Facility Name: **IMERYS - Sandersville Calcine Plant**
City: Sandersville
County: Washington
AIRS #: 04-13-303-00004

Application #: TV-693009
Date Application Received: September 14, 2022
Permit No: 3295-303-0004-V-05-0

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Introduction

This narrative is being provided to assist the reader in understanding the content of referenced operating permit. Complex issues and unusual items are explained here in simpler terms and/or greater detail than is sometimes possible in the actual permit. The permit is being issued pursuant to: (1) Georgia Air Quality Act, O.C.G.A § 12-9-1, et seq. and (2) Georgia Rules for Air Quality Control, Chapter 391-3-1, and (3) Title V of the Clean Air Act. Section 391-3-1-.03(10) of the Georgia Rules for Air Quality Control incorporates requirements of Part 70 of Title 40 of the Code of Federal Regulations promulgated pursuant to the Federal Clean Air Act. The narrative is intended as an adjunct for the reviewer and to provide information only. It has no legal standing. Any revisions made to the permit in response to comments received during the public participation and EPA review process will be described in an addendum to this narrative.

I. Facility Description

A. Facility Identification

1. Facility Name: IMERYS Sandersville Calcine Plant

2. Parent/Holding Company Name

   IMERYS Clays, Inc.

3. Previous and/or Other Name(s)

   Anglo-American Clays Corporation prior to January 17, 1992
   ECC International, Sandersville Plant No. 1. prior to March 22, 2000

4. Facility Location

   618 Kaolin Road
   Sandersville, GA 31082 (Washington County)

5. Attainment, Non-attainment Area Location, or Contributing Area

   The facility is located in an attainment area for all pollutants.

B. Site Determination

There are no other facilities which could be contiguous or adjacent and under common control.

C. Existing Permits

Table 1 below lists all current Title V permits, all amendments, 502(b)(10) changes, and off-permit changes, issued to the facility, based on a comparative review of form A.6, Current Permits, of the Title V application and the "Permit" file(s) on the facility found in the Air Branch office.

Table 1: List of Current Permits, Amendments, and Off-Permit Changes

Permit Number and/or Off-Permit Change	Date of Issuance/ Effectiveness	Purpose of Issuance
3295-303-0004-V-04-0	March 15, 2018	Title V Renewal
Off-Permit Change	December 2018	Installation of one conveyor surge bin (BN9), one product receiver (PR1), one product bagger hopper (BB1B), one feed bin and associated bagger (IBC2).
3295-303-0004-V-04-1	January 10, 2023	Transfer of ownership to Thiele Kaolin Sandersville and decommissioning of equipment.

D. Process Description

1. SIC Codes(s)

3295 – Minerals and Earths, Ground or otherwise treated

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 and sells kaolin products.

3. Overall Facility Process Description

Kaolin clay beneficiation facility including drying, calcining, final product conveying and storage, bagging activities and bulk product loading, and ancillary support activities.

4. Overall Process Flow Diagram

The facility provided a process flow diagram in their Title V permit application.

E. Regulatory Status

1. PSD/NSR

IMERYS Sandersville Calcine Plant is a major source under PSD/NSR regulations for sulfur dioxide emissions, it is a synthetic minor source for Particulate Matter less than 10 microns (PM_{10}) and has PM_{10} PSD avoidance limits to ensure that significant deterioration does not occur according to the 40 CFR Part 52.21 *Prevention of Significant Deterioration of Air Quality*.

IMERYS Calcine Plant, Thiele Kaolin, Burgess Pigment, & KaMin 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, and IMERYS Calcine Plant, Thiele Kaolin, Burgess Pigment, & KaMin 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 3.2.3.

The limits are based on PM_{10} Increment Modeling received on April 06, 1998. These limits were carried over from Air Quality Permit No. 3295-303-0004-V-04-0.

