

Statement of Basis of the Federal Operating Permit

TEXAS LEHIGH CEMENT COMPANY LP

Site/Area Name: Texas Lehigh Cement Plant
Physical location: 1000 Jack C Hays Trail
Nearest City: Buda
County: Hays

Permit Number: O1132
Project Type: Minor Revision

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

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: March 23, 2015

Operating Permit Basis of Determination

Description of Revisions

The Texas Lehigh Cement Company, L.P. submitted a minor revision application on November 18, 2014 to remove a baghouse DC-1B from the FOP.

Permit Area Process Description

Texas-Lehigh Cement Company manufactures several types of Portland cement. Raw materials include limestone, silica, and iron. Quarried overburden and silica sand are used as silica sources. Mill scale iron, steel slags, recovered rust, and natural iron ore are used as an iron source. Limestone, marl, and silica sand are mined by and used at the Buda plant site. Iron sources and silica sources are received by rail or truck. These materials are chemically proportioned, ground to fine powder, and fed into the kiln system. Fuel used for cement manufacturing is a combination of coal, coke, natural gas, and tire derived fuel (TDF). These fuels are introduced into the kiln system through the kiln burner and through the precalciner burners. In the case of the TDF, these are administered through a feed chute in the riser duct immediately above the feed shelf of the rotary kiln. All solid fuel is received by rail or truck. Natural gas is delivered by pipeline.

The plant is referred to as a four-stage preheater/precalciner plant. Raw materials are blended in appropriate portions, ground into fine powder, and pneumatically conveyed into the rotary kiln. The rotary kiln completes the processing of raw materials into the intermediate product clinker. The clinker falls from the kiln into a cooler, where after being quenched is transferred to a covered storage area. As needed the clinker is fed into the mill system where it is blended with gypsum and ground into a finished product called Portland cement. All cement products are pneumatically conveyed and stored in silos prior to shipment in bulk trucks, railcars, or bagged for shipment through truck or railroad boxcars.

Raw Material System:

The cement manufacturing process begins at the quarry. Limestone is removed by sequential blasting and quarry overburden is stripped from new mining areas and used as a silica source. These materials are loaded into trucks and transported to the plant. Emissions from all stockpiles (coal, iron dust, & sand) are controlled by the use of a bag filter. The above emissions occur when raw materials are conveyed into the raw material feed bins. Some emissions (truck unloading) are controlled by the use of sprayed water.

Raw Mill System:

The raw mill system is fed by belt conveyor from the raw material bins. There are two raw mills operating in parallel. Preheater exhaust gases are used to dry the materials as they are processed in the mills. Air exiting the mills are routed to baghouses for emission control. After materials pass through the mills they are blended in silos. The silos also utilize baghouses for emission control.

Preheater/Kiln System:

The plant has a dual string, four stage preheater system serviced by a common in-line precalciner. The preheater system is a series of cyclones where pneumatically conveyed raw meal from the silos flows countercurrent to the hot gas exiting the kiln. By the fourth stage 95% of the calcination has been completed. This calcinated material is sent to the clinker then cooled and stored prior to grinding into cement.

Clinker Cooler System:

There are two paths for the clinker exiting the clinker cooler. As the need and the capacity exists, clinker is sent to the finish mill feed bins. There are 6 feed bins for the finish mill; four are for storing clinker. One holds and

administers limestone for the production of masonry cement. The remaining bin stores and supplies retarder gypsum to the finish mills. Emissions from the clinker system are controlled by baghouses.

Finish Mill & Loadout:

Clinker, gypsum, and limestone are fed from the feed bins onto separate belt systems that feed two finish mills. Ground cement is then packed for shipment by truck or train. Cement which is not packaged right away is stored in a fringe bin for off specification cements. All emissions and dusts involved in this part of the process are controlled by baghouses.

FOPs at Site

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

Additional FOPs: None

Major Source Pollutants

The table below specifies the pollutants for which the site is a major source:

Major Pollutants	VOC, SO ₂ , PM, NO _X , HAPS, CO, NO
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Reading State of Texas’s Federal Operating Permit

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

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

- General Terms and Conditions
- Special Terms and Conditions
 - Emissions Limitations and Standards, Monitoring and Testing, and Recordkeeping and Reporting
 - Additional Monitoring Requirements
 - New Source Review Authorization Requirements
 - Compliance Requirements
 - Protection of Stratosphere Ozone
 - Permit Location
 - Permit Shield (30 TAC § 122.148)
- Attachments
 - Applicable Requirements Summary
 - Unit Summary
 - Applicable Requirements Summary
 - Additional Monitoring Requirements

- Permit Shield
- New Source Review Authorization References
- Compliance Plan
- Alternative Requirements
- Appendix A
 - Acronym list

General Terms and Conditions

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

Special Terms and Conditions

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

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

Attachments

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

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

Additional Monitoring Requirement. The next attachment includes additional monitoring the applicant must perform to ensure compliance with the applicable standard. Compliance assurance monitoring (CAM) is often required to provide a reasonable assurance of compliance with applicable emission limitations/standards for large emission units that use control devices to achieve compliance with applicant requirements. When necessary, periodic monitoring (PM) requirements are specified for certain parameters (i.e. feed rates, flow rates, temperature, fuel type and consumption, etc.) to determine if a term and condition or emission unit is operating within specified limits to control emissions. These additional monitoring approaches may be

required for two reasons. First, the applicable rules do not adequately specify monitoring requirements (exception- Maximum Achievable Control Technology Standards (MACTs) generally have sufficient monitoring), and second, monitoring may be required to fill gaps in the monitoring requirements of certain applicable requirements. In situations where the NSR permit is the applicable requirement requiring extra monitoring for a specific emission unit, the preferred solution is to have the monitoring requirements in the NSR permit updated so that all NSR requirements are consolidated in the NSR permit.

