JOSH STEIN
Governor
D. REID WILSON
Secretary
MICHAEL ABRACZINSKAS
Director

NORTH CAROLINA
Environmental Quality

January 31, 2025

Mr. Blake Arnett
Plant Manager
3M Pittsboro – Industrial Mineral Products
4191 Highway 87 South
Moncure, NC 27559

SUBJECT: Air Quality Permit No. 09006T12
Facility ID: 1900104
3M Pittsboro – Industrial Mineral Products
Moncure
Chatham County
Fee Class: Title V
PSD Class: Minor

Dear Mr. Arnett

In accordance with your completed Air Quality Permit Application for a minor modification of your Title V permit, we are forwarding, herewith, Air Quality Permit No. 09006T12 authorizing the construction and operation of the emission source(s) and associated air pollution control device(s) specified herein. Additionally, any emissions activities determined from your Air Quality Permit Application as being insignificant per 15A North Carolina Administrative Code 02Q .0503(8) have been identified as such in the permit. Please note, the requirements for the annual compliance certification are contained in General Condition P in Section 4. The current owner is responsible for submitting a compliance certification for the entire year regardless of who owned the facility during the year.

This control device (ID No. CDC1) is listed as a minor modification per 15A NCAC 02Q .0515. The annual compliance certification as described in General Condition P is required. Unless otherwise notified by DAQ, the affected terms of this permit (excluding the permit shield as described in General Condition R) for this emission source and/or control device shall become final on April 1, 2025. Until this date, the affected permit terms herein reflect the proposed operating language that the Permittee shall operate this emission source and/or control device under pursuant to 15A NCAC 02Q .0515(f).

As the designated responsible official, it is your responsibility to review, understand, and abide by all of the terms and conditions of the attached permit. It is also your responsibility to ensure that any person who operates any emission source and associated air pollution control device subject to any term or condition of the attached permit reviews, understands, and abides by the condition(s) of the attached permit that are applicable to that particular emission source.

If any parts, requirements, or limitations contained in this Air Quality Permit are unacceptable to you, you have the right to file a petition for contested case hearing in the North Carolina Office of Administrative Hearings. Information regarding the right, procedure, and time limit for permittees and other

persons aggrieved to file such a petition is contained in the attached "Notice Regarding the Right to Contest A Division of Air Quality Permit Decision."

The construction of new air pollution emission source(s) and associated air pollution control device(s), or modifications to existing emission source(s) and air pollution control device(s) described in this permit must be covered under an Air Quality Permit issued by the Division of Air Quality prior to construction unless the Permittee has fulfilled the requirements of NCGS 143-215.108A(b) and received written approval from the Director of the Division of Air Quality to commence construction. Failure to receive an Air Quality Permit or written approval prior to commencing construction is a violation of NCGS 143-215.108A and may subject the Permittee to civil or criminal penalties as described in NCGS 143-215.114A and 143-215.114B.

Chatham County has triggered increment tracking under PSD for NO_x, PM_{10}, and SO_x. However, this permit modification does not consume or expand increments for any pollutants.

This Air Quality Permit shall be effective from April 1, 2025 until November 30, 2027, is nontransferable to future owners and operators, and shall be subject to the conditions and limitations as specified therein.

Should you have any questions concerning this matter, please contact Luke Mayer by phone at (919) 707-8042 or by email at luke.mayer@deq.nc.gov.

Sincerely yours,

Mark J. Cuilla, EIT, CPM, Chief, Permitting Section
Division of Air Quality, NCDEQ

Enclosure

c: Brad Akers, EPA Region 4 (Permit)
Laserfiche (1900104)

NOTICE REGARDING THE RIGHT TO CONTEST A DIVISION OF AIR QUALITY PERMIT DECISION

Right of the Permit Applicant or Permittee to File a Contested Case: Pursuant to NCGS 143-215.108(e), a permit applicant or permittee who is dissatisfied with the Division of Air Quality's decision on a permit application may commence a contested case by filing a petition under NCGS 150B-23 in the Office of Administrative Hearings within 30 days after the Division notifies the applicant or permittee of its decision. If the applicant or permittee does not file a petition within the required time, the Division's decision on the application is final and is not subject to review. The filing of a petition will stay the Division's decision until resolution of the contested case.

Right of Other Persons Aggrieved to File a Contested Case: Pursuant to NCGS 143-215.108(e1), a person other than an applicant or permittee who is a person aggrieved by the Division's decision on a permit application may commence a contested case by filing a petition under NCGS 150B-23 within 30 days after the Division provides notice of its decision on a permit application, as provided in NCGS 150B-23(f), or by posting the decision on a publicly available Web site. The filing of a petition under this subsection does not stay the Division's decision except as ordered by the administrative law judge under NCGS 150B-33(b).

General Filing Instructions: A petition for contested case hearing must be in the form of a written petition, conforming to NCGS 150B-23, and filed with the Office of Administrative Hearings, 1711 New Hope Church Road, Raleigh NC, 27609, along with a fee in an amount provided in NCGS 150B-23.2. A petition for contested case hearing form may be obtained upon request from the Office of Administrative Hearings or on its website at https://www.oah.nc.gov/hearings-division/filing/hearing-forms. Additional specific instructions for filing a petition are set forth at 26 NCAC Chapter 03.

Service Instructions: A party filing a contested case is required to serve a copy of the petition, by any means authorized under 26 NCAC 03 .0102, on the process agent for the Department of Environmental Quality:

Daniel S. Hirschman, General Counsel
North Carolina Department of Environmental Quality
1601 Mail Service Center
Raleigh, North Carolina 27699-1601

If the party filing the petition is a person aggrieved other than the permittee or permit applicant, the party **must also** serve the permittee in accordance with NCGS 150B-23(a).

* * *

Additional information is available at https://www.oah.nc.gov/hearings-division/hearing-process/filing-contested-case. Please contact the OAH at 984-236-1850 or oah.postmaster@oah.nc.gov with all questions regarding the filing fee and/or the details of the filing process.

Summary of Changes to Permit

The following changes were made to Air Permit No. 09006T12:*

Page No.	Section	Description of Changes
Cover letter and throughout permit	--	• Updated all dates and revision numbers • Reformatted permit in accordance with current TV permitting shell
48	4	• Updated General Conditions to most recent version (Version 8.0, dated 07/10/2024)

* This list is not intended to be a detailed record of every change made to the permit but a summary of those changes.

State of North Carolina
Department of Environmental Quality
Division of Air Quality

AIR QUALITY PERMIT

Permit No.	Replaces Permit No.(s)	Effective Date	Expiration Date
09006T12	09006T11	April 1, 2025*	November 30, 2027

NOTE: Per General Condition K, a permit application for the renewal of this Title V permit shall be submitted no later than May 30, 2027.

*The effective date listed above applies only to changes made as a result of this modification. All other terms and conditions of this permit are applicable as of the issuance date.

Until such time as this permit expires or is modified or revoked, the below named Permittee is permitted to construct and operate the emission source(s) and associated air pollution control device(s) specified herein, in accordance with the terms, conditions, and limitations within this permit. This permit is issued under the provisions of Article 21B of Chapter 143, General Statutes of North Carolina as amended, and Title 15A North Carolina Administrative Codes (15A NCAC), Subchapters 02D and 02Q, and other applicable Laws.

Pursuant to Title 15A NCAC, Subchapter 02Q, the Permittee shall not construct, operate, or modify any emission source(s) or air pollution control device(s) without having first submitted a complete Air Quality Permit Application to the permitting authority and received an Air Quality Permit, except as provided in this permit.

Permittee:	**3M Pittsboro – Industrial Mineral Products**
Facility ID:	**1900104**
Primary SIC Code:	**3295**
NAICS Code:	**327992**
Facility Site Location:	**4191 Highway 87 South**
City, County, State, Zip:	**Moncure, Chatham County, NC 27559**
Mailing Address:	**4191 Highway 87 South**
City, State, Zip:	**Moncure, NC 27559**
Application Number(s):	**1900104.24B**
Complete Application Date(s):	**November 26, 2024**
Division of Air Quality, Regional Office Address:	**Raleigh Regional Office** **3800 Barrett Drive** **Raleigh, NC 27609**

Permit issued this the 31st day of January, 2025.

Mark J. Cuilla, EIT, CPM, Chief, Air Permitting Section
By Authority of the Environmental Management Commission

Table of Contents

List of Acronyms

AOS	Alternative Operating Scenario
BACT	Best Available Control Technology
BAE	Baseline Actual Emissions
Btu	British thermal unit
CAA	Clean Air Act
CAM	Compliance Assurance Monitoring
CEMS	Continuous Emission Monitoring System
CEDRI	Compliance and Emissions Data Reporting Interface
CFR	Code of Federal Regulations
CO	Carbon Monoxide
COMS	Continuous Opacity Monitoring System
CSAPR	Cross-State Air Pollution Rule
DAQ	Division of Air Quality
DEQ	Department of Environmental Quality
EMC	Environmental Management Commission
EPA	Environmental Protection Agency
FR	Federal Register
GACT	Generally Available Control Technology
GHGs	Greenhouse Gases
HAP	Hazardous Air Pollutant
LAER	Lowest Achievable Emission Rate
MACT	Maximum Achievable Control Technology
NAA	Non-Attainment Area
NAAQS	National Ambient Air Quality Standards
NAICS	North American Industry Classification System
NCAC	North Carolina Administrative Code
NCGS	North Carolina General Statutes
NESHAP	National Emission Standards for Hazardous Air Pollutants
NO_X	Nitrogen Oxides
NSPS	New Source Performance Standard
NSR	New Source Review
OAH	Office of Administrative Hearings
PAE	Projected Actual Emissions
PAL	Plantwide Applicability Limitation
PM	Particulate Matter
$PM_{2.5}$	Particulate Matter with Nominal Aerodynamic Diameter of 2.5 Micrometers or Less
PM_{10}	Particulate Matter with Nominal Aerodynamic Diameter of 10 Micrometers or Less
POS	Primary Operating Scenario
PSD	Prevention of Significant Deterioration
PTE	Potential to Emit
RACT	Reasonably Available Control Technology
SIC	Standard Industrial Classification
SIP	State Implementation Plan
SO_2	Sulfur Dioxide
TAP	Toxic Air Pollutant
tpy	Tons Per Year
VOC	Volatile Organic Compound

SECTION 1 - PERMITTED EMISSION SOURCE(S) AND ASSOCIATED AIR POLLUTION CONTROL DEVICE(S) AND APPURTENANCES

The following table contains a summary of all permitted emission sources and associated air pollution control devices and appurtenances:

Emission Source ID No.	Emission Source Description	Control Device ID No.	Control Device Description
Crushing and Screening Plant			
ES123 **NSPS OOO**	Plant feed conveyor No. 1 (feed pile to surge bin)	CDB1	Crusher baghouse No. 1 (6,178 square feet of filter area)
ES412 **NSPS OOO**	Surge bin	CDB1	Crusher baghouse No. 1 (6,178 square feet of filter area)
ES607.1 **NSPS OOO**	Feed conveyor No. 2 (surge bin to C crusher)	CDB1	Crusher baghouse No. 1 (6,178 square feet of filter area)
ES206 **NSPS OOO**	C crusher No. 1	CDB1	Crusher baghouse No. 1 (6,178 square feet of filter area)
ES2327A **NSPS OOO**	C crusher feed bin No. 1	CDB1	Crusher baghouse No. 1 (6,178 square feet of filter area)
ES2426.1 **NSPS OOO**	C crusher feed conveyor No. 8A (C crusher feed bin No. 1 to C crusher No .1)	CDB1	Crusher baghouse No. 1 (6,178 square feet of filter area)
ES232 **NSPS OOO**	C crusher No. 2A	CDB1	Crusher baghouse No. 1 (6,178 square feet of filter area)
ES3031 **NSPS OOO**	M feed transfer bin	CDB1	Crusher baghouse No. 1 (6,178 square feet of filter area)
ES3941 **NSPS OOO**	L crusher bin No. 1	CDB1	Crusher baghouse No. 1 (6,178 square feet of filter area)
ES4347.1 **NSPS OOO**	L crusher feed conveyor No. 16A (L crusher feed bin to L crusher)	CDB1	Crusher baghouse No. 1 (6,178 square feet of filter area)
ES4347.2 **NSPS OOO**	L crusher No. 1	CDB1	Crusher baghouse No. 1 (6,178 square feet of filter area)
ESC3 **NSPS OOO**	Product conveyor No. 3 (C crusher to D screen bin No. 1)	CDB1	Crusher baghouse No. 1 (6,178 square feet of filter area)
ESC22.1 **NSPS OOO**	Conveyor No. 22 (crushing baghouse hopper screw conveyor transfer to dust conveyor No. 22)	CDB1	Crusher baghouse No. 1 (6,178 square feet of filter area)
ESC22.2 **NSPS OOO CAM**	Conveyor No. 22 (crushing 1 and 2 baghouse, dryer A and B baghouse and cyclone hopper screw conveyor) to dust conveyor No. 23A	CDB3	Dryer baghouse (12,002 square feet of filter area)
ES2426.3 **NSPS OOO**	C crusher No. 1 bypass chute	CDB1	Crusher baghouse No. 1 (6,178 square feet of filter area)
ES16-A **NSPS OOO**	C crusher conveyor No. 9 (C crushers No. 1 and No. 2A to D screen No. 2 and No. 3 feed bins)	CDB2	Screen baghouse No. 1 (11,296 square feet of filter area)
ES32.1 **NSPS OOO**	L crusher product conveyor No. 17, two pickups (M feed transfer bin and L crusher No. 1 to M screen feed bin)	CDB2	Screen baghouse No. 1 (11,296 square feet of filter area)
ES32A **NSPS OOO**	L crusher product conveyor No. 17 (L crushers to conveyor No. 18A)	CDB2	Screen baghouse No. 1 (11,296 square feet of filter area)
ES32B **NSPS OOO**	Conveyor No. 18A (L crusher product conveyor No. 17 to live M screens feed bin)	CDB2	Screen baghouse No. 1 (11,296 square feet of filter area)
ES340-A **NSPS OOO**	Live M screens feed bin, two pickups	CDB2	Screen baghouse No. 1 (11,296 square feet of filter area)
ES1721A **NSPS OOO**	D screen bin No. 2	CDB2	Screen baghouse No. 1 (11,296 square feet of filter area)
ES1721B **NSPS OOO**	D screen No. 2 feeder	CDB2	Screen baghouse No. 1 (11,296 square feet of filter area)

Emission Source ID No.	Emission Source Description	Control Device ID No.	Control Device Description
ES1721C **NSPS OOO**	D screen No. 2	CDB2	Screen baghouse No. 1 (11,296 square feet of filter area)
ES1721D **NSPS OOO**	C crusher bin feed conveyor No. 5 (D screen No. 2 to C crusher bins)	CDB2	Screen baghouse No. 1 (11,296 square feet of filter area)
ES1721E **NSPS OOO**	L crusher circuit feed conveyor No. 13 (D screen No. 2 to M transfer bin)	CDB2	Screen baghouse No. 1 (11,296 square feet of filter area)
ES3537A **NSPS OOO**	M screener No. 1	CDB2	Screen baghouse No. 1 (11,296 square feet of filter area)
ES3537B **NSPS OOO**	M screener No. 2	CDB2	Screen baghouse No. 1 (11,296 square feet of filter area)
ES3537C **NSPS OOO**	M screener No. 3	CDB2	Screen baghouse No. 1 (11,296 square feet of filter area)
ES3537D **NSPS OOO**	L crusher feed bin conveyor No. 14, three pickups (M screens to L crusher bins)	CDB2	Screen baghouse No. 1 (11,296 square feet of filter area)
ES3537E **NSPS OOO**	Grade collecting conveyor No. 19, three pickups (M screens Nos. 1, 2, and 3 to M screens Nos. 4, 5, and 6)	CDB2	Screen baghouse No. 1 (11,296 square feet of filter area)
ES3537F **NSPS OOO**	Waste conveyor No. 21, three pickup points (M screens to waste bin)	CDB2	Screen baghouse No. 1 (11,296 square feet of filter area)
ES8913A **NSPS OOO**	D screen bin No. 1	CDB2	Screen baghouse No. 1 (11,296 square feet of filter area)
ES8913B **NSPS OOO**	D screen No. 1 feeder	CDB2	Screen baghouse No. 1 (11,296 square feet of filter area)
ES8913C **NSPS OOO**	D screen No. 1	CDB2	Screen baghouse No. 1 (11,296 square feet of filter area)
ES8913D **NSPS OOO**	Undersize conveyor No. 3 (D screen No. 1 to dryer feed conveyor No. 7)	CDB2	Screen baghouse No. 1 (11,296 square feet of filter area)
ES8913E **NSPS OOO**	C bin feed conveyor No. 4 (D screen No. 1 to C crusher bin)	CDB2	Screen baghouse No. 1 (11,296 square feet of filter area)
ES8913F **NSPS OOO**	Dryer feed conveyor No. 7 (undersize conveyor No. 3 to dryer)	CDB2	Screen baghouse No. 1 (11,296 square feet of filter area)
ES16-D **NSPS OOO**	Conveyor No. 9B (feeds into D screen bin No. 4)	CDB2	Screen baghouse No. 1 (11,296 square feet of filter area)
ESA1A **NSPS OOO**	D screen bin No. 4	CDB2	Screen baghouse No. 1 (11,296 square feet of filter area)
ES8913G **NSPS OOO**	D screen bin No. 1 loadout chute	N/A	N/A
ES1415 **NSPS UUU** **CAM**	Natural gas-fired dryer	CDC1* CDB3	Dryer cyclone (96 inches in diameter Dryer baghouse (12,002 square feet of filter area)
ES16-B **NSPS OOO**	Dryer and C crusher product conveyor No. 9 (C crusher to screens No. 2 feed bin)	CDB4	Screen baghouse No. 2 (9,002 square feet of filter area)
ES33A **NSPS OOO**	Conveyor No. 18A (conveyor No. 17 to conveyor No. 18B)	CDB4	Screen baghouse No. 2 (9,002 square feet of filter area)
ES33B **NSPS OOO**	Conveyor No. 18B (conveyor No. 18A to live M feed bin)	CDB4	Screen baghouse No. 2 (9,002 square feet of filter area)
ES340-B **NSPS OOO**	Live M feed bin, two pickups	CDB4	Screen baghouse No. 2 (9,002 square feet of filter area)
ES1822A **NSPS OOO**	D screen bin No. 3	CDB4	Screen baghouse No. 2 (9,002 square feet of filter area)

