

Facility Name: **CEMEX Southeast, LLC**
City: Clinchfield
County: Houston
AIRS #: 04-13-153-00003

Application #: TV-559395
Date Application Received: May 6, 2021
Permit No: 3241-153-0003-V-07-0

| Program | Review Engineers | Review Managers |
|-----------------------------------|-------------------------|------------------------|
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Introduction

This narrative is being provided to assist the reader in understanding the content of referenced operating permit. Complex issues and unusual items are explained here in simpler terms and/or greater detail than is sometimes possible in the actual permit. The permit is being issued pursuant to: (1) Georgia Air Quality Act, O.C.G.A § 12-9-1, et seq. and (2) Georgia Rules for Air Quality Control, Chapter 391-3-1, and (3) Title V of the Clean Air Act. Section 391-3-1-.03(10) of the Georgia Rules for Air Quality Control incorporates requirements of Part 70 of Title 40 of the Code of Federal Regulations promulgated pursuant to the Federal Clean Air Act. The narrative is intended as an adjunct for the reviewer and to provide information only. It has no legal standing. Any revisions made to the permit in response to comments received during the public participation and EPA review process will be described in an addendum to this narrative.

I. Facility Description

A. Facility Identification

1. Facility Name: CEMEX Southeast, LLC.
2. Parent/Holding Company Name: CEMEX, Inc.
3. Previous and/or Other Name(s)

Cemex Inc., Medusa Cement, Medusa-Citadel, Inc., and Southdown, Inc.

4. Facility Location

2720 Highway 341 South
Clinchfield, Georgia 31013

5. Attainment, Non-attainment Area Location, or Contributing Area

The facility is not located in a non-attainment area, or a contributing area to a non-attainment area.

B. Site Determination

There are no other facilities which could possibly be contiguous or adjacent and under common control.

C. Existing Permits

Table 1 below lists all current Title V permits, all amendments, 502(b)(10) changes, and off-permit changes, issued to the facility, based on a comparative review of form A.6, Current Permits, of the Title V application and the "Permit" file(s) on the facility found in the Air Branch office.

Table 1: List of Current Permits, Amendments, and Off-Permit Changes

| Permit Number and/or Off-Permit Change | Date of Issuance/Effectiveness | Purpose of Issuance |
|--|--------------------------------|--|
| 3421-153-0003-V-06-0 | 11/10/2016 | 5 th Title V permit renewal |
| Off-permit-change | 04/21/2020 | Installing an active carbon injection pump serving Kiln No. 5 |
| Off-permit-change | 04/29/2020 | Installing cement kiln dust transferring system |
| Off-permit-change | 06/24/2021 | Replacing the No. 5 Clinker Cooler fans |
| Off-permit-change | 11/19/2020 | Installing an aqueous ammonia-injection based selective non-catalytic reduction system for additional control of NOx emissions from the No. 5 Kiln |
| Off-permit-change | 12/17/2020 | Using off-spec dryer sheets and swiffer pads as alternative fuels for cement kiln |

| | | |
|-------------------|------------|--|
| Off-permit-change | 06/29/2021 | Modifying an existing chute and installing a screw conveyor to transfer cement kiln dust |
| Off-permit-change | 06/30/2021 | Installing an on-site hydrolysis plant to generate hydrogen and oxygen for injection into the cement kiln main burner and calciner to improve combustion conditions that support alternative fuel usage |
| Off-permit-change | 10/20/2021 | Injecting oily water mixture generated from oil and water separation in used oil processing facilities into the fuel oil channel on the cement kiln main burner pipe to reduce the formation and emission of thermal NO _x . |
| Off-permit-change | 01/19/2022 | Replacing the existing Secondary Crusher (Emission Units ID No. 135) with a new crusher with same capacity |

D. Process Description

1. SIC Codes(s)

3421 – Cement, Hydraulic

The SIC Code(s) identified above were assigned by EPD's Air Protection Branch for purposes pursuant to the Georgia Air Quality Act and related administrative purposes only and are not intended to be used for any other purpose. Assignment of SIC Codes by EPD's Air Protection Branch for these purposes does not prohibit the facility from using these or different SIC Codes for other regulatory and non-regulatory purposes.

Should the reference(s) to SIC Code(s) in any narratives or narrative addendum previously issued for the Title V permit for this facility conflict with the revised language herein, the language herein shall control; provided, however, language in previously issued narratives that does not expressly reference SIC Code(s) shall not be affected.

2. Description of Product(s)

This facility manufactures Portland cement.

