission limits of 30 TAC §111.153(b) [0.3 lb/MMBtu] since the 40 CFR §60.42(a)(1) requirement is the more lenient of the two PM emission requirements.

Unit/Group/Process Information	
ID No.: GRPBOIL123	
Control Device ID No.: FGD-1	Control Device Type: Wet Scrubber
Control Device ID No.: FGD-2	Control Device Type: Wet Scrubber
Control Device ID No.: FGD-3	Control Device Type: Wet Scrubber
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 112, Sulfur Compounds	SOP Index No.: R200
Pollutant: SO ₂	Main Standard: § 112.8(a)
Monitoring Information	
Indicator: SO ₂ emission rate	
Minimum Frequency: The permit holder will collect at least four data values equally spaced over each hour.	
Averaging Period: 3 hour block	
Deviation Limit: Maximum SO ₂ emission rate = 3.0 lb/MMBtu heat input, averaged over a three hour period	
Basis of CAM: It is widely practiced and accepted to calibrate and use a portable analyzer or CEMS to measure SO ₂ 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.: GRPBOIL123	
Control Device ID No.: ESP-1	Control Device Type: Wet or Dry Electrostatic Precipitator
Control Device ID No.: ESP-2	Control Device Type: Wet or Dry Electrostatic Precipitator
Control Device ID No.: ESP-3	Control Device Type: Wet or Dry Electrostatic Precipitator
Applicable Regulatory Requirement	
Name: 40 CFR Part 60, Subpart D	SOP Index No.: 60D-LG
Pollutant: PM	Main Standard: § 60.42(a)(1)
Monitoring Information	
Indicator: Opacity	
Minimum Frequency: The permit holder will collect at least four data values equally spaced over each hour.	
Averaging Period: Six minutes	
Deviation Limit: Maximum 20% opacity except for one six-minute period per hour of not more than 27% opacity.	
<p>Basis of CAM: Opacity may be monitored as an indicator that Martin Lake Unit 1, 2 and 3 (ML123) are in compliance with the 0.10 lb/MMBtu PM emission rate limitation in 40 CFR §60.42(a)(1). This is confirmed by one-hour average PM emission rates determined by ML123 stack sampling tests versus the average of opacity readings recorded during the stack sampling tests. The data collected shows that PM emission rates are 50% or less of the NSPS D limitation when the average opacity is 20% or less.</p> <p>Parameters that affect opacity measurements include particulate matter size and physical properties, presence of uncombined water in the exhaust gas, the continuous opacity monitoring system (COMS) itself, and stack exit diameter.</p> <p>ML123 fires Texas lignite, subbituminous coal, or a combination of these. The units pulverize the coal, inject it into the combustion zone through low-NO_x burners, and utilize staged over-fire air injection to further reduce NO_x formation. ML123 utilizes electrostatic precipitators (ESP) to control PM emissions and wet flue gas desulfurization (FGD) scrubbers to control sulfur dioxide (SO₂) emissions.</p> <p>Sufficiently high temperatures are maintained in the ML123 stacks to prevent water from condensing within the stacks. Therefore, the presence of uncombined water in the stack gas is not a significant factor in opacity measurements at ML123. The COMS at ML123 comply with regulatory requirements and performance standards in 40 CFR Part 75.</p> <p>The ML123 data shows total PM (i.e., front-half and back-half) emission rates and corresponding opacity data. The data collected shows that when average opacity is 20% or less the corresponding total PM emission rates are less than 50% of the NSPS D limitation, which applies to only front-half PM emissions.</p> <p>Considering that (1) three units (ML123) achieve relatively low total PM emission rates at 20% stack exit opacity, (2) and , that front-half PM rates are less than total PM rates, the deviation limit of 20% opacity provides sufficient continuous assurance that Martin Lake Units 1, 2 and 3 emissions comply with the NSPS D emission rate limitation.</p>	