2. Title V Major Source Status by Pollutant

Table 2: 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	✓	✓		
PM_{10}	✓	✓		
$PM_{2.5}$	✓	✓		
SO_2	✓	✓		
VOC	✓			✓
NO_x	✓	✓		
CO	✓			✓
TRS	✓			✓
H_2S	✓			✓
Individual HAP	✓			✓
Total HAPs	✓			✓

3. MACT Standards

Area Source Boiler MACT – 40 CFR 63 Subpart JJJJJJ - The Calcine Wet Plant Boiler that combusts natural gas with LPG backup; it has a heat input capacity of 2.7 MMBtu/hr. As the boiler was constructed prior to June 4, 2010, it is considered as an existing source per 40 CFR 63.11194(c). As the Wet Plant Boiler is a gas-fired boiler, it is not subject to any requirements under this Subpart.[1]

40 CFR 63 Subpart ZZZZ – National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines RICE establishes national emission limitations and operating limitations for HAPs emitted from stationary reciprocating internal combustion engines (RICE) located at major and area sources of HAP emissions. The facility currently operates three emergency engines, one for each calciner. These 23hp engines are intended to keep the calciners turning, during a power outage via a mechanical drive linkage, and are gasoline-powered (spark ignited). The condition is listed in the General Provisions section (Condition 8.27.3) and IMERYS lists three (3) emissions units in the "Insignificant Activities Checklist" section. As such, the Plant is subject to NSPS Subpart ZZZZ. All emergency engines will continue to be permitted as insignificant activities.

[1] 40 CFR 63.11195(e) ; note that rule's definition of "natural gas" specifically includes LPG.

40 CFR 63 Subpart CCCCCC – "*National Emission Standards for Hazardous Air Pollutants for Source Category: Gasoline Dispensing Facilities"*. This rule applies for the onsite gasoline dispensing facility GDF as it is a gasoline dispensing facility that is located at an area source. Specifically, as the emission unit has a monthly throughput of less than 10,000 gallons of gasoline, it is subjected to only the requirements of § 63.11116 as described in Condition 3.3.4. The facility is required to comply with the work practice requirement and record the gasoline throughput.[2] The Facility will continue to comply with the requirements under Subpart CCCCCC.

4. Program Applicability (AIRS Program Codes)

Program Code	Applicable (y/n)
Program Code 6 - PSD	y
Program Code 8 – Part 61 NESHAP	n
Program Code 9 - NSPS	y
Program Code M – Part 63 NESHAP	y
Program Code V – Title V	y

Regulatory Analysis

II. Facility Wide Requirements

A. Emission and Operating Caps:

None applicable.

B. Applicable Rules and Regulations

Not applicable.

C. Compliance Status

In compliance

D. Permit Conditions

None.

[2] 40 CFR 63.11111(b) and 40 CFR 63.11116

III. Regulated Equipment Requirements

A. Equipment List for the Process

Emission Units		Applicable Requirements/Standards	Air Pollution Control Devices	
ID No.	Description		ID No.	Description
Premills and Postmills				
M1	Bauer Premill No. 1 (Calciner No. 1)	391-3-1-.02(2)(b) 391-3-1-.02(2)(p) 391-3-1-.02(1)(c)	M1C	Baghouse
M2	Bauer Premill No. 2 (Calciner No. 1)	391-3-1-.02(2)(b) 391-3-1-.02(2)(p) 391-3-1-.02(1)(c)	M2C	Baghouse
M3	Bauer Postmill Nos. 3, 4, 5 (Calciner No. 1)	391-3-1-.02(2)(b) 391-3-1-.02(2)(p) 391-3-1-.02(1)(c)	M3C M4C	Baghouse Baghouse
M6	Bauer Premill No. 6 (Calciner No. 2)	391-3-1-.02(2)(b) 391-3-1-.02(2)(p) 391-3-1-.02(1)(c)	M6C	Baghouse
M7	Bauer Premill No. 7 (Calciner No. 2)	391-3-1-.02(2)(b) 391-3-1-.02(2)(p) 391-3-1-.02(1)(c) NSPS OOO	M7C	Baghouse
M8	Bauer Postmill Nos. 8, 9, 10 (Calciner No. 2)	391-3-1-.02(2)(b) 391-3-1-.02(2)(p) 391-3-1-.02(1)(c)	M8C M9C	Baghouse Baghouse
M17	Bauer Premill Nos. 17, 18, 19 (Calciner No. 4)	391-3-1-.02(2)(b) 391-3-1-.02(2)(p) 391-3-1-.02(1)(c) NSPS OOO	M17C	Baghouse
M20	Bauer Postmill Nos. 20, 21, 22 (Calciner No. 4)	391-3-1-.02(2)(b) 391-3-1-.02(2)(p) 391-3-1-.02(1)(c) NSPS OOO	M20C M21C	Baghouse
M35	ACM Mill	391-3-1-.02(2)(b) 391-3-1-.02(2)(p) 391-3-1-.02(1)(c) NSPS OOO	M35C	Baghouse
ACM4	ACM Mill System	391-3-1-.02(2)(p) NSPS OOO	BH4	Baghouse
H1	Calciner No. 1 Horizontal Mill	391-3-1-.02(2)(b) 391-3-1-.02(2)(p) 391-3-1-.02(1)(c)	H1C	Baghouse
H2	Calciner No. 2 Horizontal Mill	391-3-1-.02(2)(b) 391-3-1-.02(2)(p) 391-3-1-.02(1)(c)	H2C	Baghouse
H4	Calciner No. 4 Horizontal Mill	391-3-1-.02(2)(b) 391-3-1-.02(2)(p) 391-3-1-.02(1)(c) NSPS OOO	H4C	Baghouse

