

Statement of Basis of the Federal Operating Permit

Graphic Packaging International, LLC

Site Name: Texarkana Mill
Physical Location: 9978 FM 3129
Nearest City: Queen City
County: Cass

Permit Number: O1378
Project Type: Renewal

The North American Industry Classification System (NAICS) Code: 32211
NAICS Name: Pulp Mills

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: October 1, 2025

Operating Permit Basis of Determination

Permit Area Process Description

Operations include the processing and/or storage of both softwood and hardwood chips, logs, and railroad cross-ties derived fuel (RDF). Chip resources include both purchased chips and chips produced on site. Debarked logs are processed into chips at the chipper and conveyed to the storage pile. Screens are used to remove fines, dust, and oversized chips from the acceptable chips. Accepted chips are conveyed to the chip pile and then to the digesters. Oversized chips are sent to the rechipper and fines from the screens are sent to the bark crusher and to the bark silo. Purchased chips are received via truck or railcar and either conveyed directly to the chip storage pile, or to screens and then to the chip pile.

Bark is removed from the logs at the debarking drum. Bark is then crushed and conveyed to the bark silo for use in PB02. The RDF, which is also used in PB02, is received in chip form and stored in a separate pile or in the bark silo and conveyed to the boiler via the bark conveyor system.

Power Operations

Power operations at the Mill include two steam and/or power generating units, two recovery furnaces, and associated processes and equipment. The power and recovery furnaces, capable of firing multiple fuels, provide steam for mill production processes and power generation. The recovery furnaces are involved in the Mill chemical recovery operation and their operations and emissions are discussed in that section of this process description. The No. 1 Power Boiler (PB01) is primarily a gas-fired combustion unit with a maximum design firing rate of 946 MMBtu/hr based on a higher heating value that is also capable of burning fuel oil.

Power Boiler No. 2 (PB02) is a combination bark boiler that is permitted to fire natural gas; Nos. 2, 4, and 6 fuel oils; bark and wood materials; primary clarifier underflow fiber cake; and railroad crossties. The maximum firing rate for this boiler is 1,087 MMBtu/hr, which occurs when firing bark and natural gas. The maximum production for PB02 is 775,000 lb/hr (24-hour averaging time).

PB02 exhaust gas is vented to a cyclone and then a wet scrubber to control SO₂ and PM before being emitted to the atmosphere. PB02 is the primary control device for high volume, low concentration (HVLC) gases and also serves as the backup to the NCG Oxidation Unit for low volume, high concentration (LVHC) gases.

Fuels for the power boilers (Power Boiler Nos. 1 and 2) are either generated on-site, delivered by truck or rail, or transported to the Mill in the natural gas utility line. Fuel storage facilities at the Texarkana Mill include the bark silo and the fuel oil storage tank.

Chemical Recovery Operations

The Mill operates two liquor recovery systems that process kraft black liquor from the hardwood and softwood pulping operations. Weak liquor from the pulping process is collected in separate weak black liquor storage tanks, one for the No. 1 system and one for the No. 2 system. The liquor from each system is sent to the multiple effect evaporator set associated with that system. Black liquor from these evaporators is then sent to heavy liquor storage before being further processed in the concentrators. Emissions from the No. 1 and No. 2 Multiple Effect Evaporator Sets and No. 1 and No. 2 Concentrators are collected and controlled by the NCG system. The foul condensates are collected in the evaporator hotwells and routed to the sewer and wastewater treatment system. The combined contaminated condensate is collected and may be used as shower water in the brown stock washers or sewered.

Tall oil soap is produced as a byproduct of the evaporation process. Liquor is extracted from an intermediate stage of each evaporator system and sent to dedicated desoaping separators where tall oil soap is skimmed from the top of the tank. The soap is then concentrated and kept in the No. 1 and No. 2 Soap Storage Tanks prior to loading into trucks for offsite processing.

The Mill recovers cooking chemicals by firing concentrated black liquor into either of the two indirect contact recovery furnaces (No. 1 and No. 2 Recovery Furnaces, RB01 and RB02, respectively). The organics from the liquor are combusted to generate heat for process steam, while the inorganic chemicals collect in the bottom of the furnaces in the form of molten smelt. The recovery furnaces are also permitted to fire natural gas, primarily during start-up operations. Each furnace operates as an independent system that includes: a smelt tank, electrostatic precipitator (ESP) for PM control, and two exhaust stacks. Ash from the ESPs is returned to the system in the Precipitator Ash Tanks (one for each

recovery furnace) that are vented to the smelt dissolving tank scrubbers. RB01 is authorized to fire 54.5 tons of black liquor solid per hour (TBLS/hr), while RB02 is authorized to fire 99.25 TBLS/hr.

The molten smelt from each recovery furnace is directed to one of two dedicated smelt tanks, where it is dissolved into weak wash or water to form green liquor, a preliminary step to regenerating white liquor in the causticizing operation. The No. 1 and No. 2 Smelt Dissolving Tanks (SM01 and SM02, respectively) are equipped with scrubbers with mist eliminators. The control devices are designed to capture particulates and TRS compounds and return them to the smelt tanks. Weak wash, an aqueous solution of sodium hydroxide, sodium sulfide, and sodium carbonate, is used as the scrubbing medium.

The dump tank handles spills in the recovery furnace area. Liquor collected is sent to the boil out tank, where the liquor is temporarily stored and then returned to the process. The boil out tank is also used during cleaning of the evaporators. To clean the evaporators, the weak black liquor feed is replaced with mill supply water and the liquor is diverted to the boil out tank. From the boil out tank, the liquor is diverted to the weak liquor storage tanks or to the concentrators.

Caustic Plant Operations

In the causticizing and lime recovery process, green liquor from the smelt dissolving tanks is clarified and then mixed with lime (CaO) in the slaker to produce white liquor for use in the pulp mill digesting operations. Dregs from the green liquor clarifiers are sent to the dregs washer and emissions from the No. 1 Slaker (LS01) and No. 2 (LS02) are routed to non-venting water eductors. Any unreacted particles (grit) in the slaker are removed for disposal.

The sodium carbonate in the green liquor reacts with the Ca(OH)_2 to form white liquor (NaOH and Na_2S) and lime mud (CaCO_3) in the causticizers. This white liquor/lime mud slurry is then clarified to separate the white liquor from the lime mud. The white liquor is sent to the digesters, and the lime mud is thickened, and burned in one of the two lime kilns to form CaO. PM emissions from the No. 1 Lime Kiln (LK01) and No. 2 Lime Kiln (LK02) are controlled with a venturi scrubber before exhausting to the atmosphere and the kilns are designed to operate at temperatures and excess oxygen conditions favoring complete combustion. TRS emissions are controlled by good washing on the precoat filters and by good combustion practices in the kilns.

Both lime kilns can fire either natural gas or Nos. 2, 4, and 6 fuel oil. LK01 has a maximum permitted lime capacity of 228 tons of lime per day and a burner rating of 105 MMBtu/hr on a higher heating value (HHV) basis. The annual firing rate is permitted at 420,480 MMBtu/yr for fuel oil and 550,000 MMBtu/yr for natural gas. LK02 has a maximum permitted lime capacity of 400 TCaO per day. The short-term maximum fuel firing rate for LK02 is 132.3 MMBtu/hr (oil firing) and the average firing rate is 113.3 MMBtu/hr (oil or natural gas firing).

Reburned lime from the lime kilns is transferred to storage in the No. 1 and No. 2 Hot Lime Silos via pan conveyors that feed into closed bucket elevators prior to being added to the slaker. The Mill also purchases fresh lime, which is conveyed from the delivery trucks to either lime silo and combined with the reburned lime. The dust from unloading activities, the lime silos, and the closed conveying to the kilns is controlled with the No. 1 and No. 2 Lime System Baghouses (BG01 and BG02).

Non-Condensable Gas System

Non-condensable gases (NCGs) from the Mill's pulping area, evaporator systems, and turpentine system are sent through a mist eliminator and then combusted in the NCG Oxidation Unit (NCG01). The NCG system consists of the necessary piping to collect the gases from batch sources and continuous sources, an incinerator to combust the gases, and a caustic scrubber to remove SO_2 prior to discharge to the atmosphere. NCGs can also be combusted in Power Boiler No. 2. The pipelines that collect the NCGs from the batch and continuous sources are separate and can be operated as independent collection systems.

Batch digester sources are routed to the NCG01 from the blow heat recovery system. The NCG system is equipped with sufficient condensing and gas cooling capacity to precondition these gases for collection and combustion. The non-condensable gas flow rate from the batch digester sources is highly variable; destruction of the sulfur compounds is ensured during low flow periods by adding sufficient natural gas to maintain the minimum permitted incinerator temperature. The NCG Oxidation Unit has a design maximum natural gas firing rate of 470 lb natural gas per hour. The continuous sources of NCGs, which produce a relatively constant flow of gases to the NCG system, include a turpentine condenser system, two multiple effect evaporator hotwells, one hotwell from the No. 1 and No. 2 concentrators, and the Central Foul Condensate Collection Tank.

Pulping Operations

The Texarkana Mill has two pulping lines: A-line and B-line. Historically, both hardwood and softwood (pine) fiber have been processed on each line. Current operations typically consist of hardwood on A-line and softwood on B-line. These two lines have a total of 16 batch digesters that are used to cook the hardwood and softwood chips in a mixture of white liquor, black liquor, and steam. At the end of the cook cycle, the digester blow valve is opened and the pulp slurry is deknotted, washed in the vacuum drum brown stock washers, screened, and thickened prior to being sent to the bleach plant. The NCGs from the digesters and blow tanks are sent through a series of condensers and then routed to the NCG system.

The vacuum drum washer system is a three-stage countercurrent washing system, with associated filtrate tanks. The filtrate tanks on the A and B-line washer systems primarily vent through either a foam tank and/or a foam breaker. The B-line also includes an oxygen delignification system between pulp washing and screening and prior to the bleaching process. The oxygen delignification system includes a two-stage oxygen reactor system that uses oxidized white liquor to reduce the lignin in the pulp, followed by a blow tank and press system. Delignifying the pulp reduces the amount of bleaching chemicals required in the bleaching process. The high volume low concentration (HVLC) gases generated from those systems are controlled by the power boilers.

When the pulp slurry from the batch digesters is blown into the blow tanks, steam flashes from the liquor due to the drop in pressure. The flash steam, including organics, is routed to the blow heat accumulator (BHA) for heat recovery. The blow steam condensate is sent to a collection tank, but the low volume high concentration (LVHC) non-condensable gases are routed to the LVHC collection and treatment system, where they are conditioned and incinerated in the NCG Oxidation Unit or Power Boiler No. 2.

Turpentine is recovered as a byproduct from the pulping of pine. Turpentine and steam are condensed from the digester relief vapors and sent to one of two decanters for the liquid-phase separation. The turpentine decanters and storage tank are also vented to the LVHC System. Turpentine underflow from the Turpentine Decanters and Storage Tank is routed to the discharge of the Central Foul Condensate Collection Tank.

Bleaching Operations

Washed pulp from the pulp lines is bleached in the A- and B-lines of the bleach plant. Both lines are capable of bleaching hardwood or softwood pulp. Each bleaching line consists of four stages; each stage consists of a reaction tower, washer, and seal tank. Bleaching is achieved with chlorine dioxide (ClO_2), supplemented with other bleaching agents, such as oxygen and hydrogen peroxide, prior to the pulp being sent to the papermaking areas.

Each bleach plant line routes all chlorine dioxide towers, washers, and seal pits to a scrubber for chlorine/chlorine dioxide control. The A-line has one scrubber (BP16) and the B-line has two scrubbers (BP14 and BP15). The A-line scrubber is capable of controlling both bleaching lines. When the B-line is not operating, the A-line bleach plant vents can be routed to the B-line scrubbers.

Chlorine dioxide is generated on-site using sodium chlorate, methanol, and sulfuric acid. Methanol is stored in the fixed roof Methanol Tank (EPN BP0351) that has a capacity of 15,000 gallons and a maximum annual throughput of 1,508,296 gallons. The bleach plant scrubber system controls emissions created during chlorine dioxide generation and storage.

Papermaking Operations

The Texarkana Mill primarily produces paperboard for packaging material; the Mill operates two paper machines, No. 1 and No.3 Paper Machines, that produce the paperboard. The machines draw bleached hardwood and softwood pulp from the pulp mill high-density storage tanks where water is used to convert the pulp into a dilute slurry. The pulp is cleaned and screened to remove dirt and foreign debris. The pulp slurry is pumped to the paper machine headbox to begin the formation of the sheet on the fourdrinier section of the machine. The slurry is gradually dewatered on the fourdrinier using a combination of gravity flow, suction boxes, and foil blades. The wet sheet is further dewatered as it passes through a series of press rolls before being transferred into the dryer by moving belts. At this point, the sheet contains greater than 50% moisture.

The dryer section consists of a series of steam-heated canisters. The sheet passes in a serpentine fashion through the dryers where the moisture is evaporated as the sheet contacts the surface of the canisters. After initial drying, the sheet is coated with a slurry of liquid starch and other additives and the drying process is continued.

After drying, the sheet passes through the calendar stacks to smooth the surface and reduce the caliper to control thickness. Depending upon the grade of paper produced, the sheet can be given surface applications of clay coating. The

sheet is again dried with steam and/or infrared dryers. The sheet is given a final calendaring operation to produce a glossy surface to enhance printability. The paper is cut to size on the winder to meet customer specifications.

Paper from the paper machines can be coated using either the No. 5 or No. 7 Extruder. The raw material for the extruders consists of base stock rolls from the paper machines and from other mills. The rolls are loaded into the unwinder where the sheet is fed into the extruder. The sheet is heated by a gas flame before molten polyethylene or PET (polyester) is applied. Following the initial lamination, the sheet receives a second application on the reverse side to provide a coat-two-side sheet. The sheet can be sold as coat-one-side or coat-two-side, depending upon the final use of the product. The laminated rolls are shipped to off-site locations for further fabrication.

Wastewater Collection and Treatment

Process wastewater is collected throughout the Mill in drains and open channels except for the pulping condensates, which are hard-piped to the wastewater treatment system. The wastewater treatment system provides complete treatment for the process wastewater, which consists of primary clarification, aeration stabilization, and polishing. Other inorganic sludges are clarified in settling ponds and dredged to surface impoundments. The pulping condensates are discharged from the hard-pipe below the surface in order to comply with the pulping condensates portion of 40 CFR 63, Subpart S (§63.446). Effluent passes into two aeration stabilization basins for treatment by oxygen injection, fine bubble aeration, and finally surface aeration. Treated wastewater is stored in a large holding pond where final polishing takes place. The wastewater is released to Baker's Slough then to the Sulphur River. Treated wastewater is discharged by hold-and-release from Outfall 001 depending upon the flow rate from Lake Wright Patman located upstream on the Sulphur River. Storm water enters the system at various locations and is treated in the wastewater system.

Additional Mill Operations

The Mill maintains miscellaneous operations that support the pulping and paperboard production areas. Operations include fuel storage, liquor storage, painting operations, cooling operations, and other support operations.

