

TITLE V APPLICATION REVIEW

Facility Name: IMERYS Sandersville Calcine Plant

City: Sandersville

County: Washington

AIRS #: 04-13-303-00004

Application #: TV- 9443

Date Application Received: October 22, 1996

Date Application Deemed

Administratively Complete: April 22, 1997

Date of Draft Permit:

Permit No: 3259-303-0004-V-01-0

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Introduction

This narrative is being provided to assist the reader in understanding the content of the attached draft Title V operating permit. Complex issues and unusual items are explained in simpler terms and/or greater detail than is sometimes possible in the actual permit. This permit is being proposed pursuant to: (1) Section 391-3-1-.03(10) of the Georgia Rules for Air Quality Control, (2) Part 70 of Chapter I of Title 40 of the Code of Federal Regulations, and (3) Title V of the Clean Air Act Amendments of 1990. The primary purpose of this permit is to consolidate and identify existing state and federal air requirements applicable to **IMERYS Sandersville Calcine Plant** and to provide practical methods for determining compliance with these requirements. The following narrative is designed to accompany the draft permit and is presented in the same general order as the permit. It initially describes the facility receiving the permit, then the applicable requirements and their significance, and finally the methods for determining compliance with those applicable requirements. This narrative is intended only as an adjunct for the reviewer and has no legal standing. Any revisions made to the permit in response to comments received during the public participation process will be described in an addendum to this narrative.

I. Facility Description

A. Facility Identification

1. Facility Name: IMERYYS Sandersville Calcine Plant
2. Parent/Holding Company Name: IMERYYS Pigment, Inc.
3. Previous and/or Other Name(s)

The facility was originally permitted (No. 3295-150-4270-0) under the name of Anglo-American Clays Corporation on November 24, 1974. On January 17 1992, an amendment was issued to Air Quality Permit No. 3295-150-4270-0 changing the facility designation to ECC International, Sandersville Plant 1. On March 22, 2000, the Division received a facsimile ECC International, Sandersville Plant 1 has changed the facility name to IMERYYS, Sanderville Calcine Plant and the parent company is IMERYYS Clays, Incorporated.

4. Facility Location

Kaolin Road
 Sandersville, Georgia 31082

5. Attainment or Non-attainment Area Location

The facility is not located inside the Atlanta Non-attainment Area.

6. Class I Area Impacts

The facility is not located within 100 km of a Class I area.

B. Site Determination

None.

C. Existing Permits

No.	Air Quality Permit Number	Dates of Original Permit Issuance or Amendment
32	3295-150-4270-0	March 24, 1999 (Amendment)
31	3295-150-4270-0	June 11, 1998 (Amendment)
30	3295-150-4270-0	February 18, 1998 (Amendment)
29	3295-150-4270-0	March 24, 1997 (Amendment)
28	3295-150-4270-0	March 20, 1997 (Amendment)
27	3295-150-4270-0	January 30, 1995 (Amendment)
26	3295-150-4270-0	December 17, 1993 (Amendment)

TITLE V APPLICATION REVIEW

No.	Air Quality Permit Number	Dates of Original Permit Issuance or Amendment
25	3295-150-4270-0	July 08, 1992 (Amendment)
24	3295-150-4270-0	March 17, 1992 (Amendment)
23	3295-150-4270-0	January 17, 1992 (Amendment)
22	3295-150-4270-0	October 25, 1991 (Amendment)
21	3295-150-4270-0	August 30, 1991 (Amendment)
20	3295-150-4270-0	December 14, 1990 (Amendment)
19	3295-150-4270-0	January 25, 1990 (Amendment)
18	3295-150-4270-0	August 04, 1989 (Amendment)
17	3295-150-4270-0	September 25, 1989 (Amendment)
16	3295-150-4270-0	June 03, 1988 (Amendment)
15	3295-150-4270-0	February 25, 1988 (Amendment)
14	3295-150-4270-0	October 05, 1987 (Amendment)
13	3295-150-4270-0	March 03, 1987 (Amendment)
12	3295-150-4270-0	January 21, 1987 (Amendment)
11	3295-150-4270-0	August 27, 1986 (Amendment)
10	3295-150-4270-0	October 28, 1986 (Amendment)
9	3295-150-4270-0	April 04, 1985 (Amendment)
8	3295-150-4270-0	September 26, 1984 (Amendment)
7	3295-150-4270-0	November 18, 1983 (Amendment)
6	3295-150-4270-0	February 22, 1983 (Amendment)
5	3295-150-4270-0	October 22, 1982 (Amendment)
4	3295-150-4270-0	March 24, 1982 (Amendment)
3	3295-150-4270-0	September 09, 1981 (Amendment)
2	3295-150-4270-0	April 03, 1981 (Amendment)
1	3295-150-4270-0	November 24, 1975 (Permit)

Permit Number	Comments
3295-150-4270-0	None

D. Process Description

1. SIC Code(s)

Major - 3259
Other - 1455

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

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

2. Description of Product(s)

The facility processes kaolin.

3. Overall Facility Process Description

IMERYYS Sandersville Calcine Plant is made up of two production facilities (Sandersville Calcine Plant, Deepstep Road Plant) that produce two lines of kaolin based mineral products. The product lines are distinguished by the primary process route: Hydrous - all of the final product property development is done in an aqueous slurry form, and Calcined - the structure of the mineral is fundamentally changed at high heat. All of the plants follow the same basic process of mining, blunging, processing, and packaging.

Mining involves the activities from prospecting to delivery at the blunger sites. Initial kaolin ore quality is appraised on the basis of intensive lab testing of widely spaced (400 foot centers) drill cores. If the deposit shows promise, it is re-drilled and tested on smaller bore hole spacing (typically 100-200 foot centers). This information is then used to create an overburden removal plan. Overburden is the material lying on top of the usable deposit. It is often quoted in terms of a ratio of how many vertical feet of material must be removed to get one vertical foot of clay. The overburden is stored/used for reclamation of exhausted mines. Once the clay is exposed, it is re-drilled on closely spacing (50 foot centers) for mine planning purposes. Mining is the physical extraction of the crude clay from its natural state (typically via backhoe or dragline) and delivery to a blunger (typically by large dump truck). Blungers can be located either in the pit or at the plants.

Blunging is the first and most critical step in the product development process. Proper feed preparation determines much of the subsequent process efficiencies. Crude kaolin in its natural state is a solid material having nominal water and residue contents of 20% and 10% respectfully. At a micro level the clay is composed of discrete stacks, plates, and blocks. The purpose of blunging is to liberate the usable clay from the undesired residue and produce dispersed slurry for further processing. The delivered crude is crushed to a small size and fed to a high energy/intensity mixer. Additional water is added to reach the desired solids. A dispersant is also added to keep the individual clay particles in suspension. The separation of the crude into proper dispersed slurry of individual particles is critical to the proper operation of subsequent processes. The residue is separated from the desirable clay through gravity settling and/or flow/pressure assisted G-force processes. Dispersed, de-gritted slip is delivered to the following process via pipelines.

