



PAT MCCRORY  
*Governor*

DONALD R. VAN DER VAART  
*Secretary*

SHEILA C. HOLMAN  
*Director*

March XX, 2016

Mr. Blake Arnett  
Plant Manager  
3M Industrial Mineral Products  
3M Roofing Granule Manufacturing Operations  
4191 Highway 87 South  
Moncure, North Carolina 27559

**SUBJECT: Air Quality Permit No. 09006T06**  
**Facility ID: 1900104**  
**3M Pittsboro – Industrial Mineral Products**  
**Moncure, North Carolina**  
**Chatham County**  
**Fee Class: Title V**  
**PSD Class: Minor**

Dear Mr. Arnett:

In accordance with your completed Air Quality Permit Application for renewal of your Title V permit received January 30, 2015, we are forwarding herewith Air Quality Permit No. 09006T06 to 3M Pittsboro – Industrial Mineral Products, 4191 Highway 87 South, Moncure, Chatham County, North Carolina 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 listed for informational purposes as an "ATTACHMENT." Please note the requirements for the annual compliance certification are contained in General Condition P in Section 3. The current owner is responsible for submitting a compliance certification for the entire year regardless of who owned the facility during the year.

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 conditions 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 request a formal adjudicatory hearing within 30 days following receipt of this permit, identifying the specific issues to be contested.

This hearing request must be in the form of a written petition, conforming to NCGS (North Carolina General Statutes) 150B-23, and filed with both the Office of Administrative Hearings, 6714 Mail Service Center, Raleigh, North Carolina 27699-6714 and the Division of Air Quality, Permitting Section, 1641 Mail Service Center, Raleigh, North Carolina 27699-1641. The form for requesting a formal adjudicatory hearing may be obtained upon request from the Office of Administrative Hearings. Please note that this permit will be stayed in its entirety upon receipt of the request for a hearing. Unless a request for a hearing is made pursuant to NCGS 150B-23, this Air Quality Permit shall be final and binding 30 days after issuance.

You may request modification of your Air Quality Permit through informal means pursuant to NCGS 150B-22. This request must be submitted in writing to the Director and must identify the specific provisions or issues for which the modification is sought. Please note that this Air Quality Permit will become final and binding regardless of a request for informal modification unless a request for a hearing is also made under NCGS 150B-23.

The construction of new air pollution emission source(s) and associated air pollution control device(s), or modifications to the 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.

Increment tracking does not apply to this renewal. Although Chatham County's minor source baseline for NO<sub>x</sub>, PM<sub>10</sub> and SO<sub>2</sub> has been triggered; there are no emissions increases or decreases associated with this change.

This Air Quality Permit shall be effective from March XX, 2016 until February XX, 2021, 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 Richard R. Simpson, at (919) 707-8476 or [Richard.Simpson@ncdenr.gov](mailto:Richard.Simpson@ncdenr.gov).

Sincerely yours,

William D. Willets, P.E., Chief, Permitting Section  
Division of Air Quality, NCDEQ

Enclosure

cc: Heather Ceron - EPA Region IV  
Patrick Butler, Supervisor, Raleigh Regional Office  
Central Files  
Connie Horne (cover letter only)

**Insignificant Activities under 15A NCAC 02Q .0503(8)**

<b>Emission Source ID No.</b>	<b>Emission Source Description</b>	<b>Control Device ID No.</b>	<b>Control Device Description</b>
<b>Sources at Crushing and Screening Plant</b>			
IS	Vacuum system for building 13 crushing and screening	N/A	N/A
IS-2	Crusher building unit heater exhaust fan #3	N/A	N/A
IS-3	Crusher building exhaust fan #1	N/A	N/A
IS-4	Crusher building exhaust fan #2	N/A	N/A
IS-5	Crusher building restroom exhaust fan	N/A	N/A
IS-6	Screening building unit heater exhaust vent	N/A	N/A
IS-7	Screening building exhaust fan #1	N/A	N/A
IS-8	Screening building restroom exhaust fan	N/A	N/A
IS-9	Screening building exhaust fan #2	N/A	N/A
IS-F123	Plant Feed Conveyor No. 1	N/A	N/A
IS-F56A	Grade loading hopper	N/A	N/A
IS-F56B	Grade silo loadout	N/A	N/A
<b>Sources at Coloring Plant</b>			
IS-10	Coloring building exhaust fan #1	N/A	N/A
IS-11	Coloring building exhaust fan #2	N/A	N/A
IS-12	Coloring building exhaust fan #3	N/A	N/A
IS-13	Coloring building exhaust fan #4	N/A	N/A
IS-14	Coloring building exhaust fan #5	N/A	N/A
IS-15	Coloring building exhaust fan #6	N/A	N/A
IS-16	Coloring building exhaust fan #7	N/A	N/A
IS-17	Coloring building exhaust fan #8	N/A	N/A
IS-18	Finished granule storage building exhaust fan #1	N/A	N/A
IS-19	Finished granule storage building exhaust fan #2	N/A	N/A
IS-20	Finished granule storage building exhaust fan #3	N/A	N/A
IS-21	Finished granule storage building exhaust fan #4	N/A	N/A
IS-22	Tank farm building exhaust fan	N/A	N/A
IS-23	Warehouse area unit heater exhaust fan	N/A	N/A
IS-27	Warehouse area restroom exhaust fan	N/A	N/A
IS-A1	B3 liquid clay tank (20,000 gallon capacity)	N/A	N/A
IS-A2	Albion clay tank (20,000 gallon capacity)	N/A	N/A
IS-A3	Sodium silicate tank (20,000 gallon capacity)	N/A	N/A
IS-A4	Sodium silicate tank (20,000 gallon capacity)	N/A	N/A
IS-A5	Magnesium chloride tank (6,000 gallon capacity)	N/A	N/A
IS-A6	Slate oil tank (20,000 gallon capacity)	N/A	N/A
IS-A8	Mix tank No. 1 (325 gallon capacity)	N/A	N/A
IS-A9	Hold tank No. 1 (500 gallon capacity)	N/A	N/A
IS-A12	Mix tank No. 2 (325 gallon capacity)	N/A	N/A
IS-A13	Hold tank No. 2 (500 gallon capacity)	N/A	N/A
IS-A15	Sludge tank (5,000 gallon capacity)	N/A	N/A
IS-A16	Adhesion promoter tank (10,000 gallon capacity)	N/A	N/A

Emission Source ID No.	Emission Source Description	Control Device ID No.	Control Device Description
IS-A17	Day tank (adhesion promoter) (400 gallon capacity)	N/A	N/A
IS-ES CPA1	Raw granule transfer conveyor (RTC)/conveyor No. 27/ load-in to raw granule transfer conveyor No. 4 (RCTC4)/ conveyor No. 4	CDB8	Raw granule baghouse (5,750 square feet of filter area)
IS-ES CPA2	Raw granule bin No. 3 (RGB3)	CDB8	Raw granule baghouse (5,750 square feet of filter area)
IS-ES CPA3	Rerun bin No. 3 (RRB3)	CDB8	Raw granule baghouse (5,750 square feet of filter area)
IS-ESCP1	Rerun conveyor	CDB15	Finished granule baghouse (6,111 square feet of filter area)
IS-ESCP2	Consolidation conveyor	CDB15	Finished granule baghouse (6,111 square feet of filter area)
IS-ESCP3	Line 2 rerun/headlap conveyor	CDB15	Finished granule baghouse (6,111 square feet of filter area)
IS-ESCP4	Headlap/consolidation conveyor	CDB15	Finished granule baghouse (6,111 square feet of filter area)
IS-ESCP15A	Rerun elevator No. 1, two pickups	CDB8	Raw granule baghouse (5,750 square feet of filter area)
IS-ESCP15B	Rerun elevator No. 2, two pickups	CDB8	Raw granule baghouse (5,750 square feet of filter area)
IS-ESCP43	Product loadout conveyor	N/A	N/A
IS-ESCP44	Transload conveyor	N/A	N/A
IS-ESCPBHWC	Dust conveyor	N/A	N/A
IS-ESCP8	Consolidation elevator	CDB15	Finished granule baghouse (6,111 square feet of filter area)
IS-ESCP1-8	Line 1 product elevator	CDB15	Finished granule baghouse (6,111 square feet of filter area)

Emission Source ID No.	Emission Source Description	Control Device ID No.	Control Device Description
IS-ESCPL2-8	Line 2 product elevator	CDB15	Finished granule baghouse (6,111 square feet of filter area)
IS-ESCPVF16A	Rerun bin No. 1	CDB8	Raw granule baghouse (5,750 square feet of filter area)
IS-ESCPVF16B	Rerun bin No. 2	CDB8	Raw granule baghouse (5,750 square feet of filter area)
<b>Sources Located Outside</b>			
IS-A7	Reclaim water tank (32,000 gallon capacity)	N/A	N/A
IS-A9	Wastewater tank (17,000 gallon capacity)	N/A	N/A
IS-A10	Recycle water tank (10,000 gallon capacity)	N/A	N/A
IS-A11	Chatham County Water Tower	N/A	N/A
IS-FP** <b>MACT ZZZZ</b>	One diesel-fired emergency fire water pump (290 hp) [constructed prior to June 12, 2006]	N/A	N/A
<b>Sources in Shipping Area</b>			
IS-FCP34	Waste bin load	N/A	N/A
IS-FCP35	Waste bin unload	N/A	N/A
IS-FCP363940	100 enclosed storage bins	N/A	N/A
<b>Sources in Office Area</b>			
IS-24	Office area unit heater exhaust fan	N/A	N/A
IS-25	Office area exhaust fan	N/A	N/A
IS-26	Office area restrooms exhaust fan	N/A	N/A
IS-28	Office area restrooms exhaust fan #1	N/A	N/A
IS-29	Office area restrooms exhaust fan #2	N/A	N/A
<b>Building 30 Laboratory</b>			
IS-30	Laboratory Fume Hood	N/A	N/A
IS-31	Laboratory Dispatch Machine	N/A	N/A

\*\* - Compliance date of May 3, 2013

1. Because an activity is insignificant does not mean that the activity is exempted from an applicable requirement or that the owner or operator of the source 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".
3. For additional information regarding the applicability of GACT, MACT, and NSPS for permit exempt/insignificant activities see the NC DAQ website: <http://daq.state.nc.us/permits/insig/>. Hard copies of the regulatory requirements will be provided by the regional office upon request.