The Fuel Oil Tank (FOT) is used for bulk fuel oil storage at the Texarkana Mill. Fuel oils No. 2, 4, and 6 can be stored in FOT for use in mill combustion sources including boilers, lime kilns, and recovery furnaces. The tank has an approximate capacity of 921,000 gallons and can also be used to store white, green, or black liquor. Several other tanks are used to store various liquors (white, weak or heavy black liquor) on site. These include the No. 1, No. 2, and No. 3 Spare Liquor Storage Tanks, and the Spill Collection Tank.

Painting operations at the Mill include maintenance activities in the Paint Yard and on fixed, immovable structures in the Mill itself. Paint guns are used to apply the coatings and a distiller is used to recover thinners/cleaners used in the painting process so that it can be recycled.

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, NO _x , HAPS, CO
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Reading State of Texas's Federal Operating Permit

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

Administrative Code (TAC) Chapter 122, requires adherence with NSR requirements of 30 TAC Chapter 116, and finally indicates the permit number and the issuance date.

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

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

General Terms and Conditions

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

Special Terms and Conditions

Emissions Limitations and Standards, Monitoring and Testing, and Recordkeeping and Reporting. The TCEQ has designated certain applicable requirements as site-wide requirements. A site-wide requirement is a requirement that applies uniformly to all the units or activities at the site. Units with only site-wide requirements are addressed on Form OP-REQ1 and are not required to be listed separately on an OP-UA Form or Form OP-SUM. Form OP-SUM must list all units addressed in the application and provide identifying information, applicable OP-UA Forms, and preconstruction authorizations. The various OP-UA Forms provide the characteristics of each unit from which applicable requirements are established. Some exceptions exist as a few units may have both site-wide requirements and unit specific requirements.

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

Attachments

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

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

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

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

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

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

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

Appendix A

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

Appendix B

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

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

The site contains stationary vents with a flowrate less than 100,000 actual cubic feet per minute (acfm) and constructed after January 31, 1972 which are limited, over a six-minute average, to 20% opacity as required by 30 TAC § 111.111(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)	Yes
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)	No
Title V (Federal Operating Permits) of the CAA	Yes
Title VI (Stratospheric Ozone Protection) of the CAA	Yes
CSAPR (Cross-State Air Pollution Rule)	No
Federal Implementation Plan for Regional Haze (Texas SO ₂ Trading Program)	No

Basis for Applying Permit Shields

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

Insignificant Activities and Emission Units

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

De Minimis Sources

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

Miscellaneous Sources

2. Office activities such as photocopying, blueprint copying, and photographic processes.
3. Outdoor barbecue pits, campfires, and fireplaces.
4. Storage and handling of sealed portable containers, cylinders, or sealed drums.
5. Vehicle exhaust from maintenance or repair shops.
6. Storage and use of non-VOC products or equipment for maintaining motor vehicles operated at the site (including but not limited to, antifreeze and fuel additives).
7. Air contaminant detectors and recorders, combustion controllers and shut-off devices, product analyzers, laboratory analyzers, continuous emissions monitors, other analyzers and monitors, and emissions associated with sampling activities. Exception to this category includes sampling activities that are deemed fugitive emissions and under a regulatory leak detection and repair program.
8. Steam vents, steam leaks, and steam safety relief valves, provided the steam (or boiler feedwater) has not contacted other materials or fluids containing regulated air pollutants other than boiler water treatment chemicals.
9. Storage of water that has not contacted other materials or fluids containing regulated air pollutants other than boiler water treatment chemicals.
10. Well cellars.
11. Fire or emergency response equipment and training, including but not limited to, use of fire control equipment including equipment testing and training, and open burning of materials or fuels associated with firefighting training.
12. Equipment used exclusively for the melting or application of wax.
13. Instrument systems utilizing air, natural gas, nitrogen, oxygen, carbon dioxide, helium, neon, argon, krypton, and xenon.
14. Battery recharging areas.

Sources Authorized by 30 TAC Chapter 106, Permits by Rule

15. Sources authorized by §106.102: Combustion units designed and used exclusively for comfort heating purposes employing liquid petroleum gas, natural gas, solid wood, or distillate fuel oil.
16. Sources authorized by §106.122: Bench scale laboratory equipment and laboratory equipment used exclusively for chemical and physical analysis, including but not limited to, assorted vacuum producing devices and laboratory fume hoods.
17. Sources authorized by §106.141: Batch mixers with rated capacity of 27 cubic feet or less for mixing cement, sand, aggregate, lime, gypsum, additives, and/or water to produce concrete, grout, stucco, mortar, or other similar products.
18. Sources authorized by §106.143: Wet sand and gravel production facilities that obtain material from subterranean and subaqueous beds where the deposits of sand and gravel are consolidated granular materials resulting from natural disintegration of rock and stone and have a production rate of 500 tons per hour or less.

19. Sources authorized by §106.148: Railcar or truck unloading of wet sand, gravel, aggregate, coal, lignite, and scrap iron or scrap steel (but not including metal ores, metal oxides, battery parts, or fine dry materials) into trucks or other railcars for transportation to other locations.
20. Sources authorized by §106.149: Sand and gravel production facilities that obtain material from deposits of sand and gravel consisting of natural disintegration of rock and stone, provided that crushing or breaking operations are not used and no blasting is conducted to obtain the material.
21. Sources authorized by §106.161: Animal feeding operations which confine animals in numbers specified and any associated on-site feed handling and/or feed millings operations, not including caged laying and caged pullet operations.
22. Sources authorized by §106.162: Livestock auction sales facilities.
23. Sources authorized by §106.163: All animal racing facilities, domestic animal shelters, zoos, and their associated confinement areas, stables, feeding areas, and waste collection and treatment facilities, other than incineration units.
24. Sources authorized by §106.229: Equipment used exclusively for the dyeing or stripping of textiles.
25. Sources authorized by §106.241: Any facility where animals or poultry are slaughtered and prepared for human consumption provided that waste products such as blood, offal, and feathers are stored in such a manner as to prevent the creation of a nuisance condition and these waste products are removed from the premises daily or stored under refrigeration.
26. Sources authorized by §106.242: Equipment used in eating establishments for the purpose of preparing food for human consumption.
27. Sources authorized by §106.243: Smokehouses in which the maximum horizontal inside cross-sectional area does not exceed 100 square feet.
28. Sources authorized by §106.244: Ovens, mixers, blenders, barbecue pits, and cookers if the products are edible and intended for human consumption.
29. Sources authorized by §106.266: Vacuum cleaning systems used exclusively for industrial, commercial, or residential housekeeping purposes.
30. Sources authorized by §106.301: Aqueous fertilizer storage tanks.
31. Sources authorized by §106.313: All closed tumblers used for the cleaning or deburring of metal products without abrasive blasting, and all open tumblers with a batch capacity of 1,000 lbs. or less.
32. Sources authorized by §106.316: Equipment used for inspection of metal products.
33. Sources authorized by §106.317: Equipment used exclusively for rolling, forging, pressing, drawing, spinning, or extruding either hot or cold metals by some mechanical means.
34. Sources authorized by §106.318: Die casting machines.
35. Sources authorized by §106.319: Foundry sand mold forming equipment to which no heat is applied.
36. Sources authorized by §106.331: Equipment used exclusively to package pharmaceuticals and cosmetics or to coat pharmaceutical tablets.
37. Sources authorized by §106.333: Equipment used exclusively for the mixing and blending of materials at ambient temperature to make water-based adhesives.
38. Sources authorized by §106.372: Any air separation or other industrial gas production, storage, or packaging facility. Industrial gases, for purposes of this list, include only oxygen, nitrogen, helium, neon, argon, krypton, and xenon.
39. Sources authorized by §106.391: Presses used for the curing of rubber products and plastic products.
40. Sources authorized by §106.394: Equipment used for compression molding and injection molding of plastics.
41. Sources authorized by §106.414: Equipment used exclusively for the packaging of lubricants or greases.
42. Sources authorized by §106.415: Laundry dryers, extractors, and tumblers used for fabrics cleaned with water solutions of bleach or detergents.
43. Sources authorized by §106.431: Equipment used exclusively to mill or grind coatings and molding compounds where all materials charged are in paste form.
44. Sources authorized by §106.432: Containers, reservoirs, or tanks used exclusively for dipping operations for coating objects with oils, waxes, or greases where no organic solvents, diluents, or thinners are used; or dipping operations for applying coatings of natural or synthetic resins which contain no organic solvents.
45. Sources authorized by §106.451: Blast cleaning equipment using a suspension of abrasives in water.
46. Sources authorized by §106.453: Equipment used for washing or drying products fabricated from metal or glass, provided no volatile organic materials are used in the process and no oil or solid fuel is burned.
47. Sources authorized by §106.471: Equipment used exclusively to store or hold dry natural gas.
48. Sources authorized by §106.531: Sewage treatment facilities, excluding combustion or incineration equipment, land farms, or grease trap waste handling or treatment facilities.

Determination of Applicable Requirements

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

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

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

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

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

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

Operational Flexibility

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

Determination of Applicable Requirements

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
FIREPMP4	40 CFR Part 60, Subpart IIII	60IIII-01	Applicability Date = Stationary CI ICE commenced construction, reconstruction, or modification after 07/11/2005. Exemptions = The CI ICE is not exempt due to national security, testing at an engine test cell/stand or as a temporary replacement. Service = CI ICE is a fire-pump engine, an emergency engine certified to National Fire Protection Association requirements. Commencing = CI ICE was reconstructed after 07/11/2005 (per §60.15) Manufacture Date = Date of manufacture was after 07/01/2006. Diesel = Diesel fuel is used. Displacement = Displacement is less than 10 liters per cylinder. Model Year = CI ICE was manufactured in model year 2013. Kilowatts = Power rating is greater than or equal to 130 KW and less than or equal to 368 KW. Standard = The emergency CI ICE does not meet the Tier 1, 2, 3, or 4 standards applicable to non-emergency engines (for the same KW and model year) Compliance Option = Engine certified to meet the emission standards in §60.4204(e) or §60.4205(f), as applicable.	-- Affected Pollutant - CO: Added Main Standard § 60.4205(c)-Table 4 Added Related Standard § 60.4205(f) Added Related Standard § 60.4206 Added Related Standard § 60.4207(b) Added Related Standard § 60.4211(e) Added Related Standard § 60.4211(e)(1) Added Related Standard [G]§ 60.4211(f) Added Monitoring/Testing § 60.4209(a) Added Recordkeeping § 60.4214(b) Added Reporting [G]§ 60.4214(d)
FIREPMP4	40 CFR Part 63, Subpart ZZZZ	63ZZZZ-01	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 250 HP and less than 300 HP. Construction/Reconstruction Date = Commenced construction or reconstruction on or after June 12, 2006. Nonindustrial Emergency Engine = Stationary RICE is not defined in 40 CFR §63.6675 as a residential emergency RICE, a commercial emergency RICE, or an institutional emergency RICE. Service Type = Emergency use where the RICE 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	
FIREPMPNO	40 CFR Part 60, Subpart IIII	60IIII-01	Applicability Date = Stationary CI ICE commenced construction, reconstruction, or modification after 07/11/2005. Exemptions = The CI ICE is not exempt due to national security, testing at an engine test cell/stand or as a temporary replacement. Service = CI ICE is a fire-pump engine, an emergency engine certified to National Fire Protection Association requirements. Commencing = CI ICE was reconstructed after 07/11/2005 (per §60.15) Manufacture Date = Date of manufacture was after 07/01/2006.	CO: The rule citations were determined from an analysis of the rule text and the basis of determination.

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
			Diesel = Diesel fuel is used. Displacement = Displacement is less than 10 liters per cylinder. Generator Set = The CI ICE is not a generator set engine. Model Year = CI ICE was manufactured in model year 2013. Install Date = The CI ICE was installed in 2012 through 2015. Kilowatts = Power rating is greater than or equal to 130 KW and less than or equal to 368 KW. Standard = The emergency CI ICE does not meet the Tier 1, 2, 3, or 4 standards applicable to non-emergency engines (for the same KW and model year) Compliance Option = Engine certified to meet the emission standards in §60.4204(e) or §60.4205(f), as applicable.	
FIREPMPNO	40 CFR Part 63, Subpart ZZZZ	63ZZZZ-01	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 250 HP and less than 300 HP. Construction/Reconstruction Date = Commenced construction or reconstruction on or after June 12, 2006. Nonindustrial Emergency Engine = Stationary RICE is not defined in 40 CFR §63.6675 as a residential emergency RICE, a commercial emergency RICE, or an institutional emergency RICE. Service Type = Emergency use where the RICE 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	
LKENG1	40 CFR Part 60, Subpart IIII	60IIII-01	Applicability Date = Stationary CI ICE commenced construction, reconstruction, or modification on or before 07/11/2005.	
LKENG1	40 CFR Part 63, Subpart ZZZZ	63ZZZZ-01	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 less than 100 HP. Construction/Reconstruction Date = Commenced construction or reconstruction before December 19, 2002. Service Type = Normal use. Stationary RICE Type = Compression ignition engine	
LKENG2	40 CFR Part 60, Subpart IIII	60IIII-01	Applicability Date = Stationary CI ICE commenced construction, reconstruction, or modification on or before 07/11/2005.	
LKENG2	40 CFR Part 63, Subpart ZZZZ	63ZZZZ-01	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 less than 100 HP.	