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

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

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

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

Appendix A

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

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

The site contains stationary vents with a flowrate less than 100,000 actual cubic feet per minute (acfm) and constructed after January 31, 1972 which are limited, over a six-minute average, to 20% opacity as required by 30 TAC § 111.111(a)(1)(B). As a site may have a large number of stationary vents that fall into this category, they are not required to be listed individually in the permit's Applicable Requirement Summary. This is consistent with EPA's White Paper for Streamlined Development of Part 70 Permit Applications, July 10, 1995, that states that requirements that apply identically to emission units at a site can be treated on a generic basis such as source-wide opacity limits.

Periodic monitoring is specified in Special Term and Condition 3 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.

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

Insignificant Activities

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

1. Office activities such as photocopying, blueprint copying, and photographic processes.
2. Sanitary sewage collection and treatment facilities other than those used to incinerate wastewater treatment plant sludge. Stacks or vents for sanitary sewer plumbing traps are also included.

3. Food preparation facilities including, but not limited to, restaurants and cafeterias used for preparing food or beverages primarily for consumption on the premises.
4. Outdoor barbecue pits, campfires, and fireplaces.
5. Laundry dryers, extractors, and tumblers processing bedding, clothing, or other fabric items generated primarily at the premises. This does not include emissions from dry cleaning systems using perchloroethylene or petroleum solvents.
6. Facilities storing only dry, sweet natural gas, including natural gas pressure regulator vents.
7. Any air separation or other industrial gas production, storage, or packaging facility. Industrial gases, for purposes of this list, include only oxygen, nitrogen, helium, neon, argon, krypton, and xenon.
8. Storage and handling of sealed portable containers, cylinders, or sealed drums.
9. Vehicle exhaust from maintenance or repair shops.
10. Storage and use of non-VOC products or equipment for maintaining motor vehicles operated at the site (including but not limited to, antifreeze and fuel additives).
11. Air contaminant detectors and recorders, combustion controllers and shut-off devices, product analyzers, laboratory analyzers, continuous emissions monitors, other analyzers and monitors, and emissions associated with sampling activities. Exception to this category includes sampling activities that are deemed fugitive emissions and under a regulatory leak detection and repair program.
12. Bench scale laboratory equipment and laboratory equipment used exclusively for chemical and physical analysis, including but not limited to, assorted vacuum producing devices and laboratory fume hoods.
13. Steam vents, steam leaks, and steam safety relief valves, provided the steam (or boiler feedwater) has not contacted other materials or fluids containing regulated air pollutants other than boiler water treatment chemicals.
14. Storage of water that has not contacted other materials or fluids containing regulated air pollutants other than boiler water treatment chemicals.
15. Well cellars.
16. Fire or emergency response equipment and training, including but not limited to, use of fire control equipment including equipment testing and training, and open burning of materials or fuels associated with firefighting training.
17. Crucible or pot furnaces with a brim full capacity of less than 450 cubic inches of any molten metal.
18. Equipment used exclusively for the melting or application of wax.
19. All closed tumblers used for the cleaning or deburring of metal products without abrasive blasting, and all open tumblers with a batch capacity of 1,000 lbs. or less.
20. Shell core and shell mold manufacturing machines.
21. Sand or investment molds with a capacity of 100 lbs. or less used for the casting of metals;
22. Equipment used for inspection of metal products.
23. Equipment used exclusively for rolling, forging, pressing, drawing, spinning, or extruding either hot or cold metals by some mechanical means.
24. Instrument systems utilizing air, natural gas, nitrogen, oxygen, carbon dioxide, helium, neon, argon, krypton, and xenon.
25. Battery recharging areas.
26. Brazing, soldering, or welding equipment.

Determination of Applicable Requirements

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

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

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

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

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

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

Operational Flexibility

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

Determination of Applicable Requirements

Unit ID	Regulation	Index Number	Basis of Determination *
EMENG	40 CFR Part 63, Subpart ZZZZ	63-ZZZZ	<p>HAP Source = Any stationary source or group of stationary sources of hazardous air pollutants meeting the definition of a major source as described in 40 CFR § 63.2.</p> <p>Brake HP = Stationary RICE with a brake hp less than 100 hp.</p> <p>Construction/Reconstruction Date = Commenced construction or reconstruction before December 19, 2002.</p> <p>Service Type = Emergency use where the RICE operates or is 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 that operates for the purpose specified in 40 CFR §63.6640(f)(4)(ii).</p> <p>Stationary RICE Type = Compression ignition engine</p>
FUG-1	40 CFR Part 60, Subpart Y	60-Y	<p>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.</p> <p>Design Capacity = Design capacity is greater than 200 tons of coal per day.</p> <p>Federally Enforceable Limit Option = The plant chooses not to operate under a federally enforceable limit of less than 200 tons per day.</p>
FUG-1	40 CFR Part 60, Subpart Y	60-Y	<p>Affected Facility = Coal processing and conveying equipment (including breakers and crushers), coal storage systems (excluding open storage piles), or coal transfer and loading systems.</p> <p>Construction/Reconstruction/Modification Date = After October 24, 1974 and before April 28, 2008.</p>
PLTCEMENTPLANT	40 CFR Part 60, Subpart Y	60-Y	<p>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.</p> <p>Design Capacity = Design capacity is greater than 200 tons of coal per day.</p> <p>Federally Enforceable Limit Option = The plant chooses not to operate under a federally enforceable limit of less than 200 tons per day.</p>
BLDG-CGST	40 CFR Part 60, Subpart OOO	60-OOO	<p>Plant Type = Nonmetallic mineral processing plant other than a sand and gravel, crushed stone, common clay, pumice plant, hot-mix asphalt facility or plant without crushers or grinding mills containing stand-alone screening operations.</p>
BLDG-CGST	40 CFR Part 63, Subpart LLL	63-LLL	<p>Major Source = The affected source is located at Portland cement plant that is a major source as defined in 40 CFR § 63.2.</p> <p>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.</p> <p>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.</p>
BLDG-FINM	40 CFR Part 60, Subpart OOO	60-OOO	<p>Plant Type = Nonmetallic mineral processing plant other than a sand and gravel, crushed stone, common clay, pumice plant, hot-mix asphalt facility or plant without crushers or grinding mills containing stand-alone screening operations.</p>
BLDG-FINM	40 CFR Part 63, Subpart LLL	63-LLL	<p>Major Source = The affected source is located at Portland cement plant that is a major source as defined in 40 CFR § 63.2.</p> <p>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.</p> <p>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.</p>
BLDG-RAWST	40 CFR Part 60, Subpart OOO	60-OOO	<p>Plant Type = Nonmetallic mineral processing plant other than a sand and gravel, crushed stone, common clay, pumice plant, hot-mix asphalt facility or plant without crushers or grinding mills containing stand-alone screening operations.</p>