Emission Source ID No.	Emission Source Description	Control Device ID No.	Control Device Description
ES1822B **NSPS OOO**	D screen feeder No. 3	CDB4	Screen baghouse No. 2 (9,002 square feet of filter area)
ES1822C **NSPS OOO**	D screen No. 3	CDB4	Screen baghouse No. 2 (9,002 square feet of filter area)
ES1822D **NSPS OOO**	Feed conveyor No. 5, two pickups (D screens Nos. 2 and 3 to C crusher bin)	CDB4	Screen baghouse No. 2 (9,002 square feet of filter area)
ES2327B **NSPS OOO**	Feed conveyor No. 6 (D screens to C crusher bins)	CDB4	Screen baghouse No. 2 (9,002 square feet of filter area)
ES2327C **NSPS OOO**	Conveyor No. 6 metal diverter chute	N/A	N/A
ES3537G **NSPS OOO**	M screener No. 4	CDB4	Screen baghouse No. 2 (9,002 square feet of filter area)
ES3537H **NSPS OOO**	M screener No. 5	CDB4	Screen baghouse No. 2 (9,002 square feet of filter area)
ES3537I **NSPS OOO**	M screener No. 6	CDB4	Screen baghouse No. 2 (9,002 square feet of filter area)
ES3537J **NSPS OOO**	L crusher feed bin conveyor No. 14, three pickups (M screens to L crusher)	CDB4	Screen baghouse No. 2 (9,002 square feet of filter area)
ES3537K **NSPS OOO**	Grade collecting conveyor No. 19, three pickup points (M screens to grade silos)	CDB4	Screen baghouse No. 2 (9,002 square feet of filter area)
ES3537L **NSPS OOO**	Waste conveyor No. 21, three pickups (M screen to waste bin)	CDB4	Screen baghouse No. 2 (9,002 square feet of filter area)
ESC23C **NSPS OOO**	24" Dust conveyor No. 23C (baghouse hopper to dust elevator)	CDB4	Screen baghouse No. 2 (9,002 square feet of filter area)
ESA1B **NSPS OOO**	D screen feeder No. 4	CDB4	Screen baghouse No. 2 (9,002 square feet of filter area)
ESA1C **NSPS OOO**	D screen No. 4	CDB4	Screen baghouse No. 2 (9,002 square feet of filter area)
ES16-C **NSPS OOO**	Dryer and C crusher product conveyor No. 9 (C crusher to screens No. 2 feed bin)	CDB5	Crusher baghouse No. 2 (4,942 square feet of filter area)
ES32.2 **NSPS OOO**	L crusher product conveyor No. 17 (L crushers and M feed transfer bin to M screen feed bin)	CDB5	Crusher baghouse No. 2 (4,942 square feet of filter area)
ES38 **NSPS OOO**	Conveyor No. 14 (M screens to conveyor No. 14A)	CDB5	Crusher baghouse No. 2 (4,942 square feet of filter area)
ES39 **NSPS OOO**	Conveyor No. 14A (conveyor No. 14 to L crusher feed bins)	CDB5	Crusher baghouse No. 2 (4,942 square feet of filter area)
ES2327 **NSPS OOO**	C crusher bin No. 2B	CDB5	Crusher baghouse No. 2 (4,942 square feet of filter area)
ES2729.1 **NSPS OOO**	C crusher feed conveyor No. 8B (C crusher 2B bin to C crusher 2B)	CDB5	Crusher baghouse No. 2 (4,942 square feet of filter area)
ES233 **NSPS OOO**	C crusher No. 2B	CDB5	Crusher baghouse No. 2 (4,942 square feet of filter area)
ES4042 **NSPS OOO**	Feed conveyor No. 14A to L crusher bin No. 2	CDB5	Crusher baghouse No. 2 (4,942 square feet of filter area)
ES4043 **NSPS OOO**	L crusher bin No. 2	CDB5	Crusher baghouse No. 2 (4,942 square feet of filter area)
ES4448.1 **NSPS OOO**	L crusher feed conveyor No. 16B	CDB5	Crusher baghouse No. 2 (4,942 square feet of filter area)
ES4448.2 **NSPS OOO**	L crusher No. 2	CDB5	Crusher baghouse No. 2 (4,942 square feet of filter area)
ES49A **NSPS OOO**	Grade collection conveyor No. 19 (M screens to grade bucket elevator)	CDB6	Grade silo baghouse No. 1 (4,942 square feet of filter area)

Emission Source ID No.	Emission Source Description	Control Device ID No.	Control Device Description
ES49B **NSPS OOO**	Grade bucket elevator No. 1, two pickups (grade collecting conveyor No. 19 to grade transfer conveyor No. 20)	CDB6	Grade silo baghouse No. 1 (4,942 square feet of filter area)
ES50 **NSPS OOO**	Grade transfer conveyor No. 20, two pickups (grade bucket elevator to grade silos)	CDB6	Grade silo baghouse No. 1 (4,942 square feet of filter area)
ES57 **NSPS OOO**	Grade silo conveyor No. 26, three pickups (grade silos to bin discharge bucket elevator)	CDB6	Grade silo baghouse No. 1 (4,942 square feet of filter area)
ES58 **NSPS OOO**	Grade transfer conveyor No. 27 (bin discharge elevator to coloring plant)	CDB6	Grade silo baghouse No. 1 (4,942 square feet of filter area)
ES59 **NSPS OOO**	Bin discharge bucket elevator No. 4, two pickups	CDB6	Grade silo baghouse No. 1 (4,942 square feet of filter area)
ES5155A **NSPS OOO**	Grade silo No. 1	CDB6	Grade silo baghouse No. 1 (4,942 square feet of filter area)
ES5155B **NSPS OOO**	Grade silo No. 2	CDB6	Grade silo baghouse No. 1 (4,942 square feet of filter area)
ES5155C **NSPS OOO**	Grade silo No. 3	CDB6	Grade silo baghouse No. 1 (4,942 square feet of filter area)
ES20A **NSPS OOO**	Enclosed conveyor No. 20A, two pickups	CDB6	Grade silo baghouse No. 1 (4,942 square feet of filter area)
ES5155D **NSPS OOO**	Grade silo No. 4	CDB21	Grade silo baghouse No. 2 (5,119 square feet of filter area)
ES20B **NSPS OOO**	Enclosed conveyor No. 20B, two pickups	CDB21	Grade silo baghouse No. 2 (5,119 square feet of filter area)
ES26A **NSPS OOO**	Enclosed conveyor No. 26A, two pickups	CDB21	Grade silo baghouse No. 2 (5,119 square feet of filter area)
ESC23A.1 **NSPS OOO**	Conveyor No. 23A (crushing and dryer baghouse hopper screw conveyor) to dust conveyor No. 23C transfer point (baghouse dust from conveyor No. 22 conveyed onto conveyor No. 23A then onto 23C	CDB6	Grade silo baghouse No. 1 (4,942 square feet of filter area)
ES23C **NSPS OOO**	Dust conveyor No. 23C (baghouse hopper loadout to dust elevator)	CDB7	Waste handling baghouse (2,648 square feet of filter area)
ES63A **NSPS OOO**	Dust conveyor No. 23C (baghouse hopper transfer to dust elevator 3)	CDB7	Waste handling baghouse (2,648 square feet of filter area)
ES63B **NSPS OOO**	Dust elevator No. 3, two pickups	CDB7	Waste handling baghouse (2,648 square feet of filter area)
ES68A **NSPS OOO**	Waste conveyor No. 21	CDB7	Waste handling baghouse (2,648 square feet of filter area)
ES68B **NSPS OOO**	Waste elevator No. 2, two pickups	CDB7	Waste handling baghouse (2,648 square feet of filter area)
ES6466 **NSPS OOO**	Dust bin	CDB7	Waste handling baghouse (2,648 square feet of filter area)
ES6466SC **NSPS OOO**	Dust bin screw conveyor (waste handling baghouse hopper to pugmill)	CDB7	Waste handling baghouse (2,648 square feet of filter area)
ES6970 **NSPS OOO**	Waste bin	CDB7	Waste handling baghouse (2,648 square feet of filter area)
ESA5 **NSPS OOO**	Load-in to conveyor No. 18C	CDB16	Screen baghouse No. 3 (9,000 square feet of filter area)
ESA6 **NSPS OOO**	Line 3 live M feed bin	CDB16	Screen baghouse No. 3 (9,000 square feet of filter area)
ESA7 **NSPS OOO**	Line 3 M screen assemblies	CDB16	Screen baghouse No. 3 (9,000 square feet of filter area)

Emission Source ID No.	Emission Source Description	Control Device ID No.	Control Device Description
ESA11 **NSPS OOO**	Screen baghouse No. 3 ash loadout	CDB16	Screen baghouse No. 3 (9,000 square feet of filter area)
ESA2 **NSPS OOO**	2C bin feed conveyor No. 6 transfer to bin feed conveyor No. 6A	CDB17	Crusher baghouse No. 3 (6,500 square feet of filter area)
ESA3 **NSPS OOO**	L crusher feed bin No. 2C	CDB17	Crusher baghouse No. 3 (6,500 square feet of filter area)
ESA4 **NSPS OOO**	L crusher No. 2C	CDB17	Crusher baghouse No. 3 (6,500 square feet of filter area)
ESA8 **NSPS OOO**	Feed bin No. 3	CDB17	Crusher baghouse No. 3 (6,500 square feet of filter area)
ESA9 **NSPS OOO**	G crusher No. 3	CDB17	Crusher baghouse No. 3 (6,500 square feet of filter area)
ES12 **NSPS OOO**	Crusher baghouse No. 3 screw conveyor A	CDB17	Crusher baghouse No. 3 (6,500 square feet of filter area)
ES4044 **NSPS OOO**	Feed conveyor No. 16C to L crusher No. 3	CDB17	Crusher baghouse No. 3 (6,500 square feet of filter area)
ES40 **NSPS OOO**	Conveyor No. 14B (conveyor No. 14 to L crusher feed bins)	CDB17	Crusher baghouse No. 3 (6,500 square feet of filter area)
ES32.3 **NSPS OOO**	L crusher product conveyor No. 17, two pickups (M feed transfer bin and L crusher No. 1 to M screen feed bin)	CDB17	Crusher baghouse No. 3 (6,500 square feet of filter area)
F61 **NSPS OOO**	Enclosed dust conveyor No. 23C (dust conveyor No. 23A to transfer conveyor No. 23C)	N/A	N/A
F6772 **NSPS OOO**	Enclosed East and West pugmill system (for dust and waste processing)	CDF6772	Wet suppression consisting of water sprays
F72 **NSPS OOO**	Enclosed waste stacker conveyor No. 25 (pugmill to conveyor No. 25A)	CD25	Water carryover from pugmill
ES25A **NSPS OOO**	Waste stacker conveyor No. 25A (to waste pile, ID No. FWP)	CD25A	Water carryover from pugmill
FWP	Waste pile	N/A	N/A
Coloring Plant			
ESCP1012A	Headlap bin	CDB8	Raw granule baghouse (5,472 square feet of filter area)
ESCP1012B	Transfer conveyor No. 27 (grade silos to headlap and raw granule bins)	CDB8	Raw granule baghouse (5,472 square feet of filter area)
ESCP1012C	Raw granule bin No. 1	CDB8	Raw granule baghouse (5,472 square feet of filter area)
ESCP1012D	Raw granule bin No. 2	CDB8	Raw granule baghouse (5,472 square feet of filter area)
ESCPPFC1	Line 1 dryer feed conveyor, two pickups (line 1 raw granule and rerun bins to dryer)	CDB8	Raw granule baghouse (5,472 square feet of filter area)
ESCPPFC2	Line 2 dryer feed conveyor, two pickups (line 2 raw granule and rerun bins to dryer)	CDB8	Raw granule baghouse (5,472 square feet of filter area)
ESCPPH1 **NSPS UUU** **CAM**	Line 1 natural gas-fired dryer	CDB9	Preheater baghouse No. 1 (6,354 square feet of filter area)
ESCPPH2 **NSPS UUU** **CAM**	Line 2 natural gas-fired dryer	CDB10	Preheater baghouse No. 2 (6,534 square feet of filter area)
ESCPM1 **CAM**	Line 1 mixer	CDB11	Mixer baghouse No. 1 (2,648 square feet of filter area)

Emission Source ID No.	Emission Source Description	Control Device ID No.	Control Device Description
ESCPM2 **CAM**	Line 2 mixer	CDB12	Mixer baghouse No. 2 (2,648 square feet of filter area)
ESCPK1 **CAM**	Line 1 natural gas-fired kiln	CDB13	Kiln 1 baghouse (10,590 square feet of filter area)
ESCPK2 **CAM**	Line 2 natural gas-fired kiln	CDB14	Kiln 2 baghouse (10,590 square feet of filter area)
ESCPL1-280A	Blend bin No. 1A	CDB15	Finished granule baghouse (5,825 square feet of filter area)
ESCPL1-280B	Product/blend bin No. 1B	CDB15	Finished granule baghouse (5,825 square feet of filter area)
ESCPL1-280C	Product bin No. 1C	CDB15	Finished granule baghouse (5,825 square feet of filter area)
ESCPL2-280A	Blend bin No. 2A	CDB15	Finished granule baghouse (5,825 square feet of filter area)
ESCPL2-280B	Product/blend bin No. 2B	CDB15	Finished granule baghouse (5,825 square feet of filter area)
ESCPL2-280C	Product bin No. 2C	CDB15	Finished granule baghouse (5,825 square feet of filter area)
ESCPL1-600	R screen No. 1	CDB15	Finished granule baghouse (5,825 square feet of filter area)
ESCPL2-600	R screen No. 2	CDB15	Finished granule baghouse (5,825 square feet of filter area)
ESCPL3-600	R screen No. 3	CDB15	Finished granule baghouse (5,825 square feet of filter area)
ESCP900	Waste bin	CDB15	Finished granule baghouse (5,825 square feet of filter area)
ESCPA9	Line 3 product elevator No. 9 (product and blend bins)	CDB15	Finished granule baghouse (5,825 square feet of filter area)
ESCPA10	Line 3 R screen (ROT4)	CDB15	Finished granule baghouse (5,825 square feet of filter area)
ESCPCC	Line 1 rerun conveyor (consolidation conveyor to rerun elevator No. 1)	CDB15	Finished granule baghouse (5,825 square feet of filter area)
ESCPPH3 **NSPS UUU CAM**	Line 3 natural gas-fired dryer	CDB18	Line 3 dryer baghouse (7,111 square feet of filter area)
ESCPM3 **CAM**	Line 3 mixer	CDB19	Line 3 mixer baghouse (2,889 square feet of filter area)
ESCPA6	Kiln feed elevator No. 3 (KFE3)	CDB20	Line 3 kiln baghouse (11,111 square feet of filter area)
ESCPK3 **CAM**	Line 3 natural gas-fired kiln	CDB20	Line 3 kiln baghouse (11,111 square feet of filter area)
ESCPC1	Line 1 cooler	N/A	N/A
ESCPC2	Line 2 cooler	N/A	N/A
ESCPC3	Line 3 cooler	N/A	N/A
FCP44A	Truck loading with dust suppression	N/A	N/A
FCP44B	Truck loading with dust suppression	N/A	N/A
FCP363940	Finished product storage bins	N/A	N/A
FCPA11	Product conveyor No. 1 and No. 2 loadouts to railcars	N/A	N/A

* Pursuant to application 1900104.24B, this control device **(ID No. CDC1)** is listed as a minor modification per 15A NCAC 02Q .0515. The annual compliance certification as described in General Condition P is required. Unless otherwise notified by DAQ, the affected terms of this permit (excluding the permit shield as described in General Condition R) for this emission source and/or control device shall become final on April 1, 2025. Until this date, the affected permit terms herein reflect the proposed operating language that the Permittee shall operate this emission source and/or control device pursuant to 15A NCAC 02Q .0515(f).

SECTION 2 - SPECIFIC LIMITATIONS AND CONDITIONS

2.1 Emission Source(s) and Control Devices(s) Specific Limitations and Conditions

The emission source(s) and associated air pollution control device(s) and appurtenances listed below are subject to the following specific terms, conditions, and limitations, including the testing, monitoring, recordkeeping, and reporting requirements as specified herein:

A. Crushing and Screening Operations, including:

- **Plant feed conveyor No. 1 (feed pile to surge bin) (ID No. ES123);**
- **Surge bin (ID No. ES412);**
- **Feed conveyor No. 2 (surge bin to C crusher) (ID No. ES607.1);**
- **C crusher No. 1 (ID No. ES206);**
- **C crusher feed bin No. 1 (ID No. ES2327A);**
- **C crusher feed conveyor No. 8A (C crusher feed bin No. 1 to C crusher No. 1) (ID No. ES2426.1);**
- **C crusher No. 2A;**
- **M feed transfer bin (ID No. ES3031);**
- **L crusher bin No. 1 (ID No. ES3941);**
- **L crusher feed conveyor No. 16A (L crusher feed bin to L crusher) (ID No. ES4347.1);**
- **L crusher No. 1 (ID No. ES4347.2);**
- **Product conveyor No. 3 (C crusher to D screen bin No. 1) (ID No. ESC3);**
- **C crusher No. 1 bypass chute (ID No. ES2426.3);**
- **Conveyor No. 22 (crushing baghouse hopper screw conveyor transfer to dust conveyor No. 22) (ID No. ESC22.1); and**
- **Conveyor No. 22 (crushing 1 and 2 baghouse, dryer A and B baghouse and cyclone hopper screw conveyor) to dust conveyor No. 23A) (ID No. ESC22.2)**

With associated crusher baghouse No. 1 (6,178 square feet of filter area; ID No. CDB1)

- **C crusher conveyor No. 9 (C crushers No. 1 to No. 2A and D screens No. 2 and No. 3 feed bin) (ID No. ES16-A);**
- **Conveyor No. 9B (feeds into D screen bin No. 4) (ID No. ES16-D);**
- **L crusher product conveyor No. 17, two pickups, (M feed transfer bin and L crusher No. 1 to M screen feed bin) (ID No. ES32.1);**
- **L crusher product conveyor No. 17 (L crushers to conveyor No. 18A) (ID No. ES32A);**
- **Conveyor No. 18A (L crusher product conveyor No. 17 to live M screens feed bin) (ID No. ES32B);**
- **Live M screens feed bin, two pickups (ID No. ES340-A);**
- **D screen bin No. 2 (ID No. ES1721A);**
- **D screen No. 2 feeder (ID No. ES1721B);**
- **D screen No. 2 (ID No. ES1721C);**
- **C crusher bin feed conveyor No. 5 (D screen No. 2 to C crusher bins) (ID No. ES1721D);**
- **L crusher circuit feed conveyor No. 13 (D screen No. 2 to M transfer bin) (ID No. ES1721E);**
- **M screen No. 1 (ID No. ES3537A);**

- **M screen No. 2 (ID No. ES3537B);**
- **M screen No. 3 (ID No. ES3537C);**
- **L crusher feed bin conveyor No. 14, three pickups (M screens to L crusher bins) (ID No. ES3537D);**
- **Grade collecting conveyor No. 19, three pickups (M screens Nos. 1, 2, and 3 to M screens Nos. 4, 5, and 6) (ID No. ES3537E);**
- **Waste conveyor No. 21, three pickup points (M screens to waste bin (ID No. ES3537F);**
- **D screen bin No. 1 (ID No. ES8913A);**
- **D screen bin No. 4 (ID No. ESA1A);**
- **D screen No. 1 feeder (ID No. ES8913B);**
- **D screen No. 1 (ID No. ES8913C);**
- **Undersize conveyor No. 3 (D screen No. 1 to dryer feed conveyor No. 7) (ID No. ES8913D);**
- **C bin feed conveyor No. 4 (D screen No. 1 to C crusher bin) (ID No. ES8913E); and**
- **Dryer feed conveyor No. 7 (undersize conveyor No. 3 to dryer) (ID No. ES8913F)**

With associated screen baghouse No. 1 (11,296 square feet of filter area; ID No. CDB2)

- **Dryer and C crusher product conveyor No. 9 (C crusher to screens No. 2 feed bin) (ID No. ES16-B);**
- **Conveyor No. 18A (conveyor No. 17 to conveyor No. 18B) (ID No. ES33A);**
- **Conveyor No. 18B (conveyor No. 18A to live M feed bin) (ID No. ES33B);**
- **Live M feed bin, two pickups (ID No. ES340-B);**
- **D screen bin No. 3 (ID No. ES1822A);**
- **D screen feeder No. 3 (ID No. ES1822B);**
- **D screen No. 3 (ID No. ES1822C);**
- **Feed conveyor No. 5, two pickups (D screens Nos. 2 and 3 to C crusher bin) (ID No. ES1822D);**
- **Feed conveyor No. 6 (D screens to C crusher bins) (ID No. ES2327B);**
- **M screen No. 4 (ID No. ES3537G);**
- **M screen No. 5 (ID No. ES3537H);**
- **M screen No. 6 (ID No. ES3537I);**
- **L crusher feed bin conveyor No. 14, three pickups (M screens to L crusher) (ID No. ES3537J);**
- **Grade collecting conveyor No. 14, three pickup points (M screens to grade silos) (ID No. ES3537K);**
- **Waste conveyor No. 21, three pickups (M screen to waste bin) (ID No. ES3537L);**
- **24" Dust conveyor No. 23C (baghouse hopper to dust elevator (ID No. ESC23C);**
- **D screen feeder No. 4 (ID No. ESA1B); and**
- **D screen No. 4 (ID No. ESA1C)**

With associated screen baghouse No. 2 (9,002 square feet of filter area; ID No. CDB4)

- **Dryer and C crusher product conveyor No. 9 (C crusher to screens No. 2 feed bin) (ID No. ES16-C);**
- **L crusher product conveyor No. 17 (L crushers and M feed transfer bin to M screen feed bin) (ID No. ES32.2);**
- **Conveyor No. 14 (M screens to conveyor No. 14A) (ID No. ES38);**

