

**BASF Corporation**  
**Quincy Operations**  
Facility ID No.: **0390005**  
**Gadsden County**

**Title V Air Operation Permit Revision**

**DRAFT/PROPOSED Permit No.: 0390005-017-AV**  
**Revision to Title V Air Operation Permit No.: 0390005-014-AV**



Permitting and Compliance Authority:  
Florida Department of Environmental Protection  
Northwest District Waste/Air Resources  
160 W. Government Street, Suite 308  
Pensacola FL 32502-5740

Telephone: 850.595.8300  
Fax: 850.595.8393

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**DRAFT/PROPOSED Permit No.: 0390005-017-AV**  
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Permittee:  
BASF Corporation  
1101 North Madison Street  
Quincy, Florida 32352

DRAFT/PROPOSED Permit No.: 0390005-017-AV  
Facility ID No.: 0390005  
SIC No(s): 32, 3295  
Project: Title V Air Operation Permit Revision

This permit revision is being issued for the purpose of incorporating permit 0390005-018-AC and changing equipment descriptions at the existing Quincy Operations. This facility is located at 1101 North Madison Street in Quincy, Gadsden County; UTM Coordinates: Zone 16, 732.6 km East and 3387.5 km North.

This Title V Air Operation Permit Revision is issued under the provisions of Chapter 403, Florida Statutes (F.S.), and Florida Administrative Code (F.A.C.) Chapters 62-4, 62-210 and 62-213. The above named permittee is hereby authorized to operate the facility shown on the application and approved drawing(s), plans, and other documents, attached hereto or on file with the permitting authority, in accordance with the terms and conditions of this permit.

**Referenced attachments made a part of this permit:**

Appendix I-1, List of Insignificant Emissions Units and/or Activities  
Appendix TV-6, TITLE V CONDITIONS version dated 02/16/12  
Appendix SS-1, STACK SAMPLING FACILITIES version dated 10/07/96  
Appendix CAM (revised August 2013)  
Appendix A-1, Abbreviations, Acronyms, Citations, and Identification Numbers  
Startup and Shutdown Plan  
Appendix Equipment Requirements (available upon request)  
Table 1, Applicability of Subpart A to Subpart OOO

Initial Effective Date: January 26, 2010  
Revision Effective Date: [ARMS Day 55+1]  
Renewal Application Due Date: June 15, 2014  
Expiration Date: January 26, 2015

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J. Charles Harp  
Program Administrator  
Waste Management/Air Resources  
Northwest District

JCH/aj/

## **Section I. Facility Information.**

This is a revision to Title V permit 0390005-014-AV, effective January 26, 2010, to incorporate permit 0390005-018-AC, concurrently processed with 0390005-017-AV, which includes; the addition of a portable bulk bag reclamation system; corrected baghouse information and updated fan ratings and flow rates. These changes will not affect the emissions.

Also included in this revision are the following:

- Changes in the equipment nomenclature;
- Removal of emissions unit 027 - Loadout East Bagging
- Removal of emissions unit 029 North Fluid Bed Dryer.
- Update CAM Plan language to allow for baghouse pressure drop data to be collected either manually or electronically and the number of bags in the fluid bed dryer baghouses.
  - a. The facility also has spare pressure indicators and strap on flow meters to use in as a back-up in case the primary indicators or meters fail.
- Update the List of Insignificant Activities to include:
  - a. 250 gallon mercaptan tank used for odorizing natural gas; and
  - b. House-cleaning and Clean-Up Related activities.

### **Subsection A. Facility Description.**

The BASF Corporation Quincy Operation processes Attapulgite Clay and Fullers Earth in two major production lines: Granular Processing and Gel Processing. Granular processing essentially consists of crushing drying, sizing and packing. Gel processing essentially consists of crushing extruding with additives (magnesium oxide), drying/milling, classifying and packing. The crude clay from the mines is trucked to the facility either stockpiled by quality or fed directly to a primary crusher. Based on production needs and clay quality, it may be blended by mixing various grades using a front end loader. The clay is then stored under the Granular Storage Shed or the Gel Storage Shed, dependent on the clay quality.

In general, emissions consisting of particulate matter (PM) resulting from clay handling and processing are controlled by baghouses. Some of the natural gas or propane-fired equipment (Granular Clay and Gel Clay fired equipment) emissions are controlled by scrubbers.

#### **Granular Processing**

A front-end loader feeds clay from the granular Crude Shed to a crusher and screen systems to reduce the size to one-half inch. The crude feed may be blended with extradite material and fed to one of two Fluid Bed Dryers. The clay is fed directly from the dryers to the 1A Mill or stored in a stock bin. A reconstitution system consisting of three extruders is used to handle fines. Water is added to the fines from the Granular Processing Systems and passed through the extruders. The extrudite is added to the crude clay and sent to the Fluid Bed Dryers.

In the 1A Mill the clay is passed through primary screens to make a 6/60 mesh cut. The oversized material (overs) is passed through roller mills and sent to secondary screens. The overs from the secondary screens are sent to roller mills. The overs from these mills are sent to screening and the roller mill recirculation circuit. The product from this operation is stored in a bin. The fines are pumped back to Fluid Bed reconstitution.

Clay from the product bin is sent to three mesh screens. The product is sent to the #2 Kiln and calcined. The #2 Kiln product is sent to a rotary cooler and, from the cooler, the product is put into a storage bin for bagging or bulk shipment.

Clay from the 6/60 bin can also be sent to the screen tower. The screen tower consists of 18 sifters and storage bins. The sifters are set up to make various size products. Screen tower products can be shipped as product or calcined. The output of the #1 Kiln goes to a rotary cooler. From the #1 Cooler the product goes to bins for bagging or bulk shipment. The Granular Shipping area has a packer, pelletizer and stretch wrap machine associated with its operation. This allows granular product to be shipped in bags, bulk trucks and bulk railcars.

### **Gel Processing**

A front end loader feeds clay to a feed system for four extruders. A screw feeder may be used to add magnesium oxide to the extruder feed. The clay then goes to one of three dryer mills to be dried and sized. The clay is recovered from the air stream by a cyclone collector. From the Mills, the clay is pumped pneumatically to the Gel Shipping Areas or bulk loaded for shipment. The shipping area includes a pelletizer, packers and stretch wrap machines.

### **Fine Grind**

Some of the clay from the Gel Mills is sent to either Fine Grind for ACM Milling or Ultra Fine Grind for additional processing. In Fine Grind the clay is sent to a pulverizer mill where the clay is ground. The clay from the mill is sent to a classifier to make the final products. The products can then be loaded bulk or bagged on one of the packers.

In ACM Milling, the clay is sent to a pulverizer mill where the clay is ground. The clay from the mill is sent to classifier to make the final product cuts. The products can then be loaded in bulk or bagged for shipment.

In Ultra Fine Grind, clay is fed to two jet mills where the clay is ground. The clay from the mill is sent to a classifier to make the final product cuts. The products can then be loaded in bulk or bagged for shipment.

The facility includes emissions units subject to NSPS (40 CFR 60 subpart OOO) as a result of the date of construction of the affected equipment. These emissions units have particulate emissions controlled by baghouses and include the Gel Clay Production Equipment, Granular Clay Production Equipment, and the ACM Milling/Ultra Fine Grind Equipment. The permit limits are comparable or more stringent than those required by NSPS and include 5% opacity limits.

The clay mining areas are not contiguous with the process plant areas, and are not included in this Title V Facility permit.

The facility is subject to a facility-wide limit of 124 tons per year of NO<sub>x</sub> associated with a BACT determination for the construction of the north and south fluid bed dryers (Construction Permits AC20-41424 and AC20-41425 issued August 4, 1981).

Since this BASF facility has a potential-to-emit of greater than 250 tons per year of PM (297 tons/yr), the facility is a major source under Prevention of Significant Deterioration (PSD) and any future modifications and/or construction must be evaluated with respect to the preconstruction review requirements of Chapter 62-212, F.A.C.

The following represent the nomenclature changes:

| <b>E.U. ID</b>  | <b>DESCRIPTION:</b>                   | <b>DESCRIPTION (NEW):</b>               |
|---|---------------------------------------|---|
| <b>Gel Clay Production Equipment not subject to NSPS (Baghouses)</b>  |                                       |   |
| 017   | Mini-U-Gel Truck Loading and Bagging  | CGS Bulk Truck Loading Dust Collector   |
| 021   | Coarse Gel West Bagging               | CGS West Bagging Dust Collector         |
| 022   | East Product Storage Bin              | East Bin CGS Bin Vent                   |
| 023   | West Product Storage Bin              | West Bin CGS Bin Vent                   |
| 024   | Miscellaneous Product Storage Bin     | Miscellaneous CGS Bin Vent              |
| 025   | Fine Gel Mill Product Collector       | NFG ACM Mill Product Dust Collector     |
| 026   | Fine Gel Classifier System            | MS4 Old Classifier NFG Dust Collector   |
| <b>Gel Clay Production Equipment subject to NSPS (Baghouses)</b>      |                                       |   |
| 013   | Fine Grinding                         | NFG Fugitive Dust Collector             |
| 016   | Extrusion Reagent Process             | MGO System Dust Collector               |
| 018   | #4 Mill Material Handling             | No. 4 Mill Fugitive Dust Collector      |
| 020   | East Bagging and Fugitive Dust        | CGS East Bagging Dust Collector         |
| 028   | Classifier Product Bagging System     | NFG Bagger Dust Collector               |
| <b>Granular Clay Production Equipment subject to NSPS (Baghouses)</b> |                                       |   |
| 011   | #1 Milling Area                       | Old Roller Mill Fugitive Dust Collector |
| 031   | Fluid Bed Dryer Material Handling     | FLBD Stock Bin Dust Collector           |
| 032   | Reconstitution Area                   | Fine Bin FLBD                           |
| 033   | #1A Mill System                       | #1A Mill Fugitive Dust Collector        |
| 035   | Finishing Area                        | Kiln Fugitive Dust Collector            |
| 036   | Granular Packaging Area               | Granular Shipping Dust Collector        |
| <b>Granular Clay Fired Equipment not subject to NSPS (Baghouses)</b>  |                                       |   |
| 030   | Fluid Bed Dryer – South               | South Fluid Bed Dryer Dust Collector    |
| <b>Granular Clay Fired Equipment not subject to NSPS (Scrubbers)</b>  |                                       |   |
| 014   | High Temperature Drying Kiln No. 1    | No. 1 Kiln Scrubber                     |
| 015   | High Temperature Drying Kiln No. 2    | No. 2 Kiln Scrubber                     |
| <b>Gel Clay Fired Equipment not subject to NSPS (Scrubbers)</b>       |                                       |   |
| 002   | Mill #4A Scrubber                     | No. 4A Mill Scrubber                    |
| 008   | Mill #4 Scrubber                      | No. 4 Mill Scrubber                     |
| 019   | Mill #4B Scrubber                     | No. 4B Mill Scrubber                    |
| <b>ACM Milling Equipment subject to NSPS (Baghouses)</b>              |                                       |   |
| 038, EP 37  | ACM Feed Bin                          | 100 Feed Bin Dust Collector             |
| 038, EP 38  | Return Conveyer Exhaust               | 800 Bin Vent                            |
| 038, EP 39  | ACM Mill Receiver Collector           | SFG ACM Mill Product Dust Collector     |
| 038, EP 40  | #1 Mill Classifier Feed Bin           | #1 Classifier 150 Bin Vent              |
| 038, EP 41a   | Product Bin 400                       | Product 400 Bin Vent                    |
| 038, EP 41b   | Product Bin 405                       | Product 405 Bin Vent                    |
| 038, EP 41c   | Product Bin 410                       | Product 410 Bin Vent                    |
| 038, EP 41d   | Product Bin 600                       | Product 600 Bin Vent                    |
| 038, EP 41e   | Product Bin 700                       | Product 700 Bin Vent                    |
| 038, EP 42  | Bulk Loadout Exhaust-Truck            | No. 4 Truck Loading Bin Vent            |
| 038, EP 43  | Bulk Loadout Exhaust-Rail             | SFG RLO Dust Collector                  |
| 038, EP 44  | Receiver Bin Vent                     | SFG Bagging Dust Collector              |
| 038, EP 46  | Bagger Exhaust                        | 3 Dock Bagging Dust Collector           |
| 038, EP 54  | Product Storage Bin and Loading Spout | No. 5 Load Out Bin Vent                 |
| <b>Ultra Fine Grind Equipment subject to NSPS (Baghouses)</b>         |                                       |   |
| 039, EP 48  | Receiver Bin 200 Vent                 | 200 Bin Vent                            |
| 039, EP 49  | FEM Mill #1 Receiver Collector        | No. 1 FEM Dust Collector                |
| 039, EP 50  | FEM Mill #2 Receiver Collector        | No. 2 FEM Dust Collector                |
| 039, EP 53  | #2 Classifier Feed Vent               | #2 Classifier 300 Bin Vent              |
| 039, EP 55  | Gel Rail Loadout                      | CGS RLO Dust Collector                  |
| 039, EP 56  | Product Bin 151                       | No Change                               |

Also included in this permit are miscellaneous unregulated/insignificant emissions units and/or activities.