**ATTACHMENT 2 to cover letter of Permit No. 09006T06**  
**3M Pittsboro – Industrial Mineral Products**

The following table lists all modifications associated with this permit action:

<b>Page(s)</b>	<b>Section</b>	<b>Description of Change(s)</b>
Cover and throughout	Throughout	Updated all tables, dates, and permit revision numbers.
Attachment	Insignificant Activities List	Moved IS-ESCPBHCW Dust Conveyor from Crushing and Screening to the “Sources at Coloring Plant”.
Attachment	Insignificant Activities List	Updated description for IS-F123 to Plant Feed Conveyor No. 1.
Attachment	Insignificant Activities List	Updated description for IS-F56B to Grade Silo Outlet.
Attachment	Insignificant Activities List	Updated description for IS-F56B to Grade Silo Outlet.
Attachment	Insignificant Activities List	Updated description for IS-A8 to Mix tank No. 1 (325 gallon capacity)
Attachment	Insignificant Activities List	Inserted IS-A9 with emission source description of “Hold tank No. 1 (500 gallon capacity)”.
Attachment	Insignificant Activities List	Deleted redundant IS-A10 with emission source description of “Mix tank (325 gallon capacity)”.
Attachment	Insignificant Activities List	Updated description for IS-A12 to Mix tank No. 2 (325 gallon capacity).
Attachment	Insignificant Activities List	Updated description for IS-A13 to Hold tank No. 2 (500 gallon capacity).
Attachment	Insignificant Activities List	Deleted IS-A14 with emission source description of “Prinlin tank (550 gallon capacity)”.
Attachment	Insignificant Activities List	Updated description for IS-ES CPA1 from conveyor No. 6 to conveyor No. 4.
Attachment	Insignificant Activities List	For Emission Sources ID Nos. IS-ES(CPA1, CPA2, CPA3, CP15A, CP15B, CPVF16A, and CPVF16B) inserted Control Device ID No. as “CDB8” and control device description as “Finished granule baghouse (5,750 square feet of filter area)”.
Attachment	Insignificant Activities List	For Emission Sources ID Nos. IS-ES(CP1, CP2, CP3, CP4, CPC-8, CPL1-8, and CPL2-8) inserted Control Device ID No. as “CDB15” and control device description as “Finished granule baghouse (6,111 square feet of filter area)”.
Attachment	Insignificant Activities List	Inserted IS-ESCP44 with emission source description of “Transload conveyor”.
Attachment	Insignificant Activities List	Included IS-ESCPBHCW where it was moved from Crushing and Screening section.
Attachment	Insignificant Activities List	Inserted IS-A10 with emission source description of “Recycle water tank (10,000 gallon capacity)”.
Attachment	Insignificant Activities List	Updated IS-A11 with emission source description of “Chatham County Water Tower”.
Attachment	Insignificant Activities List	Deleted IS-FCP(45, 46, and 47) source description “Enclosed rail car unloading Nos.1, 2 and 3 since facility does not have rail car unloading capabilities.
Attachment	Insignificant Activities List	Added source header “Building 30 Laboratory”.
Attachment	Insignificant Activities List	Added emission source description IS-30 with description of “Laboratory Fume Hood”.
Attachment	Insignificant Activities List	Added emission source description IS-31 with description of “Laboratory Dispatch Machine”.

<b>Page(s)</b>	<b>Section</b>	<b>Description of Change(s)</b>
3 - 9	Section 1	Inserted Page No. column with page numbers.
3, 10	Section 1 and Section 2.1.A.	Moved ES16-A and ES32.1 from control device ID No. CDB1 to CDB2.
3, 4, 10, and 11	Section 1 and Section 2.1.A.	Moved ESC3 from control device ID No. CDB2 to CDB1.
3, 10	Section 1 and Section 2.1.A.	Updated ES23A.1 with emission source description of “Conveyor No. 23A baghouse hopper screw conveyor to dust conveyor No. 23C”.
3, 10	Section 1 and Section 2.1.A.	Updated ES23A.2 with emission source description of “Conveyor No. 22 baghouse hopper screw conveyor to dust conveyor No. 23A”.
4, 11	Section 1 and Section 2.1.A.	Updated ES3537D with emission source description of “L crusher feed bin conveyor No. 14, three pickups (M screens to L crusher bins)”.
4, 11	Section 1 and Section 2.1.A.	Updated ES23A.2 with emission source description of “Conveyor No. 22 (baghouse hopper screw conveyor to dust conveyor No. 23C”.
5, 6, and 11	Section 1 and Section 2.1.A.	Moved ES2327B from control device ID No. CDB5 to CDB4.
6, 12	Section 1 and Section 2.1.A.	Updated ES2729.1 with emission source description of “G crusher feed conveyor No. 8B (G crusher bin to G crusher)”.
6, 12	Section 1 and Section 2.1.A.	Updated ES49B with emission source description of “Grade bucket elevator No. 1, two pickups (grade collecting conveyor No. 19 to grade transfer conveyor No. 20)”.
7, 12	Section 1 and Section 2.1.A.	Moved ES23C from control device ID No. CDB6 to CDB7.
7, 12	Section 1 and Section 2.1.A.	Updated ES63B with emission source description of “Dust elevator No. 3, two pickups”.
7, 12	Section 1 and Section 2.1.A.	Updated ES68B with emission source description of “Waste elevator No. 2, two pickups”.
7, 13	Section 1 and Section 2.1.A.	Updated F61 with emission source description of “Enclosed dust conveyor No. 23C (dust conveyor No. 23A to transfer conveyor No. 23C)”.
13	Section 2.1.A.	Updated language in summary table to “Visible emissions from the vents of the crushing and screening buildings, any other affected facility, stacks associated with conveyors, screening operations, screen feeders, storage bins, and elevators”.
13	Section 2.1.A.	Updated language in summary table to “Visible emissions due to fugitive emissions from each grinding mill, screening operation, bucket elevator, transfer point on belt conveyors, storage bin, enclosed truck loading operation, or from any other affected facility (i.e. pugmill, waste pile, etc.)”. Updated Limits for opacity to 10% per 40 CFR Part 60 Subpart OOO since equipment installation was before 2008.
14	Section 2.1.A.2.a.i.	Updated emission limitation language to “Visible fugitive emissions greater than 10% opacity shall not be discharged into the atmosphere from any building enclosing any transfer point on a conveyor belt or any other affected facility (grinding mill, screening operation, bucket elevator, transfer point on belt conveyors, storage bin, enclosed truck loading operation, or from any other affected facility ...”.
14	Section 2.1.A.2.a.iii.	Updated emission standard from §60.672 to §60.670(d)(1).
14	Section 2.1.A.2.a.ii.	Updated emission limitation language to “...shall not be more than 0.05 grams per dry standard cubic meter (0.022 grains per dry standard cubic foot);”.

<b>Page(s)</b>	<b>Section</b>	<b>Description of Change(s)</b>
14, 15	Section 2.1.A.2.a.iv. and 2.1.A.2.b.i.	Included emission sources ESC23A and ESC22 in permit regulatory language.
14	Section 2.1.A.2.a.v.	Updated emission limitation language to include “stack”.
15	Section 2.1.A.2.c.i.(A).	Updated monitoring language to “...for any visible emissions. Should visible emissions and/or fugitive emissions be observed above the limits, each affected facility...”.
15, 26	Section 2.1.A.2.c.i.(B). and 2.1.E.3.c.ii.	Corrected the regulatory reference from 02D .2601 to .2610.
16	Section 2.1.A.2.f.	Updated reporting language to “ <u>Like-kind Replacement</u> - As provided in 40 CFR 60.670(d), when an existing facility (ID No. ESC23A, ESC22, and ESC23C is replaced by a piece...”
16, 21	Section 2.1.A.3.c.ii. and 2.1.C.3.c.ii	Updated 15A NCAC 02D .0540 language from 90 days to 60 days.
23	Section 2.1.D.2.d.ii.	Deleted redundant language to “The sampling time <del>shall be</del> and volume for each test run shall be at least ...”
36	Section 2.2.B.1.a. and b.	Deleted CAM language “and 15A NCAC 02D .0521” and “and visible emissions” since not applicable.
36	Section 2.2.B.1.c.i.	Updated CAM monitoring language for continuous pressure drop, daily recordings, pressure drop ranges with new filters and pressure drop ranges with filters after 120 operational hours.
36	Section 2.2.B.1.c.ii.	Updated CAM monitoring language to “If a source or bagfilter listed in Section 2.2 B.1.a, above, operates with more than ten excursions in a semiannual reporting period, then the Permittee shall develop a Quality Improvement Plan (QIP)”.
37	Section 2.1.B.d.	Inserted updated CAM reporting language with the current requirements with monitoring and reporting.
38	General Conditions	Updated to latest version of DAQ shell version 4.0 12/17/15.