3. Overall Facility Process Description

This facility mines limestone, fuller's earth, and clay for the use in the manufacture of Portland cement. Mined raw materials are crushed, conveyed, stored, and then mixed with either mill scale or slag, and coal ash. This material blend is dried in a dryer, ground in a roller mill, and fired in a kiln to form 1-2" balls of cement clinker. The clinker is cooled, milled with gypsum, and stored for bagging or bulk loadout.

4. Overall Process Flow Diagram

The facility provided a process flow diagram in their Title V permit application.

E. Regulatory Status

1. PSD/NSR

Portland cement plants fall under the 28 major source categories as defined by federal Prevention of Significant Air Quality Deterioration (PSD) regulation, 40 CFR 52.21, and are subject to 100 tons per year as a major PSD source threshold. Accordingly, CEMEX Southeast, LLC is a PSD major source because it has the potential to emit more than 100 tons per year of particulate matter (PM), particulate matter less than 10 micrometers in diameter (PM₁₀), sulfur dioxide (SO₂), nitrogen oxides (NO_x), carbon monoxide (CO), and volatile organic compounds (VOCs).

Any future modification at this facility will be subject to NSR/PSD applicability determination. Any modification resulting significant increases in emissions of any criteria pollutants will be considered major and subject to a case-by-case NSR/PSD review to determine the Best Available Control Technology (BACT) applicable to the criteria pollutants with the significant emission increases.

2. Title V Major Source Status by Pollutant

Table 2: Title V Major Source Status

| Pollutant | Is the Pollutant Emitted? | If emitted, what is the facility's Title V status for the pollutant? | | |
|-------------------|---------------------------|--|-----------------------------------|-------------------------|
| | | Major Source Status | Major Source Requesting SM Status | Non-Major Source Status |
| PM | Yes | ✓ | | |
| PM ₁₀ | Yes | ✓ | | |
| PM _{2.5} | Yes | ✓ | | |
| SO ₂ | Yes | ✓ | | |
| VOC | Yes | ✓ | | |
| NO _x | Yes | ✓ | | |
| CO | Yes | ✓ | | |
| TRS | N/A | | | |
| H ₂ S | N/A | | | |
| Individual HAP | Yes | ✓ | | |
| Total HAPs | Yes | ✓ | | |

3. MACT Standards

The facility is subject to the provisions of NESHAP, 40 CFR 63 Subpart LLL, “*National Emission Standards for Hazardous Air Pollutants from the Portland Cement Manufacturing Industry*”, which EPA finalized on February 12, 2013.

4. Program Applicability (AIRS Program Codes)

| Program Code | Applicable (y/n) |
|---------------------------------|-----------------------------|
| Program Code 6 - PSD | No |
| Program Code 8 – Part 61 NESHAP | No |
| Program Code 9 - NSPS | Yes |
| Program Code M – Part 63 NESHAP | Yes |
| Program Code V – Title V | Yes |

Regulatory Analysis**II. Facility Wide Requirements****A. Emission and Operating Caps:**

Nonapplicable

C. Compliance Status

There are no noncompliance issues associated with this Title V renewal permit.

D. Permit Conditions

This facility is not subject to any facility-wide air quality rules other than the general requirements of the 40 CFR 60 and 40 CFR 63 for sources subject to these rules, as referred by existing Conditions 2.2.1 and 2.2.2. They are in addition to the general provisions in Section VIII of the enclosed permit and the general provisions contained in Rule 391-3-1-.02(2)(a).

III. Regulated Equipment Requirements

A. Equipment List for the Process

The equipment list below is a duplication of Subpart 3.1 – Emission Units of draft Title V operating permit renewal No. 3241-153-0003-V-07-0, prepared based on the Title V permit renewal application No. TV-559395. Compared to the one of the current permit No. 3241-153-0003-V-06-0, this list has the following additions: (1) An existing 800 HP portable diesel-powered crusher/grinder with Emission Unit ID No. 215. This source was added via a permit amendment; (2) An existing active carbon injection system for reducing mercury emissions from the Cement Kiln No. 5. This system was added as an additional control option via an off-per-permit change; (3) An existing aqueous ammonia-injection system for reducing NO_x emissions from the Cement Kiln No. 5. This system was added as an additional control option via an off-per-permit change; (4) An existing dry lime injection silo (Emission Unit ID No. 561); As part of the existing dry lime injection system controlling acidic gases emitted from the Cement Kiln No. 5, this silo was inadvertently left out of the current permit; and (5) An oily water injection for reducing NO_x emissions from the Cement Kiln No. 5. This system was added as an additional control option via an off-per-permit change.

