

PERMIT NO. 3295-051-0023-V-04-0

ISSUANCE DATE:



GEORGIA

DEPARTMENT OF NATURAL RESOURCES

ENVIRONMENTAL PROTECTION DIVISION

Air Quality - Part 70 Operating Permit

Facility Name: BASF Corporation – Savannah Operations

Facility Address: 1800 East President Street
Savannah, Georgia 31404, Chatham County

Mailing Address: 1800 East President Street
Savannah, Georgia 31404

Parent/Holding Company: BASF Corporation

Facility AIRS Number: 04-13-051-00023

In accordance with the provisions of the Georgia Air Quality Act, O.C.G.A. Section 12-9-1, et seq and the Georgia Rules for Air Quality Control, Chapter 391-3-1, adopted pursuant to and in effect under the Act, the Permittee described above is issued a Part 70 Permit for:

The operation of a petroleum catalyst manufacturing facility

This Permit is conditioned upon compliance with all provisions of The Georgia Air Quality Act, O.C.G.A. Section 12-9-1, et seq, the Rules, Chapter 391-3-1, adopted and in effect under that Act, or any other condition of this Permit. Unless modified or revoked, this Permit expires five years after the issuance date indicated above.

This Permit may be subject to revocation, suspension, modification or amendment by the Director for cause including evidence of noncompliance with any of the above, for any misrepresentation made in Title V Application TV42105 signed on November 22, 2016, any other applications upon which this Permit is based, supporting data entered therein or attached thereto, or any subsequent submittal of supporting data, or for any alterations affecting the emissions from this source.

This Permit is further subject to and conditioned upon the terms, conditions, limitations, standards, or schedules contained in or specified on the attached **45** pages.

Draft



Richard E. Dunn, Director
Environmental Protection Division

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PART 1.0 FACILITY DESCRIPTION**1.1 Site Determination**

This is the only facility at this Part 70 site; there are no known site determination issues.

1.2 Previous and/or Other Names

Previously known as BASF Catalysts LLC – Savannah Operations.

1.3 Overall Facility Process Description

The facility manufactures three products: Alumina, Fluid Cracking Catalysts, and Microspheres.

“Alumina”

Raw materials are mixed together and crystallized. The alumina is washed on belt filters and then spray dried into the final product, which is pneumatically conveyed to storage silos. The product is loaded out of the silos into railcars, trucks or bagged into supersacks for delivery to downstream catalysts manufacturing facilities.

“Fluid Cracking Catalyst”

Raw materials are mixed in tanks and then crystallized in reactors. The catalyst then goes through a base exchange process on belt filters, rotary driers and calciners. The finished catalyst is pneumatically conveyed to storage hoppers. The product is loaded from the hoppers into either railcars, trucks or bagged into supersacks for delivery to oil refineries.

“Microspheres”

Kaolin slurry is mixed with other raw materials, spray dried, calcined and sifted. Finished microspheres are pneumatically conveyed to storage hoppers. The product is loaded from the storage hoppers into railcars or trucks for delivery to downstream catalyst manufacturing facilities or used on site to manufacture catalyst.

PART 2.0 REQUIREMENTS PERTAINING TO THE ENTIRE FACILITY

2.1 Facility Wide Emission Caps and Operating Limits

- 2.1.1 The Permittee shall limit the plant-wide usage of formic acid to less than 2,500,000 pounds during any 12 consecutive month period.
[391-3-1-.03(2)(c) & PSD avoidance]
- 2.1.2 The Permittee shall not discharge, or cause the discharge into the atmosphere from the entire facility, nitrogen oxides (NO_x) in amounts equal to or exceeding 250 tons during any twelve consecutive months.
[391-3-1-.03(2)(c) & PSD avoidance]

2.2 Facility Wide Federal Rule Standards

None applicable.

2.3 Facility Wide SIP Rule Standards

None applicable.

2.4 Facility Wide Standards Not Covered by a Federal or SIP Rule and Not Instituted as an Emission Cap or Operating Limit

None applicable.

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PART 3.0 REQUIREMENTS FOR EMISSION UNITS

Note: Except where an applicable requirement specifically states otherwise, the averaging times of any of the Emissions Limitations or Standards included in this permit are tied to or based on the run time(s) specified for the applicable reference test method(s) or procedures required for demonstrating compliance.

3.1 Emission Units

Emission Units		Specific Limitations/Requirements		Air Pollution Control Devices	
ID No.	Description	Applicable Requirements / Standards	Corresponding Permit Conditions	ID No.	Description
D1A	Spray Dryer- 35 mmbtu/hr	391-3-1-.02(2)(e), 391-3-1-.02(2)(b), 391-3-1-.02(2)(g), PSD Avoidance	3.2.1, 3.4.1, 3.4.2, 3.4.4, 5.2.1, 5.2.5, 5.2.6, 5.2.8, 5.2.11, 6.2.3, 6.2.4 & 6.2.6	CD1A	Baghouse with COMS
D2	Rotary Dryer- 20 mmbtu/hr	391-3-1-.02(2)(e), 391-3-1-.02(2)(b), 391-3-1-.02(2)(g), PSD Avoidance	3.2.1, 3.4.1, 3.4.2, 3.4.4, 5.2.3, 5.2.4, 5.2.5, 5.2.6, 5.2.8, 6.2.3, 6.2.4 & 6.2.6	CD02	baghouse
D3	Rotary Dryer- 20 mmbtu/hr	40 CFR 60, Subpart UUU, 391-3-1-.02(2)(e), 391-3-1-.02(2)(g)	3.2.2, 3.3.1, 3.4.1, 3.4.4, 5.2.1, 5.2.5, 5.2.6, 5.2.8, 5.2.11, 6.2.2, 6.2.3, 6.2.4, 6.2.5 & 6.2.6	CD03	baghouse with COMS
D6	Rotary Calciner- 35 MMBtu/hr Non heat recovery mode	40 CFR 60, Subpart UUU, 391-3-1-.02(2)(e), 391-3-1-.02(2)(g)	3.3.1, 3.4.1, 3.4.4, 5.2.1, 5.2.2, 5.2.3, 5.2.4, 5.2.5, 5.2.6, (5.2.8, 5.2.9, 5.2.10, 5.2.11), 6.2.3, 6.2.4 & 6.2.6	CD6A or CD1B CD6B	scrubber or (spray dryer D1B baghouse with COMS, in heat recovery mode) product collector
D1B	Spray Dryer 35 MMBtu/hr	40 CFR 60, Subpart UUU, 391-3-1-.02(2)(e), 391-3-1-.02(2)(g)	3.3.1, 3.4.1, 3.4.4, 5.2.1, 5.2.5, 5.2.6, 5.2.8, 5.2.11, 6.2.3, 6.2.4 & 6.2.6	CD1B	D1B baghouse with COMS
D7	Rotary Calciner- 20 mmbtu/hr	40 CFR 60, Subpart UUU, 391-3-1-.02(2)(e), 391-3-1-.02(2)(g)	3.2.2, 3.3.1, 3.4.1, 3.4.4, 5.2.2, 5.2.3, 5.2.4, 5.2.6, 6.2.2, 6.2.3, 6.2.4, 6.2.5 & 6.2.6	CD8A CD8B CD8C CD07	baghouse venturi scrubber NH3 absorber product collector
D8	Spray Dryer- 20 mmbtu/hr	40 CFR 60, Subpart UUU, 391-3-1-.02(2)(e), 391-3-1-.02(2)(g)	3.2.2, 3.3.1, 3.4.1, 3.4.4, 5.2.2, 5.2.3, 5.2.4, 5.2.5, 5.2.6, 5.2.8, 5.2.9, 5.2.10, 6.2.2, 6.2.3, 6.2.4, 6.2.5 & 6.2.6	CD8A CD8B CD8C	baghouse venturi scrubber NH3 absorber
D9	Alumina Dryer- 35 mmbtu/hr	40 CFR 60, Subpart UUU, 391-3-1-.02(2)(e), 391-3-1-.02(2)(g)	3.3.1, 3.4.1, 3.4.4, 5.2.1, 5.2.5, 5.2.6, 5.2.8, 5.2.11, 6.2.3, 6.2.4 & 6.2.6	CD09	baghouse with COMS
D10	Rotary Calciner- 20 mmbtu/hr	40 CFR 60, Subpart UUU, 391-3-1-.02(2)(e), 391-3-1-.02(2)(g)	3.2.2, 3.3.1, 3.4.1, 3.4.4, 5.2.1, 5.2.5, 5.2.6, 5.2.8, 5.2.11, 6.2.2., 6.2.3, 6.2.4, 6.2.5 & 6.2.6	CD03	baghouse with COMS
H07	Storage Silo	391-3-1-.02(2)(e), 391-3-1-.02(2)(b), PSD Avoidance	3.2.1, 3.4.1, 3.4.2	CH07	baghouse

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ID No.	Description	Applicable Requirements / Standards	Corresponding Permit Conditions	ID No.	Description
H08	Storage Silo	391-3-1-.02(2)(e), 391-3-1-.02(2)(b), PSD Avoidance	3.2.1, 3.4.1, 3.4.2	CH08	baghouse
H09	Storage Silo	391-3-1-.02(2)(e), 391-3-1-.02(2)(b), PSD Avoidance	3.2.1, 3.4.1, 3.4.2	CH09	baghouse
H10	Storage Silo	391-3-1-.02(2)(e), 391-3-1-.02(2)(b), PSD Avoidance	3.2.1, 3.4.1, 3.4.2	CH10	baghouse
H11A	Storage Silo	391-3-1-.02(2)(e), 391-3-1-.02(2)(b), PSD Avoidance	3.2.1, 3.4.1, 3.4.2	CH11A	baghouse
H11B	Storage Silo	391-3-1-.02(2)(e), 391-3-1-.02(2)(b), PSD Avoidance	3.2.1, 3.4.1, 3.4.2	CH11B	baghouse
H12	Storage Silo	391-3-1-.02(2)(e), 391-3-1-.02(2)(b), PSD Avoidance	3.2.1, 3.4.1, 3.4.2	CH12	baghouse
H13	Storage Silo	391-3-1-.02(2)(e), 391-3-1-.02(2)(b), PSD Avoidance	3.2.1, 3.4.1, 3.4.2	CH13	baghouse
H14	Storage Silo	391-3-1-.02(2)(e), 391-3-1-.02(2)(b), PSD Avoidance	3.2.1, 3.4.1, 3.4.2	CH14	baghouse
H15	Storage Silo	391-3-1-.02(2)(e), 391-3-1-.02(2)(b), PSD Avoidance	3.2.1, 3.4.1, 3.4.2	CH15	baghouse
H16	Storage Silo	391-3-1-.02(2)(e), 391-3-1-.02(2)(b), PSD Avoidance	3.2.1, 3.4.1, 3.4.2	CH16	baghouse
H17	Storage Silo	391-3-1-.02(2)(e), 391-3-1-.02(2)(b), PSD Avoidance	3.2.1, 3.4.1, 3.4.2	CH17	baghouse
H18	Storage Silo	391-3-1-.02(2)(e), 391-3-1-.02(2)(b), PSD Avoidance	3.2.1, 3.4.1, 3.4.2	CH18	baghouse
H19	Storage Silo	391-3-1-.02(2)(e), 391-3-1-.02(2)(b), PSD Avoidance	3.2.1, 3.4.1, 3.4.2	CH19	baghouse
H20	Storage Silo	391-3-1-.02(2)(e),	3.2.1, 3.4.1, 3.4.2	CH20	baghouse