Unit ID	Regulation	Index Number	Basis of Determination *
BLDG-RAWST	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. 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. 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.
DB-1	40 CFR Part 60, Subpart OOO	60-OOO	Plant Type = Nonmetallic mineral processing plant other than a sand and gravel, crushed stone, common clay, pumice plant, hot-mix asphalt facility or plant without crushers or grinding mills containing stand-alone screening operations.
DB-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. 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. 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.
DC-10A	40 CFR Part 60, Subpart OOO	60-OOO	Plant Type = Nonmetallic mineral processing plant other than a sand and gravel, crushed stone, common clay, pumice plant, hot-mix asphalt facility or plant without crushers or grinding mills containing stand-alone screening operations.
DC-10A	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. 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. Facility Type = Raw mill or finish mill Raw/Finish Mill Opacity = Conducting daily visible emissions observations according to 40 CFR § 63.1350(e).
DC-10B	40 CFR Part 60, Subpart OOO	60-OOO	Plant Type = Nonmetallic mineral processing plant other than a sand and gravel, crushed stone, common clay, pumice plant, hot-mix asphalt facility or plant without crushers or grinding mills containing stand-alone screening operations.
DC-10B	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. 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. Facility Type = Raw mill or finish mill Raw/Finish Mill Opacity = Conducting daily visible emissions observations according to 40 CFR § 63.1350(e).
DC-10C1	40 CFR Part 60, Subpart OOO	60-OOO	Plant Type = Nonmetallic mineral processing plant other than a sand and gravel, crushed stone, common clay, pumice plant, hot-mix asphalt facility or plant without crushers or grinding mills containing stand-alone screening operations.
DC-10C1	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. 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. 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.
DC-11A	40 CFR Part 60, Subpart OOO	60-OOO	Plant Type = Nonmetallic mineral processing plant other than a sand and gravel, crushed stone, common clay, pumice plant, hot-mix asphalt facility or plant without crushers or grinding mills containing stand-alone screening operations.

Unit ID	Regulation	Index Number	Basis of Determination *
DC-11A	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. 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. 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.
DC-11B	40 CFR Part 60, Subpart OOO	60-OOO	Plant Type = Nonmetallic mineral processing plant other than a sand and gravel, crushed stone, common clay, pumice plant, hot-mix asphalt facility or plant without crushers or grinding mills containing stand-alone screening operations.
DC-11B	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. 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. 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.
DC-11C	40 CFR Part 60, Subpart OOO	60-OOO	Plant Type = Nonmetallic mineral processing plant other than a sand and gravel, crushed stone, common clay, pumice plant, hot-mix asphalt facility or plant without crushers or grinding mills containing stand-alone screening operations.
DC-11C	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. 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. 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.
DC-11D	40 CFR Part 60, Subpart OOO	60-OOO	Plant Type = Nonmetallic mineral processing plant other than a sand and gravel, crushed stone, common clay, pumice plant, hot-mix asphalt facility or plant without crushers or grinding mills containing stand-alone screening operations.
DC-11D	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. 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. 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.
DC-11E	40 CFR Part 60, Subpart OOO	60-OOO	Plant Type = Nonmetallic mineral processing plant other than a sand and gravel, crushed stone, common clay, pumice plant, hot-mix asphalt facility or plant without crushers or grinding mills containing stand-alone screening operations.
DC-11E	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. 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. 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.
DC-11F	40 CFR Part 60, Subpart OOO	60-OOO	Plant Type = Nonmetallic mineral processing plant other than a sand and gravel, crushed stone, common clay, pumice plant, hot-mix asphalt facility or plant without crushers or grinding mills containing stand-alone screening operations.
DC-11F	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. 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. 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 *
DC-13	40 CFR Part 60, Subpart OOO	60-000	Plant Type = Nonmetallic mineral processing plant other than a sand and gravel, crushed stone, common clay, pumice plant, hot-mix asphalt facility or plant without crushers or grinding mills containing stand-alone screening operations.
DC-13	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. 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. 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.
DC-13A	40 CFR Part 60, Subpart OOO	60-000	Plant Type = Nonmetallic mineral processing plant other than a sand and gravel, crushed stone, common clay, pumice plant, hot-mix asphalt facility or plant without crushers or grinding mills containing stand-alone screening operations.
DC-13A	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. 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. 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.
DC-1A	40 CFR Part 60, Subpart OOO	60-000	Plant Type = Nonmetallic mineral processing plant other than a sand and gravel, crushed stone, common clay, pumice plant, hot-mix asphalt facility or plant without crushers or grinding mills containing stand-alone screening operations.
DC-1A	40 CFR Part 60, Subpart OOO	60-000	Capture System = The affected facility is not using a capture system for emissions control. Underground Mines = The facility is not located in an underground mine. Control Device Type = Control device other than a baghouse controlling emissions from only an individual enclosed storage bin or wet scrubber, or no emissions control. Subpart Applicability = The facility is not subject to 40 CFR Part 60, Subparts F or I, nor does the facility follow, in the plant process, another facility subject to Subparts F or I. Facility Type = Crusher. Construction/Modification Date = On or before August 31, 1983. Replacement Type = Is not replacing an existing facility.
DC-1C	40 CFR Part 60, Subpart OOO	60-000	Plant Type = Nonmetallic mineral processing plant other than a sand and gravel, crushed stone, common clay, pumice plant, hot-mix asphalt facility or plant without crushers or grinding mills containing stand-alone screening operations.
DC-1C	40 CFR Part 60, Subpart OOO	60-000	Underground Mines = The facility is not located in an underground mine. Subpart Applicability = The facility is not subject to 40 CFR Part 60, Subparts F or I, nor does the facility follow, in the plant process, another facility subject to Subparts F or I. Facility Type = Transfer point on a belt conveyor not processing saturated material. Construction/Modification Date = On or before August 31, 1983.
DC-20	40 CFR Part 60, Subpart OOO	60-000	Plant Type = Nonmetallic mineral processing plant other than a sand and gravel, crushed stone, common clay, pumice plant, hot-mix asphalt facility or plant without crushers or grinding mills containing stand-alone screening operations.