The next step in the process is impurity removal and particle size/shape development. These processes are typically impurity specific, are not required for all products, and are not required in any particular order; however, they are usually conducted in a sequence to deliver maximum cost effectiveness. Flotation/flocculation are usually the first steps in the process. These processes are typically targeted to remove low amounts of titanium based impurities. The titanium compound is 'collected' with various organic compounds and separated from the desired kaolin by using gravity. Classification uses high g-force centrifuges to control the particle size of the final products. Typical control points are at the size of 2.0 and 0.25 microns. The rejected oversize material is processed in high intensity sand-assisted grinders to liberate the plates/stacks for use in specific products and applications. Ozone is used to remove trace iron impurities. High gradient magnetic separation is used to reduce trace iron impurities. The final step is typically a reductive 'bleaching' to convert residual iron to a colorless form. This step is typically carried out in conjunction with an acid flocculation/vacuum filtration step. The filtration is needed to remove salts added in prior process steps and it is a cost effective way to increase the solids prior to drying.

At this point, the Hydrous and Calcine flow sheets diverge. Hydrous clay are typically spray dried and/or evaporated for final product packaging. Calcined clays are spray dried, pulverized, and fed to the calciner. The calciner imparts unique performance properties through the high temperature alteration of the kaolin crystalline structure. Calcine product is re-pulverized to break up soft agglomerates and stored in silos.

Kaolin is sold to various customers/markets in many forms. High solids clay slurries are produced by evaporative concentration of filter products. An alternative route is to backmix spray dried/calcined clay with water to reach the desired solids. Specific additives are used to prevent solids settling and bacteria growth. Slurry can be delivered via rail or truck. Both products are also offered in dry bulk (rail and truck), dry big bags (500-1,000 kilograms, and dry small bags (40-50 pounds).

4. Overall Process Flow Diagram (optional)

The process flow diagrams are included.

E. Regulatory Status

1. PSD/NSR

IMERY'S Sandersville Calcine Plant is a major source under PSD/NSR regulations for Particulate Matter

TITLE V APPLICATION REVIEW

(PM), Particulate Matter less than 10 microns (PM-10), Nitrogen Oxides (NO_x), and Sulfur Dioxides (SO₂). The facility is subject to the PSD Increment for PM₁₀ (particulate matter less than or equal to 10 micrometers aerodynamic diameter) in accordance with the 40 CFR Part 52.21 *Prevention of Significant Deterioration of Air Quality*.

2. Title V Major Source Status by Pollutant

Table 3: Title V Major Source Status

Pollutant	Is the Pollutant Emitted?	If emitted, what is the facility's Title V status for the Pollutant?		
		Major Source Status	Major Source Requesting SM Status	Non-Major Source Status
PM	U	U		
PM ₁₀	U	U		
SO ₂	U	U		
VOC	U			U
NO _x	U	U		
CO	U	U		
TRS	U			U
H ₂ S	U			U
Individual HAP	U			U
Total HAPs	U			U

3. MACT Standards

The facility is not subject to any current MACT Standards.

4. Program Applicability

Program Code	Applicable (Yes/No)
Program Code 6 - PSD	yes
Program Code 8 - Part 61 NESHAP	no
Program Code 9 - NSPS	yes
Program Code M - Part 63 NESHAP	no
Program Code V - Title V	yes

Regulatory Analysis

II. Facility Wide Requirements

A. Emission and Operating Caps:

None.

B. Applicable Rules and Regulations

None.

C. Compliance Status

The facility currently operates in compliance.

D. Operational Flexibility

Not applicable.

E. Permit Conditions

None.

III. Regulated Equipment Requirements

A. Brief Process Description

The facility processes kaolin.

B. Equipment List for the Process

Table 3.1

Emission Units		Specific Limitation(s)/Requirements		Air Pollution Control Devices	
ID No.(s)	Description	Applicable Requirement(s) / Standard(s)	Corresponding Permit Condition(s)	ID No.(s)	Description
<i>Premills and Postmills</i>					
M1	Pulverizing Bauer Premill No. 1 (Calciner No. 1)	391-3-1-.02(2)(b) 391-3-1-.02(2)(p)1 40 CFR Part 52.21	3.5.4, 3.3.3, 3.4.1, 3.4.2	M1C	Baghouse
M2	Pulverizing Bauer Premill No. 2 (Calciner No. 1)	391-3-1-.02(2)(b) 391-3-1-.02(2)(p)1 40 CFR Part 52.21	3.5.4, 3.3.3, 3.4.1, 3.4.2	M2C	Baghouse

TITLE V APPLICATION REVIEW

Emission Units		Specific Limitation(s)/Requirements		Air Pollution Control Devices	
ID No.(s)	Description	Applicable Requirement(s) / Standard(s)	Corresponding Permit Condition(s)	ID No.(s)	Description
M3	Pulverizing Bauer Postmill Nos. 3, 4, 5 (Calciner No. 1)	391-3-1-.02(2)(b) 391-3-1-.02(2)(p)1 40 CFR Part 52.21	3.5.4, 3.3.3, 3.4.1, 3.4.2	M3C M4C	Baghouse Baghouse
M6	Pulverizing Bauer Premill No. 6 (Calciner No. 2)	391-3-1-.02(2)(p)1 NSPS OOO 40 CFR Part 52.21	3.5.4, 3.3.1, 3.3.3, 3.4.1	M6C	Baghouse
M7	Pulverizing Bauer Premill No. 7 (Calciner No. 2)	391-3-1-.02(2)(p)1 NSPS OOO 40 CFR Part 52.21	3.5.4, 3.3.1, 3.3.3, 3.4.1	M7C	Baghouse
M8	Pulverizing Bauer Postmill Nos. 8, 9, 10 (Calciner No. 2)	391-3-1-.02(2)(p)1 NSPS OOO 40 CFR Part 52.21	3.5.4, 3.3.1, 3.3.3, 3.4.1	M8C M9C	Baghouse Baghouse
M11	Pulverizing Bauer Premill Nos. 11, 12 (Calciner No. 3)	391-3-1-.02(2)(p)1 NSPS OOO 40 CFR Part 52.21	3.5.4, 3.3.1, 3.3.3, 3.4.1	M11C	Baghouse
M14	Pulverizing Bauer Postmill Nos. 14, 15, 16 (Calciner No. 3)	391-3-1-.02(2)(p)1 NSPS OOO 40 CFR Part 52.21	3.5.4, 3.3.1, 3.3.3, 3.4.1	M14C	Baghouse
M17	Pulverizing Bauer Premill Nos. 17, 18, 19 (Calciner No. 4)	391-3-1-.02(2)(p)1 NSPS OOO 40 CFR Part 52.21	3.5.4, 3.3.1, 3.3.3, 3.4.1	M17C	Baghouse
M20	Pulverizing Bauer Postmill Nos. 20, 21, 22, 23, 24 (Calciner No. 4)	391-3-1-.02(2)(p)1 NSPS OOO 40 CFR Part 52.21	3.5.4, 3.3.1, 3.3.3, 3.4.1	M20C	Baghouse
M26	Pulverizing Bauer Premill Nos. 26, 27, 28 (Calciner No. 5)	391-3-1-.02(2)(p)1 NSPS OOO 40 CFR Part 52.21	3.5.4, 3.3.1, 3.3.3, 3.4.1	M26C	Baghouse
M35	ACM Mill	391-3-1-.02(2)(p)1 NSPS OOO 40 CFR Part 52.21	3.5.4, 3.3.1, 3.3.3, 3.4.1, 3.5.5	M35C	Baghouse
H1	Calciner No. 1 Horizontal Mill	391-3-1-.02(2)(b) 391-3-1-.02(2)(p)1 40 CFR Part 52.21	3.5.4, 3.3.3, 3.4.1, 3.4.2	H1C	Baghouse
H2	Calciner No. 2 Horizontal Mill	391-3-1-.02(2)(p)1 NSPS OOO 40 CFR Part 52.21	3.5.4, 3.3.1, 3.3.3, 3.4.1	H2C	Baghouse
H3	Calciner No. 3 Horizontal Mill	391-3-1-.02(2)(p)1 NSPS OOO 40 CFR Part 52.21	3.5.4, 3.3.1, 3.3.3, 3.4.1	H3C	Baghouse
H4	Calciner No. 4 Horizontal Mill	391-3-1-.02(2)(p)1 NSPS OOO 40 CFR Part 52.21	3.5.4, 3.3.1, 3.3.3, 3.4.1	H4C	Baghouse
H6	Calciner No. 3 Horizontal Mill	391-3-1-.02(2)(p)1 NSPS OOO 40 CFR Part 52.21	3.5.4, 3.3.1, 3.4.1	H3C	Baghouse
<i>Spray Dryers</i>					