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Emission Units		Specific Limitations/Requirements		Air Pollution Control Devices	
ID No.	Description	Applicable Requirements / Standards	Corresponding Permit Conditions	ID No.	Description
		391-3-1-.02(2)(b), PSD Avoidance			
H31	Storage Silo	391-3-1-.02(2)(e), 391-3-1-.02(2)(b), PSD Avoidance	3.2.1, 3.4.1, 3.4.2	CH31	baghouse
H32	Storage Silo	391-3-1-.02(2)(e), 391-3-1-.02(2)(b), PSD Avoidance	3.2.1, 3.4.1, 3.4.2	CH32	baghouse
H33	Storage Silo	391-3-1-.02(2)(e), 391-3-1-.02(2)(b), PSD Avoidance	3.2.1, 3.4.1, 3.4.2	CH33	baghouse
H34	Storage Silo	391-3-1-.02(2)(e), 391-3-1-.02(2)(b), PSD Avoidance	3.2.1, 3.4.1, 3.4.2	CH34	baghouse
T5	MT4034 Mix Tank	391-3-1-.02(2)(e), 391-3-1-.02(2)(b), PSD Avoidance	3.2.1, 3.4.1, 3.4.2	CT05	baghouse
T8	MT6325 Mix Tank	391-3-1-.02(2)(e), 391-3-1-.02(2)(b), PSD Avoidance	3.2.1, 3.4.1, 3.4.2	CD07	D7 baghouse
L1	Catalyst Blender/Loadout Spout	391-3-1-.02(2)(e), 391-3-1-.02(2)(b), PSD Avoidance	3.2.1, 3.4.1, 3.4.2	CL01	baghouse
L2	Microsphere Screw Conveyor Loadout	391-3-1-.02(2)(e), 391-3-1-.02(2)(b), PSD Avoidance	3.2.1, 3.4.1, 3.4.2	CL02	baghouse
L3	Fluid Cracking Catalyst Bagging System	391-3-1-.02(2)(e), 391-3-1-.02(2)(b), PSD Avoidance	3.2.1, 3.4.1, 3.4.2	CL03	baghouse
L4	Alumina Bagging System	391-3-1-.02(2)(e), 391-3-1-.02(2)(b), PSD Avoidance	3.2.1, 3.4.1, 3.4.2	CL04	baghouse
L7	Catalyst Screw Conveyor Loadout	391-3-1-.02(2)(e), 391-3-1-.02(2)(b), PSD Avoidance	3.2.1, 3.4.1, 3.4.2	CL07	baghouse
L8	Alumina Bagging System	391-3-1-.02(2)(e), 391-3-1-.02(2)(b), PSD Avoidance	3.2.1, 3.4.1, 3.4.2	CL04	baghouse
L9	Alumina Bagging System	391-3-1-.02(2)(e), 391-3-1-.02(2)(b)	3.4.1, 3.4.2	CL09	baghouse

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Emission Units		Specific Limitations/Requirements		Air Pollution Control Devices	
ID No.	Description	Applicable Requirements / Standards	Corresponding Permit Conditions	ID No.	Description
MIS2	H-1479, 1480 Surge Hoppers	391-3-1-.02(2)(e), 391-3-1-.02(2)(b), PSD Avoidance	3.2.1, 3.4.1, 3.4.2	CMS2	baghouse
MIS3	GM1420 Georgia. Marble (GM) Sifter	391-3-1-.02(2)(e), 391-3-1-.02(2)(b), PSD Avoidance	3.2.1, 3.4.1, 3.4.2	CMS3	baghouse
MIS5	Logistics Vacuum Receiver	391-3-1-.02(2)(e), 391-3-1-.02(2)(b), PSD Avoidance	3.2.1, 3.4.1, 3.4.2	CMS5	baghouse
MIS6	Logistic Semi-Dense Phase Transporter	391-3-1-.02(2)(e), 391-3-1-.02(2)(b), PSD Avoidance	3.2.1, 3.4.1, 3.4.2	CMS6	baghouse
MIS7	H-5250 Product Hopper	391-3-1-.02(2)(e), 391-3-1-.02(2)(b), PSD Avoidance	3.2.1, 3.4.1, 3.4.2, 5.2.3, 5.2.4	CD03	baghouse
B1	20 mmbtu/hr boiler 1	391-3-1-.02(2)(d), 391-3-1-.02(2)(g)	3.4.3, 3.4.4, 6.2.3, 6.2.4 & 6.2.6	none	none
B2	20 mmbtu/hr boiler 2	391-3-1-.02(2)(d), 391-3-1-.02(2)(g)	3.4.3, 3.4.4, 6.2.3, 6.2.4 & 6.2.6	none	none
B3	20 mmbtu/hr boiler 3	391-3-1-.02(2)(d), 391-3-1-.02(2)(g)	3.4.3, 3.4.4, 6.2.3, 6.2.4 & 6.2.6	none	none
B4	20 mmbtu/hr boiler 4	40 CFR 52.21 avoidance, 40 CFR 60 Subpart Dc, 391-3-1-.02(2)(d), 391-3-1-.02(2)(g)	3.2.3, 3.3.2, 3.4.3, 3.4.4, 6.2.3, 6.2.4, 6.2.6 & 6.2.7	none	none
D11	GEA Spray Dryer System - Niro SD-630 with NP70 Direct Gas Fired heater rated at 26 MMBtu/Hr.	0 CFR 60, Subpart UUU, 391-3-1-.02(2)(e), 391-3-1-.02(2)(g)	3.3.1, 3.4.1, 3.4.4, 5.2.1, 5.2.5, 5.2.6, 5.2.8, 5.2.11, 6.2.3, 6.2.4 & 6.2.6	CD11	baghouse with COMS

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

3.2 Equipment Emission Caps and Operating Limits

- 3.2.1 The Permittee shall not discharge, or cause the discharge, into the atmosphere, from any source not separately specified in another condition in Section 3 of this permit, gases which contain particulate matter emissions in amounts exceeding 0.02 grains/dscf or exhibit greater than 10 percent opacity. Table 3.1 of this Permit indicates sources affected by this condition.
[391-3-1-.03(2)(c) & PSD avoidance]

- 3.2.2 The Permittee shall not discharge, or cause the discharge, into the atmosphere, from the following sources, ammonia emissions in excess of:
[391-3-1-.03(2)(c) & Georgia EPD Toxic Impact Assessment Guidelines]
- a. D3/D10 stack (SD02) - 250.0 pounds per hour
 - b. D7/D8 stack (SD08) - 10.0 pounds per hour
- 3.2.3 The Permittee shall limit fuels combusted in Boiler No. 4 (B4) to natural gas and propane only.
[391-3-1-.03(2)(c)]

3.3 Equipment Federal Rule Standards

- 3.3.1 The Permittee shall comply with the provisions of 40 CFR 60, Subpart UUU, “*Standards of Performance for Calciners and Dryers in Mineral Industries*,” for all subject equipment {for reference, see listing in Section 3.1 above}. In particular, for sources subject to Subpart UUU, the Permittee shall comply with the following conditions for each calciner and dryer:
[40 CFR 60.732(a) & (b)]
- a. Discharges particulate matter not in excess of 0.092 gram per dry standard cubic meter (g/dscm) [0.040 grain per dry standard cubic foot (gr/dscf)] for calciners and for calciners and dryers installed in series and not in excess of 0.057 g/dscm (0.025 grains/dscf) for dryers.
 - b. Exhibits no greater than 10 percent opacity, unless the emissions are discharged from an emission unit using a wet scrubbing control device. Facilities using a wet scrubbing control device shall comply with the monitoring provisions 40 CFR 60.734 (d) and recordkeeping and reporting requirements of 40 CFR 60.735(b) & (c).
- 3.3.2 The Permittee shall comply with all applicable provisions of the New Source Performance Standards (NSPS) as found in 40 CFR 60 Subpart A - “*General Provisions*” and 40 CFR 60 Subpart Dc – “*Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units*,” for operation of Boiler No. 4 (Emission Unit ID No. B4). In particular, the Permittee shall comply with recordkeeping and reporting requirements of Subpart Dc.
[40 CFR 60.40c & 60.48c]

3.4 Equipment SIP Rule Standards

3.4.1 The Permittee shall not cause, let, suffer, permit, or allow the emission from any source, particulate matters (PM) in total quantities equal to or exceeding the allowable rate as calculated using the applicable equation below, unless otherwise specified in this Permit.
[391-3-1-.02(2)(e)1. and 2.][Vault GA-022-EL, 02/10]

a. For equipment in operation or extensively altered **after** July 2, 1968:

i. $E = 4.1P^{0.67}$, for process input weight rate up to and including 30 tons per hour;

ii. $E = 55P^{0.11} - 40$, for process input weight rate in excess of 30 tons per hour.

b. For equipment in operation or under construction contract **on or before** July 2, 1968:

$$E = 4.1P^{0.67}$$

Where:

E = allowable emission rate in pounds per hour;

P = process input weight rate in tons per hour.

3.4.2 The Permittee shall not discharge, or cause the discharge, into the atmosphere, from any source listed as subject to Rule (b) in Table 3.1, any gases which exhibit visible emissions, the opacity of which is equal to or greater than 40 percent, unless otherwise specified.
[391-3-1-.02(2)(b)1.] [Vault GA-024-EL, 09/11]

3.4.3 The Permittee shall not discharge, or cause the discharge, into the atmosphere, from boilers B1 through B4, gases which:
[391-3-1-.02(2)(d)]

a. Exhibit greater than 20 percent opacity, except for one six-minute period per hour of not more than 27 percent opacity.

[391-3-1-.02(2)(d)3.] [Vault GA-001-EL, 02/10]

b. Contain fly ash and/or other particulate matter in amounts equal to or exceeding the rate derived from $P = 0.5(10/R)^{0.5}$ where R equals heat input rate in million BTU per hour and P equals the allowable emission rate in pounds per million BTU.

[391-3-1-.02(2)(d)2.(ii)] [Vault GA-001-EL, 02/10]

3.4.4 The Permittee shall not burn fuel containing more than 2.5 percent sulfur, by weight, in any dryer, calciner, boiler, or any other fuel burning source, unless otherwise specified by the Director.

[391-3-1-.02(2)(g)2.][Vault GA-002-EL, 02/10]

3.5 Equipment Standards Not Covered by a Federal or SIP Rule and Not Instituted as an Emission Cap or Operating Limit

- 3.5.1 Except when processing “intermediate” product from other facilities containing reduced nitrates, the Permittee shall reduce nitrates in Zeolite prior to calcination using various methods including washing if required, to reduce NO_x emissions from the facility. Intermediate products are washed at other facilities in order to reduce nitrates and do not need to be rewashed at the facility.
[391-3-1-.03(2)(c)]

PART 4.0 REQUIREMENTS FOR TESTING**4.1 General Testing Requirements**

4.1.1 The Permittee shall cause to be conducted a performance test at any specified emission unit when so directed by the Environmental Protection Division (“Division”). The test results shall be submitted to the Division within 60 days of the completion of the testing. Any tests shall be performed and conducted using methods and procedures that have been previously specified or approved by the Division.
[391-3-1-.02(6)(b)1(i)]

4.1.2 The Permittee shall provide the Division thirty (30) days (or sixty (60) days for tests required by 40 CFR Part 63) prior written notice of the date of any performance test(s) to afford the Division the opportunity to witness and/or audit the test, and shall provide with the notification a test plan in accordance with Division guidelines.
[391-3-1-.02(3)(a) and 40 CFR 63.7(b)(1)]

4.1.3 Performance and compliance tests shall be conducted and data reduced in accordance with applicable procedures and methods specified in the Division’s Procedures for Testing and Monitoring Sources of Air Pollutants. The methods for the determination of compliance with emission limits listed under Sections 3.2, 3.3, 3.4 and 3.5 are as follows:

- a. Method 1 for the determination of sample point locations,
- b. Method 2 for the determination of flow rate,
- c. Method 3 or 3A for the determination of stack gas molecular weight,
- d. Method 4 for the determination of stack gas moisture,
- e. Method 5 or Method 17 as applicable, for the determination of Particulate Matter emissions. Procedures of 40 CFR 60.736 shall be used for Subpart UUU applicable sources,
- f. Method 9 and the procedures contained in Section 1.3 of the above reference document for the determination of opacity,
- g. Method 22 for the visual determination of fugitive emissions.
- h. Conditional Test Method 027 for the determination of ammonia emissions.

Minor changes in methodology may be specified or approved by the Director or his designee when necessitated by process variables, changes in facility design, or improvement or corrections that, in his opinion, render those methods or procedures, or portions thereof, more reliable.

