# 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: Minor Revision

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

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

Prepared on: October 1, 2026

# Operating Permit
# Basis of Determination

**Description of Revisions**

- Updated deviation limit in Compliance Assurance Monitoring and Periodic Monitoring Tables for the wet scrubber associated with Unit IDs SM01 (SOP Index Number: R1151-01 for 30 TAC Chapter 111, Nonagricultural Processes and R1111-01 for 30 TAC Chapter 111, Visible Emissions) & SM02 (SOP Index Number: R1111-01 for 30 TAC Chapter 111, Nonagricultural Processes).
- Added 40 CFR Part 60, Subpart BBa applicability to Unit ID SM02
- Removed 40 CFR Part 60, Subpart BB applicability for SM02

**Permit Area Process Description**

The Texarkana Mill produces bleached kraft pulp that is used to make paperboard for packaging materials. The operations with air emissions sources at the Texarkana Mill include the following: Woodyard, Power, Chemical Recovery, Caustic Plant, Non-Condensable Gas System, Pulping, Bleaching, Papermaking, Wastewater Treatment, Miscellaneous Support Operations, Extruders.

GPI woodyard operations debark logs, process chips, and intake purchased chips as raw materials to the process, which are digested under elevated temperature and pressure in an alkaline solution of sodium sulfide and sodium hydroxide, called “white liquor”. The two pulping lines process hardwood and softwood to produce a pulp slurry which is bleached and sent to the paper machines. The final product is dried and can be laminated through extruders that combine it with polyethylene.

**Chemical Recovery Operations**

The Texarkana Mil 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, Emission 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. 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.

**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, SO2, PM, NOX, HAPS, CO |

**Reading State of Texas's Federal Operating Permit**

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

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

- General Terms and Conditions
- Special Terms and Conditions
    - Emissions Limitations and Standards, Monitoring and Testing, and Recordkeeping and Reporting
    - Additional Monitoring Requirements
    - New Source Review Authorization Requirements
    - 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 |

| Regulatory Program | Applicability (Yes/No) |
|---|---|
| 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.