| Emission Units | | Specific Limitations/Requirements | Air Pollution Control Devices | |
|---|--|--|-------------------------------|-------------------------|
| ID No. | Description | Applicable Requirements Standards | ID No. | Description |
| Quarry and Crushing Operations | | | | |
| 182 | Mine Property at Clinchfield | 391-3-1-.02(2)(e) | N/A | Water Truck |
| 105 | Primary Crusher | | N/A | None |
| 107 | Primary Crusher Belt Conveyor | | N/A | None |
| 110 | Fuller's Earth Diverter Gate | | N/A | None |
| 115 | Secondary Crusher Feed Belt | | N/A | None |
| 118 | Fuller's Earth Belt Conveyor | 40 CFR 60 Subpart OOO 391-3-1-.02(2)(e) | N/A | None |
| 119 | Fuller's Earth Storage Building | 391-3-1-.02(2)(e) | N/A | None |
| 126 | Fuller's Earth Feeder | | N/A | None |
| 130 | Fuller's Earth Belt Conveyor | | N/A | None |
| 135 | Secondary Crusher | | N/A | None |
| 145 | Analyzer Belt Conveyor | | N/A | None |
| 150 | Pit Belt #1 | | N/A | None |
| 155 | Haul Belt #1 | 40 CFR 60 Subpart OOO 391-3-1-.02(2)(e) | N/A | None |
| 160 | Haul Belt #2 | 391-3-1-.02(2)(e) | N/A | None |
| 165 | Gathering Belt #3 | | N/A | Enclosed transfer point |
| 170 | Haul Belt #4 | | N/A | None |
| 205 | Transfer Tower Feed Belt | | N/A | None |
| 206 | Diverter Gate | | N/A | None |
| 210 | Stacker-Tripper Belt | 40 CFR 60 Subpart OOO 391-3-1-.02(2)(e) | N/A | None |
| 244 | Limestone Bin Feed Belt | | N/A | None |
| 215 | 800 HP Portable Diesel-Powered Crusher/Grinder | 40 CFR 60 Subpart OOO 391-3-1-.02(2)(b) 391-3-1-.02(2)(e) 391-3-1-.02(2)(g) | N/A | None |
| Raw Material Handling and Processing | | | | |
| 220 | Bridge Reclaimer | 40 CFR 63 Subpart LLL 391-3-1-.02(2)(e) | N/A | None |
| 235 | Material Belt Conveyor | | N/A | None |
| 237 | Additive Feed Hopper | | N/A | None |
| 240 | Reversible Belt | | N/A | Enclosed transfer point |
| 242 | Clay & Iron Bin Belt | | N/A | Enclosed transfer point |