- **Conveyor No. 14A (conveyor No. 14 to L crusher feed bins) (ID No. ES39);**
- **C crusher bin No. 2B (ID No. ES2327);**
- **C crusher feed conveyor No. 8B (C crusher 2B bin to C crusher 2B) (ID No. ES2729.1);**
- **C crusher No. 2B (ID No. ES233);**
- **Feed conveyor No. 14A to L crusher bin No. 2 (ID No. ES4042);**
- **L crusher bin No. 2 (ID No. ES4043);**
- **L crusher feed conveyor No. 16-C (ID No. ES4448.1); and**
- **L crusher No. 2 (ID No. ES4448.2)**

With associated crusher baghouse No. 2 (4,942 square feet of filter area; ID No. CDB5)

- **Grade collection conveyor No. 19 (M screens to grade bucket elevator) (ID No. ES49A);**
- **Grade bucket elevator No. 1, two pickups (grade collecting conveyor No. 19 to grade transfer conveyor No. 20) (ID No. ES49B);**
- **Grade transfer conveyor No. 20, two pickups (grade bucket elevator to grade silos) (ID No. ES50);**
- **Grade silo conveyor No. 26, three pickups (grade silos to bin discharge bucket elevator) (ID No. ES57);**
- **Grade transfer conveyor No. 27 (bin discharge elevator to coloring plant) (ID no. ES58);**
- **Bin discharge bucket elevator No. 4, two pickups (ID No. ES59);**
- **Grade silo No. 1 (ID No. ES5155A);**
- **Grade silo No. 2 (ID No. ES5155B);**
- **Grade silo No. 3 (ID No. ES5155C);**
- **Conveyor No. 23A (crushing and dryer baghouse hopper screw conveyor) to dust conveyor No. 23C transfer point [baghouse dust from conveyor No. 22 conveyed onto conveyor No. 23A then onto conveyor No. 23C] (ID No. ESC23A.1); and**
- **Enclosed conveyor No. 20A, two pickups (ID No. ES20A)**

With associated grade silo baghouse No. 1 (4,942 square feet of filer area; ID No. CDB6)

- **Grade silo No. 4 (ID No. ES5155D);**
- **Enclosed conveyor No. 20B, two pickups (ID No. ES20B); and**
- **Enclosed conveyor No. 26A, two pickups (ID No. ES26A)**

With associated grade silo baghouse No. 2 (5,119 square feet of filter area; ID No. CDB21)

- **Dust conveyor No. 23C (baghouse hopper loadout to dust elevator) (ID No. ES23C);**
- **Dust conveyor No. 23C (baghouse hopper loadout to dust elevator 3) (ID No. ES63A);**
- **Dust elevator No. 3, two pickups (ID No. ES63B);**
- **Waste conveyor No.21 (ID No. ES68A);**
- **Waste elevator No. 2 two pickups (ID No. ES68B);**
- **Dust bin (ID No. ES6466);**
- **Waste bin (ID No. ES6970); and**
- **Dust bin screw conveyor (waste handling baghouse hopper to pugmill) (ID No. ES6466SC)**

With associated waste handling baghouse (2,648 square feet of filter area; ID No. CDB7)

- **Load-in to conveyor No. 18C (ID No. ESA5);**
- **Line 3 live M feed bin (ID No. ESA6);**

- **Line 3 M screen assemblies (ID No. ESA7); and**
- **Screen baghouse No. 3 ash loadout (ID No. ESA11)**

With associated screen baghouse No. 3 (9,000 square feet of filter area; ID No. CDB16)

- **2C bin feed conveyor No. 6 transfer to bin feed conveyor No. 6A (ID No. ESA2);**
- **L crusher feed bin No. 2C (ID No. ESA3);**
- **L crusher No. 2C (ID No. ESA4);**
- **Feed bin No. 3 (ID No. ESA8);**
- **G crusher No. 3 (ID No. ESA9);**
- **Crusher baghouse No. 3 screw conveyor A (ID No. ES12);**
- **Feed conveyor 16C to L crusher No. 3 (ID No. ES4044);**
- **Conveyor No. 14B (conveyor No. 14 to L crusher feed bins) (ID No. ES40); and**
- **L crusher product conveyor No. 17 (L crushers and M feed transfer bin to M screen feed bin) (ID No. ES32.3)**

With associated crusher baghouse No. 3 (6,500 square feet of filter area; ID No. CDB17)

Other Sources in Crushing and Screening plant:

- **D screen bin No. 1 loadout chute (ID No. ES8913G);**
- **Conveyor No. 6 metal diverter chute (ID No. ES2327C);**
- **Enclosed dust conveyor No. 23C (dust conveyor No. 23A to transfer conveyor No. 23C) (ID No. F61);**
- **Enclosed East and West pugmill system (for dust and waste processing) (ID No. F6772) controlled with wet suppression (ID No. CDF6772);**
- **Enclosed waste stacker conveyor No. 25 (pugmill to conveyor No. 25A) (ID No. F72) controlled by water carryover (ID No. CD25) from the pugmill (ID No. F6772);**
- **Enclosed waste stacker conveyor No. 25A (to waste pile (ID No. FWP) (ID No. ES25A) controlled by water carryover (ID No. CD25) from the pugmill (ID No. F6772); and**
- **Waste pile (ID No. FWP)**

The following table provides a summary of limits and standards for the emission source(s) described above:

Pollutant	Limits/Standards	Applicable Regulation
Particulate Matter	Work practice standards	15A NCAC 02D .0510
Particulate Matter	0.05 grams per dry standard cubic meter – affected facility that commenced construction, modification, or reconstruction after August 31, 1983 but before April 22, 2008	15A NCAC 02D .0524 (40 CFR 60, Subpart OOO)
Particulate Matter	0.032 grams per dry standard cubic meter – affected facility that commenced construction, modification, or reconstruction on or after April 22, 2008	15A NCAC 02D .0524 (40 CFR 60, Subpart OOO)
Visible Emissions from dry control devices	7 percent opacity – affected facility that commenced construction, modification, or reconstruction after August 31, 1983 but April 22, 2008	15A NCAC 02D .0524 (40 CFR 60, Subpart OOO)
Visible Emissions from dry control devices on individual enclosed storage bins	7 percent opacity – affected facility that commenced construction, modification, or reconstruction on or after April 22, 2008	15A NCAC 02D .0524 (40 CFR 60, Subpart OOO)
Visible Emissions due to fugitive emissions, except crushers	10 percent opacity – affected facility that commenced construction, modification, or reconstruction after August 31, 1983 but before April 22, 2008	15A NCAC 02D .0524 (40 CFR 60, Subpart OOO)

Visible Emissions due to fugitive emissions, except crushers	7 percent opacity – affected facility that commenced construction, modification, or reconstruction on or after April 22, 2008	15A NCAC 02D .0524 (40 CFR 60, Subpart OOO)
Visible Emissions due to fugitive emissions from crushers	15 percent opacity – affected facility that commenced construction, modification, or reconstruction after August 31, 1983 but before April 22, 2008	15A NCAC 02D .0524 (40 CFR 60, Subpart OOO)
Visible Emissions due to fugitive emissions from crushers	12 percent opacity – affected facility that commenced construction, modification, or reconstruction on or after April 22, 2008	15A NCAC 02D .0524 (40 CFR 60, Subpart OOO)
Particulate Matter associated with fugitive non-process dust emissions	**State-enforceable only** **See Section 2.2 A.1** – Multiple Emission Sources	15A NCAC 02D .0540
Particulate Matter	**State-enforceable only** **See Section 2.2 C.2** – Multiple Emission Sources	15A NCAC 02D .0614
Odorous Emissions	**State-enforceable only** **See Section 2.2 B.1** – Multiple Emission Sources	15A NCAC 02D .1806

1. 15A NCAC 02D .0510: PARTICULATES FROM SAND, GRAVEL, OR CRUSHED STONE OPERATIONS

a. The owner or operator of a sand, gravel, or crushed stone operation shall not cause, allow, or permit any material to be produced, handled, transported, or stockpiled without taking measures, such as application of a dust or wet suppressant, soil stabilizers, covers, or add-on particulate control devices, to reduce to a minimum any particulate matter from becoming airborne to prevent exceeding the ambient air quality standards beyond the property line for particulate matter, both PM_{10} and total suspended particulates.
b. Fugitive non-process dust emissions from sand, gravel, or crushed stone operations shall be controlled in accordance with 15A NCAC 02D .0540 as described in Section 2.2 A.1 below.
c. The owner or operator of any sand, gravel, or crushed stone operation shall control process-generated emissions:
   i. from crushers with wet suppression; and
   ii. from conveyors, screens, and transfer points,
   such that the applicable opacity standards in 15A NCAC 02D .0524, as described in Section 2.1 A.2 below, are not exceeded.

Testing [15A NCAC 02Q .0508(f)]

d. If emissions testing is required, the Permittee shall perform such testing in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 A.1.a through 2.1 A.1.c above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0510.

Monitoring/Recordkeeping/Reporting [15A NCAC 02Q .0508(f)]

e. The monitoring, recordkeeping, and reporting requirements for 15A NCAC 02D .0510 shall be satisfied by compliance with the monitoring, recordkeeping, and reporting requirements of 15A NCAC 02D .0524 found in Section 2.1 A.2 below.

2. 15A NCAC 02D .0524: NEW SOURCE PERFORMANCE STANDARDS

a. The Permittee shall comply with all applicable provisions, including the notification, testing, recordkeeping, and monitoring requirements contained in Environmental Monitoring Commission Standard 15A NCAC 02D .0524 "New Source Performance Standards (NSPS)" as promulgated in 40 CFR 60, Subpart OOO "Standards of Performance for Nonmetallic Mineral Processing Plants," including Subpart A "General Provisions."
b. Pursuant to 40 CFR 60.670(a)(2), wet material processing operations as defined in 40 CFR 60.671 are exempt from the requirements in Section 2.1 A.2.a above.
c. Pursuant to 40 CFR 60.670(d)(1), like-kind replacement dust conveyors **(ID Nos. ESC22.2**, and **ESC23C)** are exempt from the provisions of 40 CFR 60.672, 40 CFR 60.674 and 40 CFR 60.675 in accordance with the July 16, 2015 approved application (No. 1900104.13A).
d. Pursuant to 40 CFR 60.670(d)(1), like-kind replacement crushers **(ID Nos. ES232** and **ES233)** are exempt from the provisions of 40 CFR 60.672, 40 CFR 60.674 and 40 CFR 60.675 in accordance with the December 6, 2022 approved application. (No. 1900104.20A).

Testing [15A NCAC 02Q .0508(f) and 40 CFR 60.675]

e. If emissions testing is required, the Permittee shall perform such testing in accordance with General Condition JJ. If the results of this test are above the limits given in Section 2.1 A.2.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524.

f. Under the provisions of NCGS 143-215.108, the Permittee shall demonstrate compliance with the emission limits in Section 2.1 A.2.a above by testing of the affected sources in accordance with a testing protocol approved by DAQ. Details of the emissions testing and reporting requirements can be found in General Condition JJ. Testing shall be completed, and the results submitted within 180 days of beginning operation of any new affected source(s), if not exempted, unless an alternate date is approved by DAQ.
   i. the initial performance testing for existing affected sources (i.e., each crusher, grinding mill, screening operation, bucket elevator, belt conveyor, bagging operation, storage bin, enclosed truck or railcar loading station) that commenced construction, modification, or reconstruction after August 31, 1983 but before April 22, 2008 listed in Section 2.1 A above, as applicable, were conducted utilizing US EPA Method 5 and Method 9, on September 26, 2007 (for Silo No. 3; ID No. ES5155C) and August 5, 2002 through August 8, 2002 (for all other subject sources). Those tests indicated compliance with the applicable requirements.
   ii. initial performance tests pursuant to 40 CFR 60.11 and 40 CFR 60.675 for affected sources (i.e., each crusher, grinding mill, screening operation, bucket elevator, belt conveyor, bagging operation, storage bin, enclosed truck or railcar loading station or from any other affected facility as defined in 40 CFR 60.670 or 40 CFR 60.671) that commence construction, modification, or reconstruction on or after April 22, 2008, as required pursuant to 40 CFR 60.8, must be conducted utilizing the reference methods and procedures as specified in 40 CFR 60 Subpart A and Subpart OOO in accordance with a testing protocol approved by the DAQ. Details of the emissions testing and reporting requirements can be found in General Condition JJ.
   [EPA Method 9 conducted on June 2, 2021 for the Portable backup conveyor (approved on July 9, 2021). Waste stacker conveyor and East and West pugmill were tested on November 11, 2021 and December 1, 2021 (approved on February 15, 2022)].
   iii. a repeat performance test according to 40 CFR 60.11 and 40 CFR 60.675 must be conducted within five (5) years from the previous performance test for fugitive emissions from affected facilities without waters sprays that commence construction, modification, or reconstruction on or after April 22, 2008.
   iv. an affected facility that relies on water carryover from upstream water sprays to control fugitive emissions, then that affected facility is exempt from the 5-year repeat testing requirement specified in Table 3 to Subpart OOO provided that the affected facility meets the criteria in 40 CFR 60.674(b) and 40 CFR 60.676(b), incorporated in Section 2.1 A.2.n.iv below.

g. The Permittee shall confirm or reestablish operating limits during performance tests as specified in Section 2.1 A.2.e and Section 2.1 A.2.f above. The source shall be responsible for ensuring that the equipment or process being tested is operating at a normal production rate, or at a lesser rate if specified by the Director or his delegate. The results of any testing pursuant to this paragraph shall be submitted to DAQ within 30 days of receipt by the Permittee.

Emissions Limitations/Operational and/or Production Limits [15A NCAC 02D .0524 and 40 CFR 60.672]

h. The Permittee shall not allow to be discharged into the atmosphere from any affected facility that commenced construction, modification, or reconstruction after August 31, 1983 but before April 22, 2008 **(ID Nos. ES123, ES412, ES607, ES206, ES2327A, ES2426.1, ES232, ES3031, ES3941, ES4347.1, ES4347.2, ESC3, ES16-A, ES32A, ES32B, ES340-A, ES1721A through ES1721D, ES3537D, ES3537F, ES8913A, ES8913B, ES8913C, ES8913F, ESC22.2, ES16-B, ES33A, ES33B, ES340-B, ES1822A through ES1822D, ES3537J through ES3537L, ESC23C, ES16-C, ES32.2, ES38, ES39, ES2327, ES2729.1, ES233, ES4042, ES4043, ES4044, ES4448.1, ES4448.2, ES49A, ES49B, ES50, ES57, ES58, ES59, ES5155A, ES5155B, ES5155C, ESC23A.1, ES23C, ES68A, ES68B, ES6466, ES6970, ES6466SC, ESA5, ESA6, ESA7, ESA11, ESA8, ESA9, ES8913G, F61, ES20A, and FWP)**:
   i. particulate matter in excess of 0.05 grams per day standard cubic meter (0.022 grams per dry standard cubic foot) from any stack,
   ii. visible emissions greater than 7 percent opacity for dry control devices,
   iii. visible emissions greater than 10 percent opacity due to fugitive emissions except for crushers, and
   iv. visible emissions greater than 15 percent opacity due to fugitive emissions from crushers.

i. On or before the 60th day of achieving the maximum production rate at which the affected facility will be operated, but no later than 180 days after initial startup, the Permittee shall not allow to be discharged into the atmosphere from any affected facility that commenced construction, modification, or reconstruction on or before after April 22, 2008 **(ID Nos. F6772, ES25A, ES3537A, ES3537B, ES3537C, ES3537G, ES3537H, ES3537I, ES8913D, ES8913E, ES2426.3, ES2327C, ES5155D, ES20B, and ES26A, ES40, ES16-D, ESA2, ESA3, ESA4, ES12, ESA1A, ESA1B, ESA1C, ES32.1, ES32.3, ESC22.1, ES2327B, ES1721E, F72, ES3537E, ES63A, and ES63B)**:

i. particulate matter in excess of 0.032 grams per dry standard cubic meter (0.014 grains per dry standard cubic foot) from any stack,
ii. visible emissions greater than 7 percent opacity for dry control devices on individual enclosed storage bins, and
iii. visible emissions greater than 7 percent opacity due to fugitive emissions except for crushers, and
iv. visible emissions greater than 12 percent opacity due to fugitive emissions from crushers.
v. exemptions from the particulate matter standard requirements:
(A) Pursuant to 40 CFR 60.670(d)(1), when an existing facility (i.e., pre-April 2008) is replaced by a piece of equipment of equal or smaller size (i.e., Like-kind Replacements), having the same function as the existing facility, and there is no increase in the amount of emissions, the new facility is exempt from the provisions of 40 CFR 60.672 upon submittal of the information required in Section 2.1 A.2.n pursuant to 40 CFR 60.676(a); thus, the replacement facilities **(ID Nos. ESC22.2, ESC23C, ES232, and ES233)** must comply with the same emission limitations as specified in Section 2.1 A.2.h above.
(B) Truck dumping of nonmetallic materials into any screening operation, feed hopper, or crusher is exempt.
(C) Any baghouse that controls emissions from only an individual, enclosed storage bin is exempt from the applicable stack PM concentration limit (and associated performance testing) in Table 2 to Subpart OOO but must meet the applicable stack opacity limit and compliance requirements in Table 2. This exemption from the stack PM concentration limit does not apply for multiple storage bins with combined stack emissions.

j. If any transfer point on a conveyor belt or any other affected facility is enclosed in a building, then each enclosed affected facility must comply with the emission limits in Section 2.1 A.2.h and Section 2.1 A.2.i above, or the building enclosing the affected facility or facilities must comply with the following emission limits:
i. fugitive emissions from the building openings (except for vents as defined in 40 CFR 60.671) must not exceed 7 percent opacity, and
ii. vents (as defined in 40 CFR 60.671) in the building must meet the applicable stack emission limits and compliance requirements in Table 2 to Subpart OOO as specified in Section 2.1 A.2.h and Section 2.1 A.2.i above.

k. The enclosed East and West pugmill system **(ID No. F6772)** shall be operated at a production rate of no more than 120 tons per hour to ensure compliance with the applicable emissions standards in Section 2.1 A.2.a and Section 2.1 A.2.i above. If the pugmill is to be operated at any material throughput rates greater than 10 percent of the tested throughput rate approved on February 15, 2022, testing shall be required to re-establish operating parameters (i.e., material throughput rate) and demonstrate compliance with the applicable emission standards for the pugmill **(ID No. F6772)** operation in accordance with Section 2.1 A.2.f, Section 2.1 A.2.g and Section 2.1 A.2.h above.

l. The opacity standards set forth in Section 2.1 A.2.f through Section 2.1 A.2.i above, shall apply at all times except during periods of startup, shutdown, malfunction, and as otherwise provided in the applicable standard. [40 CFR 60.11(c)]

m. At all times, including periods of startup, shutdown, and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on available information which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source. [40 CFR 60.11(d)]

Monitoring [15A NCAC 02Q .0508(f) and 40 CFR 60.674]

n. Monitoring to ensure compliance with the applicable particulate matter and visible emissions standards of Section 2.1 A.2.a above, shall be performed per the following:
i. observation of a building enclosure containing affected facilities – the Permittee shall:
(A) Observe each building, on a monthly basis, for any visible emissions above the limits in Section 2.1 A.2.h through Section 2.1 A.2.j above. Each affected facility enclosed in the building shall be deemed to be in noncompliance with 15A NCAC 02D .0524 UNLESS a compliance demonstration for each affected facility enclosed in the building is performed in accordance with Section 2.1 A.2.o i.(B) below.
(B) After corrective action is taken, a Method 9 – *Visual Determination of the Opacity of Emissions from Stationary Sources* for stacks OR Method 22 – *Visual Determination of Fugitive Emissions from Material Sources and Smoke Emissions from Flares* for fugitives, IF observing an affected facility's building enclosure a determination meeting the requirements of 40 CFR 60.675 and 15A NCAC 02D .2610 is performed and visible emissions are demonstrated to comply with the applicable limit(s) given in Sections 2.1 A.2.h through 2.1 A.2.j above, THEN no further action is required.
(C) If compliance for the affected facility cannot be demonstrated, then the affected facility shall be deemed to be in noncompliance with 15A NCAC 02D .0524.

ii. affected facilities that commence construction, modification, or reconstruction on or after April 22, 2008, that use a baghouse to control emissions must conduct quarterly 30-minute visible emissions inspections using EPA Method 22 pursuant to 40 CFR 60.674(c) conducted while the baghouse is operating.
   (A) If no visible emissions are observed, the test is successful.
   (B) If any visible emissions are observed, the owner or operator of the affected facility must initiate corrective action within 24 hours to return baghouse to normal operation.

iii. affected facilities that commence construction, modification, or reconstruction on or after April 22, 2008, that use wet suppression to control emissions from the affected facility must perform monthly periodic inspections pursuant to 40 CFR 60.674(b). The periodic inspections apply to affected facilities with fugitive emissions that are controlled by either direct water sprays or water carryover from upstream water sprays:
   (A) Perform monthly periodic inspections to check that water is flowing to discharge spray nozzles in the wet suppression system.
   (B) The owner or operator must initiate corrective action within 24 hours and complete corrective action as expediently as practical if the owner or operator finds that water is not flowing properly during an inspection of the water spray nozzles.
   (C) An affected facility that routinely uses wet suppression water sprays ceases operation of the water sprays or is using a control mechanism to reduce fugitive emissions other than water sprays during the monthly inspection (e.g., water from recent rainfall), the logbook entry required in Section 2.1 A.2.p below must specify the control mechanism being used instead of the water sprays.

iv. affected facilities that commence construction, modification, or reconstruction on or after April 22, 2008, that rely on water carryover from upstream water sprays to control fugitive emissions, then that facility is exempt from the 5-year repeat testing specified in 2.1 A.2.f.iv above provided that the affected facility meets the following criteria:
   (A) Perform monthly periodic inspections of the upstream water spray(s) that are responsible for controlling fugitive emissions from the affected facility.
   (B) The owner or operator must initiate corrective action within 24 hours and complete corrective action as expediently as practical if the owner or operator finds that water is not flowing properly during an inspection of the water spray nozzles.

v. as an alternative to the periodic Method 22 (40 CFR 60, Appendix A-7) visible emissions inspections specified in Section 2.1 A.2.n.ii above, the Permittee of any affected facility that commences construction, modification, or reconstruction, on or after April 22, 2008, that use a baghouse to control emissions may use a bag leak detection system. The bag leak detection system must be installed, operated and maintained according to 40 CFR 60.674(d)(1) through 40 CFR 60.674(d)(3).