| 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.<br>Exemptions = The CI ICE is not exempt due to national security, testing at an engine test cell/stand or as a temporary replacement.<br>Service = CI ICE is a fire-pump engine, an emergency engine certified to National Fire Protection Association requirements.<br>Commencing = CI ICE was reconstructed after 07/11/2005 (per §60.15)<br>Manufacture Date = Date of manufacture was after 07/01/2006.<br>Diesel = Diesel fuel is used.<br>Displacement = Displacement is less than 10 liters per cylinder.<br>Model Year = CI ICE was manufactured in model year 2013.<br>Kilowatts = Power rating is greater than or equal to 130 KW and less than or equal to 368 KW.<br>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)<br>Compliance Option = Engine certified to meet the emission standards in §60.4204(e) or §60.4205(f), as applicable. | -- Affected Pollutant - CO:<br>Added Main Standard § 60.4205(c)-Table 4<br>Added Related Standard § 60.4205(f)<br>Added Related Standard § 60.4206<br>Added Related Standard § 60.4207(b)<br>Added Related Standard § 60.4211(e)<br>Added Related Standard § 60.4211(e)(1)<br>Added Related Standard [G]§ 60.4211(f)<br>Added Monitoring/Testing § 60.4209(a)<br>Added Recordkeeping § 60.4214(b)<br>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<br>Brake HP = Stationary RICE with a brake HP greater than or equal to 250 HP and less than 300 HP.<br>Construction/Reconstruction Date = Commenced construction or reconstruction on or after June 12, 2006.<br>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.<br>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).<br>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.<br>Exemptions = The CI ICE is not exempt due to national security, testing at an engine test cell/stand or as a temporary replacement.<br>Service = CI ICE is a fire-pump engine, an emergency engine certified to National Fire Protection Association requirements.<br>Commencing = CI ICE was reconstructed after 07/11/2005 (per §60.15)<br>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.<br>Displacement = Displacement is less than 10 liters per cylinder.<br>Generator Set = The CI ICE is not a generator set engine.<br>Model Year = CI ICE was manufactured in model year 2013.<br>Install Date = The CI ICE was installed in 2012 through 2015.<br>Kilowatts = Power rating is greater than or equal to 130 KW and less than or equal to 368 KW.<br>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)<br>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<br>Brake HP = Stationary RICE with a brake HP greater than or equal to 250 HP and less than 300 HP.<br>Construction/Reconstruction Date = Commenced construction or reconstruction on or after June 12, 2006.<br>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.<br>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).<br>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<br>Brake HP = Stationary RICE with a brake HP less than 100 HP.<br>Construction/Reconstruction Date = Commenced construction or reconstruction before December 19, 2002.<br>Service Type = Normal use.<br>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<br>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.<br>Service Type = Normal use.<br>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.<br>Exemptions = The CI ICE is not exempt due to national security, testing at an engine test cell/stand or as a temporary replacement.<br>Service = CI ICE is an emergency engine.<br>Commencing = CI ICE was newly constructed after 07/11/2005<br>Manufacture Date = Date of manufacture was after 04/01/2006.<br>Diesel = Diesel fuel is used.<br>Displacement = Displacement is less than 10 liters per cylinder and engine is a constant-speed engine.<br>Model Year = CI ICE was manufactured in model year 2017 or later.<br>Kilowatts = Power rating is greater than or equal to 75 KW and less than 130 KW.<br>AECD = The CI ICE is not equipped with auxiliary emission control devices (AECDs) pursuant to the requirements of 40 CFR 1039.665<br>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)<br>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<br>Brake HP = Stationary RICE with a brake HP greater than or equal to 100 HP and less than 250 HP.<br>Construction/Reconstruction Date = Commenced construction or reconstruction on or after June 12, 2006.<br>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.<br>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).<br>Stationary RICE Type = Compression ignition engine | |
| BP0351 | 40 CFR Part 60, Subpart Kb | 60Kb-01 | Product Stored = Volatile organic liquid<br>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<br>Storage Capacity = Capacity is greater than or equal to 39,890 gallons (151,000 liters)<br>WW Tank Control = The storage vessel is not using 40 CFR 63, subpart WW to comply with 40 CFR 60, subpart Kb<br>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)<br>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<br>Storage Capacity = Capacity is greater than or equal to 39,890 gallons (151,000 liters)<br>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<br>Storage Capacity = Capacity is greater than 65,000 gallons (246,052 liters)<br>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<br>Storage Capacity = Capacity is greater than or equal to 39,890 gallons (151,000 liters)<br>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<br>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)<br>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.<br>Alternate Control Requirement (ACR) = No alternate control requirements are being utilized.<br>Product Transferred = Volatile organic compounds other than gasoline.<br>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.<br>Alternate Control Requirement (ACR) = No alternate control requirements are being utilized.<br>Product Transferred = Volatile organic compounds other than gasoline.<br>Transfer Type = Loading and unloading. | |