Emission Units		Applicable Requirements/Standards	Air Pollution Control Devices	
ID No.	Description		ID No.	Description
Spray Dryers				
SD3	Spray Dryer No. 3	391-3-1-.02(2)(b) 391-3-1-.02(2)(p) 391-3-1-.02(1)(c)	SD3C	Baghouse
SD4	Spray Dryer No. 4	391-3-1-.02(2)(b) 391-3-1-.02(2)(p) 391-3-1-.02(1)(c)	SD4C	Baghouse
Calciners				
C1	Calciner No. 1	391-3-1-.02(2)(b) 391-3-1-.02(2)(p) 391-3-1-.02(1)(c)	C1C	Scrubber
C2	Calciner No. 2	391-3-1-.02(2)(b) 391-3-1-.02(2)(p) 391-3-1-.02(1)(c)	C2C	Scrubber
C4	Calciner No. 4	391-3-1-.02(2)(b) 391-3-1-.02(2)(p) 391-3-1-.02(1)(c) NSPS UUU	C4C	Scrubber
Bagging Operations				
BB1	Calciner Big Bagger Hopper	391-3-1-.02(2)(b) 391-3-1-.02(2)(p) 391-3-1-.02(1)(c)	BB1C	Baghouse
BB1B	Calcined Product Bagger Bin	391-3-1-.02(2)(b) 391-3-1-.02(2)(p) 391-3-1-.02(1)(c)	BH2B	Bin Vent
MEB1	Modified Existing Bagger	391-3-1-.02(2)(p) NSPS OOO	BH2 BH3	Baghouse
BC1	Bag Cleaner	391-3-1-.02(2)(p) NSPS OOO	BH3	Baghouse
IBCB	IBC Bagger	391-3-1-.02(2)(p) NSPS OOO	BH6A	Bin Vent
IBC2	IBC Bagger	391-3-1-.02(2)(b) 391-3-1-.02(2)(p) NSPS OOO	BH6B	Bin Vent
BFB1	Warehouse D Feed Bin	391-3-1-.02(2)(p) NSPS OOO	BH3	Baghouse
Conveyors and Conveying Systems				
BC3	Belt Conveyor No. 3	391-3-1-.02(2)(p) NSPS OOO	N/A	None
BN1	ACM Mill Surge Bin	391-3-1-.02(2)(p) NSPS OOO	N/A	None
BN9	Conveyor Surge Bin No. 9	391-3-1-.02(2)(b) 391-3-1-.02(2)(p) NSPS OOO	F9	Bin Vent
PR1	Calcined Clay Product Receiver	391-3-1-.02(2)(b) 391-3-1-.02(2)(p) NSPS OOO	FR8	Filter Receiver
K1	Calciner No. 1 Cooler/Conveyor	391-3-1-.02(2)(b) 391-3-1-.02(2)(p) 391-3-1-.02(1)(c)	K1C	Baghouse