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524 if the monitoring in Section 2.1 A.2.n is not conducted and/or if the Permittee does not conduct the periodic observations and/or if the result of any observation is greater than the respective limits in Section 2.1 A.2.h through Section 2.1 A.2.j above and/or if the production limit in Section 2.1 A.2.k above are exceeded.

Recordkeeping [15A NCAC 02Q .0508(f) and 40 CFR 60.676]

o. Like-kind Replacement – Pursuant to 40 CFR 60.670(d), when an existing affected facility is replaced by a piece of equipment of equal or smaller size, as defined in 40 CFR 60.671, having the same function as the existing facility, and there is no increase in the amount of emissions, the new facility is exempt from the provisions of 40 CFR 60.672, 40 CFR 60.674, and 40 CFR 60.675 except as provided for in 40 CFR 60.670(d)(3).

i. the owner or operator shall submit the following information about the existing facility being replaced and the replacement piece of equipment pursuant to 40 CFR 60.676(a):
   (A) For a crusher, grinding mill, bucket elevator, bagging operation, or enclosed truck or railcar loading station:
      (1) the rated capacity in tons per hour of the existing facility being replaced; and
      (2) the rated capacity in tons per hour of the replacement equipment.
   (B) For a screening operation:
      (1) the total surface area of the top screen of the existing screening operation being replaced; and
      (2) the total surface area of the top screen of the replacement screening operation.
   (C) For a conveyor belt:
      (1) the width of the existing belt being replaced; and
      (2) the width of the replacement conveyor belt.
   (D) For a storage bin:
      (1) the rated capacity in tons of the existing storage bin being replaced; and
      (2) the rated capacity in tons of replacement storage bins.

p. Affected facilities (as defined in 40 CFR 60.670 and 40 CFR 60.671) for which construction, modification, or reconstruction commenced after August 31, 1983 but before April 22, 2008 **(ID Nos. ES123, ES412, ES607.1, ES206, ES2327A, ES2426.1, ES232, ES3031, ES3941, ES4347.1, ES43347.2, ESC3, ES16-A, ES32A, ES32B, ES340-A, ES1721A through ES1721D, ES3537D, ES3537F, ES8913A, ES8913B, ES8913C, ES8913F, ESC22.2, ES16-B, ES33A, ES33B, ES340-B, ES1822A through ES1822D, ES3537J through ES3537L, ESC23C, ES16-C, ES32.2, ES38, ES39, ES2327, ES2729.1, ES233, ES4042, ES4043, ES4044, ES4448.1, ES4448.2, ES49A, ES49B, ES50, ES57, ES58, ES59, ES5155A, ES5155B, ES5155C, ESC23A.1, ES23C, ES68A, ES68B, ES6466, ES6970, ES6466SC, ESA5, ESA6, ESA7, ESA11, ESA8, ESA9, ES8913G, F61, ES20A, and FWP)**, the Permittee shall maintain results of monitoring in a logbook (written or electronic form) and made available to authorized personnel upon request. The following shall be recorded in the logbook:
   i. the results of the monthly building fugitive emissions observations or the monthly visible emissions observations for each affected facility;
   ii. whether the observed emissions source was the building or each affected facility within the building, date and time of each observation;
   iii. if any emissions were observed from the building or affected facility, the time and any resulting action(s) taken to reduce emissions exceeding an applicable limit;
   iv. the date, time, and type of all corrective actions performed to prevent such an exceedance from re-occurring and a copy of any Method 9 or Method 22 opacity observation performed for the purpose of demonstrating compliance with the applicable emissions limit(s).

q. Affected facilities (as defined in 40 CFR 60.670 and 40 CFR 60.671) for which construction, modification, or reconstruction commenced on or after April 22, 2008 **(ID Nos. F6772, ES25A, ES3537A, ES3537B, ES3537C, ES3537G, ES3537H, ES 3537I, ES8913D, ES8913E, ES2426.3, ES2327C, ES5155D, ES20B, ES26A, ES40, ES16-D, ESA2, ESA3, ESA4, ES12, ESA1A, ESA1B, ESA1C, ES32.1, ES32.3, ESC22.1, ES2327B, ES1721E, F72, ES3537E, ES63A, and ES63B)**, the Permittee shall maintain results of monitoring in a logbook (written or electronic format) and made available to authorized personnel upon request. The following shall be recorded in the logbook:
   i. the results of each periodic inspection required pursuant to 40 CFR 60.674(b), 40 CFR 60.674(c), or 40 CFR 60.674(d) incorporated in Section 2.1 A.2.n above, including the dates of each inspection and any corrective actions taken, in a logbook (in written or electronic format) as required under 40 CFR 60.676(b);
   ii. the monthly pugmill production rate (or material throughput rate) as specified in Section 2.1 A.2.l above, and the 12-month production rate;
   iii. the results of each monthly periodic inspection of wet suppression water spray and any resulting action taken as specified in Section 2.1 A.2.n.iii above; and
   iv. the results of each monthly periodic inspection of the upstream water spray(s) and any resulting action taken as specified in Section 2.1 A.2.n.iv above.

   The above records shall be recorded monthly in a logbook (written or electronic format), maintained on-site and made available to officials of the Division of Air Quality (DAQ), upon request. The Permittee must keep each entry in the log and all required records on file for a minimum of five years. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524 if these records are not recorded monthly in a logbook (written or electronic format), kept on-site and made available to DAQ personnel upon request.

Reporting [15A NCAC 02Q .0508(f)]

r. The Permittee shall, in addition to any other reporting requirements pursuant to 40 CFR 60.676(a), 40 CFR 60.7 or notification requirements to the EPA, submit a semiannual summary report of monitoring and recordkeeping activities in Section 2.1 A.2.n through Section 2.1 A.2.q above postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. The summary report shall include the following information:
   i. a report of any changes in existing facilities as specified in 40 CFR 60.676 "Reporting and recordkeeping," including equipment being replaced and the replacement equipment of affected facilities;
   ii. a report of the monthly production rate (or material throughput rate) of the pugmill for the previous 17 months. The production rate must be calculated for the 12-month periods over the previous 17 months.
   iii. a report of any non-compliant emissions observed to occur from a building enclosing an affected facility OR the applicable opacity limit(s) of 40 CFR 60.672(a), 40 CFR 60.672(b), 40 CFR 60.672(e) and 40 CFR 60.672(f) as established using Method 9 or Method 22 compliance demonstrations conducted on an affected facility or building, along with the determined cause of exceedance and the resulting corrective action taken, within five (5) business days of noncompliant observation.
   iv. monitoring records from any performance tests conducted as required in Section 2.1 A.2.e and 2.1 A.2.f above.
   v. all instances of deviations from the requirements of this permit must be clearly identified.

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524 if the 12-month rolling production average exceeds 120 tons per hour from the pugmill (ID No. F6772) and/or if the above requirements are not met.

s. The Permittee shall submit, to the Regional Supervisor, a notification of the date of initial start-up of an affected facility postmarked within 15 days after such date. [40 CFR 60.7(a)(3)]
   i. for a combination of affected facilities in a production line that begin actual initial startup on the same day, a single notification of startup may be submitted. The notification shall include a description of each affected facility, equipment manufacturer, and serial number of the equipment, if available.
   ii. for portable aggregate processing plants, the notification of the actual date of initial startup shall include both the home office and the current address or location of the portable plant.

   The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524 if the requirements in Section 2.1 A.2.n through Section 2.1 A.2.s are not met.

B. One natural gas-fired dryer (ID No. ES1415) with one associated simple cyclone (96 inches in diameter; ID No. CDC1) in series with one baghouse (12,002 square feet of filter area; ID No. CDB3)

The following table provides a summary of limits and standards for the emission source(s) described above:

Pollutant	Limits/Standards	Applicable Regulation
Sulfur Dioxide	2.3 pounds per million Btu heat input	15A NCAC 02D .0516
Particulate Matter	0.057 grams per dry standard cubic meter	15A NCAC 02D .0524 (40 CFR 60, Subpart UUU)
Visible Emissions	10 percent opacity	15A NCAC 02D .0524 (40 CFR 60, Subpart UUU)
Particulate Matter	Compliance Assurance Monitoring See Section 2.2 C.3 – Multiple Emission Sources	15A NCAC 02D .0614
Odorous Emissions	**State-enforceable only** See Section 2.2 B.1 – Multiple Emission Sources	15A NCAC 02D .1806
Hazardous Air Pollutants	See Section 2.2 B.3 – Multiple Emission Sources	15A NCAC 02Q .0317 for avoidance of 15A NCAC 02D .1111

1. 15A NCAC 02D .0516: SULFUR DIOXIDE EMISSIONS FROM COMBUSTION SOURCES

a. Emissions of sulfur dioxide from this dryer **(ID No. ES1415)** shall not exceed 2.3 pounds per million Btu heat input. Sulfur dioxide formed by the combustion of sulfur in fuels, wastes, ores, and other substances shall be included when determining compliance with this standard.

Testing [15A NCAC 02Q .0508(f)]

b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 B.1.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0516.

Monitoring/Recordkeeping/Reporting [15A NCAC 02Q .0508(f)]

c. No monitoring/recordkeeping/reporting is required for sulfur dioxide emissions from the firing of natural gas in this dryer **(ID No. ES1415)**.

2. 15A NCAC 02D .0524: NEW SOURCE PERFORMANCE STANDARDS

a. The Permittee shall comply with all applicable provisions, including the notification, testing, reporting, recordkeeping, and monitoring requirements contained in Environmental Management Commission Standard 15A NCAC 02D .0524 "New Source Performance Standards" as promulgated in 40 CFR Part 60, Subpart UUU "Standards of Performance for Calciners and Dryers in Mineral Industries," including Subpart A "General Provisions."

Emission Limitations [15A NCAC 0D .0524 and 40 CFR 60.732]

b. Particulate matter emissions from this dryer **(ID No. ES1415)** shall not exceed 0.057 gram per dry standard cubic meter (g/dscm).

c. Visible emissions from this dryer **(ID No. ES1415)** shall not exceed 10 percent opacity (6-minute average).

Testing [15A NCAC 02Q .0508(f) and 40 CFR 60.736]

d. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 B.2.b or Section 2.1 B.2.c above, as applicable, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524.
[The Permittee conducted the initial testing for this dryer **(ID No. ES1415)** on August 6, 2002. Those tests indicated compliance with the applicable requirements.]

Monitoring/Recordkeeping [15A NCAC 02Q .0508(f) and 40 CFR 60.734 and 40 CFR 60.735]

e. To ensure compliance with the emission limits in Section 2.1 B.2.b or Section 2.1 B.2.c above:

i. the owner and operator of an affected facility subject to the provisions of this Subpart who uses a dry control device to comply with the mass emission standard shall install, calibrate, maintain, and operate a continuous monitoring system to measure and record the opacity of emissions that are discharged into the atmosphere from the control device. The opacity monitor shall comply with 40 CFR 60 Appendix F, Procedure 3, "Quality Assurance Requirements for COMs at Stationary Sources."

ii. particulate matter emissions from this dryer **(ID No. ES1415)** shall be controlled by one simple cyclone **(ID No. CDC1)** in series with one baghouse **(ID No. CDB3)**. The Permittee shall perform inspections and maintenance as recommended by the manufacturer. In addition to the manufacturer's inspection and maintenance recommendations, or if there is no manufacturer's inspection and maintenance recommendations, as a minimum, the inspection and maintenance requirement shall include the following:
   (A) A monthly visual inspection of the system ductwork and material collection unit for leaks; and
   (B) An annual (for each 12 month period following the initial inspection) internal inspection of the bagfilter for structural integrity.
   (C) An annual (for each 12 month period following the initial inspection) external inspection of the cyclone for structural integrity.

   The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524 if the ductwork, cyclone, and bagfilter are not inspected and maintained.

iii. the results of inspection and maintenance shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The logbook shall record the following:
   (A) The date and time of each recorded action;
   (B) The results of each inspection;
   (C) The results of any maintenance performed on any control device; and
   (D) Any variance from manufacturer's recommendations, if any, and corrections made.

   The above records shall be recorded in a logbook (written or electronic format), maintained on-site and made available to officials of the Division of Air Quality (DAQ), upon request. The Permittee must keep each entry in the log and all required records on file for a minimum of five years. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524 if these records are not recorded in a logbook (written or electronic format), kept on-site and made available to DAQ personnel upon request.

Reporting [15A NCAC 02Q .0508(f)]

f. The Permittee shall, consistent with 40 CFR 60.7(c), submit semiannually an excess emissions and continuous monitoring system performance report and/or a summary report. The semiannual report shall be calculated on a quarterly basis and contain the monitoring and recordkeeping activities given in Section 2.1 B.2.e above. The semiannual report shall be postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

C. Coloring Plant sources, including:

- **Headlap bin (ID No. ESCP1012A);**
- **Transfer conveyor No. 27 (grade silos to headlap and raw granule bins, ID No. ESCP1012B);**
- **Raw granule bin No. 1 (ID No. ESCP1012C);**
- **Raw granule bin No. 2 (ID No. ESCP1012D);**
- **Line 1 dryer feed conveyor, two pickups (line 1 raw granule and rerun bins to dryer) (ID No. ESCPPFC1); and**
- **Line 2 dryer feed conveyor, two pickups (line 2 raw granule and rerun bins to dryer) (ID No. ESCPPFC2)**

With associated raw granule baghouse (5,472 square feet of filter area; ID No. CDB8)

- **Blend bin No. 1A (ID No. ESCPL1-280A);**
- **Product/blend bin No. 1B (ID No. ESCPL1-280B);**
- **Product bin No. 1C (ID No. ESCPL1-280C);**
- **Blend bin No. 2A (ID No. ESCPL2-280A);**
- **Product/blend bin No. 2B (ID No. ESCPL2-280B);**
- **Product bin No. 2C (ID No. ESCPL2-280C);**
- **R screen No. 1 (ID No. ESCPL1-600);**
- **R screen No. 2 (ID No. ESCPL2-600);**
- **R screen No. 3 (ID No. ESCPL3-600);**
- **Waste bin (ID No. ESCP900);**
- **Line 3 product elevator No. 9, product and blend bins (ID No. ESCPA9);**
- **R screen for line 3 (ROT4) (ID No. ESCPA10); and**
- **Line 1 rerun conveyor (consolidation conveyor to rerun elevator No. 1) (ID No. ESCPCC)**

With associated finished granule baghouse (5,825 square feet of filter area; ID No. CDB15)

- **Kiln feed elevator No. 3 (KFE3) (ID No. ESCPA6)**

With associated line 3 kiln baghouse (11,111 square feet of filter area; ID No. CDB20)

- **Truck loading with dust suppression (ID No. FCP44A);**
- **Truck loading with dust suppression (ID No. FCP44B);**
- **Finished product storage bins (ID No. FCP363940); and**
- **Production conveyor No. 1 and No. 2 loadouts to railcars (ID No. FCPA11)**

The following table provides a summary of limits and standards for the emission source(s) described above:

Pollutant	Limits/Standards	Applicable Regulation
Particulate Matter	Work practice standards	15A NCAC 02D .0510
Visible Emissions	20 percent opacity	15A NCAC 02D .0521
Particulate Matter associated with fugitive non-process dust emissions	**State-enforceable only** See Section 2.2 A.1	15A NCAC 02D .0540
Toxic Air Pollutants	**State-enforceable only** See Section 2.2 B.2 – Multiple Emission Sources	15A NCAC 02D .1100
Odorous Emissions	**State-enforceable only** See Section 2.2 B.1 – Multiple Emission Sources	15A NCAC 02D .1806

Pollutant	Limits/Standards	Applicable Regulation
Hazardous Air Pollutants	See Section 2.2 B.3 – Multiple Emission Sources	15A NCAC 02Q .0317 for avoidance of 15A NCAC 02D .1111
Toxic Air Pollutants	**State-enforceable only** See Section 2.2 B.4 – Multiple Emission Sources	15A NCAC 02Q .0711

1. 15A NCAC 02D .0510: PARTICULATES FROM SAND, GRAVEL, OR CRUSHED STONE OPERATIONS

a. The owner or operator of a sand, gravel, or crushed stone operation shall not cause, allow, or permit any material to be produced, handled, transported or stockpiled without taking measures, such as application of a dust or wet suppressant, soil stabilizers, covers, or add-on particulate control devices, to reduce to a minimum any particulate matter from becoming airborne to prevent exceeding the ambient air quality standards beyond the property line for particulate matter, both PM_{10} and total suspended particulates.
b. Fugitive non-process dust emissions from sand, gravel, or crushed stone operations shall be controlled in accordance with 15A NCAC 02D .0540 as described in Section 2.2 A.1 below.
c. The owner or operator of any sand, gravel or crushed stone operation shall control process-generated emissions:
   i. from crushers with wet suppression; and
   ii. from conveyors, screens, and transfer points,
   such that the applicable opacity standards in 15A NCAC 02D .0521, as described in Section 2.1 C.2 below, are not exceeded.

Testing [15A NCAC 02Q .0508(f)]
d. If emissions testing is required, the Permittee shall perform such testing in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 C.1.a through 2.1 C.1.c above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0510.

Monitoring/Recordkeeping/Reporting [15A NCAC 02Q .0508(f)]
e. The monitoring, recordkeeping, and reporting requirements for 15A NCAC 02D .0510 shall be satisfied by compliance with the monitoring, recordkeeping, and reporting requirements of 15A NCAC 02D .0521 found in Section 2.1 C.2 below.

2. 15A NCAC 02D .0521: CONTROL OF VISIBLE EMISSIONS

a. Visible emissions from the sources (i.e., conveyors, screening operations, screen feeders, storage bins) located at the Coloring Plant listed under Section 2.1 C above, shall not be more than 20 percent opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 87 percent opacity.