Based on the Title V Air Operation Permit Revision application received June 06, 2013, this facility **is not** a major source of hazardous air pollutants (HAP).

**Subsection B. Summary of Emissions Unit ID No(s). and Brief Description(s).**

| <u>E.U. ID No.</u> | <u>Brief Description</u>  |
|--------------------|---|
|                    | <b>Gel Clay Production Equipment not subject to NSPS (Baghouses)</b>      |
| 017                | CGS Bulk Truck Loading Dust Collector                                     |
| 021                | CGS West Bagging Dust Collector   |
| 022                | East Bin CGS Bin Vent   |
| 023                | West Bin CGS Bin Vent   |
| 024                | Miscellaneous CGS Bin Vent  |
| 025                | NFG ACM Mill Product Dust Collector                                       |
| 026                | MS4 Old Classifier NFG Dust Collector                                     |
|                    | <b>Gel Clay Production Equipment subject to NSPS (Baghouses)</b>          |
| 013                | NFG Fugitive Dust Collector   |
| 016                | MGO System Dust Collector   |
| 018                | No. 4 Mill Fugitive Dust Collector  |
| 020                | CGS East Bagging Dust Collector   |
| 028                | NFG Bagger Dust Collector   |
|                    | <b>Granular Clay Production Equipment subject to NSPS (Baghouses)</b>     |
| 011                | Old Roller Mill Fugitive Dust Collector                                   |
| 031                | FLBD Stock Bin Dust Collector   |
| 032                | Fine Bin FLBD   |
| 033                | #1A Mill Fugitive Dust Collector  |
| 035                | Kiln Fugitive Dust Collector  |
| 036                | Granular Shipping Dust Collector  |
|                    | <b>Granular Clay Production Equipment not subject to NSPS (Baghouses)</b> |
| 030                | South Fluid Bed Dryer Dust Collector                                      |
|                    | <b>Granular Clay Production Equipment not subject to NSPS (Scrubbers)</b> |
| 014                | No. 1 Kiln Scrubber   |
| 015                | No. 2 Kiln Scrubber   |
|                    | <b>Gel Clay Fired Equipment not subject to NSPS (Scrubbers)</b>           |
| 002                | No. 4A Mill Scrubber  |
| 008                | No. 4 Mill Scrubber   |
| 019                | No. 4B Mill Scrubber  |
|                    | <b>ACM Milling Equipment subject to NSPS (Baghouses)</b>                  |
| 038                | 100 Feed Bin Dust Collector   |
| 038                | 800 Bin Vent  |
| 038                | SFG ACM Mill Product Dust Collector                                       |
| 038                | #1 Classifier 150 Bin Vent  |
| 038                | Product 400 Bin Vent  |
| 038                | Product 405 Bin Vent  |
| 038                | Product 410 Bin Vent  |
| 038                | Product 600 Bin Vent  |
| 038                | Product 700 Bin Vent  |
| 038                | No. 4 Truck Loading Bin Vent  |
| 038                | SFG RLO Dust Collector  |
| 038                | SFG Bagging Dust Collector  |
| 038                | 3 Dock Bagging Dust Collector   |
| 038                | No. 5 Load Out Bin Vent   |
|                    | <b>Ultra Fine Grind Equipment subject to NSPS (Baghouses)</b>             |
| 039                | 200 Bin Vent  |
| 039                | No. 1 FEM Dust Collector  |

|     |                            |
|-----|----------------------------|
| 039 | No. 2 FEM Dust Collector   |
| 039 | #2 Classifier 300 Bin Vent |
| 039 | CGS RLO Dust Collector     |
| 039 | Product Bin 151            |

Unregulated Emissions Units and/or Activities

| <u>E.U. ID No.</u> | <u>Brief Description</u> |
|--------------------|--------------------------|
| 041                | Fugitive Emissions       |

*Please reference the Permit No., Facility ID No., and appropriate Emissions Unit(s) ID No(s). on all correspondence, test report submittals, applications, etc.*

**Subsection C. Relevant Documents.**

The documents listed below are not a part of this permit; however, they are specifically related to this permitting action.

These documents are provided to the permittee for information purposes only:

Appendix A-1: Abbreviations, Acronyms, Citations, and Identification Numbers  
Statement of Basis

These documents are on file with the permitting authority:

Initial Title V Air Operation Permit issued March 16, 1999  
Appendix H-1: Permit History  
Application for a Title V Air Operation Permit Revision received June 06, 2013  
Additional Information Request dated June 26, 2013  
Additional Information Response received August 8, 2013

**Section II. Facility-wide Conditions.**

**The following conditions apply facility-wide:**

1. APPENDIX TV, TITLE V GENERAL CONDITIONS, is a part of this permit.
  2. General Pollutant Emission Limiting Standards. Objectionable Odor Prohibited. No person shall cause, suffer, allow, or permit the discharge of air pollutants which cause or contribute to an objectionable odor. [Rule 62-296.320(2), F.A.C.]
  3. General Particulate Emission Limiting Standards. General Visible Emissions Standard. Except for emissions units that are subject to a particulate matter or opacity limit set forth or established by rule and reflected by conditions in this permit, no person shall cause, let, permit, suffer or allow to be discharged into the atmosphere the emissions of air pollutants from any activity, the density of which is equal to or greater than that designated as Number 1 on the Ringelmann Chart (20 percent opacity). EPA Method 9 is the method of compliance pursuant to Chapter 62-297, F.A.C. [Rules 62-296.320(4)(b)1. & 4., F.A.C.]
  4. Prevention of Accidental Releases (Section 112(r) of CAA).
    - a. The permittee shall submit its Risk Management Plan (RMP) to the Chemical Emergency Preparedness and Prevention Office (CEPPO) RMP Reporting Center when, and if, such requirement becomes applicable. Any Risk Management Plans, original submittals, revisions or updates to submittals, should be sent to:

RMP Reporting Center  
Post Office Box 10162  
Fairfax, VA 22038  
Telephone: 703/227-7650
- and,
- b. The permittee shall submit to the permitting authority Title V certification forms or a compliance schedule in accordance with Rule 62-213.440(2), F.A.C.  
[40 CFR 68]
5. Unregulated Emissions Units and/or Activities. Appendix U-1, List of Unregulated Emissions Units and/or Activities, is a part of this permit.  
[Rule 62-213.440(1), F.A.C.]
6. Insignificant Emissions Units and/or Activities. Appendix I-1, List of Insignificant Emissions Units and/or Activities, is a part of this permit. [Rules 62-213.440(1), 62-213.430(6) and 62-4.040(1)(b), F.A.C.]
7. General Pollutant Emission Limiting Standards. Volatile Organic Compounds (VOC) Emissions or Organic Solvents (OS) Emissions. The permittee shall allow no person to store, pump, handle, process, load, unload or use in any process or installation, volatile organic compounds (VOC) or organic solvents (OS) without applying known and existing vapor emission control devices or systems deemed necessary and ordered by the Department. Nothing was deemed necessary and ordered at this time.  
[Rule 62-296.320(1), F.A.C.; permit 0390005- 015-AC]
8. Emissions of Unconfined Particulate Matter. No person shall cause, let, permit, suffer or allow the emissions of unconfined particulate matter from any activity, including vehicular

movement; transportation of materials; construction, alteration, demolition or wrecking; or industrially related activities such as loading, unloading, storing or handling; without taking reasonable precautions to prevent such emissions. Reasonable precautions to prevent emissions of unconfined (fugitive) particulate matter at this facility include the following requirements:

- a. Paving and maintenance of roads, parking areas, and yards.
- b. Application of water or other dust suppressants to unpaved roads, yards, open stock piles and similar activities.
- c. Removal of particulate matter from roads and other paved areas under the control of the owner or operator of the facility to prevent reentrainment, and from buildings or work areas to prevent particulate from becoming airborne.
- d. Landscaping or planting of vegetation.
- e. Repair rotary feeder leaks, dust piping holes, general equipment leaks immediately upon detection.
- f. Vacuum sweep regularly.
- g. Minimize dust generation during bag stacking by using improved work procedures.
- h. Use extreme caution and carefulness while changing out dust collector bags.
- i. Utilize control equipment as necessary during loadout of open trucks.
- j. Control belt speeds to minimize transfer points emissions, use regular maintenance of dust pick up points.
- k. Confining abrasive blasting wherever possible.

[Rule 62-296.320(4)(c) 2., F.A.C.; permit 0390005- 015-AC]

**9. Emissions of Nitrogen Dioxide.** Facility-wide nitrogen dioxide emissions are limited to 124 tons per year.

[Title V Operation Permit 0390005-014-AV; construction permits AC20-41424 and 41425]

**10. Annual Statement of Compliance.** The permittee shall submit an annual statement of compliance to the compliance authority at the address shown on the cover of this permit within 60 days after the end of each calendar year during which the Title V permit was effective. [Rules 62-213.440(3)(a)2. & 3. and (3)(b), F.A.C.]

**11. Annual Operating Report.** The permittee shall submit an annual report that summarizes the actual operating rates and emissions from this facility. Annual operating reports shall be submitted to the Compliance Authority by April 1<sup>st</sup> of each year. A copy of the form and instructions may be obtained electronically at <http://www.dep.state.fl.us/air/rules/forms/aor.htm>. If the report is submitted using the Department's electronic annual operating report software, there is no requirement to submit a copy to any DEP or local air program office. [Rule 62-210.370(3), F.A.C.]

**12. Annual Emissions Fee Form and Fee.** The annual Title V emissions fees are due (postmarked) by March 1<sup>st</sup> of each year. The completed form and calculated fee shall be submitted to: Major Air Pollution Source Annual Emissions Fee, P.O. Box 3070, Tallahassee, Florida 32315-3070. The forms are available for download by accessing the Title V Annual Emissions Fee On-line Information Center at the following Internet web site: <http://www.dep.state.fl.us/air/emission/tvfee.htm>. [Rule 62-213.205, F.A.C.]

**13.** The permittee shall submit all compliance related notifications and reports required of this permit to the Department's Northwest District Office. Notifications and reports may be submitted by electronic mail to [nwdair@dep.state.fl.us](mailto:nwdair@dep.state.fl.us).

Northwest District Waste Management/Air Resources  
160 W. Government Street, Suite 308  
Pensacola, Florida 32502-5794  
Telephone: 850/595-8300; Fax: 850/595-8393

**14.** Any reports, data, notifications, certifications, and requests required to be sent to the United States Environmental Protection Agency, Region 4, should be sent to:

United States Environmental Protection Agency  
Region 4  
Air, Pesticides & Toxics Management Division  
Air and EPCRA Enforcement Branch  
Air Enforcement Section  
61 Forsyth Street  
Atlanta, Georgia 30303-8960  
Telephone: 404/562-9155; Fax: 404/562-9163

**15.** Certification by Responsible Official (RO). In addition to the professional engineering certification required for applications by Rule 62-4.050(3), F.A.C., any application form, report, compliance statement, compliance plan and compliance schedule submitted pursuant to Chapter 62-213, F.A.C., shall contain a certification signed by a responsible official that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. Any responsible official who fails to submit any required information or who has submitted incorrect information shall, upon becoming aware of such failure or incorrect submittal, promptly submit such supplementary information or correct information. [Rule 62-213.420(4), F.A.C.]