Unit ID	Regulation	Index Number	Basis of Determination *
DC-20	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. 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. 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.
DC-23	40 CFR Part 60, Subpart OOO	60-OOO	Plant Type = Nonmetallic mineral processing plant other than a sand and gravel, crushed stone, common clay, pumice plant, hot-mix asphalt facility or plant without crushers or grinding mills containing stand-alone screening operations.
DC-23	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. 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. 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.
DC-24	40 CFR Part 60, Subpart OOO	60-OOO	Plant Type = Nonmetallic mineral processing plant other than a sand and gravel, crushed stone, common clay, pumice plant, hot-mix asphalt facility or plant without crushers or grinding mills containing stand-alone screening operations.
DC-24	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. 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. 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.
DC2-DC9	40 CFR Part 60, Subpart OOO	60-OOO	Plant Type = Nonmetallic mineral processing plant other than a sand and gravel, crushed stone, common clay, pumice plant, hot-mix asphalt facility or plant without crushers or grinding mills containing stand-alone screening operations.
DC2-DC9	40 CFR Part 63, Subpart LLL	63-LLL	Alkali Bypass = There is no alkali by-pass associated with the kiln or in-line kiln/raw mill. Major Source = The affected source is located at Portland cement plant that is a major source as defined in 40 CFR § 63.2. Performance Test Temperature = Less than or equal to 204° C (400° F). 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. Carbon Injection = Carbon injection is not employed as an emission control technique. Facility Type = In-line kiln/raw mill Burning Hazardous Waste = The kiln or in-line kiln/raw mill does not burn hazardous waste. Monovent = The unit has a control device that does not exhaust through a monovent. Source Classification = Existing source constructed, reconstructed or modified prior to March 24, 1998. 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. Alternate D/F Monitoring = No alternate D/F monitoring requirements have been approved. Multiple Stacks = A fabric filter with a single stack or an electrostatic precipitator with single stack is used.
DC-3A	40 CFR Part 60, Subpart OOO	60-OOO	Plant Type = Nonmetallic mineral processing plant other than a sand and gravel, crushed stone, common clay, pumice plant, hot-mix asphalt facility or plant without crushers or grinding mills containing stand-alone screening operations.