Emission Units		Applicable Requirements/Standards	Air Pollution Control Devices	
ID No.	Description		ID No.	Description
K2	Calciner No. 2 Cooler/Conveyor	391-3-1-.02(2)(b) 391-3-1-.02(2)(p) 391-3-1-.02(1)(c) NSPS OOO	K2C	Baghouse
K4	Calciner No. 4 Cooler/Conveyor	391-3-1-.02(2)(b) 391-3-1-.02(2)(p) 391-3-1-.02(1)(c) NSPS OOO	K4C	Baghouse
P1	Pneumatic Conveying From Silos 42 and 43	391-3-1-.02(2)(b) 391-3-1-.02(2)(p) 391-3-1-.02(1)(c)	P1C	Baghouse
F6B	ACM4 Feed Bin	391-3-1-.02(2)(p) NSPS OOO	BH1	Baghouse
BE1	Bucket Elevator BE-1	391-3-1-.02(2)(p) NSPS OOO	BH2	Baghouse
CS5	Pulverized Clay Storage Bin	391-3-1-.02(2)(p) NSPS OOO	BH5	Baghouse
Loading Operations				
R3	Spray Dryer No. 3 Railcar Loadout	391-3-1-.02(2)(b) 391-3-1-.02(2)(p) 391-3-1-.02(1)(c)	R3C	Baghouse
R14	Bulk Loading From Silo 14	391-3-1-.02(2)(b) 391-3-1-.02(2)(p) 391-3-1-.02(1)(c)	R14C	Baghouse
R15	Bulk Loading From Silo 15	391-3-1-.02(2)(b) 391-3-1-.02(2)(p) 391-3-1-.02(1)(c)	R15C	Baghouse
R16	Bulk Loading From Silo 16	391-3-1-.02(2)(b) 391-3-1-.02(2)(p)	R16C	Baghouse
R24	Bulk Loading From Silo 24	391-3-1-.02(2)(b) 391-3-1-.02(2)(p)	R24C	Baghouse
R25	Bulk Loading From Silo 25	391-3-1-.02(2)(b) 391-3-1-.02(2)(p) 391-3-1-.02(1)(c)	R25C	Baghouse
R27	Warehouse D Railcar Loadout	391-3-1-.02(2)(p) NSPS OOO	BH3	Baghouse
T1	Silo 52 Truck Loading	391-3-1-.02(2)(b) 391-3-1-.02(2)(p) 391-3-1-.02(1)(c) NSPS OOO	T1C	Baghouse
Small Bagging Operations				
SB1	Calciner Small Bagger Product Receiver	391-3-1-.02(2)(b) 391-3-1-.02(2)(p) 391-3-1-.02(1)(c)	SB1C	Baghouse
SB2	Calciner Small Bagger Fugitive Dust	391-3-1-.02(2)(b) 391-3-1-.02(2)(p) 391-3-1-.02(1)(c)	SB2C	Baghouse