**16.** When appropriate, any recording, monitoring or reporting requirements that are time-specific shall be in accordance with the effective date of the permit, which defines day one. [Rule 62-213.440, F.A.C.]

**17.** The Department telephone number for reporting problems, malfunctions or exceedances under this permit is 850/595-0578, day or night, and for emergencies involving a significant threat to human health or the environment is 800/320-0519. For routine business, telephone 850/595-8300, then press 3 during normal working hours. [Rules 62-210.700 and 62-4.130, F.A.C.]

**Section III. Emissions Unit(s) and Conditions.**

**Subsection A. This section addresses the following emissions unit(s).**

| <u>E.U. ID No.</u> | <u>Brief Description</u>   |
|--------------------|--|
|                    | <b>Gel Clay Production Equipment not subject to NSPS (Baghouses)</b> |
| 017                | CGS Bulk Truck Loading Dust Collector                                |
| 021                | CGS West Bagging Dust Collector                                      |
| 022                | East Bin CGS Bin Vent  |
| 023                | West Bin CGS Bin Vent  |
| 024                | Miscellaneous CGS Bin Vent   |
| 025                | NFG ACM Mill Product Dust Collector                                  |
| 026                | MS4 Old Classifier NFG Dust Collector                                |

These regulated emissions units include gel attapulgitic clay production equipment constructed prior to August 31, 1983 and are not subject to NSPS (Subpart OOO, 40 CFR 60). These emissions units are subject to BACT under permit 0390005-015-AC that allowed modifications to Emissions Units 022, 023 and 024 that included installing a new Cyclonaire Pneumatic Transporter, modifying the existing pneumatic transporters, Con 100 and Con 500, plus additional modifications. These pneumatic transporters and the rotary valve have no specific requirements under 40 CFR 60 subpart OOO. These changes were incorporated into Permit 0390005-016-AV.

Concurrently processed permit 0390005-018-AC will allow the installation of a portable bulk bag reclamation system that will affect Emissions Units 017, 022 through 024. These changes are incorporated into this permit revision.

The equipment includes conveyors, classifiers, storage bins, bag packers and emissions from miscellaneous fugitive sources. This equipment is identified in Appendix Equipment Requirements, Identification of Applicable Requirements by Equipment.

Emissions are controlled by dust collectors, identified as follows:

| <u>E.U. ID No.</u> | <u>Description</u>                    | <u>Baghouse</u>                                     |
|--------------------|---------------------------------------|---|
| 017                | CGS Bulk Truck Loading Dust Collector | Seneca 100-IM-8 with 100 polyethylene bags          |
| 021                | CGS West Bagging Dust Collector       | Flex-Kleen 84-CTBS-74-III with 74 polyethylene bags |
| 022                | East Bin CGS Bin Vent                 | Flex-Kleen 84-BVBS-36 with 36 polyethylene bags     |
| 023                | West Bin CGS Bin Vent                 | Flex-Kleen 84-BVBS-36 with 36 polyethylene bags     |
| 024                | Miscellaneous CGS Bin Vent            | Flex-Kleen 84-BVBS-36 with 36 polyethylene bags     |
| 025                | NFG ACM Mill Product Dust Collector   | Mikro-Pulsaire 289S-8-40 with 289 polyethylene bags |
| 026                | MS4 Old Classifier NFG Dust Collector | Mikro-Pulsaire 81S-20 with 81 polyethylene bags     |

Emission limits include 5% opacity (original BACT) and 0.017 gds/cf (applicant's request, used as supporting information in original construction permit).

**The following specific conditions apply to the emissions unit(s) listed above:**

**Essential Potential to Emit (PTE) Parameters**

**A.1. Capacity.** The maximum process throughput rate shall not exceed the following:

| E.U.<br>ID No. | Description                           | Operation rate |         |
|----------------|---------------------------------------|----------------|---------|
|                |                                       | TPH            | TPY     |
| 017            | CGS Bulk Truck Loading Dust Collector | 35             | 306,600 |
| 021            | CGS West Bagging Dust Collector       | 18             | 157,680 |
| 022            | East Bin CGS Bin Vent                 | 25             | 219,000 |
| 023            | West Bin CGS Bin Vent                 | 25             | 219,000 |
| 024            | Miscellaneous CGS Bin Vent            | 10             | 87,600  |
| 025            | NFG ACM Mill Product Dust Collector   | 8              | 70,080  |
| 026            | MS4 Old Classifier NFG Dust Collector | 3              | 26,280  |

[Rules 62-4.070(3) and 62-210.200(PTE), F.A.C.; Title V Operation Permit 0390005-002-AV and Permit 0390005-015-AC]

**A.2. Hours of Operation.** This emissions unit is allowed to operate continuously, i.e., 8,760 hours/year.

[Rule 62-210.200(PTE), and 62-213.410, F.A.C.; Title V Operation Permit 0390005-002-AV]

**Emission Limitations and Standards**

**A.3. Visible Emissions:** Visible emissions (VE) shall not exceed 5% opacity. [Rule 62-297.620(4), F.A.C., Title V Operation Permit 0390005-002-AV]

**A.4. Particulate Matter:** Particulate matter (PM) shall not exceed the following:

| E.U.<br>ID No. | Description                           | Particulate Matter |                               |      |
|----------------|---------------------------------------|--------------------|-------------------------------|------|
|                |                                       | Limits<br>gpdsf    | Estimated Emissions<br>lbs/hr | TPY  |
| 017            | CGS Bulk Truck Loading Dust Collector | 0.017              | 0.7                           | 3.2  |
| 021            | CGS West Bagging Dust Collector       | 0.017              | 0.5                           | 1.9  |
| 022            | East Bin CGS Bin Vent                 | 0.017              | 0.4                           | 1.9  |
| 023            | West Bin CGS Bin Vent                 | 0.017              | 0.4                           | 1.9  |
| 024            | Miscellaneous CGS Bin Vent            | 0.017              | 0.2                           | 0.9  |
| 025            | NFG ACM Mill Product Dust Collector   | 0.017              | 1.7                           | 7.3  |
| 026            | MS4 Old Classifier NFG Dust Collector | 0.017              | 0.7                           | 2.9  |
| <b>TOTAL:</b>  |                                       |                    | 4.6                           | 20.0 |

[Title V Operation Permit 0390005-002-AV and application 0390005-017-AV]

**Test Methods and Procedures**

**A.5. Compliance Tests**

**a. One time-Compliance Test pursuant to 0390005-018-AC:** The permittee shall conduct a VE test on emissions units 017, 022, 023 and 024 while the portable bulk bag reclamation system is in operation. The initial tests shall be scheduled and performed prior to the Title V renewal application due date of June 14, 2014 so the results are included with the application. The VE test duration shall be 30 minutes. [Permit 0390005-018-AC]

**b. PM, VE:** The permittee shall conduct visible emissions tests on each emissions unit. The test method shall be EPA Method 9, incorporated and adopted by reference in Rule 62-297, F.A.C., and the test duration is 30 minutes. Such tests shall be scheduled and performed within the last 12 months prior to the renewal application due date. [Rules 62-297.401(c), and 62-297.310, F.A.C.; Title V Operation Permit 0390005-002-AV; permit 0390005-015-AC]

**A.6. PM:** Rule 62-297.620(4), F.A.C., allows the waiver of particulate matter compliance test requirements for an emissions unit which has the potential to emit less than 100 tons per year of particulate matter and is equipped with a baghouse. If the Department has reason to believe that the particulate weight emission standard applicable to such emissions unit is not being met, it shall require that compliance be demonstrated by the applicable test method. Compliance with the particulate matter emission limit may be demonstrated by compliance with the alternative opacity standard of 5%. In the event any emissions unit does not satisfactorily demonstrate compliance with the alternative VE opacity standard, each such emissions unit shall demonstrate compliance with the PM standard by EPA Method 5 within 90 days of the visible emissions test date. [Rules 62-4.070(3) and 62-297.620(4), F.A.C.; Title V Operation Permit 0390005-002-AV]

**Monitoring of Operations and Recordkeeping**

**A.7.** The permittee shall maintain a record of baghouse pressure differentials, recording the pressure drops at least at each shift change or every eight hours, whichever is more frequent. [Rule 62-4.070(3), F.A.C.; Title V Operation Permit 0390005-002-AV]

*{Permit Note: The baghouse pressure differential should be within the normal operational range of 0.5" to 5" WG. If the pressure differential is observed outside of the normal operation parameters, appropriate corrective action should be taken immediately.}*

**A.8.** These emissions units are also subject to Common Conditions, Test Methods and Procedures; Monitoring of Operations; and Excess Emissions. [Title V Operation Permit 0390005-002-AV]

**Section III. Emissions Unit(s) and Conditions.**

**Subsection B. This section addresses the following emissions units.**

**E.U.**

**ID No.    Brief Description**

**Gel Clay Production Equipment subject to NSPS (Baghouses)**

|     |                                    |
|-----|------------------------------------|
| 013 | NFG Fugitive Dust Collector        |
| 016 | MGO System Dust Collector          |
| 018 | No. 4 Mill Fugitive Dust Collector |
| 020 | CGS East Bagging Dust Collector    |
| 028 | NFG Bagger Dust Collector          |

These are regulated emissions units that include gel attapulgitic clay production equipment modified after August 31, 1983 and subject to NSPS (Subpart OOO, 40 CFR 60). These emissions units are subject to BACT. The equipment includes conveyors, classifiers, storage bins, bag packers, and emissions from miscellaneous fugitive sources. This equipment is identified in Appendix Equipment Requirements, Identification of Applicable Requirements by Equipment.

Concurrently processed permit 0390005-018-AC will allow the installation of a portable bulk bag reclamation system that will affect Emissions Units 013 and 018. These changes are incorporated into this permit revision.

Emissions are controlled by dust collectors, identified as follows:

**E.U.**

**ID**

| <u>No.</u> | <u>Description</u>                 | <u>Baghouse</u>  |
|------------|------------------------------------|--|
| 013        | NFG Fugitive Dust Collector        | Flex-Kleen 100-WMWC-525-III with 525 polyethylene bags |
| 016        | MGO System Dust Collector          | Flex-Kleen 100-WRW-80-III with 80 polyethylene bags    |
| 018        | No. 4 Mill Fugitive Dust Collector | Flex-Kleen 100-WMWC-600-III with 600 polyethylene bags |
| 020        | CGS East Bagging Dust Collector    | Flex-Kleen 84-CTB-74-III with 74 polyethylene bags     |
| 028        | NFG Bagger Dust Collector          | Flex-Kleen 100-WMW-360 with 360 polyethylene bags      |

Emission limits include 5% opacity (original BACT, more stringent than NSPS standard of 7% opacity) and 0.05 grams per dry standard cubic meter. Emissions unit 013 includes a PM limit of 1.1 lbs/hr PM and 4.4 TPY PM based on limits included in permit AC20-31307 dated November 17, 1980, which is more stringent than the NSPS standard of 0.05 grams/dscm (0.022gr/dscf).

These emissions units are subject to the requirements of 40CFR60 subpart OOO, Standards of Performance for Nonmetallic Mineral Processing Plants applicable to each crusher, screening operation, bucket elevator, belt conveyor, bagging operation, storage bin, enclosed truck or railcar loading station. In general, the applicable standards for particulate matter are 0.022 gr/dscf and 7% opacity for affected facilities [40 CFR 60.672(a)]. Operations enclosed in a building are subject to the requirements in 40 CFR 60.672(e) of no visible fugitive emissions from the building and 0.022 gr/dscf and 7% opacity for any building vents. The facility has requested the alternate VE standard of 5% opacity in accordance with Rule 62-297.620(4), F.A.C., to demonstrate compliance with the PM limit, more stringent than the limits in 40 CFR 60.672.

