

Facility Name: **Thiele Kaolin Company, Sandersville Plant**

City: Sandersville

County: Washington

AIRS #: 04-13-303-00006

Application #: 658337

Date SIP Application Received: May 24, 2022

Date Title V Application Received: May 24, 2022

Permit No: 3295-303-0006-V-04-1

Program	Review Engineers	Review Managers
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Introduction

This narrative is being provided to assist the reader in understanding the content of the referenced SIP permit to construct and draft operating permit amendment. 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 issued pursuant to: (1) Sections 391-3-1-.03(1) and 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 following narrative is designed to accompany the draft permit and is presented in the same general order as the permit. 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 comment period and EPA review process will be described in an addendum to this narrative.

I. Facility Description**A. Existing Permits**

Table 1 below lists the current Title V permit, and all administrative amendments, minor and significant modifications to that permit, and 502(b)(10) attachments.

Table 1: Current Title V Permit and Amendments

Permit/Amendment Number	Date of Issuance	Description
3295-303-0006-V-04-0	April 30, 2018	Title V renewal.

B. Regulatory Status**1. PSD/NSR/RACT**

Thiele Kaolin Company, Sandersville Plant is a major source under PSD/NSR regulations for particulate matter (PM), particulate matter less than 10 microns (PM₁₀), and sulfur dioxide (SO₂). Thiele Sandersville is subject to, PM₁₀ and SO₂ limits set in order to assure significant deterioration does not occur in accordance with 40 CFR Part 52.21, *Prevention of Significant Deterioration of Air Quality*.

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 ₂ S				✓
Individual HAP	✓			✓
Total HAPs	✓			✓

II. Proposed Modification

A. Description of Modification

Thiele Kaolin Company purchased No. 3 Calciner (C3) and its associated equipment, from its neighbor IMERYS - SANDERSVILLE CALCINE PLANT, and submitted Application No. 658337 to request adding said equipment to its Title V permit. The equipment was owned by IMERYS Clays, Inc. (IMERYS) and operated under air quality permit No. 3295-303-0004-V-04-0 issued on March 15, 2018. There will be no changes to equipment, process, or emissions as a part of this ownership change.

B. Emissions Change

Table 3: Emissions Change Due to Modification

Pollutant	Is the Pollutant Emitted?	Net Actual Emissions Increase (tpy)	Net Potential Emissions Increase (tpy)
PM	Yes	<21.76	21.76
PM ₁₀	Yes	<21.76	21.76
PM _{2.5}	Yes	<21.76	21.76
SO ₂	Yes	<45.40	45.40
VOC	Yes	<0.96	0.96
NO _x	Yes	<12.85	12.85
CO	Yes	<7.25	7.25
TRS	No	N/A	N/A
H ₂ S	No	N/A	N/A
Individual HAP	Yes	<0.15	0.15
Total HAPs	Yes	<0.16	0.16

C. PSD/NSR Applicability

Calciner No. 3 (C3) and its associated equipment are not new sources or undergoing a modification at this time. 40 CFR 52.21(b)(2)(iii)(g) states that a “*physical change or change in the method of operation shall not include... (g) [a]ny change in ownership at a stationary source.*”

(iii) A physical change or change in the method of operation shall not include:

(g) Any change in ownership at a stationary source.

Therefore, ownership changes without physical changes or changes in method of operation, are not considered major modifications. However, any future modification(s) resulting in a significant net increase of any regulated NSR pollutant at Thiele Kaolin Company Sandersville Plant will trigger a PSD review.

III. Facility Wide Requirements**A. Emission and Operating Caps:**

None applicable.

B. Applicable Rules and Regulations

Rules and Regulations Assessment – None associated with the enclosed permit amendment.

Emission and Operating Standards – None associated with the enclosed permit amendment.

C. Compliance Status

The facility did not indicate any non-compliance issues.

D. Permit Conditions

No facility wide requirements are associated with the enclosed permit amendment.

IV. Regulated Equipment Requirements**A. Brief Process Description**

Calciner No. 3 engages in milling, calcining of spray-dried kaolin; final product conveying, storage and bulk loading; as well as ancillary support activities.