Emission Units		Applicable Requirements/Standards	Air Pollution Control Devices	
ID No.	Description		ID No.	Description
Silos				
V11	Silo No. 11	391-3-1-.02(2)(b) 391-3-1-.02(2)(p) 391-3-1-.02(1)(c)	V11C	Bin Vent
V12	Silo No. 12	391-3-1-.02(2)(b) 391-3-1-.02(2)(p) 391-3-1-.02(1)(c)	V12C	Bin Vent
V13	Silo No. 13	391-3-1-.02(2)(b) 391-3-1-.02(2)(p) 391-3-1-.02(1)(c) NSPS OOO	V13C	Bin Vent
V14	Silo No. 14	391-3-1-.02(2)(b) 391-3-1-.02(2)(p) 391-3-1-.02(1)(c)	V14C	Bin Vent
V15	Silo No. 15	391-3-1-.02(2)(b) 391-3-1-.02(2)(p) 391-3-1-.02(1)(c)	V15C	Bin Vent
V16	Silo No. 16	391-3-1-.02(2)(b) 391-3-1-.02(2)(p) 391-3-1-.02(1)(c)	V16C	Bin Vent
V21	Silo No. 21	391-3-1-.02(2)(b) 391-3-1-.02(2)(p) 391-3-1-.02(1)(c)	V21C	Bin Vent
V23	Silo No. 23	391-3-1-.02(2)(b) 391-3-1-.02(2)(p) 391-3-1-.02(1)(c) NSPS OOO	V23C	Bin Vent
V24	Silo No. 24	391-3-1-.02(2)(b) 391-3-1-.02(2)(p) 391-3-1-.02(1)(c)	V24C	Bin Vent
V25	Silo No. 25	391-3-1-.02(2)(b) 391-3-1-.02(2)(p) 391-3-1-.02(1)(c)	V25C	Bin Vent
V41	Silo No. 41	391-3-1-.02(2)(b) 391-3-1-.02(2)(p) 391-3-1-.02(1)(c)	V41C	Bin Vent
V42	Silo No. 42	391-3-1-.02(2)(b) 391-3-1-.02(2)(p) 391-3-1-.02(1)(c)	V42C	Bin Vent
V43	Silo No. 43	391-3-1-.02(2)(b) 391-3-1-.02(2)(p) 391-3-1-.02(1)(c)	V43C	Bin Vent
V51	Silo No. 51	391-3-1-.02(2)(b) 391-3-1-.02(2)(p) 391-3-1-.02(1)(c) NSPS OOO	V51C	Bin Vent
V52	Silo No. 52	391-3-1-.02(2)(b) 391-3-1-.02(2)(p) 391-3-1-.02(1)(c)	V52C	Bin Vent
Miscellaneous				

Emission Units		Applicable Requirements/Standards	Air Pollution Control Devices	
ID No.	Description		ID No.	Description
GDF	Gasoline Dispensing Facility	391-3-1-.02(2)(b) 40 CFR 63 Subpart CCCCCC	N/A	None

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

B. Equipment & Rule Applicability

The facility is a major source under PSD/NSR regulations for Sulfur Dioxides (SO_2). The facility is subject to PSD avoidance PM_{10} limits (as described in Condition 3.2.3) set to assure significant deterioration does not occur according to the 40 CFR Part 52.21 *Prevention of Significant Deterioration of Air Quality*. In addition, the consumption of fuel oil will be limited to 300,000 gallons in order to reduce SO_2 emissions to below 40 tons per year in order to avoid PSD/NSR regulations with respect to SO_2.

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 subject emission unit is identified in section 3.1. This condition has been updated to include a compliance option for sources located inside a building in accordance with the 40 CFR 60 Subpart OOO and updated regulation. New emissions standards were incorporated in the April 22, 2008 version.

The Facility is a kaolin processing facility, which meets the definition of nonmetallic mineral processing; therefore, each source of the types listed are potentially subject to NSPS Subpart OOO.

NSPS Subpart OOO specifies PM emission standards for stack emissions from affected facilities that commence construction, modification, or reconstruction on or after April 22, 2008 to be 0.014 grains per dry standard cubic foot (gr/dscf) and 7 percent fugitive opacity (12% for crushers without capture systems). Dry control devices on individual enclosed storage bins are limited to 7 percent stack opacity in lieu of a grain loading limit. No stack opacity limit applies to sources subject to the grain loading limit. The fugitive opacity performance test for each source in this group must be repeated at least every 5 years. Stack opacity must be checked using Method 22 for these sources quarterly using a zero-opacity standard unless bag leak detectors are installed.

Affected facilities that commenced construction modification or reconstruction after August 31, 1983 but before April 22, 2008 are limited to 0.022 gr/dscf particulate matter. A 7 percent stack opacity limit applies to all affected sources using dry controls. Dry control devices on individual enclosed storage bins are exempt from the grain loading limit. All sources are subject to a 10 percent fugitive opacity limit (15% for crushers without capture systems).

