Facility Name: KaMin - Macon Facility
City: Macon
County: Twiggs
AIRS #: 04-13-289-00001

Application #: TV-599943
Date Application Received: October 14, 2021
Permit No: 1455-289-0001-V-06-0

Program	Review Engineers	Review Managers
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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:

   KaMin - Macon Facility.

2. Parent/Holding Company Name

   KaMin, LLC.

3. Previous and/or Other Name(s)

   Huber Engineered Materials
   J.M. Huber Corporation

4. Facility Location

   822 Huber Road
   Macon, Georgia 31217

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

   The facility is located in attainment area.

B. Site Determination

There are no other manufacturing 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
1455-289-0001-V-05-0	June 15, 2017	Title V renewal.
Off Permit Change	July 18, 2017	App No. 26132 – Change the style of grinder used for the Post Mills (S-771, S-772, S-773, and S-774).
Off Permit Change	November 30, 2017	App No. 26309 – Run a trial replacing sodium polyacrylate dispersant with an ammonium polyacrylate materials and replacing soda ash with a 19% aqueous ammonia solution.
Off Permit Change	September 27, 2018	App No. 26698 – Run a second trial like that of App No. 26309.

Off Permit Change	April 26, 2019	App No. 27047 – Replace baghouses for S-704, S-713 and S-717 with same type as the existing units.
Off Permit Change	May 13, 2019	App No. 27083/27084 – Replace an existing motor starter with a starter that has a VFD that controls the air for the Calcine Product dust collector for S-767.
Off Permit Change	March 5, 2021	App No. 27865 – Increase conveying rate to #7 bagger (S911) and vacuum pump air flow from 600 acfm to 2175 acfm

D. Process Description

1. SIC Codes(s)

Major - 1455.
Other - 3295.

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)

Inert nonmetallic minerals slurry, dry inert nonmetallic minerals beads, dry inert nonmetallic minerals powder, calcined treated clays, and printing ink clay.

3. Overall Facility Process Description

Mining: The plant operates two general mining operations, one in Twiggs County and the other is in Wilkinson County. Crude clay is mined and hauled by truck to a stationary blunger where it is turned into slurry and pumped approximately 6 miles to the Plant (23 miles in case of the Wilkinson County operation).

Washplant Operations: The slurry is centrifuged for particle sizing, grinded for delamination in attrition mills, ozonated for increased brightness, and magnetically-separated for ferrous material removal all to increased brightness. The slurry is rotary-vacuum filtered to dewater it into a "filter cake."

Spray Dryers: Two spray dryers, No. 2 (S-735) and No. 4 (S-689), are used to dry the dewaterd kaolin filter cake to approximately 1% moisture and store it in Silos. This product is either bagged, sold as bulk, or sent to Slurry Makedown.

Slurry Makedown: Some of this kaolin product is sold as a high percent solids slurry. To achieve this, the spray dried clay is mixed with "filter cake" and heavily agitated in a Makedown system and the product is either loaded into tanker trucks or tanker railcars for shipment to the customer.

Impact Mill: Impact Mill (S-645) is used to fine grind water washed clays after spray drying.

Calciner: A portion of spray dried clay requires calcining in the only Calciner (S-760). Calcining drives off chemically bonded water and changes the physical structure by exposing the clay to temperatures of 2000 degree F approximately.

Ink Clay: This is a small mini-plant consisting of a hot Water Heater (S-850), mixing tank, centrifuge, Furnace (S-629), Cyclone (S-630), Baghouse (S-631) and rejects Baghouse (S-779). This is a specialty clay product manufactured for the printing industry.

Calcined Treated Clays: This is a small mini-plant consisting of a turbulizer and disintegrator for applying and mixing surfactants with calcined clays.

Bagging and Truck Loading: There are several baggers and silo loading is done through filling bulk rail cars.

On-Site Electrical Generation: There is an emergency diesel generator at the Twiggs County Degritting plant. Note that the facility has removed Generator # 1(S695) and Generator # 2 (S-695), and thus have been removed from this permit renewal.

Miscellaneous: In addition to the material processing equipment, the facility has several small fuel oil tanks and gasoline tanks as well as multiple insignificant propane-fired heaters. Several mixers and slicers for material processing as well as additive storage tanks are also on site.