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
			Construction/Reconstruction Date = Commenced construction or reconstruction before December 19, 2002. Service Type = Normal use. Stationary RICE Type = Compression ignition engine	
WPEMERGEN	40 CFR Part 60, Subpart IIII	60IIII-01	Applicability Date = Stationary CI ICE commenced construction, reconstruction, or modification after 07/11/2005. Exemptions = The CI ICE is not exempt due to national security, testing at an engine test cell/stand or as a temporary replacement. Service = CI ICE is an emergency engine. Commencing = CI ICE was newly constructed after 07/11/2005 Manufacture Date = Date of manufacture was after 04/01/2006. Diesel = Diesel fuel is used. Displacement = Displacement is less than 10 liters per cylinder and engine is a constant-speed engine. Model Year = CI ICE was manufactured in model year 2017 or later. Kilowatts = Power rating is greater than or equal to 75 KW and less than 130 KW. AECD = The CI ICE is not equipped with auxiliary emission control devices (AECDs) pursuant to the requirements of 40 CFR 1039.665 Standard = The emergency CI ICE meets the Tier 1, 2, 3, or 4 standards applicable to non-emergency engines (for the same KW and model year) Compliance Option = The CI ICE and control device is installed, configured, operated, and maintained according to the manufacturer's emission-related written instructions.	
WPEMERGEN	40 CFR Part 63, Subpart ZZZZ	63ZZZZ-01	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 on or after June 12, 2006. Nonindustrial Emergency Engine = Stationary RICE is not defined in 40 CFR §63.6675 as a residential emergency RICE, a commercial emergency RICE, or an institutional emergency RICE. Service Type = Emergency use where the RICE 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	
BP0351	40 CFR Part 60, Subpart Kb	60Kb-01	Product Stored = Volatile organic liquid Storage Capacity = Capacity is greater than or equal to 10,600 gallons but less than 19,813 gallons (capacity is greater than 40,000 liters but less than or equal to 75,000 liters)	

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
BP0368	40 CFR Part 60, Subpart Kb	60Kb-01	Product Stored = Stored product other than volatile organic liquid or petroleum liquid	
FOT	40 CFR Part 60, Subpart Kb	60Kb-01	Product Stored = Volatile organic liquid Storage Capacity = Capacity is greater than or equal to 39,890 gallons (151,000 liters) WW Tank Control = The storage vessel is not using 40 CFR 63, subpart WW to comply with 40 CFR 60, subpart Kb Maximum True Vapor Pressure = True vapor pressure is less than 0.5 psia	
GRP-SMTANK	40 CFR Part 60, Subpart Kb	60Kb-01	Product Stored = Petroleum liquid (other than petroleum or condensate) Storage Capacity = Capacity is less than 10,600 gallons (40,000 liters)	
SST01	40 CFR Part 60, Subpart Kb	60Kb-01	Product Stored = Volatile organic liquid Storage Capacity = Capacity is greater than or equal to 39,890 gallons (151,000 liters) Maximum True Vapor Pressure = True vapor pressure is less than 0.5 psia	
SST02	40 CFR Part 60, Subpart K	60K-01	Construction/Modification Date = After March 8, 1974 and on or before May 19, 1978 Storage Capacity = Capacity is greater than 65,000 gallons (246,052 liters) Product Stored = Stored product other than petroleum liquid (as defined in 40 CFR Part 60, Subpart K)	
SST02	40 CFR Part 60, Subpart Kb	60Kb-01	Product Stored = Volatile organic liquid Storage Capacity = Capacity is greater than or equal to 39,890 gallons (151,000 liters) Maximum True Vapor Pressure = True vapor pressure is less than 0.5 psia	
SVPTANK	40 CFR Part 60, Subpart Kb	60Kb-01	Product Stored = Stored product other than volatile organic liquid or petroleum liquid	
TURP01	40 CFR Part 60, Subpart Kb	60Kb-01	Product Stored = Volatile organic liquid Storage Capacity = Capacity is greater than or equal to 19,813 gallons but less than 39,890 gallons (capacity is greater than 75,000 liters but less than or equal to 151,000 liters) Maximum True Vapor Pressure = True vapor pressure is less than 2.2 psia	
DIESELLOAD	30 TAC Chapter 115, Loading and Unloading of VOC	R5211-01	Chapter 115 Facility Type = Facility type other than a gasoline terminal, gasoline bulk plant, motor vehicle fuel dispensing facility or marine terminal. Alternate Control Requirement (ACR) = No alternate control requirements are being utilized. Product Transferred = Volatile organic compounds other than gasoline. Transfer Type = Loading and unloading.	

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
MVFD	30 TAC Chapter 115, Loading and Unloading of VOC	R5211-01	Chapter 115 Facility Type = Motor vehicle fuel dispensing facility	
TURPLD	30 TAC Chapter 115, Loading and Unloading of VOC	R5211-01	Chapter 115 Facility Type = Facility type other than a gasoline terminal, gasoline bulk plant, motor vehicle fuel dispensing facility or marine terminal. Alternate Control Requirement (ACR) = No alternate control requirements are being utilized. Product Transferred = Volatile organic compounds other than gasoline. Transfer Type = Loading and unloading.	
LK01	30 TAC Chapter 112, Sulfur Compounds	REG2-01	Fuel Type = Liquid fuel. Heat Input = Design heat input is less than or equal to 250 MMBtu/hr. Stack Height = The effective stack height is at least the standard effective stack height for each stack to which the unit routes emissions.	
LK02	30 TAC Chapter 112, Sulfur Compounds	REG2-01	Fuel Type = Liquid fuel. Heat Input = Design heat input is less than or equal to 250 MMBtu/hr. Stack Height = The effective stack height is less than the standard effective stack height for each stack to which the unit routes emissions.	
PB01	30 TAC Chapter 112, Sulfur Compounds	REG2-01	Fuel Type = Liquid fuel. Heat Input = Design heat input is greater than 250 MMBtu/hr. Control Equipment = Unit not equipped with SO ₂ control equipment. Stack Height = The effective stack height is at least the standard effective stack height for each stack to which the unit routes emissions.	
PB01	40 CFR Part 60, Subpart D	60D-01	Construction/Modification Date = On or before August 17, 1971.	
PB01	40 CFR Part 60, Subpart Db	60Db-01	Construction/Modification Date = Constructed on or before June 19, 1984	
PB01	40 CFR Part 60, Subpart Dc	60Dc-01	Construction/Modification Date = On or before June 9, 1989.	
PB01	40 CFR Part 63, Subpart DDDDD	63DDDDDD-01	Commence = Source is existing (commenced construction or reconstruction on or before June 4, 2010) Table Applicability = The unit is designed to burn Gas 1 fuel AND has no continuous oxygen trim AND has heat input equal to or greater than 10 MMBtu/hr	
PB02	30 TAC Chapter 112, Sulfur Compounds	REG2-01	Fuel Type = Liquid fuel. Heat Input = Design heat input is greater than 250 MMBtu/hr.	

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
			Control Equipment = Unit equipped with SO₂ control equipment. FCAA § 412(c) = The unit is not 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.	
PB02	40 CFR Part 60, Subpart D	60D-01A	Construction/Modification Date = After August 17, 1971, and on or before December 22, 1976. 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. PM CEMS = The facility does not use a CEMS to measure PM. Opacity Monitoring = Facility meets exemption from COMS in § 60.45(b)(1) or (b)(6). Gas/Liquid Fuel = The facility does not burn only gaseous or liquid fossil fuel (excluding residual oil) with potential SO₂ emissions rates of 0.060 lb/MMBtu or less and does not use post combustion technology to reduce emissions of SO₂ or PM. Fuels with 0.30 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. Specific Site = The facility is not Southwestern Public Service Company's Harrington Station #1 in Amarillo, TX. D-Series Fuel Type #1 = Wood residue. D-Series Fuel Type #2 = Natural gas. D-Series Fuel Type #3 = Non-fossil fuel other than wood residue. Alternate 43D = No alternative requirement is used for SO₂, unit is complying with requirements of § 60.43(a) and (b). 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 = Fuel receipts. Cyclone-Fired Unit = The unit is not a cyclone-fired unit. NO_x 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.	PM(OPACITY) - The applicable requirements were determined from an analysis of the rule text for units with an Alternative Requirement approved by EPA SO₂: The rule citations for SO₂ were determined from an analysis of the rule text and the basis of determination.
PB02	40 CFR Part 60, Subpart D	60D-01B	Construction/Modification Date = After August 17, 1971, and on or before December 22, 1976. 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.	PM(OPACITY) - The applicable requirements were determined from an analysis of the rule text for units with an Alternative Requirement approved by EPA

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
			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. PM CEMS = The facility does not use a CEMS to measure PM. Opacity Monitoring = Facility meets exemption from COMS in § 60.45(b)(1) or (b)(6). Gas/Liquid Fuel = The facility does not burn only gaseous or liquid fossil fuel (excluding residual oil) with potential SO₂ emissions rates of 0.060 lb/MMBtu or less and does not use post combustion technology to reduce emissions of SO₂ or PM. Fuels with 0.30 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. 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. Alternate 43D = No alternative requirement is used for SO₂, unit is complying with requirements of § 60.43(a) and (b). 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 = Fuel receipts. Cyclone-Fired Unit = The unit is not a cyclone-fired unit. NO_x 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.	
PB02	40 CFR Part 60, Subpart Db	60Db-01	Construction/Modification Date = Constructed on or before June 19, 1984	
PB02	40 CFR Part 60, Subpart Dc	60Dc-01	Construction/Modification Date = On or before June 9, 1989.	
PB02	40 CFR Part 63, Subpart DDDDD	63DDDDDD-01	Commence = Source is existing (commenced construction or reconstruction on or before June 4, 2010) Table Applicability = The unit burns biomass/bio-based solid fuel AND has heat input equal to or greater than 10 MMBtu/hr HCl Emission = Emission limits for HCl in pounds per MMBtu heat input HCl-CMS = A CMS is not being used HCl-CD = A wet acid scrubber is used HCl-Test = A performance test is not being used HCl-FA = Compliance is demonstrated by conducting fuel analysis for HCl HCl-FloMon = Flow monitoring system is not required for HCl	

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
			HCl-pHMon = A pH monitoring system is not required for HCl Hg Emission = Emission limits for Hg in pounds per MMBtu heat input Hg-InjRate = An operating limit does not require a monitoring system to measure sorbent injection rate for mercury Hg-CMS = A CMS is not being used Hg-CD = A wet acid scrubber is used Hg-Test = A performance test is not being used Hg-FA = Compliance is demonstrated by conducting fuel analysis for Hg BM Subcategory = The unit is a hybrid suspension/grate burner designed to burn wet biomass/bio-based solid PM/TSM Emission = Emission limits for PM in pounds per MMBtu heat input PM-CMS = CMS is not being used PM-CD = A Wet Scrubber is used PM-Test = Compliance is demonstrated by conducting a performance test for PM PM-FM = A flow monitoring system is not required PM-PMON = Operating limit requires the use of a pressure monitoring system Opacity-CD = Other control methods are being used CO Emission = Emission limits for CO in ppm by volume not using a CEMS CO-CMS = CMS is not being used CO-Test = Compliance is demonstrated by conducting a performance test for CO	
RB01	30 TAC Chapter 112, Sulfur Compounds	REG2-01	Fuel Type = Liquid fuel. Heat Input = Design heat input is greater than 250 MMBtu/hr. Control Equipment = Unit not equipped with SO₂ control equipment. Stack Height = The effective stack height is at least the standard effective stack height for each stack to which the unit routes emissions.	
RB01	40 CFR Part 60, Subpart Db	60Db-01	Construction/Modification Date = Constructed on or before June 19, 1984	
RB01	40 CFR Part 60, Subpart Dc	60Dc-01	Construction/Modification Date = On or before June 9, 1989.	
RB02	30 TAC Chapter 112, Sulfur Compounds	REG2-01	Fuel Type = Liquid fuel. Heat Input = Design heat input is greater than 250 MMBtu/hr. Control Equipment = Unit not equipped with SO₂ control equipment. Stack Height = The effective stack height is at least the standard effective stack height for each stack to which the unit routes emissions.	

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
RB02	40 CFR Part 60, Subpart Db	60Db-01	Construction/Modification Date = Constructed on or after November 25, 1986, and on or before July 9, 1997 Heat Input Capacity = Heat input capacity is greater than 250 MMBtu/hr (73 MW). Subpart Da = The affected facility does not meet applicability requirements of 40 CFR Part 60, Subpart Da. Changes to Existing Affected Facility = No change has been made to the existing steam generating unit, which was not previously subject to 40 CFR Part 60, Subpart Db, for the sole purpose of combusting gases containing totally reduced sulfur as defined under 40 CFR § 60.281. Subpart Ea, Eb, AAAA, or CCCC = The affected facility does not meet applicability requirements of and is subject to 40 CFR Part 60, Subpart Ea, Eb or AAAA. Subpart KKKK = The affected facility is not a heat recovery steam generator associated with combined cycle gas turbines and that meets applicability requirements of and is subject to 40 CFR Part 60, Subpart KKKK. Subpart Cb or BBBB = The affected facility is not covered by an EPA approved State or Federal section 111(d)/129 plan implementing 40 CFR Part 60, Subpart Cb or BBBB emission guidelines. Temporary Boiler = The steam-generating unit is not a temporary boiler D-Series Fuel Type #1 = Byproduct/waste. D-Series Fuel Type #2 = Natural gas. Subpart D = The affected facility does not meet the applicability requirements of 40 CFR Part 60, Subpart D. Additional Applicability Requirement = The affected facility meets the applicability requirements in 40 CFR Part 60, Subpart BB ACF Option - SO₂ = Other ACF or no ACF. ACF Option - PM = Other ACF or no ACF. ACF Option - NO_x = Coal, oil, or natural gas with byproduct/waste and has a coal, oil, and natural gas ACF of 10 percent (0.10) or less, and has an (FE) limit less than or equal to 10% (FE) 60.49Da(n) Alternative = The facility is not using the § 60.49Da(n) alternative. 60.49Da(m) Alternative = The facility is not using the § 60.49Da(m) alternative. Monitoring Type PM = No particulate monitoring. Monitoring Type PM (Opacity) = No particulate (opacity) monitoring. Monitoring Type NO_x = No NO_x monitoring. Monitoring Type SO₂ = No SO₂ monitoring. Technology Type = No emerging or conventional technology is used to reduce or control SO₂ emissions Unit Type = OTHER UNIT TYPE Heat Release Rate = Natural gas with a heat release rate less than or equal to 70 MBtu/hr/ft³.	NOX: The rule citations for NO _x were determined from an analysis of the rule text and the basis of determination.

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
			Alternate Emission Limit (AEL) = The facility combusts byproduct/waste with either natural gas or oil and did not petition the EPA Administrator to establish a NO _x emission limit that applies specifically when the byproduct/waste is combusted.	
RB02	40 CFR Part 60, Subpart Dc	60Dc-01	Construction/Modification Date = After June 9, 1989 but on or before February 28, 2005. Maximum Design Heat Input Capacity = Maximum design heat input capacity is greater than 100 MMBtu/hr (29 MW).	
GRP-CT	40 CFR Part 63, Subpart Q	63Q-01	Used Compounds Containing Chromium on or After September 8, 1994 = The industrial process cooling tower has not used compounds containing chromium on or after September 8, 1994.	
BP14	30 TAC Chapter 111, Visible Emissions	R1111-01	Alternate Opacity Limitation = Not complying with an alternate opacity limit under 30 TAC § 111.113. Vent Source = The source of the vent is not a steam generator fired by solid fossil fuel, oil or a mixture of oil and gas and is not a catalyst regenerator for a fluid bed catalytic cracking unit. Opacity Monitoring System = Optical instrument capable of measuring the opacity of emissions is not installed in the vent or optical instrumentation does not meet the requirements of § 111.111(a)(1)(D), or the vent stream does not qualify for the exemption in § 111.111(a)(3). Construction Date = After January 31, 1972 Effluent Flow Rate = Effluent flow rate is less than 100,000 actual cubic feet per minute.	
BP15	30 TAC Chapter 111, Visible Emissions	R1111-01	Alternate Opacity Limitation = Not complying with an alternate opacity limit under 30 TAC § 111.113. Vent Source = The source of the vent is not a steam generator fired by solid fossil fuel, oil or a mixture of oil and gas and is not a catalyst regenerator for a fluid bed catalytic cracking unit. Opacity Monitoring System = Optical instrument capable of measuring the opacity of emissions is not installed in the vent or optical instrumentation does not meet the requirements of § 111.111(a)(1)(D), or the vent stream does not qualify for the exemption in § 111.111(a)(3). Construction Date = After January 31, 1972 Effluent Flow Rate = Effluent flow rate is less than 100,000 actual cubic feet per minute.	
BP16	30 TAC Chapter 111, Visible Emissions	R1111-01	Alternate Opacity Limitation = Not complying with an alternate opacity limit under 30 TAC § 111.113. Vent Source = The source of the vent is not a steam generator fired by solid fossil fuel, oil or a mixture of oil and gas and is not a catalyst regenerator for a fluid bed catalytic cracking unit. Opacity Monitoring System = Optical instrument capable of measuring the opacity of emissions is not installed in the vent or optical instrumentation does not meet the requirements of § 111.111(a)(1)(D), or the vent stream does not qualify for the exemption in § 111.111(a)(3). Construction Date = After January 31, 1972	