The Facility operates the following equipment that were constructed after April 22, 2008 and are subject to the PM limit of 0.014 gr/dscf:

- Modified Existing Bagger (EU ID: MEB1)
- Bucket Elevator (EU ID: BE1)
- Conveyor Surge Bin #9 (EU ID: BN9)
- Bag Cleaner (EU ID: BC1)

- Calcined Clay Product Receiver (EU ID: PR1)
- Calcined Product Bagger Bin (EU ID: BB1B)
- IBC Bagger (EU ID: IBCB)
- IBC Calcine Clays Feed Bin (EU ID: IBC2)
- Railcar Loadout (EU ID: R27)
- ACM Mill System (EU ID: ACM4)
- Pulverized Clay Storage Bin (EU ID: CS5)

The ACM4 Feed Bin (EU ID: F6B) and Pulverized Clay Storage Bin (EU ID: CS5) are controlled by baghouse BH1 and BH5, respectively. The ACM4 Feed Bin and Pulverized Clay Storage Bin are enclosed storage bins are constructed after April 22, 2008; therefore, they are subject to a 7 percent stack opacity limit and are exempt from the stack PM concentration limit. These are the sources subject to quarterly Method 22 opacity monitoring and 5-year fugitive opacity retests.

All the other crushers, grinding mills, screening operations, bucket elevators, belt conveyors, bagging operations, storage bins, and enclosed truck or rail loading stations constructed after August 31, 1983 but before April 22, 2008 and are limited to 0.022 grain per dry standard cubic feet (gr/dscf) particulate matter and 7 percent opacity (if using dry controls). Properly operated baghouses and bin vents ensure compliance with NSPS Subpart OOO.

40 CFR Part 60 Subpart UUU, "Standards of Performance for Calciners and Dryers in Mineral Industries" is carried over from the initial permit and is listed in the permit as Condition 3.3.2. This includes only Calciner No. 4 (CA4). In order for 40 CFR, Part 60, Subpart UUU to be applicable, the emission units 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.

Calciner No. 4 is subject to NSPS Subpart UUU as it was constructed after April 23, 1986. Spray Dryer No. 3, Spray Dryer No. 4, Calciner No. 1, and Calciner No. 2 were constructed before April 23, 1986 and have not been modified since; therefore, they are not subject to NSPS Subpart UUU. The Facility will comply with the provision as stack emissions from Calciner No. 4 will not contain particulate matter in excess of 0.04 gr/dscf and will not exhibit greater than 10 percent opacity. Proper operation of the wet scrubber ensures compliance with NSPS Subpart UUU.

40 CFR 60 Subpart JJJJ – "*Stationary Spark Ignition Internal Combustion Engines*"

NSPS Subpart JJJJ applies to spark ignition (SI)[3] internal combustion engines (ICE) based on the date each engine was constructed, reconstructed, or modified. The Facility operates three gasoline fired

[3] Pursuant to 40 CFR 60.4219, *spark ignition means relating to a gasoline, natural gas, or liquefied petroleum gas fueled engine or any other type of engine with a spark plug (or other sparking device) and with operating characteristics significantly similar to the theoretical Otto combustion cycle. Spark ignition engines usually use a throttle to regulate intake air flow to control power during normal operation. Dual-fuel engines in which a liquid fuel (typically diesel fuel) is used for CI and gaseous fuel (typically natural gas) is used as the primary fuel at an annual average ratio of less than 2 parts diesel fuel to 100 parts total fuel on an energy equivalent basis are spark ignition engines.*

emergency engines, one for each calciner, with maximum engine power of 23 horsepower (hp). The emergency engines were constructed before June 12, 2006 and have not been reconstructed since then. Therefore, the emergency engines do not fall into any of the categories as specified in 40 CFR 60.4230(a)(1) through (6). NSPS Subpart JJJJ is not applicable.

Condition 3.3.3 requires IMERYS to comply with the standards, provisions, and requirements of 40 CFR 60, Subpart A, the General Provisions for all subject emission units.

Georgia Rule 391-3-1-.02(2)(p), "Particulate Emissions from Kaolin and Fuller's Earth Processes," is carried over from the previous permit and is listed in the permit as Condition 3.4.1. There are two sets of equations used to calculate the allowable rates of emission from kaolin and fuller's earth process equipment. The first set of equations is for equipment constructed or extensively modified **after** January 1, 1972. The second set is for before January 1, 1972.

Georgia Rule 391-3-1-.02(2)(b)1 "Visible Emissions" is carried over from the previous permit and is listed in the permit as Condition 3.4.2. Each emission unit in Section 3.1 subject to this requirement has 3.4.2 in the "Corresponding Permit Condition" column. Visible emissions shall not equal or exceed forty (40) percent.