4. Overall Process Flow Diagram

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

E. Regulatory Status

1. PSD/NSR

KaMin - Macon Facility took limits which made it classified as a non-major source for PSD. The facility is located in Twiggs County which is designated as an attainment area for all criteria pollutants.

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	✓	✓		

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

3. MACT Standards

The facility was potentially a "major" source for the individual HAP methanol, but limits were taken on individual and total HAP emissions, to remain a "minor" source and avoid MACT standards applicability in the previous Title V permits. However, Title V renewal Application No. 41004 indicated that individual and total HAPs are less than 10/25 tpy, but condition to limit HAPs to less than10/25 tpy will remain in the renewal permit.

The facility's generators [(Generator # 1 and #2) (S695 and S696)], and Twiggs County Degritter, are subjected to 40 CFR 63 Subpart ZZZZ, *NESHAP for Stationary Reciprocating Internal Combustion Engines*.

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:

Conditions 2.1.1 and 2.1.2 limit the emissions of VOC, NOx and SO_2 to less than 250 tpy, to avoid 40 CFR 52.21 and individual and total HAPs to less than 10/25 tpy, to remain a minor source. Thus, the facility will be a minor source for HAPs.

B. Applicable Rules and Regulations

Conditions 2.2.1 and 2.2.2 address facility-wide federal rule standards potentially applicable which are the general provisions of 40 CFR 60, *New Source Performance Standards* (NSPS), and the general provisions of 40 CFR 63, *National Emission Standards for Hazardous Air Pollutants* (NESHAP).

C. Compliance Status

Title V permit Application No. 599943 does not indicate that any emission unit or group in the facility is operating out of compliance with any of the applicable rules or regulations.

D. Permit Conditions

No facility-wide conditions are included in the permit other than NSPS and NESHAP general requirements and the general provisions in Section VIII.

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
S-621	Boiler #1 (29 MMBtu/hr, natural gas/#2 Fuel oil fired)	391-3-1-.02(2)(b) 391-3-1-.02(2)(d) 391-3-1-.02(2)(g) 40 CFR 63 JJJJJJ Avoidance	None	None
AST-1	No. 2 Diesel Storage	391-3-1-.02(2)(b)	None	None
S-627	#5 Raymond Mill	391-3-1-.02(2)(p)2 391-3-1-.02(2)(b) 391-3-1-.02(2)(e) 40 CFR 64 40 CFR 52.21 Avoidance	S-630 S-631	Cyclone Baghouse
S-754	Bauer Grinder (Ink Clay)	391-3-1-.02(2)(p)1 391-3-1-.02(2)(b) 391-3-1-.02(2)(e)	S-779	Bag Filter Receiver
S-645	Impact Mill	391-3-1-.02(2)(p)1 391-3-1-.02(2)(b) 391-3-1-.02(2)(e) 40 CFR 52.21 Avoidance	S-649	Baghouse

