

Facility Name: **IMERYYS Clays, Inc. - Deepstep Road Plant**  
City: Sandersville  
County: Washington  
AIRS #: 04-13-30300008

Application #: TV-68097  
Date Application Received: November 29, 2017  
Permit No: 3295-303-0008-V-04-0

<b>Program</b>	<b>Review Engineers</b>	<b>Review Managers</b>
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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:

IMERYYS Clays, Inc. - Deepstep Road Plant.

## 2. Parent/Holding Company Name

IMERYYS Clays, Inc.

## 3. Previous and/or Other Name(s)

American Industrial Clay Company.  
ECC International, Sandersville Plant 2.  
IMERYYS Deepstep Road Plant.

## 4. Facility Location

4062 Deepstep Road, Sandersville, Georgia 31082 (Washington County)

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

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

**B. Site Determination**

There are no other facilities which could possibly 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
3295-303-0008-V-03-0	May 30, 2013	Title V renewal.
Off-Permit Change	February 11, 2014	Construction and operation of a new bulk bagger (F4D).
Off-Permit Change	July 17, 2015	Construction and operation of a new talc unloading system.

## D. Process Description

### 1. SIC Codes(s)

3295.

### 2. Description of Product(s)

Kaolin powder and slurry.

### 3. Overall Facility Process Description

IMERYS Clays, Inc. - Deepstep Road Plant is a kaolin clay beneficiation facility including crude storage/handling, blunging/slurrying, degritting, thickening/select flocculation, ozonation, magnetic separation, slurry grinding, classification, leaching, leaching, filtration, blending, drying, final product conveying and storage, bagging activities and bulk product loading, and ancillary support activities (maintenance, chemicals handling/storage).

### 4. Overall Process Flow Diagram

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

## E. Regulatory Status

### 1. PSD/NSR

IMERYS Clays, Inc. - Deepstep Road Plant is classified as a major stationary source as defined by the federal *Prevention of Significant Air Quality Deterioration (PSD)* regulation, 40 CFR 52.21. Specifically, it has the potential to emit more than 250 tons per year of particulate matter and PM<sub>10</sub> (particulate matter less than or equal to 10 micrometers aerodynamic diameter). Also, the facility's GHG emissions (CO<sub>2</sub>, CH<sub>4</sub> and N<sub>2</sub>O) exceeds 100,000 tons per year.

### 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 <sub>10</sub>	✓	✓		
PM <sub>2.5</sub>	✓	✓		
SO <sub>2</sub>	✓	✓		
VOC	✓			✓
NO <sub>x</sub>	✓	✓		
CO	✓			

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
TRS				
H <sub>2</sub> S				
Individual HAP	✓			✓
Total HAPs	✓			✓

### 3. MACT Standards

This facility is an “area source” for hazardous air pollutants (HAPs) emissions. Therefore, the two existing dual-fuel (natural gas and fuel oil) boilers are subject to NESHAP 40 CFR Part 63, Subpart JJJJJ – *National Emission Standards for Hazardous Air Pollutants for Area Sources: Industrial, Commercial, and Institutional Boilers*.

### 4. Program Applicability (AIRS Program Codes)

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

## Regulatory Analysis

### II. Facility Wide Requirements

#### A. Emission and Operating Caps:

None applicable.

#### B. Applicable Rules and Regulations

Facility-wide air quality applicable rules include the general requirements of 40 CFR 60, *New Source Performance Standards* (NSPS) and 40 CFR 63 *National Emission Standards for Hazardous Air Pollutants for Source Categories*. This is in addition to the general provisions of Georgia Rule 391-3-1-.02(2)(a) which are cited, primarily, in Section VIII of the enclosed permit.

#### C. Compliance Status

Title V renewal Application No. TV-68097 does not indicate that the facility is operating out of compliance with the rules and regulations.

## D. Permit Conditions

Conditions 2.2.1 & 2.2.2 refer to the applicable NSPS and NESHAP general provisions.