| Emission Units | | Specific Limitations/Requirements | Air Pollution Control Devices | |
|------------------------------------|---------------------------------|--|-------------------------------|--|
| ID No. | Description | Applicable Requirements Standards | ID No. | Description |
| 243 | Additive Diverter | | N/A | Enclosed transfer point |
| 250 | East Clay Bin (125 Ton) | | N/A | Enclosed transfer point |
| 254 | Apron Feeder (East) | | N/A | None |
| 258 | Clay Belt | | N/A | Enclosed transfer point |
| 260 | Iron Bin | | N/A | Enclosed transfer point |
| 264 | Iron Slag Weigh Feeder | | N/A | Enclosed transfer point |
| 270 | Limestone Bin | | N/A | Enclosed transfer point |
| 274 | Apron Feeder (Limestone Bin) | | N/A | None |
| 278 | Limestone Belt | | N/A | Enclosed transfer point |
| 290 | West Clay Bin (125 Ton) | | N/A | Enclosed transfer point |
| 294 | Apron Feeder (West) | | N/A | None |
| 300 | Raw Mix Bin (100 Ton) | | N/A | Enclosed transfer point |
| 305 | Apron Feeder (HAC) | | N/A | None |
| 307 | High Angle Conveyor (TOP) | | N/A | Enclosed transfer point |
| 308 | High Angle Conveyor (Bottom) | 40 CFR 63 Subpart LLL 391-3-1-.02(2)(e) | N/A | Enclosed transfer point |
| 320 | Roller Mill System | 40 CFR 63 Subpart LLL 391-3-1-.02(2)(g) | 0400 0401 | Kiln Baghouse Lime Injection System |
| 325 | Roller Mill Reject Belt | 40 CFR 63 Subpart LLL 391-3-1-.02(2)(e) | N/A | Enclosed transfer point |
| 327 | Roller Mill Reject Elevator | | N/A | Enclosed transfer point |
| 330 | Roller Mill Discharge Conveyor | | N/A | Enclosed transfer point |
| 350 | Roller Mill Cyclone (Northwest) | 40 CFR 63 Subpart LLL | 0400 | Kiln Baghouse |
| 351 | Roller Mill Cyclone (Southwest) | | 0400 | Kiln Baghouse |
| 352 | Roller Mill Cyclone (Northeast) | | 0400 | Kiln Baghouse |
| 353 | Roller Mill Cyclone (Southeast) | | 0400 | Kiln Baghouse |
| Kiln and Kiln Feed Handling System | | | | |
| 370 | Kiln Feed Bucket Elevator | 40 CFR 63 Subpart LLL 391-3-1-.02(2)(e) | 0497 | Dust Collector |
| 371 | Diverter Gate (to Masonry) | | 0369 | Dust Collector |
| 373 | Diverter Gate (to Silos) | | 0387 | Dust Collector |
| 388 | Homogenizing Silo #1 | | 0387 | Dust Collector |
| 381 | Homogenizing Silo #2 | | 0387 | Dust Collector |
| 382 | Homogenizing Silo #3 | | 0387 | Dust Collector |
| 380B | Kiln Feed System | | 5080 | Dust Collector |
| 383 | Masonry Limestone Silo | | 0369 | Dust Collector |
| 485 | Kiln Dust Bin (400 Ton) | | 0495 | Dust Collector |
| 491 | Kiln Dust Bucket Elevator | 40 CFR 52.21 40 CFR 63 Subpart LLL | 0495 | Dust Collector |
| 517 | Kiln Feed Weigh Feeder | 40 CFR 63 Subpart LLL | 5080 | Dust Collector |
| 525 | Kiln Feed Elevator East | | 0540 | Dust Collector |
| 530 | Kiln Feed Elevator West | | 0540 | Dust Collector |
| 531 | Kiln Feed Diverter Gate | | 0540 | Dust Collector |
| 550 | 1st Stage Preheater (East) | | 0540 | Dust Collector |
| 551 | 1st Stage Preheater (West) | | 0540 | Dust Collector |
| 560 | Cement Kiln No. 5 | 40 CFR 63 Subpart LLL 391-3-1-.02(2)(g) 40 CFR 52.21 | 0400 0401 | Kiln Baghouse Lime Injection System Baghouse Active Carbon Injection (optional) Aqueous NH ₃ -injection (optional) or oily water injection (option) |
| 561 | Dry Lime Injection Silo | 391-3-1-.02(2)(b) 391-3-1-.02(2)(e) | 0402 | Silo Baghouse |
| Coal Mill System | | | | |
| 648A | Pit Hopper | 40 CFR 60 Subpart Y 391-3-1-.02(2)(e) | N/A | None |
| 648B | Pit Drag Conveyor | | N/A | None |
| 648C | Pit Bucket Elevator | | N/A | None |

