# Statement of Basis of the Federal Operating Permit

TXI Operations, LP

Site Name: Midlothian Cement Plant
Physical Location: 245 Ward Road
Nearest City: Midlothian
County: Ellis

Permit Number: O1077
Project Type: Renewal

Standard Industrial Classification (SIC) Code: 3241
SIC Name: Cement

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

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

Prepared on: September 21, 2016

# Operating Permit
# Basis of Determination

**Permit Area Process Description**
The TXI Midlothian Plant manufactures Portland cement, a basic construction material. The production of cement is a closely controlled chemical process involving the crushing and mixing of materials (calcium carbonate, aluminum oxide, silica and iron). The plant's No. 5 Kiln, is a four stage preheater/precalciner line which processes finely ground raw materials by calcining and clinkering within the preheater and kiln. The system has two burner areas, the kiln burner located in the kiln where the clinker exits the kiln and in the calciner which is located at the kiln material inlet and base of the preheater tower.

The preheater/precalciner dry process kiln utilizes an in-line roller mill to prepare raw materials prior to entry into the preheater/kiln system. The roller mill is swept by preheater exhaust gases to assist in drying the material before it is carried out of the mill. The milled material passes through four cyclone separators which are vented by a fabric filter baghouse. Material from the cyclones and baghouse is now suitable raw feed, and is conveyed by a drag chain conveyor to an air lift system and is pneumatically conveyed to the top of the preheater tower. Raw material enters the suspension preheater into the first of four stages. As the material makes its vertical descent thought the stages of the preheater, exhaust flue gases pass counter-current to the material. This counter flow of exhaust gases is effective in preheating and calcining the raw material prior to entering the rotary kiln.

The calciner provides heat by combustion of coal and natural gas. Combustion air for the calciner is provided via the tertiary air duct which delivers hot air from the kiln's cooler into the calciner to provide excess oxygen for efficient combustion in the calciner. The tire system will feed whole and shredded tires to an area immediately below the tertiary air duct. The calciner provides approximately 60% of the heat requirement to the kiln and preheater system with the kiln burner providing the remaining 40% heat needed for clinkerization of the raw materials. Raw material temperatures in excess of 1500F are created by the calciner prior to entry into the kiln which results in the calcination of limestone.

Material exiting the calciner enters the rotary kiln. Fuel and combustion air is introduced to the kiln at the opposite end from the raw material. As the raw material tumbles through the kiln, the counter flow of combustion gases continues to elevate material temperatures until clinkerization occurs. Clinkerization involves the crystalline combination of calcium, silica, alumina and iron into calcium silicate compounds which are the primary building blocks of Portland cement. The resultant intermediate product takes the form of small, solid, spheres know as clinker.

Clinker falls from the rotary kiln into the clinker cooler. The clinker cooler consists of grates through which ambient air is blown to cool the clinker. The majority of the heated air is then recycled into the process where it is used for secondary combustion air to kiln, combustion air to the calciner, and drying air to the raw material roller mill. Use of the air in this manner reclaims the heat absorbed by the air as it cools the clinker, and eliminates a separate emission point for the clinker cooler exhaust. Excess air will be diverted to a heat exchanger, baghouse, then to the main stack. The fuel systems at Midlothian fall into three major feeding systems: the coke/coal system, the tire and solid fuels system, and the liquid fuel feeding system.

**FOPs at Site**
The "application area" consists of the emission units and that portion of the site included in the application and this permit. Multiple FOPs may be issued to a site in accordance with 30 TAC § 122.201(e). When there is only one area for the site, then the application information and permit will include all units at the site. Additional FOPs that exist at the site, if any, are listed below.

Additional FOPs: None

**Major Source Pollutants**
The table below specifies the pollutants for which the site is a major source:

| | |
|---|---|
| Major Pollutants | VOC, 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 a OP-UA Form or Form OP-SUM. Form OP-SUM must list all units addressed in the application and provide identifying information, applicable OP-UA Forms, and preconstruction authorizations. The various OP-UA Forms provide the characteristics of each unit from which applicable requirements are established. Some exceptions exist as a few units may have both site-wide requirements and unit specific requirements.

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

Attachments

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

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

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

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

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

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

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

Appendix A

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

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 either before or after January 31, 1972 which are limited, over a six-minute average, to 20% opacity as required by 30 TAC § 111.111(a)(1)(B). As a site may have a large number of stationary vents that fall into this category, they are not required to be listed individually in the permit's Applicable Requirement Summary. This is consistent with EPA's White Paper for Streamlined Development of Part 70 Permit Applications, July 10, 1995, that states that requirements that apply identically to emission units at a site can be treated on a generic basis such as source-wide opacity limits.

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

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

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

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

**Federal Regulatory Applicability Determinations**

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

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

**Basis for Applying Permit Shields**

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

**Insignificant Activities**

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

1. Office activities such as photocopying, blueprint copying, and photographic processes.
2. Sanitary sewage collection and treatment facilities other than those used to incinerate wastewater treatment plant sludge. Stacks or vents for sanitary sewer plumbing traps are also included.
3. Food preparation facilities including, but not limited to, restaurants and cafeterias used for preparing food or beverages primarily for consumption on the premises.
4. Outdoor barbecue pits, campfires, and fireplaces.
5. Laundry dryers, extractors, and tumblers processing bedding, clothing, or other fabric items generated primarily at the premises. This does not include emissions from dry cleaning systems using perchloroethylene or petroleum solvents.
6. Facilities storing only dry, sweet natural gas, including natural gas pressure regulator vents.
7. Any air separation or other industrial gas production, storage, or packaging facility. Industrial gases, for purposes of this list, include only oxygen, nitrogen, helium, neon, argon, krypton, and xenon.
8. Storage and handling of sealed portable containers, cylinders, or sealed drums.
9. Vehicle exhaust from maintenance or repair shops.
10. Storage and use of non-VOC products or equipment for maintaining motor vehicles operated at the site (including but not limited to, antifreeze and fuel additives).