Unit/Group/Process Information	
ID No.: GRPBOIL123	
Control Device ID No.: ESP-1	Control Device Type: Wet or Dry Electrostatic Precipitator
Control Device ID No.: ESP-2	Control Device Type: Wet or Dry Electrostatic Precipitator
Control Device ID No.: ESP-3	Control Device Type: Wet or Dry Electrostatic Precipitator
Applicable Regulatory Requirement	
Name: 40 CFR Part 60, Subpart D	SOP Index No.: 60D-LG&SFF
Pollutant: PM	Main Standard: § 60.42(a)(1)
Monitoring Information	
Indicator: Opacity	
Minimum Frequency: The permit holder will collect at least four data values equally spaced over each hour.	
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: Opacity may be monitored as an indicator that Martin Lake Unit 1, 2 and 3 (ML123) are in compliance with the 0.10 lb/MMBtu PM emission rate limitation in 40 CFR §60.42(a)(1). This is confirmed by one-hour average PM emission rates determined by ML123 stack sampling tests versus the average of opacity readings recorded during the stack sampling tests. The data collected shows that PM emission rates are 50% or less of the NSPS D limitation when the average opacity is 20% or less.

Parameters that affect opacity measurements include particulate matter size and physical properties, presence of uncombined water in the exhaust gas, the continuous opacity monitoring system (COMS) itself, and stack exit diameter.

ML123 fires Texas lignite, subbituminous coal, or a combination of these. The units pulverize the coal, inject it into the combustion zone through low-NO_x burners, and utilize staged over-fire air injection to further reduce NO_x formation. ML123 utilizes electrostatic precipitators (ESP) to control PM emissions and wet flue gas desulfurization (FGD) scrubbers to control sulfur dioxide (SO₂) emissions.

Sufficiently high temperatures are maintained in the ML123 stacks to prevent water from condensing within the stacks. Therefore, the presence of uncombined water in the stack gas is not a significant factor in opacity measurements at ML123. The COMS at ML123 comply with regulatory requirements and performance standards in 40 CFR Part 75.

The ML123 data shows total PM (i.e., front-half and back-half) emission rates and corresponding opacity data. The data collected shows that when average opacity is 20% or less the corresponding total PM emission rates are less than 50% of the NSPS D limitation, which applies to only front-half PM emissions.

Considering that (1) three units (ML123) achieve relatively low total PM emission rates at 20% stack exit opacity, (2) and , that front-half PM rates are less than total PM rates, the deviation limit of 20% opacity provides sufficient continuous assurance that Martin Lake Units 1, 2 and 3 emissions comply with the NSPS D emission rate limitation.

Unit/Group/Process Information	
ID No.: GRPBOIL123	
Control Device ID No.: ESP-1	Control Device Type: Wet or Dry Electrostatic Precipitator
Control Device ID No.: ESP-2	Control Device Type: Wet or Dry Electrostatic Precipitator
Control Device ID No.: ESP-3	Control Device Type: Wet or Dry Electrostatic Precipitator
Applicable Regulatory Requirement	
Name: 40 CFR Part 60, Subpart D	SOP Index No.: 60D-SFF
Pollutant: PM	Main Standard: § 60.42(a)(1)
Monitoring Information	
Indicator: Opacity	
Minimum Frequency: The permit holder will collect at least four data values equally spaced over each hour.	
Averaging Period: Six minutes	
Deviation Limit: Maximum 20% opacity except for one six-minute period per hour of not more than 27% opacity.	
<p>Basis of CAM: Opacity may be monitored as an indicator that Martin Lake Unit 1, 2 and 3 (ML123) are in compliance with the 0.10 lb/MMBtu PM emission rate limitation in 40 CFR §60.42(a)(1). This is confirmed by one-hour average PM emission rates determined by ML123 stack sampling tests versus the average of opacity readings recorded during the stack sampling tests. The data collected shows that PM emission rates are 50% or less of the NSPS D limitation when the average opacity is 20% or less.</p> <p>Parameters that affect opacity measurements include particulate matter size and physical properties, presence of uncombined water in the exhaust gas, the continuous opacity monitoring system (COMS) itself, and stack exit diameter.</p> <p>ML123 fires Texas lignite, subbituminous coal, or a combination of these. The units pulverize the coal, inject it into the combustion zone through low-NO_x burners, and utilize staged over-fire air injection to further reduce NO_x formation. ML123 utilizes electrostatic precipitators (ESP) to control PM emissions and wet flue gas desulfurization (FGD) scrubbers to control sulfur dioxide (SO₂) emissions.</p> <p>Sufficiently high temperatures are maintained in the ML123 stacks to prevent water from condensing within the stacks. Therefore, the presence of uncombined water in the stack gas is not a significant factor in opacity measurements at ML123. The COMS at ML123 comply with regulatory requirements and performance standards in 40 CFR Part 75.</p> <p>The ML123 data shows total PM (i.e., front-half and back-half) emission rates and corresponding opacity data. The data collected shows that when average opacity is 20% or less the corresponding total PM emission rates are less than 50% of the NSPS D limitation, which applies to only front-half PM emissions.</p> <p>Considering that (1) three units (ML123) achieve relatively low total PM emission rates at 20% stack exit opacity, (2) and , that front-half PM rates are less than total PM rates, the deviation limit of 20% opacity provides sufficient continuous assurance that Martin Lake Units 1, 2 and 3 emissions comply with the NSPS D emission rate limitation.</p>	