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
			Effluent Flow Rate = Effluent flow rate is less than 100,000 actual cubic feet per minute.	
CTRW-1	30 TAC Chapter 111, Visible Emissions	R1111-01	Alternate Opacity Limitation = Not complying with an alternate opacity limit under 30 TAC § 111.113. Vent Source = The source of the vent is not a steam generator fired by solid fossil fuel, oil or a mixture of oil and gas and is not a catalyst regenerator for a fluid bed catalytic cracking unit. Opacity Monitoring System = Optical instrument capable of measuring the opacity of emissions is not installed in the vent or optical instrumentation does not meet the requirements of § 111.111(a)(1)(D), or the vent stream does not qualify for the exemption in § 111.111(a)(3). Construction Date = On or before January 31, 1972 Effluent Flow Rate = Effluent flow rate is less than 100,000 actual cubic feet per minute.	
EX7LAM1	30 TAC Chapter 111, Visible Emissions	R1111-01	Alternate Opacity Limitation = Not complying with an alternate opacity limit under 30 TAC § 111.113. Vent Source = The source of the vent is not a steam generator fired by solid fossil fuel, oil or a mixture of oil and gas and is not a catalyst regenerator for a fluid bed catalytic cracking unit. Opacity Monitoring System = Optical instrument capable of measuring the opacity of emissions is not installed in the vent or optical instrumentation does not meet the requirements of § 111.111(a)(1)(D), or the vent stream does not qualify for the exemption in § 111.111(a)(3). Construction Date = On or before January 31, 1972 Effluent Flow Rate = Effluent flow rate is less than 100,000 actual cubic feet per minute.	
LK01	30 TAC Chapter 111, Nonagricultural Processes	R1151-01	Effective Stack Height = The effective stack height as calculated in the equation specified by 30 TAC §111.151(c) is not less than the standard effective stack height as determined by Table 2 specified in 30 TAC §111.151(b).	
LK01	30 TAC Chapter 111, Visible Emissions	R1111-01	Alternate Opacity Limitation = Not complying with an alternate opacity limit under 30 TAC § 111.113. Vent Source = The source of the vent is not a steam generator fired by solid fossil fuel, oil or a mixture of oil and gas and is not a catalyst regenerator for a fluid bed catalytic cracking unit. Opacity Monitoring System = Optical instrument capable of measuring the opacity of emissions is not installed in the vent or optical instrumentation does not meet the requirements of § 111.111(a)(1)(D), or the vent stream does not qualify for the exemption in § 111.111(a)(3). Construction Date = On or before January 31, 1972 Effluent Flow Rate = Effluent flow rate is less than 100,000 actual cubic feet per minute. SIP Violation = The source is not able to comply with applicable periodic monitoring (PM) and opacity regulations without the use of PM collection equipment and has been found to be in violation of any visible emission standard in a State Implementation Plan.	

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
LK02	30 TAC Chapter 111, Nonagricultural Processes	R1151-01	Effective Stack Height = The effective stack height as calculated in the equation specified by 30 TAC §111.151(c) is not less than the standard effective stack height as determined by Table 2 specified in 30 TAC §111.151(b).	
LK02	30 TAC Chapter 111, Visible Emissions	R1111-01	Alternate Opacity Limitation = Not complying with an alternate opacity limit under 30 TAC § 111.113. Vent Source = The source of the vent is not a steam generator fired by solid fossil fuel, oil or a mixture of oil and gas and is not a catalyst regenerator for a fluid bed catalytic cracking unit. Opacity Monitoring System = Optical instrument capable of measuring the opacity of emissions is not installed in the vent or optical instrumentation does not meet the requirements of § 111.111(a)(1)(D), or the vent stream does not qualify for the exemption in § 111.111(a)(3). Construction Date = After January 31, 1972 Effluent Flow Rate = Effluent flow rate is less than 100,000 actual cubic feet per minute. SIP Violation = The source is not able to comply with applicable periodic monitoring (PM) and opacity regulations without the use of PM collection equipment and has been found to be in violation of any visible emission standard in a State Implementation Plan.	
PB01	30 TAC Chapter 111, Visible Emissions	R1111-01	Alternate Opacity Limitation = Not complying with an alternate opacity limit under 30 TAC § 111.113. Vent Source = The source of the vent is not a steam generator fired by solid fossil fuel, oil or a mixture of oil and gas and is not a catalyst regenerator for a fluid bed catalytic cracking unit. Opacity Monitoring System = 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 = On or before January 31, 1972 Effluent Flow Rate = Effluent flow rate is at least 100,000 actual cubic feet per minute. 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.	
PB01	30 TAC Chapter 111, Visible Emissions	R1111-02	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 that burns oil or a mixture of oil and gas. Opacity Monitoring System = Optical instrument capable of measuring the opacity of emissions is not installed in the vent or optical instrumentation does not meet the requirements of § 111.111(a)(1)(D), or the vent stream does not qualify for the exemption in § 111.111(a)(3). Construction Date = On or before January 31, 1972 Effluent Flow Rate = Effluent flow rate is at least 100,000 actual cubic feet per minute.	

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
			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.	
PB02	30 TAC Chapter 111, Nonagricultural Processes	R1151-01	Effective Stack Height = The effective stack height as calculated in the equation specified by 30 TAC §111.151(c) is not less than the standard effective stack height as determined by Table 2 specified in 30 TAC §111.151(b).	
PB02	30 TAC Chapter 111, Visible Emissions	R1111-01	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 that burns oil or a mixture of oil and gas. Opacity Monitoring System = The executive director and Administrator have determined that 30 TAC § 111.111(a)(1)(F) may be used to comply with the appropriate opacity standard since the gas stream contains condensed water vapor which could interfere with proper CEMS operation. Construction Date = After January 31, 1972 Effluent Flow Rate = Effluent flow rate is at least 100,000 actual cubic feet per minute. SIP Violation = The source is not able to comply with applicable periodic monitoring (PM) and opacity regulations without the use of PM collection equipment and has been found to be in violation of any visible emission standard in a State Implementation Plan.	
RB01A	30 TAC Chapter 111, Nonagricultural Processes	R1151-01	Effective Stack Height = The effective stack height as calculated in the equation specified by 30 TAC §111.151(c) is not less than the standard effective stack height as determined by Table 2 specified in 30 TAC §111.151(b).	
RB01A	30 TAC Chapter 111, Visible Emissions	R1111-01	Alternate Opacity Limitation = Not complying with an alternate opacity limit under 30 TAC § 111.113. Vent Source = The source of the vent is not a steam generator fired by solid fossil fuel, oil or a mixture of oil and gas and is not a catalyst regenerator for a fluid bed catalytic cracking unit. Opacity Monitoring System = 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 = On or before January 31, 1972 Effluent Flow Rate = Effluent flow rate is at least 100,000 actual cubic feet per minute.	
RB01B	30 TAC Chapter 111, Nonagricultural Processes	R1151-01	Effective Stack Height = The effective stack height as calculated in the equation specified by 30 TAC §111.151(c) is not less than the standard effective stack height as determined by Table 2 specified in 30 TAC §111.151(b).	
RB01B	30 TAC Chapter 111, Visible Emissions	R1111-01	Alternate Opacity Limitation = Not complying with an alternate opacity limit under 30 TAC § 111.113.	

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
			Vent Source = The source of the vent is not a steam generator fired by solid fossil fuel, oil or a mixture of oil and gas and is not a catalyst regenerator for a fluid bed catalytic cracking unit. Opacity Monitoring System = 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 = On or before January 31, 1972 Effluent Flow Rate = Effluent flow rate is at least 100,000 actual cubic feet per minute.	
RB02A	30 TAC Chapter 111, Nonagricultural Processes	R1151-01	Effective Stack Height = The effective stack height as calculated in the equation specified by 30 TAC §111.151(c) is not less than the standard effective stack height as determined by Table 2 specified in 30 TAC §111.151(b).	
RB02A	30 TAC Chapter 111, Visible Emissions	R1111-01	Alternate Opacity Limitation = Not complying with an alternate opacity limit under 30 TAC § 111.113. Vent Source = The source of the vent is not a steam generator fired by solid fossil fuel, oil or a mixture of oil and gas and is not a catalyst regenerator for a fluid bed catalytic cracking unit. Opacity Monitoring System = 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.	
RB02B	30 TAC Chapter 111, Nonagricultural Processes	R1151-01	Effective Stack Height = The effective stack height as calculated in the equation specified by 30 TAC §111.151(c) is not less than the standard effective stack height as determined by Table 2 specified in 30 TAC §111.151(b).	
RB02B	30 TAC Chapter 111, Visible Emissions	R1111-01	Alternate Opacity Limitation = Not complying with an alternate opacity limit under 30 TAC § 111.113. Vent Source = The source of the vent is not a steam generator fired by solid fossil fuel, oil or a mixture of oil and gas and is not a catalyst regenerator for a fluid bed catalytic cracking unit. Opacity Monitoring System = 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.	
SM01	30 TAC Chapter 111, Nonagricultural Processes	R1151-01	Effective Stack Height = The effective stack height as calculated in the equation specified by 30 TAC §111.151(c) is not less than the standard effective stack height as determined by Table 2 specified in 30 TAC §111.151(b).	

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
SM01	30 TAC Chapter 111, Visible Emissions	R1111-01	Alternate Opacity Limitation = Not complying with an alternate opacity limit under 30 TAC § 111.113. Vent Source = The source of the vent is not a steam generator fired by solid fossil fuel, oil or a mixture of oil and gas and is not a catalyst regenerator for a fluid bed catalytic cracking unit. Opacity Monitoring System = Optical instrument capable of measuring the opacity of emissions is not installed in the vent or optical instrumentation does not meet the requirements of § 111.111(a)(1)(D), or the vent stream does not qualify for the exemption in § 111.111(a)(3). Construction Date = After January 31, 1972 Effluent Flow Rate = Effluent flow rate is less than 100,000 actual cubic feet per minute.	
SM02	30 TAC Chapter 111, Nonagricultural Processes	R1151-01	Effective Stack Height = The effective stack height as calculated in the equation specified by 30 TAC §111.151(c) is not less than the standard effective stack height as determined by Table 2 specified in 30 TAC §111.151(b).	
SM02	30 TAC Chapter 111, Visible Emissions	R1111-01	Alternate Opacity Limitation = Not complying with an alternate opacity limit under 30 TAC § 111.113. Vent Source = The source of the vent is not a steam generator fired by solid fossil fuel, oil or a mixture of oil and gas and is not a catalyst regenerator for a fluid bed catalytic cracking unit. Opacity Monitoring System = Optical instrument capable of measuring the opacity of emissions is not installed in the vent or optical instrumentation does not meet the requirements of § 111.111(a)(1)(D), or the vent stream does not qualify for the exemption in § 111.111(a)(3). Construction Date = After January 31, 1972 Effluent Flow Rate = Effluent flow rate is less than 100,000 actual cubic feet per minute.	
TNK0115	30 TAC Chapter 111, Visible Emissions	R1111-01	Alternate Opacity Limitation = Not complying with an alternate opacity limit under 30 TAC § 111.113. Vent Source = The source of the vent is not a steam generator fired by solid fossil fuel, oil or a mixture of oil and gas and is not a catalyst regenerator for a fluid bed catalytic cracking unit. Opacity Monitoring System = Optical instrument capable of measuring the opacity of emissions is not installed in the vent or optical instrumentation does not meet the requirements of § 111.111(a)(1)(D), or the vent stream does not qualify for the exemption in § 111.111(a)(3). Construction Date = On or before January 31, 1972 Effluent Flow Rate = Effluent flow rate is less than 100,000 actual cubic feet per minute.	
TNK0116	30 TAC Chapter 111, Visible Emissions	R1111-01	Alternate Opacity Limitation = Not complying with an alternate opacity limit under 30 TAC § 111.113. Vent Source = The source of the vent is not a steam generator fired by solid fossil fuel, oil or a mixture of oil and gas and is not a catalyst regenerator for a fluid bed catalytic cracking unit.	

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
			Opacity Monitoring System = Optical instrument capable of measuring the opacity of emissions is not installed in the vent or optical instrumentation does not meet the requirements of § 111.111(a)(1)(D), or the vent stream does not qualify for the exemption in § 111.111(a)(3). Construction Date = On or before January 31, 1972 Effluent Flow Rate = Effluent flow rate is less than 100,000 actual cubic feet per minute.	
GRP-EX	40 CFR Part 63, Subpart JJJJ	63JJJJ-1	Construction/Reconstruction = Affected source commenced construction/reconstruction after September 13, 2000.	The rule citations were determined from an analysis of the rule text and the basis of determination.
DIG-16	40 CFR Part 60, Subpart BB	60BB-01	Facility Type = Digester. Construction/Modification Date = Affected source was constructed/modified after September 24, 1976. Kraft Pulping Combination = Kraft pulping is not combined with neutral sulfite semi-chemical pulping. Gas Control Techniques = Gases are combusted with other waste gases in an incinerator or other combustion device. Minimum Temperature = The gases are subjected to a minimum temperature of 1200° F for at least 0.5 seconds.	
DIG-16	40 CFR Part 60, Subpart BB	60BB-02	Facility Type = Digester. Construction/Modification Date = Affected source was constructed/modified after September 24, 1976. Kraft Pulping Combination = Kraft pulping is not combined with neutral sulfite semi-chemical pulping. Gas Control Techniques = Gases are combusted with other waste gases in an incinerator or other combustion device. Minimum Temperature = The gases are subjected to a minimum temperature of 1200° F for at least 0.5 seconds.	
GRP-BSW	40 CFR Part 60, Subpart BB	60BB-01	Facility Type = Brown stock washer. Construction/Modification Date = Affected source was constructed/modified on or before September 24, 1976.	
GRP-CONC	40 CFR Part 60, Subpart BB	60BB-01	Facility Type = Multiple effect evaporator. Construction/Modification Date = Affected source was constructed/modified after September 24, 1976. Kraft Pulping Combination = Kraft pulping is not combined with neutral sulfite semi-chemical pulping. Gas Control Techniques = Gases are combusted with other waste gases in an incinerator or other combustion device. Minimum Temperature = The gases are subjected to a minimum temperature of 1200° F for at least 0.5 seconds.	