B. Equipment List for the Process

Emission Units		Applicable Requirements/Standards	Air Pollution Control Devices	
ID No.	Description		ID No.	Description
M11	Bauer Premill Nos. 11, 12	40 CFR Subpart OOO 391-3-1-.02(2)(b) 391-3-1-.02(2)(p) 391-3-1-.02(1)(c)	M11C/M12C	Baghouse
M14	Bauer Postmill Nos. 14, 15, 16	40 CFR Subpart OOO 391-3-1-.02(2)(b) 391-3-1-.02(2)(p) 391-3-1-.02(1)(c)	M14C	Baghouse
H3	Calciner No. 3 Horizontal Mill	40 CFR Subpart OOO 391-3-1-.02(2)(b) 391-3-1-.02(2)(p) 391-3-1-.02(1)(c)	H3C	Baghouse
C3	Calciner No. 3	391-3-1-.02(2)(b) 391-3-1-.02(2)(p) 391-3-1-.02(1)(c)	C3C	Scrubber
K3	Calciner No. 3 Cooler/Conveyor	40 CFR Subpart OOO 391-3-1-.02(2)(b) 391-3-1-.02(2)(p) 391-3-1-.02(1)(c)	K3C	Baghouse
R26	Bulk Loading from Silo 26	391-3-1-.02(2)(b) 391-3-1-.02(2)(p) 391-3-1-.02(1)(c)	R26C	Baghouse

TITLE V SIGNIFICANT MODIFICATION (WITHOUT CONSTRUCTION) APPLICATION REVIEW

Emission Units		Applicable Requirements/Standards	Air Pollution Control Devices	
ID No.	Description		ID No.	Description
V22	Silo No. 22	391-3-1-.02(2)(b) 391-3-1-.02(2)(p) 391-3-1-.02(1)(c)	V22C	Bin Vent
V26	Silo No. 26	391-3-1-.02(2)(b) 391-3-1-.02(2)(p) 391-3-1-.02(1)(c)	V26C	Bin Vent

C. Equipment & Rule Applicability

Emission and Operating Caps –

Existing limitations are being carried over in the enclosed permit amendment. Namely, the Permittee shall burn only natural gas, propane, or No. 2 fuel oil in Calciner No. 3 (C3) and the sulfur content of the No. 2 fuel oil shall not exceed 0.5 weight percent. Also, there are PSD increment limits on PM10 (particulate matter less than or equal to 10 micrometers aerodynamic diameter). Those limits were decided based on 40 CFR Part 52.21 *Prevention of Significant Deterioration of Air Quality*.

Applicable Rules and Regulations -

Emission and Operating Standards: – Calciner No. 3 (C3) is not subject to 40 CFR 60 Subpart UUU – *Calciners and Dryers in Mineral Industries*, because it was constructed before its applicability date, of April 23, 1986, and has not been modified. However, some of the equipment associated with Calciner No. 3 (C3) is subject to 40 CFR 60 Subpart OOO – *Nonmetallic Mineral Processing Plants*.

D. Permit Conditions

Conditions 3.2.11 and 3.2.12 are carry over of existing limitations from air quality permit No. 3295-303-0004-V-04-0 issued to IMERYS Sandersville Calcine Plant (Namely, Conditions 3.2.3 and 3.2.4). No Condition has been added to cover 40 CFR 60 Subpart OOO – *Nonmetallic Mineral Processing Plants*, applicability because existing Condition 3.3.1 addressed that.

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

None applicable.

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

Conditions 5.2.12 & 6.1.8 (were obtained from Conditions 5.2.1 & 6.1.7 of IMERYS Sandersville Calcine Plant permit).

VII. Other Record Keeping and Reporting Requirements

Condition and 6.2.7, of Thiele Kaolin Company permit NO. 3295-303-0006-V-04-0, was rewritten to add No. 3 Calciner (C3).

VIII. Specific Requirements

A. Operational Flexibility

None applicable.

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/CAIR/CSPAR

None applicable.

I. Prevention of Accidental Releases

None applicable.

J. Stratospheric Ozone Protection Requirements

None applicable.

K. Pollution Prevention

None applicable.

L. Specific Conditions

None applicable.

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.//