Emission Units		Applicable Requirements/Standards	Air Pollution Control Devices	
ID No.	Description		ID No.	Description
S-730	#2 Spray Dryer	391-3-1-.02(2)(p)1 391-3-1-.02(2)(b) 391-3-1-.02(2)(g) 391-3-1-.02(2)(e) 40 CFR 64 40 CFR 52.21 Avoidance	S-735 S-736	Baghouse Scrubber
S-687	#4 Spray Dryer	391-3-1-.02(2)(p)1 391-3-1-.02(2)(b) 391-3-1-.02(2)(g) 40 CFR 64 391-3-1-.02(2)(e) 40 CFR 64 40 CFR 60 Subpart UUU	S-689	Baghouse
S-760	Calciner #1	391-3-1-.02(2)(p)1 391-3-1-.02(2)(b) 391-3-1-.02(2)(g) 391-3-1-.02(2)(e) 40 CFR 64 40 CFR 52.21 Avoidance	S-764 S-767	Baghouse
S-605	Soda Ash Bin	391-3-1-.02(2)(p)1 391-3-1-.02(2)(b) 391-3-1-.02(2)(e) 40 CFR 60 Subpart OOO	S-607	Bin Vent
S-628	One-ton Bagger #12	391-3-1-.02(2)(p)1 391-3-1-.02(2)(b) 391-3-1-.02(2)(e) 40 CFR 60 Subpart OOO	S-779	Bag Filter Receiver
S-626	50# Vacuum Packer #11	391-3-1-.02(2)(p)1 391-3-1-.02(2)(b) 391-3-1-.02(2)(e) 40 CFR 60 Subpart OOO	S-779	Bag Filter Receiver
S-910	Pneumatic Conveying System from Silos 6, 7, 8, 11	391-3-1-.02(2)(p)1 391-3-1-.02(2)(b) 40 CFR 64 391-3-1-.02(2)(e) 40 CFR 52.21 Avoidance	S-648	Bag Filter Receiver
S-805	Bagger #2	391-3-1-.02(2)(p)1 391-3-1-.02(2)(b) 40 CFR 64 391-3-1-.02(2)(e) 40 CFR 52.21 Avoidance	S-806	Bin Vent
S-804	Bagger #2 Bin	391-3-1-.02(2)(p)1 391-3-1-.02(2)(b) 40 CFR 64 391-3-1-.02(2)(e) 40 CFR 52.21 Avoidance	S-806	Bin Vent
S-810	Bagger #4	391-3-1-.02(2)(p)1 391-3-1-.02(2)(b) 40 CFR 64 391-3-1-.02(2)(e) 40 CFR 52.21 Avoidance	S-812	Bin Vent
S-811	Bagger #4 Bin	391-3-1-.02(2)(p)1 391-3-1-.02(2)(b) 40 CFR 64 391-3-1-.02(2)(e) 40 CFR 52.21 Avoidance	S-812	Bin Vent

Emission Units		Applicable Requirements/Standards	Air Pollution Control Devices	
ID No.	Description		ID No.	Description
S-639	Impact Mill Loadout Bin	391-3-1-.02(2)(p)1 391-3-1-.02(2)(b) 40 CFR 64 391-3-1-.02(2)(e) 40 CFR 52.21 Avoidance	S-640	Bin Vent
S-656	One-ton Bagger #6	391-3-1-.02(2)(p)1 391-3-1-.02(2)(b) 391-3-1-.02(2)(e) 40 CFR 60 Subpart OOO	S-658	Bin Vent
S-657	One-ton Bagger #6 Bin	391-3-1-.02(2)(p)1 391-3-1-.02(2)(b) 391-3-1-.02(2)(e) 40 CFR 60 Subpart OOO	S-658	Bin Vent
S-635	Bin #1	391-3-1-.02(2)(p)1 391-3-1-.02(2)(b) 391-3-1-.02(2)(e) 40 CFR 52.21 Avoidance	S-636	Bin Vent
S-661	Silo #5	40 CFR 52.21 Avoidance 391-3-1-.02(2)(p)1 391-3-1-.02(2)(b) 391-3-1-.02(2)(e) 40 CFR 52.21 Avoidance	S-662	Bin Vent
S-664	Silo #6	391-3-1-.02(2)(p)1 391-3-1-.02(2)(b) 391-3-1-.02(2)(e) 40 CFR 52.21 Avoidance	S-665	Bin Vent
S-667	Silo #7	391-3-1-.02(2)(p)1 391-3-1-.02(2)(b) 391-3-1-.02(2)(e) 40 CFR 52.21 Avoidance	S-668	Bin Vent
S-670	Silo #8	391-3-1-.02(2)(p)1 391-3-1-.02(2)(b) 391-3-1-.02(2)(e) 40 CFR 52.21 Avoidance	S-671	Bin Vent
S-673	Silo #9	391-3-1-.02(2)(p)1 391-3-1-.02(2)(b) 391-3-1-.02(2)(e) 40 CFR 52.21 Avoidance	S-674	Bin Vent
S-676	Silo #10	391-3-1-.02(2)(p)1 391-3-1-.02(2)(b) 391-3-1-.02(2)(e) 40 CFR 52.21 Avoidance	S-677	Bin Vent
S-679	Silo #11	391-3-1-.02(2)(p)1 391-3-1-.02(2)(b) 391-3-1-.02(2)(e) 40 CFR 52.21 Avoidance	S-680	Bin Vent
S-813	Slurry Makedown Bin #1	391-3-1-.02(2)(p)1 391-3-1-.02(2)(b) 40 CFR 64 391-3-1-.02(2)(e) 40 CFR 52.21 Avoidance	S-815	Baghouse
S-814	Slurry Makedown Bin #2	391-3-1-.02(2)(p)1 391-3-1-.02(2)(b) 40 CFR 64 391-3-1-.02(2)(e) 40 CFR 52.21 Avoidance	S-815	Baghouse