Testing [15A NCAC 02Q .0508(f)]
b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 C.2.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521.

Monitoring [15A NCAC 02Q .0508(f)]
c. To ensure compliance, once a month the Permittee shall observe the emission points of these sources (Coloring Plant) for any visible emissions above normal. The monthly observation must be made for each month of the calendar year period to ensure compliance with this requirement. If visible emissions from a source are observed to be above normal, the Permittee shall either:
   i. take appropriate action to correct the above-normal emissions as soon as practicable and within the monitoring period and record the action taken as provided in the recordkeeping requirements below, or
   ii. demonstrate that the percent opacity from the emission points of the emission source in accordance with 15A NCAC 02D .2610 (Method 9) for 12 minutes is below the limit given in Section 2.1 C.2.a above.
   The Permittee shall be deemed to be in noncompliance with 15A NCAC 02D .0521 if the required monthly observations are not conducted as required; if the above-normal emissions are not corrected within the monitoring period or the percent opacity demonstration cannot be made.

Recordkeeping [15A NCAC 02Q .0508(f)]

d. The results of the monitoring shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The logbook shall record the following:
   i. the date and time of each recorded action;
   ii. the results of each observation and/or test noting those sources with emissions that were observed to be in noncompliance along with any corrective actions taken to reduce visible emissions; and
   iii. the results of any corrective actions performed.

   The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521 if these records are not maintained.

Reporting [15A NCAC 02Q .0508(f)]

e. The Permittee shall submit a summary report of the monitoring and recordkeeping activities given in Section 2.1 C.2.c and Section 2.1 C.2.d above postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

D. Three natural gas-fired dryers (ID Nos. ESCPPH1, ESCPPH2, and ESCPPH3) with three associated baghouses (6,354; 6,354; and 7,111 square feet of filter area; ID Nos. CDB9, CDB10, and CDB18, respectively)

The following table provides a summary of limits and standards for the emission source(s) described above:

Pollutant	Limits/Standards	Applicable Regulation
Sulfur Dioxide	2.3 pounds per million Btu heat input	15A NCAC 02D .0516
Particulate Matter	0.057 grams per dry standard cubic meter	15A NCAC 02D .0524 40 CFR 60, Subpart UUU
Visible Emissions	10 percent opacity	15A NCAC 02D .0524 40 CFR 60, Subpart UUU
Particulate Matter	Compliance Assurance Monitoring See Section 2.2 C.3 – Multiple Emission Sources	15A NCAC 02D .0614
Odorous Emissions	**State-enforceable only** See Section 2.2 B.1 – Multiple Emission Sources	15A NCAC 02D .1806
Hazardous Air Pollutants	See Section 2.2 B.3 – Multiple Emission Sources	15A NCAC 02Q .0317 for avoidance of 15A NCAC 02D .1111

1. 15A NCAC 02D .0516: SULFUR DIOXIDE EMISSIONS FROM COMBUSTION SOURCES

a. Emissions of sulfur dioxide from these dryers **(ID Nos. ESCPPH1, ESCPPH2, and ESCPPH3)** shall not exceed 2.3 pounds per million Btu heat input. Sulfur dioxide formed by the combustion of sulfur in fuels, wastes, ores, and other substances shall be included when determining compliance with this standard.

Testing [15A NCAC 02Q .0508(f)]

b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 D.1.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0516.

Monitoring/Recordkeeping/Reporting [15A NCAC 02Q .0508(f)]

c. No monitoring/recordkeeping/reporting is required for sulfur dioxide emissions from the firing of natural gas in these dryers **(ID Nos. ESCPPH1, ESCPPH2, and ESCPPH3)**.

2. 15A NCAC 02D .0524: NEW SOURCE PERFORMANCE STANDARDS

a. The Permittee shall comply with all applicable provisions, including the notification, testing, reporting, recordkeeping, and monitoring requirements contained in Environmental Management Commission Standard 15A NCAC 02D .0524 "New Source Performance Standards (NSPS)" as promulgated in 40 CFR Part 60 Subpart UUU "Standards of Performance for Calciners and Dryers in Mineral Industries," including Subpart A "General Provisions."

Emission Limitations [15A NCAC 02D .0524 and 40 CFR 60.732]

b. Particulate matter emissions from each dryer **(ID Nos. ESCPPH1, ESCPPH2, and ESCPPH3)** shall not exceed 0.057 gram (g) per dry standard cubic meter (dscm).

c. Visible emissions from these three dryers **(ID Nos. ESCPPH1, ESCPPH2, and ESCPPH3)** shall not exceed 10 percent opacity (6-minute average).

Testing [15A NCAC 02Q .0508(f)]

d. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 D.2.b or Section 2.1 D.2.c above, as applicable, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524.

   i. the Permittee conducted the initial compliance testing for dryers **(ID Nos. ESCPPH1 and ESCPPH2)** on August 8, 2002 and August 7, 2002, respectively. Those tests indicated compliance with the applicable requirements. No additional testing is required for these dryers.

ii. under the provisions of NCGS 143-215.108, the Permittee shall demonstrate compliance with the emission limit in Section 2.1 D.2.b, above, for dryer **(ID No. ESCPPH3)** by testing for particulate matter emissions by utilizing EPA test method 5. The sampling time and volume for each test run shall be at least 2 hours and 1.70 dscm. This testing must be conducted within 60 days of achieving the maximum production rate of dryer **(ID No. ESCPPH3)** and no later than 180 days after initial startup of dryer **(ID No. ESCPPH3)**.

iii. Under the provisions of NCGS 143-215.108, the Permittee shall demonstrate compliance with the emission limit in Section 2.1 D.2.c, above, for dryer **(ID No. ESCPPH3)** by testing for opacity of visible emissions by utilizing EPA test method 9. This testing must be conducted within 60 days of achieving the maximum production rate of dryer **(ID No. ESCPPH3)** and no later than 180 days after initial startup of dryer **(ID No. ESCPPH3)**.

Monitoring/Recordkeeping [15A NCAC 02Q .0508(f) and 40 CFR 60.734 and 40 CFR 60.735]

e. To ensure compliance with the emission limits in Section 2.1 D.2.b or Section 2.1 D.2.c above:

i. the owner and operator of an affected facility subject to the provisions of this subpart who uses a dry control device to comply with the mass emission standard shall install, calibrate, maintain, and operate a continuous monitoring system to measure and record the opacity of emissions that are discharged into the atmosphere from the control device. Records of monitoring shall be kept for a minimum of 5 years. The opacity monitor shall comply with 40 CFR 60 Appendix F, Procedure 3, Quality Assurance Requirements for COMs at Stationary Sources."

ii. particulate matter emissions from these dryers **(ID Nos. ESCPPH1, ESCPPH2, and ESCPPH3)** shall be controlled by associated bagfilters **(ID Nos. CDB9, CDB10, and CDB18, respectively)**. The Permittee shall perform inspections and maintenance as recommended by the manufacturer. In addition to the manufacturer's inspection and maintenance recommendations, or if there is no manufacturer's inspection and maintenance recommendations, as a minimum, the inspection and maintenance requirement shall include the following:
   (A) A monthly visual inspection of the system ductwork and material collection unit for leaks; and
   (B) An annual (for each 12-month period following the initial inspection) internal inspection of the bagfilter's structural integrity.

   The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524 if the ductwork and bagfilters are not inspected and maintained.

iii. the results of inspection and maintenance shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The logbook shall record the following:
   (A) The date and time of each recorded action;
   (B) The results of each inspection;
   (C) The results of any maintenance performed on any control device; and
   (D) Any variance from manufacturer's recommendations, if any, and corrections made.

   The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524 if these records are not maintained.

Reporting [15A NCAC 02Q .0508(f)]

f. The Permittee shall submit the results of any maintenance performed on any control device within 30 days of a written request by the DAQ.

g. The Permittee shall, consistent with 40 CFR 60.7(c) submit semiannually an excess emissions and continuous monitoring system performance report and/or a summary report. The semiannual report shall be calculated on a quarterly basis and contain the monitoring and recordkeeping activities given in Section 2.1 D.2.e above. The semiannual report shall be postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

E. Three natural gas-fired kilns (ID Nos. ESCPK1, ESCPK2, and ESCPK3) with three associated baghouses (10,590; 10,590; and 11,111 square feet of filter area; ID Nos. CDB13, CDB14, and CDB20, respectively)

The following table provides a summary of limits and standards for the emission source(s) described above:

Pollutant	Limits/Standards	Applicable Regulation
Particulate Matter	$E = 4.10 \times (P)^{0.67}$ for $P \leq 30$ tons per hour $E = 55.0 \times (P)^{0.11} - 40$ for $P \geq 30$ tons per hour Where: E = Allowable emission rate in pounds per hour; and P = Process weight in tons per hour	15A NCAC 02D .0515
Sulfur Dioxide	2.3 pounds per million Btu heat input	15A NCAC 02D .0516
Visible Emissions	10 percent opacity	15A NCAC 02D .0521
Particulate Matter	Compliance Assurance Monitoring See Section 2.2 C.3 – Multiple Emission Sources	15A NCAC 02D .0614
Odorous Emissions	**State-enforceable only** See Section 2.2 B.1 – Multiple Emission Sources	15A NCAC 02D .1806
Hazardous Air Pollutants	See Section 2.2 B.3 – Multiple Emission Sources	15A NCAC 02Q .0317 for avoidance of 15A NCAC 02D .1111

1. 15A NCAC 02D .0515: PARTICULATES FROM MISCELLANEOUS INDUSTRIAL PROCESSES

a. Emissions of particulate matter from these kilns **(ID Nos. ESCPK1, ESCPK2, and ESCPK3)** shall not exceed an allowable emission rate as calculated by the following equation:

$E = 4.10 \times P^{0.67}$ (for process rates less than or equal to 30 tons per hour), or
$E = 55.0 \times P^{0.11} - 40$ (for process rates greater than 30 tons per hour)

Where E = allowable emission rate in pounds per hour
P = process weight in tons per hour

Liquid and gaseous fuels and combustion air are not considered as part of the process weight.

Testing [15A NCAC 02Q .0508(f)]

b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 E.1.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0515.

Monitoring [15A NCAC 02Q .0508(f)]

c. Particulate matter emissions from these kilns **(ID Nos. ESCPK1, ESCPK2, and ESCPK3)** shall be controlled by associated bagfilters **(ID Nos. CDB13, CDB14, and CDB20, respectively)** To ensure compliance, the Permittee shall perform inspections and maintenance as recommended by the manufacturer. In addition to the manufacturer's inspection and maintenance recommendations, or if there are no manufacturer's inspection and maintenance recommendations, as a minimum, the inspection and maintenance requirement shall include the following:
   i. a monthly visual inspection of the system ductwork and material collection unit for leaks; and
   ii. an annual (for each 12-month period following the initial inspection) internal inspection of the bagfilter's structural integrity.

   The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0515 if the ductwork and bagfilters are not inspected and maintained.

Recordkeeping [15A NCAC 02Q .0508(f)]

d. The results of inspection and maintenance shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The logbook shall record the following:

i. the date and time of each recorded action;
ii. the results of each inspection;
iii. the results of any maintenance performed on any control device; and
iv. any variance from manufacturer's recommendations, if any, and corrections made.

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0515 if these records are not maintained.

Reporting [15A NCAC 02Q .0508(f)]

e. The Permittee shall submit the results of any maintenance performed on any control device within 30 days of a written request by the DAQ.
f. The Permittee shall submit a summary report of the monitoring and recordkeeping activities given in Section(s) 2.1 E.1.c and Section 2.1 E.1.d above postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

2. 15A NCAC 02D .0516: SULFUR DIOXIDE EMISSIONS FROM COMBUSTION SOURCES

a. Emissions of sulfur dioxide from these kilns **(ID Nos. ESCPK1, ESCPK2, and ESCPK3)** shall not exceed 2.3 pounds per million Btu heat input. Sulfur dioxide formed by the combustion of sulfur in fuels, wastes, ores, and other substances shall be included when determining compliance with this standard.

Testing [15A NCAC 02Q .0508(f)]

b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 E.2.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0516.

Monitoring/Recordkeeping/Reporting [15A NCAC 02Q .0508(f)]

c. No monitoring/recordkeeping/reporting is required for sulfur dioxide emissions from the firing of natural gas in these kilns **(ID Nos. ESCPK1, ESCPK2, and ESCPK3)**.

3. 15A NCAC 02D .0521: CONTROL OF VISIBLE EMISSIONS

a. Visible emissions from these kilns **(ID Nos. ESCPK1, ESCPK2, and ESCPK3)** shall not be more than 20 percent opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 87 percent opacity.

Testing [15A NCAC 02Q .0508(f)]

b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 E.3.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521.

Monitoring [15A NCAC 02Q .0508(f)]

c. To ensure compliance, once a month the Permittee shall observe the emission points of these sources **(ID Nos. ESCPK1, ESCPK2, and ESCPK3)** for any visible emissions above normal. The monthly observation must be made for each month of the calendar year period to ensure compliance with this requirement. If visible emissions from a source are observed to be above normal, the Permittee shall either:
   i. take appropriate action to correct the above-normal emissions as soon as practicable and within the monitoring period and record the action taken as provided in the recordkeeping requirements below, or
   ii. demonstrate that the percent opacity from the emission points of the emission source in accordance with 15A NCAC 02D .2610 (Method 9) for 12 minutes is below the limit given in Section 2.1 E.3.a above.

   The Permittee shall be deemed to be in noncompliance with 15A NCAC 02D .0521 if the required monthly observations are not conducted as required; if the above-normal emissions are not corrected within the monitoring period or the percent opacity demonstration cannot be made.

Recordkeeping [15A NCAC 02Q .0508(f)]

d. The results of the monitoring shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The logbook shall record the following:

i. the date and time of each recorded action;
ii. the results of each observation and/or test noting those sources with emissions that were observed to be in noncompliance along with any corrective actions taken to reduce visible emissions; and
iii. the results of any corrective actions performed.

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521 if these records are not maintained.

Reporting [15A NCAC 02Q .0508(f)]

e. The Permittee shall submit a summary report of the monitoring and recordkeeping activities given in Section 2.1 E.3.c and Section 2.1 E.3.d above postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

F. Three roof granule mixing units (ID Nos. ESCPM1, ESCPM2, and ESCPM3) with three associated baghouses (2,648; 2,648; and 2,889 square feet of filter area; ID Nos. CDB11, CDB12, and CDB19, respectively)

The following table provides a summary of limits and standards for the emission source(s) described above:

Pollutant	Limits/Standards	Applicable Regulation
Particulate Matter	$E = 4.10 \times (P)^{0.67}$ for $P \leq 30$ tons per hour $E = 55.0 \times (P)^{0.11} - 40$ for $P \geq 30$ tons per hour Where: E = Allowable emission rate in pounds per hour; and P = Process weight in tons per hour	15A NCAC 02D .0515
Visible Emissions	20 percent opacity	15A NCAC 02D .0521
Particulate Matter	Compliance Assurance Monitoring See Section 2.2 C.1 – Multiple Emission Sources	15A NCAC 02D .0614
Odorous Emissions	**State-enforceable only** See Section 2.2 B.1 – Multiple Emission Sources	15A NCAC 02D .1806
Hazardous Air Pollutants	See Section 2.2 B.3 – Multiple Emission Sources	15A NCAC 02Q .0317 for avoidance of 15A NCAC 02D .1111
Toxic Air Pollutants	**State-enforceable only** See Section 2.2 B.2 – Multiple Emission Sources	15A NCAC 02D .1100
Toxic Air Pollutants	**State-enforceable only** See Section 2.2 B.4 – Multiple Emission Sources	15A NCAC 02Q .0711

1. 15A NCAC 02D .0515: PARTICULATES FROM MISCELLANEOUS INDUSTRIAL PROCESSES

a. Emissions of particulate matter from these roof granule mixing units **(ID Nos. ESCPM1, ESCPM2, and ESCPM3)** shall not exceed an allowable emission rate as calculated by the following equation:

$E = 4.10 \times P^{0.67}$ (for process rates less than or equal to 30 tons per hour), or
$E = 55.0 \times P^{0.11} - 40$ (for process rates greater than 30 tons per hour)

Where E = allowable emission rate in pounds per hour
P = process weight in tons per hour

Liquid and gaseous fuels and combustion air are not considered as part of the process weight.

Testing [15A NCAC 02Q .0508(f)]

b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 F.1.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0515.

Monitoring [15A NCAC 02Q .0508(f)]

c. Particulate matter emissions from these sources **(ID Nos. ESCPM1, ESCPM2, and ESCPM3)** shall be controlled by associated bagfilters **(ID Nos. CDB11, CDB12, and CDB19, respectively)**. To ensure compliance, the Permittee shall perform inspections and maintenance as recommended by the manufacturer. In addition to the manufacturer's inspection and maintenance recommendations, or if there are no manufacturer's inspection and maintenance recommendations, as a minimum, the inspection and maintenance requirement shall include the following:
   i. a monthly visual inspection of the system ductwork and material collection unit for leaks; and
   ii. an annual (for each 12-month period following the initial inspection) internal inspection of the bagfilter's structural integrity.

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0515 if the ductwork and bagfilters are not inspected and maintained.

Recordkeeping [15A NCAC 02Q .0508(f)]

d. The results of inspection and maintenance shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The logbook shall record the following:
   i. the date and time of each recorded action;
   ii. the results of each inspection;
   iii. the results of any maintenance performed on any control device; and
   iv. any variance from manufacturer's recommendations, if any, and corrections made.

   The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0515 if these records are not maintained.

Reporting [15A NCAC 02Q .0508(f)]

e. The Permittee shall submit the results of any maintenance performed on any control device within 30 days of a written request by the DAQ.
f. The Permittee shall submit a summary report of the monitoring and recordkeeping activities given in Section 2.1 F.1.c and Section 2.1 F.1.d above postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

2. 15A NCAC 02D .0521: CONTROL OF VISIBLE EMISSIONS

a. Visible emissions from these three roof granule mixing units **(ID Nos. ESCPM1, ESCPM2, and ESCPM3)** shall not be more than 20 percent opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 87 percent opacity.

Testing [15A NCAC 02Q .0508(f)]

b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 F.2.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521.

Monitoring [15A NCAC 02Q .0508(f)]

c. To ensure compliance, once a month the Permittee shall observe the emission points of these sources **(ID Nos. ESCPM1, ESCPM2, and ESCPM3)** for any visible emissions above normal. The monthly observation must be made for each month of the calendar year period to ensure compliance with this requirement. If visible emissions from a source are observed to be above normal, the Permittee shall either:
   i. take appropriate action to correct the above-normal emissions as soon as practicable and within the monitoring period and record the action taken as provided in the recordkeeping requirements below, or
   ii. demonstrate that the percent opacity from the emission points of the emission source in accordance with 15A NCAC 02D .2610 (Method 9) for 12 minutes is below the limit given in Section 2.1 F.2.a above.

   The Permittee shall be deemed to be in noncompliance with 15A NCAC 02D .0521 if the required monthly observations are not conducted as required; if the above-normal emissions are not corrected within the monitoring period or the percent opacity demonstration cannot be made.

Recordkeeping [15A NCAC 02Q .0508(f)]

d. The results of the monitoring shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The logbook shall record the following:
   i. the date and time of each recorded action;
   ii. the results of each observation and/or test noting those sources with emissions that were observed to be in noncompliance along with any corrective actions taken to reduce visible emissions; and
   iii. the results of any corrective actions performed.

   The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521 if these records are not maintained.