## III. Regulated Equipment Requirements

## A. Equipment List for the Process

Emission Units		Specific Limitations/Requirements		Air Pollution Control Devices	
ID No.	Description	Applicable Requirements/Standards	Corresponding Permit Conditions	ID No.	Description
BL4	Boiler No. 4	40 CFR 63 Subpart JJJJJJ 391-3-1-.02(2)(b) 391-3-1-.02(2)(d)	3.3.2 3.4.1 3.4.2	None	
BL5	Boiler No. 5		3.2.1, 3.2.2, 3.3.3, 3.3.4 5.2.11, 6.1.7, 6.2.3 6.2.4, 6.2.5, 6.2.6, 6.2.7	None	
D1	Spray Dryer No. 1	291-3-1-.02(2)(b) 391-3-1-.02(2)(p) 40 CFR 64	3.4.1	D1C	Baghouse
D2	Spray Dryer No. 2		3.4.3	D2C	Baghouse
D3	Spray Dryer No. 3		5.2.8, 5.2.9, 5.2.10 3.2.1, 3.2.2, 5.2.1, 5.2.2	D3C	Baghouse
D4	Spray Dryer No. 4		5.2.3, 5.2.7, 6.1.7, 6.2.3 6.2.4	D4C	Baghouse
D5	Apron Dryer	391-3-1-.02(2)(b) 391-3-1-.02(2)(p)	3.4.1 3.4.3 3.2.1, 3.2.2, 5.2.4, 5.2.7 6.1.7, 6.2.3, 6.2.4	None	
F1	Spray Dryer No. 1 Bulk Railcar Loading	391-3-1-.02(2)(b) 391-3-1-.02(2)(p) 40 CFR 64	3.4.1 3.4.3 5.2.8, 5.2.9, 5.2.10 5.2.2, 5.2.3, 6.1.7	F1C	Baghouse
F2	Spray Dryer No. 2 Bulk Railcar Loading			F2C	Baghouse
F3	Spray Dryer No. 3 Bulk Railcar Loading			F3C	Baghouse
F4	Spray Dryer No. 4 Bulk Railcar Loading			F4C	Baghouse
F4B	Spray Dryer No. 4 Bagging Machine			F4C	Baghouse
F5	Apron Dryer Bulk Railcar Loading	40 CFR 60 Subpart OOO 391-3-1-.02(2)(b) 391-3-1-.02(2)(p)	3.3.1(a) 3.4.1 3.4.3 5.2.2, 5.2.3, 6.1.7 6.2.1, 6.2.2	F5C	Baghouse
F5B	Apron Dryer Big (IBC) Bagger	40 CFR 60 Subpart OOO 391-3-1-.02(2)(b) 391-3-1-.02(2)(p)	3.3.1(a) 3.4.1 3.4.3 5.2.2, 5.2.3, 6.1.7 6.2.1, 6.2.2	F5C	Baghouse
F4D	Spray Dryer No. 4 Bulk Bagger	40 CFR 60 Subpart OOO 391-3-1-.02(2)(b) 391-3-1-.02(2)(p)	3.3.1(b) 3.4.1 3.4.3 4.2.2, 5.2.2, 5.2.3, 5.2.5 5.2.6, 6.1.7, 6.2.1, 6.2.2	F4C	Baghouse

Emission Units		Specific Limitations/Requirements		Air Pollution Control Devices	
ID No.	Description	Applicable Requirements/Standards	Corresponding Permit Conditions	ID No.	Description
S1	Soda Ash Make-down Tank	391-3-1-.02(2)(b) 391-3-1-.02(2)(e)	3.4.1 8.21.1	S1C	Scrubber
S01	50 ton Talc Storage Silo	391-3-1-.02(2)(b) 391-3-1-.02(2)(e)	3.4.1	BH1	Baghouse
MD1	Make Down Tank		8.21.1 6.1.7		
B2	Make Down Surge Bin	40 CFR 60 Subpart OOO 391-3-1-.02(2)(b) 391-3-1-.02(2)(e)	3.3.1(b)	BH1	Baghouse
B2	Make Down Surge Bin		3.4.1		
B3	Talc Bag Unloading System and Surge Bin		8.21.1 5.2.5, 5.2.6, 6.1.7 6.2.1, 6.2.2		

## B. Equipment & Rule Applicability

### Emission and Operating Caps:

The sulfur content of fuel oil fired in all fuel burning sources is limited to sources to no more than 0.5 percent sulfur by weight. Sulfur dioxide emissions are limited amounts not equal or exceed 250 tons during any twelve consecutive month period.