Unit ID	Regulation	Index Number	Basis of Determination *
DC-3A	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. 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. 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.
DC-3B	40 CFR Part 60, Subpart OOO	60-OOO	Plant Type = Nonmetallic mineral processing plant other than a sand and gravel, crushed stone, common clay, pumice plant, hot-mix asphalt facility or plant without crushers or grinding mills containing stand-alone screening operations.
DC-3B	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. 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. 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.
DC-3C	40 CFR Part 60, Subpart OOO	60-OOO	Plant Type = Nonmetallic mineral processing plant other than a sand and gravel, crushed stone, common clay, pumice plant, hot-mix asphalt facility or plant without crushers or grinding mills containing stand-alone screening operations.
DC-3C	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. 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. 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.
DC-3D1	40 CFR Part 60, Subpart OOO	60-OOO	Plant Type = Nonmetallic mineral processing plant other than a sand and gravel, crushed stone, common clay, pumice plant, hot-mix asphalt facility or plant without crushers or grinding mills containing stand-alone screening operations.
DC-3D1	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. 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. 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.
DC-3D2	40 CFR Part 60, Subpart OOO	60-OOO	Plant Type = Nonmetallic mineral processing plant other than a sand and gravel, crushed stone, common clay, pumice plant, hot-mix asphalt facility or plant without crushers or grinding mills containing stand-alone screening operations.
DC-3D2	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. 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. 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.
DC-3D3	40 CFR Part 60, Subpart OOO	60-OOO	Plant Type = Nonmetallic mineral processing plant other than a sand and gravel, crushed stone, common clay, pumice plant, hot-mix asphalt facility or plant without crushers or grinding mills containing stand-alone screening operations.
DC-3D3	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. 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. 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 *
DC-4	40 CFR Part 60, Subpart OOO	60-000	Plant Type = Nonmetallic mineral processing plant other than a sand and gravel, crushed stone, common clay, pumice plant, hot-mix asphalt facility or plant without crushers or grinding mills containing stand-alone screening operations.
DC-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. 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. Facility Type = Clinker cooler Monovent = The unit has a control device that does not exhaust through a monovent. 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. Multiple Stacks = A fabric filter with a single stack or an electrostatic precipitator with single stack is used.
DC-4A1	40 CFR Part 60, Subpart OOO	60-000	Plant Type = Nonmetallic mineral processing plant other than a sand and gravel, crushed stone, common clay, pumice plant, hot-mix asphalt facility or plant without crushers or grinding mills containing stand-alone screening operations.
DC-4A1	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. 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. 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.
DC-5	40 CFR Part 60, Subpart OOO	60-000	Plant Type = Nonmetallic mineral processing plant other than a sand and gravel, crushed stone, common clay, pumice plant, hot-mix asphalt facility or plant without crushers or grinding mills containing stand-alone screening operations.
DC-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. 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. Facility Type = Raw mill or finish mill Raw/Finish Mill Opacity = Conducting daily visible emissions observations according to 40 CFR § 63.1350(e).
DC-5A1	40 CFR Part 60, Subpart OOO	60-000	Plant Type = Nonmetallic mineral processing plant other than a sand and gravel, crushed stone, common clay, pumice plant, hot-mix asphalt facility or plant without crushers or grinding mills containing stand-alone screening operations.
DC-5A1	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. 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. 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.
DC-6A	40 CFR Part 60, Subpart OOO	60-000	Plant Type = Nonmetallic mineral processing plant other than a sand and gravel, crushed stone, common clay, pumice plant, hot-mix asphalt facility or plant without crushers or grinding mills containing stand-alone screening operations.
DC-6A	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. 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. 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 *
DC-6B	40 CFR Part 60, Subpart OOO	60-000	Plant Type = Nonmetallic mineral processing plant other than a sand and gravel, crushed stone, common clay, pumice plant, hot-mix asphalt facility or plant without crushers or grinding mills containing stand-alone screening operations.
DC-6B	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. 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. 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.
DC-6C	40 CFR Part 60, Subpart OOO	60-000	Plant Type = Nonmetallic mineral processing plant other than a sand and gravel, crushed stone, common clay, pumice plant, hot-mix asphalt facility or plant without crushers or grinding mills containing stand-alone screening operations.
DC-6C	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. 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. 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.
DC-6D	40 CFR Part 60, Subpart OOO	60-000	Plant Type = Nonmetallic mineral processing plant other than a sand and gravel, crushed stone, common clay, pumice plant, hot-mix asphalt facility or plant without crushers or grinding mills containing stand-alone screening operations.
DC-6D	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. 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. 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.
DC-7B	40 CFR Part 60, Subpart OOO	60-000	Plant Type = Nonmetallic mineral processing plant other than a sand and gravel, crushed stone, common clay, pumice plant, hot-mix asphalt facility or plant without crushers or grinding mills containing stand-alone screening operations.
DC-7B	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. 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. 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.
DC-8	40 CFR Part 60, Subpart OOO	60-000	Plant Type = Nonmetallic mineral processing plant other than a sand and gravel, crushed stone, common clay, pumice plant, hot-mix asphalt facility or plant without crushers or grinding mills containing stand-alone screening operations.
DC-8	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. 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. 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.
FUG-2	40 CFR Part 60, Subpart OOO	60-000	Plant Type = Nonmetallic mineral processing plant other than a sand and gravel, crushed stone, common clay, pumice plant, hot-mix asphalt facility or plant without crushers or grinding mills containing stand-alone screening operations.

Unit ID	Regulation	Index Number	Basis of Determination *
FUG-2	40 CFR Part 60, Subpart OOO	60-000	Underground Mines = The facility is not located in an underground mine. Subpart Applicability = The facility is not subject to 40 CFR Part 60, Subparts F or I, nor does the facility follow, in the plant process, another facility subject to Subparts F or I. Facility Type = Individual storage bin. Construction/Modification Date = On or before August 31, 1983.
FUG-3	40 CFR Part 60, Subpart OOO	60-000	Plant Type = Nonmetallic mineral processing plant other than a sand and gravel, crushed stone, common clay, pumice plant, hot-mix asphalt facility or plant without crushers or grinding mills containing stand-alone screening operations.
FUG-3	40 CFR Part 60, Subpart OOO	60-000	Underground Mines = The facility is not located in an underground mine. Subpart Applicability = The facility is not subject to 40 CFR Part 60, Subparts F or I, nor does the facility follow, in the plant process, another facility subject to Subparts F or I. Facility Type = Individual storage bin. Construction/Modification Date = On or before August 31, 1983.
FUG-5	40 CFR Part 60, Subpart OOO	60-000	Plant Type = Nonmetallic mineral processing plant other than a sand and gravel, crushed stone, common clay, pumice plant, hot-mix asphalt facility or plant without crushers or grinding mills containing stand-alone screening operations.
FUG-5	40 CFR Part 60, Subpart OOO	60-000	Underground Mines = The facility is not located in an underground mine. Subpart Applicability = The facility is not subject to 40 CFR Part 60, Subparts F or I, nor does the facility follow, in the plant process, another facility subject to Subparts F or I. Facility Type = Individual storage bin. Construction/Modification Date = On or before August 31, 1983.
FUG-RBINS	40 CFR Part 60, Subpart OOO	60-000	Plant Type = Nonmetallic mineral processing plant other than a sand and gravel, crushed stone, common clay, pumice plant, hot-mix asphalt facility or plant without crushers or grinding mills containing stand-alone screening operations.
FUG-RBINS	40 CFR Part 60, Subpart OOO	60-000	Underground Mines = The facility is not located in an underground mine. Subpart Applicability = The facility is not subject to 40 CFR Part 60, Subparts F or I, nor does the facility follow, in the plant process, another facility subject to Subparts F or I. Facility Type = Individual storage bin. Construction/Modification Date = On or before August 31, 1983.
G-2	40 CFR Part 60, Subpart OOO	60-000	Plant Type = Nonmetallic mineral processing plant other than a sand and gravel, crushed stone, common clay, pumice plant, hot-mix asphalt facility or plant without crushers or grinding mills containing stand-alone screening operations.
G-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. 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. 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.
G-3	40 CFR Part 60, Subpart OOO	60-000	Plant Type = Nonmetallic mineral processing plant other than a sand and gravel, crushed stone, common clay, pumice plant, hot-mix asphalt facility or plant without crushers or grinding mills containing stand-alone screening operations.