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
GRP-CONC	40 CFR Part 60, Subpart BB	60BB-02	Facility Type = Multiple effect evaporator. Construction/Modification Date = Affected source was constructed/modified after September 24, 1976. Kraft Pulping Combination = Kraft pulping is not combined with neutral sulfite semi-chemical pulping. Gas Control Techniques = Gases are combusted with other waste gases in an incinerator or other combustion device. Minimum Temperature = The gases are subjected to a minimum temperature of 1200° F for at least 0.5 seconds.	
GRP-DIGEST	30 TAC Chapter 112, Sulfur Compounds	REG2-01	Facility Type = Digester. Alternate Emission Limitation = No alternate emission limitation (AEL) has been approved by the TCEQ Executive Director or none has been requested.	
GRP-DIGEST	40 CFR Part 60, Subpart BB	60BB-01	Facility Type = Digester. Construction/Modification Date = Affected source was constructed/modified on or before September 24, 1976.	
GRP-MEES	30 TAC Chapter 112, Sulfur Compounds	REG2-01	Facility Type = Multiple effect evaporator. Alternate Emission Limitation = No alternate emission limitation (AEL) has been approved by the TCEQ Executive Director or none has been requested.	
GRP-MEES	40 CFR Part 60, Subpart BB	60BB-01	Facility Type = Multiple effect evaporator. Construction/Modification Date = Affected source was constructed/modified on or before September 24, 1976.	
LK01	30 TAC Chapter 112, Sulfur Compounds	REG2-01	Facility Type = Lime kiln. Alternate Emission Limitation = No alternate emission limitation (AEL) has been approved by the TCEQ Executive Director or none has been requested.	
LK01	40 CFR Part 60, Subpart BB	60BB-01	Facility Type = Lime kiln. Construction/Modification Date = Affected source was constructed/modified on or before September 24, 1976.	
LK01	40 CFR Part 63, Subpart MM	63MM-01	Source Type = Lime kiln. New or Existing Source = Existing source. Kraft or Soda Source Alternative = The source at an existing kraft or soda pulp mill operates 6,300 hours per year or more and is complying with the requirements of 40 CFR § 63.862(a)(1)(ii). Subject to 40 CFR § 60.282 = The source is not subject to 40 CFR § 60.282. Control System = Wet scrubber.	Revised requirements of MACT MM published on October 11, 2017, and effective on October 11, 2019, were incorporated, with the exception of the 5-year periodic performance tests which must be conducted by October 13, 2020. The applicable requirements were manually altered to include the current requirements. Added the following: Related Standards § 63.860(d), and § 63.864(k)(2)(iv)

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
			Alternative Operating Parameter = Prior approval has been received from the EPA Administrator to monitor an alternative control device operating parameters or no such approval has been requested. Subject to 40 CFR Part 63, Subpart S = The source is not subject to 40 CFR Part 63, Subpart S.	Monitoring/Testing § 63.860(d), § 63.864(f), § 63.864(h), § 63.864(k)(2)(iv), and § 63.864(k)(2)(iv) Recordkeeping [G]§ 63.866(d), [G]§ 63.867(c)(3), § 63.867(c)(4), and [G]§ 63.867(d)
LK01	40 CFR Part 63, Subpart MM	63MM-02	Source Type = Lime kiln. New or Existing Source = Existing source. Kraft or Soda Source Alternative = The source at an existing kraft or soda pulp mill either operates less than 6,300 hours per year or operates 6,300 hours per year or more and is complying with the requirements of 40 CFR § 63.862(a)(1)(i). Subject to 40 CFR § 60.282 = The source is not subject to 40 CFR § 60.282. Control System = Wet scrubber. Alternative Operating Parameter = Prior approval has been received from the EPA Administrator to monitor an alternative control device operating parameters or no such approval has been requested. Subject to 40 CFR Part 63, Subpart S = The source is not subject to 40 CFR Part 63, Subpart S.	Revised requirements of MACT MM published on October 11, 2017, and effective on October 11, 2019, were incorporated, with the exception of the 5-year periodic performance tests which must be conducted by October 13, 2020. The applicable requirements were manually altered to include the current requirements. Added the following: Related Standard § 63.860(d), § 63.864(k)(2)(iv), and [G]§ 63.866 Monitoring/Testing § 63.860(d), § 63.864(f), § 63.864(h), and § 63.864(k)(2)(iv) Recordkeeping [G]§ 63.866(d) Reporting [G]§ 63.867(c)(3), § 63.867(c)(4), and [G]§ 63.867(d) Deleted the following: Related Standard § 63.864(k)(2)(iii) Monitoring/Testing § 63.864(k)(2)(iii) Recordkeeping § 63.866(a), [G]§ 63.866(a)(1), and [G]§ 63.866(a)(2)
LK02	30 TAC Chapter 112, Sulfur Compounds	REG2-01	Facility Type = Lime kiln. Alternate Emission Limitation = No alternate emission limitation (AEL) has been approved by the TCEQ Executive Director or none has been requested.	
LK02	40 CFR Part 60, Subpart BB	60BB-01	Facility Type = Lime kiln. Construction/Modification Date = Affected source was constructed/modified on or before September 24, 1976.	
LK02	40 CFR Part 63, Subpart MM	63MM-01	Source Type = Lime kiln. New or Existing Source = Existing source. Kraft or Soda Source Alternative = The source at an existing kraft or soda pulp mill operates 6,300 hours per year or more and is complying with the requirements of 40 CFR § 63.862(a)(1)(ii). Subject to 40 CFR § 60.282 = The source is not subject to 40 CFR § 60.282. Control System = Wet scrubber.	Revised requirements of MACT MM published on October 11, 2017, and effective on October 11, 2019, were incorporated, with the exception of the 5-year periodic performance tests which must be conducted by October 13, 2020. The applicable requirements were manually altered to include the current requirements. Added the following: Related Standards § 63.860(d), § 63.864(k)(2)(iv), and [G]§ 63.865(a)(2)

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
			Alternative Operating Parameter = Prior approval has been received from the EPA Administrator to monitor an alternative control device operating parameters or no such approval has been requested. Subject to 40 CFR Part 63, Subpart S = The source is not subject to 40 CFR Part 63, Subpart S.	Monitoring/Testing § 63.860(d), § 63.864(f), § 63.864(h), § 63.864(k)(2)(iv), and [G]§ 63.865(a)(2) Recordkeeping [G]§ 63.866(d) Reporting [G]§ 63.867(b)(3), [G]§ 63.867(c)(3), § 63.867(c)(4), [G]§ 63.867(d) Deleted the following: Related Standards § 63.862(a)(1)(ii)(B), § 63.865(a)(2), § 63.865(a)(2)(iv) Monitoring/Testing § 63.865(a)(2), § 63.865(a)(2)(iii), § 63.865(a)(2)(iv), and § 63.865(a)(2)(v) Reporting § 63.867(b)(3), § 63.867(b)(3)(i), § 63.867(b)(3)(ii), and § 63.867(b)(3)(iii)
LK02	40 CFR Part 63, Subpart MM	63MM-02	Source Type = Lime kiln. New or Existing Source = Existing source. Kraft or Soda Source Alternative = The source at an existing kraft or soda pulp mill either operates less than 6,300 hours per year or operates 6,300 hours per year or more and is complying with the requirements of 40 CFR § 63.862(a)(1)(i). Subject to 40 CFR § 60.282 = The source is not subject to 40 CFR § 60.282. Control System = Wet scrubber. Alternative Operating Parameter = Prior approval has been received from the EPA Administrator to monitor an alternative control device operating parameters or no such approval has been requested. Subject to 40 CFR Part 63, Subpart S = The source is not subject to 40 CFR Part 63, Subpart S.	Revised requirements of MACT MM published on October 11, 2017, and effective on October 11, 2019, were incorporated, with the exception of the 5-year periodic performance tests which must be conducted by October 13, 2020. The applicable requirements were manually altered to include the current requirements. Added the following: Related Standards § 63.860(d), § 63.864(k)(2)(iv), and [G]§ 63.866 Monitoring/Testing § 63.860(d), § 63.864(f), § 63.864(h), and § 63.864(k)(2)(iv) Recordkeeping [G]§ 63.866(d) Reporting [G]§ 63.867(c)(3), § 63.867(c)(4), and [G]§ 63.867(d) Deleted the following: Related Standard § 63.864(k)(2)(iii) Monitoring/Testing § 63.864(k)(2)(iii) Recordkeeping § 63.866(a), [G]§ 63.866(a)(1), and [G]§ 63.866(a)(2)
RB01	40 CFR Part 60, Subpart BB	60BB-01	Facility Type = Straight kraft recovery furnace. Construction/Modification Date = Affected source was constructed/modified after September 24, 1976. Kraft Pulping Combination = Kraft pulping is not combined with neutral sulfite semi-chemical pulping.	
RB01	40 CFR Part 63, Subpart MM	63MM-01	Source Type = Nondirect contact evaporator (NDCE) recovery furnace. New or Existing Source = Existing source.	Revised requirements of MACT MM published on October 11, 2017, and effective on October 11, 2019, were incorporated, with the exception of the 5-year periodic performance tests which must be

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
			Kraft or Soda Source Alternative = The source at an existing kraft or soda pulp mill operates 6,300 hours per year or more and is complying with the requirements of 40 CFR § 63.862(a)(1)(ii). Subject to 40 CFR § 60.282 = The source is subject to 40 CFR § 60.282. Control System = Electrostatic precipitator. Alternative Operating Parameter = Prior approval has been received from the EPA Administrator to monitor an alternative control device operating parameters or no such approval has been requested. Subject to 40 CFR Part 63, Subpart S = The source is not subject to 40 CFR Part 63, Subpart S.	conducted by October 13, 2020. The applicable requirements were manually altered to include the current requirements. Added the following: Related Standards § 63.860(d) and [G]§ 63.865(a)(2) Monitoring/Testing § 63.860(d), § 63.864(e)(1), § 63.864(f), § 63.864(h), and [G]§ 63.865(a)(2) Recordkeeping § 63.866(c)(8) and [G]§ 63.866(d) Reporting [G]§ 63.867(c)(3) Reporting § 63.867(c)(4), and [G]§ 63.867(d) Deleted the following: Related Standards § 63.864(k)(3), § 63.865(a)(2), § 63.865(a)(2)(iv) Monitoring/Testing § 63.864(k)(3), § 63.865(a)(2), § 63.865(a)(2)(i), § 63.865(a)(2)(iv), and § 63.865(a)(2)(v)
RB01	40 CFR Part 63, Subpart MM	63MM-02	Source Type = Nondirect contact evaporator (NDCE) recovery furnace. New or Existing Source = Existing source. Kraft or Soda Source Alternative = The source at an existing kraft or soda pulp mill either operates less than 6,300 hours per year or operates 6,300 hours per year or more and is complying with the requirements of 40 CFR § 63.862(a)(1)(i). Subject to 40 CFR § 60.282 = The source is subject to 40 CFR § 60.282. Control System = Electrostatic precipitator. Alternative Operating Parameter = Prior approval has been received from the EPA Administrator to monitor an alternative control device operating parameters or no such approval has been requested. Subject to 40 CFR Part 63, Subpart S = The source is not subject to 40 CFR Part 63, Subpart S.	Revised requirements of MACT MM published on October 11, 2017, and effective on October 11, 2019, were incorporated, with the exception of the 5-year periodic performance tests which must be conducted by October 13, 2020. The applicable requirements were manually altered to include the current requirements. Added the following: Monitoring/Testing § 63.860(d), § 63.864(e)(1), § 63.864(f), and § 63.864(h) Recordkeeping § 63.866(c)(8) and [G]§ 63.866(d) Reporting [G]§ 63.867(c)(3), § 63.867(c)(4), and [G]§ 63.867(d) Deleted the following Recordkeeping § 63.866(a) and [G]§ 63.866(a)(2)
RB02	40 CFR Part 60, Subpart BB	60BB-01	Facility Type = Straight kraft recovery furnace. Construction/Modification Date = Affected source was constructed/modified after September 24, 1976. Kraft Pulping Combination = Kraft pulping is not combined with neutral sulfite semi-chemical pulping.	
RB02	40 CFR Part 63, Subpart MM	63MM-01	Source Type = Nondirect contact evaporator (NDCE) recovery furnace. New or Existing Source = Existing source.	Revised requirements of MACT MM published on October 11, 2017, and effective on October 11, 2019, were incorporated, with the exception of the 5-year periodic performance tests which must be conducted by October 13, 2020. The applicable

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
			Kraft or Soda Source Alternative = The source at an existing kraft or soda pulp mill operates 6,300 hours per year or more and is complying with the requirements of 40 CFR § 63.862(a)(1)(ii). Subject to 40 CFR § 60.282 = The source is subject to 40 CFR § 60.282. Control System = Electrostatic precipitator. Alternative Operating Parameter = Prior approval has been received from the EPA Administrator to monitor an alternative control device operating parameters or no such approval has been requested. Subject to 40 CFR Part 63, Subpart S = The source is not subject to 40 CFR Part 63, Subpart S.	requirements were manually altered to include the current requirements. Added the following: Related Standards § 63.860(d) and [G]§ 63.865(a)(2) Monitoring/Testing § 63.860(d), § 63.864(e)(1), § 63.864(f), § 63.864(h), and [G]§ 63.865(a)(2) Recordkeeping § 63.866(c)(8) and [G]§ 63.866(d) Reporting [G]§ 63.867(c)(3), § 63.867(c)(4), and [G]§ 63.867(d) Deleted the following: Related Standards § 63.864(k)(3), § 63.865(a)(2), and § 63.865(a)(2)(iv) Monitoring/Testing § 63.864(k)(3), § 63.865(a)(2), § 63.865(a)(2)(i), § 63.865(a)(2)(iv), and § 63.865(a)(2)(v)
RB02	40 CFR Part 63, Subpart MM	63MM-02	Source Type = Nondirect contact evaporator (NDCE) recovery furnace. New or Existing Source = Existing source. Kraft or Soda Source Alternative = The source at an existing kraft or soda pulp mill either operates less than 6,300 hours per year or operates 6,300 hours per year or more and is complying with the requirements of 40 CFR § 63.862(a)(1)(i). Subject to 40 CFR § 60.282 = The source is subject to 40 CFR § 60.282. Control System = Electrostatic precipitator. Alternative Operating Parameter = Prior approval has been received from the EPA Administrator to monitor an alternative control device operating parameters or no such approval has been requested. Subject to 40 CFR Part 63, Subpart S = The source is not subject to 40 CFR Part 63, Subpart S.	Revised requirements of MACT MM published on October 11, 2017, and effective on October 11, 2019, were incorporated, with the exception of the 5-year periodic performance tests which must be conducted by October 13, 2020. The applicable requirements were manually altered to include the current requirements. Added the following: Monitoring/Testing § 63.860(d), § 63.864(e)(1), § 63.864(f), and § 63.864(h) Recordkeeping § 63.866(c)(8) and [G]§ 63.866(d) Reporting [G]§ 63.867(c)(3), § 63.867(c)(4), and [G]§ 63.867(d) Deleted the following: Recordkeeping § 63.866(a) and [G]§ 63.866(a)(2)
SM01	30 TAC Chapter 112, Sulfur Compounds	REG2-01	Facility Type = Smelt dissolving tank. Alternate Emission Limitation = No alternate emission limitation (AEL) has been approved by the TCEQ Executive Director or none has been requested.	
SM01	40 CFR Part 60, Subpart BB	60BB-01	Facility Type = Smelt dissolving tank. Construction/Modification Date = Affected source was constructed/modified on or before September 24, 1976.	
SM01	40 CFR Part 63, Subpart MM	63MM-01	Source Type = Smelt dissolving tank. New or Existing Source = Existing source.	Revised requirements of MACT MM published on October 11, 2017, and effective on October 11, 2019, were incorporated, with the exception of the 5-year periodic performance tests which must be