TITLE V APPLICATION REVIEW

Emission Units		Specific Limitation(s)/Requirements		Air Pollution Control Devices	
ID No.(s)	Description	Applicable Requirement(s) / Standard(s)	Corresponding Permit Condition(s)	ID No.(s)	Description
SD3	Spray Dryer No. 3	391-3-1-.02(2)(b) 391-3-1-.02(2)(p)1 40 CFR Part 52.21	3.5.4, 3.3.3, 3.4.1, 3.4.2, 3.5.6, 5.2.6, 5.2.8, 5.3.6, 6.2.3	SD3C	Baghouse
SD4	Spray Dryer No. 4	391-3-1-.02(2)(b) 391-3-1-.02(2)(p)1 40 CFR Part 52.21	3.5.4, 3.3.3, 3.4.1, 3.4.2, 3.5.6, 5.2.6, 5.2.8, 5.3.6, 6.2.3	SD4C	Baghouse
<i>Calciners</i>					
C1	Calciner No. 1	391-3-1-.02(2)(b) 391-3-1-.02(2)(p)1 40 CFR Part 52.21	3.5.4, 3.3.3, 3.4.1, 3.4.2, 3.5.6, 5.2.1, 5.2.2, 5.2.3, 5.2.8, 5.2.9, 5.3.6, 6.2.3	C1C	Scrubber
C2	Calciner No. 2	391-3-1-.02(2)(b) 391-3-1-.02(2)(p)1 40 CFR Part 52.21	3.5.4, 3.3.3, 3.4.1, 3.4.2, 3.5.6, 5.2.1, 5.2.2, 5.2.3, 5.2.8, 5.2.9, 5.3.6, 6.2.3	C2C	Scrubber
C3	Calciner No. 3	391-3-1-.02(2)(b) 391-3-1-.02(2)(p)1 40 CFR Part 52.21	3.5.4, 3.3.3, 3.4.1, 3.4.2, 3.5.3, 3.5.6, 5.2.1, 5.2.2, 5.2.3, 5.2.8, 5.2.9, 5.3.6, 6.2.3	C3C	Scrubber
C4	Calciner No. 4	391-3-1-.02(2)(p)1 NSPS UUU 40 CFR Part 52.21	3.5.4, 3.3.2, 3.3.3, 3.4.1, 3.5.3, 3.5.6, 3.5.7, 5.2.1, 5.2.2, 5.2.3, 5.2.8, 5.2.9, 5.3.6, 6.2.3	C4C	Scrubber
<i>Bagging Operations</i>					
BB1	Calciner Big Bagger Hopper	391-3-1-.02(2)(b) 391-3-1-.02(2)(p)1 40 CFR Part 52.21	3.5.4, 3.3.3, 3.4.1, 3.4.2	BB1C	Baghouse
BB6	Big Bagger	391-3-1-.02(2)(p)1 NSPS OOO 40 CFR Part 52.21	3.5.4, 3.3.1, 3.4.1	BN3C	Baghouse
<i>Conveyors and Conveying Systems</i>					
BC3	Belt Conveyor No. 3	391-3-1-.02(2)(p)1 NSPS OOO	3.3.1, 3.4.1	N/A	None
BN1	ACM Mill Surge Bin	391-3-1-.02(2)(p)1 NSPS OOO	3.5.4, 3.3.1, 3.4.1, 3.5.5	N/A	None
BN2	Feed Bin	391-3-1-.02(2)(p)1 NSPS OOO 40 CFR Part 52.21	3.5.3, 3.3.1, 3.3.3, 3.4.1, 3.5.5	BN2C	Baghouse
BN3	Big Bagger Feed Bin	391-3-1-.02(2)(p)1 NSPS OOO 40 CFR Part 52.21	3.5.3, 3.3.1, 3.3.3, 3.4.1, 3.5.5	BN3C	Baghouse
BN4	Product Bin B-4	391-3-1-.02(2)(p)1 NSPS OOO 40 CFR Part 52.21	3.5.4, 3.3.1, 3.3.3, 3.4.1, 3.5.5	BN4C	Baghouse
BN5	Product Bin B-5	391-3-1-.02(2)(p)1 NSPS OOO 40 CFR Part 52.21	3.5.4, 3.3.1, 3.3.3, 3.4.1, 3.5.5	BN5C	Baghouse