| Emission Units | | Specific Limitations/Requirements | Air Pollution Control Devices | |
|-------------------------------------|---------------------------------|--|-------------------------------|---|
| ID No. | Description | Applicable Requirements Standards | ID No. | Description |
| 648D | Coal Unload Belt Conveyor | | N/A | None |
| 648E | Kiln Coal Mill Bin/Weigh Feeder | | N/A | None |
| 648 | Coal Mill | 40 CFR 60 Subpart Y 391-3-1-.02(2)(e) | 0400 | Kiln Baghouse |
| Clinker Cooling and Handling System | | | | |
| 606 | No. 5 Clinker Cooler | 40 CFR 63 Subpart LLL 391-3-1-.02(2)(e) | 0601 | Clinker Cooler Baghouse |
| 681 | Drag Conveyor South | | 0601 | Clinker Cooler Baghouse |
| 682 | Drag Conveyor North | | 0601 | Clinker Cooler Baghouse |
| 683 | Bucket Elevator South | | 0601 | Clinker Cooler Baghouse |
| 684 | Bucket Elevator North | | 0601 | Clinker Cooler Baghouse |
| 687 | Diverter Gate | | 0601 | Clinker Cooler Baghouse |
| 688 | Bucket Elevator (Finish Mill) | 40 CFR 63 Subpart LLL 391-3-1-.02(2)(e) | 0695 | Dust Collector |
| 689 | Clinker Drag Conveyor | 40 CFR 63 Subpart LLL 391-3-1-.02(2)(e) | 0695 | Dust Collector |
| 690 | Clinker Drag Conveyor | | 0695 | Dust Collector |
| 691 | Diverter Gate | 40 CFR 63 Subpart LLL 391-3-1-.02(2)(e) | 0601 | Clinker Cooler Baghouse |
| 698 | Clinker Storage Ladder | | 0601 | Clinker Cooler Baghouse |
| 706 | #4 Clinker Bin | 40 CFR 63 Subpart LLL 391-3-1-.02(2)(e) | N/A | None |
| 800 | #5 Clinker Bin | | N/A | None |
| 900 | #6 Clinker Bin | | N/A | None |
| 602 | Bucket Crane | | N/A | None |
| | | | | |
| Finish Mill No. 4 System | | | | |
| 727 | #4 Finish Mill/Drag/Elevator | 40 CFR 63 Subpart LLL | 0716 | Dust Collector |
| 728 | #4 Air Separator/Airslide | | 0722 | Dust Collector |
| 733 | #4 Recirculating Elevator | | 0722 | Dust Collector |
| 707 | #4 Gypsum Bin | 40 CFR 63 Subpart LLL 391-3-1-.02(2)(e) | N/A | None |
| 703 | #4 Specialty Bin | | N/A | None |
| 702 | #4 Clinker Feeder Belt | | N/A | None |
| 710 | #4 Gypsum Feeder Belt | | N/A | None |
| 708 | #4 Specialty Feeder Belt | | N/A | None |
| | | | | |
| Finish Mill No. 5 System | | | | |
| 825 | #5 Finish Mill/Drag/Elevator | 40 CFR 63 Subpart LLL 391-3-1-.02(2)(e) | 0814 | Dust Collector |
| 826 | #5 Recirculating Elevator | | 0821 | Dust Collector |
| 827 | #5 Air Separator/Airslide | 40 CFR 63 Subpart LLL 391-3-1-.02(2)(e) | 0821 | Dust Collector |
| 828 | 150 Ton Dust Bin | 40 CFR 52.21 40 CFR 63 Subpart LLL 391-3-1-.02(2)(e) | 0829 | Fabric Baghouse/Filter Cartridge Dust Collector |
| 802 | #5 Clinker Feeder Belt | 40 CFR 63 Subpart LLL 391-3-1-.02(2)(e) | N/A | None |
| 807 | #5 Gypsum Bin | | N/A | None |
| 810 | #5 Gypsum Feeder Belt | | N/A | None |
| Finish Mill No. 6 System | | | | |
| 920 | #6 Finish Mill/Drag | 40 CFR 63 Subpart LLL 391-3-1-.02(2)(e) | 0909 | Dust Collector |
| 921 | #6 Recirculating Elevator | | 0916 | Dust Collector |
| 922 | #6 Air Separator/Airslide | 40 CFR 63 Subpart LLL 391-3-1-.02(2)(e) | 0916 | Dust Collector |
| 902 | #6 Clinker Feeder Belt | 40 CFR 63 Subpart LLL 391-3-1-.02(2)(e) | N/A | None |
| 907 | #6 Gypsum Bin | | N/A | None |
| 901 | #6 Gypsum Feeder Belt | | N/A | None |
| Packing and Shipping Operations | | | | |
| 1255 | 17 Cement Bulk Storage Silos | 40 CFR 63 Subpart LLL 391-3-1-.02(2)(e) | 1600 1602 | Dust Collectors |
| 1625 | 23 Packhouse Storage Silos | | 1530 1531 1532 | Dust Collectors |
| | | | | |

| Emission Units | | Specific Limitations/Requirements | Air Pollution Control Devices | |
|----------------|----------------------------------|--|-------------------------------|---|
| ID No. | Description | Applicable Requirements Standards | ID No. | Description |
| 1509 | Packing Equipment #1 | | 1512 | Dust Collector |
| 1510 | Packing Equipment #2 | | 1512 | Dust Collector |
| 1615 | Bulk Silo Loadout Chute (West) | | 1605 | Dust Collector |
| 1616 | Bulk Silo Loadout Chute (East) | | 1607 | Dust Collector |
| 6118 | Alternative Fuel Handling System | 391-3-1-.02(2)(b) 391-3-1-.02(2)(e) | BF2 | Drag Conveyor Dust Collector - Baghouse |
| | | | BF3 | Bucket Elevator Dust Collector - Baghouse |
| | | | BF4 | Silo 1 Dust Collector - Baghouse |
| | | | BF5 | Silo 2 Dust Collector - Baghouse |
| | | | CF1 | Silo 1 Discharge Cartridge Filter |
| | | | CF2 | Silo 2 Discharge Cartridge Filter |
| | | | CF3 | Combined Discharge Cartridge Filter |

* Generally applicable requirements contained in this permit may also apply to emission units listed above. The lists of applicable requirements/standards are intended as a compliance tool and may not be definitive

B. Equipment & Rule Applicability

Emission and Operating Caps:

Section 3.2 of the proposed Title V permit renewal No. 3241-153-0003-V-07-0 contains existing emission limits. Those emission limits allowed in the past pertinent sources to avoid being subject to New Source Review (NSR)/Best Available Control Technology (BACT) Determination under 40 CFR 52.21, *Prevention of Significant Deterioration (PSD) of Air Quality*.