11. Air contaminant detectors and recorders, combustion controllers and shut-off devices, product analyzers, laboratory analyzers, continuous emissions monitors, other analyzers and monitors, and emissions associated with sampling activities. Exception to this category includes sampling activities that are deemed fugitive emissions and under a regulatory leak detection and repair program.
12. Bench scale laboratory equipment and laboratory equipment used exclusively for chemical and physical analysis, including but not limited to, assorted vacuum producing devices and laboratory fume hoods.
13. Steam vents, steam leaks, and steam safety relief valves, provided the steam (or boiler feed-water) has not contacted other materials or fluids containing regulated air pollutants other than boiler water treatment chemicals.
14. Storage of water that has not contacted other materials or fluids containing regulated air pollutants other than boiler water treatment chemicals.
15. Well cellars.
16. Fire or emergency response equipment and training, including but not limited to, use of fire control equipment including equipment testing and training, and open burning of materials or fuels associated with firefighting training.
17. Crucible or pot furnaces with a brim full capacity of less than 450 cubic inches of any molten metal.
18. Equipment used exclusively for the melting or application of wax.
19. All closed tumblers used for the cleaning or deburring of metal products without abrasive blasting, and all open tumblers with a batch capacity of 1,000 lbs. or less.
20. Shell core and shell mold manufacturing machines.
21. Sand or investment molds with a capacity of 100 lbs. or less used for the casting of metals;
22. Equipment used for inspection of metal products.
23. Equipment used exclusively for rolling, forging, pressing, drawing, spinning, or extruding either hot or cold metals by some mechanical means.
24. Instrument systems utilizing air, natural gas, nitrogen, oxygen, carbon dioxide, helium, neon, argon, krypton, and xenon.
25. Battery recharging areas.
26. Brazing, soldering, or welding equipment.

**Determination of Applicable Requirements**

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

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

The attributes for each unit and corresponding index number provide the basis for determining the specific legal citations in an applicable requirement that apply, including emission limitations or standards, monitoring, recordkeeping, and reporting. The rules were found to apply or not apply by using the unit attributes as answers to decision questions found in the flowcharts of the DSS. Some additional attributes indicate which legal citations of a rule apply. The legal citations that apply to each emission unit may be found in the Applicable Requirements Summary table of the draft permit. There may be some entries or rows of

units and rules not found in the permit, or if the permit contains a permit shield, repeated in the permit shield area. These are sets of attributes that describe negative applicability, or; in other words, the reason why a potentially applicable requirement does not apply.

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

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

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

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

## Determination of Applicable Requirements

| Unit ID | Regulation | Index Number | Basis of Determination* |
|---|---|---|---|
| ME-0042 | 40 CFR Part 63, Subpart ZZZZ | 63ZZZZ | HAP Source = Any stationary source or group of stationary sources of hazardous air pollutants meeting the definition of a major source as described in 40 CFR § 63.2.<br>Brake HP = Stationary RICE with a brake HP greater than 500 HP.<br>Construction/Reconstruction Date = Commenced construction or reconstruction before December 19, 2002.<br>Service Type = Emergency use where the RICE does not operate or is not contractually obligated to be available for more than 15 hours per calendar year as specified in 40 CFR §63.6640(f)(2)(ii)-(iii) or does not operate as specified in 40 CFR §63.6640(f)(4)(ii). |
| GRPTANK | 40 CFR Part 60, Subpart K | 60K | Construction/Modification Date = On or before June 11, 1973<br>Storage Capacity = Capacity is 40,000 gallons (151,416 liters) or less |
| P-25 | 40 CFR Part 60, Subpart Kb | 60 Kb | Product Stored = Petroleum liquid (other than petroleum or condensate)<br>Storage Capacity = Capacity is less than 10,600 gallons (40,000 liters) |
| P-26 | 40 CFR Part 60, Subpart Kb | 60 Kb | Product Stored = Petroleum liquid (other than petroleum or condensate)<br>Storage Capacity = Capacity is less than 10,600 gallons (40,000 liters) |
| P-33 | 30 TAC Chapter 115, Storage of VOCs | R5211 | Construction Date = Date not determined since 30 TAC § 115.117(c)(3) exemption is not utilized<br>Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.<br>Product Stored = Gasoline from a storage container in motor vehicle fuel dispensing service (as defined in 30 TAC Chapter 115)<br>Storage Capacity = Capacity is less than 25,000 gallons |
| GRPTANK | 30 TAC Chapter 115, Loading and Unloading of VOC | R5211 | 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 liquefied petroleum gas and gasoline.<br>Transfer Type = Loading and unloading.<br>True Vapor Pressure = True vapor pressure less than 0.5 psia. |
| P-33 | 30 TAC Chapter 115, Loading and Unloading of VOC | R5211 | Chapter 115 Facility Type = Motor vehicle fuel dispensing facility<br>Alternate Control Requirement (ACR) = No alternate control requirements are being utilized.<br>Product Transferred = Gasoline<br>Transfer Type = Loading and unloading. |
| GRPCOAL1 | 40 CFR Part 60, Subpart Y | 60Y | Coal Preparation Plant = Coal preparation plant contains thermal dryers, pneumatic coal-cleaning equipment (air tables), coal processing and conveying equipment (including breakers and crushers), coal storage systems or coal transfer and loading systems.<br>Design Capacity = Design capacity is greater than 200 tons of coal per day.<br>Federally Enforceable Limit Option = The plant chooses not to operate under a federally enforceable limit of less than 200 tons per day.<br>Affected Facility = Coal processing and conveying equipment (including breakers and crushers), coal storage systems |