**The following specific conditions apply to the emissions units listed above:**

**Essential Potential to Emit (PTE) Parameters**

**B.1. Capacity.** The maximum process throughput rate shall not exceed the following:

| <u>EU<br/>ID No.</u> | <u>Description</u>                 | <u>Operation rate</u> |            |
|----------------------|------------------------------------|-----------------------|------------|
|                      |                                    | <u>TPH</u>            | <u>TPY</u> |
| 013                  | NFG Fugitive Dust Collector        | 12                    | 105,120    |
| 016                  | MGO System Dust Collector          | 33                    | 289,080    |
| 018                  | No. 4 Mill Fugitive Dust Collector | 33                    | 289,080    |
| 020                  | CGS East Bagging Dust Collector    | 25                    | 219,000    |
| 028                  | NFG Bagger Dust Collector          | 12                    | 105,120    |

[Rules 62-4.070(3) and 62-210.200(PTE), F.A.C.; Title V Operation Permit 0390005-002-AV]

**B.2. Hours of Operation.** These emissions units are allowed to operate continuously, i.e., 8,760 hours/year. [Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.]

**Emission Limitations and Standards**

**B.3. Visible Emissions:** Visible emissions shall not exceed 5% opacity. [Rule 62-297.620(4), F.A.C.]

**B.4. Particulate Matter:** Particulate matter shall not exceed the following:

- (1) The permittee shall not cause to be discharged into the atmosphere from any transfer point on belt conveyors or from any other affected facility any stack emissions which:
  - (a) Contain particulate matter in excess of 0.05 g/dscm (0.022 gr/dscf); and
  - (b) Exhibit greater than 5 percent opacity.

*{Permit Note: The 7% opacity limitation contained in 40 CFR 60.672 is replaced with a 5% opacity limitation at the permittee's request in accordance with Rule 62-297.620(4) as an alternate PM compliance standard.}*

- (2) Each emission point enclosed in a building shall comply with the emission limits in paragraph (1) above, or the building shall comply with the following emission limits:

No owner or operator shall cause to be discharged into the atmosphere from any building enclosing any transfer point on a conveyor belt or any other affected facility any visible fugitive emissions except emissions from a vent as defined in 40 CFR 60.671. No owner or operator shall cause to be discharged into the atmosphere from any vent of any building enclosing any transfer point on a conveyor belt or any other affected facility emissions that exceed the stack emissions limits in paragraph (1) of this condition.

The following emission points are subject to the particulate matter standards identified below:

| <u>EU<br/>ID No.</u> | <u>Description</u>                 | <u>Particulate Matter</u> |                            |            |
|----------------------|------------------------------------|---------------------------|----------------------------|------------|
|                      |                                    | <u>Limits<br/>gpdscf</u>  | <u>Estimated Emissions</u> |            |
|                      |                                    |                           | <u>lbs/hr</u>              | <u>TPY</u> |
| 013                  | NFG Fugitive Dust Collector        | 0.022                     | 2.7                        | 11.7       |
| 016                  | MGO System Dust Collector          | 0.022                     | 0.7                        | 3.1        |
| 018                  | No. 4 Mill Fugitive Dust Collector | 0.022                     | 3.9                        | 17.1       |
| 020                  | CGS East Bagging Dust Collector    | 0.022                     | 0.9                        | 4.1        |
| 028                  | NFG Bagger Dust Collector          | 0.022                     | 2.4                        | 9.9        |
| <b><u>TOTAL:</u></b> |                                    |                           | 10.6                       | 45.9       |

[BACT, 40CFR60.672; Rule 62-204.800(8)(b)68. F.A.C.; Title V Operation Permit 0390005-002-AV]

**Test Methods and Procedures**

**B.5. Compliance Tests**

a. One time-Compliance Test pursuant to 0390005-018-AC: The permittee shall conduct a VE test on emissions units 013 and 018 while the portable bulk bag reclamation system is in operation. The initial tests shall be scheduled and performed prior to the Title V renewal application due date of June 14, 2014 so the results are included with the application. The VE test duration shall be 30 minutes. [Permit 0390005-018-AC]

b. PM, VE: The permittee shall conduct annual visible emissions tests on each emission point once during each federal fiscal year (October 1 through September 30) and generally at 12-month intervals. The test method shall be EPA Method 9, incorporated and adopted by reference in Rule 62-297, F.A.C. and the test duration is 30 minutes.

In addition, to demonstrate compliance with the PM standard, the owner or operator shall conduct EPA Method 22 performance tests for fugitive emissions on each building enclosing the referenced emission points twice during the lifetime of this permit and generally at 24-month intervals. The performance test shall be conducted while all affected emission points inside the building are operating. The performance test for each building shall be at least 75 minutes in duration, with each side of the building and the roof being observed for at least 15 minutes. [Rules 62-297.401(9) and (22), 62-297.310, and 62-204.800(8)(b)68, F.A.C.; Title V Operation Permit 0390005-002-AV; 40 CFR 60.675(d)]

**B.6. PM**: Rule 62-297.620(4), F.A.C., allows the waiver of particulate matter compliance test requirements for an emissions unit which has the potential to emit less than 100 tons per year of particulate matter and is equipped with a baghouse. If the Department has reason to believe that the particulate weight emission standard applicable to such emissions unit is not being met, it shall require that compliance be demonstrated by the applicable test method. Compliance with the particulate matter emission limit may be demonstrated by compliance with the alternative opacity standard of 5%. In the event any emissions unit does not satisfactorily demonstrate compliance, with the alternative VE opacity standard, each such emissions unit shall demonstrate compliance with the PM standard by EPA Method 5 within 90 days of the visible emissions test date. [Rules 62-4.070(3) and 62-297.620(4), F.A.C.; Title V Operation Permit 0390005-002-AV]

**Monitoring of Operations and Recordkeeping**

**B.7.** The permittee shall maintain a record of baghouse pressure differentials, recording the pressure drops at least at each shift change or every eight hours, whichever is more frequent. [Rule 62-4.070(3), F.A.C.; Title V Operation Permit 0390005-002-AV]

*{Permit Note: The baghouse pressure differential should be within the normal operational range of 0.5" to 5" WG. If the pressure differential is observed outside of the normal operation parameters, appropriate corrective action should be taken immediately.}*

**B.8.** These emissions units are also subject to Common Conditions, Test Methods and Procedures; Monitoring of Operations; 40 CFR 60, Subpart A - General Provisions Requirements and 40 CFR 60 Subpart OOO Standards of Performance for Nonmetallic Mineral Processing Plants. [Title V Operation Permit 0390005-002-AV]

### Section III. Emissions Units and Conditions.

#### Subsection C. This section addresses the following emissions units.

##### E.U.

| <u>ID No.</u> | <u>Brief Description</u>  |
|---------------|---|
|               | <b>Granular Clay Production Equipment subject to NSPS (Baghouses)</b> |
| 011           | Old Roller Mill Fugitive Dust Collector                               |
| 031           | FLBD Stock Bin Dust Collector   |
| 032           | Fine Bin FLBD   |
| 033           | #1A Mill Fugitive Dust Collector                                      |
| 035           | Kiln Fugitive Dust Collector  |
| 036           | Granular Shipping Dust Collector                                      |

These are regulated emissions units that include granular clay production equipment modified after August 31, 1983, and subject to NSPS (Subpart OOO, 40 CFR 60). These emissions units are subject to BACT.

The equipment includes conveyors, classifiers, storage bins, bag packers, and emissions from miscellaneous fugitive sources. This equipment is identified in Appendix Equipment Requirements, Identification of Applicable Requirements by Equipment.

Emissions are controlled by dust collectors, identified as follows:

##### E.U.

| <u>ID No.</u> | <u>Description</u>                      | <u>Baghouse</u>  |
|---------------|---|--|
| 011           | Old Roller Mill Fugitive Dust Collector | Micro Pulsaire 1-FS-24 with 240 polyethylene bags                    |
| 031           | FLBD Stock Bin Dust Collector           | Flex-Kleen 100-WMW-180 with 180 polyethylene bags                    |
| 032           | Fine Bin FLBD                           | Material Handling Flex-Kleen 100-WMWC-120 with 120 polyethylene bags |
| 033           | #1A Mill Fugitive Dust Collector        | Flex-Kleen 100-WMW-1080  |
| 035           | Kiln Fugitive Dust Collector            | Flex-Kleen 100-WMW-540 with 540 polyethylene bags                    |
| 036           | Granular Shipping Dust Collector        | Flex-Kleen 100-WMW-300 with 300 polyethylene bags                    |

Emission limits include 5% opacity (original BACT, more stringent than NSPS standard of 7% opacity) and 0.05 grams per dry standard cubic meter. Emissions unit 032 includes a PM limit of 1.0 lbs/hr PM and 4.4 TPY PM based on limits included in permit AC20-41427 dated August 4, 1981; 033, 4.0 lbs/hr PM and 17.6 TPY PM based on AC20-41428 dated August 4, 1981; 035, 2.4 lbs/hr and 10.6 TPY based on AC20-41430 dated August 4, 1981; and 036, 1.0 lbs/hr PM and 4.4 TPY PM based on AC20-41431 dated August 4, 1981. The construction permit limits are all more stringent than 0.05 grams/dscm (0.022 gr/dscf).

These emissions units are subject to the requirements of 40 CFR 60 subpart OOO, Standards of Performance for Nonmetallic Mineral Processing Plants applicable to each crusher, screening operation, bucket elevator, belt conveyor, bagging operation, storage bin, enclosed truck or railcar loading station. In general, the applicable standards for particulate matter are 0.022 gr/dscf and 7% opacity for affected facilities [40 CFR 60.672(a)]. Operations enclosed in a building are subject to the requirements in 40 CFR 60.672(e) of no visible fugitive emissions from the

building and 0.022 gr/dscf and 7% opacity for any building vents. The facility has requested the alternate VE standard of 5% opacity in accordance with Rule 62-297.620(4), F.A.C., to demonstrate compliance with the PM limit, more stringent than the limits in 40 CFR 60.672.

**The following specific conditions apply to the emissions units listed above:**

**Essential Potential to Emit (PTE) Parameters**

**C.1. Capacity.** The maximum process throughput rate shall not exceed the following:

| <u>EU<br/>ID No.</u> | <u>Description</u>                      | <u>Operation rate</u> |            |
|----------------------|---|-----------------------|------------|
|                      |   | <u>TPH</u>            | <u>TPY</u> |
| 011                  | Old Roller Mill Fugitive Dust Collector | 14                    | 80,360     |
| 031                  | FLBD Stock Bin Dust Collector           | 68                    | 595,680    |
| 032                  | Fine Bin FLBD                           | 52                    | 455,520    |
| 033                  | #1A Mill Fugitive Dust Collector        | 66                    | 378,840    |
| 035                  | Kiln Fugitive Dust Collector            | 65                    | 569,400    |
| 036                  | Granular Shipping Dust Collector        | 45                    | 394,200    |

[Rules 62-4.070(3) and 62-210.200(PTE), F.A.C.; Title V Operation Permit 0390005-002-AV]

**C.2. Hours of Operation.** These emissions units are allowed to operate continuously, i.e., 8,760 hours/year. However, emissions unit ID No. 011, the Old Roller Mill Fugitive Dust Collector, is limited to 5,740 hours of operation. The permittee shall maintain records of operation of the Old Roller Mill Fugitive Dust Collector.

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; Title V Operation Permit 0390005-002-AV]

**Emission Limitations and Standards**

**C.3. Visible Emissions:** Visible emissions shall not exceed 5% opacity. [Rule 62-297.620(4), F.A.C.; Title V Operation Permit 0390005-002-AV]

**C.4. Particulate Matter:** Particulate matter shall not exceed the following:

- (1) The permittee shall not cause to be discharged into the atmosphere from any transfer point on belt conveyors or from any other affected facility any stack emissions which:
  - (a) Contain particulate matter in excess of 0.05 g/dscm (0.022 gr/dscf); and,
  - (b) Exhibit greater than 5% opacity.

*{Permit Note: The 7% opacity limitation contained in 40 CFR 60.672 is replaced with a 5% opacity limitation at the permittee's request in accordance with Rule 62-297.620(4) as an alternate PM compliance standard.}*

- (2) Each emission point enclosed in a building shall comply with the emission limits in paragraphs (1) above, or the building shall comply with the following emission limits:

No owner or operator shall cause to be discharged into the atmosphere from any building enclosing any transfer point on a conveyor belt or any other affected facility any visible fugitive emissions except emissions from a vent as defined in 40 CFR 60.671. No owner or operator shall cause to be discharged into the atmosphere from any vent of any building enclosing any transfer point on a conveyor belt or any other affected facility emissions that exceed the stack emissions limits in paragraph (1) of this condition.