TITLE V APPLICATION REVIEW

Emission Units		Specific Limitation(s)/Requirements		Air Pollution Control Devices	
ID No.(s)	Description	Applicable Requirement(s) / Standard(s)	Corresponding Permit Condition(s)	ID No.(s)	Description
D1	Densifier	391-3-1-.02(2)(p)1 NSPS OOO 40 CFR Part 52.21	3.5.3, 3.3.1, 3.3.3, 3.4.1, 3.5.5, 5.2.1, 5.2.2, 5.2.3, 5.2.9	D1C	Scrubber
D2	Densifier	391-3-1-.02(2)(p)1 NSPS OOO 40 CFR Part 52.21	3.5.3, 3.3.1, 3.3.3, 3.4.1, 3.5.5, 5.2.1, 5.2.2, 5.2.3, 5.2.9	D2C	Scrubber
K1	Calciner No. 1 Cooler/Conveyor	391-3-1-.02(2)(b) 391-3-1-.02(2)(p)1 40 CFR Part 52.21	3.5.4, 3.3.3, 3.4.1, 3.4.2, 5.2.6	K1C	Baghouse
K2	Calciner No. 2 Cooler/Conveyor	391-3-1-.02(2)(p)1 NSPS OOO 40 CFR Part 52.21	3.5.4, 3.3.1, 3.3.3, 3.4.1, 5.2.6	K2C	Baghouse
K3	Calciner No. 3 Cooler/Conveyor	391-3-1-.02(2)(p)1 NSPS OOO 40 CFR Part 52.21	3.5.4, 3.3.1, 3.3.3, 3.4.1, 5.2.6	K3C	Baghouse
K4	Calciner No. 4 Cooler/Conveyor	391-3-1-.02(2)(p)1 NSPS OOO 40 CFR Part 52.21	3.5.4, 3.3.1, 3.3.3, 3.4.1, 5.2.6	K4C	Baghouse
P1	Pneumatic Conveying From Silos 42 and 43	391-3-1-.02(2)(b) 391-3-1-.02(2)(p)1 40 CFR Part 52.21	3.5.4, 3.3.3, 3.4.1, 3.4.2	P1C	Baghouse
<i>Loading Operations</i>					
R3	Spray Dryer No. 3 Railcar Loadout	391-3-1-.02(2)(b) 391-3-1-.02(2)(p)1 40 CFR Part 52.21	3.3.3, 3.4.1, 3.4.2	R3C	Baghouse
R14	Bulk Loading From Silo 14	391-3-1-.02(2)(b) 391-3-1-.02(2)(p)1 40 CFR Part 52.21	3.5.4, 3.3.3, 3.4.1, 3.4.2	R14C	Baghouse
R15	Bulk Loading From Silo 15	391-3-1-.02(2)(b) 391-3-1-.02(2)(p)1 40 CFR Part 52.21	3.5.4, 3.3.3, 3.4.1, 3.4.2	R15C	Baghouse
R16	Bulk Loading From Silo 16	391-3-1-.02(2)(b) 391-3-1-.02(2)(p)1	3.4.1, 3.4.2	R16C	Baghouse
R24	Bulk Loading From Silo 24	391-3-1-.02(2)(b) 391-3-1-.02(2)(p)1	3.4.1, 3.4.2	R24C	Baghouse
R25	Bulk Loading From Silo 25	391-3-1-.02(2)(b) 391-3-1-.02(2)(p)1 40 CFR Part 52.21	3.5.4, 3.3.3, 3.4.1, 3.4.2	R25C	Baghouse
R26	Bulk Loading From Silo 26	391-3-1-.02(2)(b) 391-3-1-.02(2)(p)1 40 CFR Part 52.21	3.5.4, 3.3.3, 3.4.1, 3.4.2	R26C	Baghouse
RB5	Truck Loading Station	391-3-1-.02(2)(p)1 NSPS OOO 40 CFR Part 52.21	3.5.3, 3.3.1, 3.4.1, 3.5.5	RB5C	Baghouse
<i>Screens</i>					

TITLE V APPLICATION REVIEW

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S1	Screen	391-3-1-.02(2)(p)1 NSPS OOO 40 CFR Part 52.21	3.5.4, 3.3.1, 3.3.3, 3.4.1, 3.5.5	S1C	Baghouse
<i>Small Bagging Operations</i>					
SB1	Calciner Small Bagger Product Receiver	391-3-1-.02(2)(b) 391-3-1-.02(2)(p)1 40 CFR Part 52.21	3.5.4, 3.3.3, 3.4.1, 3.4.2	SB1C	Baghouse
SB2	Calciner Small Bagger Fugitive Dust	391-3-1-.02(2)(b) 391-3-1-.02(2)(p)1 40 CFR Part 52.21	3.5.4, 3.3.3, 3.4.1, 3.4.2	SB2C	Baghouse
SB7	Fugitive Dust Collection at PRP Small Bagging (Bagging Collector)	391-3-1-.02(2)(p)1 NSPS OOO 40 CFR Part 52.21	3.5.4, 3.5.4, 3.3.1, 3.4.1	SB7C	Baghouse
SB8	Small Bagger Feed Bin	391-3-1-.02(2)(p)1 NSPS OOO 40 CFR Part 52.21	3.5.4, 3.3.1, 3.3.3, 3.4.1, 3.5.5	SB8C	Baghouse
SB9	Small Bagger	391-3-1-.02(2)(p)1 NSPS OOO 40 CFR Part 52.21	3.5.4, 3.3.1, 3.3.3, 3.4.1, 3.5.5	SB9C	Baghouse
<i>Silos</i>					
V11	Silo No. 11	391-3-1-.02(2)(b) 391-3-1-.02(2)(p)1 40 CFR Part 52.21	3.5.4, 3.3.3, 3.4.1, 3.4.2	V11C	Bin Vent
V12	Silo No. 12	391-3-1-.02(2)(b) 391-3-1-.02(2)(p)1 40 CFR Part 52.21	3.5.4, 3.3.3, 3.4.1, 3.4.2	V12C	Bin Vent
V13	Silo No. 13	391-3-1-.02(2)(p)1 NSPS OOO 40 CFR Part 52.21	3.5.4, 3.3.1, 3.3.3, 3.4.1	V13C	Bin Vent
V14	Silo No. 14	391-3-1-.02(2)(b) 391-3-1-.02(2)(p)1 40 CFR Part 52.21	3.5.4, 3.3.3, 3.4.1, 3.4.2	V14C	Bin Vent
V15	Silo No. 15	391-3-1-.02(2)(b) 391-3-1-.02(2)(p)1 40 CFR Part 52.21	3.5.4, 3.3.3, 3.4.1, 3.4.2	V15C	Bin Vent
V16	Silo No. 16	391-3-1-.02(2)(b) 391-3-1-.02(2)(p)1 40 CFR Part 52.21	3.5.4, 3.3.3, 3.4.1, 3.4.2	V16C	Bin Vent
V17	Silo No. 17	391-3-1-.02(2)(p)1 NSPS OOO 40 CFR Part 52.21	3.5.4, 3.3.1, 3.3.3, 3.4.1	V17C	Bin Vent
V21	Silo No. 21	391-3-1-.02(2)(b) 391-3-1-.02(2)(p)1 40 CFR Part 52.21	3.5.4, 3.3.3, 3.4.1, 3.4.2	V21C	Bin Vent

Emission Units		Specific Limitation(s)/Requirements		Air Pollution Control Devices	
ID No.(s)	Description	Applicable Requirement(s) / Standard(s)	Corresponding Permit Condition(s)	ID No.(s)	Description
V22	Silo No. 22	391-3-1-.02(2)(b) 391-3-1-.02(2)(p)1 40 CFR Part 52.21	3.5.4, 3.3.3, 3.4.1, 3.4.2	V22C	Bin Vent
V23	Silo No. 23	391-3-1-.02(2)(p)1 NSPS OOO 40 CFR Part 52.21	3.5.4, 3.3.1, 3.3.3, 3.4.1	V23C	Bin Vent
V24	Silo No. 24	391-3-1-.02(2)(b) 391-3-1-.02(2)(p)1 40 CFR Part 52.21	3.5.4, 3.3.3, 3.4.1, 3.4.2	V24C	Bin Vent
V25	Silo No. 25	391-3-1-.02(2)(b) 391-3-1-.02(2)(p)1 40 CFR Part 52.21	3.5.4, 3.3.3, 3.4.1, 3.4.2	V25C	Bin Vent
V26	Silo No. 26	391-3-1-.02(2)(b) 391-3-1-.02(2)(p)1 40 CFR Part 52.21	3.5.4, 3.3.3, 3.4.1, 3.4.2	V26C	Bin Vent
V41	Silo No. 41	391-3-1-.02(2)(b) 391-3-1-.02(2)(p)1 40 CFR Part 52.21	3.5.4, 3.3.3, 3.4.1, 3.4.2	V41C	Bin Vent
V42	Silo No. 42	391-3-1-.02(2)(b) 391-3-1-.02(2)(p)1 40 CFR Part 52.21	3.5.4, 3.3.3, 3.4.1, 3.4.2	V42C	Bin Vent
V43	Silo No. 43	391-3-1-.02(2)(b) 391-3-1-.02(2)(p)1 40 CFR Part 52.21	3.5.4, 3.3.3, 3.4.1, 3.4.2	V43C	Bin Vent

C. Equipment & Rule Applicability

! Emission and Operating Caps

None.