## AIR QUALITY PERMIT

Permit No.	Replaces Permit No.(s)	Effective Date	Expiration Date
09006T06	09006T05	March XX, 2016	February XX, 2016

\*\*This permit shall expire on the earlier of March XX, 2016 or the renewal of permit 09006T06 has been issued or denied.

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  
**Facility Site Location:** 4191 Highway 87 South  
**City, County, State, Zip:** Moncure, Chatham County, N.C. 27559  
**Mailing Address:** 4191 Highway 87 South  
**City, State, Zip:** Moncure, Chatham County, N.C. 27559  
**Application Number:** 1900104.15A & Amendment  
**Complete Application Date:** March XX, 2016  
**Primary SIC Code:** 3295  
**Division of Air Quality,  
Regional Office Address:** Raleigh Regional Office  
3800 Barrett Drive  
Raleigh, NC 27609

Permit issued this the XX<sup>th</sup> day of March, 2016

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William D. Willets, P. E., Chief, Permitting Section  
By Authority of the Environmental Management Commission

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SECTION 2: SPECIFIC LIMITATIONS AND CONDITIONS

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(Including specific requirements, testing, monitoring, recordkeeping, and reporting requirements)

2.2 - Multiple Emission Source(s) Specific Limitations and Conditions  
(Including specific requirements, testing, monitoring, recordkeeping, and reporting requirements)

SECTION 3: GENERAL PERMIT CONDITIONS

ATTACHMENTS

ATTACHMENT 1.....List of Acronyms

## 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:

Page No.	Emission Source ID No.	Emission Source Description	Control Device ID No.	Control Device Description
<b>Crushing and Screening Plant</b>				
9, 32	ES123 <b>NSPS 000</b>	Plant feed conveyor No. 1 (feed pile to surge bin)		
9, 32	ES412 <b>NSPS 000</b>	Surge bin		
9, 32	ES607.1 <b>NSPS 000</b>	Feed conveyor No. 2 (surge bin to C crusher)		
9, 32	ES607.2 <b>NSPS 000</b>	C crusher		
9, 32	ES2327A <b>NSPS 000</b>	G crusher feed bin No. 1		
9, 32	ES2426.1 <b>NSPS 000</b>	G crusher feed conveyor No. 8A (G crusher feed bin No. 1 to G crusher No. 1)		
9, 32	ES2426.2 <b>NSPS 000</b>	G crusher No. 1		
9, 32	ES3031 <b>NSPS 000</b>	M feed transfer bin		
9, 32	ES3941 <b>NSPS 000</b>	L crusher bin No. 1		
9, 32	ES4347.1 <b>NSPS 000</b>	L crusher feed conveyor No. 16A (L crusher feed bin to L crusher)		
9, 32	ES4347.2 <b>NSPS 000</b>	L crusher		
9, 32	ESC3 <b>NSPS 000</b>	Product conveyor No. 3 (C crusher to D screen bin No. 1)		
9, 32	ESC23A.1 <b>NSPS 000</b>	Conveyor No. 23A (baghouse hopper screw conveyor to dust conveyor No. 23C)		
9, 32	ES16-A <b>NSPS 000</b>	Dryer and G crusher conveyor No. 9 (G crusher to screens No. 2 and No. 3 feed bin)		
9, 32	ES32.1 <b>NSPS 000</b>	L crusher product conveyor No. 17, two pickups (M feed transfer bin and L crusher No. 1 to M screen feed bin)		
9, 32	ES32A <b>NSPS 000</b>	L crusher product conveyor No. 17 (L crushers to conveyor No. 18A)		
9, 32	ES32B <b>NSPS 000</b>	Conveyor No. 18A (L crusher product conveyor No. 17 to live M screens feed bin)		
9, 32	ES340-A <b>NSPS 000</b>	Live M screens feed bin, two pickups		
9, 32	ES1721A <b>NSPS 000</b>	D screen bin No. 2		
9, 32	ES1721B <b>NSPS 000</b>	D screen No. 2 feeder		

Page No.	Emission Source ID No.	Emission Source Description	Control Device ID No.	Control Device Description
<b>Crushing and Screening Plant (continued)</b>				
9, 32	ES1721C NSPS OOO	D screen No. 2	CDB2 (continued)	Screen baghouse No. 1 (11,750 square feet of filter area)
9, 32	ES1721D NSPS OOO	G crusher bin feed conveyor No. 5 (D screen No. 2 to G crusher bins)		
9, 32	ES1721E NSPS OOO	L circuit new feed conveyor No. 13 (D screen No. 2 to M transfer bin)		
9, 32	ES3537A NSPS OOO	M screen No. 1		
9, 32	ES3537B NSPS OOO	M screen No. 2		
9, 32	ES3537C NSPS OOO	M screen No. 3		
9, 32	ES3537D NSPS OOO	L crusher feed bin conveyor No. 14, three pickups (M screens to L crusher bins)		
9, 32	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)		
9, 32	ES3537F NSPS OOO	Waste conveyor No. 21, three pickup points (M screens to waste bin)		
9, 32	ES8913A NSPS OOO	D screen bin No. 1		
9, 32	ES8913B NSPS OOO	D screen No. 1 feeder		
9, 32	ES8913C NSPS OOO	D screen No. 1		
9, 32	ES8913D NSPS OOO	Undersize conveyor No. 3 (D screen No. 1 to dryer feed conveyor No. 7)		
9, 32	ES8913E NSPS OOO	C bin feed conveyor No. 4 (D screen No. 1 to C crusher bin)		
9, 32	ES8913F NSPS OOO	Dryer feed conveyor No. 7 (undersize conveyor No. 3 to dryer)		
9, 32	ESC23A.2 NSPS OOO	Conveyor No. 22 (baghouse hopper screw conveyor to dust conveyor No. 23A)	CDB3	Dryer baghouse (12,300 square feet of filter area)
16, 32	ES1415 NSPS UUU	One natural gas-fired dryer	CDC1  CDB3	Dryer cyclone (eight feet in diameter) in series with  Dryer baghouse (12,300 square feet of filter area)

Page No.	Emission Source ID No.	Emission Source Description	Control Device ID No.	Control Device Description
<b>Crushing and Screening Plant (continued)</b>				
9, 32	ES16-B <b>NSPS OOO</b>	Dryer and G crusher product conveyor No. 9 (G crusher to screens No. 2 feed bin)	CDB4	Screen baghouse No. 2 (9,000 square feet of filter area)
9, 32	ES33A <b>NSPS OOO</b>	Conveyor No. 18A (conveyor No. 17 to conveyor No. 18B)		
9, 32	ES33B <b>NSPS OOO</b>	Conveyor No. 18B (conveyor No. 18A to live M feed bin)		
9, 32	ES340-B <b>NSPS OOO</b>	Live M feed bin, two pickups		
9, 32	ES1822A <b>NSPS OOO</b>	D screen bin No. 3		
9, 32	ES1822B <b>NSPS OOO</b>	D screen feeder No. 3		
9, 32	ES1822C <b>NSPS OOO</b>	D screen No. 3		
9, 32	ES1822D <b>NSPS OOO</b>	Feed conveyor No. 5, two pickups (D screens Nos. 2 and 3 to G crusher bin)		
9, 32	ES2327B <b>NSPS OOO</b>	Feed conveyor No. 6 (D screens to G crusher bins)		
9, 32	ES3537G <b>NSPS OOO</b>	M screen No. 4		
9, 32	ES3537H <b>NSPS OOO</b>	M screen No. 5		
9, 32	ES3537I <b>NSPS OOO</b>	M screen No. 6		
9, 32	ES3537J <b>NSPS OOO</b>	L crusher feed bin conveyor No. 14, three pickups (M screens to L crusher)		
9, 32	ES3537K <b>NSPS OOO</b>	Grade collecting conveyor No. 19, three pickup points (M screens to grade silos)		
9, 32	ES3537L <b>NSPS OOO</b>	Waste conveyor No. 21, three pickups (M screen to waste bin)		
9, 32	ESC23C <b>NSPS OOO</b>	24" Dust conveyor No. 23C (60 tons per hour maximum design capacity; baghouse hopper to dust elevator)		
9, 32	ES16-C <b>NSPS OOO</b>	Dryer and G crusher product conveyor No. 9 (G crusher to screens No. 2 feed bin)	CDB5	Crusher baghouse No. 2 (5,250 square feet of filter area)
9, 32	ES32.2 <b>NSPS OOO</b>	L crusher product conveyor No. 17 (L crushers and M feed transfer bin to M screen feed bin)		
9, 32	ES38 <b>NSPS OOO</b>	Conveyor No. 14 (M screens to conveyor No. 14A)		
9, 32	ES39 <b>NSPS OOO</b>	Conveyor No. 14A (conveyor No. 14 to L crusher feed bins)		
9, 32	ES2327 <b>NSPS OOO</b>	G crusher bin No. 2		
9, 32	ES2729.1 <b>NSPS OOO</b>	G crusher feed conveyor No. 8B (G crusher bin to G crusher)		
9, 32	ES2729.2 <b>NSPS OOO</b>	G crusher No. 2		