The following emission points are subject to the particulate matter standards identified below:

| <u>EU</u><br><u>ID No.</u> | <u>Description</u>                      | <u>Particulate Matter</u>     |  |      |
|----------------------------|---|-------------------------------|--|------|
|                            |   | <u>Limits</u><br><u>gpdsf</u> | <u>Estimated Emissions</u><br><u>lbs/hr</u> <u>TPY</u> |      |
| 011                        | Old Roller Mill Fugitive Dust Collector | 0.022                         | 2.6  | 7.5  |
| 031                        | FLBD Stock Bin Dust Collector           | 0.022                         | 0.7  | 2.8  |
| 032                        | Fine Bin FLBD                           | 0.022                         | 1.0  | 4.4  |
| 033                        | #1A Mill Fugitive Dust Collector        | 0.022                         | 4.0  | 17.6 |
| 035                        | Kiln Fugitive Dust Collector            | 0.022                         | 5.4  | 23.5 |
| 036                        | Granular Shipping Dust Collector        | 0.022                         | 1.0  | 4.4  |
|                            |   | <u>TOTAL:</u>                 | 14.7   | 60.2 |

[BACT, 40CFR60.672; Rule 62-204.800(8)(b)68, F.A.C.; Title V Operation Permit 0390005-002-AV and Permit 0390005-018-AC]

**Test Methods and Procedures**

**C.5. PM, VE:** The permittee shall conduct annual visible emissions tests on each emission point once during each federal fiscal year (October 1 through September 30) and generally at 12-month intervals. The test method shall be EPA Method 9, incorporated and adopted by reference in Rule 62-297, F.A.C. and the test duration is 30 minutes.

In addition, to demonstrate compliance with the PM standard, the owner or operator shall conduct EPA Method 22 performance tests for fugitive emissions on each building enclosing the referenced emission points twice during the lifetime of this permit and generally at 24-month intervals. The performance test shall be conducted while all affected emission points inside the building are operating. The performance test for each building shall be at least 75 minutes in duration, with each side of the building and the roof being observed for at least 15 minutes. [Rules 62-4.070(3), 62-297.401 and 62-204.800(8)(b)68, F.A.C.; Title V Operation Permit 0390005-002-AV; 40 CFR 60.675(d)]

**C.6. PM:** Rule 62-297.620(4), F.A.C., allows the waiver of particulate matter compliance test requirements for an emissions unit which has the potential to emit less than 100 tons per year of particulate matter and is equipped with a baghouse. If the Department has reason to believe that the particulate weight emission standard applicable to such emissions unit is not being met, it shall require that compliance be demonstrated by the applicable test method. Compliance with the particulate matter emission limit may be demonstrated by compliance with the alternative opacity standard of 5%. In the event any emissions unit does not satisfactorily demonstrate compliance, with the alternative VE opacity standard, each such emissions unit shall demonstrate compliance with the PM standard by EPA Method 5 within 90 days of the visible emissions test date. [Rule 62-297.620(4), F.A.C.; Title V Operation Permit 0390005-002-AV]

**C.7.** The permittee shall maintain a record of baghouse pressure differentials, recording the pressure drops at least at each shift change or every eight hours, whichever is more frequent. [Rule 62-4.070(3), F.A.C.; Title V Operation Permit 0390005-002-AV]

*{Permit Note: The baghouse pressure differential should be within the normal operational range of 0.5" to 5" WG. If the pressure differential is observed outside of the normal operation parameters, appropriate corrective action should be taken immediately.}*

**C.8.** These emissions units are also subject to Common Conditions, Test Methods and Procedures; Monitoring of Operations; 40 CFR 60, Subpart A - General Provisions Requirements

**BASF Corporation**  
**Quincy Operations**

**DRAFT/PROPOSED Permit No.: 0390005-017-AV**  
**Facility ID No.: 0390005**

and 40 CFR 60. Subpart OOO - Standards of Performance for Nonmetallic Mineral Processing Plants. [Title V Operation Permit 0390005-002-AV]

DRAFT / PROPOSED

**Section III. Emissions Units and Conditions.**

**Subsection D. This section addresses the following emissions units.**

**E.U.**

**ID No.    Brief Description**

**Granular Clay Fired Equipment not subject to NSPS (Baghouses)**

030      South Fluid Bed Dryer Dust Collector

This regulated emissions unit consists of natural gas or propane-fired equipment utilized for the production of granular attapulgite clay products constructed prior to August 31, 1983, and not subject to NSPS (40 CFR 60 subpart OOO). This emissions unit is subject to BACT, and to Compliance Assurance Monitoring (CAM) requirements. Additionally, this emissions unit has accepted a NOx emissions limit to avoid PSD review.

The equipment includes collector screws, dryers, burners, and product coolers with emissions controlled by a product dust collector and dual cyclones, followed by twin baghouses. The equipment is identified in Appendix Equipment Requirements, Identification of Applicable Requirements by Equipment.

The emission control equipment is identified as follows:

| <u>EU</u> | <u>Description</u>                   | <u>Baghouse</u>  |
|-----------|--------------------------------------|--|
| 030       | South Fluid Bed Dryer Dust Collector | Dust collector and product cyclone followed by dual baghouses consisting of Flex-Kleen 120 WMW 960 with Nomex bags |

Emission limits include 5% opacity (original BACT) and limits included in original construction permits. Construction permit AC20-41425, issued August 4, 1981, for the South Fluid Bed Dryer included limits of 4.7 lbs/hr PM. Combustion by-products are subject to a facility-wide BACT limiting NOx emissions to 124 TPY.

**The following specific conditions apply to the emissions units listed above:**

**Essential Potential to Emit (PTE) Parameters**

**D.1. Capacity.** The maximum process throughput rate and heat input shall not exceed the following:

| <u>EU</u> | <u>Description</u>                   | <u>Operation rate/tons processed</u> |            | <u>Heat Input</u> |
|-----------|--------------------------------------|--------------------------------------|------------|-------------------|
|           |                                      | <u>TPH</u>                           | <u>TPY</u> | <u>MMBtu/hr</u>   |
| 030       | South Fluid Bed Dryer Dust Collector | 68                                   | 595,680100 |                   |

[Rules 62-4.070(3) and 62-210.200(PTE), F.A.C.; Title V Operation Permit 0390005-002-AV]

**D.2. Hours of Operation.** These emissions unit are allowed to operate continuously, i.e., 8,760 hours/year. [Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.]

**D.3. Methods of Operation (i.e. Fuels).** This emissions unit may operate using pipeline quality natural gas or liquid propane. The permittee shall track fuel usage by the emissions unit and facility overall. The permittee shall maintain a log available for Department inspection of the fuel usage, and shall maintain vendor certificates documenting the fuel sulfur content. [Rules 62-4.070 and 62-213.440(1), F.A.C., construction permit 0390005-008-AC]

**Emission Limitations and Standards**

**D.4. Visible Emissions:** Visible emissions shall not exceed 5% opacity. [Rule 62-297.620(4), F.A.C.; Title V Operation Permit 0390005-012-AV]

**D.5. Particulate Matter:** Particulate matter shall not exceed the following:

| <u>EU<br/>ID No.</u> | <u>Description</u>                   | <u>Particulate Matter Limits</u> |            |
|----------------------|--------------------------------------|----------------------------------|------------|
|                      |                                      | <u>lbs/hr</u>                    | <u>TPY</u> |
| 030                  | South Fluid Bed Dryer Dust Collector | 4.7                              | 20.6       |

[BACT; Permits AC20-41424 and AC20-41425; Title V Operation Permit 0390005-002-AV]

**D.6. Nitrogen Dioxide:** Nitrogen dioxide emissions are limited by Emissions of Nitrogen Dioxide [BACT; Permit and AC20-41425, Title V Operation Permit 0390005-002-AV]

**Test Methods and Procedures**

**D.7. PM, VE:** The permittee shall conduct visible emissions tests on this emissions unit. The test method shall be EPA Method 9, incorporated and adopted by reference in Rule 62-297, F.A.C., and the test duration is 30 minutes. Such tests shall be scheduled and performed within the last 12 months prior to the renewal application due date [Rule 62-297.401, F.A.C.; Title V Operation Permit 0390005-002-AV; and permit 0390005-015-AC]

**D.8. PM:** Rule 62-297.620(4), F.A.C., allows the waiver of particulate matter compliance test requirements for an emissions unit which has the potential to emit less than 100 tons per year of particulate matter and is equipped with a baghouse. If the Department has reason to believe that the particulate weight emission standard applicable to such emissions unit is not being met, it shall require that compliance be demonstrated by the applicable test method. Compliance with the particulate matter emission limit may be demonstrated by compliance with the alternative opacity standard of 5%. In the event this emissions unit does not satisfactorily demonstrate compliance, with the alternative VE opacity standard, this emissions unit shall demonstrate compliance with the PM standard by EPA Method 5 within 90 days of the visible emissions test date. [Rule 62-297.620(4), F.A.C.; Title V Operation Permit 0390005-002-AV]

**D.9. NOx.** Compliance with the nitrogen dioxide limit shall be demonstrated by tracking fuel usage by emissions unit and facility overall. Nitrogen dioxide emissions shall be calculated on a quarterly basis using applicable emission factors. However, in the event nitrogen dioxide emissions exceed 62 tons (50% of annual emission limit) at any time during any calendar year, the permittee shall calculate nitrogen emissions on a monthly basis. In the event nitrogen dioxide emissions exceed 93 tons (75% of annual emission limit) at any time during any calendar year, the permittee shall calculate nitrogen emissions on a weekly basis unless the maximum potential emissions remaining in the calendar year is less than 124 tons. In the event nitrogen dioxide emissions exceed 112 tons (90% of annual emission limit) and the maximum potential emissions remaining in the calendar year exceeds 124 tons, the permittee shall immediately advise the department of those emergency measures to be taken to ensure compliance with the nitrogen dioxide emissions limit. [Title V Operation Permit 0390005-002-AV]

**Compliance Assurance Monitoring (CAM) Requirements**

**D.10.** This emissions unit is subject to the CAM requirements contained in the attached Appendix CAM. Failure to adhere to the monitoring requirements specified does not necessarily

indicate an exceedance of a specific emissions limitation; however, it may constitute good reason to require compliance testing pursuant to Rule 62-297.310(7)(b), F.A.C. [40 CFR 64; Rules 62-204.800(12) and 62-213.440(1)(b)1.a., F.A.C.]

*{Permit Note: The permittee is required to submit compliance assurance monitoring semiannual monitoring reports in accordance with 40 CFR 64.9}*

**D.11.** This emissions unit is also subject to Common Conditions, Test Methods and Procedures; Monitoring of Operations, and Excess Emissions. [Title V Operation Permit 0390005-002-AV]

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**Section III. Emissions Units and Conditions.**

**Subsection E. This section addresses the following emissions units.**

**E.U.**

| <b><u>ID No.</u></b> | <b><u>Brief Description</u></b>                                      |
|----------------------|--|
|                      | <b>Granular Clay Fired Equipment not subject to NSPS (Scrubbers)</b> |
| 014                  | No. 1 Kiln Scrubber  |
| 015                  | No. 2 Kiln Scrubber  |

These are regulated emissions units consisting of natural gas or propane-fired kilns utilized for the production of granular attapulgite clay products constructed prior to August 31, 1983, and not subject to NSPS (Subpart OOO, 40 CFR 60). These emissions units are subject to BACT, and to Compliance Assurance Monitoring (CAM) requirements. Additionally, these emissions units have accepted a NOx emissions limit to avoid PSD review.

Emissions are controlled by wet scrubbers. Associated equipment is identified in Appendix Equipment Requirements, Identification of Applicable Requirements by Equipment.

The emission control equipment is identified as follows:

| <u>EU</u> | <u>ID No.</u> | <u>Description</u>  | <u>Controls</u>  |
|-----------|---------------|---------------------|------------------|
|           | 014           | No. 1 Kiln Scrubber | Venturi scrubber |
|           | 015           | No. 2 Kiln Scrubber | Venturi scrubber |

Emission limits include 5% opacity (original BACT), and PM limits included in supporting information associated with original construction permit applications (0.017 gpdscf). Combustion by-products are subject to a facility-wide BACT limiting NOx emissions to 124 TPY.