| Unit ID | Regulation | Index Number | Basis of Determination* |
|---|---|---|---|
| | | | (excluding open storage piles), or coal transfer and loading systems.<br>Construction/Reconstruction/Modification Date = After October 24, 1974 and before April 28, 2008. |
| GRPCOAL2 | 40 CFR Part 60, Subpart Y | 60Y | Coal Preparation Plant = Coal preparation plant contains thermal dryers, pneumatic coal-cleaning equipment (air tables), coal processing and conveying equipment (including breakers and crushers), coal storage systems or coal transfer and loading systems.<br>Design Capacity = Design capacity is greater than 200 tons of coal per day.<br>Federally Enforceable Limit Option = The plant chooses not to operate under a federally enforceable limit of less than 200 tons per day.<br>Affected Facility = Coal processing and conveying equipment (including breakers and crushers), coal storage systems (excluding open storage piles), or coal transfer and loading systems.<br>Construction/Reconstruction/Modification Date = After October 24, 1974 and before April 28, 2008. |
| GRPCOAL3 | 40 CFR Part 60, Subpart Y | 60Y | Coal Preparation Plant = Coal preparation plant contains thermal dryers, pneumatic coal-cleaning equipment (air tables), coal processing and conveying equipment (including breakers and crushers), coal storage systems or coal transfer and loading systems.<br>Design Capacity = Design capacity is greater than 200 tons of coal per day.<br>Federally Enforceable Limit Option = The plant chooses not to operate under a federally enforceable limit of less than 200 tons per day.<br>Affected Facility = Coal processing and conveying equipment (including breakers and crushers), coal storage systems (excluding open storage piles), or coal transfer and loading systems.<br>Construction/Reconstruction/Modification Date = After October 24, 1974 and before April 28, 2008. |
| E1-23B | 40 CFR Part 63, Subpart LLL | 63 LLL | Major Source = The affected source is located at Portland cement plant that is a major source as defined in 40 CFR § 63.2.<br>Alternate Opacity Monitoring = No application has been submitted or approval has not been received for alternate monitoring requirements to demonstrate compliance with the opacity emission standards.<br>Facility Type = Raw mill or finish mill<br>Raw/Finish Mill Opacity = Conducting daily visible emissions observations according to 40 CFR § 63.1350(e).<br>Monovent = The unit has a control device that exhausts through a monovent.<br>Source Classification = Existing source constructed, reconstructed or modified prior to March 24, 1998.<br>98% Weight Reduction = Electing to demonstrate compliance with the 20 ppmv concentration limitation for THC.<br>COM Feasibility = The use of a continuous opacity monitor (COM), in accordance with the installation specifications of Performance Specification 1 of 40 CFR Part 60, Appendix B is feasible.<br>Multiple Stacks = A fabric filter with a single stack or an electrostatic precipitator with single stack is used. |
| E1-29 | 40 CFR Part 63, Subpart LLL | 63 LLL | Major Source = The affected source is located at Portland cement plant that is a major source as defined in 40 CFR § 63.2.<br>Alternate Opacity Monitoring = No application has been submitted or approval has not been received for alternate monitoring requirements to demonstrate compliance with the opacity emission standards.<br>Facility Type = Raw material storage bin, clinker storage bin, finished product storage bin, conveying system transfer point, bagging system, bulk loading system, or bulk unloading system. |
| E2-22 | 40 CFR Part 63, Subpart LLL | 63LLL | Alkali Bypass = There is an alkali by-pass associated with the kiln or in-line kiln/raw mill.<br>Major Source = The affected source is located at Portland cement plant that is a major source as defined in 40 CFR § 63.2.<br>Performance Test Temperature = Greater than 204˚ C (400˚ F).<br>Alternate Opacity Monitoring = No application has been submitted or approval has not been received for alternate monitoring |

| Unit ID | Regulation | Index Number | Basis of Determination* |
|---|---|---|---|
| | | | requirements to demonstrate compliance with the opacity emission standards.<br>Carbon Injection = Carbon injection is not employed as an emission control technique.<br>Facility Type = Kiln<br>Burning Hazardous Waste = The kiln or in-line kiln/raw mill does not burn hazardous waste.<br>Monovent = The unit has a control device that does not exhaust through a monovent.<br>Source Classification = Brownfield source constructed or reconstructed after 03/24/1998 and before 12/02/2005.<br>COM Feasibility = The use of a continuous opacity monitor (COM), in accordance with the installation specifications of Performance Specification 1 of 40 CFR Part 60, Appendix B is feasible.<br>Alternate D/F Monitoring = No alternate D/F monitoring requirements have been approved.<br>Multiple Stacks = A fabric filter with a single stack or an electrostatic precipitator with single stack is used. |
| E3-1 | 40 CFR Part 60, Subpart F | 60 F | Construction/Modification Date = On or before August 17, 1971. |
| E3-16 | 40 CFR Part 60, Subpart F | 60 F | Construction/Modification Date = On or before August 17, 1971. |
| E3-17 | 40 CFR Part 60, Subpart F | 60 F | Construction/Modification Date = On or before August 17, 1971. |
| E3-18 | 40 CFR Part 60, Subpart F | 60 F | Construction/Modification Date = On or before August 17, 1971. |
| E3-19 | 40 CFR Part 60, Subpart F | 60 F | Construction/Modification Date = On or before August 17, 1971. |
| E3-21 | 40 CFR Part 63, Subpart LLL | 63 LLL | Major Source = The affected source is located at Portland cement plant that is a major source as defined in 40 CFR § 63.2.<br>Alternate Opacity Monitoring = No application has been submitted or approval has not been received for alternate monitoring requirements to demonstrate compliance with the opacity emission standards.<br>Carbon Injection = Carbon injection is not employed as an emission control technique.<br>Facility Type = Raw mill or finish mill<br>Control Device = No additional control device is used to comply with the mercury emission limitation.<br>Raw/Finish Mill Opacity = Conducting daily visible emissions observations according to 40 CFR § 63.1350(e).<br>Monovent = The unit has a control device that exhausts through a monovent.<br>Source Classification = Existing source constructed, reconstructed or modified prior to March 24, 1998.<br>98% Weight Reduction = Electing to demonstrate compliance with the 20 ppmv concentration limitation for THC.<br>COM Feasibility = The use of a continuous opacity monitor (COM), in accordance with the installation specifications of Performance Specification 1 of 40 CFR Part 60, Appendix B is feasible.<br>Multiple Stacks = A fabric filter with a single stack or an electrostatic precipitator with single stack is used. |
| E3-3 | 40 CFR Part 60, Subpart F | 60 F | Construction/Modification Date = On or before August 17, 1971. |
| E3-4 | 40 CFR Part 60, Subpart F | 60 F | Construction/Modification Date = On or before August 17, 1971. |
| E3-5 | 40 CFR Part 60, | 60 F | Construction/Modification Date = On or before August 17, 1971. |