| LK01 | 30 TAC Chapter 112, Sulfur Compounds | REG2-01 | Fuel Type = Liquid fuel.<br>Heat Input = Design heat input is less than or equal to 250 MMBtu/hr.<br>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.<br>Heat Input = Design heat input is less than or equal to 250 MMBtu/hr.<br>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.<br>Heat Input = Design heat input is greater than 250 MMBtu/hr.<br>Control Equipment = Unit not equipped with $SO_2$ control equipment.<br>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, modified, or reconstructed 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 | 63DDDDD-01 | Commence = Source is existing (commenced construction or reconstruction on or before June 4, 2010)<br>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.<br>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 $SO_2$ control equipment.<br>FCAA § 412(c) = The unit is not subject to the Federal Clean Air Act § 412(c) [FCAA § 412(c)] as amended in 1990.<br>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.<br>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.<br>Changes to Existing Affected Facility = No change has been made to the existing fossil fuel-fired steam generating unit.<br>Heat Input Rate = Heat input rate is greater than 250 MMBtu/hr (73 MW).<br>Alternate 42C = The facility is meeting the requirements of § 60.42(a) for PM.<br>PM CEMS = The facility does not use a CEMS to measure PM.<br>Opacity Monitoring = Facility meets exemption from COMS in § 60.45(b)(1) or (b)(6).<br>Gas/Liquid Fuel = The facility does not burn only gaseous or liquid fossil fuel (excluding residual oil) with potential $SO_2$ emissions rates of 0.060 lb/MMBtu or less and does not use post combustion technology to reduce emissions of $SO_2$ or PM.<br>Fuels with 0.30 Percent or Less Sulfur = Facility uses post combustion technology (except a wet scrubber) for reducing PM, $SO_2$, or CO, burns gaseous fuels or fuel oils that contain more than 0.30 % sulfur by weight or other fuels, or operates so CO emissions are > 0.15 lb/MMBtu average.<br>Specific Site = The facility is not Southwestern Public Service Company's Harrington Station #1 in Amarillo, TX.<br>D-Series Fuel Type #1 = Wood residue.<br>D-Series Fuel Type #2 = Natural gas.<br>D-Series Fuel Type #3 = Non-fossil fuel other than wood residue.<br>Alternate 43D = No alternative requirement is used for $SO_2$, unit is complying with requirements of § 60.43(a) and (b).<br>Alternate 44E = The facility is meeting the requirements of § 60.44(a), (b), and (d) for $NO_x$.<br>Flue Gas Desulfurization = The unit utilizes a flue gas desulfurization device.<br>SO2 Monitoring = Fuel receipts.<br>Cyclone-Fired Unit = The unit is not a cyclone-fired unit.<br>NOx Monitoring Type = It was not demonstrated during the performance test that emissions of $NO_x$ are less than 70% of applicable standards in 40 CFR § 60.44. | PM(OPACITY) - The applicable requirements were determined from an analysis of the rule text for units with an Alternative Requirement approved by EPA<br>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.<br>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.<br>Heat Input Rate = Heat input rate is greater than 250 MMBtu/hr (73 MW).<br>Alternate 42C = The facility is meeting the requirements of § 60.42(a) for PM.<br>PM CEMS = The facility does not use a CEMS to measure PM.<br>Opacity Monitoring = Facility meets exemption from COMS in § 60.45(b)(1) or (b)(6).<br>Gas/Liquid Fuel = The facility does not burn only gaseous or liquid fossil fuel (excluding residual oil) with potential $SO_2$ emissions rates of 0.060 lb/MMBtu or less and does not use post combustion technology to reduce emissions of $SO_2$ or PM.<br>Fuels with 0.30 Percent or Less Sulfur = Facility uses post combustion technology (except a wet scrubber) for reducing PM, $SO_2$, or CO, burns gaseous fuels or fuel oils that contain more than 0.30 % sulfur by weight or other fuels, or operates so CO emissions are > 0.15 lb/MMBtu average.<br>Specific Site = The facility is not Southwestern Public Service Company's Harrington Station #1 in Amarillo, TX.<br>D-Series Fuel Type #1 = Liquid fossil fuel.<br>Alternate 43D = No alternative requirement is used for $SO_2$, unit is complying with requirements of § 60.43(a) and (b).<br>Alternate 44E = The facility is meeting the requirements of § 60.44(a), (b), and (d) for $NO_x$.<br>Flue Gas Desulfurization = The unit utilizes a flue gas desulfurization device.<br>SO2 Monitoring = Fuel receipts.<br>Cyclone-Fired Unit = The unit is not a cyclone-fired unit.<br>NOx Monitoring Type = It was not demonstrated during the performance test that emissions of $NO_x$ are less than 70% of applicable standards in 40 CFR § 60.44. | |
| PB02 | 40 CFR Part 60, Subpart Db | 60Db-01 | Construction/Modification Date = Constructed, modified, or reconstructed 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 | 63DDDDD-01 | Commence = Source is existing (commenced construction or reconstruction on or before June 4, 2010)<br>Table Applicability = The unit burns biomass/bio-based solid fuel AND has heat input equal to or greater than 10 MMBtu/hr<br>HCl Emission = Emission limits for HCl in pounds per MMBtu heat input<br>HCl-CMS = A CMS is not being used<br>HCl-CD = A wet acid scrubber is used<br>HCl-Test = A performance test is not being used<br>HCl-FA = Compliance is demonstrated by conducting fuel analysis for HCl<br>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<br>Hg Emission = Emission limits for Hg in pounds per MMBtu heat input<br>Hg-InjRate = An operating limit does not require a monitoring system to measure sorbent injection rate for mercury<br>Hg-CMS = A CMS is not being used<br>Hg-CD = A wet acid scrubber is used<br>Hg-Test = A performance test is not being used<br>Hg-FA = Compliance is demonstrated by conducting fuel analysis for Hg<br>BM Subcategory = The unit is a hybrid suspension/grate burner designed to burn wet biomass/bio-based solid<br>PM/TSM Emission = Emission limits for PM in pounds per MMBtu heat input<br>PM-CMS = CMS is not being used<br>PM-CD = A Wet Scrubber is used<br>PM-Test = Compliance is demonstrated by conducting a performance test for PM<br>PM-FM = A flow monitoring system is not required<br>PM-PMON = Operating limit requires the use of a pressure monitoring system<br>Opacity-CD = Other control methods are being used<br>CO Emission = Emission limits for CO in ppm by volume not using a CEMS<br>CO-CMS = CMS is not being used<br>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.