Unit/Group/Process Information	
ID No.: GRPBOIL123	
Control Device ID No.: ESP-1	Control Device Type: Wet or Dry Electrostatic Precipitator
Control Device ID No.: ESP-2	Control Device Type: Wet or Dry Electrostatic Precipitator
Control Device ID No.: ESP-3	Control Device Type: Wet or Dry Electrostatic Precipitator
Applicable Regulatory Requirement	
Name: 40 CFR Part 60, Subpart D	SOP Index No.: 60D-LG
Pollutant: OPACITY	Main Standard: § 60.42(a)(2)
Monitoring Information	
Indicator: Opacity	
Minimum Frequency: The permit holder will collect at least four data values equally spaced over each hour.	
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.: GRPBOIL123	
Control Device ID No.: ESP-1	Control Device Type: Wet or Dry Electrostatic Precipitator
Control Device ID No.: ESP-2	Control Device Type: Wet or Dry Electrostatic Precipitator
Control Device ID No.: ESP-3	Control Device Type: Wet or Dry Electrostatic Precipitator
Applicable Regulatory Requirement	
Name: 40 CFR Part 60, Subpart D	SOP Index No.: 60D-LG&SFF
Pollutant: OPACITY	Main Standard: § 60.42(a)(2)
Monitoring Information	
Indicator: Opacity	
Minimum Frequency: The permit holder will collect at least four data values equally spaced over each hour.	
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.: GRPBOIL123	
Control Device ID No.: ESP-1	Control Device Type: Wet or Dry Electrostatic Precipitator
Control Device ID No.: ESP-2	Control Device Type: Wet or Dry Electrostatic Precipitator
Control Device ID No.: ESP-3	Control Device Type: Wet or Dry Electrostatic Precipitator
Applicable Regulatory Requirement	
Name: 40 CFR Part 60, Subpart D	SOP Index No.: 60D-SFF
Pollutant: OPACITY	Main Standard: § 60.42(a)(2)
Monitoring Information	
Indicator: Opacity	
Minimum Frequency: The permit holder will collect at least four data values equally spaced over each hour.	
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.: GRPBOIL123	
Control Device ID No.: FGD-1	Control Device Type: Wet Scrubber
Control Device ID No.: FGD-2	Control Device Type: Wet Scrubber
Control Device ID No.: FGD-3	Control Device Type: Wet Scrubber
Applicable Regulatory Requirement	
Name: 40 CFR Part 60, Subpart D	SOP Index No.: 60D-LG
Pollutant: SO ₂	Main Standard: § 60.43(a)(2)
Monitoring Information	
Indicator: SO ₂ emission rate	
Minimum Frequency: The permit holder will collect at least four data values equally spaced over each hour.	
Averaging Period: Three hours	
Deviation Limit: Maximum SO ₂ Emission Rate = 1.2lb/MMBtu heat input, averaged over a three hour period	
Basis of CAM: It is widely practiced and accepted to calibrate and use a portable analyzer or CEMS to measure SO ₂ 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.: GRPBOIL123	
Control Device ID No.: FGD-1	Control Device Type: Wet Scrubber
Control Device ID No.: FGD-2	Control Device Type: Wet Scrubber
Control Device ID No.: FGD-3	Control Device Type: Wet Scrubber
Applicable Regulatory Requirement	
Name: 40 CFR Part 60, Subpart D	SOP Index No.: 60D-LG&SFF
Pollutant: SO ₂	Main Standard: § 60.43(a)(2)
Monitoring Information	
Indicator: SO ₂ emission rate	
Minimum Frequency: The permit holder will collect at least four data values equally spaced over each hour.	
Averaging Period: Three hours	
Deviation Limit: Maximum SO ₂ Emission Rate = 1.2lb/MMBtu heat input, averaged over a three hour period	
Basis of CAM: It is widely practiced and accepted to calibrate and use a portable analyzer or CEMS to measure SO ₂ 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.: GRPBOIL123	
Control Device ID No.: FGD-1	Control Device Type: Wet Scrubber
Control Device ID No.: FGD-2	Control Device Type: Wet Scrubber
Control Device ID No.: FGD-3	Control Device Type: Wet Scrubber
Applicable Regulatory Requirement	
Name: 40 CFR Part 60, Subpart D	SOP Index No.: 60D-SFF
Pollutant: SO ₂	Main Standard: § 60.43(a)(2)
Monitoring Information	
Indicator: SO ₂ emission rate	
Minimum Frequency: The permit holder will collect at least four data values equally spaced over each hour.	
Averaging Period: Three hours	
Deviation Limit: Maximum SO ₂ Emission Rate = 1.2lb/MMBtu heat input, averaged over a three hour period	
Basis of CAM: It is widely practiced and accepted to calibrate and use a portable analyzer or CEMS to measure SO ₂ 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.: GRPFAS	
Control Device ID No.: BG-FA1A	Control Device Type: Fabric Filter
Control Device ID No.: BG-FA1B	Control Device Type: Fabric Filter
Control Device ID No.: BG-FA2A	Control Device Type: Fabric Filter
Control Device ID No.: BG-FA2B	Control Device Type: Fabric Filter
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 111, Nonagricultural Processes	SOP Index No.: R1151
Pollutant: OPACITY	Main Standard: § 111.151(a) & (b)
Monitoring Information	
Indicator: Visible emissions	
Minimum Frequency: Daily	
Averaging Period: n/a	
Deviation Limit: Maximum opacity = 20%	
<p>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.</p>	