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
			Kraft or Soda Source Alternative = The source at an existing kraft or soda pulp mill operates 6,300 hours per year or more and is complying with the requirements of 40 CFR § 63.862(a)(1)(ii). Subject to 40 CFR § 60.282 = The source is not subject to 40 CFR § 60.282. Control System = Wet scrubber. Alternative Operating Parameter = Prior approval has been received from the EPA Administrator to monitor an alternative control device operating parameters. Subject to 40 CFR Part 63, Subpart S = The source is not subject to 40 CFR Part 63, Subpart S.	conducted by October 13, 2020. The applicable requirements were manually altered to include the current requirements. Added the following: Related Standards § 63.860(d), § 63.864(k)(1)(vi), and § 63.864(k)(2)(iv) Monitoring/Testing § 63.860(d), § 63.864(e)(10)(iii), § 63.864(f), § 63.864(h), § 63.864(k)(1)(vi), and § 63.864(k)(2)(iv) Recordkeeping [G]§ 63.866(d) Reporting [G]§ 63.867(c)(3), § 63.867(c)(4), and [G]§ 63.867(d) Deleted the following: Related Standard § 63.864(k)(2)(iii) Monitoring/Testing § 63.864(k)(2)(iii) Recordkeeping § 63.866(a), [G]§ 63.866(a)(1), and [G]§ 63.866(a)(2)
SM01	40 CFR Part 63, Subpart MM	63MM-02	Source Type = Smelt dissolving tank. New or Existing Source = Existing source. Kraft or Soda Source Alternative = The source at an existing kraft or soda pulp mill either operates less than 6,300 hours per year or operates 6,300 hours per year or more and is complying with the requirements of 40 CFR § 63.862(a)(1)(i). Subject to 40 CFR § 60.282 = The source is not subject to 40 CFR § 60.282. Control System = Wet scrubber. Alternative Operating Parameter = Prior approval has been received from the EPA Administrator to monitor an alternative control device operating parameters. Subject to 40 CFR Part 63, Subpart S = The source is not subject to 40 CFR Part 63, Subpart S.	Revised requirements of MACT MM published on October 11, 2017, and effective on October 11, 2019, were incorporated, with the exception of the 5-year periodic performance tests which must be conducted by October 13, 2020. The applicable requirements were manually altered to include the current requirements. Added the following: Related Standard § 63.860(d) Monitoring/Testing § 63.860(d), § 63.860(f), and § 63.860(h) Recordkeeping [G]§ 63.866(d) Reporting [G]§ 63.867(c)(3), § 63.867(c)(4), and [G]§ 63.867(d) Deleted the following: Recordkeeping § 63.866(a), [G]§ 63.866(a)(1), and [G]§ 63.866(a)(2)
SM02	40 CFR Part 60, Subpart BB	60BB-01	Facility Type = Smelt dissolving tank. Construction/Modification Date = Affected source was constructed/modified after September 24, 1976. Kraft Pulping Combination = Kraft pulping is not combined with neutral sulfite semi-chemical pulping. Scrubber = The smelt dissolving tank or lime kiln uses a scrubber emission control device.	

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
SM02	40 CFR Part 63, Subpart MM	63MM-01	Source Type = Smelt dissolving tank. New or Existing Source = Existing source. Kraft or Soda Source Alternative = The source at an existing kraft or soda pulp mill operates 6,300 hours per year or more and is complying with the requirements of 40 CFR § 63.862(a)(1)(ii). Subject to 40 CFR § 60.282 = The source is subject to 40 CFR § 60.282. Control System = Wet scrubber. Alternative Operating Parameter = Prior approval has been received from the EPA Administrator to monitor an alternative control device operating parameters. Subject to 40 CFR Part 63, Subpart S = The source is not subject to 40 CFR Part 63, Subpart S.	Revised requirements of MACT MM published on October 11, 2017, and effective on October 11, 2019, were incorporated, with the exception of the 5-year periodic performance tests which must be conducted by October 13, 2020. The applicable requirements were manually altered to include the current requirements. Added the following: Related Standards § 63.860(d), § 63.864(k)(1)(vi), and § 63.864(k)(2)(iv) Monitoring/Testing § 63.860(d), § 63.864(e)(10)(iii), § 63.864(f), § 63.864(h), § 63.864(k)(1)(vi), and § 63.864(k)(2)(iv) Recordkeeping [G]§ 63.866(d) Reporting [G]§ 63.867(c)(3), § 63.867(c)(4), and [G]§ 63.867(d) Deleted the following: Related Standard § 63.864(k)(2)(iii) Monitoring/Testing § 63.864(k)(2)(iii) Recordkeeping § 63.866(a), [G]§ 63.866(a)(1), and [G]§ 63.866(a)(2)
SM02	40 CFR Part 63, Subpart MM	63MM-02	Source Type = Smelt dissolving tank. New or Existing Source = Existing source. Kraft or Soda Source Alternative = The source at an existing kraft or soda pulp mill either operates less than 6,300 hours per year or operates 6,300 hours per year or more and is complying with the requirements of 40 CFR § 63.862(a)(1)(i). Subject to 40 CFR § 60.282 = The source is subject to 40 CFR § 60.282. Control System = Wet scrubber. Alternative Operating Parameter = Prior approval has been received from the EPA Administrator to monitor an alternative control device operating parameters. Subject to 40 CFR Part 63, Subpart S = The source is not subject to 40 CFR Part 63, Subpart S.	Revised requirements of MACT MM published on October 11, 2017, and effective on October 11, 2019, were incorporated, with the exception of the 5-year periodic performance tests which must be conducted by October 13, 2020. The applicable requirements were manually altered to include the current requirements. Added the following: Related Standard § 63.860(d) Monitoring/Testing § 63.860(d), § 63.864(f), and § 63.864(h) Recordkeeping [G]§ 63.866(d) Reporting [G]§ 63.867(c)(3), § 63.867(c)(4), and [G]§ 63.867(d) Deleted the following: Recordkeeping § 63.866(a), [G]§ 63.866(a)(1), and [G]§ 63.866(a)(2)
PB02	40 CFR Part 61, Subpart E	61E-01	Emission Testing Waiver = No waiver of emission testing was obtained under 40 CFR § 61.13 Sludge Sampling = Sludge sampling is conducted to determine compliance with § 61.52(b).	

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
			Mercury Emissions = Mercury emissions are less than 1,600 grams per 24-hour period	
PRO-BLEACH	40 CFR Part 63, Subpart S	63S-1	Process = Kraft pulping process using wood. By-pass Line = The process does not use a by-pass line in the closed vent system that could divert vent streams containing hazardous air pollutants to the atmosphere. Alternative Monitoring = Using a control device or alternative parameters other than those specified in § 63.453(b)-(l). Construction Date = On or before December 17, 1993. Clean Condensate Alternative = The affected source is complying with one of the requirements in § 63.443(a)(1)(ii)-(iv). Control Device at Kraft, Soda, or Semi-chemical Process = Reduce the total HAP concentration at the outlet of the thermal oxidizer to 20 parts per million or less by volume, corrected to 10 percent oxygen on a dry basis. Pulp Process Condensates = Condensates are not generated from equipment in 40 CFR § 63.446(b)(1) - (5) or specified equipment is not used in the pulping process. Bleaching System = The bleaching system from the kraft, sulfite, or soda process uses chlorinated compounds. Reduction of Chlorinated HAP Emissions = Achieve a treatment device outlet concentration of 10 parts per million or less by volume of total chlorinated HAP. Monitoring Parameters = Complying with 40 CFR § 63.453(c). Bleaching Plant Provisions = Complying with 40 CFR § 63.440(d)(3)(i). Hypochlorite or Chlorine Bleaching = Hypochlorite or chlorine is not used in the bleaching systems and lines.	Deleted Reporting [G]§ 63.455(b) since the initial notification date has passed.
PRO-FCOND	40 CFR Part 63, Subpart S	63S-1	Process = Kraft pulping process using wood. By-pass Line = The process does not use a by-pass line in the closed vent system that could divert vent streams containing hazardous air pollutants to the atmosphere. Alternative Monitoring = Using a control device or alternative parameters other than those specified in § 63.453(b)-(l). Construction Date = After December 17, 1993. Clean Condensate Alternative = The affected source is complying with one of the requirements in § 63.443(a)(1)(ii)-(iv). Control Device at Kraft, Soda, or Semi-chemical Process = Reduce the total HAP concentration at the outlet of the thermal oxidizer to 20 parts per million or less by volume, corrected to 10 percent oxygen on a dry basis. Pulp Process Condensates = Condensates generated from equipment in 40 CFR § 63.446(b)(1) - (5) are being controlled. Condensate Segregation Method = The condensate segregation method in 40 CFR § 63.446(c)(3) is being used. Condensate Control Tank = A condensate tank is used in the collection system. Condensate Treatment = Treat the process condensates to remove 5.1 kg or more of HAP per Mg of oven-dried pulp, or achieve a HAP concentration of 330 ppmw at control device outlet and discharge condensate below surface of biological treatment system.	Deleted Reporting [G]§ 63.455(b) since the initial notification date has passed.

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
			Mixed Pond = The biological treatment pond is thoroughly mixed. Daily Monitoring Procedures = As an alternative to the monitoring requirements of paragraph 40 CFR § 63.453(j)(1), conduct daily monitoring of the site-specific parameters established according to the procedures specified 40 CFR § 63.453(n). Alternative Continuous Monitoring System = The affected source complies with the requirements specified in 40 CFR § 63.453(g). Bleaching System = The bleaching system from the kraft, sulfite, or soda process uses chlorinated compounds or there is no bleaching system.	
PRO-HVLC	40 CFR Part 63, Subpart S	63S-1	Process = Kraft pulping process using wood. By-pass Line = The process uses a by-pass line in the closed vent system that could divert vent streams containing hazardous air pollutants to the atmosphere. Flow Indicator = A flow indicator is installed to monitor the by-pass line. Alternative Monitoring = NO Construction Date = On or before December 17, 1993. Clean Condensate Alternative = The affected source is complying with one of the requirements in § 63.443(a)(1)(ii)-(iv). Control Device at Kraft, Soda, or Semi-chemical Process = Reduce total HAP emissions using a boiler or recovery furnace with a heat input capacity greater than or equal to 44 megawatts by introducing the HAP emission stream with the combustion air. Pulp Process Condensates = Condensates are not generated from equipment in 40 CFR § 63.446(b)(1) - (5) or specified equipment is not used in the pulping process.	Deleted Reporting [G]§ 63.455(b) since the initial notification date has passed.
PRO-HVLC	40 CFR Part 63, Subpart S	63S-2	Process = Kraft pulping process using wood. By-pass Line = The process uses a by-pass line in the closed vent system that could divert vent streams containing hazardous air pollutants to the atmosphere. Flow Indicator = A flow indicator is installed to monitor the by-pass line. Alternative Monitoring = NO Construction Date = On or before December 17, 1993. Clean Condensate Alternative = The affected source is complying with one of the requirements in § 63.443(a)(1)(ii)-(iv). Control Device at Kraft, Soda, or Semi-chemical Process = Reduce total HAP emissions using a boiler, lime kiln, or recovery furnace by introducing the HAP emission stream with the primary fuel or into the flame zone. Pulp Process Condensates = Condensates are not generated from equipment in 40 CFR § 63.446(b)(1) - (5) or specified equipment is not used in the pulping process.	Deleted Reporting [G]§ 63.455(b) since the initial notification date has passed.
PRO-LVHC	40 CFR Part 63, Subpart S	63S-1	Process = Kraft pulping process using wood. By-pass Line = The process uses a by-pass line in the closed vent system that could divert vent streams containing hazardous air pollutants to the atmosphere. Flow Indicator = A flow indicator is installed to monitor the by-pass line. Alternative Monitoring = NO	Deleted Reporting [G]§ 63.455(b) since the initial notification date has passed.

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
			Construction Date = On or before December 17, 1993. Clean Condensate Alternative = The affected source is complying with one of the requirements in § 63.443(a)(1)(ii)-(iv). Control Device at Kraft, Soda, or Semi-chemical Process = Reduce the total HAP concentration at the outlet of the thermal oxidizer to 20 parts per million or less by volume, corrected to 10 percent oxygen on a dry basis. Pulp Process Condensates = Condensates are not generated from equipment in 40 CFR § 63.446(b)(1) - (5) or specified equipment is not used in the pulping process. Bleaching System = The bleaching system from the kraft, sulfite, or soda process uses chlorinated compounds or there is no bleaching system.	
PRO-LVHC	40 CFR Part 63, Subpart S	63S-2	Process = Kraft pulping process using wood. By-pass Line = The process uses a by-pass line in the closed vent system that could divert vent streams containing hazardous air pollutants to the atmosphere. Flow Indicator = A flow indicator is installed to monitor the by-pass line. Alternative Monitoring = NO Construction Date = On or before December 17, 1993. Clean Condensate Alternative = The affected source is complying with one of the requirements in § 63.443(a)(1)(ii)-(iv). Control Device at Kraft, Soda, or Semi-chemical Process = Reduce total HAP emissions using a boiler, lime kiln, or recovery furnace by introducing the HAP emission stream with the primary fuel or into the flame zone. Pulp Process Condensates = Condensates are not generated from equipment in 40 CFR § 63.446(b)(1) - (5) or specified equipment is not used in the pulping process. Bleaching System = The bleaching system from the kraft, sulfite, or soda process uses chlorinated compounds or there is no bleaching system.	Deleted Reporting [G]§ 63.455(b) since the initial notification date has passed.

* - 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

Prevention of Significant Deterioration (PSD) Permits	
PSD Permit No.: PSDTX778M2	Issuance Date: 02/21/2023
Title 30 TAC Chapter 116 Permits, Special Permits, and Other Authorizations (Other Than Permits by Rule, PSD Permits, or NA Permits) for the Application Area.	
Authorization No.: 2975	Issuance Date: 02/21/2023
Permits by Rule (30 TAC Chapter 106) for the Application Area	
Number: 106.183	Version No./Date: 09/04/2000
Number: 106.227	Version No./Date: 09/04/2000
Number: 106.261	Version No./Date: 03/14/1997
Number: 106.262	Version No./Date: 03/14/1997
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: 106.412	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: 106.476	Version No./Date: 09/04/2000
Number: 106.511	Version No./Date: 09/04/2000
Number: 106.512	Version No./Date: 06/13/2001
Number: 31	Version No./Date: 05/05/1976
Number: 46	Version No./Date: 05/08/1972

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. 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 12. 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.: LK01	
Control Device ID No.: VS-2	Control Device Type: Wet scrubber
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 111, Nonagricultural Processes	SOP Index No.: R1151-01
Pollutant: PM	Main Standard: § 111.151(a)
Monitoring Information	
Indicator: [I] Pressure Drop; [II] Liquid Flow Rate	
Minimum Frequency: [I] once per 15 minutes; [II] once per 15 minutes	
Averaging Period: [I] 3 hours; [II] 3 hours	
Deviation Limit: [I] Minimum Pressure Drop = 17 inches H ₂ O; [II] Minimum Liquid Flow Rate = 404 gpm	
Basis of CAM: A common way to control particulate emissions is by use of a wet scrubber. The option to monitor pressure drop and liquid flow rate may indicate malfunctions in the liquid pumping equipment, blockage of pipes or spray nozzles or the need to adjust the variable throat opening (if applicable). This type monitoring for wet scrubbers is commonly required in federal rules including 40 CFR Part 60, Subparts Y, HH, LL, NN, OOO, and PPP.	