### Rules and Regulations Assessment:

Most of the emission units in this plant are subject to Georgia Air Quality Control Rules 391-3-1-.02(2)(b), *Visible Emissions*, and 391-3-1-.02(2)(p), *Particulate Emissions from Kaolin and Fuller's Earth Processes*. The Apron Dryer Big Bagger (F5B) is subject to the, pre-April 22, 2008, 40 CFR 60 Subpart OOO, *Standards of Performance for Nonmetallic Mineral Processing Plants*. Emission units burning fuel are subject to Georgia Rules 391-3-1-.02(2)(g), *Sulfur dioxide* and 391-3-1-.02(2)(d) - *"Fuel Burning Equipment."*

This facility is an "area source" for HAPs because it has a potential to emit less than 10 tons per year of any single HAP and less than 25 tons per year of combined HAPs. The facility's two have heat input capacity greater than 10 MMBtu/hr each and were built before June 4, 2010. Said boilers burn fuel oil regularly and are all considered as "existing sources" subject to 40 CFR 63 Subpart JJJJJ – *"National Emissions Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Area Sources."*

## C. Permit Conditions

Most of the conditions of existing Title V permit No. 3295-303-0008-V-03-0, are being carried over in the enclosed permit and some have been renumbered or better worded. Prominent changes that have been made the existing permit conditions are summarized in the following Table:

New Condition No.	Comments
Section 2	Conditions 2.2.1 & 2.2.2 address the applicability of the <i>General Provisions</i> of the federal <i>New Source Performance Standards</i> (NSPS) and the <i>General Provisions</i> of 40 CFR 63, <i>National Emission Standards for Hazardous Air Pollutants</i> (NESHAP).
Section 3.1 <i>Emission Units</i> Table 3.1	Table 3.1 was updated to reflect current applicable rules. Per the company's request in the write up submitted with Application No. TV-68097, Boiler No. 3 (BL3) has been removed from the permit because it was physically removed from the facility.
Section 3.2	Current permit Condition 2.4.1 has been better worded and renumbered as Conditions 3.2.1. Condition 3.2.2, imposing a 0.5% sulfur content limit on fuels burned at the facility, has been added according to the company's request and, therefore, the old Condition 3.4.3 (relating to Rule (g) 2.5% sulfur limit) has been removed (the only fuels used by the plant are distillate oil, LPG and natural gas).
Section 3.3	Condition 3.3.1 reflects current 40 CFR 60 Subpart OOO wording. The Apron Dryer Bulk Railcar Loading (F5) and the Apron Dryer Big Bagger (F5B) are the only pieces of equipment that is subject to the pre-April 22, 2008, 40 CFR 60 Subpart OOO. All other equipment that is subject to Subpart OOO falls under the after April 22, 2008 provisions thereof. Condition 3.3.2 has been better worded and expired dates have been removed.
Section 3.4	Conditions have been better worded and renumbered.
Section 3.5	Has been revised and Condition 3.5.3 has been added.
Sections 4.1	4.1.3(e) has been rewritten and 4.1.3(h) has been added to grant IMERYYS' request that PM testing condition be consistent with conditions approved in the draft Imerys Sandersville Calcine Plant renewal permit 3295-303-0004-V-04-0.
Section 4.2	Condition 4.2.2 has been added to incorporate the new 40 CFR 60 Subpart OOO requirement mandating repeating performance tests within 5 years for specific affected facilities constructed, modified, or reconstructed on or after April 22, 2008.
Section 5.2	Conditions have been renumbered to match logical sequencing used in similar permits. Wording in current Condition 5.2.3 (now 5.2.1) has been changed to generically mention "baghouses that receive gases from sources that dry or calcine." To ensure compliance with Condition 3.2.2, existing Condition 5.2.4 (now 5.2.7) limits the sulfur content of distillate fuel oil burned in fuel burning sources in the facility to 0.5 percent or less, (use of ASTM D396 numbers 1 and 2 or ultra-low sulfur diesel (ULSD)). Conditions 5.2.5 & 5.2.6 have been inserted to incorporate new 40 CFR 60 Subpart OOO monitoring requirements for affected facilities constructed on or after April 22, 2008. Old Condition 5.2.4 (now 5.2.7), and 6.1.7(c)(vii), have been revised according to the company's request. Conditions 5.2.8 through 5.2.10 address Compliance Assurance Monitoring (CAM) and per the company's request CAM applicability has been removed from, the NSPS 40 CFR Subpart OOO, Apron Dryer Bulk Railcar Loading (F5) and Apron Dryer Big (IBC) Bagger (F5B). However, the company's request to remove CAM applicability for the Spray Dryers Bulk Railcar Loadings, citing better emission estimation than limits allowed by Georgia Rule 391-3-1-.02(2)(p)1, has not been granted. Condition 5.2.11 deals with the applicable requirements of 40 CFR 63 Subpart JJJJJ (the phrase amended on February 1, 2013 has been removed). Also, existing Conditions 5.2.10 & 5.2.11 dealing with performing 40 CFR 63 Subpart JJJJJ initial performance tune-up and one-time energy assessment have been removed.
Section 6.1	Condition 6.1.7 has updated and been better worded.
Section 6.2	Condition 6.2.3 (now 6.2.4) has been rewritten (and combined with current Condition 6.2.5) to remove unnecessary equations and grant the company's request