| Unit ID | Regulation | Index Number | Basis of Determination* |
|---|---|---|---|
| | Subpart F | | |
| E3-55 | 40 CFR Part 63, Subpart LLL | 63LLL | Major Source = The affected source is located at Portland cement plant that is a major source as defined in 40 CFR § 63.2.<br>Alternate Opacity Monitoring = No application has been submitted or approval has not been received for alternate monitoring requirements to demonstrate compliance with the opacity emission standards.<br>Facility Type = Raw mill or finish mill<br>Raw/Finish Mill Opacity = Conducting daily visible emissions observations according to 40 CFR § 63.1350(e).<br>Monovent = The unit has a control device that exhausts through a monovent.<br>Source Classification = Brownfield source constructed or reconstructed after 03/24/1998 and before 12/02/2005.<br>98% Weight Reduction = Electing to demonstrate compliance with the 20 ppmv concentration limitation for THC.<br>COM Feasibility = The use of a continuous opacity monitor (COM), in accordance with the installation specifications of Performance Specification 1 of 40 CFR Part 60, Appendix B is feasible.<br>Multiple Stacks = A fabric filter with a single stack or an electrostatic precipitator with single stack is used. |
| E4-1 | 40 CFR Part 60, Subpart F | 60 F | Construction/Modification Date = On or before August 17, 1971.<br>Facility Type = Finished product storage. |
| E4-11A | 40 CFR Part 60, Subpart F | 60 F | Construction/Modification Date = On or before August 17, 1971.<br>Facility Type = Finished product storage. |
| E4-2 | 40 CFR Part 60, Subpart F | 60 F | Construction/Modification Date = On or before August 17, 1971.<br>Facility Type = Finished product storage. |
| E4-23 | 40 CFR Part 60, Subpart F | 60 F | Construction/Modification Date = On or before August 17, 1971.<br>Facility Type = Finished product storage. |
| E4-3 | 40 CFR Part 60, Subpart F | 60 F | Construction/Modification Date = On or before August 17, 1971.<br>Facility Type = Finished product storage. |
| E4-4 | 40 CFR Part 60, Subpart F | 60 F | Construction/Modification Date = On or before August 17, 1971.<br>Facility Type = Finished product storage. |
| E4-5 | 40 CFR Part 60, Subpart F | 60 F | Construction/Modification Date = On or before August 17, 1971.<br>Facility Type = Finished product storage. |
| E4-6 | 40 CFR Part 60, Subpart F | 60 F | Construction/Modification Date = On or before August 17, 1971.<br>Facility Type = Finished product storage. |
| E4-7 | 40 CFR Part 60, Subpart F | 60 F | Construction/Modification Date = On or before August 17, 1971.<br>Facility Type = Finished product storage. |
| E4-8 | 40 CFR Part 60, Subpart F | 60 F | Construction/Modification Date = On or before August 17, 1971.<br>Facility Type = Finished product storage. |
| FLTC-P-1 | 40 CFR Part 63, Subpart LLL | 63 LLL | Major Source = The affected source is located at Portland cement plant that is a major source as defined in 40 CFR § 63.2.<br>Alternate Opacity Monitoring = No application has been submitted or approval has not been received for alternate monitoring requirements to demonstrate compliance with the opacity emission standards. |

| Unit ID | Regulation | Index Number | Basis of Determination* |
|---|---|---|---|
| | | | Carbon Injection = Carbon injection is not employed as an emission control technique.<br>Facility Type = Raw material storage bin, clinker storage bin, finished product storage bin, conveying system transfer point, bagging system, bulk loading system, or bulk unloading system.<br>Control Device = No additional control device is used to comply with the mercury emission limitation.<br>Alternate Hg Monitoring = No alternate Hg monitoring requirements have been approved.<br>Monovent = The unit has a control device that does not exhaust through a monovent.<br>COM Feasibility = The use of a continuous opacity monitor (COM), in accordance with the installation specifications of Performance Specification 1 of 40 CFR Part 60, Appendix B is feasible. |
| GRP-ALTM | 40 CFR Part 63, Subpart LLL | 63 LLL | Major Source = The affected source is located at Portland cement plant that is a major source as defined in 40 CFR § 63.2.<br>Alternate Opacity Monitoring = No application has been submitted or approval has not been received for alternate monitoring requirements to demonstrate compliance with the opacity emission standards.<br>Carbon Injection = Carbon injection is not employed as an emission control technique.<br>Facility Type = Raw material storage bin, clinker storage bin, finished product storage bin, conveying system transfer point, bagging system, bulk loading system, or bulk unloading system.<br>Control Device = No additional control device is used to comply with the mercury emission limitation.<br>Alternate Hg Monitoring = No alternate Hg monitoring requirements have been approved.<br>Monovent = The unit has a control device that does not exhaust through a monovent.<br>COM Feasibility = The use of a continuous opacity monitor (COM), in accordance with the installation specifications of Performance Specification 1 of 40 CFR Part 60, Appendix B is feasible.<br>Multiple Stacks = A fabric filter with a single stack or an electrostatic precipitator with single stack is used. |
| GRP-ALTSF | 40 CFR Part 63, Subpart LLL | 63 LLL | Major Source = The affected source is located at Portland cement plant that is a major source as defined in 40 CFR § 63.2.<br>Alternate Opacity Monitoring = No application has been submitted or approval has not been received for alternate monitoring requirements to demonstrate compliance with the opacity emission standards.<br>Carbon Injection = Carbon injection is not employed as an emission control technique.<br>Facility Type = Raw material storage bin, clinker storage bin, finished product storage bin, conveying system transfer point, bagging system, bulk loading system, or bulk unloading system.<br>Control Device = No additional control device is used to comply with the mercury emission limitation.<br>Alternate Hg Monitoring = No alternate Hg monitoring requirements have been approved.<br>Monovent = The unit has a control device that does not exhaust through a monovent.<br>COM Feasibility = The use of a continuous opacity monitor (COM), in accordance with the installation specifications of Performance Specification 1 of 40 CFR Part 60, Appendix B is feasible.<br>Multiple Stacks = A fabric filter with a single stack or an electrostatic precipitator with single stack is used. |
| GRPBAG | 40 CFR Part 63, Subpart LLL | 63 LLL | Major Source = The affected source is located at Portland cement plant that is a major source as defined in 40 CFR § 63.2.<br>Alternate Opacity Monitoring = No application has been submitted or approval has not been received for alternate monitoring requirements to demonstrate compliance with the opacity emission standards.<br>Facility Type = Raw material storage bin, clinker storage bin, finished product storage bin, conveying system transfer point, bagging system, bulk loading system, or bulk unloading system. |
| GRPBELT | 40 CFR Part 60, Subpart OOO | 60OOO-1 | Plant Type = Crushed stone plant.<br>Portable or Fixed Plant = Fixed. |