! Applicable Rules and Regulations

1. 40 CFR, Part 60, Subpart OOO, "Standards of Performance for Nonmetallic Mineral Processing Plants" is listed in the permit as Condition 3.3.1. Each listed piece of equipment in Table 3.1 subject to this requirement has 3.3.1 in the column, "Corresponding Permit Condition". This requirement applies to any crusher, grinding mill, screening operation, bucket elevator, belt conveyor, bagging operation, storage bin, enclosed truck or railcar loading station constructed, reconstructed, or modified after August 31, 1983. Emission requirements associated with this rule include no visible fugitive emissions greater than 10 percent opacity. Stack emissions shall not contain particulate matter in excess of 0.05 g/dscm (0.02 grains/dscf) and exhibit greater than 7 percent opacity.
2. 40 CFR, Part 60, Subpart UUU, "Standards of Performance for Calciners and Dryers in Mineral Industries" is listed in the permit as Condition 3.3.2. Each listed piece of equipment in Table 3.1 subject

to this requirement has 3.3.2 in the column, “Corresponding Permit Condition”. This includes **Calciner No. 4 (CA4)**. In order for 40 CFR, Part 60, Subpart UUU to be applicable, the emission sources shall have been constructed, reconstructed, or modified after April 23, 1986.

Emission requirements associated with this rule include any gases which contain particulate matter in excess of 0.04 grains/dscf (0.092 grams/dscm) for calciners and calciners and dryers installed in series. For dryers which stand alone, the emissions shall not contain particulate matter in excess of 0.025 grains/dscf (0.057 grams/dscm). For both series and parallel operations, the opacity is limited not to exceed 10 percent opacity.

3. 40 CFR, Part 52.21 *Prevention of Significant Deterioration of Air Quality*. Burgess Pigment Company is a PSD (Prevention of Significant Deterioration) major source for particulate matter (PM) and particulate matter less than 10 mg (PM-10). Thiele Kaolin, Burgess Pigment, J. M. Huber, and IMERY’S Calcine Plant operate within a close proximity of each other in the Sandersville area and each facility contributes to the PSD increment. Because of the close proximity and magnitude of each source, Thiele Kaolin, Burgess Pigment, J. M. Huber, and IMERY’S Calcine Plant are required to submit a comprehensive PM-10 increment assessment to determine compliance in the event of any significant emissions increase. Several pieces of equipment must have stack emission limits and the increment consuming sources in the table listed below may not exceed the specified limit. Any source subject to this requirement will be identified under “Corresponding Permit Condition” as Condition 3.3.3.

Many source IDs identified in this table are different than the source IDs in Table 3.1. This is due to two reasons. An independent company models all four plants and assigns different source IDs. If the company did not assign a universal source ID, many of the source codes would have the same ID and would cause confusion.

Title V Stack Code No.	Source ID	Increment Consuming Sources	PM₁₀ Emission Limit (lb/hr)
BB1S	BB1	Big Bagger Hopper Bin Vent	0.067
BN2S	BN2	Specialty Clay Feed Bin (B2)	0.127
BN3S	BN3	Specialty Clay Feed Bin (B3, BB6)	0.038
BN4S	BN4	Specialty Clay Product Bin (B4)	0.084
BN5S	BN5	Specialty Clay Product Bin (B5)	0.084
C1S	C1	Calciner No. 1 Scrubber	1.044
C2S	C2	Calciner No. 2 Scrubber	1.171
C3S	C3	Calciner No. 3 Scrubber	1.171
C4S	C4	Calciner No. 4 Scrubber	2.115
DS	D1,D2	Specialty Clay Densifier (D1, D2)	0.056
H1S	H1	Calciner No. 1 Horizontal Mill	0.101
H2S	H2	Calciner No. 2 Horizontal Mill	0.050
H3S	H3	Calciner No. 3 Horizontal Mill	0.081
H4S	H4	Calciner No. 4 Horizontal Mill	0.248
K1S	K1	Cooler No. 1	1.642

TITLE V APPLICATION REVIEW

Title V Stack Code No.	Source ID	Increment Consuming Sources	PM₁₀ Emission Limit (lb/hr)
K2S	K2	Calciner 2 Cooler	1.685
K3S	K3	Calciner 3 Cooler	1.685
K4S	K4	Calciner 4 Cooler	3.532
M11S	M11	Calciner 3, Premills 11 & 12	0.842
M14S	M14	Calciner 3, Postmills 14-16	0.842
M17S	M17	Calciner 4, Premills 17-19	0.909
M1S	M1	Calciner 1, Premill No. 1	0.320
M20S	M20	Calciner 4, Postmills 20-24	1.498
M26S	M26	Calciner 5, Premills 26-28	0.905
M29S	M29	Calciner 5, Postmills 29-34	1.496
M2S	M2	Calciner 1, Premill No. 2	0.320
M35S	M35	Specialty Clay ACM Mill (M35)	1.153
M3S	M3	Calciner 1, Postmill 2	0.283
M6S	M6	Calciner 2, Premill 6	0.324
M7S	M7	Calciner 2, Premill 7	0.324
M8S	M8	Calciner 2, Postmill 8	0.324
P1S	P1	Pneumatic Conveying from Silos 42 & 43	0.342
P6S	P6	Alphalux 91 Salt Silo	0.204
R14S	R14	Silo 14, Railcar Loading	0.083
R15S	R15	Silo 15, Railcar Loading	0.041
R25S	R25	Silo 25, Railcar Loading	0.083
R26S	R26	Silo 16, Railcar Loading	0.041
R3S	R3	Spray Dryer #3 Railcar Loading	0.238
S1S	S1	Specialty Clay Screen (S1)	0.038
SB1S	SB1	Small Bagger Hopper Bin Vent	0.313
SB2S	SB2	Small Bagger Fugitive Collector	0.132
SB8S	SB8	Specialty Clay Bagger Bin (BB1)	0.038
SB9S	SB9	Specialty Clay Small Bagging	0.255
SD3S	SD3	Spray Dryer No. 3	2.968
SD4S	SD4	Spray Dryer No. 4	3.452
V11S	V11	Bin Vent, Silo 11	0.017
V12S	V12	Bin Vent, Silo 12	0.059
V13S	V13	Bin Vent, Silo No. 13	0.011
V14S	V14	Bin Vent, Silo No. 14	0.048
V15S	V15	Bin Vent, Silo No. 15	0.011
V16S	V16	Bin Vent, Silo 16	0.010
V17S	V17	Bin Vent, Silo No. 17	0.087
V21S	V21	Bin Vent, Silo 21	0.172

Title V Stack Code No.	Source ID	Increment Consuming Sources	PM₁₀ Emission Limit (lb/hr)
V22S	V22	Bin Vent, Silo 22	0.146
V23S	V23	Bin Vent Silo 23	0.050
V24S	V24	Bin Vent, Silo 24	0.012
V25S	V25	Bin Vent, Silo 25	0.012
V26S	V26	Bin Vent, Silo 26	0.012
V41S	V41	Bin Vent, Silo No. 41	0.148
V42S	V42	Bin Vent, Silo No. 42	0.012
V43S	V43	Bin Vent, Silo No. 43	0.012

A list of increment consuming sources subject to limits which will ensure compliance with the PSD increment. The limits are based on PM₁₀ Increment Modeling received on April 06, 1998.