Unit ID	Regulation	Index Number	Basis of Determination *
G-3	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. 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. 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.
NG-2	40 CFR Part 60, Subpart OOO	60-OOO	Plant Type = Nonmetallic mineral processing plant other than a sand and gravel, crushed stone, common clay, pumice plant, hot-mix asphalt facility or plant without crushers or grinding mills containing stand-alone screening operations.
NG-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. 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. 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.
OC-2	40 CFR Part 60, Subpart OOO	60-OOO	Plant Type = Nonmetallic mineral processing plant other than a sand and gravel, crushed stone, common clay, pumice plant, hot-mix asphalt facility or plant without crushers or grinding mills containing stand-alone screening operations.
OC-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. 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. 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.
OG-1	40 CFR Part 60, Subpart OOO	60-OOO	Plant Type = Nonmetallic mineral processing plant other than a sand and gravel, crushed stone, common clay, pumice plant, hot-mix asphalt facility or plant without crushers or grinding mills containing stand-alone screening operations.
OG-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. 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. 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.
ON-3	40 CFR Part 60, Subpart OOO	60-OOO	Plant Type = Nonmetallic mineral processing plant other than a sand and gravel, crushed stone, common clay, pumice plant, hot-mix asphalt facility or plant without crushers or grinding mills containing stand-alone screening operations.
ON-3	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. 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. 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.
PLTCEMENT	40 CFR Part 60, Subpart OOO	60-OOO	Plant Type = Nonmetallic mineral processing plant other than a sand and gravel, crushed stone, common clay, pumice plant, hot-mix asphalt facility or plant without crushers or grinding mills containing stand-alone screening operations.

Unit ID	Regulation	Index Number	Basis of Determination*
RM1A	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. 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. 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.
RM1A		60-000	Plant Type = Nonmetallic mineral processing plant other than a sand and gravel, crushed stone, common clay, pumice plant, hot-mix asphalt facility or plant without crushers or grinding mills containing stand-alone screening operations.
RM1B	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. 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. 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.
RM1B		60-000	Plant Type = Nonmetallic mineral processing plant other than a sand and gravel, crushed stone, common clay, pumice plant, hot-mix asphalt facility or plant without crushers or grinding mills containing stand-alone screening operations.
RM2A	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. 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. 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.
RM2A		60-000	Plant Type = Nonmetallic mineral processing plant other than a sand and gravel, crushed stone, common clay, pumice plant, hot-mix asphalt facility or plant without crushers or grinding mills containing stand-alone screening operations.
RM2B	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. 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. 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.
RM2B		60-000	Plant Type = Nonmetallic mineral processing plant other than a sand and gravel, crushed stone, common clay, pumice plant, hot-mix asphalt facility or plant without crushers or grinding mills containing stand-alone screening operations.
SG-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. 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. 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.
SG-1		60-000	Plant Type = Nonmetallic mineral processing plant other than a sand and gravel, crushed stone, common clay, pumice plant, hot-mix asphalt facility or plant without crushers or grinding mills containing stand-alone screening operations.

Unit ID	Regulation	Index Number	Basis of Determination *
SG-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. 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. 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.
SG-2		60-000	Plant Type = Nonmetallic mineral processing plant other than a sand and gravel, crushed stone, common clay, pumice plant, hot-mix asphalt facility or plant without crushers or grinding mills containing stand-alone screening operations.
SG-3	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. 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. 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.
SG-3		60-000	Plant Type = Nonmetallic mineral processing plant other than a sand and gravel, crushed stone, common clay, pumice plant, hot-mix asphalt facility or plant without crushers or grinding mills containing stand-alone screening operations.
SG-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. 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. 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.
SG-4		60-000	Plant Type = Nonmetallic mineral processing plant other than a sand and gravel, crushed stone, common clay, pumice plant, hot-mix asphalt facility or plant without crushers or grinding mills containing stand-alone screening operations.