[391-3-1-.02(3)(a)]

- 4.1.4 The Permittee shall submit performance test results to the US EPA's Central Data Exchange (CDX) using the Compliance and Emissions Data Reporting Interface (CEDRI) in accordance with any applicable NSPS or NESHAP standards (40 CFR 60 or 40 CFR 63) that contain Electronic Data Reporting Requirements. This Condition is only applicable if required by an applicable standard and for the pollutant(s) subject to said standard.
[391-3-1-.02(8)(a) and 391-3-1-.02(9)(a)]

4.2 Specific Testing Requirements

- 4.2.1 In accordance with the provisions of 40 CFR 60.8, for any equipment constructed or modified at the facility, the Permittee shall conduct a performance test within 60 days after achieving the maximum production rate at which the equipment will be operated, but no later than 180 days after initial startup, unless the equipment is specifically exempt from testing in the applicable Subpart of 40 CFR Part 60. The tests shall be conducted using the test methods and procedures specified in Condition 4.1.3. The specific pollutants, sample volumes, run times, and other testing parameters shall be as specified in the applicable Subpart of 40 CFR Part 60.
[40 CFR 60.8]

PART 5.0 REQUIREMENTS FOR MONITORING (Related to Data Collection)**5.1 General Monitoring Requirements**

- 5.1.1 Any continuous monitoring system required by the Division and installed by the Permittee shall be in continuous operation and data recorded during all periods of operation of the affected facility except for continuous monitoring system breakdowns and repairs. Monitoring system response, relating only to calibration checks and zero and span adjustments, shall be measured and recorded during such periods. Maintenance or repair shall be conducted in the most expedient manner to minimize the period during which the system is out of service.
[391-3-1-.02(6)(b)1]

5.2 Specific Monitoring Requirements

- 5.2.1 The Permittee shall install, calibrate, maintain, and operate a system to continuously monitor and record the indicated pollutants on the following equipment. Each system shall meet the applicable performance specification(s) of the Division's monitoring requirements.
[391-3-1-.02(6)(b)1, 40 CFR 70.6(a)(3)(i) & 40 CFR Part 60, Subpart UUU]
- a. A Continuous Opacity Monitoring System, (COMS), to measure and record the opacity of emissions in the combined exhaust from Calciner D6 (when operated in heat recovery mode) and Spray Dryer D1B.
 - b. A Continuous Opacity Monitoring System, (COMS), to measure and record the opacity of emissions from Alumina Dryer D9.
 - c. A Continuous Opacity Monitoring System, (COMS), to measure and record the opacity of emissions in the combined exhaust from Rotary Dryer D3 and from Calciner D10.
 - d. A continuous opacity monitoring system (COMS), to measure and record the opacity of emissions from Spray Dryer D1A.
 - e. A continuous opacity monitoring system (COMS), to measure and record the opacity of emissions from Spray Dryer D11.
- 5.2.2 The Permittee shall install, calibrate, maintain, and operate a system to continuously monitor and record the indicated parameters on the following equipment. Where such performance specification(s) exist, each system shall meet the applicable performance specification(s) of the Division's monitoring requirements.
[391-3-1-.02(6)(b)1 and 40 CFR 70.6(a)(3)(i)]
- a. For scrubber CD6A and for scrubber CD8B, a monitoring device for continuously monitoring and recording the pressure loss of the gas stream through the scrubbers. The pressure loss monitoring device must be certified by the manufacturer to be accurate within 5% of water column gauge pressure at the level of operation.

- b. For scrubber CD6A and for scrubber CD8B, a monitoring device for continuously monitoring and recording the scrubbing liquid flow rate to the scrubbers. The liquid flow rate monitoring device must be certified by the manufacturer to be accurate within 5% of the design scrubbing liquid flow rate.
- c. For absorber CD8C, a monitoring device for the measurement of the scrubbing liquid flow rate to the absorber. The liquid flow rate monitoring device must be certified by the manufacturer to be accurate within 5% of the design scrubbing liquid flow rate.
- d. For absorber CD8C, a monitoring device for the measurement of the scrubbing liquid pH level. The device shall be calibrated according to manufacturer's specifications.

5.2.3 The Permittee shall perform a check of visible emissions from all baghouses (including process baghouses) controlling emissions from sources listed in Section 3.1 of this permit, and from sources added or replaced in accordance with the provisions of Condition 7.2.1. Sources subject to Condition 5.2.1 and baghouses controlling emissions from silos with dedicated bin vents, wet screening operations, bucket elevators, screw conveyors, bagging operations, and pneumatic conveyors are exempt from this condition provided those baghouses and respective emission units are not subject to CAM per Condition 5.2.8. The Permittee shall retain a record in a daily visible emissions (VE) log suitable for inspection or submittal. The check shall be conducted at least once for each day or portion of each day of operation using procedures a through d below except when scheduling, atmospheric conditions or sun positioning prevent any opportunity to perform the daily VE check. Scheduling prevents a daily VE check only when an emission unit is not operating during a regularly scheduled time period established for the daily VE checks.
[391-3-1-.02(6)(b)1 and 40 CFR 70.6(a)(3)(i)]

- a. Determine, in accordance with the procedures specified in paragraph d of this Condition, if visible emissions are present at the discharge point to the atmosphere from each of the sources and record the results in the daily (VE) log. For sources that exhibit visible emissions, the Permittee shall comply with paragraph “b” or “c” of this condition.
- b. For each source determined to be emitting visible emissions, the Permittee shall determine whether the emissions equal or exceed the opacity action level using the procedure specified in paragraph d. of this condition, except that the person performing the determination shall have received additional training acceptable to the Division to recognize the appropriate opacity level and the determination shall cover a period of three minutes. The opacity action level is 5% for baghouses subject to NSPS or an avoidance limit and the opacity action level is 10% for all other baghouses. The results shall be recorded in the daily (VE) log. For sources that exhibit visible emissions of greater than or equal to the opacity action level, the Permittee shall comply with paragraph c. of this Condition.

- c. For each source that requires action in accordance with paragraphs a. or b. of this condition, the Permittee shall determine the cause of the visible emissions and correct the problem in the most expedient manner possible. The Permittee shall note the cause of the visible emissions, the pressure drop, any other pertinent operating parameters, and the corrective action taken in the maintenance log.
 - d. The person performing the determination shall stand at a distance of at least 15 feet, which is sufficient to provide a clear view of the plume against a contrasting background with the sun in the 140° sector at his/her back. Consistent with this requirement, the determination shall be made from a position such that the line of vision is approximately perpendicular to the plume direction. Only one plume shall be in the line of sight at any time when multiple stacks are in proximity to each other.
- 5.2.4 The Permittee shall implement a Preventive Maintenance Program for the baghouses specified in Condition 5.2.3 to assure that the provisions of Condition 8.17.1 are met. The program shall be subject to review and, if necessary to assure compliance, modification by the Division and shall include the pressure drop ranges that indicate proper operation for each baghouse. At a minimum, the following operation and maintenance checks shall be made on at least a weekly basis, and a record of the findings and corrective actions taken shall be kept in a maintenance log:
[391-3-1-.02(6)(b)1 and 40 CFR 70.6(a)(3)(i)]
- a. Record the pressure drop across each baghouse and ensure that it is within the appropriate range.
 - b. For baghouses equipped with compressed air cleaning systems, check the system for proper operation. This may include checking for low pressure, leaks, proper lubrication, and proper operation of timer and valves.
 - c. For baghouses equipped with reverse air cleaning systems, check the system for proper operation. This may include checking damper, bypass, and isolation valves for proper operation.
 - d. For baghouses equipped with shaker cleaning systems, check the system for proper operation. This may include checking shaker mechanism for loose or worn bearings, drive components, mountings, proper operation of outlet/isolation valves and proper lubrication.
 - e. Check dust collector hoppers and conveying systems for proper operation.

- 5.2.5 Within 60 days of issuance of this permit, the Permittee shall submit a current version of the Preventive Maintenance Program for the baghouses identified in Condition 5.2.8 as controlling a PSEU(s) subject to the provision of the 40 CFR 64. The program shall include maintenance action levels indicative of proper baghouse maintenance. As a minimum, the submittal shall include maintenance action levels for all operational and maintenance checks required by Condition 5.2.4. Any change to the Preventive Maintenance Program shall be submitted 30 days prior to implementation. Any changes to the program shall be subject to review and, if necessary to assure compliance, modification by the Division.
[[391-3-1-.02(6)(b), 40 CFR 70.6(a)(3)(i) and 40 CFR 64]
- 5.2.6 The Permittee shall install a continuous temperature monitor on the inlet of baghouses that receive gases from sources that dry or calcine, that are identified in the Table in Sections 3.1, and record the time and date of each incident when the temperature exceeds the filter bag design temperature. In lieu of monitoring temperature at the baghouse inlet, the Permittee may monitor a surrogate temperature (e.g., clay temperature or calciner outlet temperature). For each baghouse monitored by a surrogate temperature, the Permittee shall determine the equivalent filter bag design temperature and record each incident when the surrogate temperature exceeds the equivalent filter bag design temperature. The Permittee shall record the filter bag design temperature or the equivalent filter bag design temperature for each baghouse listed. Such records and any supporting calculations shall be made available for inspection.
[391-3-1-.02(6)(b)1 and 40 CFR 70.6(a)(3)(i)]
- 5.2.7 Once each day or portion of each day of operation, the Permittee shall inspect all emission points from the emission units listed in Table 3.1 for which no air pollution control device (APCD) is utilized and all emission points from emission units added or replaced in accordance with the provisions of Condition 7.2.1 for which no APCD is utilized. Boilers are exempt from this condition provided they are fired with a clean fuel such as natural gas, propane or LNG. Emission units monitored in accordance with Conditions 5.2.1 or 5.2.2 are exempt from this condition. The inspection shall be conducted by performing a walk through of the facility and noting the occurrence of the following in a daily (VE) log:
- a. Any visible emissions. The visible emission check may be performed on the building containing the emission unit or directly on the emission unit.
 - b. Any mechanical failure or malfunction that results in increased air emissions.

For each emission point noted with visible emissions, mechanical problems or malfunctions, the Permittee shall take corrective action in the most expedient manner possible and re-inspect the unit within 24 hours to verify that no visible emissions exist. Failure to eliminate the visible emissions or to correct the mechanical failure or malfunction specified in a. and b. within 24 hours shall constitute an excursion.

[391-3-1-.02(6)(b)1 and 40 CFR 70.6(a)(3)(i)]

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- 5.2.8 The following pollutant specific emission unit(s) (PSEU) is/are subject to the Compliance Assurance Monitoring (CAM) Rule in 40 CFR 64.

Emission Unit	Pollutant
Spray Dryer D8 & Rotary Dryer D2	PM
Spray Dryers D1A & D1B, Rotary Dryer D3, Alumina Dryer D9 & Calciners D6 & D10, Spray Dryer D11.	PM

Permit conditions in this permit for the PSEU(s) listed above with regulatory citation 40 CFR 70.6(a)(3)(i) are included for the purpose of complying with 40 CFR 64. In addition, the Permittee shall meet the requirements, as applicable, of 40 CFR 64.7, 64.8, and 64.9. [40 CFR 64]

- 5.2.9 The Permittee shall comply with the performance criteria listed in the table below for the PM emissions from Rotary Dryer D2 and Spray Dryer D8 having baghouses as add on control devices.
[40 CFR 64.6(c)(1)(iii)]

Performance Criteria [64.4(a)(3)]	Indicator No. 1: VE Check	Indicator No. 2: Baghouse Inspection	Indicator No. 3: Baghouse Temperature
A. Data Representativeness [64.3(b)(1)]	Visible emissions will be observed at the baghouse exhaust stack	Preventative Maintenance Program that includes checks as specified by Condition 5.2.5	Temperature monitoring for baghouses specified by Condition 5.2.6
B. Verification of Operational Status (new/modified monitoring equipment only) [64.3(b)(2)]	Not Applicable	Not Applicable	Not Applicable
C. QA/QC Practices and Criteria [64.3(b)(3)]	The observer shall have received training acceptable to the Division to recognize the appropriate opacity action levels	Specific QA/QC practices and criteria will be specified in the Preventive Maintenance Program required by Condition 5.2.5	The Baghouse temperature shall be continuously measured. The temperature monitoring system must be certified by the manufacturer to be accurate within 5% for the maximum temperature rating for the bags. Installation and calibration is done in accordance with the manufacturer's recommendations.

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Performance Criteria [64.4(a)(3)]	Indicator No. 1: VE Check	Indicator No. 2: Baghouse Inspection	Indicator No. 3: Baghouse Temperature
D. Monitoring Frequency [64.3(b)(4)]	Once per day or portion of day of the emission unit is operated as prescribed in Condition 5.2.3	At least once each week	Continuous
E. Data Collection Procedures [64.3(b)(4)]	Visual readings manually recorded in a daily visible emissions (VE) log suitable for inspection or submittal to the Division. Pressure drop and other pertinent data must be recorded in the log if a problem requiring action is detected.	Manual readings and data logging	Continuous recording
F. Averaging Period [64.3(b)(4)]	Three-minute average	Not Applicable	3-hour block average

- 5.2.10 The Permittee shall comply with the performance criteria listed in the table below for the PM emissions from Spray Dryer D8 and Calciner D6 in non-heat recovery mode.
[40 CFR 64.6(c)(1)(iii)]

Performance Criteria [64.4(a)(3)]	Indicator No. 1: Scrubber Pressure Drop	Indicator No. 2: Scrubber Flow Rate
A. Data Representativeness [64.3(b)(1)]	Pressure drop will be monitored at the inlet and exhaust of the scrubber	A flow meter located on the circulation water line to scrubber will measure the scrubber liquid flow rate.
B. Verification of Operational Status (new/modified monitoring equipment only) [64.3(b)(2)]	Not Applicable	Not Applicable
C. QA/QC Practices and Criteria [64.3(b)(3)]	Pressure gauge is calibrated in accordance with company maintenance procedures consistent with gauge manufacturer recommendations or with acceptable engineering practices.	Liquid flow meter is calibrated in accordance with company maintenance procedures consistent with flow meter manufacturer recommendations or with acceptable engineering practices.
D. Monitoring Frequency [64.3(b)(4)]	Continuous.	Continuous.
E. Data Collection Procedures [64.3(b)(4)]	The DCS (Data control system) collects data continuously and records continuous values and two hour averages.	The DCS (Data control system) collects data continuously and records continuous values and two hour averages.