| Unit ID | Regulation | Index Number | Basis of Determination* |
|---|---|---|---|
| | | | Plant Capacity = Capacity is greater than 25 tons/hr.<br>Capture System = The affected facility is not using a capture system for emissions control.<br>Underground Mines = The facility is not located in an underground mine.<br>Subpart Applicability = The facility is not subject to 40 CFR Part 60, Subparts F or I, nor does the facility follow, in the plant process, another facility subject to Subparts F or I.<br>Facility Type = Transfer point on a belt conveyor not processing saturated material.<br>Construction/Modification Date = After August 31, 1983.<br>Truck Dump = No truck dumps nonmetallic minerals into the affected facility.<br>Emissions Interference Type = No emissions interference occurs for the affected facility.<br>Replacement Type = Is not replacing an existing facility.<br>Separation Possible = Emissions from this affected facility cannot be separated so that the opacity of fugitive emissions from the individual affected facilities can be read. |
| GRPCLINK | 40 CFR Part 60, Subpart F | 60 F | Construction/Modification Date = On or before August 17, 1971. |
| GRPCLINK | 40 CFR Part 63, Subpart LLL | 63 LLL | Major Source = The affected source is located at Portland cement plant that is a major source as defined in 40 CFR § 63.2.<br>Alternate Opacity Monitoring = No application has been submitted or approval has not been received for alternate monitoring requirements to demonstrate compliance with the opacity emission standards.<br>Facility Type = Raw material storage bin, clinker storage bin, finished product storage bin, conveying system transfer point, bagging system, bulk loading system, or bulk unloading system. |
| GRPCOAL1 | 40 CFR Part 63, Subpart LLL | 63 LLL | Major Source = The affected source is located at Portland cement plant that is a major source as defined in 40 CFR § 63.2.<br>Alternate Opacity Monitoring = No application has been submitted or approval has not been received for alternate monitoring requirements to demonstrate compliance with the opacity emission standards.<br>Facility Type = Raw material storage bin, clinker storage bin, finished product storage bin, conveying system transfer point, bagging system, bulk loading system, or bulk unloading system. |
| GRPCOAL2 | 40 CFR Part 63, Subpart LLL | 63 LLL | Major Source = The affected source is located at Portland cement plant that is a major source as defined in 40 CFR § 63.2.<br>Alternate Opacity Monitoring = No application has been submitted or approval has not been received for alternate monitoring requirements to demonstrate compliance with the opacity emission standards.<br>Facility Type = Raw material storage bin, clinker storage bin, finished product storage bin, conveying system transfer point, bagging system, bulk loading system, or bulk unloading system. |
| GRPCOAL3 | 40 CFR Part 63, Subpart LLL | 63 LLL | Major Source = The affected source is located at Portland cement plant that is a major source as defined in 40 CFR § 63.2.<br>Alternate Opacity Monitoring = No application has been submitted or approval has not been received for alternate monitoring requirements to demonstrate compliance with the opacity emission standards.<br>Facility Type = Raw material storage bin, clinker storage bin, finished product storage bin, conveying system transfer point, bagging system, bulk loading system, or bulk unloading system. |
| GRPCRSHR | 40 CFR Part 60, Subpart OOO | 60OOO-1 | Plant Type = Crushed stone plant.<br>Portable or Fixed Plant = Fixed.<br>Plant Capacity = Capacity is greater than 25 tons/hr.<br>Capture System = The affected facility is not using a capture system for emissions control.<br>Underground Mines = The facility is not located in an underground mine. |

| Unit ID | Regulation | Index Number | Basis of Determination* |
|---|---|---|---|
| | | | Subpart Applicability = The facility is not subject to 40 CFR Part 60, Subparts F or I, nor does the facility follow, in the plant process, another facility subject to Subparts F or I.<br>Facility Type = Crusher.<br>Construction/Modification Date = After August 31, 1983.<br>Truck Dump = No truck dumps nonmetallic minerals into the affected facility.<br>Emissions Interference Type = No emissions interference occurs for the affected facility.<br>Replacement Type = Is not replacing an existing facility.<br>Separation Possible = Emissions from this affected facility cannot be separated so that the opacity of fugitive emissions from the individual affected facilities can be read. |
| GRPFNBIN | 40 CFR Part 63, Subpart LLL | 63 LLL | Major Source = The affected source is located at Portland cement plant that is a major source as defined in 40 CFR § 63.2.<br>Alternate Opacity Monitoring = No application has been submitted or approval has not been received for alternate monitoring requirements to demonstrate compliance with the opacity emission standards.<br>Facility Type = Raw material storage bin, clinker storage bin, finished product storage bin, conveying system transfer point, bagging system, bulk loading system, or bulk unloading system. |
| GRPFNHANDL | 40 CFR Part 63, Subpart LLL | 63 LLL | Major Source = The affected source is located at Portland cement plant that is a major source as defined in 40 CFR § 63.2.<br>Alternate Opacity Monitoring = No application has been submitted or approval has not been received for alternate monitoring requirements to demonstrate compliance with the opacity emission standards.<br>Facility Type = Raw material storage bin, clinker storage bin, finished product storage bin, conveying system transfer point, bagging system, bulk loading system, or bulk unloading system. |
| GRPFNSTOR | 40 CFR Part 60, Subpart F | 60 F | Construction/Modification Date = On or before August 17, 1971.<br>Facility Type = Finished product storage. |
| GRPFNSTOR | 40 CFR Part 63, Subpart LLL | 63 LLL | Major Source = The affected source is located at Portland cement plant that is a major source as defined in 40 CFR § 63.2.<br>Alternate Opacity Monitoring = No application has been submitted or approval has not been received for alternate monitoring requirements to demonstrate compliance with the opacity emission standards.<br>Facility Type = Raw material storage bin, clinker storage bin, finished product storage bin, conveying system transfer point, bagging system, bulk loading system, or bulk unloading system. |
| GRPFNSTOR1 | 40 CFR Part 60, Subpart F | 60 F | Construction/Modification Date = On or before August 17, 1971.<br>Facility Type = Finished product storage. |
| GRPFNSTOR1 | 40 CFR Part 63, Subpart LLL | 63 LLL | Major Source = The affected source is located at Portland cement plant that is a major source as defined in 40 CFR § 63.2.<br>Alternate Opacity Monitoring = No application has been submitted or approval has not been received for alternate monitoring requirements to demonstrate compliance with the opacity emission standards.<br>Facility Type = Raw material storage bin, clinker storage bin, finished product storage bin, conveying system transfer point, bagging system, bulk loading system, or bulk unloading system. |
| GRPLOAD | 40 CFR Part 63, Subpart LLL | 63 LLL | Major Source = The affected source is located at Portland cement plant that is a major source as defined in 40 CFR § 63.2.<br>Alternate Opacity Monitoring = No application has been submitted or approval has not been received for alternate monitoring requirements to demonstrate compliance with the opacity emission standards.<br>Facility Type = Raw material storage bin, clinker storage bin, finished product storage bin, conveying system transfer point, bagging system, bulk loading system, or bulk unloading system. |