3. Georgia Rule 391-3-1-.02(2)(p), "Particulate Emissions from Kaolin and Fuller's Earth Processes," is listed in the permit as Condition 3.4.1. Each listed piece of equipment in Table 3.1 subject to this requirement has 3.4.1 in the column, "Corresponding Permit Condition". The following equations are used to calculate the allowable rates of emission from kaolin and fuller's earth process equipment constructed or put in operation. Particulate matter emissions can not equal to or exceed the allowable rates specified in the below equations.
 - a. For equipment constructed or extensively modified after January 1, 1972, the following equations is used to determine allowable emission rates:
 - i. $E = 3.59 P^{0.62}$, for process input weight rate up to and including 30 tons per hour;
 - ii. $E = 17.31 P^{0.16}$, for process input weight rates in excess of 30 tons per hour.
 - b. For equipment constructed or put in operation on or before January 1, 1972, the following equations is used to determine allowable emission rates:
 - i. $E = 4.1 P^{0.67}$, for process input weight rate up to and including 30 tons per hour;
 - ii. $E = 55 P^{0.11} - 40$, for process input weight rates in excess of 30 tons per hour.

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

4. Georgia Rule 391-3-1-.02(2)(b)1 "Visible Emissions" is a general permitting requirement which applies to all facilities and is listed in the permit as Condition 3.4.2. Each listed piece of equipment in Table 3.1 subject to this requirement has 3.4.2 in the column, "Corresponding Permit Condition". Visible emissions shall not equal or exceed forty (40) percent.

D. Compliance Status

The facility is in compliance.

E. Operational Flexibility

Not applicable.

F. Permit Conditions

1. Because of the close proximity and magnitude of each source, Thiele Kaolin, Burgess Pigment, IMERYYS (p.k.a. ECC), and J. M. Huber are required to submit a comprehensive PM-10 increment assessment to determine compliance in the event of any significant emissions increase. The previous PSD increment assessment revealed the highest second-high 24 hour concentration was 29.98 mg/m³ and does not exceed the particulate matter (30.0 mg/m³) threshold. To maintain compliance status with the particulate matter (30.0 mg/m³) threshold, IMERYYS may need to take additional stack emissions limits not required either by any current state or federal regulation. The following stack limits may apply either by regulatory requirement or requested limit.
2. IMERYYS will limit stack emissions as not to contain particulate matter in excess of 0.0375 g/dscm (0.015 grains/dscf) from each source code as identified in Table 3.1. This stack limit is listed in the permit as Condition 3.5.3. All of the equipment in Table 3.1 subject to this requirement is identified in the column, "Corresponding Permit Condition". This stack emissions limit is requested by IMERYYS to remain below the particulate matter increment.
3. IMERYYS will limit stack emissions as not to contain particulate matter in excess of 0.05 g/dscm (0.02 grains/dscf) from each source code identified in Table 3.1. This stack limit is listed in the permit as Condition 3.5.4. All of the equipment in Table 3.1 subject to this requirement is identified in the column, "Corresponding Permit Condition". This stack emissions limit, which is included in 40 CFR, Part 60, Subpart OOO may also be requested by IMERYYS, even though the equipment is not subject to the regulation, to remain below the particulate matter increment.
4. IMERYYS will make the necessary modifications to demonstrate compliance with the PSD Increment for PM-10. Specifically, IMERYYS will not operate any of the following equipment: Screen (S1), modified existing Bagger Feed Bin (SB8), modified existing Bagger (SB9), Surge Bin (BN1), ACM Mill (M35), Feed Bin (BN2), Densifier (D1), Densifier (D2), Big Bagger Feed Bin (BN3), Big Bagger (BB6), relocated existing Product Bin (BN4), relocated existing Product Bin (BN5), Truck Loading Station (RB5), and Baghouses (S1C, SB8C, SB9C, BN2C, M35C, BN3C, BN4C, BN5C, and RB5C), and Scrubbers (D1C, and D2C) until the increase in stack heights is completed and the Air Protection Branch is notified. The change in stack heights is the Specialty Clay Small Bagging (SB9) to 100 feet and Spray Dryer No 3 Railcar Loading Station (R3) to 60 feet. At the time of processing the Title V application, the equipment has not yet been installed.

5. IMERYYS will burn only natural gas, propane, or No. 2 fuel oil in Calciner No. 1 (CA1), Calciner No. 2 (CA2), Calciner No. 3 (CA3), Calciner No. 4 (CA4), Spray Dryer No 3 (SD3), and Spray Dryer No. 4 (SD4). The sulfur content of the No. 2 fuel oil will not exceed 0.5 weight percent.
6. Calciner No. 4 (CA1) will be limited such that the total uncontrolled emissions of sulfur dioxide could not equal or exceed 40 tons during any 12 consecutive months and the consumption of fuel oil will not exceed 300,000 gallons during any 12 consecutive month period.

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

A. General Testing Requirements

This permit specifies that a performance test may be required to determine compliance with the emission limits in Part 3.0, and the test methods to be used to determine compliance are listed. A general condition to require notification of any test and for the submission of a test plan is included.

B. Specific Testing Requirements

The initial performance tests required by 40 CFR 60.8 and the current Air Quality Permit have been completed for all existing equipment. This permit allows certain changes to be made to the facility without permit revision. These changes may include installing new equipment and replacing existing equipment. If these changes are made, a condition is present to require the initial performance test be performed in accordance with 40 CFR 60.8 and the applicable subpart. This permit does not contain any conditions to require specific testing for any source.

V. Monitoring Requirements (with Associated Record Keeping and Reporting)

A. General Monitoring Requirements

This permit specifies that any monitoring systems installed should be in continuous operation and that downtime due to maintenance should be minimized.