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Performance Criteria [64.4(a)(3)]	Indicator No. 1: Scrubber Pressure Drop	Indicator No. 2: Scrubber Flow Rate
F. Averaging Period [64.3(b)(4)]	2 hours	2 hours

- 5.2.11 The Permittee shall comply with the performance criteria listed in the table below for the PM emissions from Emission Units D3, D10, D6 (when on heat recovery with D1B), D9, D1A, D1B and D11 that has a baghouse as an add on control device and whose opacities are monitored using COMS.
[40 CFR 64.6(c)(1)(iii)]

Performance Criteria [64.4(a)(3)]	Indicator No. 1: COMS
A. Data Representativeness [64.3(b)(1)]	Visible emissions will be monitored using COMS
B. Verification of Operational Status (new/modified monitoring equipment only) [64.3(b)(2)]	Verified using Performance Specification 1 for COMS in 40 CFR 60, Appendix B
C. QA/QC Practices and Criteria [64.3(b)(3)]	The zero and span drifts are checked daily. If the zero or a span drift is plus or minus 2%, an E&I Tech will check the status of the monitor.
D. Monitoring Frequency [64.3(b)(4)]	Continuous
E. Data Collection Procedures [64.3(b)(4)]	The DCS collects data from the COMS continually and records continuous (once every 5 seconds) and six-minute averages.
F. Averaging Period [64.3(b)(4)]	Six minutes.

PART 6.0 RECORD KEEPING AND REPORTING REQUIREMENTS**6.1 General Record Keeping and Reporting Requirements**

- 6.1.1 Unless otherwise specified, all records required to be maintained by this Permit shall be recorded in a permanent form suitable for inspection and submission to the Division and to the EPA. The records shall be retained for at least five (5) years following the date of entry.

[391-3-1-.02(6)(b)1(i) and 40 CFR 70.6(a)(3)]

- 6.1.2 In addition to any other reporting requirements of this Permit, the Permittee shall report to the Division in writing, within seven (7) days, any deviations from applicable requirements associated with any malfunction or breakdown of process, fuel burning, or emissions control equipment for a period of four hours or more which results in excessive emissions.

The Permittee shall submit a written report that shall contain the probable cause of the deviation(s), duration of the deviation(s), and any corrective actions or preventive measures taken.

[391-3-1-.02(6)(b)1(iv), 391-3-1-.03(10)(d)1(i) and 40 CFR 70.6(a)(3)(iii)(B)]

- 6.1.3 The Permittee shall submit written reports of any failure to meet an applicable emission limitation or standard contained in this permit and/or any failure to comply with or complete a work practice standard or requirement contained in this permit which are not otherwise reported in accordance with Conditions 6.1.4 or 6.1.2. Such failures shall be determined through observation, data from any monitoring protocol, or by any other monitoring which is required by this permit. The reports shall cover each semiannual period ending June 30 and December 31 of each year, shall be postmarked by August 29 and February 28, respectively following each reporting period, and shall contain the probable cause of the failure(s), duration of the failure(s), and any corrective actions or preventive measures taken.

[391-3-1-.03(10)(d)1(i) and 40 CFR 70.6(a)(3)(iii)(B)]

- 6.1.4 The Permittee shall submit a written report containing any excess emissions, exceedances, and/or excursions as described in this permit and any monitor malfunctions for each quarterly period ending March 31, June 30, September 30, and December 31 of each year. All reports shall be postmarked by May 30, August 29, November 29, and February 28, respectively following each reporting period. In the event that there have not been any excess emissions, exceedances, excursions or malfunctions during a reporting period, the report should so state. Otherwise, the contents of each report shall be as specified by the Division's Procedures for Testing and Monitoring Sources of Air Pollutants and shall contain the following:

[391-3-1-.02(6)(b)1 and 40 CFR 70.6(a)(3)(iii)(A)]

- a. A summary report of excess emissions, exceedances and excursions, and monitor downtime, in accordance with Section 1.5(c) and (d) of the above referenced document, including any failure to follow required work practice procedures.
- b. Total process operating time during each reporting period.

- c. The magnitude of all excess emissions, exceedances and excursions computed in accordance with the applicable definitions as determined by the Director, and any conversion factors used, and the date and time of the commencement and completion of each time period of occurrence.
- d. Specific identification of each period of such excess emissions, exceedances, and excursions that occur during startups, shutdowns, or malfunctions of the affected facility. Include the nature and cause of any malfunction (if known), the corrective action taken or preventive measures adopted.
- e. The date and time identifying each period during which any required monitoring system or device was inoperative (including periods of malfunction) except for zero and span checks, and the nature of the repairs, adjustments, or replacement. When the monitoring system or device has not been inoperative, repaired, or adjusted, such information shall be stated in the report.
- f. Certification by a Responsible Official that, based on information and belief formed after reasonable inquiry, the statements and information in the report are true, accurate, and complete.

6.1.5 Where applicable, the Permittee shall keep the following records:
[391-3-1-.03(10)(d)1(i) and 40 CFR 70.6(a)(3)(ii)(A)]

- a. The date, place, and time of sampling or measurement;
- b. The date(s) analyses were performed;
- c. The company or entity that performed the analyses;
- d. The analytical techniques or methods used;
- e. The results of such analyses; and
- f. The operating conditions as existing at the time of sampling or measurement.

6.1.6 The Permittee shall maintain files of all required measurements, including continuous monitoring systems, monitoring devices, and performance testing measurements; all continuous monitoring system or monitoring device calibration checks; and adjustments and maintenance performed on these systems or devices. These files shall be kept in a permanent form suitable for inspection and shall be maintained for a period of at least five (5) years following the date of such measurements, reports, maintenance and records.
[391-3-1-.03(10)(d)1(i) and 40 CFR 70.6 (a)(3)(ii)(B)]

6.1.7 For the purpose of reporting excess emissions, exceedances or excursions in the report required in Condition 6.1.4, the following excess emissions, exceedances, and excursions shall be reported:
[391-3-1-.02(6)(b)1 and 40 CFR 70.6(a)(3)(iii)]

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- a. Excess emissions: (means for the purpose of this Condition and Condition 6.1.4, any condition that is detected by monitoring or record keeping which is specifically defined, or stated to be, excess emissions by an applicable requirement)

None required to be reported in accordance with Condition 6.1.4.

- b. Exceedances: (means for the purpose of this Condition and Condition 6.1.4, any condition that is detected by monitoring or record keeping that provides data in terms of an emission limitation or standard and that indicates that emissions (or opacity) do not meet the applicable emission limitation or standard consistent with the averaging period specified for averaging the results of the monitoring)

- i. Each six-minute average opacity, as recorded by the Continuous Opacity Monitoring Systems required by Conditions 5.2.1 (a), (b), (c), (d) and (e) that exceeds 10 percent.
- ii. For scrubbers CD6A and CD8B any two-hour average of the wet scrubber pressure loss that is less than 25 inches of water column for CD6A and 2 inches of water column for CD8B.
- iii. For scrubbers CD6A and CD8B any two-hour average of the wet scrubber liquid flow rate that is less than 179 gallons per minute for CD6A and 232 gallons per minute for CD8B.
- iv. Any 12 consecutive month period where formic acid solution usage exceeds 2,500,000 pounds.
- v. Any 12 consecutive month period where NO_x emission equals or exceeds 250 tons.
- vi. Any time fuel other than natural gas or propane is combusted in Boiler No. 4 (B4).

- c. Excursions: (means for the purpose of this Condition and Condition 6.1.4, any departure from an indicator range or value established for monitoring consistent with any averaging period specified for averaging the results of the monitoring)

- i. For absorber CD8C, any measurement (2-hour average) of the wet scrubber liquid flow rate that is less than 800 gallons/minute.
- ii. For absorber CD8C, any measurement (2-hour average) of the scrubbing liquid pH that is greater than 6.0.
- iii. For the sources subject to Condition 5.2.3, any two-consecutive required daily determinations of visible emissions from the same source for which the visible emissions are above the specified opacity action level.

- iv. Any instance an operational or maintenance check required by Conditions 5.2.4 or 5.2.5 reveals that a maintenance action level was triggered and the maintenance was not performed according to the Preventative Maintenance Program.
- v. Any visible emissions or mechanical failure or malfunction discovered by the walk through described in Condition 5.2.7 that are not eliminated or corrected with 24 hours of first discovering the visible emissions or mechanical failure or malfunction.
- vi. Each occurrence when any 3-hour block average temperature at the inlet of any baghouse specified in Condition 5.2.6 exceeds the filter bag design temperature or the equivalent filter bag design temperature.

6.2 Specific Record Keeping and Reporting Requirements

- 6.2.1 The Permittee shall maintain monthly records of formic acid solution usage. The records shall be kept in a form suitable for inspection and/or submittal to the Division for five years from the date of record.
[391-3-1-.02(6)(b)1 and 40 CFR 70.6(a)(3)(i)]
- 6.2.2 For each operating day when rare earth nitrates are added to the product (zeolite), the Permittee shall keep separate operating time records (in hour) for Rotary Dryer D3 and Rotary Calciners D7 and D10, and Spray Dryer D8. These records shall be kept in a log suitable for inspection and/or submittal to the Division. During periods when rare earth nitrates are not used in the affected sources aforementioned, the logs should state such.
[391-3-1-.02(6)(b)1 and 40 CFR 70.6(a)(3)(i)]
- 6.2.3 The Permittee shall maintain monthly usage records of all fuel (natural gas, propane, oil, etc.) consumed at the facility. These records shall be kept in a log suitable for inspection and/or submittal to the Division.
[391-3-1-.03(10)(d)1(i)]
- 6.2.4 The Permittee shall use the fuel usage records required in Condition 6.2.3 and Division - approved emission factors to calculate the monthly emissions of NO_x caused from combustion.
[391-3-1-.03(10)(d)1(i)]
- 6.2.5 The Permittee shall use the records required by Condition 6.2.2, and following equations to calculate the monthly NO_x emissions from the production of rare earth-impregnated zeolite:
[391-3-1-.02(6)(b)1 and 40 CFR 70.6(a)(3)(i)]

$$E_{NOx} = E_{NOx, D3\&D10} + E_{NOx, D7\&D8}$$

$$E_{NOx, D3\&D10} = (C_{NOx, D3\&D10}) \times (T_{D3\&D10})$$

$$E_{NOx, D7\&D8} = (C_{NOx, D7\&D8}) \times (T_{D7\&D8})$$

Where:

E_{NO_x}	=	Monthly combined NO_x emissions from the production of rare earth-impregnated zeolite with Rotary Dryer D3 and Rotary Calciners D7 and D10, and/or Spray Dryer D8, lbs./month
$E_{NO_x, D3\&D10}$	=	Monthly NO_x emissions from the production of rare earth-impregnated zeolite with Rotary Dryer D3 and Rotary Calciner D10, lbs./month
$C_{NO_x, D3\&D10}$	=	NO_x emission factor for the production of rare earth-impregnated zeolite with Rotary Dryer D3 and Rotary Calciner D10, 15.61 lbs./hr or that established during the most recent Division-approved performance testing, lbs./hr
$T_{D3\&D10}$	=	Operating time of Rotary Dryer D3 and Rotary Calciner D10 for the production of rare earth-impregnated zeolite, hour/month
$E_{NO_x, D7\&D8}$	=	Monthly NO_x emissions from the production of rare earth-impregnated zeolite with Rotary Calciner D7 and Spray Dryer D8, lbs./month
$C_{NO_x, D7\&D8}$	=	NO_x emission factor for the production of rare earth-impregnated zeolite with Rotary Calciner D7 and Spray Dryer D8, 7.98 lbs./hr., or that established during the most recent Division-approved performance testing, lbs./hr.
$T_{D7\&D8}$	=	Operating time of Rotary Calciner D7 and Spray Dryer d8 for the production of rare earth-impregnated zeolite, hour/month