Rules and Regulations Assessment:

This facility is subject to Georgia Air Quality Rule 391-3-1-.02(2)(h), “*Portland Cement Plants*”, and therefore, it is also subject to Georgia Air Quality Rule 391-3-1-.02(2)(b), “*Visible Emissions*”. Rule (h) delegates its authority to applicable New Source Performance Standards under 40 CFR Part 60. Rule (b) limits the visible emissions from the process unit(s) to less than 40% opacity. In addition, Georgia Air Quality Rule 391-3-1-.02(2)(n), “*Fugitive Dust*” limits the fugitive emissions from this facility to no greater than 20% opacity. Rule (n) also requires the facility to take all reasonable precautions to prevent fugitive emissions.

Some of the process units at this facility are not subject to Rule (h), e.g., preparing kiln fuels. Therefore, they are subject to Georgia Air Quality Rule 391-3-1-.02(2)(e), “*Particulate Emissions from Manufacturing Processes*”. Rule (e) limits the emissions of particulate matters from this facility based on the process input weight rate(s) and construction or operation date(s) of the process unit(s). Therefore, these sources are also subject to the visible emission limit in Rule (b).

All fuels including kiln fuels utilized by this facility are subject to Georgia Air Quality Rule 391-3-1-.02(2)(g), “*Sulfur Dioxide*”. Rule (g) limits the sulfur contents of the fuels based on source heat input rates, types of fuels burned, and burning methods.

In addition to the State rules, this Portland cement plant is subject to 40 CFR 60 Subpart OOO, “*Standards of Performance for Nonmetallic Mineral Processing Plants*”, 40 CFR 60 Subpart Y, “*Standards of Performance for Coal Preparation Plants*” and 40 CFR 63 Subpart LLL, “*National Emission Standards for Hazardous Air Pollutants from the Portland Cement Manufacturing Industry*”.

This facility is no longer subject to 40 CFR 60 Subpart F, “*Standards of Performance for Portland Cement Plants*”, because 40 CFR 63.1356 of 40 CFR 63 Subpart LLL exempts any affected source subject to the provisions of Subpart LLL from any otherwise applicable new source performance standard contained in 40 CFR 60, Subpart F or 40 CFR 60, Subpart OOO. Also, 40 CFR 63.1356 waives some of the requirement of 40 CFR 60 Subpart Y, specifically those pertaining to conveying system transfer points used to convey coal from the mill to the kiln that are associated with coal preparation at a Portland cement plant that is a major source under 40 CFR 63 Subpart LLL.

C. Permit Conditions

Both Conditions 2.2.1 and 2.2.2 are carried over from the current permit No. 3241-153-0003-V-06-0. All the emission units subject to NSPS Subparts OOO, IIII, Y, and/or MACT Subpart LLL shall comply with the applicable general provisions of 40 CFR Part 60, Subpart A and/or 40 CFR Part 63, Subpart A.

Conditions 3.2.1 through 3.2.6 are carried over from the current permit. Except Conditions 3.2.2 and 3.2.6, these conditions contain emission limits and operating requirements for the facility to avoid NSR/PSD in the past. Condition 3.2.2 contains an operating limitation of not allowing Cement Kiln No. 5 to have exhaust gas bypass, i.e., alkali bypass, per 40 CFR Part 63, Subpart LLL. Condition 3.2.6 contains operating limitations allowing the facility to avoid being subject to 40 CFR Part 63, Subpart EEE, “*National Emission Standards for Hazardous Air Pollutants from Hazardous Waste Combustors*”.

Condition 3.2.7 has been revised to include off-spec dryer sheets and swiffer pads as kiln fuels, as permitted via an off-permit-change dated June 30, 2021.

Conditions 3.2.8 through 3.2.12 are carried over from the current permit. These conditions contain various operating requirements and limitations regarding the burn of alternative fuels (ALs) in the cement kiln.

Conditions 3.2.13, 3.2.14 and 3.2.15 are carried over from the current permit. These conditions ensure the diesel engine onboard of the powered portable crusher/grinder (215) to remain a non-road engine and thus avoid being subject to 40 CFR Part 60, Subpart IIII or 40 CFR Part 63, Subpart ZZZZ.

Carried over from the current permit, Condition 3.2.16 allows the 150-ton dust collector added in the past to remain a minor modification and thus avoid being subject to 40 CFR 52.21 – NSR/PSD rules.

Condition 3.3.1 is carried over from the current permit. This condition contains emissions standards under 40 CFR Part 60, Subpart OOO, and is a standard/vault condition developed by the Division.

Conditions 3.3.2, 3.3.3, 3.3.4 and 3.3.7 are carried over from the current permit. These conditions contain applicable emission limits and operating requirements under 40 CFR Part 63, Subpart LLL, which regulates HAP emissions from Portland cement manufacturing industry.