B. Specific Monitoring Requirements

1. Most sources at the facility have baghouses for control of Particulate Matter (PM) emissions and are subject to the PM and Visible emissions (opacity) limitations of Georgia Rules (p), (b), and/or 40 CFR Part 60 Subpart OOO. The processes that are substantial sources of PM emissions are controlled by the larger baghouses installed at the facility and are subject to the monitoring requirements of condition 5.2.4 to reasonably assure compliance with applicable emissions limitations. To reasonably assure compliance with applicable PM limitations, a Visible Emissions (VE) check is required each day of operation of the emissions units controlled by the baghouses. Corrective actions are required for visible emissions or for visible emissions which exceed a specified opacity action level. In addition, a Preventive Maintenance Program is required on these baghouses. The program requires weekly monitoring of baghouse pressure drop and the performance of operation and maintenance checks on the baghouses. All VE and Preventative Maintenance Program information is retained by IMERYS and submitted to the Division upon request. Excursions, to be reported semiannually, are specified. Additionally, many of these sources have emissions limitations for PM-10 for purposes of Prevention of Significant Deterioration (PSD). These PM-10 limitations were based upon the limitations for Particulate Matter emissions and the monitoring described previously is adequate for assuring compliance with the PM-10 limitations.
2. Dust collectors, bin vents and filter receivers controlling emissions from individual bins, wet screening operations, bucket elevators, belt and pneumatic conveyances, and bagging operations are exempted from detailed monitoring provisions due to little likelihood of significant Particulate Matter emissions.
3. Calciner No. 4 (CA4) is subject to 40 CFR 60 Subpart UUU and Georgia Rules (p) for limitations of particulate matter (PM) and visible emissions (opacity). Particulate matter emissions are controlled by a scrubber. Subpart UUU requires Calciner No. 4 (CA4) equipped with a scrubber, install a Continuous Opacity Monitoring System (COMS). The COMS was determined to be sufficient monitoring to assure compliance with the PM and opacity limitations. The monitoring strategy requires IMERYS to continuously monitor and record pressure loss of the gas stream through the scrubbers. Additionally, Burgess Pigment is required to continuously monitor and record the scrubbing flow rate to the scrubbers. Exceedances are as defined in Subpart UUU.

4. All fuel burning sources (dryers and calciners) are subject to Georgia Rule (g) for sulfur dioxide emissions. However, there are additional sulfur restrictions on all dryers and calciners nullifying Rule (g). Calciner No. 1 (CA1), Calciner No. 2 (CA2), Calciner No. 3 (CA3), Calciner No. 4 (CA4), Spray Dryer No 3 (SD3), and Spray Dryer No. 4 (SD4) will burn only natural gas, propane, or No. 2 fuel oil. Calciner No. 4 (CA1) will be limited such that the total uncontrolled emissions of sulfur dioxide could not equal or exceed 40 tons during any 12 consecutive months and the consumption of fuel oil will not exceed 300,000 gallons during any 12 consecutive month period. For PSD purposes, the permit limits the sulfur content of fuel oil to 0.5 percent by weight. This limitation is more stringent than the rule (g) sulfur limit and will be monitored by fuel supplier certifications. IMERYYS is required to obtain from the fuel oil supplier, a certification that the oil is 0.5 percent sulfur by weight or less. Natural gas and propane are processed fuels (cleaned) which have negligible amounts of sulfur; therefore no monitoring is required. Additionally, the permit limits the consumption of natural gas and fuel oil during any 12-consecutive month period and records of fuel usage are required to assure compliance with this limitation.
5. Baghouses SD3C, SD4C, K1C, K2C, K3C, and K4C which receive gases from combustion sources, are required to monitor (not record) temperature continuously and to record all incidents when the temperature exceeds a temperature based on the maximum temperature that the bags can withstand.
6. Calciners Nos 1, 2, 3, and 4, and Densifiers D1 and D2 are subject to PM emission limits for PSD, which are equivalent to or more stringent than the additionally applicable Rule (p) and/or 40 CFR Part 60, Subparts OOO or UUU. PM emissions from each calciner are controlled by venturi scrubbers except for the Densifiers which are controlled by the Spray Dryer heat exchanger scrubbers D1C and D2C. Pressure drop across the scrubbers and scrubbant flow rates are required to be continuously monitored and recorded. The permit requires that ranges representative of proper operation for pressure drop and flow rate be determined and submitted for approval to reasonably assure the operation of the Spray Dryers in compliance with the PSD limits. Exceedances and excursions, to be reported semiannually, are specified.
7. The permit requires all uncontrolled sources, except those that specify no monitoring by this narrative, be checked daily for obvious mechanical failure and all uncontrolled sources be checked the presence of Visible Emissions. The permit includes a requirement to take corrective action and keep records. If problems are revealed during the daily check, they must be reported in the semiannual report if not corrected within 24 hours.
8. Condition 7.1.2 includes a *deferral* on minor modifications to the plant and not an exemption from permitting. With the daily checks required in condition 5.2.7 and only minor modifications allowed to the facility, confidence is high the PSD PM increment will not be compromised. Any cumulative modification above state deferral levels will require modeling data to be submitted demonstrating compliance.

Record keeping and Reporting Requirements:

Records, including identification of exceedances and excursions, the cause of such occurrence, the corrective action taken, fuel usage, and fuel supplier certifications are required to be kept by IMERYYS. Reporting is required on a semiannual basis.

VI. Other Record keeping and Reporting Requirements

General Record keeping and Reporting Requirements:

The Permit contains general requirements for the maintenance of all records for a period of five years following the date of entry and requires the prompt reporting of all related information to deviations from applicable requirements.

Specific Record keeping and Reporting Requirements:

None.

VII. Specific Requirements

A. Operational Flexibility

C Not applicable.

B. Alternative Requirements

C None.

C. Insignificant Activities

C Not applicable.

D. Temporary Sources

C None.

E. Short-Term Activities

C Not applicable.

F. Compliance Schedule/Progress Reports

C Not applicable.

G. Emissions Trading

C Not applicable.

H. Acid Rain Requirements

C Not applicable.

I. Prevention of Accidental Releases

C Not applicable.

J. Stratospheric Ozone Protection Requirements

C Not applicable.

K. Pollution Prevention

C Not applicable.

L. Specific Conditions

C Not applicable.

VIII. General Provisions

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

Closing Block: We have reviewed and recommend issuance of draft Permit
No. 3295-303-0004-V-01-0

Program	Review Engineers	Dates	Review Managers	Dates
SSPP/ASU				
SSCP/ASU				
ISMP				
TOXICS				

Stationary Source Permitting Program Manager

Date

Addendum to Narrative Imerys Clays, Inc., Sandersville Calcine Plant TV-9443

Comments

1. SIC Code -- An incorrect SIC (Standard Industrial Classification) Code is assigned on the Part 70 Operating Permit signature page in 2 places: the first 4 numbers of the permit number and in the "Primary SIC" data field. The proper code that more accurately reflects our combined mining and milling operation is 1455 and not 3295. The proper SIC code was provided in our permit applications, so we do not understand the change made on the draft permit. As you know, IMERYYS has filed for an administrative hearing on this issue relative to our Jeffersonville and Dry Branch operations where SIC codes were changed as well. Our basis for using 1455 is documented in those petitions and will be further documented as the proceeding progresses. SCP is a milling operation directly tied to and directly supporting our various mining operations that supply the plant it's crude kaolin feed. The facility is "primarily engaged in mining, milling or otherwise preparing kaolin or ball clay, including china clay, paper clay and slip clay" which is the definition for SIC 1455. SIC 3295 is for "(e)stablishments operating without a mine or quarry and primarily engaged in crushing, grinding, pulverizing, or otherwise preparing clay, ceramic, and refractory minerals..." (emphasis added). Please be advised that it is our intent to file a similar petition for the Sandersville Calcine Plant Title V if this matter cannot be resolved before issuing our final Operating Permit.