| Unit ID | Regulation | Index Number | Basis of Determination* |
|---|---|---|---|
| GRPLOAD1 | 40 CFR Part 63, Subpart LLL | 63 LLL | Major Source = The affected source is located at Portland cement plant that is a major source as defined in 40 CFR § 63.2.<br>Alternate Opacity Monitoring = No application has been submitted or approval has not been received for alternate monitoring requirements to demonstrate compliance with the opacity emission standards.<br>Facility Type = Raw material storage bin, clinker storage bin, finished product storage bin, conveying system transfer point, bagging system, bulk loading system, or bulk unloading system. |
| GRPMTHANDL | 40 CFR Part 63, Subpart LLL | 63 LLL | Major Source = The affected source is located at Portland cement plant that is a major source as defined in 40 CFR § 63.2.<br>Alternate Opacity Monitoring = No application has been submitted or approval has not been received for alternate monitoring requirements to demonstrate compliance with the opacity emission standards.<br>Facility Type = Raw material storage bin, clinker storage bin, finished product storage bin, conveying system transfer point, bagging system, bulk loading system, or bulk unloading system. |
| GRPMTTRANS | 40 CFR Part 63, Subpart LLL | 63 LLL | Major Source = The affected source is located at Portland cement plant that is a major source as defined in 40 CFR § 63.2.<br>Alternate Opacity Monitoring = No application has been submitted or approval has not been received for alternate monitoring requirements to demonstrate compliance with the opacity emission standards.<br>Facility Type = Raw material storage bin, clinker storage bin, finished product storage bin, conveying system transfer point, bagging system, bulk loading system, or bulk unloading system. |
| GRPMTTRANS1 | 40 CFR Part 63, Subpart LLL | 63 LLL | Major Source = The affected source is located at Portland cement plant that is a major source as defined in 40 CFR § 63.2.<br>Alternate Opacity Monitoring = No application has been submitted or approval has not been received for alternate monitoring requirements to demonstrate compliance with the opacity emission standards.<br>Facility Type = Raw material storage bin, clinker storage bin, finished product storage bin, conveying system transfer point, bagging system, bulk loading system, or bulk unloading system. |
| GRP-P-1 | 40 CFR Part 63, Subpart LLL | 63 LLL | Major Source = The affected source is located at Portland cement plant that is a major source as defined in 40 CFR § 63.2.<br>Alternate Opacity Monitoring = No application has been submitted or approval has not been received for alternate monitoring requirements to demonstrate compliance with the opacity emission standards.<br>Carbon Injection = Carbon injection is not employed as an emission control technique.<br>Facility Type = Raw material storage bin, clinker storage bin, finished product storage bin, conveying system transfer point, bagging system, bulk loading system, or bulk unloading system.<br>Control Device = No additional control device is used to comply with the mercury emission limitation.<br>Alternate Hg Monitoring = No alternate Hg monitoring requirements have been approved.<br>Monovent = The unit has a control device that does not exhaust through a monovent.<br>COM Feasibility = The use of a continuous opacity monitor (COM), in accordance with the installation specifications of Performance Specification 1 of 40 CFR Part 60, Appendix B is feasible. |
| GRPSYNGYP | 40 CFR Part 63, Subpart LLL | 63 LLL | Major Source = The affected source is located at Portland cement plant that is a major source as defined in 40 CFR § 63.2.<br>Alternate Opacity Monitoring = No application has been submitted or approval has not been received for alternate monitoring requirements to demonstrate compliance with the opacity emission standards.<br>Facility Type = Raw material storage bin, clinker storage bin, finished product storage bin, conveying system transfer point, bagging system, bulk loading system, or bulk unloading system. |
| IRN-P-1 | 40 CFR Part 63, Subpart LLL | 63 LLL | Major Source = The affected source is located at Portland cement plant that is a major source as defined in 40 CFR § 63.2.<br>Alternate Opacity Monitoring = No application has been submitted or approval has not been received for alternate monitoring requirements to demonstrate compliance with the opacity emission standards. |

| Unit ID | Regulation | Index Number | Basis of Determination* |
|---|---|---|---|
| | | | Carbon Injection = Carbon injection is not employed as an emission control technique.<br>Facility Type = Raw material storage bin, clinker storage bin, finished product storage bin, conveying system transfer point, bagging system, bulk loading system, or bulk unloading system.<br>Control Device = No additional control device is used to comply with the mercury emission limitation.<br>Alternate Hg Monitoring = No alternate Hg monitoring requirements have been approved.<br>Monovent = The unit has a control device that does not exhaust through a monovent.<br>COM Feasibility = The use of a continuous opacity monitor (COM), in accordance with the installation specifications of Performance Specification 1 of 40 CFR Part 60, Appendix B is feasible. |
| PC5-1 | 40 CFR Part 63, Subpart LLL | 63 LLL | Major Source = The affected source is located at Portland cement plant that is a major source as defined in 40 CFR § 63.2.<br>Alternate Opacity Monitoring = No application has been submitted or approval has not been received for alternate monitoring requirements to demonstrate compliance with the opacity emission standards.<br>Carbon Injection = Carbon injection is not employed as an emission control technique.<br>Facility Type = Raw material storage bin, clinker storage bin, finished product storage bin, conveying system transfer point, bagging system, bulk loading system, or bulk unloading system.<br>Control Device = No additional control device is used to comply with the mercury emission limitation.<br>Alternate Hg Monitoring = No alternate Hg monitoring requirements have been approved.<br>Monovent = The unit has a control device that does not exhaust through a monovent.<br>COM Feasibility = The use of a continuous opacity monitor (COM), in accordance with the installation specifications of Performance Specification 1 of 40 CFR Part 60, Appendix B is feasible. |
| PC5-2 | 40 CFR Part 63, Subpart LLL | 63 LLL | Major Source = The affected source is located at Portland cement plant that is a major source as defined in 40 CFR § 63.2.<br>Alternate Opacity Monitoring = No application has been submitted or approval has not been received for alternate monitoring requirements to demonstrate compliance with the opacity emission standards.<br>Carbon Injection = Carbon injection is not employed as an emission control technique.<br>Facility Type = Raw material storage bin, clinker storage bin, finished product storage bin, conveying system transfer point, bagging system, bulk loading system, or bulk unloading system.<br>Control Device = No additional control device is used to comply with the mercury emission limitation.<br>Alternate Hg Monitoring = No alternate Hg monitoring requirements have been approved.<br>Monovent = The unit has a control device that does not exhaust through a monovent.<br>COM Feasibility = The use of a continuous opacity monitor (COM), in accordance with the installation specifications of Performance Specification 1 of 40 CFR Part 60, Appendix B is feasible. |
| PC5-4 | 40 CFR Part 63, Subpart LLL | 63 LLL | Major Source = The affected source is located at Portland cement plant that is a major source as defined in 40 CFR § 63.2.<br>Alternate Opacity Monitoring = No application has been submitted or approval has not been received for alternate monitoring requirements to demonstrate compliance with the opacity emission standards.<br>Carbon Injection = Carbon injection is not employed as an emission control technique.<br>Facility Type = Raw material storage bin, clinker storage bin, finished product storage bin, conveying system transfer point, bagging system, bulk loading system, or bulk unloading system.<br>Control Device = No additional control device is used to comply with the mercury emission limitation.<br>Alternate Hg Monitoring = No alternate Hg monitoring requirements have been approved.<br>Monovent = The unit has a control device that exhausts through a monovent. |