Conditions 3.3.5 and 3.3.6 are carryovers from the current permit and contain applicable emission limits for coal preparation operations at this facility.

Conditions 3.4.1, 3.4.2, 3.4.3 and 3.4.4 are all carried over from the current permit. These conditions establish applicable emission limits under Georgia Air Quality Rules (b), (e) and (g).

Conditions 3.5.1, 3.5.2, 3.5.3 and 3.5.4 are carried over from the current permit. These conditions specify operating requirements for certain air pollution control devices which are used to comply with emission limitations.

IV. Testing Requirements (with Associated Record Keeping and Reporting)**A. General Testing Requirements**

The permit includes a requirement that the Permittee conduct performance testing on any specified emission unit when directed by the Division. Additionally, a written notification of any performance test(s) is required 30 days (or sixty (60) days for tests required by 40 CFR Part 63) prior to the date of the test(s) and a test plan is required to be submitted with the test notification. Test methods and procedures for determining compliance with applicable emission limitations are listed and test results are required to be submitted to the Division within 60 days of completion of the testing.

B. Specific Testing Requirements

All the conditions in this subpart are carried over from the current permit. Condition 4.2.1 contains the requirements for initial performance tests under 40 CFR 60.8 and/or 63.7 and the applicable NSPS and/or NESHAP standards. Condition 4.2.2 establishes requirements for repeated performance testing under pertinent 40 CFR Part 63, Subpart LLL. Conditions 4.2.3 and 4.2.4 address new 40 CFR 60 Subpart OOO requirements mandating repeating performance tests, within 5 years, for fugitive emissions from affected facilities without water sprays (This applies only to equipment that commence construction, modification, or reconstruction on or after April 22, 2008). Condition 4.2.5 specifies state requirements for reporting and performing required emission tests. Conditions 4.2.6, 4.2.7 and 4.2.8 establish requirements for testing and analyzing the alternative fuels (AFs) being used to fire the cement kilns at the facility.

V. Monitoring Requirements

A. General Monitoring Requirements

Condition 5.1.1 requires that all continuous monitoring systems required by the Division be operated continuously except during monitoring system breakdowns and repairs. Monitoring system response during quality assurance activities is required to be measured and recorded. Maintenance or repair is required to be conducted in an expeditious manner.

B. Specific Monitoring Requirements

Condition 5.2.1 is carried over from the current permit with minor rewording of subparagraph a. for more clarity. This condition establishes the monitoring requirements for mercury, carbon monoxide, particulate matter, sulfur dioxide and nitrogen oxides emissions from No. 5 Cement Kiln.

Carried over from the current permit, Conditions 5.2.2 and 5.2.3 contain monitoring requirements ensuring the maintenance of compliance with applicable monitoring provisions of 40 CFR 63 Subpart LLL, "*National Emission Standards for Hazardous Air Pollutants from the Portland Cement Manufacturing Industry*", on a continuous basis.

Conditions 5.2.4, 5.2.5 and 5.2.6 are carried over from the current permit. The monitoring requirements in Conditions 5.2.4 and 5.2.5 reasonably assure the compliance with applicable PM and visible emission limitations related to the 40 CFR 52.21 avoidance limits in Section 3.2 of this permit and pertinent Georgia Air Quality Rules. Conditions 5.2.4 and 5.2.5 require daily visible emissions check and emission source inspection on emission sources. Timely corrective actions are required by Condition 5.2.4 for visible emissions from control systems that exceed a specified opacity action level. Timely correction actions are required by Condition 5.2.5 for any visible emissions and/or any mechanical failure or malfunction that results in increased air emissions.

Condition 5.2.6 incorporates a specific monitoring provision of 40 CFR Part 60, Subpart OOO that requires monthly periodic inspections of wet suppression systems used to control emissions from affected facilities constructed, modified, or reconstructed on or after April 22, 2008.

C. Compliance Assurance Monitoring (CAM)

Under 40 CFR 64, the Compliance Assurance Monitoring Regulations (CAM), facilities are required to prepare and submit monitoring plans for certain emission units with the Title V application. Each emission unit controlled by a control device that "*has potential pre-control device emissions of the applicable regulated air pollutant that are equal to or greater than 100 percent of the amount, in tons per year, required for a source to be classified as a major source,*" as defined by 40 CFR §64.2(a)(3) is subject to CAM.