Division's Response: SIC Code identification removed from cover page. The SIC Code(s) identified above were assigned by EPD's Air Protection Branch for purposes pursuant to the Georgia Air Quality Act and related administrative purposes only and are not intended to be used for any other purpose. Assignment of SIC Codes by EPD's Air Protection Branch for these purposes does not prohibit the facility from using these or different SIC Codes for other regulatory and non-regulatory purposes. EPD acknowledges that SIC codes 1455 and 3295 may both apply.

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

2. Parent/Holding Company -- Please correct the legal entity on the cover page of the permit to be "IMERYYS Clays, Inc." This is the legal entity that owns and operates the assets for which this Operating Permit is being issued. This is consistent with our March 22, 2000 letter to the EPD notifying the agency of our name change. References to IMERYYS Pigments, Inc. in sections 1.2 and 1.3 should also be changed to IMERYYS Clays, Inc.

Division's Response

Division agrees. Changes made.

TITLE V APPLICATION REVIEW

3. Emission Units -- Remove JM Huber source M26 transferred to them November 5, 1999. Remove IMERYYS sources D1 and D2, which are closed loop processes without emission points. Calciners 1-4 (sources C1, C2, C3, and C4) should not be subject to limitations 3.5.3 nor 3.5.4. Emissions in our application and in PSD modeling were based on 0.027 gr/dscf and should not be subject to the noted 0.015 and/or 0.02 limits. A new specific condition 3.5.8 was drafted to reflect the 0.027 gr/dscf limit. Remove references to NSPS and 3.3.1 for sources M6, M8, and H2. Our application did not show them to be NSPS sources. We added clarifying text to sources RB5, V13, V17, and V23.

Division's Response

Division agrees. Changes made.

4. Section 3.3.3 -- Numerous changes were made to reflect our source list in the PSD modeling completed by Tom Davis of ECT.

Division's Response

Division agrees. Changes made.

5. Add Section 3.5.8 regarding incorrect grain loading limit for Calciners 1-4.

Division's Response

Division agrees. Changes made.

6. Remove sources D1 and D2 -- As noted in comment 3 above, remove all references to densifiers (sources D1 and D2) specifically in 5.2.1 a & b, 5.2.2, 5.2.3, and 5.2.9. c. I and ii. These 2 sources do not have outlets to atmosphere due to their closed system design.

Division's Response

Division agrees. Changes made.

7. Section 5.2.2 and 5.2.3 -- IMERYYS requests an additional 30 days to complete these tasks due primarily to our anticipated delivery of necessary equipment. This extension is reasonable and has been granted to other Title V holders including our sister facility in Dry Branch.

Division's Response

Division disagrees. No changes made. The Division believes 90 days is sufficient to complete these tasks.

TITLE V APPLICATION REVIEW

8. Specific Monitoring Requirements -- In section 5.2.4.b., reference to "is greater than or equal to" the 5% and 10% NSPS opacity action levels needs to be changed to "when average visible emissions exceed" for three (3) reasons. First, this change in wording will make it consistent with existing similar language in section 5.2.7.b. Secondly, this change will make the wording consistent with the Mining Industry Model Permit jointly negotiated between the Georgia Mining Association/China Clay Producers Association and GA EPD where the action level was to be compared to a three (3) minute determination period patterned after Method 9. Thirdly, the change avoids an overly burdensome requirement for zero visible emissions based on the limitations of Method 9. Essentially, students of Method 9 are taught and their eyes calibrated in 5% visible emissions increments. At the lower end of a 0-100% scale, the method instructs observers to call an observation of a totally clear emission a "zero". An observation of any other emission is noted as at least 5% or some higher increment of 5% if judged greater than 5%. The point is that any visible emission, no matter how minute, will be judged 5% and recorded as such. With the language indicating "greater than or equal to" the action level, any emission, no matter how close to zero, will end up being at least equal to 5%. This likely will lead to incorrectly determining that an operation has visible emissions when there may not be a problem with the source and its control equipment.

Division's Response

Division disagrees. No changes made. Condition 5.2.4 is consistent with the model permit. The division views these opacity action limits necessary and may assist in identifying potential control device failures.

9. Specific Monitoring Requirements -- In section 5.2.4.b, remove reference to "at any time" in the first sentence. As mentioned in comment 6 above, the negotiated model permit established opacity action levels at half of the source's regulated limit where certain maintenance corrective actions would be triggered based on a limited scope Method 9 visible emissions determination over a 3 minute period. Observations are to be made over this limited duration period in lieu of the longer duration periods in Method 9. Maintenance is triggered when average emissions exceed the action level and not when visible emissions at any discrete moment during the 3 minutes exceed the action level.

Division's Response

Division disagrees. No changes made. Condition 5.2.4 is consistent with the model permit. The Division believes the language and condition is necessary to achieve compliance.

10. Section 5.2.5 -- Reference to "and modification" in this section needs to be removed for consistency with the model permit language.

Division's Response

Division disagrees. No changes made. Condition 5.2.5 is consistent with the model permit. This is consistent wording in permits of this type.

TITLE V APPLICATION REVIEW

11. Section 5.2.7 -- A new section c was added to ensure a consistent response to visible emissions for sources without control devices. The language is consistent with the model permit and with our Deepstep Road Plant Title V. Corrective action should be done if visible emissions are above an action limit.

Division's Response

Division disagrees. Condition 5.2.7 is consistent with the model permit. No changes made.

12. Specific Record keeping - Fuel Oil 1/12th Rolling Annual Limit -- In section 6.2.3, IMERYYS cannot agree to the limitation on fuel oil consumption being limited to one-twelfth of its rolling annual limit during any calendar month. This requirement needs to be removed altogether. It is inconsistent with the model permit and with permits issued to our other kaolin operations including our Dry Branch facility. Fuel oil is used in our facilities during natural gas curtailments mostly in the winter months (typically Dec, Jan, Feb and Mar). Our fuel consumption duration is often out of our control and could be skewed toward a given month in any 12 month rolling period. Placing a one-twelfth limit in effect places an arbitrary and capricious burden on our operations during these unanticipated curtailments. The limit should be based on any rolling 12 month period exceeding the rolling annual limit when applicable. To do otherwise will place undue hardship on our operations without a material benefit to the environment.

Division's Response

Division disagrees. No changes made. Condition 6.2.3 is a reporting requirement only and not an additional limit. The Division is aware of natural gas curtailments and requires the facility to notify the Division when the monthly fuel consumption exceeds 1/12th of the limit and specify how the facility intends to maintain compliance with the applicable emission limit in order to prevent actual violations.

13. Facility and Mailing Addresses -- Please change the Facility Address by adding "618" in front of Kaolin Road. Please also delete the reference to the "P.O. Box 471" in the Mailing Address and insert "Attn: Environmental Department 4062 Deepstep Road".

Division's Response

Division agrees. Changes made.

14. Overall Facility Process Description -- Section 1.3 needs to be modified to reflect minor changes in text and to correct a few typographical errors.

Division's Response

Division agrees. Changes made.

TITLE V APPLICATION REVIEW

15. Section 3.5.5. -- Remove reference to Specialty Clay Small Bagging (SB9) to 100 feet. This has already been done and GA EPD has already been notified.

Division's Response

Division agrees. Changes made.

16. Attachment B Insignificant Activities Based on Emission Levels -- Several minor adjustments were made to these tables

Division's Response

Division agrees. Changes made.