Georgia Rule 391-3-1-.02(2)(g) "Sulfur Dioxide" requires compliance with a sulfur limit of 2.5 percent by weight for these fuel burning sources rated below 100 MMBTU per hour of heat input. Since IMERYS has voluntarily elected to limit fuel oils to numbers 1 and 2 (have less than 0.5 percent by weight), the Rule (g) requirement is subsumed into Condition 3.2.5. Natural gas has negligible sulfur content. No other fuels will be fired at this facility. Compliance will be inherent based on the types of fuels used at the facility.

40 CFR Part 98 "Mandatory Greenhouse Gas Reporting" Specifically §98.2 (a)(3); A facility that in any calendar year starting in 2010 meets all three of the conditions listed in this paragraph (a)(3). For these facilities, the annual GHG report must cover emissions from stationary fuel combustion sources only.

1. The facility does not meet the requirements of either paragraph (a)(1) or (a)(2) of this section.
2. The aggregate maximum rated heat input capacity of the stationary fuel combustion units at the facility is 30 MMBtu/hr or greater.
3. The facility emits 25,000 metric tons CO_2e or more per year in combined emissions from all stationary fuel combustion sources.

Emissions of GHG CO_2e emissions are calculated to be 113,462 tons/yr.

C. Permit Conditions

Condition 3.2.1 limits stack emissions as not to contain particulate matter in excess of 0.05 g/dscm (0.022 grains/dscf) from each source code. This is to avoid the provisions of 40 CFR 52.21.

Condition 3.2.2 limits stack emissions as not to contain particulate matter in excess of 0.0675 g/dscm (0.027 grains/dscf) from each source code. This is to avoid the provisions of 40 CFR 52.21.

Condition 3.2.3 lists the PM_{10} Emission Limit (lb/hr) for applicable emissions units. This is done to ensure significant deterioration does not occur in accordance with 40 CFR Part 52.21.

Condition 3.2.4 lists the allowable fuels to be burned in calciners and spray dryers, as well as the 0.5 weight percent sulfur limit in fuels.

Condition 3.2.5 limits fuel oil consumption to 300,000 gallons annually in order to establish a 40 tons per year SO_2 limit for Calciner No. 4 (C4).

Condition 3.2.6 limits stack emissions for ACM Mill System (ACM4) as not to contain particulate matter in excess of 0.023 g/dscm (0.01 grains/dscf) from each source code. This is to avoid the provisions of 40 CFR 52.21.

Section 3.3 containing Conditions 3.3.1 to 3.3.3 lists the provisions of NSPS Subpart A, OOO, UUU, and 40 CFR 63 Subpart CCCCCC.

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

A. General Testing Requirements

The permit includes a requirement that the Permittee conduct performance testing on any specified emission unit when directed by the Division. Additionally, a written notification of any performance test(s) is required 30 days (or sixty (60) days for tests required by 40 CFR Part 63) prior to the date of the test(s) and a test plan is required to be submitted with the test notification. Test methods and procedures for determining compliance with applicable emission limitations are listed and test results are required to be submitted to the Division within 60 days of completion of the testing.

B. Specific Testing Requirements

Conditions 4.2.1 through requires the Permittee to conduct performance test in accordance with the provisions of 40 CFR 60.8 60 days after achieving the maximum production rate and furnish the results to the Division.

Condition 4.2.2 lists the performance test requirements of NSPS Subpart OOO as it applies to facility equipment.

V. Monitoring Requirements

A. General Monitoring Requirements

Condition 5.1.1 requires that all continuous monitoring systems required by the Division be operated continuously except during monitoring system breakdowns and repairs. Monitoring system response during quality assurance activities is required to be measured and recorded. Maintenance or repair is required to be conducted in an expeditious manner.

B. Specific Monitoring Requirements

Condition 5.2.1 describes continuous monitoring requirements for scrubbers C1C, C2C, C3C, and C4C. Thus, includes monitoring of pressure drop and scrubbant flow rates.

Condition 5.2.2 lists monitoring requirements for the monitoring of visible emissions from all baghouses of the facility.