Reporting [15A NCAC 02Q .0508(f)]

e. The Permittee shall submit a summary report of the monitoring and recordkeeping activities given in Section 2.1 F.2.c and Section 2.1 F.2.d above postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

G. Three coolers (ID Nos. ESCPC1, ESCPC2, and ESCPC3)

The following table provides a summary of limits and standards for the emission source(s) described above:

Pollutant	Limits/Standards	Applicable Regulation
Particulate Matter	$E = 4.10 \times (P)^{0.67}$ for $P \leq 30$ tons per hour $E = 55.0 \times (P)^{0.11} - 40$ for $P \geq 30$ tons per hour Where: E = Allowable emission rate in pounds per hour; and P = Process weight in tons per hour	15A NCAC 02D .0515
Visible Emissions	20 percent opacity	15A NCAC 02D .0521
Toxic Air Pollutants	**State-enforceable only** See Section 2.2 B.2 – Multiple Emission Sources	15A NCAC 02D .1100
Odorous Emissions	**State-enforceable only** See Section 2.2 B.1 – Multiple Emission Sources	15A NCAC 02D .1806
Hazardous Air Pollutants	See Section 2.2 B.3 – Multiple Emission Sources	15A NCAC 02Q .0317 for avoidance of 15A NCAC 02D .1111
Toxic Air Pollutants	**State-enforceable only** See Section 2.2 B.4 – Multiple Emission Sources	15A NCAC 02Q .0711

1. 15A NCAC 02D .0515: PARTICULATES FROM MISCELLANEOUS INDUSTRIAL PROCESSES

a. Emissions of particulate matter from these cooling units **(ID Nos. ESCPC1, ESCPC2, and ESCPC3)** shall not exceed an allowable emission rate as calculated by the following equation:

$E = 4.10 \times P^{0.67}$ (for process rates less than or equal to 30 tons per hour), or
$E = 55.0 \times P^{0.11} - 40$ (for process rates greater than 30 tons per hour)

Where E = allowable emission rate in pounds per hour
P = process weight in tons per hour

Liquid and gaseous fuels and combustion air are not considered as part of the process weight.

Testing [15A NCAC 02Q .0508(f)]

b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 G.1.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0515.

Monitoring/Recordkeeping/Reporting [15A NCAC 02Q .0508(f)]

c. The Permittee shall maintain production records such that the process rates "P" in tons per hour, as specified by the formulas contained above, can be derived and shall make these records available to a DAQ authorized representative upon request. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0515 if the production records are not maintained or the types of materials and finishes are not monitored.

d. No reporting is required for particulate emissions from these sources **(ID Nos. ESCPC1, ESCPC2, and ESCPC3)**.

2. 15A NCAC 02D .0521: CONTROL OF VISIBLE EMISSIONS

a. Visible emissions from the three coolers **(ID Nos. ESCPC1, ESCPC2, and ESCPC3)** shall not be more than 20 percent opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 87 percent opacity.

Testing [15A NCAC 02Q .0508(f)]

b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of

this test are above the limit given in Section 2.1 G.2.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521.

Monitoring [15A NCAC 02Q .0508(f)]

c. To ensure compliance, once a month the Permittee shall observe the emission points of these sources **(ID Nos. ESCPC1, ESCPC2, and ESCPC3)** for any visible emissions above normal. The monthly observation must be made for each month of the calendar year period to ensure compliance with this requirement. If visible emissions from a source are observed to be above normal, the Permittee shall either:
   i. take appropriate action to correct the above-normal emissions as soon as practicable and within the monitoring period and record the action taken as provided in the recordkeeping requirements below, or
   ii. demonstrate that the percent opacity from the emission points of the emission source in accordance with 15A NCAC 02D .2610 (Method 9) for 12 minutes is below the limit given in Section 2.1 G.2.a above.

   The Permittee shall be deemed to be in noncompliance with 15A NCAC 02D .0521 if the required monthly observations are not conducted as required; if the above-normal emissions are not corrected within the monitoring period or the percent opacity demonstration cannot be made.

Recordkeeping [15A NCAC 02Q .0508(f)]

d. The results of the monitoring shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The logbook shall record the following:
   i. the date and time of each recorded action;
   ii. the results of each observation and/or test noting those sources with emissions that were observed to be in noncompliance along with any corrective actions taken to reduce visible emissions; and
   iii. the results of any corrective actions performed.

   The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521 if these records are not maintained.

Reporting [15A NCAC 02Q .0508(f)]

e. The Permittee shall submit a summary report of the monitoring and recordkeeping activities given in Section 2.1 G.2.c and Section 2.1 G.2.d above postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

2.2 Multiple Emission Source(s) Specific Limitations and Conditions

A. Non-process Fugitive Dust Emission Sources

The following table provides a summary of limits and standards for the emission source(s) described above:

Pollutant	Limits/Standards	Applicable Regulation
Particulate matter	**State-enforceable only** Fugitive non-process dust emissions shall not cause or contribute to substantive complaints	15A NCAC 02D .0540

1. 15A NCAC 02D .0540: PARTICULATES FROM FUGITIVE NON-PROCESS DUST EMISSION SOURCES.

a. For the purpose of this Rule the following definitions apply:
   i. "fugitive non-process dust emission" means particulate matter that is not collected by a capture system and is generated from areas such as pit areas, process areas, haul roads, stockpiles, and plant roads.
   ii. "substantive complaints" means complaints that are verified with physical evidence acceptable to the Division.

b. The Permittee shall not cause or allow fugitive non-process dust emissions to cause or contribute to substantive complaints.

c. If fugitive non-process dust emissions from a facility, required to comply with this Rule, cause or contribute to substantive complaints, the Permittee shall:
   i. within 30 days upon receipt of written notification from the Director of a second substantive complaint in a consecutive 12-month period, submit to the Director a written description of what has been done and what will be done to reduce fugitive non-process dust emissions from that part of the facility that caused the second substantive complaint;
   ii. within 60 days of receipt of written notification from the Director of a second substantive complaint in a consecutive 12-month period, submit to the Director a control plan as described in Paragraph (e) of this rule; and
   iii. within 30 days after the Director approves the plan, be in compliance with the plan.

d. The Director may require that the Permittee develop and submit a fugitive non-process dust control plan as described in Section 2.2 A.1.e, below if:
   i. ambient air quality measurements or dispersion modeling acceptable to the DAQ show violation or a potential for a violation of an ambient air quality standard for particulates in 15A NCAC 02D .0400 "Ambient Air Quality Standards;" or
   ii. if the DAQ observes excessive fugitive non-process dust emissions from the facility beyond the property boundaries.

   The control plan shall be submitted to the Director no later than 90 days after notification. The facility shall be in compliance with the plan within 30 days after the Director approves the plan.

e. The fugitive dust control plan shall:
   i. identify the sources of fugitive non-process dust emissions within the facility;
   ii. describe how fugitive non-process dust will be controlled from each identified source;
   iii. contain a schedule by which the plan will be implemented;
   iv. describe how the plan will be implemented, including training of facility personnel; and
   v. describe methods to verify compliance with the plan.

f. The Director shall approve the plan if he finds that:
   i. the plan contains all required elements in Section 2.2 A.1.e, above;
   ii. the proposed schedule contained in the plan will reduce fugitive non-process dust emissions in a timely manner;
   iii. the methods used to control fugitive non-process dust emissions are sufficient to prevent fugitive non-process dust emissions from causing or contributing to a violation of the ambient air quality standards for particulates; and
   iv. the described compliance verification methods are sufficient to verify compliance with the plan.

   If the Director finds that the proposed plan does not meet the requirements of this Paragraph, he shall notify the Permittee of any deficiencies in the proposed plan. The Permittee shall have 30 days after receiving written notification from the Director to correct the deficiencies.

g. If after a plan has been implemented, the Director finds that the plan inadequately controls fugitive non-process dust emissions, he shall require the owner or operator of the facility to correct the deficiencies in the plan. Within 90 days after receiving written notification from the Director identifying the deficiency, the owner or operator of the facility shall submit a revision to his plan to correct the deficiencies.

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0540 if a control plan is not submitted within the prescribed time or the facility does not comply with a control plan.

Monitoring/Recordkeeping/Reporting

h. No monitoring, recordkeeping, or reporting for particulates from fugitive non-process dust emissions from these sources pursuant to 15A NCAC 02D .0540 is required at this time.

B. Facility-wide affected emission sources

- **Four natural gas-fired dryers (ID Nos. ES1415, ESCPPH1, ESCPPH2, and ESCPPH3), as described in Sections 2.1 B and 2.1 D, above;**
- **Coloring Plant, as described in Section 2.1 C, above;**
- **Three natural gas-fired kilns (ID Nos. ESCPK1, ESCPK2, and ESCPK3), as described in Section 2.1 E, above;**
- **Three roof granule mixing units (ID Nos. ESCPM1, ESCPM2, and ESCPM3), as described in Section 2.1 F, above; and**
- **Three coolers (ID Nos. ESCPC1, ESCPC2 and ESCPC3), as described in Section 2.1 G, above**

The following table provides a summary of limits and standards for the emission source(s) described above:

Pollutant	Limits/Standards	Applicable Regulation
Odorous Emissions	Facility-wide: Odorous emissions must be controlled	**State-enforceable only** 15A NCAC 02D .1806
Toxic Air Pollutants	Facility-wide: Modeled emission rates	**State-enforceable only** 15A NCAC 02D .1100
Hazardous Air Pollutants	Facility-wide: Less than 10 tons per year for a single HAP per 12-month period Less than 25 tons per year for a combined HAPs per 12-month period	15A NCAC 02Q .0317 for avoidance of 15A NCAC 02D .1111
Toxic Air Pollutants	Facility-wide: Emission limits for toxic air pollutant emission rates	**State-enforceable only** 15A NCAC 02Q .0711

State-enforceable only

1. 15A NCAC 02D .1806: CONTROL AND PROHIBITION OF ODOROUS EMISSIONS

The Permittee shall not operate the facility without implementing management practices or installing and operating odor control equipment sufficient to prevent odorous emissions from the facility from causing or contributing to objectionable odors beyond the facility's boundary.

State-enforceable only

2. TOXIC AIR POLLUTANT EMISSIONS LIMITATION AND REPORTING REQUIREMENT

a. Pursuant to 15A NCAC 02D .1100 and in accordance with the approved application (1900104.11A), for an air toxic compliance demonstration, the following permit limits shall not be exceeded:

Emission Source(s)	Toxic Air Pollutant(s)	Emission Limit(s)
Facility-wide	Arsenic & Compounds (total mass of elemental AS, arsine and all inorganic compounds) (ASC-7778394)	0.69 lb/yr
	Cadmium Metal, elemental, unreacted (Component of CDC) (7440-43-9)	3.79 lb/yr

b. The Permittee has submitted a toxic pollutant dispersion modeling analysis dated November 21, 2011 for the facility's toxic air pollutant emissions as listed in the above table. The modeling analysis was reviewed and approved by the AQAB on October 1, 2012. Placement of the emission sources, configuration of the emission points, and operation of the source shall be in accordance with the submitted dispersion modeling analysis and should reflect any changes from the original analysis submittal as outlined in the AQAB review memorandum.

3. 15A NCAC 02Q .0317: AVOIDANCE CONDITIONS for avoidance of 15A NCAC 02D .1111: MAXIMUM ACHIEVABLE CONTROL TECHNOLOGY

a. In order to remain classified as a minor source for hazardous air pollutants and avoid applicability of this regulation, 15A NCAC 02D .1111, facility-wide emissions shall be less than the following limitations:
   i. 25 tons per consecutive 12-month period of total, combined hazardous air pollutants; and
   ii. 10 tons per consecutive 12-month period of any individual hazardous air pollutant.

Testing [15A NCAC 02Q .0508(f)]

b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above either of the limits given in Section 2.2 B.3.a, above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111.

Monitoring [15A NCAC 02Q .0508(f)]

c. To ensure compliance, the Permittee shall monitor the total HAP emissions from facility-wide sources of HAP emissions on a monthly basis utilizing, as appropriate:
   i. a mass balance method (e.g., multiplying the amount of HAP-containing material utilized by the HAP content of that material);
   ii. emission factors approved by NC DAQ (e.g., the current emission factors found in the EPA AP-42 document for natural gas combustion); and/or
   iii. any other appropriate method of emission estimation approved by NC DAQ.

   The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if this monitoring is not performed.

Recordkeeping [15A NCAC 02Q .0508(f)]

d. The Permittee shall retain records (written or electronic format) of the monitoring conducted pursuant to Section 2.2 B.3.c, above. The Permittee shall maintain these records on-site for a period of at least five years after the date of the record, or until facility becomes major for purposes of 15A NCAC 02D .1111 and 40 CFR Part 63 and make these records available for review by authorized DAQ personnel upon request.
   The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if these records are not maintained.

Reporting [15A NCAC 02Q .0508(f)]

e. The Permittee shall submit a semiannual monitoring summary report postmarked or delivered on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. These semiannual reports shall clearly identify of all instances of deviations from the requirements of this permit.

State-enforceable only

4. 15A NCAC 02Q .0711: EMISSION RATES REQUIRING A PERMIT

a. The facility shall be operated and maintained in such a manner that any new, existing or increased actual emissions of any Toxic Air Pollutant (TAP) listed in 15A NCAC 02Q .0711 or in this permit from all sources at the facility (excluding those sources exempt under 15A NCAC 02Q .0702 "Exemptions"), including fugitive emissions and emission sources not otherwise required to have a permit, will not exceed its respective TAP permitting emission rates (TPER) listed in 15A NCAC 02Q .0711 without first obtaining an air permit to construct or operate.
b. PRIOR to exceeding any of the TPERs listed in 15A NCAC 02Q .0711, the Permittee shall be responsible for obtaining an air permit to emit TAPs and for demonstrating compliance with the requirements found in 15A NCAC 02D .1100 "Control of Toxic Air Pollutants."
c. The Permittee shall maintain at the facility records of operational information sufficient for demonstrating to the Division of Air Quality staff that actual TAPs are less than the rate listed in 15A NCAC 02Q .0711.
d. The TPER table listed below is provided to assist the Permittee in determining when an air permit is required pursuant to 15A NCAC 02Q .0711(a) and may not represent all TAPs being emitted from the facility. This table will be updated at such time as the permit is either modified or renewed.

Pollutant (CAS Number)	TPERs Limitations			
	Carcinogens (lb/yr)	Chronic Toxicants (lb/day)	Acute Systemic Toxicants (lb/hr)	Acute Irritants (lb/hr)
Benzene (71-43-2)	8.1			
Beryllium (7440-41-7)	0.28			
p-Dichlorobenzene (106-46-7)				16.8
Formaldehyde (50-00-0)				0.04
n-Hexane (110-54-3)		23		
Manganese and compounds (Not applicable)		0.63		
Mercury (7439-97-6)		0.013		
Nickel metal (7440-02-0)		0.13		
Toluene (108-88-3)		98		14.4

C. Compliance Assurance Monitoring Affected Sources

1. 15A NCAC 02D .0614: Compliance Assurance Monitoring
The Permittee shall monitor the visible emissions from the outlets of the sources listed below.

a. The Permittee must ensure that PM10 emitted from the natural gas-fired kilns **(ID Nos. ESCPK1, ESCPK2, and ESCPK3)** and roof granule mixing units **(ID Nos. ESCPM1, ESCPM2, and ESCPM3)** are controlled by bagfilters **(ID Nos. CDB13, CDB14, and CDB20; and CDB11, CDB12, and CDB19, respectively)**.

Background

b. Emission Units:
Three natural gas-fired kilns **(ID Nos. ESCPK1, ESCPK2, and ESCPK3)**, and
Three roof granule mixing units **(ID Nos. ESCPM1, ESCPM2, and ESCPM3)**

c. **Applicable Regulation, Emission Limit, and Monitoring Requirements:**

i. Applicable Regulation: 15A NCAC 02D .0515, Particulate matter (PM) from miscellaneous industrial processes

ii. Emission limits: Maximum allowable emission rate, E, in pounds per hour as calculated by the equations found in Section 2.1 E.1.a and Section 2.1 F.1.a above.

iii. Control Technology: Pulse-jet bagfilters
ID Nos. CDB13, CDB14, and CDB20; and CDB11, CDB12, and CDB19, respectively

Monitoring Approach

d. The key elements of the monitoring approach for particulate matter, including parameters to be monitored, parameter ranges and performance criteria are presented in the following table.

Measure	Indicator
I. Indicator	Pressure drop (ΔP)
Measurement Approach	ΔP across each bagfilter is measured with a magnehelic differential pressure gauge.
II. Indicator Range	An excursion is defined as a pressure drop greater than 6.0 inches of water or less than 2.0 inches of water, except readings that occur within 120 operational hours from the installation of a new filter; then, an excursion is defined as a pressure drop greater than 7.0 inches of water or less than 0 inches of water.
Quality Improvement Plan (QIP) Threshold	In the event of an excursion the Permittee shall take appropriate action to correct the excursion as soon as practicable. No QIP threshold is selected.
III. Performance Criteria	
Data Representativeness	Pressure taps are located at each bagfilters inlet and outlet.
Verification of Operational Status	N/A
QA/QC Practices and Criteria	Semi-annual calibration of pressure monitoring gauges.
Monitoring Frequency	ΔP is monitored continuously while the emission unit is in operation.
Data Collection Procedure	At a minimum, the pressure transmitters will collect and record a data point every 5 minutes while the process is in operation which will capture and document the occurrence of any pressure excursion. When the processes are offline, any data collected for the baghouse would be excluded from the average.

Measure	Indicator
Averaging Period	Instantaneous differential pressure (dP) measurements are recorded every second in Historian. Each day, the previous day's 5-minute average records for each source are calculated from the 1 second values and stored via an automated SQL query of the Historian data, then these records are exported to a Daily Differential Pressure PDF Report that is automatically saved to the plant's environmental records files. The Report displays the average 5-minute records and calculated hourly and daily average dP for the above bagfilters. Average ΔP is recorded hourly for each associated bagfilter based on an arithmetic mean of the data points read and recorded during each hour.

Recordkeeping and Reporting [15A NCAC 02Q .0508(f) and 40 CFR 64.9]

e. The Permittee shall comply with the recordkeeping requirements of 40 CFR 64.9(b) and submit a summary report of the monitoring and recordkeeping activities given in Section 2.2 C.1.c and Section 2.2 C.1.d above, postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of 40 CFR 64.9(a) and include, at a minimum, the following information, as applicable:
   i. summary information on the number, duration and cause (including unknown cause, if applicable) of excursions or exceedances, as applicable, and the corrective actions taken;
   ii. summary information on the number, duration and cause (including unknown cause, if applicable) for monitor downtime incidents (other than downtime associated with zero and span or other daily calibration checks, if applicable); and
   iii. a description of the actions taken to implement a QIP during the reporting period as specified in 40 CFR 64.8. Upon completion of a QIP, the owner or operator shall include in the next summary report documentation that the implementation of the plan has been completed and reduced the likelihood of similar levels of excursions or exceedances occurring.

2. 15A NCAC 02D .0614: Compliance Assurance Monitoring

The Permittee shall monitor the visible emissions from the outlets of the sources mentioned below:

a. The Permittee must ensure that PM10 emitted from the crushing and screening unit **(ID No. ESC22.2)** are controlled by bagfilter **(ID No. CDB3)**.

Background

b. Emission Units: Crushing and screening units

c. **Applicable Regulation, Emission Limit, and Monitoring Requirements:**
   i. Applicable Regulation: 15A NCAC 02D .0524, New Source Performance Standards, 40 CFR 60, Subpart OOO
   ii. Emission limits: Standard for particulate matter in Section 2.1 A.2.h above pursuant to 40 CFR 60.672
   iii. Control Technology: Pulse-jet bagfilter ID No. CDB3

Monitoring Approach

d. The key elements of the monitoring approach for particulate matter, including parameters to be monitored, parameter ranges and performance criteria are presented in the following table.

Measure	Indicator
I. Indicator	Pressure drop (ΔP)
Measurement Approach	ΔP across each bagfilter is measured with a magnehelic differential pressure gauge.
II. Indicator Range	An excursion is defined as a pressure drop greater than 6.0 inches of water or less than 2.0 inches of water, except readings that occur within 120 operational hours from the installation of a new filter; then, an excursion is defined as a pressure drop greater than 7.0 inches of water or less than 0 inches of water.
Quality Improvement Plan (QIP) Threshold	In the event of an excursion the Permittee shall take appropriate action to correct the excursion as soon as practicable. No QIP threshold is selected.
III. Performance Criteria	
Data Representativeness	Pressure taps are located at each bagfilters inlet and outlet.
Verification of Operational Status	N/A
QA/QC Practices and Criteria	Semi-annual calibration of pressure monitoring gauges.
Monitoring Frequency	ΔP is monitored continuously while the emission unit is in operation.
Data Collection Procedure	At a minimum, the pressure transmitters will collect and record a data point every 5 minutes while the process is in operation which will capture and document the occurrence of any pressure excursion. When the processes are offline, any data collected for the baghouse would be excluded from the average.
Averaging Period	Average ΔP is recorded daily for each associated bagfilter based on an arithmetic mean of the data points read and recorded during each day.