Page No.	Emission Source ID No.	Emission Source Description	Control Device ID No.	Control Device Description
<b>Crushing and Screening Plant (continued)</b>				
9, 32	ES4042 <b>NSPS OOO</b>	Feed conveyor No. 14A to L crusher bin No. 2	CDB5	Crusher baghouse No. 2 (5,250 square feet of filter area)
9, 32	ES4043 <b>NSPS OOO</b>	L crusher bin No. 2		
9, 32	ES4044 <b>NSPS OOO</b>	Feed conveyor No. 16B to L crusher No. 2		
9, 32	ES4448.1 <b>NSPS OOO</b>	L crusher feed conveyor No. 16B		
9, 32	ES4448.2 <b>NSPS OOO</b>	L crusher No. 2		
9, 32	ES49A <b>NSPS OOO</b>	Grade collection conveyor No. 19 (M screens to grade bucket elevator)		
9, 32	ES49B <b>NSPS OOO</b>	Grade bucket elevator No. 1, two pickups (grade collecting conveyor No. 19 to grade transfer conveyor No. 20)		
9, 32	ES50 <b>NSPS OOO</b>	Grade transfer conveyor No. 20, two pickups (grade bucket elevator to grade silos)		
9, 32	ES57 <b>NSPS OOO</b>	Grade silo conveyor No. 26, three pickups (grade silos to bin discharge bucket elevator)		
9, 32	ES58 <b>NSPS OOO</b>	Grade transfer conveyor No. 27 (bin discharge elevator to coloring plant)		
9, 32	ES59 <b>NSPS OOO</b>	Bin discharge bucket elevator No. 4, two pickups		
9, 32	ES5155A <b>NSPS OOO</b>	Grade silo No. 1		
9, 32	ES5155B <b>NSPS OOO</b>	Grade silo No. 2		
9, 32	ES5155C <b>NSPS OOO</b>	Grade silo No. 3		
9, 32	ES23C <b>NSPS OOO</b>	Dust conveyor No. 23C (baghouse hopper loadout to dust elevator)	CDB7	Waste handling baghouse (2,750 square feet of filter area)
9, 32	ES63A <b>NSPS OOO</b>	Dust conveyor No. 23C (hoppers for screens, grade silo, and waste baghouses to dust elevator)		
9, 32	ES63B <b>NSPS OOO</b>	Dust elevator No. 3, two pickups		
9, 32	ES68A <b>NSPS OOO</b>	Waste conveyor No. 21		
9, 32	ES68B <b>NSPS OOO</b>	Waste elevator No. 2, two pickups		
9, 32	ES6466 <b>NSPS OOO</b>	Dust bin		
9, 32	ES6466SC <b>NSPS OOO</b>	Dust bin screw conveyor (waste handling baghouse hopper to pugmill)		
9, 32	ES6970 <b>NSPS OOO</b>	Waste bin		

Page No.	Emission Source ID No.	Emission Source Description	Control Device ID No.	Control Device Description
<b>Crushing and Screening Plant (continued)</b>				
9, 32	ESA1 NSPS 000	D screen No. 4 assembly (includes the vibrator)	CDB16	Screen baghouse No. 3 (9,000 square feet of filter area)
9, 32	ESA5 NSPS 000	Load-in to conveyor No. 18C		
9, 32	ESA6 NSPS 000	Line 3 live M feed bin		
9, 32	ESA7 NSPS 000	Line 3 M screen assemblies		
9, 32	ESA11 NSPS 000	Screen baghouse No. 3 ash loadout		
9, 32	ESA2 NSPS 000	G bin feed conveyor No. 6 loadout to bin feed conveyor No. 6A	CDB17	Crusher baghouse No. 3 (6,500 square feet of filter area)
9, 32	ESA3 NSPS 000	G feed bin No. 3		
9, 32	ESA4 NSPS 000	G crusher No. 3		
9, 32	ESA8 NSPS 000	Feed bin No. 3		
9, 32	ESA9 NSPS 000	L crusher No. 3		
9, 32	ESA12 NSPS 000	Crusher baghouse No. 3 ash loadout		
9, 32	F61 NSPS 000	Enclosed dust conveyor No. 23C (dust conveyor No. 23A to transfer conveyor No. 23C)	N/A	N/A
9, 32	F72 NSPS 000	Enclosed waste stacker conveyor No. 25 with wet suppression (pugmill to outside storage)	N/A	N/A
9, 32	F6771 NSPS 000	Enclosed pugmill with wet suppression (dust and waste processing)	N/A	N/A
9, 32	FWP	Waste pile	N/A	N/A
<b>Coloring Plant</b>				
18, 32	ESCP1012A	Headlap bin	CDB8	Raw granule baghouse (5,750 square feet of filter area)
18, 32	ESCP1012B	Transfer conveyor No. 27 (grade silos to headlap and raw granule bins)		
18, 32	ESCP1012C	Raw granule bin No. 1		
18, 32	ESCP1012D	Raw granule bin No. 2		
18, 32	ESCPPFC1	Line 1 dryer feed conveyor, two pickups (line 1 raw granule and rerun bins to dryer)		
18, 32	ESCPPFC2	Line 2 dryer feed conveyor, two pickups (line 2 raw granule and rerun bins to dryer)		
22, 32	ESCPPH1 NSPS UUU	One natural gas-fired dryer, line 1	CDB9	Line 1 dryer baghouse (7,111 square feet of filter area)

<b>Page No.</b>	<b>Emission Source ID No.</b>	<b>Emission Source Description</b>	<b>Control Device ID No.</b>	<b>Control Device Description</b>
<b>Coloring Plant (continued)</b>				
22, 32	ESCPPH2 NSPS UUU	One natural gas-fired dryer, line 2	CDB10	Line 2 dryer baghouse (7,111 square feet of filter area)
27, 32	ESCPM1 CAM	Mixer, line 1	CDB11	Line 1 mixer baghouse (2,889 square feet of filter area)
27, 32	ESCPM2 CAM	Mixer, line 2	CDB12	Line 2 mixer baghouse (2,889 square feet of filter area)
24, 32	ESCPK1 CAM	One natural gas-fired kiln, line 1	CDB13	Line 1 kiln baghouse (11,111 square feet of filter area)
24, 32	ESCPK2 CAM	One natural gas-fired kiln, line 2	CDB14	Line 2 kiln baghouse (11,111 square feet of filter area)
18, 32	ESCPL1-280A	Blend bin No. 1A	CDB15	Finished granule baghouse (6,111 square feet of filter area)
18, 32	ESCPL1-280B	Product/blend bin No. 1B		
18, 32	ESCPL1-280C	Product bin No. 1C		
18, 32	ESCPL2-280A	Blend bin No. 2A		
18, 32	ESCPL2-280B	Product/blend bin No. 2B		
18, 32	ESCPL2-280C	Product bin No. 2C		
18, 32	ESCPL1-600	R screen No. 1		
18, 32	ESCPL2-600	R screen No. 2		
18, 32	ESCPL3-600	R screen No. 3		
18, 32	ESCP900	Waste bin		
18, 32	ESCPA9	Line 3 product elevator No. 9, product and blend bins		
18, 32	ESCPA10	R screen for line 3 (ROT4)		



Page No.	Emission Source ID No.	Emission Source Description	Control Device ID No.	Control Device Description
<b>Coloring Plant (continued)</b>				
18, 32	ESCPCC	Line 1 rerun conveyor (consolidation conveyor to rerun elevator No. 1)	CDB15 (continued)	
22, 32	ESCPH3 NSPS UUU	One natural gas-fired dryer, line 3	CDB18	Line 3 dryer baghouse (7,111 square feet of filter area)
27, 32	ESCPM3 CAM	Mixer, line 3	CDB19	Line 3 mixer baghouse (2,889 square feet of filter area)
18, 24, and 32	ESCPA6	Kiln feed elevator No. 3 (KFE3)	CDB20	Line 3 kiln baghouse (11,111 square feet of filter area)
18, 32	ESCPK3 CAM	One natural gas-fired kiln, line 3		
30, 32	ESCPC1	Cooler, line 1	N/A	N/A
30, 32	ESCPC2	Cooler, line 2	N/A	N/A
30, 32	ESCPC3	Cooler, line 3	N/A	N/A
18, 32	FCP44A	Truck loading with dust suppression	N/A	N/A
18, 32	FCP44B	Truck loading with dust suppression	N/A	N/A
18, 32	FCP363940	Finished product storage bins	N/A	N/A
18, 32	FCPA11	Product conveyor No. 1 and No. 2 loadouts to railcars	N/A	N/A

## SECTION 2 - SPECIFIC LIMITATIONS AND CONDITIONS

### 2.1 - Emission Source(s) and Control Device(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 (ID No. ES607.2);
- G crusher feed bin No. 1 (ID No. ES2327A);
- G crusher feed conveyor No. 8A (G crusher feed bin No. 1 to G crusher No. 1) (ID No. ES2426.1);
- G crusher No. 1 (ID No. ES2426.2);

- 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 (ID No. ES4347.2);
- Product conveyor No. 3 (C crusher to D screen bin No. 1) (ID No. ESC3); and
- Conveyor No. 23A (baghouse hopper screw conveyor to dust conveyor No. 23C) (ID No. ESC23A.1)

**With associated crusher baghouse No. 1 (6,500 square feet of filter area; ID No. CDB1)**

- Dryer and G crusher conveyor No. 9 (G crusher to screens No. 2 and No. 3 feed bin) (ID No. ES16-A);
- 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);
- G crusher bin feed conveyor No. 5 (D screen No. 2 to G crusher bins) (ID No. ES1721D);
- L circuit new 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 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);
- Dryer feed conveyor No. 7 (undersize conveyor No. 3 to dryer) (ID No. ES8913F); and