<br>Heat Input = Design heat input is greater than 250 MMBtu/hr.<br>Control Equipment = Unit not equipped with $SO_2$ control equipment.<br>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, modified, or reconstructed 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.<br>Heat Input = Design heat input is greater than 250 MMBtu/hr.<br>Control Equipment = Unit not equipped with $SO_2$ control equipment.<br>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<br>Heat Input Capacity = Heat input capacity is greater than 250 MMBtu/hr (73 MW).<br>Subpart Da = The affected facility does not meet applicability requirements of 40 CFR Part 60, Subpart Da.<br>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.<br>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.<br>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.<br>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.<br>Temporary Boiler = The steam-generating unit is not a temporary boiler<br>D-Series Fuel Type #1 = Byproduct/waste.<br>D-Series Fuel Type #2 = Natural gas.<br>Subpart D = The affected facility does not meet the applicability requirements of 40 CFR Part 60, Subpart D.<br>Additional Applicability Requirement = The affected facility meets the applicability requirements in 40 CFR Part 60, Subpart BB<br>ACF Option - SO2 = Other ACF or no ACF.<br>ACF Option - PM = Other ACF or no ACF.<br>ACF Option - NOx = 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)<br>60.49Da(n) Alternative = The facility is not using the § 60.49Da(n) alternative.<br>60.49Da(m) Alternative = The facility is not using the § 60.49Da(m) alternative.<br>Monitoring Type PM = No particulate monitoring.<br>Monitoring Type PM (Opacity) = No particulate (opacity) monitoring.<br>Monitoring Type NOx = No $NO_x$ monitoring.<br>Monitoring Type SO2 = No $SO_2$ monitoring.<br>Technology Type = No emerging or conventional technology is used to reduce or control SO2 emissions<br>Unit Type = OTHER UNIT TYPE<br>Heat Release Rate = Natural gas with a heat release rate less than or equal to 70 MBtu/hr/$ft^3$. | NOX: The rule citations for NOx 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.<br>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.<br>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.<br>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).<br>Construction Date = After January 31, 1972<br>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.<br>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.<br>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).<br>Construction Date = After January 31, 1972<br>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.<br>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.<br>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).<br>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.<br>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.<br>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).<br>Construction Date = On or before January 31, 1972<br>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.<br>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.<br>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).<br>Construction Date = On or before January 31, 1972<br>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.<br>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.<br>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).<br>Construction Date = On or before January 31, 1972<br>Effluent Flow Rate = Effluent flow rate is less than 100,000 actual cubic feet per minute.<br>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.<br>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.<br>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).<br>Construction Date = After January 31, 1972<br>Effluent Flow Rate = Effluent flow rate is less than 100,000 actual cubic feet per minute.<br>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.<br>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.<br>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).<br>Construction Date = On or before January 31, 1972<br>Effluent Flow Rate = Effluent flow rate is at least 100,000 actual cubic feet per minute.<br>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.<br>Vent Source = The source of the vent is a steam generator that burns oil or a mixture of oil and gas.<br>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).<br>Construction Date = On or before January 31, 1972<br>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.<br>Vent Source = The source of the vent is a steam generator that burns oil or a mixture of oil and gas.<br>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.<br>Construction Date = After January 31, 1972<br>Effluent Flow Rate = Effluent flow rate is at least 100,000 actual cubic feet per minute.<br>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.<br>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.<br>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).<br>Construction Date = On or before January 31, 1972<br>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.<br>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).<br>Construction Date = On or before January 31, 1972<br>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.<br>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.<br>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).<br>Construction Date = After January 31, 1972<br>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.<br>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.<br>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).<br>Construction Date = After January 31, 1972<br>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.<br>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.<br>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).<br>Construction Date = After January 31, 1972<br>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.<br>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.<br>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).