- 6.2.6 The Permittee shall use the monthly NO_x emissions records required in Condition 6.2.5 and the monthly NO_x emissions from combustion required in Condition 6.2.4 to calculate the total monthly NO_x emissions from the facility. The Permittee shall also calculate the twelve month rolling total NO_x emissions each month. The Permittee shall notify the Division in writing if the NO_x emissions equal or exceed 250 tons during any twelve month period. This notification shall be postmarked by the fifteenth day of the following month. [391-3-1-.02(6)(b)1 and 40 CFR 70.6(a)(3)(i)]
- 6.2.7 For sources subject to 40 CFR 60 Subpart Dc, the Permittee shall comply with the recordkeeping and reporting requirements of this subpart, in particular, the Permittee shall maintain records of the quantity of natural gas and propane burned in the Boiler No. 4 for each calendar month. [40 CFR 60.48c, 40 CFR 60.116b(b) and 40 CFR 70.6(a)(30)(I), Alternate Fuel Usage Recordkeeping Frequency for Dc boilers approved by USEPA Region 4, August 14, 1996]

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- 6.2.8 The Permittee shall maintain a record of all actions taken in accordance with Condition 8.22 to suppress fugitive dust from roads, storage piles, or any other source of fugitive dust. Such records shall include the date and time of occurrence and a description of the actions taken. [391-3-1-.02(6)(b)1 and 40 CFR 70.6(a)(3)(i)]

PART 7.0 OTHER SPECIFIC REQUIREMENTS**7.1 Operational Flexibility**

7.1.1 The Permittee may make Section 502(b)(10) changes as defined in 40 CFR 70.2 without requiring a Permit revision, if the changes are not modifications under any provisions of Title I of the Federal Act and the changes do not exceed the emissions allowable under the Permit (whether expressed therein as a rate of emissions or in terms of total emissions). For each such change, the Permittee shall provide the Division and the EPA with written notification as required below in advance of the proposed changes and shall obtain any Permits required under Rules 391-3-1-.03(1) and (2). The Permittee and the Division shall attach each such notice to their copy of this Permit.
[391-3-1-.03(10)(b)5 and 40 CFR 70.4(b)(12)(i)]

- a. For each such change, the Permittee's written notification and application for a construction Permit shall be submitted well in advance of any critical date (typically at least 3 months in advance of any commencement of construction, Permit issuance date, etc.) involved in the change, but no less than seven (7) days in advance of such change and shall include a brief description of the change within the Permitted facility, the date on which the change is proposed to occur, any change in emissions, and any Permit term or condition that is no longer applicable as a result of the change.
- b. The Permit shield described in Condition 8.16.1 shall not apply to any change made pursuant to this condition.

7.2 Off-Permit Changes

7.2.1 The Permittee may make changes that are not addressed or prohibited by this Permit, other than those described in Condition 7.2.2 below, without a Permit revision, provided the following requirements are met:
[391-3-1-.03(10)(b)6 and 40 CFR 70.4(b)(14)]

- a. Each such change shall meet all applicable requirements and shall not violate any existing Permit term or condition.
- b. The Permittee must provide contemporaneous written notice to the Division and to the EPA of each such change, except for changes that qualify as insignificant under Rule 391-3-1-.03(10)(g). Such written notice shall describe each such change, including the date, any change in emissions, pollutants emitted, and any applicable requirement that would apply as a result of the change.
- c. The change shall not qualify for the Permit shield in Condition 8.16.1.
- d. The Permittee shall keep a record describing changes made at the source that result in emissions of a regulated air pollutant subject to an applicable requirement, but not otherwise regulated under the Permit, and the emissions resulting from those changes.

- 7.2.2 The Permittee shall not make, without a Permit revision, any changes that are not addressed or prohibited by this Permit, if such changes are subject to any requirements under Title IV of the Federal Act or are modifications under any provision of Title I of the Federal Act.
[Rule 391-3-1-.03(10)(b)7 and 40 CFR 70.4(b)(15)]

7.3 Alternative Requirements

[White Paper #2]

Not Applicable

7.4 Insignificant Activities

(see Attachment B for the list of Insignificant Activities in existence at the facility at the time of permit issuance)

7.5 Temporary Sources

[391-3-1-.03(10)(d)5 and 40 CFR 70.6(e)]

Not Applicable

7.6 Short-term Activities

(see Form D5 “Short Term Activities” of the Permit application and White Paper #1)

Not Applicable

7.7 Compliance Schedule/Progress Reports

[391-3-1-.03(10)(d)3 and 40 CFR 70.6(c)(4)]

None applicable.

7.8 Emissions Trading

[391-3-1-.03(10)(d)1(ii) and 40 CFR 70.6(a)(10)]

Not Applicable

7.9 Acid Rain Requirements

Not Applicable

7.10 Prevention of Accidental Releases (Section 112(r) of the 1990 CAAA)

[391-3-1-.02(10)]

- 7.10.1 When and if the requirements of 40 CFR Part 68 become applicable, the Permittee shall comply with all applicable requirements of 40 CFR Part 68, including the following.

- a. The Permittee shall submit a Risk Management Plan (RMP) as provided in 40 CFR 68.150 through 68.185. The RMP shall include a registration that reflects all covered processes.

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- b. For processes eligible for Program 1, as provided in 40 CFR 68.10, the Permittee shall comply with 7.10.1.a. and the following additional requirements:
 - i. Analyze the worst-case release scenario for the process(es), as provided in 40 CFR 68.25; document that the nearest public receptor is beyond the distance to a toxic or flammable endpoint defined in 40 CFR 68.22(a); and submit in the RMP the worst-case release scenario as provided in 40 CFR 68.165.
 - ii. Complete the five-year accident history for the process as provided in 40 CFR 68.42 and submit in the RMP as provided in 40 CFR 68.168
 - iii. Ensure that response actions have been coordinated with local emergency planning and response agencies
 - iv. Include a certification in the RMP as specified in 40 CFR 68.12(b)(4)
- c. For processes subject to Program 2, as provided in 40 CFR 68.10, the Permittee shall comply with 7.10.1.a., 7.10.1.b. and the following additional requirements:
 - i. Develop and implement a management system as provided in 40 CFR 68.15
 - ii. Conduct a hazard assessment as provided in 40 CFR 68.20 through 68.42
 - iii. Implement the Program 2 prevention steps provided in 40 CFR 68.48 through 68.60 or implement the Program 3 prevention steps provided in 40 CFR 68.65 through 68.87
 - iv. Develop and implement an emergency response program as provided in 40 CFR 68.90 through 68.95
 - v. Submit as part of the RMP the data on prevention program elements for Program 2 processes as provided in 40 CFR 68.170
- d. For processes subject to Program 3, as provided in 40 CFR 68.10, the Permittee shall comply with 7.10.1.a., 7.10.1.b. and the following additional requirements:
 - i. Develop and implement a management system as provided in 40 CFR 68.15
 - ii. Conduct a hazard assessment as provided in 40 CFR 68.20 through 68.42
 - iii. Implement the prevention requirements of 40 CFR 68.65 through 68.87
 - iv. Develop and implement an emergency response program as provided in 40 CFR 68.90 through 68.95
 - v. Submit as part of the RMP the data on prevention program elements for Program 3 as provided in 40 CFR 68.175
- e. All reports and notification required by 40 CFR Part 68 must be submitted electronically using RMP*eSubmit (information for establishing an account can be found at www.epa.gov/rmp/rmpesubmit). Electronic Signature Agreements should be mailed to:

MAIL

Risk Management Program (RMP) Reporting Center
P.O. Box 10162
Fairfax, VA 22038

COURIER & FEDEX

Risk Management Program (RMP) Reporting Center
CGI Federal
12601 Fair Lakes Circle
Fairfax, VA 22033

Compliance with all requirements of this condition, including the registration and submission of the RMP, shall be included as part of the compliance certification submitted in accordance with Condition 8.14.1.

7.11 Stratospheric Ozone Protection Requirements (Title VI of the CAAA of 1990)

- 7.11.1 If the Permittee performs any of the activities described below or as otherwise defined in 40 CFR Part 82, the Permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR Part 82, Subpart F, except as provided for motor vehicle air conditioners (MVACs) in Subpart B:
- a. Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to 40 CFR 82.156.
 - b. Equipment used during the maintenance, service, repair, or disposal of appliance must comply with the standards for recycling and recovery equipment pursuant to 40 CFR 82.158.
 - c. Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.
 - d. Persons disposing of small appliances, MVACs, and MVAC-like appliances must comply with record keeping requirements pursuant to 40 CFR 82.166.
[Note: “MVAC-like appliance” is defined in 40 CFR 82.152.]
 - e. Persons owning commercial or industrial process refrigeration equipment must comply with the leak repair requirements pursuant to 40 CFR 82.156.
 - f. Owners/operators of appliances normally containing 50 or more pounds of refrigerant must keep records of refrigerant purchased and added to such appliances pursuant to 40 CFR 82.166.
- 7.11.2 If the Permittee performs a service on motor (fleet) vehicles and if this service involves an ozone-depleting substance (refrigerant) in the MVAC, the Permittee is subject to all the applicable requirements as specified in 40 CFR Part 82, Subpart B, Servicing of Motor Vehicle Air Conditioners.

The term “motor vehicle” as used in Subpart B does not include a vehicle in which final assembly of the vehicle has not been completed. The term “MVAC” as used in Subpart B does not include air-tight sealed refrigeration systems used for refrigerated cargo, or air conditioning systems on passenger buses using HCFC-22 refrigerant.

7.12 Revocation of Existing Permits and Amendments

The following Air Quality Permits, Amendments, and 502(b)10 are subsumed by this permit and are hereby revoked:

Air Quality Permit and Amendment Number(s)	Dates of Original Permit or Amendment Issuance
3295-051-0023-V-03-0	June 9, 2012
3295-051-0023-V-03-1	February 14, 2013
3295-051-0023-V-03-2	October 27, 2016

7.13 Pollution Prevention

None applicable.

7.14 Specific Conditions

None applicable.

PART 8.0 GENERAL PROVISIONS

8.1 Terms and References

- 8.1.1 Terms not otherwise defined in the Permit shall have the meaning assigned to such terms in the referenced regulation.
- 8.1.2 Where more than one condition in this Permit applies to an emission unit and/or the entire facility, each condition shall apply and the most stringent condition shall take precedence.
[391-3-1-.02(2)(a)2]

8.2 EPA Authorities

- 8.2.1 Except as identified as “State-only enforceable” requirements in this Permit, all terms and conditions contained herein shall be enforceable by the EPA and citizens under the Clean Air Act, as amended, 42 U.S.C. 7401, et seq.
[40 CFR 70.6(b)(1)]
- 8.2.2 Nothing in this Permit shall alter or affect the authority of the EPA to obtain information pursuant to 42 U.S.C. 7414, “Inspections, Monitoring, and Entry.”
[40 CFR 70.6(f)(3)(iv)]
- 8.2.3 Nothing in this Permit shall alter or affect the authority of the EPA to impose emergency orders pursuant to 42 U.S.C. 7603, “Emergency Powers.”
[40 CFR 70.6(f)(3)(i)]

8.3 Duty to Comply

- 8.3.1 The Permittee shall comply with all conditions of this operating Permit. Any Permit noncompliance constitutes a violation of the Federal Clean Air Act and the Georgia Air Quality Act and/or State rules and is grounds for enforcement action; for Permit termination, revocation and reissuance, or modification; or for denial of a Permit renewal application. Any noncompliance with a Permit condition specifically designated as enforceable only by the State constitutes a violation of the Georgia Air Quality Act and/or State rules only and is grounds for enforcement action; for Permit termination, revocation and reissuance, or modification; or for denial of a Permit renewal application.
[391-3-1-.03(10)(d)1(i) and 40 CFR 70.6(a)(6)(i)]
- 8.3.2 The Permittee shall not use as a defense in an enforcement action the contention that it would have been necessary to halt or reduce the Permitted activity in order to maintain compliance with the conditions of this Permit.
[391-3-1-.03(10)(d)1(i) and 40 CFR 70.6(a)(6)(ii)]
- 8.3.3 Nothing in this Permit shall alter or affect the liability of the Permittee for any violation of applicable requirements prior to or at the time of Permit issuance.
[391-3-1-.03(10)(d)1(i) and 40 CFR 70.6(f)(3)(ii)]

- 8.3.4 Issuance of this Permit does not relieve the Permittee from the responsibility of obtaining any other permits, licenses, or approvals required by the Director or any other federal, state, or local agency.
[391-3-1-.03(10)(e)1(iv) and 40 CFR 70.7(a)(6)]