Recordkeeping and Reporting [15A NCAC 02Q .0508(f) and 40 CFR 64.9]

e. The Permittee shall comply with the recordkeeping requirements of 40 CFR 64.9(b) and submit a summary report of the monitoring and recordkeeping activities given in Section 2.2 C.2.c and Section 2.2 C.2.d above, postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified. The report shall comply with the reporting requirements of 40 CFR 64.9(a) and include, at a minimum, the following information, as applicable:
   i. summary of information on the number, duration, and cause (including unknown cause, if applicable) of excursions or exceedances, as applicable, and the corrective actions taken;
   ii. summary information on the number, duration and cause (including unknown cause, if applicable) for monitor downtime incidents (other than downtime associated with zero and span or other daily calibration checks, if applicable); and
   iii. a description of the actions taken to implement a QIP during the reporting period as specified in 40 CFR 64.8. Upon completion of a QIP, the owner or operator shall include in the next summary report documentation that the implementation of the plan has been completed and reduced the likelihood of similar levels of excursions or exceedances occurring.

3. 15A NCAC 02D .0614: Compliance Assurance Monitoring

The Permittee shall monitor the visible emissions from the outlets of the sources mentioned below.

a. The Permittee must ensure that PM_{10} emitted from the crushing and screening natural gas-fired dryer **(ID No. ES1415)** and the coloring plant natural gas-fired dryer lines 1 and 2 **(ID Nos. ESCPPH1 and ESCPPH2)** are controlled by bagfilters **(ID Nos. CDB3; and CDB9 and CDB10, respectively)**.

Background

b. Emission Units: Crushing and screening units

c. **Applicable Regulation, Emission Limit, and Monitoring Requirements:**

i. Applicable Regulation: 15A NCAC 02D .0524, New Source Performance Standards, 40 CFR 60, Subpart UUU

ii. Emission limits: Standard for particulate matter in Section 2.1 B.2.b and Section 2.1 D.2.b above pursuant to 40 CFR 60.732

iii. Control Technology: Pulse-jet bagfilters
ID Nos. CDB3; and CDB9 and CDB10, respectively

Monitoring Approach

d. The key elements of the monitoring approach for particulate matter, including parameters to be monitored, parameter ranges and performance criteria are presented in the following table.

Measure	Indicator
I. Indicator	Visible emissions
Measurement Approach	Visible emissions from the crushing and screening process will be monitored continuously using a continuous opacity monitoring system (COM) on the common stack (bagfilter outlet).
II. Indicator Range	An excursion is defined as visible emissions in amounts greater than **9%** (six-minute average). Excursions trigger an inspection of the control equipment and/or the COMS, corrective action, and a reporting requirement.
QIP Threshold	The QIP threshold is six excursions in a six-month reporting period.
III. Performance Criteria	
A. Data Representativeness	Measurements are being made at the emission point (bagfilter outlet) of the common stack.
B. Verification of Operational Status	N/A
C. QA/QC Practices	The COM systems shall be calibrated, maintained, and operated according to 40 CFR 60, Appendix B, Performance Specifications (PS1) and 40 CFR 60, Appendix F, Quality Assurance Procedures.
D. Monitoring Frequency	Data is collected continuously with the COM system.
E. Data Collection Procedure	Data from the COM system is collected electronically and maintained on the data acquisition and handling system (DAHS) computer. Instantaneous opacity measurements from the COMS are recorded once every ten (10) seconds in the DAHS. The software Airvision is used to automatically calculate and record 6-minute block averages for opacity from the 10-second instantaneous measurements recorded in the DAHS hardware.
F. Averaging Periods	Six-minute Average

Recordkeeping and Reporting [15A NCAC 02Q .0508(f) and 40 CFR 64.9]

e. The Permittee shall comply with the recordkeeping requirements of 40 CFR 64.9(b) and submit a summary report of the monitoring and recordkeeping activities given in Section 2.2 C.3.c and Section 2.2 C.3.d above, postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified. The report shall comply with the reporting requirements of 40 CFR 64.9(a) and include, at a minimum, the following information, as applicable:
   i. summary information on the number, duration and cause (including unknown cause, if applicable) of excursion or exceedances, as applicable, and the corrective actions taken;
   ii. summary information on the number, duration and cause (including unknown cause, if applicable) for monitor downtime incidents (other than downtime associated with zero and span or other daily calibration checks, if applicable); and
   iii. a description of the actions taken to implement a QIP during the reporting period as specified in 40 CFR 64.8. Upon completion of a QIP, the owner or operator shall include in the next summary report documentation that the implementation of the plan has been completed and reduced the likelihood of similar levels of excursions or exceedances occurring.

SECTION 3 - INSIGNIFICANT ACTIVITIES PER 15A NCAC 02Q .0503(8)

Emission Source ID No.	Emission Source Description[1,2]
Sources at Crushing and Screening Plant	
IS-1	Vacuum system for building 13 crushing and screening
IS-2	Crusher building unit heater exhaust fan #3
IS-3	Crusher building exhaust fan #1
IS-4	Crusher building exhaust fan #2
IS-5	Crusher building restroom exhaust fan
IS-6	Screening building unit heater exhaust vent
IS-7	Screening building exhaust fan #1
IS-8	Screening building restroom exhaust fan
IS-9	Screening building exhaust fan #2
IS-32 **NSPS OOO**	Portable backup conveyor to dryer feed conveyor No. 1 (ES8913F)
IS-F123	Plant feed conveyor No. 1
IS-F56A	Grade loading hopper
IS-F56B	Grade silo loadout
Source at Coloring Plant	
IS-10	Coloring building exhaust fan #1
IS-11	Coloring building exhaust fan #2
IS-12	Coloring building exhaust fan #3
IS-13	Coloring building exhaust fan #4
IS-14	Coloring building exhaust fan #5
IS-15	Coloring building exhaust fan #6
IS-16	Coloring building exhaust fan #7
IS-17	Coloring building exhaust fan #8
IS-18	Finished granule storage building exhaust fan #1
IS-19	Finished granule storage building exhaust fan #2
IS-20	Finished granule storage building exhaust fan #3
IS-21	Finished granule storage building exhaust fan #4
IS-22	Tank farm building exhaust fan
IS-23	Warehouse area unit heater exhaust fan
IS-27	Warehouse area restroom exhaust fan
IS-A1	B3 liquid clay tank (20,000 gallon capacity)
IS-A2	Albion clay tank (20,000 gallon capacity)
IS-A3	Sodium silicate tank (20,000 gallon capacity)
IS-A4	Sodium silicate tank (20,000 gallon capacity)
IS-A5	Magnesium chloride tank (6,000 gallon capacity)
IS-A6	Slate oil tank (20,000 gallon capacity)
IS-A8	Mix tank No. 1 (325 gallon capacity)

Emission Source ID No.	Emission Source Description[1,2]
IS-A10	Hold tank No. 1 (500 gallon capacity)
IS-A12	Mix tank No. 2 (325 gallon capacity)
IS-A13	Hold tank No. 2 (500 gallon capacity)
IS-A15	Sludge tank (5,000 gallon capacity)
IS-A16	Acrylate polymer (DREW) tank (10,780 gallon capacity)
IS-A17	Acrylate polymer (DREW) day tank (400 gallon capacity)
IS-ESCPA1	Raw granule transfer conveyor (RTC)/conveyor No. 27/ load-in to raw granule transfer conveyor No. 4 (RCTC4)/ conveyor No. 4 controlled by raw granule baghouse (5,472 square feet of filter area; ID No. CDB8)
IS-ESCPA2	Raw granule bin No. 3 (RGB3) controlled by raw granule baghouse (5,472 square feet of filter area; ID No. CDB8)
IS-ESCPA3	Rerun bin No. 3 (RRB3) controlled by raw granule baghouse (5,472 square feet of filter area; ID No. CDB8)
IS-ESCP1	Rerun conveyor controlled by finished granule baghouse (5,825 square feet of filter area; ID No. CDB15)
IS-ESCP2	Consolidation conveyor controlled by finished granule baghouse (5,825 square feet of filter area; ID No. CDB15)
IS-ESCP3	Line 2 rerun/headlap conveyor controlled by finished granule baghouse (5,825 square feet of filter area; ID No. CDB15)
IS-ESCP4	Headlap/consolidation conveyor controlled by finished granule baghouse (5,825 square feet of filter area; ID No. CDB15)
IS-ESCP15A	Rerun elevator No. 1, two pickups controlled by raw granule baghouse (5,472 square feet of filter area; ID No. CDB8)
IS-ESCP15B	Rerun elevator No. 2, two pickups controlled by raw granule baghouse (5,472 square feet of filter area; ID No. CDB8)
IS-ESCP43	Product loadout conveyor
IS-ESCP44	Transload (portable) conveyor
IS-ESCPBHWC	Dust conveyor
IS-E30	Elevator 12 (moves dust from baghouses in the coloring portion of plant)
IS-ESCPC-8	Consolidation elevator controlled by finished granule baghouse (5,825 square feet of filter area; ID No. CDB15)
IS-ESCPL1-8	Line 1 product elevator controlled by finished granule baghouse (5,825 square feet of filter area; ID No. CDB15)
IS-ESCPL2-8	Line 2 product elevator controlled by finished granule baghouse (5,825 square feet of filter area; ID No. CDB15)
IS-ESCPVF16A	Rerun bin No. 1 controlled by raw granule baghouse (5,472 square feet of filter area; ID No. CDB8)
IS-ESCPVF16B	Rerun bin No. 2 controlled by raw granule baghouse (5,472 square feet of filter area; ID No. CDB8)
Sources Located Outside	
IS-A7	Reclaim water tank (32,000 gallon capacity)
IS-A9	Wastewater tank (17,000 gallon capacity)
IS-A18	Recycle water tank (10,000 gallon capacity)
IS-A19	Diesel storage tank (280 gallon capacity)
IS-A20 **MACT CCCCCC**	Gasoline storage tank (280 gallon capacity)
IS-A21	Diesel storage tank (550 gallon capacity)

Emission Source ID No.	Emission Source Description[1,2]
IS-FP **MACT ZZZZ**	Diesel-fired emergency fire water pump (290 hp)
Sources in Shipping Area	
IS-FCP34	Waste bin load
IS-FCP35	Waste bin unload
IS-FCP363940	100 enclosed storage bins
Sources in Office Area	
IS-24	Office area unit heater exhaust fan
IS-25	Office area exhaust fan
IS-26	Office area restrooms exhaust fan
IS-28	Office area restrooms exhaust fan #1
IS-29	Office area restrooms exhaust fan #2
Building 30 Laboratory	
IS-30	Laboratory frame hood
IS-31	Laboratory dispatch machine

[1] Because an activity is insignificant does not mean that the activity is exempted from an applicable requirement (Federal or State) or that the Permittee is exempted from demonstrating compliance with any applicable requirement.

[2] When applicable, emissions from stationary source activities identified above shall be included in determining compliance with the permit requirements for toxic air pollutants under 15A NCAC 02D .1100 “Control of Toxic Air Pollutants” or 02Q .0711 “Emission Rates Requiring a Permit.”

SECTION 4 - GENERAL CONDITIONS (version 8.0, 07/10/2024)

This section describes terms and conditions applicable to this Title V facility.

A. **General Provisions** [NCGS 143-215 and 15A NCAC 02Q .0508(i)(16)]
1. Terms not otherwise defined in this permit shall have the meaning assigned to such terms as defined in 15A NCAC 02D and 02Q.
2. The terms, conditions, requirements, limitations, and restrictions set forth in this permit are binding and enforceable pursuant to NCGS 143-215.114A and 143-215.114B, including assessment of civil and/or criminal penalties. Any unauthorized deviation from the conditions of this permit may constitute grounds for revocation and/or enforcement action by the DAQ.
3. This permit is not a waiver of or approval of any other Department permits that may be required for other aspects of the facility which are not addressed in this permit.
4. This permit does not relieve the Permittee from liability for harm or injury to human health or welfare, animal or plant life, or property caused by the construction or operation of this permitted facility, or from penalties therefore, nor does it allow the Permittee to cause pollution in contravention of state laws or rules, unless specifically authorized by an order from the North Carolina Environmental Management Commission.
5. Except as identified as state-only requirements in this permit, all terms and conditions contained herein shall be enforceable by the DAQ, the EPA, and citizens of the United States as defined in the Federal Clean Air Act.
6. Any stationary source of air pollution shall not be operated, maintained, or modified without the appropriate and valid permits issued by the DAQ, unless the source is exempted by rule. The DAQ may issue a permit only after it receives reasonable assurance that the installation will not cause air pollution in violation of any of the applicable requirements. A permitted installation may only be operated, maintained, constructed, expanded, or modified in a manner that is consistent with the terms of this permit.

B. **Permit Availability** [15A NCAC 02Q .0507(k) and .0508(i)(9)(B)]
The Permittee shall have available at the facility a copy of this permit and shall retain for the duration of the permit term one complete copy of the application(s) and any information submitted in support of the application package. The permit and application shall be made available to an authorized representative of the Department of Environmental Quality upon request.

C. **Severability Clause** [15A NCAC 02Q .0508(i)(2)]
In the event of an administrative challenge to a final and binding permit in which a condition is held to be invalid, the provisions in this permit are severable so that all requirements contained in the permit, except those held to be invalid, shall remain valid and must be complied with.

D. **Submissions** [15A NCAC 02Q .0507(e) and 02Q .0508(i)(16)]
Except as otherwise specified herein, one copy of all documents, reports, test data, monitoring data, notifications, request for renewal, and any other information required by this permit shall be submitted to the appropriate Regional Office. Refer to the Regional Office address on the cover page of this permit. For continuous emissions monitoring systems (CEMS) reports, continuous opacity monitoring systems (COMS) reports, quality assurance (QA)/quality control (QC) reports, acid rain CEM certification reports, and NOx budget CEM certification reports, one copy shall be sent to the appropriate Regional Office and one copy shall be sent to:

Supervisor, Stationary Source Compliance
North Carolina Division of Air Quality
1641 Mail Service Center
Raleigh, NC 27699-1641

All submittals shall include the facility name and Facility ID number (refer to the cover page of this permit).

E. **Duty to Comply** [15A NCAC 02Q .0508(i)(3)]
The Permittee shall comply with all terms, conditions, requirements, limitations and restrictions set forth in this permit. Noncompliance with any permit condition except conditions identified as state-only requirements constitutes a violation of the Federal Clean Air Act. Noncompliance with any permit condition is grounds for enforcement action, for permit termination, revocation and reissuance, or modification, or for denial of a permit renewal application.

F. **Circumvention** - STATE ENFORCEABLE ONLY
The facility shall be properly operated and maintained at all times in a manner that will effect an overall reduction in air pollution. Unless otherwise specified by this permit, no emission source may be operated without the concurrent operation of its associated air pollution control device(s) and appurtenances.

G. **Title V Permit Modifications**
1. Administrative Permit Amendments [15A NCAC 02Q .0514]
The Permittee shall submit an application for an administrative permit amendment in accordance with 15A NCAC 02Q .0514.
2. Transfer in Ownership or Operation and Application Submittal Content [15A NCAC 02Q .0524 and 02Q .0505]
The Permittee shall submit an application for an ownership change in accordance with 15A NCAC 02Q.0524 and 02Q .0505.
3. Minor Permit Modifications [15A NCAC 02Q .0515]
The Permittee shall submit an application for a minor permit modification in accordance with 15A NCAC 02Q .0515.
4. Significant Permit Modifications [15A NCAC 02Q .0516]
The Permittee shall submit an application for a significant permit modification in accordance with 15A NCAC 02Q .0516.
5. Reopening for Cause [15A NCAC 02Q .0517]
The Permittee shall submit an application for reopening for cause in accordance with 15A NCAC 02Q .0517.

H. **Changes Not Requiring Permit Modifications**
1. Reporting Requirements [15A NCAC 02Q .0508(f)]
Any of the following that would result in new or increased emissions from the emission source(s) listed in Section 1 must be reported to the Regional Supervisor, DAQ:
   a. changes in the information submitted in the application;
   b. changes that modify equipment or processes; or
   c. changes in the quantity or quality of materials processed.

   If appropriate, modifications to the permit may then be made by the DAQ to reflect any necessary changes in the permit conditions. In no case are any new or increased emissions allowed that will cause a violation of the emission limitations specified herein.
2. Section 502(b)(10) Changes [15A NCAC 02Q .0523(a)]
   a. "Section 502(b)(10) changes" means changes that contravene an express permit term or condition. Such changes do not include changes that would violate applicable requirements or contravene federally enforceable permit terms and conditions that are monitoring (including test methods), recordkeeping, reporting, or compliance certification requirements.
   b. The Permittee may make Section 502(b)(10) changes without having the permit revised if:
      i. the changes are not a modification under Title I of the Federal Clean Air Act;
      ii. the changes do not cause the allowable emissions under the permit to be exceeded;
      iii. the Permittee notifies the Director and EPA with written notification at least seven days before the change is made; and
      iv. the Permittee shall attach the notice to the relevant permit.
   c. The written notification shall include:
      i. a description of the change;
      ii. the date on which the change will occur;
      iii. any change in emissions; and
      iv. any permit term or condition that is no longer applicable as a result of the change.
   d. Section 502(b)(10) changes shall be made in the permit the next time that the permit is revised or renewed, whichever comes first.
3. Off Permit Changes [15A NCAC 02Q .0523(b)]
The Permittee may make changes in the operation or emissions without revising the permit if:
   a. the change affects only insignificant activities and the activities remain insignificant after the change; or
   b. the change is not covered under any applicable requirement.
4. Emissions Trading [15A NCAC 02Q .0523(c)]
To the extent that emissions trading is allowed under 15A NCAC 02D, including subsequently adopted maximum achievable control technology standards, emissions trading shall be allowed without permit revision pursuant to 15A NCAC 02Q .0523(c).

I.A **Reporting Requirements for Excess Emissions** [15A NCAC 02D .0535(f) and 02Q .0508(f)(2)]

1. "Excess Emissions" - means an emission rate that exceeds any applicable emission limitation or standard allowed by any rule in Sections .0500, .0900, .1200, or .1400 of Subchapter 02D; or by a permit condition; or that exceeds an emission limit established in a permit issued under 15A NCAC 02Q .0700. *(Note: Definitions of excess emissions under 02D .1110 and 02D .1111 shall apply where defined by rule.)*
2. If a source is required to report excess emissions under NSPS (15A NCAC 02D .0524), NESHAPS (15A NCAC 02D .1110 or .1111), or the operating permit provides for periodic (e.g., quarterly) reporting of excess emissions, reporting shall be performed as prescribed therein.
3. If the source is not subject to NSPS (15A NCAC 02D .0524), NESHAPS (15A NCAC 02D .1110 or .1111), or these rules do NOT define "excess emissions," the Permittee shall report excess emissions in accordance with 15A NCAC 02D .0535 as follows:
   a. Pursuant to 15A NCAC 02D .0535, if excess emissions last for more than four hours resulting from a malfunction, a breakdown of process or control equipment, or any other abnormal condition, the owner or operator shall:
      i. notify the Regional Supervisor or Director of any such occurrence by 9:00 a.m. Eastern Time of the Division's next business day of becoming aware of the occurrence and provide:
         - name and location of the facility;
         - nature and cause of the malfunction or breakdown;
         - time when the malfunction or breakdown is first observed;
         - expected duration; and
         - estimated rate of emissions;
      ii. notify the Regional Supervisor or Director immediately when corrective measures have been accomplished; and
      iii. submit to the Regional Supervisor or Director within 15 days a written report as described in 15A NCAC 02D .0535(f)(3).