<br>Construction Date = After January 31, 1972<br>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.<br>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.<br>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).<br>Construction Date = On or before January 31, 1972<br>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.<br>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).<br>Construction Date = On or before January 31, 1972<br>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.<br>Construction/Modification Date = Affected source was constructed/modified after September 24, 1976.<br>Kraft Pulping Combination = Kraft pulping is not combined with neutral sulfite semi-chemical pulping.<br>Gas Control Techniques = Gases are combusted with other waste gases in an incinerator or other combustion device.<br>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.<br>Construction/Modification Date = Affected source was constructed/modified after September 24, 1976.<br>Kraft Pulping Combination = Kraft pulping is not combined with neutral sulfite semi-chemical pulping.<br>Gas Control Techniques = Gases are combusted with other waste gases in an incinerator or other combustion device.<br>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.<br>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.<br>Construction/Modification Date = Affected source was constructed/modified after September 24, 1976.<br>Kraft Pulping Combination = Kraft pulping is not combined with neutral sulfite semi-chemical pulping.<br>Gas Control Techniques = Gases are combusted with other waste gases in an incinerator or other combustion device.<br>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.<br>Construction/Modification Date = Affected source was constructed/modified after September 24, 1976.<br>Kraft Pulping Combination = Kraft pulping is not combined with neutral sulfite semi-chemical pulping.<br>Gas Control Techniques = Gases are combusted with other waste gases in an incinerator or other combustion device.<br>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.<br>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.<br>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.<br>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.<br>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.<br>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.<br>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.<br>New or Existing Source = Existing source.<br>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).<br>Subject to 40 CFR § 60.282 = The source is not subject to 40 CFR § 60.282.<br>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.<br>Added the following:<br>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.<br>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)<br>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.<br>New or Existing Source = Existing source.<br>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).<br>Subject to 40 CFR § 60.282 = The source is not subject to 40 CFR § 60.282.<br>Control System = Wet scrubber.<br>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.<br>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.<br>Added the following:<br>Related Standard § 63.860(d), § 63.864(k)(2)(iv), and [G]§ 63.866<br>Monitoring/Testing § 63.860(d), § 63.864(f), § 63.864(h), and § 63.864(k)(2)(iv)<br>Recordkeeping [G]§ 63.866(d)<br>Reporting [G]§ 63.867(c)(3), § 63.867(c)(4), and [G]§ 63.867(d)<br>Deleted the following:<br>Related Standard § 63.864(k)(2)(iii)<br>Monitoring/Testing § 63.864(k)(2)(iii)<br>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.<br>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.<br>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.<br>New or Existing Source = Existing source.<br>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).<br>Subject to 40 CFR § 60.282 = The source is not subject to 40 CFR § 60.282.<br>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.<br>Added the following:<br>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.<br>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)<br>Recordkeeping [G]§ 63.866(d)<br>Reporting [G]§ 63.867(b)(3), [G]§ 63.867(c)(3), § 63.867(c)(4), [G]§ 63.867(d)<br>Deleted the following:<br>Related Standards § 63.862(a)(1)(ii)(B), § 63.865(a)(2), § 63.865(a)(2)(iv)<br>Monitoring/Testing § 63.865(a)(2), § 63.865(a)(2)(iii), § 63.865(a)(2)(iv), and § 63.865(a)(2)(v)<br>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.<br>New or Existing Source = Existing source.<br>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).<br>Subject to 40 CFR § 60.282 = The source is not subject to 40 CFR § 60.282.<br>Control System = Wet scrubber.<br>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.<br>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.<br>Added the following:<br>Related Standards § 63.860(d), § 63.864(k)(2)(iv), and [G]§ 63.866<br>Monitoring/Testing § 63.860(d), § 63.864(f), § 63.864(h), and § 63.864(k)(2)(iv)<br>Recordkeeping [G]§ 63.866(d)<br>Reporting [G]§ 63.867(c)(3), § 63.867(c)(4), and [G]§ 63.867(d)<br>Deleted the following:<br>Related Standard § 63.864(k)(2)(iii)<br>Monitoring/Testing § 63.864(k)(2)(iii)<br>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.<br>Construction/Modification Date = Affected source was constructed/modified after September 24, 1976.<br>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.<br>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).<br>Subject to 40 CFR § 60.282 = The source is subject to 40 CFR § 60.282.<br>Control System = Electrostatic precipitator.<br>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.<br>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.<br>Added the following:<br>Related Standards § 63.860(d) and [G]§ 63.865(a)(2)<br>Monitoring/Testing § 63.860(d), § 63.864(e)(1), § 63.864(f), § 63.864(h), and [G]§ 63.865(a)(2)<br>Recordkeeping § 63.866(c)(8) and [G]§ 63.866(d)<br>Reporting [G]§ 63.867(c)(3)<br>Reporting § 63.867(c)(4), and [G]§ 63.867(d)<br>Deleted the following:<br>Related Standards § 63.864(k)(3), § 63.865(a)(2), § 63.865(a)(2)(iv)<br>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.