**The following specific conditions apply to the emissions units listed above:**

**Essential Potential to Emit (PTE) Parameters**

**E.1. Capacity.** The maximum process throughput rate and heat input shall not exceed the following:

| <u>EU</u><br><u>ID No.</u> | <u>Description</u>  | <u>Operation rate/tons processed</u> |            | <u>Heat Input</u><br><u>MMBtu/hr</u> |
|----------------------------|---------------------|--------------------------------------|------------|--------------------------------------|
|                            |                     | <u>TPH</u>                           | <u>TPY</u> |                                      |
| 014                        | No. 1 Kiln Scrubber | 16 (wet)                             | 140,16035  |                                      |
| 015                        | No. 2 Kiln Scrubber | 28 (wet)                             | 245,28050  |                                      |
| <b><u>TOTAL:</u></b>       |                     | 44                                   | 385,44085  |                                      |

[Rules 62-4.070(3) and 62-210.200(PTE), F.A.C., Title V Operation Permit 0390005-002-AV]

**E.2. Hours of Operation.** These emissions units are allowed to operate continuously, i.e., 8,760 hours/year. [Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.]

**E.3. Methods of Operation (i.e. Fuels).** These emissions units may operate using pipeline quality natural gas or liquid propane. The permittee shall track fuel usage by emissions unit and facility

overall. The permittee shall maintain a log available for Department inspection of the fuel usage, and shall maintain vendor certificates documenting the fuel sulfur content. [Rules 62-4.070 and 62-213.440(1), F.A.C., construction permit 0390005-008-AC]

**Emission Limitations and Standards**

**E.4. Visible Emissions:** Visible emissions shall not exceed 5% opacity. [Rule 62-297.620(4), F.A.C.; Title V Operation Permit 0390005-002-AV]

**E.5. Particulate Matter:** Particulate matter shall not exceed the following:

| <u>EU<br/>ID No.</u> | <u>Description</u>                 | <u>Particulate Matter Limits</u> |            |
|----------------------|------------------------------------|----------------------------------|------------|
|                      |                                    | <u>lbs/hr</u>                    | <u>TPY</u> |
| 014                  | High Temperature Drying Kiln No. 1 | 4.2                              | 18.4       |
| 015                  | High Temperature Drying Kiln No. 2 | 4.4                              | 19.3       |
| <u>TOTAL:</u>        |                                    | 8.6                              | 37.7       |

[BACT, Permit AO20-181697; Title V Operation Permit 0390005-002-AV]

**E.6. Nitrogen Dioxide:** Nitrogen dioxide emissions are limited by Facility-Wide Condition No. 9 (Section II). [BACT; Title V Operation Permit 0390005-002-AV]

**Test Methods and Procedures**

**E.7. PM, VE:** The permittee shall conduct visible emissions tests on each emissions unit. The test method shall be EPA Method 9, incorporated and adopted by reference in Rule 62-297, F.A.C., and the test duration is 30 minutes. Such tests shall be scheduled and performed within the last 12 months prior to the renewal application due date. [Rule 62-297.401, F.A.C.; Title V Operation Permit 0390005-002-AV and permit 0390005-015-AC]

**E.8. PM:** Except as noted below, compliance with the particulate matter emission limit may be demonstrated by compliance with the alternative opacity standard of 5%. In the event any emissions unit does not satisfactorily demonstrate compliance, with the alternative VE opacity standard, each such emissions unit shall demonstrate compliance with the PM standard by EPA Method 5 within 90 days of the visible emissions test date. [Rule 62-297.620(4), F.A.C.]

Each unit shall demonstrate compliance with the particulate matter limits in accordance with EPA Method 5 between October 1, 2013, and September 30, 2014. The required visible emissions tests shall be conducted during one of the Method 5 test runs. [Rule 62-297.310, F.A.C.; Title V Operation Permit 0390005-002-AV]

**E.9. NO<sub>x</sub>:** Compliance with the nitrogen dioxide limit shall be demonstrated by tracking fuel usage by emissions unit and facility overall. Nitrogen dioxide emissions shall be calculated on a quarterly basis using applicable emission factors. However, in the event nitrogen dioxide emissions exceed 62 tons (50% of annual emission limit) at any time during any calendar year, the permittee shall calculate nitrogen emissions on a monthly basis. In the event nitrogen dioxide emissions exceed 93 tons (75% of annual emission limit) at any time during any calendar year, the permittee shall calculate nitrogen emissions on a weekly basis unless the maximum potential emissions remaining in the calendar year is less than 124 tons. In the event nitrogen dioxide emissions exceed 112 tons (90% of annual emission limit) and the maximum potential emissions remaining in the calendar year exceeds 124 tons, the permittee shall immediately advise the department of those emergency measures to be taken to ensure compliance with the nitrogen dioxide emissions limit. [Title V Operation Permit 0390005-002-AV]

**Compliance Assurance Monitoring (CAM) Requirements**

**E.10.** These emissions units are subject to the CAM requirements contained in the attached Appendix CAM. Failure to adhere to the monitoring requirements specified does not necessarily indicate an exceedance of a specific emissions limitation; however, it may constitute good reason to require compliance testing pursuant to Rule 62-297.310(7)(b), F.A.C. [40 CFR 64; Rules 62-204.800(12) and 62-213.440(1)(b)1.a., F.A.C.]

*{Permit Note: The permittee is required to submit compliance assurance monitoring semiannual monitoring reports in accordance with 40 CFR 64.9}*

**E.11.** These emissions units are also subject to Common Conditions, Test Methods and Procedures; Monitoring of Operations; and Excess Emissions. [Title V Operation Permit 0390005-002-AV]

DRAFT / PROPOSED

**Section III. Emissions Units and Conditions.**

**Subsection F. This section addresses the following emissions units.**

**E.U.**

| <b><u>ID No.</u></b> | <b><u>Brief Description</u></b>                                     |
|----------------------|---|
|                      | <b>Gelling Clay Fired Equipment not subject to NSPS (Scrubbers)</b> |
| 002                  | No. 4A Mill Scrubber  |
| 008                  | No. 4 Mill Scrubber   |
| 019                  | No. 4B Mill Scrubber  |

These are regulated emissions units consisting of natural gas or propane-fired hammermills utilized for the production of gel attapulgite clay products constructed prior to August 31, 1983 and not subject to NSPS (Subpart OOO, 40 CFR 60). These emissions units are subject to BACT, and to Compliance Assurance Monitoring (CAM) requirements. Additionally, these emissions units have accepted a NOx emissions limit to avoid PSD review.

Emissions are controlled by wet scrubbers. Associated equipment is identified in Appendix Equipment Requirements, Identification of Applicable Requirements by Equipment.

The emission control equipment is identified as follows:

| <u>EU</u> | <u>Description</u>   | <u>Controls</u>   |
|-----------|----------------------|---|
| 002       | No. 4A Mill Scrubber | Stansteel venturi-impactor type, high efficiency scrubber model D |
| 008       | No. 4A Mill Scrubber | Stansteel venturi-impactor type, high efficiency scrubber model D |
| 019       | No. 4B Mill Scrubber | Stansteel venturi-impactor type, high efficiency scrubber model D |

Emission limits include 5% opacity (original BACT), and PM limits included in supporting information associated with original construction permit applications. Combustion by-products are subject to a facility-wide BACT limiting NOx emissions to 124 TPY.

**The following specific conditions apply to the emissions units listed above:**

**Essential Potential to Emit (PTE) Parameters**

**F.1. Capacity.** The maximum process throughput rate and heat input shall not exceed the following:

| <u>EU</u><br><u>ID No.</u> | <u>Description</u>   | <u>Operation rate/tons processed</u> |                  | <u>Heat Input</u><br><u>MMBtu/hr</u> |
|----------------------------|----------------------|--------------------------------------|------------------|--------------------------------------|
|                            |                      | <u>TPH</u>                           | <u>TPY</u>       |                                      |
| 002                        | 4A Mill Scrubber     | 13                                   | 113,88030        |                                      |
| 008                        | 4 Mill Scrubber      | 13                                   | 113,88030        |                                      |
| 019                        | 4B Mill Scrubber     | 13                                   | 113,88030        |                                      |
|                            | <b><u>TOTAL:</u></b> | <b>39</b>                            | <b>341,64090</b> |                                      |

[Rules 62-4.070(3) and 62-210.200(PTE), F.A.C.; Title V Operation Permit 0390005-002-AV]

**F.2. Hours of Operation.** These emissions unit are allowed to operate continuously, i.e., 8,760 hours/year. [Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.]

**F.3. Methods of Operation (i.e. Fuels).** These emissions units may operate using pipeline quality natural gas or liquid propane. The permittee shall track fuel usage by emissions unit and facility overall. The permittee shall maintain a log available for Department inspection of the fuel usage,

and shall maintain vendor certificates documenting the fuel sulfur content. [Rules 62-4.070 and 62-213.440(1), F.A.C.; construction permit 0390005-008-AC]

**Emission Limitations and Standards**

**F.4. Visible Emissions:** Visible emissions shall not exceed 5% opacity. [Rule 62-297.620, F.A.C.]

**F.5. Particulate Matter:** Particulate matter shall not exceed the following:

| <u>EU<br/>ID No.</u> | <u>Description</u> | <u>Particulate Matter Limits</u> |            |
|----------------------|--------------------|----------------------------------|------------|
|                      |                    | <u>lbs/hr</u>                    | <u>TPY</u> |
| 002                  | 4A Mill Scrubber   | 7.0                              | 30.7       |
| 008                  | 4 Mill Scrubber    | 7.0                              | 30.7       |
| 019                  | 4B Mill Scrubber   | 7.0                              | 30.7       |
|                      | <u>TOTAL:</u>      | 21.0                             | 92.1       |

[BACT, Permit AO20-181688; Title V Operation Permit 0390005-002-AV]

**F.6. Nitrogen Dioxide:** Nitrogen dioxide emissions are limited by Facility-Wide Condition No. 9 (Section II). [BACT; Title V Operation Permit 0390005-002-AV]

**Test Methods and Procedures**

**F.7. PM, VE:** The permittee shall conduct visible emissions tests on each emissions unit. The test method shall be EPA Method 9, incorporated and adopted by reference in Rule 62-297, F.A.C., and the test duration is 30 minutes. Such tests shall be scheduled and performed within the last 12 months prior to the renewal application due date. [Rule 62-297.401, F.A.C.; Title V Operation Permit 0390005-007-AV and permit 0390005-015-AC]

**F.8. PM:** Except as noted below, compliance with the particulate matter emission limit may be demonstrated by compliance with the alternative opacity standard of 5%. In the event any emissions unit does not satisfactorily demonstrate compliance, with the alternative VE opacity standard, each such emissions unit shall demonstrate compliance with the PM standard by EPA Method 5 within 90 days of the visible emissions test date. [Rule 62-297.620(4), F.A.C.; Title V Operation Permit 0390005-002-AV]

Each unit shall demonstrate compliance with the particulate matter limits contained in condition **F.5**, in accordance with EPA Method 5 between October 1, 2013 and September 30, 2014. The visible emissions tests shall be conducted during one of the Method 5 test runs. [Rule 62-297.310, F.A.C.]

**F.9. NOx:** Compliance with the nitrogen dioxide limit shall be demonstrated by tracking fuel usage by emissions unit and facility overall. Nitrogen dioxide emissions shall be calculated on a quarterly basis using applicable emission factors. However, in the event nitrogen dioxide emissions exceed 62 tons (50% of annual emission limit) at any time during any calendar year, the permittee shall calculate nitrogen emissions on a monthly basis. In the event nitrogen dioxide emissions exceed 93 tons (75% of annual emission limit) at any time during any calendar year, the permittee shall calculate nitrogen emissions on a weekly basis unless the maximum potential emissions remaining in the calendar year is less than 124 tons. In the event nitrogen dioxide emissions exceed 112 tons (90% of annual emission limit) and the maximum potential emissions remaining in the calendar year exceeds 124 tons, the permittee shall immediately advise the department of those emergency measures to be taken to ensure compliance with the nitrogen dioxide emissions limit. [Title V Operation Permit 0390005-002-AV]

**Compliance Assurance Monitoring (CAM) Requirements**

**F.10.** These emissions units are subject to the CAM requirements contained in the attached Appendix CAM. Failure to adhere to the monitoring requirements specified does not necessarily indicate an exceedance of a specific emissions limitation; however, it may constitute good reason to require compliance testing pursuant to Rule 62-297.310(7)(b), F.A.C. [40 CFR 64; Rules 62-204.800(12) and 62-213.440(1)(b)1.a., F.A.C.]