Unit/Group/Process Information	
ID No.: GRPFASVENT	
Control Device ID No.: BG-FA1A	Control Device Type: Fabric Filter
Control Device ID No.: BG-FA1B	Control Device Type: Fabric Filter
Control Device ID No.: BG-FA2A	Control Device Type: Fabric Filter
Control Device ID No.: BG-FA2B	Control Device Type: Fabric Filter
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 111, Visible Emissions	SOP Index No.: R1111
Pollutant: OPACITY	Main Standard: § 111.111(a)(1)(B)
Monitoring Information	
Indicator: Visible emissions	
Minimum Frequency: Daily	
Averaging Period: n/a	
Deviation Limit: Maximum opacity = 20%	
<p>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.</p>	

Unit/Group/Process Information	
ID No.: GRPSTACK	
Control Device ID No.: ESP-1	Control Device Type: Wet or Dry Electrostatic Precipitator
Control Device ID No.: ESP-2	Control Device Type: Wet or Dry Electrostatic Precipitator
Control Device ID No.: ESP-3	Control Device Type: Wet or Dry Electrostatic Precipitator
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 111, Visible Emissions	SOP Index No.: R1111
Pollutant: OPACITY	Main Standard: § 111.111(a)(1)(B)
Monitoring Information	
Indicator: Opacity	
Minimum Frequency: six times per minute	
Averaging Period: six-minute	
Deviation Limit: Maximum opacity = 20%	
<p>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.</p>	

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