**With associated screen baghouse No. 1 (11,750 square feet of filter area; ID No. CDB2)**

- Conveyor No. 23A.2 (dryer baghouse hopper screw conveyors to dust conveyor No. 23A) (ID No. ESC22)

**With associated dryer baghouse (12,300 square feet of filter area; ID No. CDB3)**

- Dryer and G crusher product conveyor No. 9 (G 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 G crusher bin) (ID No. ES1822D);
- Feed conveyor No. 6 (D screens to G 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. 19, three pickup points (M screens to grade silos) (ID No. ES3537K);
- Waste conveyor No. 21, three pickups (M screen to waste bin) (ID No. ES3527L); and
- Dust conveyor No. 23C (baghouse hopper to dust elevator) (ID No. ESC23C)

**With associated screen baghouse No. 2 (9,000 square feet of filter area; ID No. CDB4)**

#### **A. Crushing and Screening Operations, including (continued):**

- Dryer and G crusher product conveyor No. 9 (G 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);
- G crusher bin No. 2 (ID No. ES2327);
- G crusher feed conveyor No. 8B (G crusher bin to G crusher) (ID No. ES2729.1);
- G crusher No. 2 (ID No. ES2729.2);
- Feed conveyor No. 14A to L crusher bin No. 2 (ID No. ES4042);
- L crusher bin No. 2 (ID No. ES4043);
- Feed conveyor 16B to L crusher No. 2 (ID No. ES4044)
- L crusher feed conveyor No. 16B (ID No. ES4448.1); and
- L crusher No. 2 (ID No. ES4448.2)

**With associated crusher baghouse No. 2 (5,250 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); and
- Grade silo No. 3 (ID No. ES5155C)

**With associated grade silo baghouse (5,250 square feet of filter area; ID No. CDB6)**

- Dust conveyor No. 23C (baghouse hopper loadout to dust elevator) (ID No. ES23C);
- Dust conveyor No. 23C (hoppers for screens, grade silo, and waste baghouses to dust elevator) (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 (2,750 square feet of filter area; ID No. CDB7)**

- D Screen No. 4 assembly (includes the vibrator) (ID No. ESA1);
- 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)**

**A. Crushing and Screening Operations, including (continued):**

- G bin feed conveyor No. 6 loadout to bin feed conveyor No. 6A (ID No. ESA2);
- G feed bin No. 3 (ID No. ESA3);
- G crusher No. 3 (ID No. ESA4);
- Feed bin No. 3 (ID No. ESA8);
- L crusher No. 3 (ID No. ESA9); and
- Crusher baghouse No. 3 ash loadout (ID No. ESA12)

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

**Other Sources in crushing and screening plant**

- Enclosed dust conveyor No. 23C (dust conveyor No. 23A to transfer conveyor No. 23C) (ID No. F61);
- Enclosed waste stacker conveyor No. 25 with wet suppression (pugmill to outside storage) (ID No. F72);
- Enclosed pugmill with wet suppression (dust and waste processing) (ID No. F6771); and
- Waste pile (ID No. FWP)

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

Regulated Pollutant	Limits/Standards	Applicable Regulation
Particulate matter	Work practice standards	15A NCAC 02D .0510
Particulate matter from stacks associated with screen feeders, conveyors, screening operations, storage bins, elevators, and building vents	0.05 grams per dry standard cubic meter	15A NCAC 02D .0524 [40 CFR Part 60, Subpart 000]
Visible emissions from the vents of the crushing and screening buildings, any other affected facility, stacks associated with conveyors, screening operations, screen feeders, storage bins, and elevators	7 percent opacity	

Regulated Pollutant	Limits/Standards	Applicable Regulation
Visible emissions due to fugitive emissions from each grinding mill, screening operation, bucket elevator, transfer point on belt conveyors, storage bin, enclosed truck loading operation, or from any other affected facility (i.e. pugmill, waste pile, etc.).	10 percent opacity	
Particulate matter associated with fugitive non-process dust emissions	Work practice standards	15A NCAC 02D .0540

**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 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 PM10 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 2.1 A.3, below.
- c. The owner or operator of any sand, gravel, or crushed stone operation shall control process-generated emissions from conveyors, screens, and transfer points, such that the applicable opacity standards in 15A NCAC 15A NCAC 02D .0524, as described in Section 2.1 A.2.a, below, are not exceeded.

**Monitoring/Recordkeeping/Reporting**

- d. The monitoring, recordkeeping, and reporting requirements for 15A NCAC 02D .0510 shall be satisfied by compliance with the monitoring, recordkeeping, and reporting requirements of the New Source Performance Standards, 40 CFR Part 60, Subpart OOO found in Section 2.1 A.2, below.

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

**40 CFR Part 60, Subpart OOO: Standards of Performance for Nonmetallic Mineral Processing Plants**

For the conveyors, screening operations, screen feeders, storage bins, elevators, and building vents, 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 60, Subpart OOO “Standards of Performance for Nonmetallic Mineral Processing Plants,” including Subpart A “General Provisions.” [15A NCAC 02D .0524]

**Emissions Limitations** - [15A NCAC 02D .0524 and 40 CFR §60.672]

- a. The building enclosing the affected facility and building vents and/or stacks must comply with the following emission limits:
  - i. **Visible fugitive emissions** greater than 10% opacity shall not be discharged into the atmosphere from any building enclosing any transfer point on a conveyor belt or any other affected facility (grinding mill, screening operation, bucket elevator, transfer point on belt conveyors, storage bin, enclosed truck loading operation, or from any other affected facility except emissions through a vent as defined in 40 CFR §60.671.
  - ii. Particulate emissions from any vent of any building enclosing any transfer points on a conveyor belt or any other affected facility (screening operations, screen feeders, storage bins, elevators, etc.) that commenced construction, modification, or reconstruction after August 31, 1983 but before April 22, 2008, shall not be more than **0.05 grams per dry standard cubic meter (0.022 grains per dry standard cubic foot)**;

- iii. Particulate emissions from any vent of any building enclosing any transfer points on a conveyor belt or any other affected facility (screening operations, screen feeders, storage bins, elevators, etc.) that commenced construction, modification, or reconstruction on or after April 22, 2008, shall not be more than **0.032 grams per dry standard cubic meter (0.014 grains per dry standard cubic foot)** unless the affected facility meets the exemption provisions of §60.670(d)(1);
- iv. Like-kind Replacement dust conveyors (ID No. ESC23A.1, ESC23.A.2, and ESC23C) is exempt from the provisions of §60.672 per §60.670(d)(1); thus, the replacement facility shall comply with the same emission limitations as specified in Condition 2.1-A.2.a.ii. above;
- v. Visible emissions from any vent of any building enclosing any transfer points on a conveyor belt, stack, or any other affected facility (i.e. screening operations, screen feeders, storage bins, elevators, etc.) shall not be more than **7 percent opacity**.

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

- b. If emissions testing is required, the testing shall be performed in accordance with 15A NCAC 02Q .0508(f), 40 CFR §60.675, and General Condition JJ found in Section 3. If the results of this test are above the limit given in Section 2.1 A.2.a, above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524.

The Permittee conducted the initial performance testing for the sources listed in Section 2.1 A, above, as applicable, 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.

- i. Like-kind Replacement dust conveyors (ID No. ESC23A.1, ESC23.A.2, and ESC23C) is exempt from the provisions of §60.675 per §60.670(d)(1).

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

- c. Monitoring to assure compliance with the applicable emissions standards of Section 2.1.A.2.a, above, shall be performed by the Permittee per the following:
  - i. Observation of a building enclosure containing affected facilities:
    - (A) Observe each building **each month** for any visible emissions. Should visible emissions and/or fugitive emissions be observed above the limits, 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 the following;
    - (B) After corrective action is taken, a Method 9 opacity for stacks **OR** Method 22 if observing an affected facility's building enclosure 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 40 CFR §§60.672(a) and (e). 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. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524 if this monitoring is not conducted.

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

- d. Results of monitoring shall be maintained in a log (written or electronic form) and made available to authorized personnel upon request. The following shall be recorded in the log:
  - 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 the each observation;

- iii. If any emissions were observed from the building, 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).

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

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

- e. The Permittee shall submit a written summary report, of the monitoring and recordkeeping activities as follows:
  - 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. This report shall be submitted to the Administrator as requested.
  - ii. A summary report of monitoring and recordkeeping activities postmarked or delivered by 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.
  - 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), (b) and (c) as established using Method 9 or 22 compliance demonstrations conducted on an affected facility or building, along with the determined cause of exceedance and the resulting corrective action taken, within 5 business days of non-compliant observation.
- f. Like-kind Replacement - As provided in 40 CFR 60.670(d), when an existing facility (ID No. ESC23A.1, ESC23.A.2, and ESC23C) 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, the new facility is exempt from the provisions of 40 CFR 60.672, 60.674, and 60.675 except as provided for in 60.670(d)(3). The Permittee shall comply with the reporting requirements of 40 CFR 60.676(a).