<br>New or Existing Source = Existing source.<br>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).<br>Subject to 40 CFR § 60.282 = The source is subject to 40 CFR § 60.282.<br>Control System = Electrostatic precipitator.<br>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.<br>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.<br>Added the following:<br>Monitoring/Testing § 63.860(d), § 63.864(e)(1), § 63.864(f), and § 63.864(h)<br>Recordkeeping § 63.866(c)(8) and [G]§ 63.866(d)<br>Reporting [G]§ 63.867(c)(3), § 63.867(c)(4), and [G]§ 63.867(d)<br>Deleted the following<br>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.<br>Construction/Modification Date = Affected source was constructed/modified after September 24, 1976.<br>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.<br>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).<br>Subject to 40 CFR § 60.282 = The source is subject to 40 CFR § 60.282.<br>Control System = Electrostatic precipitator.<br>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.<br>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.<br>Added the following:<br>Related Standards § 63.860(d) and [G]§ 63.865(a)(2)<br>Monitoring/Testing § 63.860(d), § 63.864(e)(1), § 63.864(f), § 63.864(h), and [G]§ 63.865(a)(2)<br>Recordkeeping § 63.866(c)(8) and [G]§ 63.866(d)<br>Reporting [G]§ 63.867(c)(3), § 63.867(c)(4), and [G]§ 63.867(d)<br>Deleted the following:<br>Related Standards § 63.864(k)(3), § 63.865(a)(2), and § 63.865(a)(2)(iv)<br>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.<br>New or Existing Source = Existing source.<br>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).<br>Subject to 40 CFR § 60.282 = The source is subject to 40 CFR § 60.282.<br>Control System = Electrostatic precipitator.<br>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.<br>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.<br>Added the following:<br>Monitoring/Testing § 63.860(d), § 63.864(e)(1), § 63.864(f), and § 63.864(h)<br>Recordkeeping § 63.866(c)(8) and [G]§ 63.866(d)<br>Reporting [G]§ 63.867(c)(3), § 63.867(c)(4), and [G]§ 63.867(d)<br>Deleted the following:<br>Recordkeeping § 63.866(a) and [G]§ 63.866(a)(2) |
| SM01 | 30 TAC Chapter 112, Sulfur Compounds | REG2-01 | Facility Type = Smelt dissolving tank.<br>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.<br>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.<br>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).<br>Subject to 40 CFR § 60.282 = The source is not subject to 40 CFR § 60.282.<br>Control System = Wet scrubber.<br>Alternative Operating Parameter = Prior approval has been received from the EPA Administrator to monitor an alternative control device operating parameters.<br>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.<br>Added the following:<br>Related Standards § 63.860(d), § 63.864(k)(1)(vi), and § 63.864(k)(2)(iv)<br>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)<br>Recordkeeping [G]§ 63.866(d)<br>Reporting [G]§ 63.867(c)(3), § 63.867(c)(4), and [G]§ 63.867(d)<br>Deleted the following:<br>Related Standard § 63.864(k)(2)(iii)<br>Monitoring/Testing § 63.864(k)(2)(iii)<br>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.<br>New or Existing Source = Existing source.<br>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).<br>Subject to 40 CFR § 60.282 = The source is not subject to 40 CFR § 60.282.<br>Control System = Wet scrubber.<br>Alternative Operating Parameter = Prior approval has been received from the EPA Administrator to monitor an alternative control device operating parameters.<br>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.<br>Added the following:<br>Related Standard § 63.860(d)<br>Monitoring/Testing § 63.860(d), § 63.860(f), and § 63.860(h)<br>Recordkeeping [G]§ 63.866(d)<br>Reporting [G]§ 63.867(c)(3), § 63.867(c)(4), and [G]§ 63.867(d)<br>Deleted the following:<br>Recordkeeping § 63.866(a), [G]§ 63.866(a)(1), and [G]§ 63.866(a)(2) |
| SM02 | 40 CFR Part 60, Subpart BBa | 60BBa-01 | Construction/Reconstruction Date = Affected source commenced construction/reconstruction after May 23, 2013 | The rule citations were determined from an analysis of the rule text and the basis of determination. |
| SM02 | 40 CFR Part 63, Subpart MM | 63MM-01 | Source Type = Smelt dissolving tank.<br>New or Existing Source = Existing source.<br>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). | 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** |
|---|---|---|---|---|
| | | | Subject to 40 CFR § 60.282 = The source is subject to 40 CFR § 60.282.<br>Control System = Wet scrubber.<br>Alternative Operating Parameter = Prior approval has been received from the EPA Administrator to monitor an alternative control device operating parameters.<br>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.<br>Added the following:<br>Related Standards § 63.860(d), § 63.864(k)(1)(vi), and § 63.864(k)(2)(iv)<br>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)<br>Recordkeeping [G]§ 63.866(d)<br>Reporting [G]§ 63.867(c)(3), § 63.867(c)(4), and [G]§ 63.867(d)<br>Deleted the following:<br>Related Standard § 63.864(k)(2)(iii)<br>Monitoring/Testing § 63.864(k)(2)(iii)<br>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.<br>New or Existing Source = Existing source.<br>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).<br>Subject to 40 CFR § 60.282 = The source is subject to 40 CFR § 60.282.<br>Control System = Wet scrubber.<br>Alternative Operating Parameter = Prior approval has been received from the EPA Administrator to monitor an alternative control device operating parameters.<br>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.<br>Added the following:<br>Related Standard § 63.860(d)<br>Monitoring/Testing § 63.860(d), § 63.864(f), and § 63.864(h)<br>Recordkeeping [G]§ 63.866(d)<br>Reporting [G]§ 63.867(c)(3), § 63.867(c)(4), and [G]§ 63.867(d)<br>Deleted the following:<br>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<br>Sludge Sampling = Slucge sampling is conducted to determine compliance with § 61.52(b).<br>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. | -- Affected Pollutant - 112(B) HAPS: |