Unit/Group/Process Information	
ID No.: LK02	
Control Device ID No.: 263009	Control Device Type: Wet scrubber
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 111, Nonagricultural Processes	SOP Index No.: R1151-01
Pollutant: PM	Main Standard: § 111.151(a)
Monitoring Information	
Indicator: [I] Pressure Drop; [II] Liquid Flow Rate	
Minimum Frequency: [I] once per 15 minutes; [II] once per 15 minutes	
Averaging Period: [I] 3 hours; [II] 3 hours	
Deviation Limit: [I] Minimum Pressure Drop = 32 inches H2O; [II] Minimum Liquid Flow Rate = 739 gpm	
Basis of CAM: A common way to control particulate emissions is by use of a wet scrubber. The option to monitor pressure drop and liquid flow rate may indicate malfunctions in the liquid pumping equipment, blockage of pipes or spray nozzles or the need to adjust the variable throat opening (if applicable). This type monitoring for wet scrubbers is commonly required in federal rules including 40 CFR Part 60, Subparts Y, HH, LL, NN, OOO, and PPP.	

Unit/Group/Process Information	
ID No.: PB02	
Control Device ID No.: WS-2	Control Device Type: Wet scrubber
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 111, Nonagricultural Processes	SOP Index No.: R1151-01
Pollutant: PM	Main Standard: § 111.151(a)
Monitoring Information	
Indicator: [I] Pressure Drop; [II] Liquid Flow Rate	
Minimum Frequency: [I] once per 15 minutes; [II] once per 15 minutes	
Averaging Period: [I] 3 hours; [II] 3 hours	
Deviation Limit: [I] Minimum Pressure Drop = 16 inches H ₂ O; [II] Minimum Liquid Flow Rate = 3500 gpm	
Basis of CAM: A common way to control particulate emissions is by use of a wet scrubber. The option to monitor pressure drop and liquid flow rate may indicate malfunctions in the liquid pumping equipment, blockage of pipes or spray nozzles or the need to adjust the variable throat opening (if applicable). This type monitoring for wet scrubbers is commonly required in federal rules including 40 CFR Part 60, Subparts Y, HH, LL, NN, OOO, and PPP.	

Unit/Group/Process Information	
ID No.: PB02	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 40 CFR Part 60, Subpart D	SOP Index No.: 60D-01A
Pollutant: PM	Main Standard: § 60.42(a)(1)
Monitoring Information	
Indicator: [I] Pressure Drop; [II] Liquid Flow Rate	
Minimum Frequency: [I] once per 15 minutes; [II] once per 15 minutes	
Averaging Period: [I] 3 hours; [II] 3 hours	
Deviation Limit: [I] Minimum Pressure Drop = 16 inches H ₂ O; [II] Minimum Liquid Flow Rate = 3500 gpm	
Basis of CAM: A common way to control particulate emissions is by use of a wet scrubber. The option to monitor pressure drop and liquid flow rate may indicate malfunctions in the liquid pumping equipment, blockage of pipes or spray nozzles or the need to adjust the variable throat opening (if applicable). This type monitoring for wet scrubbers is commonly required in federal rules including 40 CFR Part 60, Subparts Y, HH, LL, NN, OOO, and PPP.	

Unit/Group/Process Information	
ID No.: PB02	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 40 CFR Part 60, Subpart D	SOP Index No.: 60D-01B
Pollutant: PM	Main Standard: § 60.42(a)(1)
Monitoring Information	
Indicator: [I] Pressure Drop; [II] Liquid Flow Rate	
Minimum Frequency: [I] once per 15 minutes; [II] once per 15 minutes	
Averaging Period: [I] 3 hours; [II] 3 hours	
Deviation Limit: [I] Minimum Pressure Drop = 16 inches H ₂ O; [II] Minimum Liquid Flow Rate = 3500 gpm	
Basis of CAM: A common way to control particulate emissions is by use of a wet scrubber. The option to monitor pressure drop and liquid flow rate may indicate malfunctions in the liquid pumping equipment, blockage of pipes or spray nozzles or the need to adjust the variable throat opening (if applicable). This type monitoring for wet scrubbers is commonly required in federal rules including 40 CFR Part 60, Subparts Y, HH, LL, NN, OOO, and PPP.	

Unit/Group/Process Information	
ID No.: RB01	
Control Device ID No.: EP-IN	Control Device Type: Wet or dry electrostatic precipitator
Control Device ID No.: EP-IS	Control Device Type: wet or dry electrostatic precipitator
Applicable Regulatory Requirement	
Name: 40 CFR Part 60, Subpart BB	SOP Index No.: 60BB-01
Pollutant: PM	Main Standard: § 60.282(a)(1)(i)
Monitoring Information	
Indicator: Opacity	
Minimum Frequency: six times per minute	
Averaging Period: 3 hours	
Deviation Limit: Maximum Opacity = 20%	
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.: RB01A	
Control Device ID No.: EP-IN	Control Device Type: Wet or dry electrostatic precipitator
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 111, Nonagricultural Processes	SOP Index No.: R1151-01
Pollutant: PM	Main Standard: § 111.151(a)
Monitoring Information	
Indicator: Opacity	
Minimum Frequency: six times per minute	
Averaging Period: 3 hours	
Deviation Limit: Maximum Opacity = 20%	
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.: RB01B	
Control Device ID No.: EP-IS	Control Device Type: Wet or dry electrostatic precipitator
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 111, Nonagricultural Processes	SOP Index No.: R1151-01
Pollutant: PM	Main Standard: § 111.151(a)
Monitoring Information	
Indicator: Opacity	
Minimum Frequency: six times per minute	
Averaging Period: 3 hours	
Deviation Limit: Maximum Opacity = 20%	
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.: RB02	
Control Device ID No.: 351013	Control Device Type: Wet or dry electrostatic precipitator
Control Device ID No.: 351014	Control Device Type: wet or dry electrostatic precipitator
Applicable Regulatory Requirement	
Name: 40 CFR Part 60, Subpart BB	SOP Index No.: 60BB-01
Pollutant: PM	Main Standard: § 60.282(a)(1)(i)
Monitoring Information	
Indicator: Opacity	
Minimum Frequency: six times per minute	
Averaging Period: 3 hours	
Deviation Limit: Maximum Opacity = 20%	
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.: RB02A	
Control Device ID No.: 351013	Control Device Type: Wet or dry electrostatic precipitator
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 111, Nonagricultural Processes	SOP Index No.: R1151-01
Pollutant: PM	Main Standard: § 111.151(a)
Monitoring Information	
Indicator: Opacity	
Minimum Frequency: six times per minute	
Averaging Period: 3 hours	
Deviation Limit: Maximum Opacity = 20%	
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.: RB02B	
Control Device ID No.: 351014	Control Device Type: Wet or dry electrostatic precipitator
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 111, Nonagricultural Processes	SOP Index No.: R1151-01
Pollutant: PM	Main Standard: § 111.151(a)
Monitoring Information	
Indicator: Opacity	
Minimum Frequency: six times per minute	
Averaging Period: 3 hours	
Deviation Limit: Maximum Opacity = 20%	
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.: SM01	
Control Device ID No.: SM01	Control Device Type: Wet scrubber
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 111, Nonagricultural Processes	SOP Index No.: R1151-01
Pollutant: PM	Main Standard: § 111.151(a)
Monitoring Information	
Indicator: [I] Fan Motor Current; [II] Liquid Flow Rate	
Minimum Frequency: [I] once per 15 minutes; [II] once per 15 minutes	
Averaging Period: [I] 3 hours; [II] 3 hours	
Deviation Limit: [I] Minimum Current = 77 amps; [II] Minimum Liquid Flow Rate = 88 gpm to scrubber and 48 gpm to fan	
Basis of CAM: The scrubbers operate at near atmospheric pressure and rely on the impaction of exhaust gas particles on rotating fan blades, interception by water droplets and the centrifugal force generated by fan blades to separate particles from the gas stream. Monitoring of the fan motor current to indicate a constant fan speed in conjunction with scrubber liquid flow should ensure proper operation of the scrubber. EPA approved the fan amperage data and scrubbing liquid flow rate as an alternative monitoring parameter to § 63.864(a)(2) in a letter dated June 4, 2003.	

Unit/Group/Process Information	
ID No.: SM02	
Control Device ID No.: 401015	Control Device Type: Wet scrubber
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 111, Nonagricultural Processes	SOP Index No.: R1151-01
Pollutant: PM	Main Standard: § 111.151(a)
Monitoring Information	
Indicator: [I] Fan Motor Current; [II] Liquid Flow Rate	
Minimum Frequency: [I] once per 15 minutes; [II] once per 15 minutes	
Averaging Period: [I] 3 hours; [II] 3 hours	
Deviation Limit: [I] Minimum Current = 36 amps; [II] Minimum Liquid Flow Rate = 95 gpm to scrubber and 75 gpm to fan	
Basis of CAM: The scrubbers operate at near atmospheric pressure and rely on the impaction of exhaust gas particles on rotating fan blades, interception by water droplets and the centrifugal force generated by fan blades to separate particles from the gas stream. Monitoring of the fan motor current to indicate a constant fan speed in conjunction with scrubber liquid flow should ensure proper operation of the scrubber. EPA approved the fan amperage data and scrubbing liquid flow rate as an alternative monitoring parameter to § 63.864(a)(2) in a letter dated June 4, 2003.	

Unit/Group/Process Information	
ID No.: SM02	
Control Device ID No.: 401015	Control Device Type: Wet scrubber
Applicable Regulatory Requirement	
Name: 40 CFR Part 60, Subpart BB	SOP Index No.: 60BB-01
Pollutant: PM	Main Standard: § 60.282(a)(2)
Monitoring Information	
Indicator: [I] Fan Motor Current; [II] Liquid Flow Rate	
Minimum Frequency: [I] once per 15 minutes; [II] once per 15 minutes	
Averaging Period: [I] 3 hours; [II] 3 hours	
Deviation Limit: [I] Minimum current = 36 amps; [II] Minimum liquid flow rate = 95 gpm to scrubber and 75 gpm to fan	
Basis of CAM: The scrubbers operate at near atmospheric pressure and rely on the impaction of exhaust gas particles on rotating fan blades, interception by water droplets and the centrifugal force generated by fan blades to separate particles from the gas stream. Monitoring of the fan motor current to indicate a constant fan speed in conjunction with scrubber liquid flow should ensure proper operation of the scrubber.	

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.: BP14	
Control Device ID No.: BP14	Control Device Type: Wet scrubber
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 111, Visible Emissions	SOP Index No.: R1111-01
Pollutant: Opacity	Main Standard: § 111.111(a)(1)(B)
Monitoring Information	
Indicator: [I] Liquid flow rate; [II] Liquid pH; [III] Fan motor current	
Minimum Frequency: [I] once per 15 minutes; [II] once per 15 minutes; [III] once per 15 minutes	
Averaging Period: [I] 3 hours; [II] 3 hours; [III] 3 hours	
Deviation Limit: [I] Minimum liquid flow rate = 12 gpm to scrubber; [II] Minimum pH of liquid = 8.37; [III] Minimum current = 25.6 amps	
Basis of monitoring: The scrubbers operate at near atmospheric pressure and rely on the impaction of exhaust gas particles on rotating fan blades, interception by water droplets and the centrifugal force generated by fan blades to separate particles from the gas stream. Monitoring of the fan motor current to indicate a constant fan speed in conjunction with scrubber liquid flow and pH of liquid flow should ensure proper operation of the scrubber.	

Unit/Group/Process Information	
ID No.: BP15	
Control Device ID No.: BP15	Control Device Type: Wet scrubber
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 111, Visible Emissions	SOP Index No.: R1111-01
Pollutant: Opacity	Main Standard: § 111.111(a)(1)(B)
Monitoring Information	
Indicator: [I] Liquid flow rate; [II] Liquid pH; [III] Fan motor current	
Minimum Frequency: [I] once per 15 minutes; [II] once per 15 minutes; [III] once per 15 minutes	
Averaging Period: [I] 3 hours; [II] 3 hours; [III] 3 hours	
Deviation Limit: [I] Minimum liquid flow rate = 71 gpm to scrubber; [II] Minimum pH of liquid = 8.6; [III] Minimum current = 18.5 amps	
Basis of monitoring: The scrubbers operate at near atmospheric pressure and rely on the impaction of exhaust gas particles on rotating fan blades, interception by water droplets and the centrifugal force generated by fan blades to separate particles from the gas stream. Monitoring of the fan motor current to indicate a constant fan speed in conjunction with scrubber liquid flow and pH of liquid flow should ensure proper operation of the scrubber.	

Unit/Group/Process Information	
ID No.: BP16	
Control Device ID No.: BP16	Control Device Type: Wet scrubber
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 111, Visible Emissions	SOP Index No.: R1111-01
Pollutant: Opacity	Main Standard: § 111.111(a)(1)(B)
Monitoring Information	
Indicator: [I] Liquid flow rate; [II] Liquid pH; [III] Fan motor current	
Minimum Frequency: [I] once per 15 minutes; [II] once per 15 minutes; [III] once per 15 minutes	
Averaging Period: [I] 3 hours; [II] 3 hours; [III] 3 hours	
Deviation Limit: Treating Only A-Line Gases: [I] Minimum liquid flow rate = 996 gpm (sum of both bodies); [II] Minimum pH of liquid flow = 8.0; [III] Minimum Current = 22 amps Treating A-Line and B-line Gases: [I] Minimum Liquid Flow Rate = 996 gpm (sum of both bodies); [II] Minimum pH of Liquid Flow = 9.49 (for either body); [III] Minimum current = 22 amps	
Basis of monitoring: The scrubbers operate at near atmospheric pressure and rely on the impaction of exhaust gas particles on rotating fan blades, interception by water droplets and the centrifugal force generated by fan blades to separate particles from the gas stream. Monitoring of the fan motor current to indicate a constant fan speed in conjunction with scrubber liquid flow and pH of liquid flow should ensure proper operation of the scrubber.	

Unit/Group/Process Information	
ID No.: CTRW-1	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 111, Visible Emissions	SOP Index No.: R1111-01
Pollutant: Opacity	Main Standard: § 111.111(a)(1)(A)
Monitoring Information	
Indicator: Visible Emissions	
Minimum Frequency: once per calendar quarter	
Averaging Period: n/a	
Deviation Limit: No visible emissions	
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.	

Unit/Group/Process Information	
ID No.: EX7LAM1	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 111, Visible Emissions	SOP Index No.: R1111-01
Pollutant: Opacity	Main Standard: § 111.111(a)(1)(A)
Monitoring Information	
Indicator: Visible Emissions	
Minimum Frequency: once per calendar quarter	
Averaging Period: n/a	
Deviation Limit: No visible emissions	
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.	