**3. 15A NCAC 02D .0540: PARTICULATES FROM FUGITIVE NON PROCESS DUST EMISSION SOURCES**

- a. For the purpose of Section 2.1 A.3 the following definitions shall 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; and
  - ii. “Substantive complaints” means complaints that are verified with physical evidence acceptable to the Division.
- b. The owner or operator of a facility required to comply with rule 15A NCAC 02D .0510 “Particulates from Sand, Gravel, or Crushed Stone Operations” 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 rule 15A NCAC 02D .0540 cause or contribute to substantive complaints, the owner or operator of the facility 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; and
- iii. Within 30 days after the Director approves the plan, be in compliance with the plan.
- d. 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.

**Monitoring/Recordkeeping/Reporting**

- e. 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. One natural gas-fired dryer (ID No. ES1415) with one associated simple cyclone (eight feet in diameter; ID No. CDC1) in series with one baghouse (12,300 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:

Regulated 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 Part 60, Subpart UUU]
Visible emissions	10 percent opacity	15A NCAC 02D .0524 [40 CFR Part 60, Subpart UUU]
Odorous emissions	See Section 2.2-A.2	15A NCAC 02D .1806
Hazardous Air Pollutants	See Section 2.2-A.3	15A NCAC 02Q .0317 to avoid 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. [15A NCAC 02D .0516]

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

- b. If emissions testing is required, the testing shall be performed in accordance with 15A NCAC 02Q .0508(f) and General Condition JJ found in Section 3 of this permit. 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, or 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  
40 CFR Part 60, Subpart UUU: NSPS For Calciners and Dryers in Mineral Industries**

- a. For this dryer (ID No. ES1415), 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.” [15A NCAC 02D .0524]



**Emission Limitations** [15A NCAC 02D .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)]

- d. If emissions testing is required, the testing shall be performed in accordance with 15A NCAC 02Q .0508(f), 40 CFR §60.736, and General Condition JJ found in Section 3 of this permit. If the results of this test are above the limit given in Section 2.1 B.2.b or c, above, as applicable, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524.

The Permittee conducted the initial testing for dryer 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 735]

- e. 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.
- ii. Particulate matter emissions from dryer ES1415 shall be controlled by bagfilter CDB3. To assure 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 is no manufacturer's inspection and maintenance recommendations, as a minimum, the inspection and maintenance requirement shall include the following:

(A) An annual (for each 12 month period following the initial inspection) 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.

(C) An annual (for each 12 month period following the initial inspection) inspection of the cyclone for 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 the bagfilters; 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 a summary report of the monitoring requirements postmarked or delivered by 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 (5,750 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 (6,111 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)**

**Other sources in the Coloring Plant**

- Truck loading with dust suppression (ID No. FCP44A);
- Truck loading with dust suppression (ID No. FCP44B);
- Finished product storage bins (ID No. FCP363940); and
- Product 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:

Regulated Pollutant	Limits/Standards	Applicable Regulation
Particulate matter	Work practice standards	15A NCAC 02D .0510
Visible emissions from conveyors, screening operations, screen feeders, storage bins	20 percent opacity	15A NCAC 02D .0521
Particulate matter associated with fugitive non-process dust emissions	Work practice standards	15A NCAC 02D .0540

Regulated Pollutant	Limits/Standards	Applicable Regulation
Volatile Organic Compounds	See Section 2.2-A.1	15A NCAC 02D .0958
Toxic air pollutants	Toxic air pollutant emissions shall not exceed rates which cause established ambient levels to be exceeded; <b>State-enforceable only</b> (See Section 2.2-A.4. – Multiple Emission Sources)	15A NCAC 02D .1100
Odorous emissions	See Section 2.2-A.2	15A NCAC 02D .1806
Hazardous Air Pollutants	See Section 2.2-A.3	15A NCAC 02Q .0317 to avoid 15A NCAC 02D .1111
Toxic Air Pollutants	See Section 2.2-A.5	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 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 PM10 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 2.1 C.3, below.
- c. The owner or operator of any sand, gravel, or crushed stone operation shall control process-generated emissions 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.a, below, are not exceeded.

**Monitoring/Recordkeeping/Reporting**

- d. 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, as described in Sections 2.1 C.2.c, d, and e, below.

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

- a. Visible emissions from the sources from the Coloring Plant building 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. [15A NCAC 02D .0521(d)]

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

- b. If emissions testing is required, the testing shall be performed in accordance with 15A NCAC 02Q .0508(f) and General Condition JJ found in Section 3 of this permit. 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 assure compliance, once a month the Permittee shall observe the emission points of these sources 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.

If the above-normal emissions are not corrected per (i) above or if the demonstration in (ii) above cannot be made, the Permittee shall be deemed to be in noncompliance with 15A NCAC 02D .0521.

**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 observations postmarked or delivered by 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.

**3. 15A NCAC 02D .0540: PARTICULATES FROM SAND, GRAVEL, OR CRUSHED STONE OPERATIONS**

- a. For the purpose of Section 2.1 C.3 the following definitions shall 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; and
  - ii. "Substantive complaints" means complaints that are verified with physical evidence acceptable to the Division.
- b. The owner or operator of a facility required to comply with rule 15A NCAC 02D .0510 "Particulates from Sand, Gravel, or Crushed Stone Operations" 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 rule 15A NCAC 02D .0540 cause or contribute to substantive complaints, the owner or operator of the facility 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; and
  - iii. Within 30 days after the Director approves the plan, be in compliance with the plan.
- d. 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.

**Monitoring/Recordkeeping/Reporting**

- e. 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.

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

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

Regulated Pollutant	Limits/Standards	Applicable Regulation
Sulfur dioxide	2.3 pounds per million Btu heat input	15A NCAC 02D .0516
Particulate emissions	0.057 grams per dry standard cubic meter	15A NCAC 02D .0524 [40 CFR Part 60, Subpart UUU]
Visible emissions	10 percent opacity	15A NCAC 02D .0524 [40 CFR Part 60, Subpart UUU]
Odororous emissions	See Section 2.2-A.2	15A NCAC 02D .1806
Hazardous Air Pollutants	See Section 2.2-A.3	15A NCAC 02Q .0317 to avoid 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. [15A NCAC 02D .0516]

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

- b. If emissions testing is required, the testing shall be performed in accordance with 15A NCAC 02Q .0508(f) and General Condition JJ found in Section 3 of this permit. 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, or 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  
40 CFR Part 60, Subpart UUU: NSPS for Calciners and Dryers in Mineral Industries**

- a. For these dryers (ID Nos. ESCPPH1, ESCPPH2, and ESCPPH3), 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." [15A NCAC 02D .0524]

**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 15A NCAC 02Q .0508(f), 40 CFR §60.736, and General Condition JJ found in Section 3 of this permit. If the results of this test are above the limit given in Section 2.1 D.2.b or 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 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 ESCPPH3 by testing for particulate 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 ESCPPH3 and no later than 180 days after initial startup of dryer 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 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 ESCPPH3 and no later than 180 days after initial startup of dryer ESCPPH3.

**Monitoring/Recordkeeping** [15A NCAC 02Q .0508(f) and 40 CFR §§60.734 and 735]

- e. 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.
- ii. Particulate matter emissions from dryers ESCPPH1, ESCPPH2, and ESCPPH3 shall be controlled by bagfilters CDB9, CDB10, and CDB18, respectively. To assure 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 is no manufacturer's inspection and maintenance recommendations, as a minimum, the inspection and maintenance requirement shall include the following:
- (A) An annual (for each 12 month period following the initial inspection) 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 bagfilters' 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 the bagfilters; 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 a summary report of the monitoring requirements postmarked or delivered by 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 (11,111 square feet of filter area, each; ID Nos. CDB13, CDB14, and CDB20, respectively)**

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

Regulated Pollutant	Limits/Standards	Applicable Regulation
Particulate emissions	$E = 4.10 \times (P)^{0.67}$ for $P \leq 30$ tons per hour	15A NCAC 02D .0515
	$E = 55.0 \times (P)^{0.11} - 40$ for $P \geq 30$ tons per hour	
	Compliance Assurance Monitoring See Section 2.2 B	15A NCAC 02D .0614
Sulfur dioxide	2.3 pounds per million Btu heat input	15A NCAC 02D .0516
Visible emissions	20 percent opacity	15A NCAC 02D .0521
Odorous emissions	See Section 2.2-A.2	15A NCAC 02D .1806
Hazardous Air Pollutants	See Section 2.2-A.3	15A NCAC 02Q .0317 to avoid 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: [15A NCAC 02D .0515(a)]  
 $E = 4.10 \times (P)^{0.67}$  for  $P \leq 30$  tons per hour Where: P = Process weight in tons per hour; and  
 $E = 55.0 \times (P)^{0.11} - 40$  for  $P \geq 30$  tons per hour E = Allowable emission rate in pounds 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 15A NCAC 02Q .0508(f) and General Condition JJ found in Section 3 of this permit. 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/Recordkeeping** [15A NCAC 02Q .0508(f)]

- c. Particulate matter emissions from these three kilns (ID Nos. ESCPK1, ESCPK2, and ESCPK3) shall be controlled by three bagfilters (ID Nos. CDB13, CDB14, and CDB20, respectively). To assure 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 is no manufacturer’s inspection and maintenance recommendations, as a minimum, the inspection and maintenance requirement shall include the following:
  - i. An **annual** (for each 12 month period following the initial inspection) 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.