8.4 Fee Assessment and Payment

- 8.4.1 The Permittee shall calculate and pay an annual Permit fee to the Division. The amount of fee shall be determined each year in accordance with the “Procedures for Calculating Air Permit Fees.”
[391-3-1-.03(9)]

8.5 Permit Renewal and Expiration

- 8.5.1 This Permit shall remain in effect for five (5) years from the issuance date. The Permit shall become null and void after the expiration date unless a timely and complete renewal application has been submitted to the Division at least six (6) months, but no more than eighteen (18) months prior to the expiration date of the Permit.
[391-3-1-.03(10)(d)1(i), (e)2, and (e)3(ii) and 40 CFR 70.5(a)(1)(iii)]
- 8.5.2 Permits being renewed are subject to the same procedural requirements, including those for public participation and affected State and EPA review, that apply to initial Permit issuance.
[391-3-1-.03(10)(e)3(i)]
- 8.5.3 Notwithstanding the provisions in 8.5.1 above, if the Division has received a timely and complete application for renewal, deemed it administratively complete, and failed to reissue the Permit for reasons other than cause, authorization to operate shall continue beyond the expiration date to the point of Permit modification, reissuance, or revocation.
[391-3-1-.03(10)(e)3(iii)]

8.6 Transfer of Ownership or Operation

- 8.6.1 This Permit is not transferable by the Permittee. Future owners and operators shall obtain a new Permit from the Director. The new Permit may be processed as an administrative amendment if no other change in this Permit is necessary, and provided that a written agreement containing a specific date for transfer of Permit responsibility coverage and liability between the current and new Permittee has been submitted to the Division at least thirty (30) days in advance of the transfer.
[391-3-1-.03(4)]

8.7 Property Rights

- 8.7.1 This Permit shall not convey property rights of any sort, or any exclusive privileges.
[391-3-1-.03(10)(d)1(i) and 40 CFR 70.6(a)(6)(iv)]

8.8 Submissions

- 8.8.1 Reports, test data, monitoring data, notifications, annual certifications, and requests for revision and renewal shall be submitted to:

**Georgia Department of Natural Resources
Environmental Protection Division
Air Protection Branch
Atlanta Tradeport, Suite 120
4244 International Parkway
Atlanta, Georgia 30354-3908**

For Environmental Management District Sources, test data and requests for revisions and renewal shall be submitted to the above address. Reports, monitoring data, notifications, and annual certifications shall be copied to the above address and submitted to:

**Georgia Department of Natural Resources
Environmental Protection Division
Coastal District (Brunswick)
400 Commerce Center Drive
Brunswick, Georgia 31523**

- 8.8.2 Any records, compliance certifications, and monitoring data required by the provisions in this Permit to be submitted to the EPA shall be sent to:

**Air and EPCRA Enforcement Branch – U. S. EPA Region 4
Sam Nunn Atlanta Federal Center
61 Forsyth Street, SW
Atlanta, Georgia 30303-3104**

- 8.8.3 Any application form, report, or compliance certification submitted pursuant to this Permit shall contain a certification by a responsible official of its truth, accuracy, and completeness. This certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

[391-3-1-.03(10)(c)2, 40 CFR 70.5(d) and 40 CFR 70.6(c)(1)]

- 8.8.4 Unless otherwise specified, all submissions under this permit shall be submitted to the Division only.

8.9 Duty to Provide Information

- 8.9.1 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 Division.

[391-3-1-.03(10)(c)5]

- 8.9.2 The Permittee shall furnish to the Division, in writing, information that the Division may request to determine whether cause exists for modifying, revoking and reissuing, or terminating the Permit, or to determine compliance with the Permit. Upon request, the Permittee shall also furnish to the Division copies of records that the Permittee is required to keep by this Permit or, for information claimed to be confidential, the Permittee may furnish such records directly to the EPA, if necessary, along with a claim of confidentiality. [391-3-1-.03(10)(d)1(i) and 40 CFR 70.6(a)(6)(v)]

8.10 Modifications

- 8.10.1 Prior to any source commencing a modification as defined in 391-3-1-.01(pp) that may result in air pollution and not exempted by 391-3-1-.03(6), the Permittee shall submit a Permit application to the Division. The application shall be submitted sufficiently in advance of any critical date involved to allow adequate time for review, discussion, or revision of plans, if necessary. Such application shall include, but not be limited to, information describing the precise nature of the change, modifications to any emission control system, production capacity of the plant before and after the change, and the anticipated completion date of the change. The application shall be in the form of a Georgia air quality Permit application to construct or modify (otherwise known as a SIP application) and shall be submitted on forms supplied by the Division, unless otherwise notified by the Division. [391-3-1-.03(1) through (8)]

8.11 Permit Revision, Revocation, Reopening and Termination

- 8.11.1 This Permit may be revised, revoked, reopened and reissued, or terminated for cause by the Director. The Permit will be reopened for cause and revised accordingly under the following circumstances:
[391-3-1-.03(10)(d)1(i)]
- a. If additional applicable requirements become applicable to the source and the remaining Permit term is three (3) or more years. In this case, the reopening shall be completed no later than eighteen (18) months after promulgation of the applicable requirement. A reopening shall not be required if the effective date of the requirement is later than the date on which the Permit is due to expire, unless the original permit or any of its terms and conditions has been extended under Condition 8.5.3;
[391-3-1-.03(10)(e)6(i)(I)]
 - b. If any additional applicable requirements of the Acid Rain Program become applicable to the source;
[391-3-1-.03(10)(e)6(i)(II)] (Acid Rain sources only)
 - c. The Director determines that the Permit contains a material mistake or inaccurate statements were made in establishing the emissions standards or other terms or conditions of the Permit; or
[391-3-1-.03(10)(e)6(i)(III) and 40 CFR 70.7(f)(1)(iii)]

- d. The Director determines that the Permit must be revised or revoked to assure compliance with the applicable requirements.
[391-3-1-.03(10)(e)6(i)(IV) and 40 CFR 70.7(f)(1)(iv)]
- 8.11.2 Proceedings to reopen and reissue a Permit shall follow the same procedures as applicable to initial Permit issuance and shall affect only those parts of the Permit for which cause to reopen exists. Reopenings shall be made as expeditiously as practicable.
[391-3-1-.03(10)(e)6(ii)]
- 8.11.3 Reopenings shall not be initiated before a notice of intent to reopen is provided to the source by the Director at least thirty (30) days in advance of the date the Permit is to be reopened, except that the Director may provide a shorter time period in the case of an emergency.
[391-3-1-.03(10)(e)6(iii)]
- 8.11.4 All Permit conditions remain in effect until such time as the Director takes final action. The filing of a request by the Permittee for any Permit revision, revocation, reissuance, or termination, or of a notification of planned changes or anticipated noncompliance, shall not stay any Permit condition.
[391-3-1-.03(10)(d)1(i) and 40 CFR 70.6(a)(6)(iii)]
- 8.11.5 A Permit revision shall not be required for changes that are explicitly authorized by the conditions of this Permit.
- 8.11.6 A Permit revision shall not be required for changes that are part of an approved economic incentive, marketable Permit, emission trading, or other similar program or process for change which is specifically provided for in this Permit.
[391-3-1-.03(10)(d)1(i) and 40 CFR 70.6(a)(8)]

8.12 Severability

- 8.12.1 Any condition or portion of this Permit which is challenged, becomes suspended or is ruled invalid as a result of any legal or other action shall not invalidate any other portion or condition of this Permit.
[391-3-1-.03(10)(d)1(i) and 40 CFR 70.6(a)(5)]

8.13 Excess Emissions Due to an Emergency

- 8.13.1 An “emergency” means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the source 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 preventative maintenance, careless or improper operation, or operator error.
[391-3-1-.03(10)(d)7 and 40 CFR 70.6(g)(1)]

8.13.2 An emergency shall constitute an affirmative defense to an action brought for noncompliance with the technology-based emission limitations if the Permittee demonstrates, through properly signed contemporaneous operating logs or other relevant evidence, that:

[391-3-1-.03(10)(d)7 and 40 CFR 70.6(g)(2) and (3)]

- a. An emergency occurred and the Permittee can identify the cause(s) of the emergency;
- b. The Permitted facility was at the time of the emergency being properly operated;
- c. During the period of the emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards, or other requirements in the Permit; and
- d. The Permittee promptly notified the Division and submitted written notice of the emergency to the Division within two (2) working days of the time when emission limitations were exceeded due to the emergency. This notice must contain a description of the emergency, any steps taken to mitigate emissions, and corrective actions taken.

8.13.3 In an enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency shall have the burden of proof.

[391-3-1-.03(10)(d)7 and 40 CFR 70.6(g)(4)]

8.13.4 The emergency conditions listed above are in addition to any emergency or upset provisions contained in any applicable requirement.

[391-3-1-.03(10)(d)7 and 40 CFR 70.6(g)(5)]

8.14 Compliance Requirements

8.14.1 Compliance Certification

The Permittee shall provide written certification to the Division and to the EPA, at least annually, of compliance with the conditions of this Permit. The annual written certification shall be postmarked no later than February 28 of each year and shall be submitted to the Division and to the EPA. The certification shall include, but not be limited to, the following elements:

[391-3-1-.03(10)(d)3 and 40 CFR 70.6(c)(5)]

- a. The identification of each term or condition of the Permit that is the basis of the certification;

- b. The status of compliance with the terms and conditions of the permit for the period covered by the certification, including whether compliance during the period was continuous or intermittent, based on the method or means designated in paragraph c below. The certification shall identify each deviation and take it into account in the compliance certification. The certification shall also identify as possible exceptions to compliance any periods during which compliance is required and in which an excursion or exceedance as defined under 40 CFR Part 64 occurred;
- c. The identification of the method(s) or other means used by the owner or operator for determining the compliance status with each term and condition during the certification period;
- d. Any other information that must be included to comply with section 113(c)(2) of the Act, which prohibits knowingly making a false certification or omitting material information; and
- e. Any additional requirements specified by the Division.

8.14.2 Inspection and Entry

- a. Upon presentation of credentials and other documents as may be required by law, the Permittee shall allow authorized representatives of the Division to perform the following:
[391-3-1-.03(10)(d)3 and 40 CFR 70.6(c)(2)]
 - i. Enter upon the Permittee's premises where a Part 70 source is located or an emissions-related activity is conducted, or where records must be kept under the conditions of this Permit;
 - ii. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this Permit;
 - iii. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this Permit; and
 - iv. Sample or monitor any substances or parameters at any location during operating hours for the purpose of assuring Permit compliance or compliance with applicable requirements as authorized by the Georgia Air Quality Act.
- b. No person shall 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.
[391-3-1-.07 and 40 CFR 70.11(a)(3)(i)]

8.14.3 Schedule of Compliance

- a. For applicable requirements with which the Permittee is in compliance, the Permittee shall continue to comply with those requirements.
[391-3-1-.03(10)(c)2 and 40 CFR 70.5(c)(8)(iii)(A)]

- b. For applicable requirements that become effective during the Permit term, the Permittee shall meet such requirements on a timely basis unless a more detailed schedule is expressly required by the applicable requirement.
[391-3-1-.03(10)(c)2 and 40 CFR 70.5(c)(8)(iii)(B)]
- c. Any schedule of compliance for applicable requirements with which the source is not in compliance at the time of Permit issuance shall be supplemental to, and shall not sanction noncompliance with, the applicable requirements on which it is based.
[391-3-1-.03(10)(c)2 and 40 CFR 70.5(c)(8)(iii)(C)]

8.14.4 Excess Emissions

- a. Excess emissions resulting from startup, shutdown, or malfunction of any source which occur though ordinary diligence is employed shall be allowed provided that:
[391-3-1-.02(2)(a)7(i)]
 - i. The best operational practices to minimize emissions are adhered to;
 - ii. All associated air pollution control equipment is operated in a manner consistent with good air pollution control practice for minimizing emissions; and
 - iii. The duration of excess emissions is minimized.
- b. Excess emissions which are caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure which may reasonably be prevented during startup, shutdown or malfunction are prohibited and are violations of Chapter 391-3-1 of the Georgia Rules for Air Quality Control.
[391-3-1-.02(2)(a)7(ii)]
- c. The provisions of this condition and Georgia Rule 391-3-1-.02(2)(a)7 shall apply only to those sources which are not subject to any requirement under Georgia Rule 391-3-1-.02(8) – New Source Performance Standards or any requirement of 40 CFR, Part 60, as amended concerning New Source Performance Standards.
[391-3-1-.02(2)(a)7(iii)]

8.15 Circumvention

State Only Enforceable Condition.