*{Permit Note: The permittee is required to submit compliance assurance monitoring semiannual monitoring reports in accordance with 40 CFR 64.9}*

**F.11.** These emissions units are also subject to Common Conditions, Test Methods and Procedures, Monitoring of Operations and Excess Emissions.

DRAFT / PROPOSED

**Section III. Emissions Unit(s) and Conditions.**

**Subsection G. This section addresses the following emissions units.**

**E.U.**

| <b><u>ID No.</u></b> | <b><u>Brief Description</u></b>                                      |
|----------------------|--|
|                      | <b>ACM Milling/Ultra Fine Grind with Baghouses – Subject to NSPS</b> |
| 038                  | ACM Milling  |
| 039                  | Ultra Fine Grind   |

These are regulated emissions units that include gel attapulgite clay production equipment consisting of conveyors, classifiers, storage bins, bag packers, and emission from miscellaneous fugitive sources constructed after August 31, 1983, and subject to NSPS (Subpart OOO, 40 CFR 60). The equipment includes conveyors, classifiers, storage bins, bag packers and emissions from miscellaneous fugitive sources. Construction permit 0390005-009-AC allowed for an additional gel load spout to facilitate flexibility of loading products produced at the plant into railcars. Construction permit 0390005-011-AC allowed for debottlenecking construction activities in emissions unit 038 and 039 (ACM Milling and Ultra Fine Grind), to allow simultaneous production of different products.

Concurrently processed permit 0390005-018-AC will allow the installation of a portable bulk bag reclamation system that will affect-emissions points 38, 54 (EU 038) and 48 (EU 039). These changes are incorporated into this permit revision.

This equipment is identified in Appendix Equipment Requirements, Identification of Applicable Requirements by Equipment (available from the Department upon request).

Emissions are controlled by dust collectors, identified as follows:

| <u>EU</u> | <u>Stack</u> | <u>Description</u>                  | <u>Baghouse</u>  |
|-----------|--------------|-------------------------------------|--|
| 038       | 37           | 100 Feed Bin Dust Collector         | Flex-Kleen 100-WSW-81-IIIG with 81 polyethylene bags   |
| 038       | 38           | 800 Bin Vent                        | Flex-Kleen 100-WSW-49-IIIG with 49 polyethylene bags   |
| 038       | 39           | SFG ACM Mill Product Dust Collector | Flex-Kleen 100-WSW-361-IIIG with 361 polyethylene bags |
| 038       | 40           | #1 Classifier 150 Bin Vent          | Flex-Kleen 84-BVBS-36IIG with 36 polyethylene bags     |
| 038       | 41a          | Product 400 Bin Vent                | Flex-Kleen 100-WSW-49-IIG with 49 polyethylene bags    |
| 038       | 41b          | Product 405 Bin Vent                | Flex-Kleen 84-BVBS-9-IIG with 9 polyethylene bags      |
| 038       | 41c          | Product 410 Bin Vent                | Flex-Kleen 84-BVBS-25-IIG with 25 polyethylene bags    |
| 038       | 41d          | Product 600 Bin Vent                | Flex-Kleen 84-BVBS-49-IIG with 49 polyethylene bags    |
| 038       | 41e          | Product 700 Bin Vent                | Flex-Kleen 84-BVBS-25-IIG with 25 polyethylene bags    |
| 038       | 42           | No. 4 Truck Loading BinVent         | Flex-Kleen 84-BVBS-25-IIG with 25 polyethylene bags    |
| 038       | 43           | SFGRLO Dust Collector               | DCL CD25-84 polyester 25                               |
| 038       | 44           | SFG Bagging Dust Collector          | Flex-Kleen 100-WSWS-49-IIG polyester 49                |
| 038       | 46           | 3 Dock Bagging Dust Collector       | Ultra RW-192-100 with 192 polyethylene bags            |
| 038       | 54           | No. 5 Load Out BinVent              | Flex-Kleen 84-BVBS-25-IIG with 25 polyethylene bags    |
| 039       | 48           | 200 Bin Vent                        | Flex-Kleen 100-WSWS-64-II with 64 polyethylene bags    |
| 039       | 49           | No. 1FEM Dust Collector             | Flex-Kleen 84-CTBS-74-IIG with polyethylene 49bags     |
| 039       | 50           | No. 2FEM Dust Collector             | Flex-Kleen 84-CTBS-74-IIG with polyethylene 49bags     |

**BASF Corporation  
Quincy Operations**

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| <u>EU</u> | <u>Stack</u> | <u>Description</u>        | <u>Baghouse</u>                                       |
|-----------|--------------|---------------------------|---|
| 039       | 53           | #2 Classifier 300 BinVent | Flex-Kleen 84-CTBS-25-IIG with 25 polyethylene bags   |
| 039       | 55           | CGS RLO Dust Collector    | Torit 36-PJD-6-reverse jet with 36 polypropylene bags |
| 039       | 56           | Product Bin 151           | Flex-Kleen 84-BVBS-25-IIG with 25 polyethylene bags   |

Emission limits include 5% opacity from the construction permits (0390005-009 AC issued November 9, 2004, and 0390005-011-AC issued April 19, 2005, both more stringent than NSPS standard of 7% opacity) and 0.05 grams per dry standard cubic meter.

This emissions unit is subject to the requirements of 40 CFR 60 subpart OOO, Standards of Performance for Nonmetallic Mineral Processing Plants applicable to each crusher, screening operation, bucket elevator, belt conveyor, bagging operation, storage bin, enclosed truck or railcar loading station. In general, the applicable standards for particulate matter are 0.022 gr/dscf and 7% opacity for affected facilities [40 CFR 60.672(a)]. Operations enclosed in a building are subject to the requirements in 40 CFR 60.672(e) of no visible fugitive emissions from the building and 0.022 gr/dscf and 7% opacity for any building vents. The facility has requested the alternate VE standard of 5% opacity in accordance with Rule 62-297.620, F.A.C., to demonstrate compliance with the PM limit.

**The following specific conditions apply to the emissions units listed above:**

**Essential Potential to Emit (PTE) Parameters**

**G.1. Capacity.** The maximum process throughput rate shall not exceed the following:

| <u>EU</u>  | <u>Point</u> | <u>Description</u>                  | <u>Operation rate</u>   |                  |        |
|------------|--------------|-------------------------------------|-------------------------|------------------|--------|
|            |              |                                     | <u>TPH</u>              | <u>TPY</u>       |        |
| <b>038</b> | 37           | 100 Feed Bin Dust Collector         | 20                      | 146,000          |        |
|            | 38           | 800 Bin Vent                        | 20                      | 146,000          |        |
|            | 39           | SFM ACM Mill Product Dust Collector | 20                      | 146,000          |        |
|            | 40           | #1 Classifier 150 Bin Vent          | 20                      | 160,000          |        |
|            | 41a          | Product 400 Bin Vent                | 20                      | 80,000           |        |
|            | 41b          | Product 405 Bin Vent                | 20                      | 120,000          |        |
|            | 41c          | Product 410 Bin Vent                | 20                      | 120,000          |        |
|            | 41d          | Product 600 Bin Vent                | 20                      | 80,000           |        |
|            | 41e          | Product 700 Bin Vent                | 20                      | 80,000           |        |
|            | 42           | No. 4 Truck Loading Bin Vent        | 20                      | 20,000           |        |
|            | 43           | SFGRLO Dust Collector               | 20                      | 20,000           |        |
|            | 44           | SFG Bagging Dust Collector          | 20                      | 160,000          |        |
|            | 46           | 3 Dock Bagging Dust Collector       | 20                      | 80,000           |        |
|            | 54           | No. 5 Load Out Bin Vent             | 20                      | 80,000           |        |
|            | <b>039</b>   | 48                                  | 200 Bin Vent            | 4.2              | 33,600 |
|            |              | 49                                  | No. 1FEM Dust Collector | 4.2              | 16,800 |
|            |              | 50                                  | No. 2FEM Dust Collector | 4.2              | 16,800 |
| 53         |              | #2 Classifier 300 BinVent           | 4.2                     | 16,800           |        |
| 55         |              | CGS RLO Dust Collector              | 20                      | 80,000           |        |
|            | 56           | Product Bin 151                     | 20                      | 80,000           |        |
|            |              | <b>TOTAL:</b>                       | <b>336.8</b>            | <b>1,682,000</b> |        |

[Rules 62-4.070(3) and 62-210.200(PTE), F.A.C.; Title V Operation Permit 0390005-002-AV; construction permits 0390005-009-AC and 0390005-011-AC]

**G.2. Hours of Operation.** These emissions units and points are limited to the following hours of operation:

| <u>EU</u> | <u>Point</u> | <u>Description</u>                  | <u>Allowable hours of operation per year</u> |      |
|-----------|--------------|-------------------------------------|--|------|
| 038       | 37           | 100 Feed Bin Dust Collector         | 7300   |      |
|           | 38           | 800 Bin Vent                        | 7300   |      |
|           | 39           | SFM ACM Mill Product Dust Collector | 7300   |      |
|           | 40           | #1 Classifier 150 Bin Vent          | 8000   |      |
|           | 41a          | Product 400 Bin Vent                | 4000   |      |
|           | 41b          | Product 405 Bin Vent                | 6000   |      |
|           | 41c          | Product 410 Bin Vent                | 6000   |      |
|           | 41d          | Product 600 Bin Vent                | 3500   |      |
|           | 41e          | Product 700 Bin Vent                | 4000   |      |
|           | 42           | No. 4 Truck Loading Bin Vent        | 1000   |      |
|           | 43           | SFGRLO Dust Collector               | 1000   |      |
|           | 44           | SFG Bagging Dust Collector          | 8000   |      |
|           | 46           | 3 Dock Bagging Dust Collector       | 4000   |      |
|           | 54           | No. 5 Load Out Bin Vent             | 4000   |      |
|           | 039          | 48                                  | 200 Bin Vent                                 | 8000 |
|           |              | 49                                  | No. 1FEM Dust Collector                      | 4000 |
|           |              | 50                                  | No. 2FEM Dust Collector                      | 4000 |
|           |              | 53                                  | #2 Classifier 300 Bin Vent                   | 4000 |
|           |              | 55                                  | CGS RLO Dust Collector                       | 4000 |
|           |              | 56                                  | Product Bin 151                              | 4000 |

The permittee shall maintain a log documenting the hours of operation of each emission point. [Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; Title V Operation Permit 0390005-002-AV; construction permits 0390005-008-AC, 0390005-009-AC; 0390005-011-AC and Permit 0390005-018-AC]

**Emission Limitations and Standards**

**G.3. Visible Emissions:** Visible emissions shall not exceed 5% opacity. [Rule 62-297.620(4), F.A.C.; Permits 0390005-009-AC and 0390005-011-AC; Title V Operation Permit 0390005-002-AV]

**G.4. Particulate Matter:** Particulate matter shall not exceed the following:

(1) The permittee shall not cause to be discharged into the atmosphere from any transfer point on belt conveyors or from any other affected facility any stack emissions which:

- (a) Contain particulate matter in excess of 0.05 g/dscm (0.022 gr/dscf); and,
- (b) Exhibit greater than 5% opacity.

*{Permitting Note: The 7% opacity limitation contained in 40 CFR 60.672 is replaced with a 5% opacity limitation at the permittee's request in accordance with Rule 62-297.620(4), F.A.C., as an alternate PM compliance standard.}*

(2) Each emission point enclosed in a building shall comply with the emission limits in paragraphs (1) above, or the building shall comply with the following emission limits: No owner or operator shall cause to be discharged into the atmosphere from any building enclosing any transfer point on a conveyor belt or any other affected facility any visible fugitive emissions except emissions from a vent as defined in 40 CFR 60.671. No owner or operator shall cause to be discharged into the atmosphere from any vent of any building enclosing any transfer point on a conveyor belt or any other affected facility emissions that exceed the stack emissions limits in paragraph (1) of this condition.