I.B **Reporting Requirements for Permit Deviations** [15A NCAC 02D .0535(f) and 02Q .0508(f)(2)]

1. "Permit Deviations" - for the purposes of this condition, any action or condition not in accordance with the terms and conditions of this permit including those attributable to upset conditions as well as excess emissions as defined above lasting less than four hours.
2. Pursuant to 15A NCAC 02Q .0508(f)(2), the Permittee shall report deviations from permit requirements (terms and conditions) quarterly by notifying the Regional Supervisor or Director of all other deviations from permit requirements not covered under 15A NCAC 02D .0535. A written report to the Regional Supervisor shall include the probable cause of such deviation and any corrective actions or preventative actions taken. The responsible official shall certify all deviations from permit requirements.

I.C **Other Requirements under 15A NCAC 02D .0535**

The Permittee shall comply with all other applicable requirements contained in 15A NCAC 02D .0535, including 15A NCAC 02D .0535(c) as follows:

1. Any excess emissions that do not occur during start-up and shut-down shall be considered a violation of the appropriate rule unless the owner or operator of the sources demonstrates to the Director that the excess emissions are a result of a malfunction. The Director shall consider, along with any other pertinent information, the criteria contained in 15A NCAC 02D .0535(c)(1) through (7).
2. 15A NCAC 02D .0535(g). Excess emissions during start-up and shut-down shall be considered a violation of the appropriate rule if the owner or operator cannot demonstrate that excess emissions are unavoidable.

J. **RESERVED**

K. **Permit Renewal** [15A NCAC 02Q .0508(e) and 02Q .0513(b)]

This 15A NCAC 02Q .0500 permit is issued for a fixed term not to exceed five years and shall expire at the end of its term. Permit expiration terminates the facility's right to operate unless a complete 15A NCAC 02Q .0500 renewal application is submitted at least six months before the date of permit expiration. If the Permittee or applicant has complied with 15A NCAC 02Q .0512(b)(1), this 15A NCAC 02Q .0500 permit shall not expire until the renewal permit has been issued or denied. Permit expiration under 15A NCAC 02Q .0400 terminates the facility's right to operate unless a complete 15A NCAC 02Q .0400 renewal application is submitted at least six months before the date of permit expiration for facilities subject to 15A NCAC 02Q .0400 requirements. In either of these events, all terms and conditions of these permits shall remain in effect until the renewal permits have been issued or denied.

L. **Need to Halt or Reduce Activity Not a Defense** [15A NCAC 02Q .0508(i)(4)]
It shall not be a defense for a Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

M. **Duty to Provide Information (submittal of information)** [15A NCAC 02Q .0508(i)(9)]
1. The Permittee shall furnish to the DAQ, in a timely manner, any reasonable information that the Director may request in **writing** to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit.
2. The Permittee shall furnish the DAQ copies of records required to be kept by the permit when such copies are requested by the Director. For information claimed to be confidential, the Permittee may furnish such records directly to the EPA upon request along with a claim of confidentiality.

N. **Duty to Supplement** [15A NCAC 02Q .0507(f)]
The Permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information to the DAQ. The Permittee shall also provide additional information as necessary to address any requirement that becomes applicable to the facility after the date a complete permit application was submitted but prior to the release of the draft permit.

O. **Retention of Records** [15A NCAC 02Q .0508(f) and 02Q .0508(l)]
The Permittee shall retain records of all required monitoring data and supporting information for a period of at least five years from the date of the monitoring sample, measurement, report, or application. Supporting information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring information, and copies of all reports required by the permit. These records shall be maintained in a form suitable and readily available for expeditious inspection and review. Any records required by the conditions of this permit shall be kept on site and made available to DAQ personnel for inspection upon request.

P. **Compliance Certification** [15A NCAC 02Q .0508(n)]
The Permittee shall submit to the DAQ and the EPA (Air Enforcement Branch, EPA, Region 4, 61 Forsyth Street SW, Atlanta, GA 30303 or through the EPA CEDRI) postmarked on or before March 1 a compliance certification (for the preceding calendar year) by a responsible official with all terms and conditions in the permit (including emissions limitations, standards, or work practices), except for conditions identified as being State-enforceable Only. It shall be the responsibility of the current owner to submit a compliance certification for the entire year regardless of who owned the facility during the year. The compliance certification shall comply with additional requirements as may be specified under Sections 114(a)(3) or 504(b) of the Federal Clean Air Act. The compliance certification shall specify:
1. the identification of each term or condition of the permit that is the basis of the certification;
2. the compliance status (with the terms and conditions of the permit for the period covered by the certification);
3. whether compliance was continuous or intermittent;
4. the method(s) used for determining the compliance status of the source during the certification period;
5. each deviation and take it into account in the compliance certification; and
6. as possible exceptions to compliance, any periods during which compliance is required and in which an excursion or exceedance as defined under 40 CFR Part 64 (CAM) occurred.

Q. **Certification by Responsible Official** [15A NCAC 02Q .0520]
A responsible official shall certify the truth, accuracy, and completeness of any application form, report, or compliance certification required by this permit. All certifications shall state that based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

R. **Permit Shield for Applicable Requirements** [15A NCAC 02Q .0512]
1. Compliance with the terms and conditions of this permit shall be deemed compliance with applicable requirements, where such applicable requirements are included and specifically identified in the permit as of the date of permit issuance.
2. A permit shield shall not alter or affect:
   a. the power of the Commission, Secretary of the Department, or Governor under NCGS 143-215.3(a)(12), or EPA under Section 303 of the Federal Clean Air Act;
   b. the liability of an owner or operator of a facility for any violation of applicable requirements prior to the effective date of the permit or at the time of permit issuance;

c. the applicable requirements under Title IV; or
d. the ability of the Director or the EPA under Section 114 of the Federal Clean Air Act to obtain information to determine compliance of the facility with its permit.

3. A permit shield does not apply to any change made at a facility that does not require a permit or permit revision made under 15A NCAC 02Q .0523.
4. A permit shield does not extend to minor permit modifications made under 15A NCAC 02Q .0515.

S. **Termination, Modification, and Revocation of the Permit** [15A NCAC 02Q .0519]
The Director may terminate, modify, or revoke and reissue this permit if:
1. the information contained in the application or presented in support thereof is determined to be incorrect;
2. the conditions under which the permit or permit renewal was granted have changed;
3. violations of conditions contained in the permit have occurred;
4. the EPA requests that the permit be revoked under 40 CFR 70.7(g) or 70.8(d); or
5. the Director finds that termination, modification, or revocation and reissuance of the permit is necessary to carry out the purpose of NCGS Chapter 143, Article 21B.

T. **Insignificant Activities** [15A NCAC 02Q .0503]
Because an emission source or activity is insignificant does not mean that the emission source or activity is exempted from any applicable requirement or that the owner or operator of the source is exempted from demonstrating compliance with any applicable requirement. The Permittee shall have available at the facility at all times and made available to an authorized representative upon request, documentation, including calculations, if necessary, to demonstrate that an emission source or activity is insignificant.

U. **Property Rights** [15A NCAC 02Q .0508(i)(8)]
This permit does not convey any property rights in either real or personal property or any exclusive privileges.

V. **Inspection and Entry** [15A NCAC 02Q .0508(l) and NCGS 143-215.3(a)(2)]
1. Upon presentation of credentials and other documents as may be required by law, the Permittee shall allow the DAQ, or an authorized representative, to perform the following:
   a. enter the Permittee's premises where the permitted facility is located or emissions related activity is conducted, or where records are kept under the conditions of the permit;
   b. have access to and copy, at reasonable times, any records that are required to be kept under the conditions of the permit;
   c. inspect at reasonable times and using reasonable safety practices any source, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit; and
   d. sample or monitor substances or parameters, using reasonable safety practices, for the purpose of assuring compliance with the permit or applicable requirements at reasonable times.

   Nothing in this condition shall limit the ability of the EPA to inspect or enter the premises of the Permittee under Section 114 or other provisions of the Federal Clean Air Act.
2. No person shall refuse entry or access to any authorized representative of the DAQ who requests entry for purposes of inspection, and who presents appropriate credentials, nor shall any person obstruct, hamper, or interfere with any such authorized representative while in the process of carrying out his official duties. Refusal of entry or access may constitute grounds for permit revocation and assessment of civil penalties.

W. **Annual Fee Payment** [15A NCAC 02Q .0508(i)(10)]
1. The Permittee shall pay all fees in accordance with 15A NCAC 02Q .0200.
2. Payment of fees may be by check or money order made payable to the N.C. Department of Environmental Quality. Annual permit fee payments shall refer to the permit number.
3. If, within 30 days after being billed, the Permittee fails to pay an annual fee, the Director may initiate action to terminate the permit under 15A NCAC 02Q .0519.

X. **Annual Emission Inventory Requirements** [15A NCAC 02Q .0207]
The Permittee shall report by **June 30 of each year** the actual emissions of each air pollutant listed in 15A NCAC 02Q .0207(a) from each emission source within the facility during the previous calendar year. The report shall be in or on such form as may be established by the Director. The accuracy of the report shall be certified by a responsible official of the facility.

Y. **Confidential Information** [15A NCAC 02Q .0107 and 02Q .0508(i)(9)]
Whenever the Permittee submits information under a claim of confidentiality pursuant to 15A NCAC 02Q .0107, the Permittee may also submit a copy of all such information and claim directly to the EPA upon request. All requests for confidentiality must be in accordance with 15A NCAC 02Q .0107.

Z. **Construction and Operation Permits** [15A NCAC 02Q .0100 and .0300]
A construction and operating permit shall be obtained by the Permittee for any proposed new or modified facility or emission source which is not exempted from having a permit prior to the beginning of construction or modification, in accordance with all applicable provisions of 15A NCAC 02Q .0100 and .0300.

AA. **Standard Application Form and Required Information** [15A NCAC 02Q .0505 and .0507]
The Permittee shall submit applications and required information in accordance with the provisions of 15A NCAC 02Q .0505 and .0507.

BB. **Financial Responsibility and Compliance History** [15A NCAC 02Q .0507(d)(3)]
The DAQ may require an applicant to submit a statement of financial qualifications and/or a statement of substantial compliance history.

CC. **Refrigerant Requirements (Stratospheric Ozone and Climate Protection)** [15A NCAC 02Q .0501(d)]
1. If the Permittee has appliances or refrigeration equipment, including air conditioning equipment, which use Class I or II ozone-depleting substances such as chlorofluorocarbons and hydrochlorofluorocarbons listed as refrigerants in 40 CFR Part 82 Subpart A Appendices A and B, the Permittee shall service, repair, and maintain such equipment according to the work practices, personnel certification requirements, and certified recycling and recovery equipment specified in 40 CFR Part 82 Subpart F.
2. The Permittee shall not knowingly vent or otherwise release any Class I or II substance into the environment during the repair, servicing, maintenance, or disposal of any such device except as provided in 40 CFR Part 82 Subpart F.
3. The Permittee shall comply with all reporting and recordkeeping requirements of 40 CFR 82.166. Reports shall be submitted to the EPA or its designee as required.

DD. **Prevention of Accidental Releases - Section 112(r)** [15A NCAC 02Q .0508(h)]
If the Permittee is required to develop and register a Risk Management Plan with EPA pursuant to Section 112(r) of the Clean Air Act, then the Permittee is required to register this plan in accordance with 40 CFR Part 68.

EE. **National Emission Standards Asbestos – 40 CFR Part 61, Subpart M** [15A NCAC 02D .1110]
The Permittee shall comply with all applicable standards for demolition and renovation activities pursuant to the requirements of 40 CFR Part 61, Subpart M. The permittee shall not be required to obtain a modification of this permit in order to perform the referenced activities.

FF. **Title IV Allowances** [15A NCAC 02Q .0508(i)(1)]
This permit does not limit the number of Title IV allowances held by the Permittee, but the Permittee may not use allowances as a defense to noncompliance with any other applicable requirement. The Permittee's emissions may not exceed any allowances that the facility lawfully holds under Title IV of the Federal Clean Air Act.

GG. **Air Pollution Emergency Episode** [15A NCAC 02D .0300]
Should the Director of the DAQ declare an Air Pollution Emergency Episode, the Permittee will be required to operate in accordance with the Permittee's previously approved Emission Reduction Plan or, in the absence of an approved plan, with the appropriate requirements specified in 15A NCAC 02D .0300.

HH. **Registration of Air Pollution Sources** [15A NCAC 02D .0202]
The Director of the DAQ may require the Permittee to register a source of air pollution. If the Permittee is required to register a source of air pollution, this registration and required information will be in accordance with 15A NCAC 02D .0202(b).

II. **Ambient Air Quality Standards** [15A NCAC 02D .0501(c)]
In addition to any control or manner of operation necessary to meet emission standards specified in this permit, any source of air pollution shall be operated with such control or in such manner that the source shall not cause the ambient air quality standards in 15A NCAC 02D .0400 to be exceeded at any point beyond the premises on which the source is located. When

controls more stringent than named in the applicable emission standards in this permit are required to prevent violation of the ambient air quality standards or are required to create an offset, the permit shall contain a condition requiring these controls.

JJ. **General Emissions Testing and Reporting Requirements** [15A NCAC 02Q .0508(i)(16)]
Emission compliance testing shall be by the procedures of Section .2600, except as may be otherwise required in Rules .0524, .1110, or .1111 of Subchapter 02D. If emissions testing is required by this permit or the DAQ or if the Permittee submits emissions testing to the DAQ to demonstrate compliance for emission sources subject to Rules .0524, .1110, or .1111, the Permittee shall provide and submit all notifications, conduct all testing, and submit all test reports in accordance with the requirements of 15A NCAC 02D .0524, .1110, or .1111, as applicable. Otherwise, if emissions testing is required by this permit or the DAQ or if the Permittee submits emissions testing to the DAQ to demonstrate compliance, the Permittee shall perform such testing in accordance with 15A NCAC 02D .2600 and follow the procedures outlined below:

1. The owner or operator of the source shall arrange for air emission testing protocols to be provided to the Director prior to air pollution testing. Testing protocols are not required to be pre-approved by the Director prior to air pollution testing. The Director shall review air emission testing protocols for pre-approval prior to testing if requested by the owner or operator at least **45 days** before conducting the test.
2. Any person proposing to conduct an emissions test to demonstrate compliance with an applicable standard shall notify the Director at least **15 days** before beginning the test so that the Director may at his option observe the test.
3. The owner or operator of the source shall arrange for controlling and measuring the production rates during the period of air testing. The owner or operator of the source shall ensure that the equipment or process being tested is operated at the production rate that best fulfills the purpose of the test. The individual conducting the emission test shall describe the procedures used to obtain accurate process data and include in the test report the average production rates determined during each testing period.
4. Two copies of the final air emission test report shall be submitted to the Director not later than **30 days** after sample collection unless otherwise specified in the specific conditions. The owner or operator may request an extension to submit the final test report. The Director shall approve an extension request if he finds that the extension request is a result of actions beyond the control of the owner or operator.
    a. The Director shall make the final determination regarding any testing procedure deviation and the validity of the compliance test. The Director may:
        i. Allow deviations from a method specified under a rule in this Section if the owner or operator of the source being tested demonstrates to the satisfaction of the Director that the specified method is inappropriate for the source being tested.
        ii. Prescribe alternate test procedures on an individual basis when he finds that the alternative method is necessary to secure more reliable test data.
        iii. Prescribe or approve methods on an individual basis for sources or pollutants for which no test method is specified in 15A NCAC 02D .2600 if the methods can be demonstrated to determine compliance of permitted emission sources or pollutants.
    b. The Director may authorize the DAQ to conduct independent tests of any source subject to a rule in 15A NCAC 02D to determine the compliance status of that source or to verify any test data submitted relating to that source. Any test conducted by the Division of Air Quality using the appropriate testing procedures described in 15A NCAC 02D .2600 has precedence over all other tests.

KK. **Reopening for Cause** [15A NCAC 02Q .0517]

1. A permit shall be reopened and revised under the following circumstances:
    a. additional applicable requirements become applicable to a facility with remaining permit term of three or more years;
    b. additional requirements (including excess emission requirements) become applicable to a source covered by Title IV;
    c. the Director or EPA finds that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit; or
    d. the Director or EPA determines that the permit must be revised or revoked to assure compliance with the applicable requirements.
2. Any permit reopening shall be completed or a revised permit issued within 18 months after the applicable requirement is promulgated. No reopening is required if the effective date of the requirement is after the expiration of the permit term unless the term of the permit was extended pursuant to 15A NCAC 02Q .0513(c).
3. Except for the state-enforceable only portion of the permit, the procedures set out in 15A NCAC 02Q .0507, .0521, or .0522 shall be followed to reissue the permit. If the State-enforceable only portion of the permit is reopened, the

procedures in 15A NCAC 02Q .0300 shall be followed. The proceedings shall affect only those parts of the permit for which cause to reopen exists.

4. The Director shall notify the Permittee at least 60 days in advance of the date that the permit is to be reopened, except in cases of imminent threat to public health or safety the notification period may be less than 60 days.
5. Within 90 days, or 180 days if the EPA extends the response period, after receiving notification from the EPA that a permit needs to be terminated, modified, or revoked and reissued, the Director shall send to the EPA a proposed determination of termination, modification, or revocation and reissuance, as appropriate.

LL. **Reporting Requirements for NonOperating Equipment** [15A NCAC 02Q .0508(i)(16)]
The Permittee shall maintain a record of operation for permitted equipment noting whenever the equipment is taken from and placed into operation. When permitted equipment is not in operation, the requirements for testing, monitoring, and recordkeeping are suspended until operation resumes.

MM. **Fugitive Dust Control Requirement** [15A NCAC 02D .0540]
As required by 15A NCAC 02D .0540 "Particulates from Fugitive Dust Emission Sources," the Permittee shall not cause or allow fugitive dust emissions to cause or contribute to substantive complaints or excess visible emissions beyond the property boundary. If substantive complaints or excessive fugitive dust emissions from the facility are observed beyond the property boundaries for six minutes in any one hour (using Reference Method 22 in 40 CFR, Appendix A), the owner or operator may be required to submit a fugitive dust plan as described in 02D .0540(f).

"Fugitive dust emissions" means particulate matter from process operations that does not pass through a process stack or vent and that is generated within plant property boundaries from activities such as: unloading and loading areas, process areas, stockpiles, stock pile working, plant parking lots, and plant roads (including access roads and haul roads).

NN. **Specific Permit Modifications** [15A NCAC 02Q .0501 and .0523]

1. For modifications made pursuant to 15A NCAC 02Q .0501(b)(2), the Permittee shall file a Title V Air Quality Permit Application for the air emission source(s) and associated air pollution control device(s) on or before 12 months after commencing operation.
2. For modifications made pursuant to 15A NCAC 02Q .0501(c)(2), the Permittee shall not begin operation of the air emission source(s) and associated air pollution control device(s) until a Title V Air Quality Permit Application is filed and a construction and operation permit following the procedures of Section .0500 (except for Rule .0504 of this Section) is obtained.
3. For modifications made pursuant to 502(b)(10), in accordance with 15A NCAC 02Q .0523(a)(1)(C), the Permittee shall notify the Director and EPA (Air Permitting Branch, EPA, Region 4, 61 Forsyth Street SW, Atlanta, GA 30303 or through the EPA CEDRI) in writing at least seven days before the change is made.
    a. The written notification shall include:
        i. a description of the change at the facility;
        ii. the date on which the change will occur;
        iii. any change in emissions; and
        iv. any permit term or condition that is no longer applicable as a result of the change.
    b. In addition to this notification requirement, with the next significant modification or Air Quality Permit renewal, the Permittee shall submit a page "E5" of the application forms signed by the responsible official verifying that the application for the 502(b)(10) change/modification, is true, accurate, and complete. Further note that modifications made pursuant to 502(b)(10) do not relieve the Permittee from satisfying preconstruction requirements.

OO. **Third Party Participation and EPA Review** [15A NCAC 02Q .0521, .0522 and .0525(7)]
For permits modifications subject to 45-day review by the federal EPA, EPA's decision to not object to the proposed permit is considered final and binding on the EPA and absent a third party petition, the failure to object is the end of EPA's decision-making process with respect to the revisions to the permit. The time period available to submit a public petition pursuant to 15A NCAC 02Q .0518 begins at the end of the 45-day EPA review period.