| Unit ID | Regulation | Index Number | Basis of Determination* |
|---|---|---|---|
| | | | Multiple Stacks = A fabric filter with a single stack or an electrostatic precipitator with single stack is used. |
| PC5-5 | 40 CFR Part 63, Subpart LLL | 63 LLL | Major Source = The affected source is located at Portland cement plant that is a major source as defined in 40 CFR § 63.2.<br>Alternate Opacity Monitoring = No application has been submitted or approval has not been received for alternate monitoring requirements to demonstrate compliance with the opacity emission standards.<br>Carbon Injection = Carbon injection is not employed as an emission control technique.<br>Facility Type = Raw material storage bin, clinker storage bin, finished product storage bin, conveying system transfer point, bagging system, bulk loading system, or bulk unloading system.<br>Control Device = No additional control device is used to comply with the mercury emission limitation.<br>Alternate Hg Monitoring = No alternate Hg monitoring requirements have been approved.<br>Monovent = The unit has a control device that exhausts through a monovent.<br>Multiple Stacks = A fabric filter with a single stack or an electrostatic precipitator with single stack is used. |
| WB-P-1 | 40 CFR Part 63, Subpart LLL | 63 LLL | Major Source = The affected source is located at Portland cement plant that is a major source as defined in 40 CFR § 63.2.<br>Alternate Opacity Monitoring = No application has been submitted or approval has not been received for alternate monitoring requirements to demonstrate compliance with the opacity emission standards.<br>Carbon Injection = Carbon injection is not employed as an emission control technique.<br>Facility Type = Raw material storage bin, clinker storage bin, finished product storage bin, conveying system transfer point, bagging system, bulk loading system, or bulk unloading system.<br>Control Device = No additional control device is used to comply with the mercury emission limitation.<br>Alternate Hg Monitoring = No alternate Hg monitoring requirements have been approved.<br>Monovent = The unit has a control device that does not exhaust through a monovent.<br>COM Feasibility = The use of a continuous opacity monitor (COM), in accordance with the installation specifications of Performance Specification 1 of 40 CFR Part 60, Appendix B is feasible. |
| WB-P-2 | 40 CFR Part 63, Subpart LLL | 63 LLL | Major Source = The affected source is located at Portland cement plant that is a major source as defined in 40 CFR § 63.2.<br>Alternate Opacity Monitoring = No application has been submitted or approval has not been received for alternate monitoring requirements to demonstrate compliance with the opacity emission standards.<br>Carbon Injection = Carbon injection is not employed as an emission control technique.<br>Facility Type = Raw material storage bin, clinker storage bin, finished product storage bin, conveying system transfer point, bagging system, bulk loading system, or bulk unloading system.<br>Control Device = No additional control device is used to comply with the mercury emission limitation.<br>Alternate Hg Monitoring = No alternate Hg monitoring requirements have been approved.<br>Monovent = The unit has a control device that does not exhaust through a monovent.<br>COM Feasibility = The use of a continuous opacity monitor (COM), in accordance with the installation specifications of Performance Specification 1 of 40 CFR Part 60, Appendix B is feasible. |
| E2-22 | 30 TAC Chapter 111, Visible Emissions | R111 | 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 |

| Unit ID | Regulation | Index Number | Basis of Determination* |
|---|---|---|---|
| | | | Effluent Flow Rate = Effluent flow rate is at least 100,000 actual cubic feet per minute. |
| PC5-4 | 30 TAC Chapter 111, Visible Emissions | R1111 | 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. |
| PC5-5 | 30 TAC Chapter 111, Visible Emissions | R1111 | 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. |
| E2-22 | 30 TAC Chapter 117, Cement Kilns | 117E-1 | Date Placed in Service = On or after December 31, 1999 and prior to January 1, 2006<br>Kilns at Account Before January 1, 2001 = At least one portland cement kiln was in operation at the account before January 1, 2001.<br>Complying with Source Cap = The kiln is located at an account that is complying with the source cap specified in 30 TAC § 117.3120.<br>Kiln Type = Preheater-precalciner kiln or precalciner kiln<br>NOx Control = Either a low-$NO_x$ burner or a low-$NO_x$ precalciner is used to control $NO_x$ under § 117.3110(d).<br>NOx Monitoring Type = Continuous emissions monitoring system<br>Alternate Case Specific Specificaitons for NH3 = Complying with the ammonia specifications under § 117.3123. |

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

**NSR Versus Title V FOP**

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

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

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

**New Source Review Requirements**

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

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

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

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

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

The status of air permits and applications and a link to the Air Permits Remote Document Server is located at the following Web site:

www.tceq.texas.gov/permitting/air/nav/air_status_permits.html

| **Prevention of Significant Deterioration (PSD) Permits** | |
|---|---|
| PSD Permit No.: PSDTX632M1 | Issuance Date: 12/07/2015 |
| **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.: 1360A | Issuance Date: 12/07/2015 |
| Authorization No.: 56271 | Issuance Date: 01/21/2014 |
| **Permits By Rule (30 TAC Chapter 106) for the Application Area** | |
| Number: 106.261 | Version No./Date: 11/01/2003 |
| Number: 106.478 | Version No./Date: 09/04/2000 |