The following emission points are subject to the particulate matter standards identified below:

| <u>EU</u>     | <u>Point</u> | <u>Description</u>                    | <u>Particulate Matter</u>      |  |     |
|---------------|--------------|---------------------------------------|--------------------------------|--|-----|
|               |              |                                       | <u>Limit</u><br><u>lbs/hr</u>  | <u>Estimated Emissions</u><br><u>tons/year</u> |     |
| 038           | 37           | ACM Feed Bin                          | 0.7                            | 2.4  |     |
|               | 38           | Return Conveyor Exhaust               | 0.4                            | 1.5  |     |
|               | 39           | ACM Mill Receiver Collector           | 2.2                            | 7.9  |     |
|               | 40           | #1 Mill Classifier Feed Bin           | 0.3                            | 0.9  |     |
|               | 41a          | Product Bin 400                       | 0.4                            | 0.9  |     |
|               | 41b          | Product Bin 405                       | 0.1                            | 0.2  |     |
|               | 41c          | Product Bin 410                       | 0.2                            | 0.6  |     |
|               | 41d          | Product Bin 600                       | 0.5                            | 0.9  |     |
|               | 41e          | Product Bin 700                       | 0.2                            | 0.4  |     |
|               | 42           | Bulk Loadout Exhaust - Truck          | 0.2                            | 0.1  |     |
|               | 43           | Bulk Loadout Exhaust - Rail           | 0.2                            | 0.1  |     |
|               | 44           | Receiver Bin Vent                     | 0.3                            | 0.9  |     |
|               | 46           | Bagger Exhaust                        | 1.3                            | 2.6  |     |
|               | 54           | Product Storage bin and loading spout | 0.2                            | 0.4  |     |
|               | 039          | 48                                    | Receiver Bin 200 Vent          | 0.6  | 2.3 |
|               |              | 49                                    | FEM Mill #1 Receiver Collector | 0.4  | 0.8 |
|               |              | 50                                    | FEM Mill #2 Receiver Collector | 0.4  | 0.8 |
| 53            |              | #2 Classifier Feed Vent               | 0.2                            | 0.3  |     |
| 55            |              | Gel Rail Loadout                      | 0.2                            | 0.4  |     |
| 56            |              | Product Bin 151                       | 0.1                            | 0.2  |     |
| <u>TOTAL:</u> |              |                                       | 9.1                            | 24.6   |     |

[40CFR60.672, Rule 62-204.800(8)(b)68, F.A.C.; construction permits 0390005-009-AC and 0390005-011-AC and Permit 0390005-018-AC; Title V Operation Permit 0390005-002-AV]

**Test Methods and Procedures**

**G.5. Compliance Tests**

**a. One time-Compliance Test pursuant to 0390005-018-AC:** The permittee shall conduct a VE test on emissions points 38, 54 (EU 038) and 48 (EU 039) while the portable bulk bag reclamation system is in operation . The initial tests shall be scheduled and performed prior to the Title V renewal application due date of June 14, 2014 so the results are included with the application. The VE test duration shall be 30 minutes. [Permit 0390005-018-AC]

**b. PM, VE:** The permittee shall conduct annual visible emissions tests on each emission point once during each federal fiscal year (October 1 through September 30) and generally at 12-month intervals. The test method shall be EPA Method 9, incorporated and adopted by reference in Rule 62-297, F.A.C. and the test duration is 30 minutes.

In addition, to demonstrate compliance the owner or operator shall conduct EPA Method 22 performance tests for fugitive emissions on each building enclosing the referenced emission points twice during the lifetime of this permit and generally at 24-month intervals. The performance test shall be conducted while all affected emission points inside the building are operating. The performance test for each building shall be at least 75 minutes in duration, with each side of the building and the roof being observed for at least 15 minutes.

[Rules 62-297.401 and 62-204.800(8)(b)68, F.A.C.; Title V Operation Permit 0390005-002-AV; 40 CFR 60.675(d)]

**G.6. PM:** Rule 62-297.620(4), F.A.C., allows the waiver of particulate matter compliance test requirements for an emissions unit which has the potential to emit less than 100 tons per year of particulate matter and is equipped with a baghouse. If the Department has reason to believe that the particulate weight emission standard applicable to such emissions unit is not being met, it shall require that compliance be demonstrated by the applicable test method. Compliance with the particulate matter emission limit may be demonstrated by compliance with the alternative opacity standard of 5% . In the event any emissions unit does not satisfactorily demonstrate compliance as required above, each such emissions unit shall demonstrate compliance with the PM limit by EPA Method 5 within 90 days of the visible emissions test date. [Rule 62-297.620(4), F.A.C.; Title V Operation Permit 0390005-002-AV]

**Recordkeeping and Reporting Requirements**

**G.7:** The permittee shall maintain a record of baghouse pressure differentials, recording the pressure drops at least at each shift change or every eight hours, whichever is more frequent. [Rule 62-4.070(3), F.A.C.; Title V Operation Permit 0390005-002-AV]

*{Permitting Note: The baghouse pressure differential should be within the normal operational range of 0.5" to 5" WG. If the pressure differential is observed outside of the normal operation parameters, appropriate corrective action should be taken immediately.}*

**G.8.** These emissions units are also subject to Common Conditions, Test Methods and Procedures, Monitoring of Operations, 40 CFR 60, Subpart A - General Provisions Requirements and 40 CFR 60. Subpart OOO Standards of Performance for Nonmetallic Mineral Processing Plants. [Title V Operation Permit 0390005-002-AV]

### Section III. Emissions Unit(s) and Conditions.

#### Subsection H. Common Conditions.

**The following conditions apply to the emissions units as noted in the applicable specific conditions.**

*{Permitting Note: The following conditions are placed here as a convenience and to avoid duplication. See specific conditions in Subsections A through G for applicability.}*

##### **H.1. Test Methods and Procedures**

Emissions tests are required to show continuing compliance with the standards of the Department. The test results must provide reasonable assurance that the source is capable of compliance at the permitted maximum operating rate. Tests shall be conducted as required by the applicable specific condition(s) of Subsections A through G. Results shall be submitted to the Department within 45 days after testing. The Department shall be notified at least 15 days prior to testing to allow witnessing. [Rule 62-297.310, F.A.C.]

Testing of emissions shall be conducted with the emissions unit operating at permitted capacity, which is defined as 90 to 100 percent of the maximum operation rate allowed by the permit. If it is impracticable to test at permitted capacity, an emissions unit may be tested at less than the minimum permitted capacity (i.e., at less than 90 percent of the maximum operation rate allowed by the permit); in this case, subsequent emissions unit operation is limited to 110 percent of the test load until a new test is conducted, provided however, operations do not exceed 100 percent of the maximum operation rate allowed by the permit. Once the emissions unit is so limited, operation at higher capacities is allowed for no more than 15 consecutive days for the purpose of additional compliance testing to regain the authority to operate at the permitted capacity. [Rules 62-297.310(2) & (2)(b), F.A.C.]

##### **H.2. Determination of Process Variables/Monitoring of Operations**

The owner or operator of an emissions unit for which compliance tests are required shall install, operate and maintain equipment or instruments necessary to determine process variables, such as process weight input or heat input, or baghouse or scrubber pressure drop, when such data are needed in conjunction with emissions data to determine the compliance of the emissions unit with applicable emission limiting standards.

Equipment or instruments used to directly or indirectly determine process variables, including devices such as belt scales, weight hoppers, flow meters, and tank scales, shall be calibrated and adjusted to indicate the true value of the parameter being measured with sufficient accuracy to allow the applicable process variable to be determined within 10% of its true value. [Rule 62-297.310(5), F.A.C.]

##### **H.3. Excess Emissions**

Excess emissions resulting from startup, shutdown or malfunction of any emissions unit shall be permitted providing (1) best operational practices to minimize emissions are adhered to and (2) the duration of excess emissions shall be minimized but in no case exceed two hours in any 24-hour period unless specifically authorized by the Department for longer durations.

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 shall be prohibited.

In case of excess emissions resulting from malfunctions, each owner or operator shall notify the Department in accordance with Rule 62-4.130, F.A.C. A full written report on the malfunctions shall be submitted in a quarterly report, if requested by the Department.  
[Rule 62-210.700, F.A.C.]

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### Section III. Emissions Unit(s) and Conditions.

#### Subsection I. NSPS Common Conditions

##### E.U.

| <u>ID No.</u> | <u>Brief Description</u>                |
|---------------|---|
| 013           | NFG Fugitive Dust Collector             |
| 016           | MGO System Dust Collector               |
| 018           | No. 4 Mill Fugitive Dust Collector      |
| 020           | CGS East Bagging Dust Collector         |
| 028           | NFG Bagger Dust Collector               |
| 011           | Old Roller Mill Fugitive Dust Collector |
| 031           | FLBD Stock Bin Dust Collector           |
| 032           | Fine Bin FLBD                           |
| 033           | #1A Mill Fugitive Dust Collector        |
| 035           | Kiln Fugitive Dust Collector            |
| 036           | Granular Shipping Dust Collector        |
| 038           | ACM Milling                             |
| 039           | Ultra Fine Grind                        |

The following conditions apply to the emissions units as noted in the applicable specific conditions.

*{Permitting Note: The following conditions are placed here as a convenience and to avoid duplication. See specific conditions in Subsections A through H for applicability.}*

The following conditions apply to the NSPS emissions units listed above:

#### **40 CFR 60, Subpart A – General Provisions Requirements**

**I.1.** These emissions units are subject to applicable requirements from Part 60 – Standards of Performance for New Stationary Sources, including Subpart A as identified in attached Table 1: Applicability of Subpart A to Subpart OOO. [40 CFR 60 subpart OOO, Rule 62-204.8008(b)68, F.A.C.]

#### **I.2. Subpart OOO-Standards of Performance for Nonmetallic Mineral Processing Plants**

These emissions units are subject to applicable requirements form Part 60 – Standards of Performance for New Stationary Sources, including Subpart OOO - Standards of Performance for Nonmetallic Mineral Processing Plants, including:

##### **§60.670 Applicability and designation of affected facility**

(a) The provisions of this subpart are applicable to the following affected facilities in fixed or portable nonmetallic mineral processing plants: each crusher, grinding mill, screening operation, bucket elevator, belt conveyor, bagging operation, storage bin, enclosed truck or railcar loading station.

(d) (1) When an existing facility is replaced by a piece of equipment of equal or smaller size, as defined in §40 CFR 60.671, having the same function as the existing facility, and there is no increase in the amount of emissions, the new facility is exempt from the provisions of §§60.672, 60.674, and 60.675 except as provided for in paragraph (d)(3) of this section.

(2) An owner or operator complying with paragraph (d)(1) of this section shall submit the information required in §60.676(a).

(3) An owner or operator replacing all existing facilities in a production line with new facilities does not qualify for the exemption described in paragraph (d)(1) of this section and must comply with the provisions of §§60.672, 60.674 and 60.675.

**60.676 Reporting and recordkeeping**

Each owner or operator seeking to comply with §60.670(d) shall submit to the Administrator the following information about the existing facility being replaced and the replacement piece of equipment.

- (1) For a crusher, grinding mill, bucket elevator, bagging operation, or enclosed truck or railcar loading station:
  - (i) The rated capacity in megagrams or tons per hour of the existing facility being replaced and
  - (ii) The rated capacity in tons per hour of the replacement equipment.
- (2) For a screening operation:
  - (i) The total surface area of the top screen of the existing screening operation being replaced and
  - (ii) The total surface area of the top screen of the replacement screening operation.
- (3) For a conveyor belt:
  - (i) The width of the existing belt being replaced and
  - (ii) The width of the replacement conveyor belt.
- (4) For a storage bin:
  - (i) The rated capacity in megagrams or tons of the existing storage bin being replaced and
  - (ii) The rated capacity in megagrams or tons of replacement storage bins.