* - 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

Prevention of Significant Deterioration (PSD) Permits	
PSD Permit No.: PSDTX194M5	Issuance Date: 06/13/2006
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.: 3611D	Issuance Date: 06/13/2006
Authorization No.: 85058	Issuance Date: 06/24/2008
Permits By Rule (30 TAC Chapter 106) for the Application Area	
Number: 106.144	Version No./Date: 09/04/2000
Number: 106.261	Version No./Date: 09/04/2000
Number: 106.261	Version No./Date: 11/01/2003
Number: 106.262	Version No./Date: 11/01/2003
Number: 106.263	Version No./Date: 11/01/2001
Number: 106.264	Version No./Date: 09/04/2000
Number: 106.371	Version No./Date: 03/14/1997
Number: 106.454	Version No./Date: 11/01/2001
Number: 106.472	Version No./Date: 09/04/2000
Number: 106.473	Version No./Date: 09/04/2000
Number: 106.511	Version No./Date: 09/04/2000
Number: 47	Version No./Date: 05/08/1972
Number: 61	Version No./Date: 07/15/1988
Number: 75	Version No./Date: 06/07/1996

Emission Units and Emission Points

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

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

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

Monitoring Sufficiency

Federal and state rules, 40 CFR § 70.6(a)(3)(i)(B) and 30 TAC § 122.142(c) respectively, require that each federal operating permit include additional monitoring for applicable requirements that lack periodic or instrumental monitoring (which may include recordkeeping that serves as monitoring) that yields reliable data from a relevant time period that are representative of the emission unit’s compliance with the applicable emission limitation or standard. Furthermore, the federal operating permit must include compliance assurance monitoring (CAM) requirements for emission sources that meet the applicability criteria of 40 CFR Part 64 in accordance with 40 CFR § 70.6(a)(3)(i)(A) and 30 TAC § 122.604(b).

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

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

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:

CAM Summary

UNIT/GROUP/PROCESS INFORMATION	
ID No.: DC-1A, DC-3A, DC-3B, DC-3C, DC-4A1, DC-5A1, DC-6A, DC-6B, DC-6C, DC-6D, DC-7B, DC-8, DC-10C1, DC-11A, DC-11B, DC-11C, DC-11D, DC-11E, DC-11F, DC-13, DC-13A	
Control Device ID No.: DC-1A, DC-3A, DC-3B, DC-3C, DC-4A1, DC-5A1, DC-6A, DC-6B, DC-6C, DC-6D, DC-7B, DC-8, DC-10C1, DC-11A, DC-11B, DC-11C, DC-11D, DC-11E, DC-11F, DC-13, DC-13A	Control Device Type: Fabric Filter
APPLICABLE REGULATORY REQUIREMENT	
Name: 30 TAC Chapter 111, Nonagricultural Processes	SOP Index No.: R1111
Pollutant: PM	Main Standard: § 111.151(a)
MONITORING INFORMATION	
Indicator: Visible emissions	
Minimum Frequency: Monthly	
Averaging Period: One minute	
Deviation Limit: Visible emissions or 10% opacity.	
CAM Text: It is widely practiced and accepted to control particulate emissions by use of a fabric filter equipped with a bag leak detection system installed, operated, calibrated, and maintained in a manner consistent with the EPA, Office of Air Quality Planning and Standards, "Fabric Filter Bag Leak Detection Guidance" (EPA-454/R-98-015). The option to use a bag leak detection system is provided since an increase in the signal may indicate an increase in opacity or particulate emissions or indicate problems with a fabric filter such as a broken bag.	

CAM Summary

UNIT/GROUP/PROCESS INFORMATION	
ID No.: DC-23, DC-24	
Control Device ID No.: DC-23, DC-24	Control Device Type: Fabric Filter
APPLICABLE REGULATORY REQUIREMENT	
Name: 30 TAC Chapter 111, Nonagricultural Processes	SOP Index No.: R1111
Pollutant: PM	Main Standard: § 111.151(a)
MONITORING INFORMATION	
Indicator: Visible Emissions	
Minimum Frequency: Monthly	
Averaging Period: One Minute	
Deviation Limit: Visible emissions or 10% opacity.	
<p>CAM Text: It is widely practiced and accepted to control particulate emissions by use of a fabric filter equipped with a bag leak detection system installed, operated, calibrated, and maintained in a manner consistent with the EPA, Office of Air Quality Planning and Standards, "Fabric Filter Bag Leak Detection Guidance" (EPA-454/R-98-015). The option to use a bag leak detection system is provided since an increase in the signal may indicate an increase in opacity or particulate emissions or indicate problems with a fabric filter such as a broken bag.</p>	

CAM Summary

UNIT/GROUP/PROCESS INFORMATION	
ID No.: DC2-DC9	
Control Device ID No.: DC2-DC9	Control Device Type: Fabric Filter
APPLICABLE REGULATORY REQUIREMENT	
Name: 30 TAC Chapter 111, Nonagricultural Processes	SOP Index No.: R1111
Pollutant: PM	Main Standard: § 111.151(a)
MONITORING INFORMATION	
Indicator: Opacity	
Minimum Frequency: six times per minute	
Averaging Period: six-minute	
Deviation Limit: 10% Opacity	
<p>CAM Text: It is widely practiced and accepted to control particulate emissions by use of a fabric filter equipped with a bag leak detection system installed, operated, calibrated, and maintained in a manner consistent with the EPA, Office of Air Quality Planning and Standards, "Fabric Filter Bag Leak Detection Guidance" (EPA-454/R-98-015). The option to use a bag leak detection system is provided since an increase in the signal may indicate an increase in opacity or particulate emissions or indicate problems with a fabric filter such as a broken bag.</p>	

CAM Summary

UNIT/GROUP/PROCESS INFORMATION	
ID No.: DC-4	
Control Device ID No.: DC-4	Control Device Type: Fabric Filter
APPLICABLE REGULATORY REQUIREMENT	
Name: 30 TAC Chapter 111, Nonagricultural Processes	SOP Index No.: R1111
Pollutant: PM	Main Standard: § 111.151(a)
MONITORING INFORMATION	
Indicator: Opacity	
Minimum Frequency: six times per minute	
Averaging Period: six-minute	
Deviation Limit: 10% Opacity	
<p>CAM Text: It is widely practiced and accepted to control particulate emissions by use of a fabric filter equipped with a bag leak detection system installed, operated, calibrated, and maintained in a manner consistent with the EPA, Office of Air Quality Planning and Standards, "Fabric Filter Bag Leak Detection Guidance" (EPA-454/R-98-015). The option to use a bag leak detection system is provided since an increase in the signal may indicate an increase in opacity or particulate emissions or indicate problems with a fabric filter such as a broken bag.</p>	