Unit/Group/Process Information	
ID No.: LK01	
Control Device ID No.: VS-2	Control Device Type: Wet scrubber
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 111, Visible Emissions	SOP Index No.: R1111-01
Pollutant: Opacity	Main Standard: § 111.111(a)(1)(A)
Monitoring Information	
Indicator: Liquid Flow Rate	
Minimum Frequency: Once per week	
Averaging Period: n/a	
Deviation Limit: Minimum Liquid Flow Rate = 404 gpm	
Basis of monitoring: A common way to control particulate emissions is by use of a wet scrubber. The option to monitor pressure drop and liquid flow rate may indicate malfunctions in the liquid pumping equipment, blockage of pipes or spray nozzles or the need to adjust the variable throat opening (if applicable). This type monitoring for wet scrubbers is commonly required in federal rules including 40 CFR Part 60, Subparts Y, HH, LL, NN, OOO, and PPP.	

Unit/Group/Process Information	
ID No.: LK01	
Control Device ID No.: VS-2	Control Device Type: Wet scrubber
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 111, Visible Emissions	SOP Index No.: R1111-01
Pollutant: Opacity	Main Standard: § 111.111(a)(1)(A)
Monitoring Information	
Indicator: Pressure Drop	
Minimum Frequency: Once per week	
Averaging Period: n/a	
Deviation Limit: Minimum Pressure Drop = 17 inches H2O	
Basis of monitoring: A common way to control particulate emissions is by use of a wet scrubber. The option to monitor pressure drop and liquid flow rate may indicate malfunctions in the liquid pumping equipment, blockage of pipes or spray nozzles or the need to adjust the variable throat opening (if applicable). This type monitoring for wet scrubbers is commonly required in federal rules including 40 CFR Part 60, Subparts Y, HH, LL, NN, OOO, and PPP.	

Unit/Group/Process Information	
ID No.: LK01	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 112, Sulfur Compounds	SOP Index No.: REG2-01
Pollutant: SO ₂	Main Standard: § 112.9(a)
Monitoring Information	
Indicator: Sulfur content of fuel	
Minimum Frequency: Quarterly and within 24 hours of any fuel change	
Averaging Period: N/A	
Deviation Limit: Maximum Sulfur Dioxide Emission Concentration = 440 ppmv at actual stack conditions (3 hour average)	
Basis of monitoring: It is widely practiced and accepted to use performance tests, manufacturer's recommendations, engineering calculations and/or historical data to establish a correlation between the component concentration and component emission rate. In situations where such a correlation exists, determining the concentration of components in the feed stock would indicate whether the emission limitation or standard are being met.	

Unit/Group/Process Information	
ID No.: LK02	
Control Device ID No.: 263009	Control Device Type: Wet scrubber
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 111, Visible Emissions	SOP Index No.: R1111-01
Pollutant: Opacity	Main Standard: § 111.111(a)(1)(B)
Monitoring Information	
Indicator: Liquid Flow Rate	
Minimum Frequency: Once per week	
Averaging Period: n/a	
Deviation Limit: Minimum Liquid Flow Rate = 739 gpm	
Basis of monitoring: A common way to control particulate emissions is by use of a wet scrubber. The option to monitor pressure drop and liquid flow rate may indicate malfunctions in the liquid pumping equipment, blockage of pipes or spray nozzles or the need to adjust the variable throat opening (if applicable). This type monitoring for wet scrubbers is commonly required in federal rules including 40 CFR Part 60, Subparts Y, HH, LL, NN, OOO, and PPP.	

Unit/Group/Process Information	
ID No.: LK02	
Control Device ID No.: 263009	Control Device Type: Wet scrubber
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 111, Visible Emissions	SOP Index No.: R1111-01
Pollutant: Opacity	Main Standard: § 111.111(a)(1)(B)
Monitoring Information	
Indicator: Pressure Drop	
Minimum Frequency: Once per week	
Averaging Period: n/a	
Deviation Limit: Minimum Pressure Drop = 32 inches H2O	
Basis of monitoring: A common way to control particulate emissions is by use of a wet scrubber. The option to monitor pressure drop and liquid flow rate may indicate malfunctions in the liquid pumping equipment, blockage of pipes or spray nozzles or the need to adjust the variable throat opening (if applicable). This type monitoring for wet scrubbers is commonly required in federal rules including 40 CFR Part 60, Subparts Y, HH, LL, NN, OOO, and PPP.	

Unit/Group/Process Information	
ID No.: LK02	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 112, Sulfur Compounds	SOP Index No.: REG2-01
Pollutant: SO ₂	Main Standard: § 112.9(a)
Monitoring Information	
Indicator: Sulfur content of fuel	
Minimum Frequency: Quarterly and within 24 hours of any fuel change	
Averaging Period: N/A	
Deviation Limit: Maximum Sulfur Dioxide Emission Concentration = 440 ppmv at actual stack conditions (3 hour average)	
Basis of monitoring: It is widely practiced and accepted to use performance tests, manufacturer's recommendations, engineering calculations and/or historical data to establish a correlation between the component concentration and component emission rate. In situations where such a correlation exists, determining the concentration of components in the feed stock would indicate whether the emission limitation or standard are being met.	

Unit/Group/Process Information	
ID No.: PB01	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 111, Visible Emissions	SOP Index No.: R1111-01
Pollutant: Opacity	Main Standard: § 111.111(a)(1)(A)
Monitoring Information	
Indicator: Opacity	
Minimum Frequency: six times per minute	
Averaging Period: six minutes	
Deviation Limit: Maximum opacity = 30%	
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.	

Unit/Group/Process Information	
ID No.: PB01	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 111, Visible Emissions	SOP Index No.: R1111-02
Pollutant: Opacity	Main Standard: § 111.111(a)(1)(C)
Monitoring Information	
Indicator: Visible Emissions	
Minimum Frequency: Once per calendar quarter	
Averaging Period: n/a	
Deviation Limit: Maximum Opacity = 15%	
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. 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. The monitoring specifications and procedures for the visible emissions monitoring are similar to "EPA Reference Method 22" procedures.	

Unit/Group/Process Information	
ID No.: PB01	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 112, Sulfur Compounds	SOP Index No.: REG2-01
Pollutant: SO ₂	Main Standard: § 112.9(a)
Monitoring Information	
Indicator: Sulfur content of fuel	
Minimum Frequency: Quarterly and within 24 hours of any fuel change	
Averaging Period: N/A	
Deviation Limit: Maximum Sulfur Dioxide Emission Concentration = 440 ppmv at actual stack conditions (3-hour average)	
Basis of monitoring: It is widely practiced and accepted to use performance tests, manufacturer's recommendations, engineering calculations and/or historical data to establish a correlation between the component concentration and component emission rate. In situations where such a correlation exists, determining the concentration of components in the feed stock would indicate whether the emission limitation or standard are being met.	

Unit/Group/Process Information	
ID No.: PB02	
Control Device ID No.: WS-2	Control Device Type: Wet scrubber
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 111, Visible Emissions	SOP Index No.: R1111-01
Pollutant: Opacity	Main Standard: § 111.111(a)(1)(B)
Monitoring Information	
Indicator: Liquid Flow Rate	
Minimum Frequency: Once per week	
Averaging Period: n/a	
Deviation Limit: Minimum Liquid Flow Rate = 3500 gpm	
Basis of monitoring: A common way to control particulate emissions is by use of a wet scrubber. The option to monitor pressure drop and liquid flow rate may indicate malfunctions in the liquid pumping equipment, blockage of pipes or spray nozzles or the need to adjust the variable throat opening (if applicable). This type monitoring for wet scrubbers is commonly required in federal rules including 40 CFR Part 60, Subparts Y, HH, LL, NN, OOO, and PPP.	

Unit/Group/Process Information	
ID No.: PB02	
Control Device ID No.: WS-2	Control Device Type: Wet scrubber
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 111, Visible Emissions	SOP Index No.: R1111-01
Pollutant: Opacity	Main Standard: § 111.111(a)(1)(B)
Monitoring Information	
Indicator: Pressure Drop	
Minimum Frequency: Once per week	
Averaging Period: n/a	
Deviation Limit: Minimum Pressure Drop = 16 inches H2O	
Basis of monitoring: A common way to control particulate emissions is by use of a wet scrubber. The option to monitor pressure drop and liquid flow rate may indicate malfunctions in the liquid pumping equipment, blockage of pipes or spray nozzles or the need to adjust the variable throat opening (if applicable). This type monitoring for wet scrubbers is commonly required in federal rules including 40 CFR Part 60, Subparts Y, HH, LL, NN, OOO, and PPP.	

Unit/Group/Process Information	
ID No.: RB01	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 112, Sulfur Compounds	SOP Index No.: REG2-01
Pollutant: SO ₂	Main Standard: § 112.9(a)
Monitoring Information	
Indicator: SO ₂ concentration	
Minimum Frequency: four times per hour	
Averaging Period: 3 hours	
Deviation Limit: 440 ppmv at actual stack conditions	
Basis of monitoring: 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.: RB01A	
Control Device ID No.: EP-IN	Control Device Type: Wet or dry electrostatic precipitator
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 111, Visible Emissions	SOP Index No.: R1111-01
Pollutant: Opacity	Main Standard: § 111.111(a)(1)(A)
Monitoring Information	
Indicator: Opacity	
Minimum Frequency: six times per minute	
Averaging Period: six minutes	
Deviation Limit: Maximum opacity = 30%	
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.	

Unit/Group/Process Information	
ID No.: RB01B	
Control Device ID No.: EP-IS	Control Device Type: Wet or dry electrostatic precipitator
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 111, Visible Emissions	SOP Index No.: R1111-01
Pollutant: Opacity	Main Standard: § 111.111(a)(1)(A)
Monitoring Information	
Indicator: Opacity	
Minimum Frequency: six times per minute	
Averaging Period: six minutes	
Deviation Limit: Maximum opacity = 30%	
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.	

Unit/Group/Process Information	
ID No.: RB02	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 112, Sulfur Compounds	SOP Index No.: REG2-01
Pollutant: SO ₂	Main Standard: § 112.9(a)
Monitoring Information	
Indicator: SO ₂ concentration	
Minimum Frequency: four times per hour	
Averaging Period: 3 hours	
Deviation Limit: 440 ppmv at actual stack conditions	
Basis of monitoring: 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.: SM01	
Control Device ID No.: SM01	Control Device Type: Wet scrubber
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 111, Visible Emissions	SOP Index No.: R1111-01
Pollutant: Opacity	Main Standard: § 111.111(a)(1)(B)
Monitoring Information	
Indicator: [I] Fan motor current; [II] Liquid flow rate	
Minimum Frequency: [I] once per 15 minutes; [II] once per 15 minutes	
Averaging Period: [I] 3 hours; [II] 3 hours	
Deviation Limit: [I] Minimum Current = 77 amps; [II] Minimum Liquid Flow Rate = 88 gpm to scrubber and 48 gpm to fan	
Basis of monitoring: The scrubbers operate at near atmospheric pressure and rely on the impaction of exhaust gas particles on rotating fan blades, interception by water droplets and the centrifugal force generated by fan blades to separate particles from the gas stream. Monitoring of the fan motor current to indicate a constant fan speed in conjunction with scrubber liquid flow should ensure proper operation of the scrubber. EPA approved the fan amperage data and scrubbing liquid flow rate as an alternative monitoring parameter to § 63.864(a)(2) in a letter dated June 4, 2003.	

Unit/Group/Process Information	
ID No.: SM02	
Control Device ID No.: 401015	Control Device Type: Wet scrubber
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 111, Visible Emissions	SOP Index No.: R1111-01
Pollutant: Opacity	Main Standard: § 111.111(a)(1)(B)
Monitoring Information	
Indicator: [I] Fan Motor Current; [II] Liquid flow rate	
Minimum Frequency: [I] once per 15 minutes; [II] once per 15 minutes	
Averaging Period: [I] 3 hours; [II] 3 hours	
Deviation Limit: [I] Minimum current = 36 amps; [II] Minimum Liquid Flow Rate = 95 gpm to scrubber and 75 gpm to fan	
Basis of monitoring: The scrubbers operate at near atmospheric pressure and rely on the impaction of exhaust gas particles on rotating fan blades, interception by water droplets and the centrifugal force generated by fan blades to separate particles from the gas stream. Monitoring of the fan motor current to indicate a constant fan speed in conjunction with scrubber liquid flow should ensure proper operation of the scrubber. EPA approved the fan amperage data and scrubbing liquid flow rate as an alternative monitoring parameter to § 63.864(a)(2) in a letter dated June 4, 2003.	

Unit/Group/Process Information	
ID No.: TNK0115	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 111, Visible Emissions	SOP Index No.: R1111-01
Pollutant: Opacity	Main Standard: § 111.111(a)(1)(A)
Monitoring Information	
Indicator: Visible Emissions	
Minimum Frequency: once per calendar quarter	
Averaging Period: n/a	
Deviation Limit: No visible emissions	
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.	

Unit/Group/Process Information	
ID No.: TNK0116	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 111, Visible Emissions	SOP Index No.: R1111-01
Pollutant: Opacity	Main Standard: § 111.111(a)(1)(A)
Monitoring Information	
Indicator: Visible Emissions	
Minimum Frequency: once per calendar quarter	
Averaging Period: n/a	
Deviation Limit: No visible emissions	
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.tceq.texas.gov/permitting/air/permitbyrule/air_pbr_index.html

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

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

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

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

Additional information concerning PBRs is available on the TCEQ website:

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

Compliance Review

1. In accordance with 30 TAC Chapter 60, the compliance history was reviewed on May 20, 2025.

Site rating: 0.31 / Satisfactory Company rating: 0.31 / Satisfactory

(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

1. Were there any out-of-compliance units listed on Form OP-ACPS?No

2. Is a compliance plan and schedule included in the permit?No

Available Unit Attribute Forms

OP-UA1 - Miscellaneous and Generic Unit Attributes

OP-UA2 - Stationary Reciprocating Internal Combustion Engine Attributes

OP-UA3 - Storage Tank/Vessel Attributes

OP-UA4 - Loading/Unloading Operations Attributes

OP-UA5 - Process Heater/Furnace Attributes

OP-UA6 - Boiler/Steam Generator/Steam Generating Unit Attributes

OP-UA7 - Flare Attributes

OP-UA10 - Gas Sweetening/Sulfur Recovery Unit Attributes

OP-UA11 - Stationary Turbine Attributes

OP-UA12 - Fugitive Emission Unit Attributes

OP-UA13 - Industrial Process Cooling Tower Attributes

OP-UA14 - Water Separator Attributes

OP-UA15 - Emission Point/Stationary Vent/Distillation Operation/Process Vent Attributes

OP-UA16 - Solvent Degreasing Machine Attributes

OP-UA17 - Distillation Unit Attributes

OP-UA18 - Surface Coating Operations Attributes

OP-UA19 - Wastewater Unit Attributes

OP-UA20 - Asphalt Operations Attributes

OP-UA21 - Grain Elevator Attributes

OP-UA22 - Printing Attributes

OP-UA24 - Wool Fiberglass Insulation Manufacturing Plant Attributes

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