Condition 5.2.3 describes the provisions of a Preventive Maintenance Program for the baghouses specified in Condition 5.2.2.

Condition 5.2.4 requires the Permittee to install continuous temperature monitors on the inlet of baghouses that receive gases from sources that dry or calcine. The temperature readings will be recorded, and any exceedance of bag design temperature will be recorded.

Condition 5.2.5 involves the inspection of emission devices with no air pollution control devices. Visible emissions, mechanical problems or malfunctions shall be noted and corrected and re-inspected within 24 hours.

Condition 5.2.6 lists the emission units subjected to CAM.

Condition 5.2.7 describes the performance criteria of emission units subjected to CAM.

Condition 5.2.8 details the monitoring requirements of NSPS Subpart OOO. This includes requirements of visible emission testing using EPA Method 22.

C. Compliance Assurance Monitoring (CAM)

Each emission unit controlled by a control device that "has potential pre-control device emissions of the applicable regulated air pollutant that are equal to or greater than 100 percent of the amount, in tons per year, required for a source to be classified as a major source," as defined by 40 CFR §64.2(a)(3) is subject to CAM. Specifically, the following pollutant specific emission units (PSEU) were found to be subject to the Compliance Assurance Monitoring.

ID Code	Emission Unit	Pollutant
SD3	Spray Dryer No. 3	Particulate Matter

Conditions 5.2.6 and 5.2.7 include the CAM requirements for the emissions unit listed in Section 3.1 which is equipped with a CAM subject "control device," as defined by 40 CFR 64.1.

VI. Record Keeping and Reporting Requirements

A. 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 information related to deviations from the applicable requirements. Records, including identification of any excess emissions, exceedances, or excursions from the applicable monitoring triggers, the cause of such occurrence, and the corrective action taken, are required to be kept by the Permittee and reporting is required on a semiannual basis.

B. Specific Record Keeping and Reporting Requirements

Condition 6.2.1 describes the recordkeeping requirements of NSPS Subpart OOO with regards to applicable equipment of the facility.

Condition 6.2.2 requires the Permittee to maintain records of the fuel oil supplier certifications from all fuel oil received.

Condition 6.2.3 requires the Permittee to verify that each shipment of fuel oil received is distillate oil through fuel oil supplier certifications.

Condition 6.2.4 requires the Permittee to suppress fugitive dust from roads, storage piles, or any other source of fugitive dust.

Condition 6.2.5 requires the Permittee to maintain separate monthly usage records of fuel oil combusted in Calciner No. 4 (C4).

Condition 6.2.6 requires the Permittee to calculate the monthly total SO_2 emissions from Calciner No. 4 (C4) through monthly fuel oil usage as described in Condition 6.2.5.

Condition 6.2.7 requires the Permittee to record and maintain records of the amounts of fuel oil and natural gas combusted each month.

Condition 6.2.8 details the provisions of a semiannual report containing the 12-consecutive month total amounts of natural gas and fuel oil combusted in the fuel burning sources.

VII. Specific Requirements

A. Operational Flexibility

None Applicable

B. Alternative Requirements

None Applicable

C. Insignificant Activities

See Permit Application on GEOS website.
See Attachment B of the permit

D. Temporary Sources

None Applicable

E. Short-Term Activities

None Applicable

F. Compliance Schedule/Progress Reports

None Applicable

G. Emissions Trading

None Applicable

H. Acid Rain Requirements

None Applicable

I. Stratospheric Ozone Protection Requirements

None Applicable

J. Pollution Prevention

None Applicable

K. Specific Conditions

None 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.

Template Condition 8.14.1 was updated in September 2011 to change the default submittal deadline for Annual Compliance Certifications to February 28.

Template Condition Section 8.27 was updated in August 2014 to include more detailed, clear requirements for emergency generator engines currently exempt from SIP permitting and considered insignificant sources in the Title V permit.

Template Condition Section 8.28 was updated in August 2014 to more clearly define the applicability of the Boiler MACT or GACT for major or minor sources of HAP.

Addendum to Narrative

The 30-day public review started on month day, year and ended on month day, year. Comments were/were not received by the Division.

//If comments were received, state the commenter, the date the comments were received in the above paragraph. All explanations of any changes should be addressed below.//