	to remove inconsistent and unnecessary reporting requirements. 40 CFR 63 Subpart JJJJJ notifications have been better worded. Also, satisfied 40 CFR 63 Subpart JJJJJ conditions relating to initial notification and notification of compliance status have been removed.
Section 7.1	No changes.

#### **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**

Condition 4.2.1 addresses potential 40 CFR 60 Subpart OOO testing requirements. Condition 4.2.2 addresses repeating Subpart OOO performance tests within 5 years, for fugitive emissions from affected facilities without water sprays (This applies only to equipment that commence construction, modification, or reconstruction on or after April 22, 2008).

#### **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 addresses continuous temperature monitoring on the inlet of the baghouses that receive gases from sources that dry or calcine). Conditions 5.2.2 and 5.2.3 address baghouses visible emissions monitoring. Condition 5.2.4 deals with monitoring emission units with no air pollution control devices. Conditions 5.2.5 and 5.2.6 address 40 CFR 60 Subpart OOO additional monitoring for affected facilities constructed, modified or reconstructed on or after April 22, 2008.



### C. Compliance Assurance Monitoring (CAM)

Under 40 CFR 64, the Compliance Assurance Monitoring Regulations (CAM), facilities are required to prepare and submit monitoring plans for certain emission units with the Title V application. 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. The enclosed permit carries over existing CAM conditions.

## 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.

Template Conditions 6.1.3 and 6.1.4 were updated in September 2011 to allow 60 days to submit periodic reports. Alternative reporting deadlines are allowed per 40 CFR 70.6, 40 CFR 60.19(f) and 40 CFR 63.10(a).

### B. Specific Record Keeping and Reporting Requirements

Conditions have been carried over from Air Quality Permit No. 3295-303-0008-V-03-0 and revised and updated to include the current requirements of 40 CFR 60 Subpart OOO.

## VII. Specific Requirements

### A. Operational Flexibility

Conditions 7.1.1 and 7.1.2 contain general operational flexibility provisions.

### B. Alternative Requirements

None applicable.

### C. Insignificant Activities

None applicable.

### 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.//