- 8.15.1 The Permittee shall not build, erect, install, or use any article, machine, equipment or process the use of which conceals an emission which would otherwise constitute a violation of an applicable emission standard. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve compliance with an opacity standard or with a standard which is based on the concentration of the pollutants in the gases discharged into the atmosphere.
[391-3-1-.03(2)(c)]

8.16 Permit Shield

- 8.16.1 Compliance with the terms of this Permit shall be deemed compliance with all applicable requirements as of the date of Permit issuance provided that all applicable requirements are included and specifically identified in the Permit.
[391-3-1-.03(10)(d)6]
- 8.16.2 Any Permit condition identified as “State only enforceable” does not have a Permit shield.

8.17 Operational Practices

- 8.17.1 At all times, including periods of startup, shutdown, and malfunction, the Permittee shall maintain and operate the source, including associated air pollution control equipment, in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on any information available to the Division that may include, but is not limited to, monitoring results, observations of the opacity or other characteristics of emissions, review of operating and maintenance procedures or records, and inspection or surveillance of the source.
[391-3-1-.02(2)(a)10]

State Only Enforceable Condition.

- 8.17.2 No person owning, leasing, or controlling, the operation of any air contaminant sources shall willfully, negligently or through failure to provide necessary equipment or facilities or to take necessary precautions, cause, permit, or allow the emission from said air contamination source or sources, of such quantities of air contaminants as will cause, or tend to cause, by themselves, or in conjunction with other air contaminants, a condition of air pollution in quantities or characteristics or of a duration which is injurious or which unreasonably interferes with the enjoyment of life or use of property in such area of the State as is affected thereby. Complying with Georgia’s Rules for Air Quality Control Chapter 391-3-1 and Conditions in this Permit, shall in no way exempt a person from this provision.
[391-3-1-.02(2)(a)1]

8.18 Visible Emissions

- 8.18.1 Except as may be provided in other provisions of this Permit, the Permittee shall not cause, let, suffer, permit or allow emissions from any air contaminant source the opacity of which is equal to or greater than forty (40) percent.
[391-3-1-.02(2)(b)1]

8.19 Fuel-burning Equipment

- 8.19.1 The Permittee shall not cause, let, suffer, permit, or allow the emission of fly ash and/or other particulate matter from any fuel-burning equipment with rated heat input capacity of less than 10 million Btu per hour, in operation or under construction on or before January 1, 1972 in amounts equal to or exceeding 0.7 pounds per million BTU heat input.
[391-3-1-.02(2)(d)]

8.19.2 The Permittee shall not cause, let, suffer, permit, or allow the emission of fly ash and/or other particulate matter from any fuel-burning equipment with rated heat input capacity of less than 10 million Btu per hour, constructed after January 1, 1972 in amounts equal to or exceeding 0.5 pounds per million BTU heat input.
[391-3-1-.02(2)(d)]

8.19.3 The Permittee shall not cause, let, suffer, permit, or allow the emission from any fuel-burning equipment constructed or extensively modified after January 1, 1972, visible emissions the opacity of which is equal to or greater than twenty (20) percent except for one six minute period per hour of not more than twenty-seven (27) percent opacity.
[391-3-1-.02(2)(d)]

8.20 Sulfur Dioxide

8.20.1 Except as may be specified in other provisions of this Permit, the Permittee shall not burn fuel containing more than 2.5 percent sulfur, by weight, in any fuel burning source that has a heat input capacity below 100 million Btu's per hour.
[391-3-1-.02(2)(g)]

8.21 Particulate Emissions

8.21.1 Except as may be specified in other provisions of this Permit, the Permittee shall not cause, let, permit, suffer, or allow the rate of emission from any source, particulate matter in total quantities equal to or exceeding the allowable rates shown below. Equipment in operation, or under construction contract, on or before July 2, 1968, shall be considered existing equipment. All other equipment put in operation or extensively altered after said date is to be considered new equipment.
[391-3-1-.02(2)(e)]

- a. The following equations shall be used to calculate the allowable rates of emission from new equipment:

$$E = 4.1P^{0.67}; \text{ for process input weight rate up to and including 30 tons per hour.}$$

$$E = 55P^{0.11} - 40; \text{ for process input weight rate above 30 tons per hour.}$$

- b. The following equation shall be used to calculate the allowable rates of emission from existing equipment:

$$E = 4.1P^{0.67}$$

In the above equations, E = emission rate in pounds per hour, and
P = process input weight rate in tons per hour.

8.22 Fugitive Dust

[391-3-1-.02(2)(n)]

- 8.22.1 Except as may be specified in other provisions of this Permit, the Permittee shall take all reasonable precautions to prevent dust from any operation, process, handling, transportation or storage facility from becoming airborne. Reasonable precautions that could be taken to prevent dust from becoming airborne include, but are not limited to, the following:
- a. Use, where possible, of water or chemicals for control of dust in the demolition of existing buildings or structures, construction operations, the grading of roads or the clearing of land;
 - b. Application of asphalt, water, or suitable chemicals on dirt roads, materials, stockpiles, and other surfaces that can give rise to airborne dusts;
 - c. Installation and use of hoods, fans, and fabric filters to enclose and vent the handling of dusty materials. Adequate containment methods can be employed during sandblasting or other similar operations;
 - d. Covering, at all times when in motion, open bodied trucks transporting materials likely to give rise to airborne dusts; and
 - e. The prompt removal of earth or other material from paved streets onto which earth or other material has been deposited.
- 8.22.2 The opacity from any fugitive dust source shall not equal or exceed 20 percent.

8.23 Solvent Metal Cleaning

- 8.23.1 Except as may be specified in other provisions of this Permit, the Permittee shall not cause, suffer, allow, or permit the operation of a cold cleaner degreaser subject to the requirements of Georgia Rule 391-3-1-.02(2)(ff) "Solvent Metal Cleaning" unless the following requirements for control of emissions of the volatile organic compounds are satisfied:
[391-3-1-.02(2)(ff)1]
- a. The degreaser shall be equipped with a cover to prevent escape of VOC during periods of non-use,
 - b. The degreaser shall be equipped with a device to drain cleaned parts before removal from the unit,
 - c. If the solvent volatility is 0.60 psi or greater measured at 100 °F, or if the solvent is heated above 120 °F, then one of the following control devices must be used:
 - i. The degreaser shall be equipped with a freeboard that gives a freeboard ratio of 0.7 or greater, or

- ii. The degreaser shall be equipped with a water cover (solvent must be insoluble in and heavier than water), or
- iii. The degreaser shall be equipped with a system of equivalent control, including but not limited to, a refrigerated chiller or carbon adsorption system.
- d. Any solvent spray utilized by the degreaser must be in the form of a solid, fluid stream (not a fine, atomized or shower type spray) and at a pressure which will not cause excessive splashing, and
- e. All waste solvent from the degreaser shall be stored in covered containers and shall not be disposed of by such a method as to allow excessive evaporation into the atmosphere.

8.24 Incinerators

- 8.24.1 Except as specified in the section dealing with conical burners, no person shall cause, let, suffer, permit, or allow the emissions of fly ash and/or other particulate matter from any incinerator subject to the requirements of Georgia Rule 391-3-1-.02(2)(c) “Incinerators”, in amounts equal to or exceeding the following:
[391-3-1-.02(2)(c)1-4]
- a. Units with charging rates of 500 pounds per hour or less of combustible waste, including water, shall not emit fly ash and/or particulate matter in quantities exceeding 1.0 pound per hour.
 - b. Units with charging rates in excess of 500 pounds per hour of combustible waste, including water, shall not emit fly ash and/or particulate matter in excess of 0.20 pounds per 100 pounds of charge.
- 8.24.2 No person shall cause, let, suffer, permit, or allow from any incinerator subject to the requirements of Georgia Rule 391-3-1-.02(2)(c) “Incinerators”, visible emissions the opacity of which is equal to or greater than twenty (20) percent except for one six minute period per hour of not more than twenty-seven (27) percent opacity.
- 8.24.3 No person shall cause or allow particles to be emitted from an incinerator subject to the requirements of Georgia Rule 391-3-1-.02(2)(c) “Incinerators” which are individually large enough to be visible to the unaided eye.
- 8.24.4 No person shall operate an existing incinerator subject to the requirements of Georgia Rule 391-3-1-.02(2)(c) “Incinerators” unless:
- a. It is a multiple chamber incinerator;
 - b. It is equipped with an auxiliary burner in the primary chamber for the purpose of creating a pre-ignition temperature of 800°F; and

- c. It has a secondary burner to control smoke and/or odors and maintain a temperature of at least 1500°F in the secondary chamber.

8.25 Volatile Organic Liquid Handling and Storage

- 8.25.1 The Permittee shall ensure that each storage tank subject to the requirements of Georgia Rule 391-3-1-.02(2)(vv) “Volatile Organic Liquid Handling and Storage” is equipped with submerged fill pipes. For the purposes of this condition and the permit, a submerged fill pipe is defined as any fill pipe with a discharge opening which is within six inches of the tank bottom.
[391-3-1-.02(2)(vv)(1)]

8.26 Use of Any Credible Evidence or Information

- 8.26.1 Notwithstanding any other provisions of any applicable rule or regulation or requirement of this permit, for the purpose of submission of compliance certifications or establishing whether or not a person has violated or is in violation of any emissions limitation or standard, nothing in this permit or any Emission Limitation or Standard to which it pertains, shall preclude the use, including the exclusive use, of any credible evidence or information, relevant to whether a source would have been in compliance with applicable requirements if the appropriate performance or compliance test or procedure had been performed.
[391-3-1-.02(3)(a)]

8.27 Internal Combustion Engines

- 8.27.1 For diesel-fired internal combustion engine(s) manufactured after April 1, 2006 or modified/reconstructed after July 11, 2005, the Permittee shall comply with all applicable provisions of New Source Performance Standards (NSPS) as found in 40 CFR 60 Subpart A - “General Provisions” and 40 CFR 60 Subpart III – “Standard of Performance for Stationary Compression Ignition Internal Combustion Engines.” Such requirements include but are not limited to:
[40 CFR 60.4200]
 - a. Equip all emergency generator engines with non-resettable hour meters in accordance with Subpart III.
 - b. Purchase only diesel fuel with a maximum sulfur content of 15 ppm unless otherwise specified by the Division in accordance with Subpart III.
 - c. Conduct engine maintenance prescribed by the engine manufacturer in accordance with Subpart III.
 - d. Limit non-emergency operation of each emergency generator to 100 hours per year in accordance with Subpart III. Non-emergency operation other than maintenance and readiness testing is prohibited for engines qualifying as “emergency generators” for the purposes of Ga Rule 391-3-1-.02(2)(mmm).
 - e. Maintain any records in accordance with Subpart III

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- f. Maintain a list of engines subject to 40 CFR 60 Subpart IIII, including the date of manufacture.[391-3-1-.02(6)(b)]
- 8.27.2 The Permittee shall comply with all applicable provisions of New Source Performance Standards (NSPS) as found in 40 CFR 60 Subpart A - “General Provisions” and 40 CFR 60 Subpart JJJJ - “Standard of Performance for Stationary Spark Ignition Internal Combustion Engines,” for spark ignition internal combustion engines(s) (gasoline, natural gas, liquefied petroleum gas or propane-fired) manufactured after July 1, 2007 or modified/reconstructed after June 12, 2006.
[40 CFR 60.4230]
- 8.27.3 The Permittee shall comply with all applicable provisions of National Emission Standards for Hazardous Air Pollutants (NESHAP) as found in 40 CFR 63 Subpart A - “General Provisions” and 40 CFR 63 Subpart ZZZZ - “National Emission Standard for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines.”
- For diesel-fired emergency generator engines defined as “existing” in 40 CFR 63 Subpart ZZZZ (constructed prior to June 12, 2006 for area sources of HAP, constructed prior to June 12, 2006 for ≤500hp engines at major sources, and constructed prior to December 19, 2002 for >500hp engines at major sources of HAP), such requirements (if applicable) include but are not limited to:
[40 CFR 63.6580]
- a. Equip all emergency generator engines with non-resettable hour meters in accordance with Subpart ZZZZ.
 - b. Purchase only diesel fuel with a maximum sulfur content of 15 ppm unless otherwise specified by the Division in accordance with Subpart ZZZZ.
 - c. Conduct the following in accordance with Subpart ZZZZ.
 - i. Change oil and filter every 500 hours of operation or annually, whichever comes first
 - ii. Inspect air cleaner every 1000 hours of operation or annually, whichever comes first and replace as necessary
 - iii. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first and replace as necessary.
 - d. Limit non-emergency operation of each emergency generator to 100 hours per year in accordance with Subpart ZZZZ. Non-emergency operation other than maintenance and readiness testing is prohibited for engines qualifying as “emergency generators” for the purposes of Ga Rule 391-3-1-.02(2)(mmm).
 - e. Maintain any records in accordance with Subpart ZZZZ

- f. Maintain a list of engines subject to 40 CFR 63 Subpart ZZZZ, including the date of manufacture.[391-3-1-.02(6)(b)]

8.28 Boilers and Process Heaters

- 8.28.1 If the facility/site is an area source of Hazardous Air Pollutants, the Permittee shall comply with all applicable provisions of National Emission Standards for Hazardous Air Pollutants (NESHAP) 40 CFR Part 63 Subpart A - “General Provisions” and 40 CFR 63 Subpart JJJJJ - “National Emission Standards for Hazardous Air Pollutants for Area Sources: Industrial, Commercial, and Institutional Boilers.”
[40 CFR 63.11193]
- 8.28.2 If the facility/site is a major source of Hazardous Air Pollutants, the Permittee shall comply with all applicable provisions of National Emission Standards for Hazardous Air Pollutants (NESHAP) 40 CFR Part 63 Subpart A - “General Provisions” and 40 CFR 63 Subpart DDDDD - “National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters.”
[40 CFR 63.7480]

Attachments

- A. List of Standard Abbreviations and List of Permit Specific Abbreviations
- B. Insignificant Activities Checklist, Insignificant Activities Based on Emission Levels and Generic Emission Groups
- C. List of References

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List Of Standard Abbreviations

[illegible]

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ATTACHMENT B

NOTE: Attachment B contains information regarding insignificant emission units/activities and groups of generic emission units/activities in existence at the facility at the time of Permit issuance. Future modifications or additions of insignificant emission units/activities and equipment that are part of generic emissions groups may not necessarily cause this attachment to be updated.