| Unit ID | Regulation | Index Number | Basis of Determination* | Changes and Exceptions to DSS** |
|---|---|---|---|---|
| | | | 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.<br>Alternative Monitoring = Using a control device or alternative parameters other than those specifice in § 63.453(b)-(l).<br>Construction Date = On or before December 17, 1993.<br>Clean Condensate Alternative = The affected source is complying with one of the requirements in § 63.443(a)(1)(ii)-(iv).<br>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.<br>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.<br>Bleaching System = The bleaching system from the kraft, sulfite, or soda process uses chlorinated compounds.<br>Reduction of Chlorinated HAP Emissions = Achieve a treatment device outlet concentration of 10 parts per million or less by volume of total chlorinated HAP.<br>Monitoring Parameters = Complying with 40 CFR § 63.453(c).<br>Bleaching Plant Provisions = Complying with 40 CFR § 63.440(d)(3)(i).<br>Hypochlorite or Chlorine Bleaching = Hypochlorite or chlorine is not used in the bleaching systems and lines. | Added Monitoring/Testing **See Alternative Requirement |
| PRO-FCOND | 40 CFR Part 63, Subpart S | 63S-1 | Process = Kraft pulping process using wood.<br>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.<br>Alternative Monitoring = Using a control device or alternative parameters other than those specifice in § 63.453(b)-(l).<br>Construction Date = After December 17, 1993.<br>Clean Condensate Alternative = The affected source is complying with one of the requirements in § 63.443(a)(1)(ii)-(iv).<br>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.<br>Pulp Process Condensates = Condensates generated from equipment in 40 CFR § 63.446(b)(1) - (5) are being controlled.<br>Condensate Segregation Method = The condensate segregation method in 40 CFR § 63.446(c)(3) is being used.<br>Condensate Control Tank = A condensate tank is used in the collection system.<br>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.<br>Mixed Pond = The biological treatment pond is thoroughly mixed. | -- Affected Pollutant - 112(B) HAPS:<br>Added Monitoring/Testing **See Alternative Requirement |