**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**

**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.: GRPCOAL1 | |
| Control Device ID No.: N/A | Control Device Type: N/A |
| **Applicable Regulatory Requirement** | |
| Name: 40 CFR Part 60, Subpart Y | SOP Index No.: 60Y |
| Pollutant: PM (OPACITY) | Main Standard: § 60.254(a) |
| **Monitoring Information** | |
| Indicator: Opacity | |
| Minimum Frequency: Once per calendar quarter | |
| Averaging Period: Six-minutes | |
| Deviation Limit: Maximum Opacity = 10% | |
| Basis of monitoring:<br>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.<br><br>The coal handling sources are sprayed with water as necessary to prevent fugitive dust emissions, therefore there is a low likelihood of opacity from these emission units. A Test Method 9 opacity reading is performed once per calendar quarter which provides a reasonable assurance of compliance with the opacity limit in 40 CFR Part 60, Subpart Y. | |

| Unit/Group/Process Information | |
|---|---|
| ID No.: GRPCOAL2 | |
| Control Device ID No.: N/A | Control Device Type: N/A |
| **Applicable Regulatory Requirement** | |
| Name: 40 CFR Part 60, Subpart Y | SOP Index No.: 60Y |
| Pollutant: PM (OPACITY) | Main Standard: § 60.254(a) |
| **Monitoring Information** | |
| Indicator: Opacity | |
| Minimum Frequency: Once per calendar quarter | |
| Averaging Period: Six-minutes | |
| Deviation Limit: Maximum Opacity = 10% | |
| Basis of monitoring:<br>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.<br><br>The coal handling sources are sprayed with water as necessary to prevent fugitive dust emissions, therefore there is a low likelihood of opacity from these emission units. A Test Method 9 opacity reading is performed once per calendar quarter which provides a reasonable assurance of compliance with the opacity limit in 40 CFR Part 60, Subpart Y. | |

| Unit/Group/Process Information | |
|---|---|
| ID No.: GRPCOAL3 | |
| Control Device ID No.: N/A | Control Device Type: N/A |
| **Applicable Regulatory Requirement** | |
| Name: 40 CFR Part 60, Subpart Y | SOP Index No.: 60Y |
| Pollutant: PM (OPACITY) | Main Standard: § 60.254(a) |
| **Monitoring Information** | |
| Indicator: Opacity | |
| Minimum Frequency: Once per calendar quarter | |
| Averaging Period: Six-minutes | |
| Deviation Limit: Maximum Opacity = 10% | |
| Basis of monitoring:<br>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.<br><br>The coal handling sources are sprayed with water as necessary to prevent fugitive dust emissions, therefore there is a low likelihood of opacity from these emission units. A Test Method 9 opacity reading is performed once per calendar quarter which provides a reasonable assurance of compliance with the opacity limit in 40 CFR Part 60, Subpart Y. | |

| Unit/Group/Process Information | |
|---|---|
| ID No.: PC5-4 | |
| Control Device ID No.: N/A | Control Device Type: N/A |
| **Applicable Regulatory Requirement** | |
| Name: 30 TAC Chapter 111, Visible Emissions | SOP Index No.: R1111 |
| Pollutant: PM (OPACITY) | Main Standard: § 111.111(a)(1)(B) |
| **Monitoring Information** | |
| Indicator: Opacity | |
| Minimum Frequency: Once per calendar quarter | |
| Averaging Period: Six-minutes | |
| Deviation Limit: Maximum Opacity = 10% | |
| Basis of monitoring:<br>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.<br><br>The coal handling sources are sprayed with water as necessary to prevent fugitive dust emissions, therefore there is a low likelihood of opacity from these emission units. A Test Method 9 opacity reading is performed once per calendar quarter which provides a reasonable assurance of compliance with the opacity limit in 40 CFR Part 60, Subpart Y. | |

| Unit/Group/Process Information | |
|---|---|
| ID No.: PC5-5 | |
| Control Device ID No.: N/A | Control Device Type: N/A |
| **Applicable Regulatory Requirement** | |
| Name: 30 TAC Chapter 111, Visible Emissions | SOP Index No.: R1111 |
| Pollutant: PM (OPACITY) | Main Standard: § 111.111(a)(1)(B) |
| **Monitoring Information** | |
| Indicator: Opacity | |
| Minimum Frequency: Once per calendar quarter | |
| Averaging Period: Six-minutes | |
| Deviation Limit: Maximum Opacity = 10% | |
| Basis of monitoring:<br>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.<br><br>The coal handling sources are sprayed with water as necessary to prevent fugitive dust emissions, therefore there is a low likelihood of opacity from these emission units. A Test Method 9 opacity reading is performed once per calendar quarter which provides a reasonable assurance of compliance with the opacity limit in 40 CFR Part 60, Subpart Y. | |

**Compliance Review**

1. In accordance with 30 TAC Chapter 60, the compliance history was reviewed on September 20, 2016.
   Site rating: 2.62 / Satisfactory  Company rating: 0.54 / Satisfactory
   *(High < 0.10; Satisfactory ≥ 0.10 and ≤ 55; Unsatisfactory > 55)*
2. Has the permit changed on the basis of the compliance history or site/company rating? .....No

**Site/Permit Area Compliance Status Review**

1. Were there any out-of-compliance units listed on Form OP-ACPS? .....No
2. Is a compliance plan and schedule included in the permit? .....No

**Available Unit Attribute Forms**

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

OP-UA45 - Surface Impoundment Attributes
OP-UA46 - Epoxy Resins and Non-Nylon Polyamides Production Attributes
OP-UA47 - Ship Building and Ship Repair Unit Attributes
OP-UA48 - Air Oxidation Unit Process Attributes
OP-UA49 - Vacuum-Producing System Attributes
OP-UA50 - Fluid Catalytic Cracking Unit Catalyst Regenerator/Fuel Gas Combustion Device/Claus Sulfur Recovery Plant Attributes
OP-UA51 - Dryer/Kiln/Oven Attributes
OP-UA52 - Closed Vent Systems and Control Devices
OP-UA53 - Beryllium Processing Attributes
OP-UA54 - Mercury Chlor-Alkali Cell Attributes
OP-UA55 - Transfer System Attributes
OP-UA56 - Vinyl Chloride Process Attributes
OP-UA57 - Cleaning/De-painting 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