- 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 the bagfilters; 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 the bagfilters within 30 days of a written request by the DAQ.
- f. The Permittee shall submit a summary report of monitoring and recordkeeping activities 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. 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. [15A NCAC 02D .0516]

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

- b. If emissions testing is required, the testing shall be performed in accordance with 15A NCAC 02Q .0508(f) and General Condition JJ found in Section 3 of this permit. 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, or 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. [15A NCAC 02D .0521(d)]

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

- b. If emissions testing is required, the testing shall be performed in accordance with 15A NCAC 02Q .0508(f) and General Condition JJ found in Section 3 of this permit. 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 assure compliance, once a month the Permittee shall observe the emission points of these sources 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.

If the above-normal emissions are not corrected per (i) above or if the demonstration in (ii) above cannot be made, the Permittee shall be deemed to be in noncompliance with 15A NCAC 02D .0521.

**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 observations postmarked or delivered by 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 (2,889 square feet of filter area, each; ID Nos. CDB11, CDB12, and CDB19, respectively)**

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

Regulated Pollutant	Limits/Standards	Applicable Regulation
Particulate emissions	$E = 4.10 \times (P)^{0.67}$ 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
	Compliance Assurance Monitoring See Section 2.2-B	15A NCAC 02D .0614
Visible emissions	20 percent opacity	15A NCAC 02D .0521
Volatile Organic Compounds	See Section 2.2-A.1	15A NCAC 02D .0958
Toxic air pollutants	Toxic air pollutant emissions shall not exceed rates which cause established ambient levels to be exceeded; <b>State-enforceable only</b> (See Section 2.2-A.4. – Multiple Emission Sources)	15A NCAC 02D .1100

Regulated Pollutant	Limits/Standards	Applicable Regulation
Odorous emissions	See Section 2.2-A.2	15A NCAC 02D .1806
Hazardous Air Pollutants	See Section 2.2-A.3	15A NCAC 02Q .0317 to avoid 15A NCAC 02D .1111
Toxic Air Pollutants	See Section 2.2-A.5	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: [15A NCAC 02D .0515(a)]

$$E = 4.10 \times (P)^{0.67} \quad \text{for } P \leq 30 \text{ tons per hour}$$

$$E = 55.0 \times (P)^{0.11} - 40 \quad \text{for } P \geq 30 \text{ tons per hour}$$

Where: E = Allowable emission rate in pounds per hour; and  
 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 15A NCAC 02Q .0508(f) and General Condition JJ found in Section 3 of this permit. 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/Recordkeeping** [15A NCAC 02Q .0508(f)]

- c. Particulate matter emissions from these three roof granule mixing units (ID Nos. ESCPM1, ESCPM2, and ESCPM3) shall be controlled by three bagfilters (ID Nos. CDB11, CDB12, and CDB19, respectively). To assure 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 is no manufacturer’s inspection and maintenance recommendations, as a minimum, the inspection and maintenance requirement shall include the following:
  - i. An **annual** (for each 12 month period following the initial inspection) 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.

- 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 the bagfilters; 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 the bagfilters within 30 days of a written request by the DAQ.
- f. The Permittee shall submit a summary report of monitoring and recordkeeping activities 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. 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. [15A NCAC 02D .0521(d)]

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

- b. If emissions testing is required, the testing shall be performed in accordance with 15A NCAC 02Q .0508(f) and General Condition JJ found in Section 3 of this permit. 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 assure compliance, once a month the Permittee shall observe the emission points of these sources 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.

If the above-normal emissions are not corrected per (i) above or if the demonstration in (ii) above cannot be made, the Permittee shall be deemed to be in noncompliance with 15A NCAC 02D .0521.

**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 observations 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. 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:

Regulated Pollutant	Limits/Standards	Applicable Regulation
Particulate emissions	$E = 4.10 \times (P)^{0.67}$ 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
Volatile Organic Compounds	See Section 2.2-A.1	15A NCAC 02D .0958
Toxic air pollutants	Toxic air pollutant emissions shall not exceed rates which cause established ambient levels to be exceeded; <b>State-enforceable only</b> (See Section 2.2-A.4. – Multiple Emission Sources)	15A NCAC 02D .1100
Odorous emissions	See Section 2.2-A.2	15A NCAC 02D .1806
Hazardous Air Pollutants	See Section 2.2-A.3	15A NCAC 02Q .0317 to avoid 15A NCAC 02D .1111
Toxic Air Pollutants	See Section 2.2-A.5	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: [15A NCAC 02D .0515(a)]

$$E = 4.10 \times (P)^{0.67} \quad \text{for } P \leq 30 \text{ tons per hour}$$

$$E = 55.0 \times (P)^{0.11} - 40 \quad \text{for } P \geq 30 \text{ tons per hour}$$

Where: E = Allowable emission rate in pounds per hour; and  
 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 15A NCAC 02Q .0508(f) and General Condition JJ found in Section 3 of this permit. 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 records sufficient to demonstrate compliance with 15A NCAC 02D .0515 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 records are not maintained.

## 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. [15A NCAC 02D .0521(d)]

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

- b. If emissions testing is required, the testing shall be performed in accordance with 15A NCAC 02Q .0508(f) and General Condition JJ found in Section 3 of this permit. 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 assure compliance, once a month the Permittee shall observe the emission points of these sources 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.

If the above-normal emissions are not corrected per (i) above or if the demonstration in (ii) above cannot be made, the Permittee shall be deemed to be in noncompliance with 15A NCAC 02D .0521.

### **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 observations 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. 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. Facility-Wide Sources of Volatile Organic Compounds (VOC), Odorous Emissions, Hazardous Air Pollutants (HAP), and/or Toxic Air Pollutants (TAP), including:**

**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**

### **1. 15A NCAC 02D .0958: WORK PRACTICES FOR SOURCES OF VOLATILE ORGANIC COMPOUNDS**

- a. Pursuant to 15A NCAC 02D .0958, for all sources that use volatile organic compounds (VOC) as solvents, carriers, material processing media, or industrial chemical reactants, or in similar uses that mix, blend, or manufacture volatile organic compounds, or emit volatile organic compounds as a product of chemical reactions, and whose emissions of VOC are greater than 15 pounds per day; the Permittee shall:
  - i. Store all material, including waste material, containing volatile organic compounds in tanks or in containers covered with a tightly fitting lid that is free of cracks, holes, or other defects, when not in use,
  - ii. Clean up spills of volatile organic compounds as soon as possible following proper safety procedures,
  - iii. Store wipe rags containing volatile organic compounds in closed containers,
  - iv. Not clean sponges, fabric, wood, paper products, and other absorbent materials with volatile organic compounds,
  - v. Transfer solvents containing volatile organic compounds used to clean supply lines and other coating equipment into closable containers and close such containers immediately after each use, or transfer such solvents to closed tanks, or to a treatment facility regulated under section 402 of the Clean Water Act,
  - vi. Clean mixing, blending, and manufacturing vats and containers containing volatile organic compounds by adding cleaning solvent and close the vat or container before agitating the cleaning solvent. The spent cleaning solvent shall then be transferred into a closed container, a closed tank or a treatment facility regulated under section 402 of the Clean Water Act. [15A NCAC 02D .0958(c)]
- b. When cleaning parts with a solvent containing a volatile organic compound, the Permittee shall:
  - i. Flush parts in the freeboard area,
  - ii. Take precautions to reduce the pooling of solvent on and in the parts,
  - iii. Tilt or rotate parts to drain solvent and allow a minimum of 15 seconds for drying or until all dripping has stopped, whichever is longer,
  - iv. Not fill cleaning machines above the fill line,
  - v. Not agitate solvent to the point of causing splashing. [15A NCAC 02D .0958(d)]

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

- c. To assure compliance with paragraphs (a) and (b) above, the Permittee shall, at a minimum, perform a visual inspection once per month of all operations and processes utilizing volatile organic compounds. The inspections shall be conducted during normal operations. If the required inspections are not conducted the Permittee shall be deemed to be in noncompliance with 15A NCAC 02D .0958.

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

- d. The results of the inspections 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 inspection; and
  - ii. The results of each inspection noting whether or not noncompliant conditions were observed.

If the required records are not maintained the Permittee shall be deemed to be in noncompliance with rule 15A NCAC 02D .0958.

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

- e. The Permittee shall submit a summary report of the observations 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. All instances of deviations from the requirements of this permit must be clearly identified.

**STATE-ENFORCEABLE ONLY**

**2. 15A NCAC 02D .1806: CONTROL AND PROHIBITION OF ODOROUS EMISSIONS**

- a. 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.

**3. 15A NCAC 02Q .0317: AVOIDANCE CONDITIONS to avoid  
15A NCAC 02D .1111: MAXIMUM ACHIEVABLE CONTROL TECHNOLOGY**

- a. In order to avoid applicability of 15A NCAC 02D .1111 "Maximum Achievable Control Technology" and 40 CFR Part 63 "National Emission Standards for Hazardous Air Pollutants for Source Categories," the Permittee shall limit emissions of pollutants that qualify as hazardous air pollutants (HAP) pursuant to 40 CFR §63.2 "Definitions" such that:
  - i. The consecutive 12-month total emissions from this facility are less than 10 tons for each individual HAP; and
  - ii. The consecutive 12-month total emissions from this facility are less than 25 tons for all HAP combined.

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

- b. If emissions testing is required, the testing shall be performed in accordance with 15A NCAC 02Q .0508(f) and General Condition JJ found in Section 3 of this permit. If the results of this test are above either of the limits given in Section 2.2 A.3.a, above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111.