| Unit ID | Regulation | Index Number | Basis of Determination* | Changes and Exceptions to DSS** |
|---|---|---|---|---|
| | | | 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).<br>Alternative Continuous Monitoring System = The affected source complys with the requirements specified in 40 CFR § 63.453(g).<br>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.<br>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.<br>Flow Indicator = A flow indicator is installed to monitor the by-pass line.<br>Alternative Monitoring = NO<br>Construction Date = On or before December 17, 1993.<br>Clean Condensate Alternative = The affected source is complying with one of the requirements in § 63.443(a)(1)(ii)-(iv).<br>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.<br>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.<br>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.<br>Flow Indicator = A flow indicator is installed to monitor the by-pass line.<br>Alternative Monitoring = NO<br>Construction Date = On or before December 17, 1993.<br>Clean Condensate Alternative = The affected source is complying with one of the requirements in § 63.443(a)(1)(ii)-(iv).<br>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.<br>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.<br>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.<br>Flow Indicator = A flow indicator is installed to monitor the by-pass line.<br>Alternative Monitoring = NO<br>Construction Date = On or before December 17, 1993. | 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** |
|---|---|---|---|---|
| | | | Clean Condensate Alternative = The affected source is complying with one of the requirements in § 63.443(a)(1)(ii)-(iv).<br>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.<br>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.<br>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.<br>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.<br>Flow Indicator = A flow indicator is installed to monitor the by-pass line.<br>Alternative Monitoring = NO<br>Construction Date = On or before December 17, 1993.<br>Clean Condensate Alternative = The affected source is complying with one of the requirements in § 63.443(a)(1)(ii)-(iv).<br>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.<br>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.<br>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 H2O; [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 H2O; [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.: WS-2 | Control Device Type: Wet scrubber |
| **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 H2O; [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.: WS-2 | Control Device Type: Wet scrubber |
| **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 H2O; [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 = 66 amps; [II] Minimum Liquid Flow Rate = 87.17 gpm to scrubber and 47.99 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 = 35.6 amps; [II] Minimum Liquid Flow Rate = 89.62 gpm to scrubber and 76.54 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. | |

**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<br>Treating A-Line and B-line Gases; [I] Minimum Liquid Flow Rate = 996 gpm (su | |
| 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: SO2 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 SO2 concentration with procedures such as EPA Test Method 6C. The measured concentration along with stack flow rate or AP-42 factors and fuel consumption records may be used to demonstrate compliance with an underlying emission limit or standard. | |

| Unit/Group/Process Information | |
|---|---|
| ID No.: 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: SO2 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 SO2 concentration with procedures such as EPA Test Method 6C. The measured concentration along with stack flow rate or AP-42 factors and fuel consumption records may be used to demonstrate compliance with an underlying emission limit or standard. | |

| Unit/Group/Process Information | |
|---|---|
| ID No.: 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 = 66 amps; [II] Minimum Liquid Flow Rate = 87.17 gpm to scrubber and 47.99 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 = 35.6 amps; [II] Minimum Liquid Flow Rate = 89.62 gpm to scrubber and 76.54 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

**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