INSIGNIFICANT ACTIVITIES CHECKLIST

Category	Description of Insignificant Activity/Unit	Quantity
Mobile Sources	1. Cleaning and sweeping of streets and paved surfaces	1
Combustion Equipment	1. Fire fighting and similar safety equipment used to train fire fighters or other emergency personnel.	
	2. Small incinerators that are not subject to any standard, limitation or other requirement under Section 111 or 112 (excluding 112(r)) of the Federal Act and are not considered a “designated facility” as specified in 40 CFR 60.32e of the Federal emissions guidelines for Hospital/Medical/Infectious Waste Incinerators, that are operating as follows:	
	i) Less than 8 million BTU/hr heat input, firing types 0, 1, 2, and/or 3 waste.	
	ii) Less than 8 million BTU/hr heat input with no more than 10% pathological (type 4) waste by weight combined with types 0, 1, 2, and/or 3 waste.	
	iii) Less than 4 million BTU/hr heat input firing type 4 waste. (Refer to 391-3-1-.03(10)(g)2.(ii) for descriptions of waste types)	
	3. Open burning in compliance with Georgia Rule 391-3-1-.02 (5).	
	4. Stationary engines burning:	2
	i) Natural gas, LPG, gasoline, dual fuel, or diesel fuel which are used exclusively as emergency generators shall not exceed 500 hours per year or 200 hours per year if subject to Georgia Rule 391-3-1-.02(2)(mmm).7	
	ii) Natural gas, LPG, and/or diesel fueled generators used for emergency, peaking, and/or standby power generation, where the combined peaking and standby power generation do not exceed 200 hours per year.	
	iii) Natural gas, LPG, and/or diesel fuel used for other purposes, provided that the output of each engine does not exceed 400 horsepower and that no individual engine operates for more than 2,000 hours per year.	
	iv) Gasoline used for other purposes, provided that the output of each engine does not exceed 100 horsepower and that no individual engine operates for more than 500 hours per year.	
Trade Operations	1. Brazing, soldering, and welding equipment, and cutting torches related to manufacturing and construction activities whose emissions of hazardous air pollutants (HAPs) fall below 1,000 pounds per year.	14
Maintenance, Cleaning, and Housekeeping	1. Blast-cleaning equipment using a suspension of abrasive in water and any exhaust system (or collector) serving them exclusively.	
	2. Portable blast-cleaning equipment.	3
	3. Non-Perchloroethylene Dry-cleaning equipment with a capacity of 100 pounds per hour or less of clothes.	
	4. Cold cleaners having an air/vapor interface of not more than 10 square feet and that do not use a halogenated solvent.	
	5. Non-routine clean out of tanks and equipment for the purposes of worker entry or in preparation for maintenance or decommissioning.	1
	6. Devices used exclusively for cleaning metal parts or surfaces by burning off residual amounts of paint, varnish, or other foreign material, provided that such devices are equipped with afterburners.	
	7. Cleaning operations: Alkaline phosphate cleaners and associated cleaners and burners.	

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INSIGNIFICANT ACTIVITIES CHECKLIST

Category	Description of Insignificant Activity/Unit	Quantity
Laboratories and Testing	1. Laboratory fume hoods and vents associated with bench-scale laboratory equipment used for physical or chemical analysis.	8
	2. Research and development facilities, quality control testing facilities and/or small pilot projects, where combined daily emissions from all operations are not individually major or are support facilities not making significant contributions to the product of a collocated major manufacturing facility.	1
Pollution Control	1. Sanitary waste water collection and treatment systems, except incineration equipment or equipment subject to any standard, limitation or other requirement under Section 111 or 112 (excluding 112(r)) of the Federal Act.	
	2. On site soil or groundwater decontamination units that are not subject to any standard, limitation or other requirement under Section 111 or 112 (excluding 112(r)) of the Federal Act.	
	3. Bioremediation operations units that are not subject to any standard, limitation or other requirement under Section 111 or 112 (excluding 112(r)) of the Federal Act.	
	4. Landfills that are not subject to any standard, limitation or other requirement under Section 111 or 112 (excluding 112(r)) of the Federal Act.	
Industrial Operations	1. Concrete block and brick plants, concrete products plants, and ready mix concrete plants producing less than 125,000 tons per year.	
	2. Any of the following processes or process equipment which are electrically heated or which fire natural gas, LPG or distillate fuel oil at a maximum total heat input rate of not more than 5 million BTU's per hour:	
	i) Furnaces for heat treating glass or metals, the use of which do not involve molten materials or oil-coated parts.	
	ii) Porcelain enameling furnaces or porcelain enameling drying ovens.	
	iii) Kilns for firing ceramic ware.	
	iv) Crucible furnaces, pot furnaces, or induction melting and holding furnaces with a capacity of 1,000 pounds or less each, in which sweating or distilling is not conducted and in which fluxing is not conducted utilizing free chlorine, chloride or fluoride derivatives, or ammonium compounds.	
	v) Bakery ovens and confection cookers.	
	vi) Feed mill ovens.	
	vii) Surface coating drying ovens	
	3. Carving, cutting, routing, turning, drilling, machining, sawing, surface grinding, sanding, planing, buffing, shot blasting, shot peening, or polishing; ceramics, glass, leather, metals, plastics, rubber, concrete, paper stock or wood, also including roll grinding and ground wood pulping stone sharpening, provided that:	6
	i) Activity is performed indoors; &	
	ii) No significant fugitive particulate emissions enter the environment; &	
	iii) No visible emissions enter the outdoor atmosphere.	
	4. Photographic process equipment by which an image is reproduced upon material sensitized to radiant energy (e.g., blueprint activity, photographic developing and microfiche).	
	5. Grain, food, or mineral extrusion processes	
	6. Equipment used exclusively for sintering of glass or metals, but not including equipment used for sintering metal-bearing ores, metal scale, clay, fly ash, or metal compounds.	
	7. Equipment for the mining and screening of uncrushed native sand and gravel.	
	8. Ozonization process or process equipment.	
	9. Electrostatic powder coating booths with an appropriately designed and operated particulate control system.	
	10. Activities involving the application of hot melt adhesives where VOC emissions are less than 5 tons per year and HAP emissions are less than 1,000 pounds per year.	
	11. Equipment used exclusively for the mixing and blending water-based adhesives and coatings at ambient temperatures.	
	12. Equipment used for compression, molding and injection of plastics where VOC emissions are less than 5 tons per year and HAP emissions are less than 1,000 pounds per year.	
	13. Ultraviolet curing processes where VOC emissions are less than 5 tons per year and HAP emissions are less than 1,000 pounds per year.	

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INSIGNIFICANT ACTIVITIES CHECKLIST

Category	Description of Insignificant Activity/Unit	Quantity
Storage Tanks and Equipment	1. All petroleum liquid storage tanks storing a liquid with a true vapor pressure of equal to or less than 0.50 psia as stored.	
	2. All petroleum liquid storage tanks with a capacity of less than 40,000 gallons storing a liquid with a true vapor pressure of equal to or less than 2.0 psia as stored that are not subject to any standard, limitation or other requirement under Section 111 or 112 (excluding 112(r)) of the Federal Act.	
	3. All petroleum liquid storage tanks with a capacity of less than 10,000 gallons storing a petroleum liquid.	3
	4. All pressurized vessels designed to operate in excess of 30 psig storing petroleum fuels that are not subject to any standard, limitation or other requirement under Section 111 or 112 (excluding 112(r)) of the Federal Act.	
	5. Gasoline storage and handling equipment at loading facilities handling less than 20,000 gallons per day or at vehicle dispensing facilities that are not subject to any standard, limitation or other requirement under Section 111 or 112 (excluding 112(r)) of the Federal Act.	
	6. Portable drums, barrels, and totes provided that the volume of each container does not exceed 550 gallons.	50
	7. All chemical storage tanks used to store a chemical with a true vapor pressure of less than or equal to 10 millimeters of mercury (0.19 psia).	150

INSIGNIFICANT ACTIVITIES BASED ON EMISSION LEVELS

Description of Emission Units / Activities	Quantity
MT-9 Mix Tank	1
ST-6 Storage Tank	1
Logistics Vacuum Receiver	1
Logistics Semi-Dense Phase Transporter	1
MT-10G Mix tank	1

ATTACHMENT B (continued)**GENERIC EMISSION GROUPS**

Emission units/activities appearing in the following table are subject only to one or more of Georgia Rules 391-3-1-.02 (2) (b), (e) &/or (n). Potential emissions of particulate matter, from these sources based on TSP, are less than 25 tons per year per process line or unit in each group. Any emissions unit subject to a NESHAP, NSPS, or any specific Air Quality Permit Condition(s) are not included in this table.

Description of Emissions Units / Activities	Number of Units (if appropriate)	Applicable Rules		
		Opacity Rule (b)	PM from Mfg Process Rule (e)	Fugitive Dust Rule (n)

The following table includes groups of fuel burning equipment subject only to Georgia Rules 391-3-1-.02 (2) (b) & (d). Any emissions unit subject to a NESHAP, NSPS, or any specific Air Quality Permit Condition(s) are not included in this table.

Description of Fuel Burning Equipment	Number of Units
Fuel burning equipment with a rated heat input capacity of less than 10 million BTU/hr burning only natural gas and/or LPG.	
Fuel burning equipment with a rated heat input capacity of less than 5 million BTU/hr, burning only distillate fuel oil, natural gas and/or LPG.	
Any fuel burning equipment with a rated heat input capacity of 1 million BTU/hr or less.	

ATTACHMENT C**LIST OF REFERENCES**

1. The Georgia Rules for Air Quality Control Chapter 391-3-1. All Rules cited herein which begin with 391-3-1 are State Air Quality Rules.
2. Title 40 of the Code of Federal Regulations; specifically 40 CFR Parts 50, 51, 52, 60, 61, 63, 64, 68, 70, 72, 73, 75, 76 and 82. All rules cited with these parts are Federal Air Quality Rules.
3. *Georgia Department of Natural Resources, Environmental Protection Division, Air Protection Branch, Procedures for Testing and Monitoring Sources of Air Pollutants.*
4. *Georgia Department of Natural Resources, Environmental Protection Division, Air Protection Branch, Procedures for Calculating Air Permit Fees.*
5. Compilation of Air Pollutant Emission Factors, AP-42, Fifth Edition, Volume I: Stationary Point and Area Sources. This information may be obtained from EPA's TTN web site at www.epa.gov/ttn/chief/ap42/index.html.
6. The latest properly functioning version of EPA's **TANKS** emission estimation software. The software may be obtained from EPA's TTN web site at www.epa.gov/ttn/chief/software/tanks/index.html.
7. The Clean Air Act (42 U.S.C. 7401 et seq).
8. White Paper for Streamlined Development of Part 70 Permit Applications, July 10, 1995 (White Paper #1).
9. White Paper Number 2 for Improved Implementation of the Part 70 Operating Permits Program, March 5, 1996 (White Paper #2).