CAM Summary

UNIT/GROUP/PROCESS INFORMATION	
ID No.: DC-5, DC-10A, DC-10B	
Control Device ID No.: DC-5, DC-10A, DC-10B	Control Device Type: Fabric Filter
APPLICABLE REGULATORY REQUIREMENT	
Name: 30 TAC Chapter 111, Nonagricultural Processes	SOP Index No.: R1111
Pollutant: PM	Main Standard: § 111.151(a)
MONITORING INFORMATION	
Indicator: Visible emissions	
Minimum Frequency: Monthly	
Averaging Period: One minute	
Deviation Limit: Visible emissions or 10% opacity.	
<p>CAM Text: It is widely practiced and accepted to control particulate emissions by use of a fabric filter equipped with a bag leak detection system installed, operated, calibrated, and maintained in a manner consistent with the EPA, Office of Air Quality Planning and Standards, "Fabric Filter Bag Leak Detection Guidance" (EPA-454/R-98-015). The option to use a bag leak detection system is provided since an increase in the signal may indicate an increase in opacity or particulate emissions or indicate problems with a fabric filter such as a broken bag.</p>	

Available Unit Attribute Forms

OP-UA1 - Miscellaneous and Generic Unit Attributes
OP-UA2 - Stationary Reciprocating Internal Combustion Engine Attributes
OP-UA3 - Storage Tank/Vessel Attributes
OP-UA4 - Loading/Unloading Operations Attributes
OP-UA5 - Process Heater/Furnace Attributes
OP-UA6 - Boiler/Steam Generator/Steam Generating Unit Attributes
OP-UA7 - Flare Attributes
OP-UA8 - Coal Preparation Plant Attributes
OP-UA9 - Nonmetallic Mineral Process Plant Attributes
OP-UA10 - Gas Sweetening/Sulfur Recovery Unit Attributes
OP-UA11 - Stationary Turbine Attributes
OP-UA12 - Fugitive Emission Unit Attributes
OP-UA13 - Industrial Process Cooling Tower Attributes
OP-UA14 - Water Separator Attributes
OP-UA15 - Emission Point/Stationary Vent/Distillation Operation/Process Vent Attributes
OP-UA16 - Solvent Degreasing Machine Attributes
OP-UA17 - Distillation Unit Attributes
OP-UA18 - Surface Coating Operations Attributes
OP-UA19 - Wastewater Unit Attributes
OP-UA20 - Asphalt Operations Attributes
OP-UA21 - Grain Elevator Attributes
OP-UA22 - Printing Attributes
OP-UA24 - Wool Fiberglass Insulation Manufacturing Plant Attributes
OP-UA25 - Synthetic Fiber Production Attributes
OP-UA26 - Electroplating and Anodizing Unit Attributes
OP-UA27 - Nitric Acid Manufacturing Attributes
OP-UA28 - Polymer Manufacturing Attributes
OP-UA29 - Glass Manufacturing Unit Attributes
OP-UA30 - Kraft, Soda, Sulfite, and Stand-Alone Semicheical Pulp Mill Attributes
OP-UA31 - Lead Smelting Attributes
OP-UA32 - Copper and Zinc Smelting/Brass and Bronze Production Attributes
OP-UA33 - Metallic Mineral Processing Plant Attributes
OP-UA34 - Pharmaceutical Manufacturing
OP-UA35 - Incinerator Attributes
OP-UA36 - Steel Plant Unit Attributes
OP-UA37 - Basic Oxygen Process Furnace Unit Attributes
OP-UA38 - Lead-Acid Battery Manufacturing Plant Attributes
OP-UA39 - Sterilization Source Attributes
OP-UA40 - Ferroalloy Production Facility Attributes
OP-UA41 - Dry Cleaning Facility Attributes
OP-UA42 - Phosphate Fertilizer Manufacturing Attributes
OP-UA43 - Sulfuric Acid Production Attributes
OP-UA44 - Municipal Solid Waste Landfill/Waste Disposal Site Attributes
OP-UA45 - Surface Impoundment Attributes
OP-UA46 - Epoxy Resins and Non-Nylon Polyamides Production Attributes
OP-UA47 - Ship Building and Ship Repair Unit Attributes
OP-UA48 - Air Oxidation Unit Process Attributes
OP-UA49 - Vacuum-Producing System Attributes
OP-UA50 - Fluid Catalytic Cracking Unit Catalyst Regenerator/Fuel Gas Combustion Device/Claus Sulfur Recovery Plant Attributes

OP-UA51 - Dryer/Kiln/Oven Attributes
OP-UA52 - Closed Vent Systems and Control Devices
OP-UA53 - Beryllium Processing Attributes
OP-UA54 - Mercury Chlor-Alkali Cell Attributes
OP-UA55 - Transfer System Attributes
OP-UA56 - Vinyl Chloride Process Attributes
OP-UA57 - Cleaning/Depainting Operation Attributes
OP-UA58 - Treatment Process Attributes
OP-UA59 - Coke By-Product Recovery Plant Attributes
OP-UA60 - Chemical Manufacturing Process Unit Attributes
OP-UA61 - Pulp, Paper, or Paperboard Producing Process Attributes
OP-UA62 - Glycol Dehydration Unit Attributes
OP-UA63 - Vegetable Oil Production Attributes