However, CAM no longer applies because the more stringent provisions of 40 CFR Part 63, Subpart LLL, which EPA finalized on February 12, 2013, make the facility falls under 40 CFR 64.2(b)(i) which exempts from CAM equipment subject to "*emission limitations or standards proposed by the [EPA] Administrator after November 15, 1990, pursuant to section 111 or 112 of the Act.*"

VI. Record Keeping and Reporting Requirements

A. General Record Keeping and Reporting Requirements

The Permit contains general requirements for the maintenance of all records for a period of five years following the date of entry and requires the prompt reporting of all information related to deviations from the applicable requirements. Records, including identification of any excess emissions, exceedances, or excursions from the applicable monitoring triggers, the cause of such occurrence, and the corrective action taken, are required to be kept by the Permittee and reporting is required on a [quarterly or semiannual] basis.

B. Specific Record Keeping and Reporting Requirements

All the conditions in Subpart 6.2 are carried over from the current permit. Conditions 6.2.1 thru 6.2.4 establish respectively the recordkeeping and reporting requirements for kiln operating time, fuel usage, kiln feed (including wastes materials) input rate, clinker production rate, SO₂, NO_x, CO, PM/PM₁₀ and VOC emissions, and combustion system inspection, under relevant state and federal rules.

Condition 6.2.5 contains the recordkeeping requirements for controlling fugitive emissions and ensures the compliance with the applicable visible and PM emission limits.

Condition 6.2.6 requires timely reporting of any action taken during startup, shutdown, or malfunction that is not consistent with the procedures in the Operational and Maintenance Plan developed in accordance with the provisions of 40 CFR 63 Subpart LLL. Rule citation of “*40 CFR 60.48c(e)(11)*” for this condition was eliminated because this facility is not subject to 40 CFR Part 60, Subpart Dc.

Since the facility is subject to 40 CFR Part 63, Subpart LLL, Condition 6.2.7 requires the Permittee to comply with all the applicable notification provisions of 40 CFR Part 63, Subpart A.

Conditions 6.2.8, 6.2.9 and 6.2.10 incorporate respectively the applicable recordkeeping, reporting and notification requirements under 40 CFR Part 63, Subpart LLL and Subpart A.

Condition 6.2.11 requires the submittal of performance testing report and the initial startup date of any new source subject to 40 CFR Part 60, Subpart OOO.

The recordkeeping requirements in Condition 6.2.12 ensure the compliance with applicable emission limits for fugitive emissions.

Conditions 6.2.13 thru 6.2.18 establish respectively the applicable recordkeeping, reporting, and notification requirements for burning alternative fuels (AFs) in the cement kiln. These conditions ensure the compliance with applicable emission limits and AF specification and combustion requirements.

Conditions 6.2.19 and 6.2.20 contain the recordkeeping requirements for operating the portable diesel-powered portable crusher/grinder.

Condition 6.2.21 requires the Permittee to maintain monthly records of fired product (tons) and operating hours for Kiln No. 5. It also requires the Permittee to calculate each month the 12-consecutive month rolling average of the hourly production rates. This condition ensures the compliance with the applicable emission limits.

VII. Specific Requirements**A. Operational Flexibility**

CEMEX maintains the flexibility to burn alternative fuels such as carpet (excluding nylon 6 and nylon 6/6), biomass (wood chips, sawdust), agricultural wastes (sugar cane baggasse, rice hulls, peanut shells, corn husks and cotton gin wastes), non-hazardous waste from sewage treatment plants, and certain industrial and trade non-hazardous waste materials including spent engine oil. This includes authorization to burn natural gas, propane, tires, coal, and fuel oils 1, 2, 4, 5, & 6.

B. Alternative Requirements

None

C. Insignificant Activities

See Permit Application on GEOS website.
See Attachment B of the permit

D. Temporary Sources

None

E. Short-Term Activities

None

F. Compliance Schedule/Progress Reports

None

G. Emissions Trading

None

H. Acid Rain Requirements

None

I. Stratospheric Ozone Protection Requirements

None

J. Pollution Prevention

None

K. Specific Conditions

None

VIII. General Provisions

Generic provisions have been included in this permit to address the requirements in 40 CFR Part 70 that apply to all Title V sources, and the requirements in Chapter 391-3-1 of the Georgia Rules for Air Quality Control that apply to all stationary sources of air pollution.

Template Condition 8.14.1 was updated in September 2011 to change the default submittal deadline for Annual Compliance Certifications to February 28.

Template Condition Section 8.27 was updated in August 2014 to include more detailed, clear requirements for emergency generator engines currently exempt from SIP permitting and considered insignificant sources in the Title V permit.

Template Condition Section 8.28 was updated in August 2014 to more clearly define the applicability of the Boiler MACT or GACT for major or minor sources of HAP.

Addendum to Narrative

The 30-day public review started on month day, year and ended on month day, year. Comments were/were not received by the Division.

//If comments were received, state the commenter, the date the comments were received in the above paragraph. All explanations of any changes should be addressed below. //