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

- c. To assure 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 Sections 2.2 A.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 ONLY TOXIC AIR POLLUTANT REQUIREMENT**

4. **TOXIC AIR POLLUTANT EMISSIONS LIMITATION AND REPORTING REQUIREMENT** - Pursuant to 15A NCAC 02D .1100 and in accordance with the approved application (application No. 1900104.11A), for an air toxic compliance demonstration (approved on October 1, 2012), 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

**STATE-ENFORCEABLE ONLY**

5. **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 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 No.)	TPER		
	pounds per year	pounds per day	pounds per hour
Benzene (71-43-2)	8.1		
Beryllium (7440-41-7)	0.28		
Dichlorobenzene (106-46-7)			16.8
Formaldehyde (50-00-0)			0.04
N-hexane (110-54-3)		23.0	
Manganese 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

**B. Three natural gas-fired kilns (ID Nos. ESCPK1, ESCPK2, and ESCPK3), as described in Section 2.1 E, above; and**

**Three roof granule mixing units (ID Nos. ESCPM1, ESCPM2, and ESCPM3), as described in Section 2.1 F, above**

**1. 15A NCAC 02D .0614: COMPLIANCE ASSURANCE MONITORING  
[40 CFR Part 64: Compliance Assurance Monitoring]**

- a. For sources **ESCPK1, ESCPK2, ESCPK3, ESCPM1, ESCPM2, and ESCPM3** and the associated bagfilters (**ID Nos. CDB11, CDB12, CDB13, CDB14, CDB19, and CDB20**), the Permittee shall comply with 40 CFR Part 64 pursuant to 15A NCAC 02D .0614 to assure that the listed sources comply with the emission limits of 15A NCAC 02D .0515.
- b. To assure compliance with particulate matter limits, emission sources **ESCPK1, ESCPK2, ESCPK3, ESCPM1, ESCPM2, and ESCPM3** shall be controlled by the associated bagfilters (**ID Nos. CDB11, CDB12, CDB13, CDB14, CDB19, and CDB20**) as listed in Sections 2.1 E and F, above.

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

- c. To assure compliance for sources **ESCPK1, ESCPK2, ESCPK3, ESCPM1, ESCPM2, and ESCPM3**, the Permittee shall:
  - i. The pressure drop is monitored continuously and the average values are recorded daily for the associated bagfilters (**ID Nos. CDB11, CDB12, CDB13, CDB14, CDB19, and CDB20**) via differential pressure gauges. The Permittee shall install, maintain, and operate, the differential pressure drop gauges as recommended by the equipment manufacturer. The facility will calculate the differential pressure drop daily average for each bagfilter, based on an arithmetic mean of the data points read and recorded during each day. 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. If the daily arithmetic mean differential pressure drop across a bagfilter is outside of the ranges given below, then an excursion has occurred;

- (A) If the pressure reading occurs within 120 operational hours from the installation of a new filter, the pressure range is between 0 and 7 inches of water
  - (B) At all other times, the pressure range is between 2.0 and 6.0 inches of water.
- ii. In the event of an excursion the Permittee shall take appropriate action to correct the excursion as soon as practicable. If a source or bagfilter listed in Section 2.2 B.1.a, above, operates with more than ten excursions in a semiannual reporting period, then the Permittee shall develop a Quality Improvement Plan (QIP) in accordance with 40 CFR §64.8
  - iii. The results of monitoring, inspections, maintenance, calibrations and corrections conducted pursuant to Sections 2.2 B.1.c.i and ii, above, 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 the differential pressure drop and visible emissions monitoring, noting any excursions along with any corrective actions taken to correct a differential pressure drop or reduce visible emissions;
    - (C) The results of any inspections or maintenance performed on the bagfilters and/or differential pressure drop gauges; and
    - (D) Any variance from manufacturer's recommendations, if any, and corrections made.The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0614 if this monitoring and recordkeeping is not conducted.

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

- d. The Permittee shall submit a summary report of the monitoring 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. All instances of deviations from the requirements of this permit must be clearly identified. The report shall also include 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.

## SECTION 3 - GENERAL CONDITIONS (version 4.0 12/17/15)

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 and any information submitted in support of the application package. The permit and application shall be made available to an authorized representative of 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, two copies 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. **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

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 and Permit Deviations**

[15A NCAC 02D .0535(f) and 02Q .0508(f)(2)]

**“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.*)

**“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.

##### Excess Emissions

1. 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.
2. 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).

##### Permit Deviations

3. Pursuant to 15A NCAC 02Q .0508(f)(2), the Permittee shall report deviations from permit requirements (terms and conditions) as follows:
  - a. Notify the Regional Supervisor or Director of all other deviations from permit requirements not

covered under 15A NCAC 02D .0535 quarterly. 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.B. 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. Emergency Provisions [40 CFR 70.6(g)]**

The Permittee shall be subject to the following provisions with respect to emergencies:

1. An emergency means any situation arising from sudden and reasonably unforeseeable events beyond the control of the facility, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the facility to exceed a technology-based emission limitation under the permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventive maintenance, careless or improper operation, or operator error.
2. An emergency constitutes an affirmative defense to an action brought for noncompliance with such technology-based emission limitations if the conditions specified in 3. below are met.
3. The affirmative defense of emergency shall be demonstrated through properly signed contemporaneous operating logs or other relevant evidence that include information as follows:
  - a. an emergency occurred and the Permittee can identify the cause(s) of the emergency;
  - b. the permitted facility was at the time being properly operated;
  - c. during the period of the emergency the Permittee took all reasonable steps to minimize levels of emissions that exceeded the standards or other requirements in the permit; and
  - d. the Permittee submitted notice of the emergency to the DAQ within two working days of the time when emission limitations were exceeded due to the emergency. This notice must contain a description of the emergency, steps taken to mitigate emissions, and corrective actions taken.
4. In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.
5. This provision is in addition to any emergency or upset provision contained in any applicable requirement specified elsewhere herein.

**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 nine 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 and EPCRA Enforcement Branch, EPA, Region 4, 61 Forsyth Street SW, Atlanta, GA 30303) postmarked on or before March 1 a compliance certification (for the preceding calendar year) by a responsible official with all federally-enforceable terms and conditions in the permit, including emissions limitations, standards, or work practices. 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; and
4. the method(s) used for determining the compliance status of the source during the certification period.

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)(4)]

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(e)]

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. **Prevention of Accidental Releases General Duty Clause - Section 112(r)(1) -**  
**FEDERALLY-ENFORCEABLE ONLY**

Although a risk management plan may not be required, if the Permittee produces, processes, handles, or stores any amount of a listed hazardous substance, the Permittee has a general duty to take such steps as are necessary to prevent the accidental release of such substance and to minimize the consequences of any release.

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, .0912, .1110, .1111, or .1415 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, 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:
    - (1) 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.
    - (2) Prescribe alternate test procedures on an individual basis when he finds that the alternative method is necessary to secure more reliable test data.
    - (3) Prescribe or approve methods on an individual basis for sources or pollutants for which no test method is specified in this Section if the methods can be demonstrated to determine compliance of permitted emission sources or pollutants.
  - b. The Director may authorize the Division of Air Quality to conduct independent tests of any source

subject to a rule in this Subchapter 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 Section 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 Non-Operating 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. During operation the monitoring recordkeeping and reporting requirements as prescribed by the permit shall be implemented within the monitoring period.

**MM. Fugitive Dust Control Requirement [15A NCAC 02D .0540] - STATE ENFORCEABLE ONLY**

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(c)(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(d)(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 (EPA - Air Planning Branch, 61 Forsyth St. SW, Atlanta, GA 30303) in writing at least seven days before the change is made. The written notification shall include:
  - a. a description of the change at the facility;
  - b. the date on which the change will occur;
  - c. any change in emissions; and
  - d. any permit term or condition that is no longer applicable as a result of the change.

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 Environmental Protection Agency (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.

## ATTACHMENT

**List of Acronyms**

<b>AOS</b>	Alternate Operating Scenario
<b>BACT</b>	Best Available Control Technology
<b>Btu</b>	British thermal unit
<b>CAA</b>	Clean Air Act
<b>CAIR</b>	Clean Air Interstate Rule
<b>CEM</b>	Continuous Emission Monitor
<b>CFR</b>	Code of Federal Regulations
<b>DAQ</b>	Division of Air Quality
<b>DEQ</b>	Department of Environmental Quality
<b>EMC</b>	Environmental Management Commission
<b>EPA</b>	Environmental Protection Agency
<b>FR</b>	Federal Register
<b>GACT</b>	Generally Available Control Technology
<b>HAP</b>	Hazardous Air Pollutant
<b>MACT</b>	Maximum Achievable Control Technology
<b>NAA</b>	Non-Attainment Area
<b>NCAC</b>	North Carolina Administrative Code
<b>NCGS</b>	North Carolina General Statutes
<b>NESHAPS</b>	National Emission Standards for Hazardous Air Pollutants
<b>NO<sub>x</sub></b>	Nitrogen Oxides
<b>NSPS</b>	New Source Performance Standard
<b>OAH</b>	Office of Administrative Hearings
<b>PM</b>	Particulate Matter
<b>PM<sub>10</sub></b>	Particulate Matter with Nominal Aerodynamic Diameter of 10 Micrometers or Less
<b>POS</b>	Primary Operating Scenario
<b>PSD</b>	Prevention of Significant Deterioration
<b>RACT</b>	Reasonably Available Control Technology
<b>SIC</b>	Standard Industrial Classification
<b>SIP</b>	State Implementation Plan
<b>SO<sub>2</sub></b>	Sulfur Dioxide
<b>tpy</b>	Tons Per Year
<b>VOC</b>	Volatile Organic Compound