Emission Units		Applicable Requirements/Standards	Air Pollution Control Devices	
ID No.	Description		ID No.	Description
S-918	Slurry Makedown Bin #4	391-3-1-.02(2)(p)1 391-3-1-.02(2)(b) 40 CFR 64 391-3-1-.02(2)(e) 40 CFR 52.21 Avoidance	S-819	Baghouse
S-732	#2 Spray Dryer Conveyor Belt	391-3-1-.02(2)(p)1 391-3-1-.02(2)(b) 40 CFR 64 391-3-1-.02(2)(e) 40 CFR 52.21 Avoidance	S-734	Baghouse
S-733	#2 Spray Dryer Bucket Elevator	391-3-1-.02(2)(p)1 391-3-1-.02(2)(b) 391-3-1-.02(2)(e) 40 CFR 52.21 Avoidance	S-674	Bin Vent
S-691	#4 Spray Dryer Bucket Elevator	391-3-1-.02(2)(p)1 391-3-1-.02(2)(b) 391-3-1-.02(2)(e) 40 CFR 60 Subpart OOO		
S-693	#4 Spray Dryer Railcar Loadout Bin	391-3-1-.02(2)(p)1 391-3-1-.02(2)(b) 391-3-1-.02(2)(e) 40 CFR 60 Subpart OOO	S-692	Bin Vent
S-701	Silo #20	391-3-1-.02(2)(p)1 391-3-1-.02(2)(b) 40 CFR 64 391-3-1-.02(2)(e) 40 CFR 52.21 Avoidance	S-703	Baghouse
S-704	Silo #21	391-3-1-.02(2)(p)1 391-3-1-.02(2)(b) 40 CFR 64 391-3-1-.02(2)(e) 40 CFR 52.21 Avoidance	S-706	Baghouse
S-707	Silo #22	391-3-1-.02(2)(p)1 391-3-1-.02(2)(b) 40 CFR 64 391-3-1-.02(2)(e) 40 CFR 52.21 Avoidance	S-709	Baghouse
S-713	Silo #23	391-3-1-.02(2)(p)1 391-3-1-.02(2)(b) 40 CFR 64 391-3-1-.02(2)(e) 40 CFR 52.21 Avoidance	S-715	Baghouse
S-717	Silo #24	391-3-1-.02(2)(p)1 391-3-1-.02(2)(b) 40 CFR 64 391-3-1-.02(2)(e) 40 CFR 52.21 Avoidance	S-719	Baghouse
S-720	Silo #25	40 CFR 52.21 Avoidance 391-3-1-.02(2)(p)1 391-3-1-.02(2)(b) 40 CFR 64 391-3-1-.02(2)(e) 40 CFR 52.21 Avoidance	S-725	Baghouse
S-920	Silo #20 Railcar Loading Spout	391-3-1-.02(2)(p)1 391-3-1-.02(2)(b) 391-3-1-.02(2)(e) 40 CFR 52.21 Avoidance	S-725	Baghouse

Emission Units		Applicable Requirements/Standards	Air Pollution Control Devices	
ID No.	Description		ID No.	Description
S-921	Silo #21 Railcar Loading Spout	391-3-1-.02(2)(p)1 391-3-1-.02(2)(b) 391-3-1-.02(2)(e) 40 CFR 52.21 Avoidance	S-725	Baghouse
S-922	Silo #22 Railcar Loading Spout	391-3-1-.02(2)(p)1 391-3-1-.02(2)(b) 391-3-1-.02(2)(e) 40 CFR 52.21 Avoidance	S-725	Baghouse
S-923	Silo #23 Railcar Loading Spout	391-3-1-.02(2)(p)1 391-3-1-.02(2)(b) 391-3-1-.02(2)(e) 40 CFR 52.21 Avoidance	S-725	Baghouse
S-924	Silo #24 Railcar Loading Spout	391-3-1-.02(2)(p)1 391-3-1-.02(2)(b) 391-3-1-.02(2)(e) 40 CFR 52.21 Avoidance	S-725	Baghouse
S-925	Silo #25 Railcar Loading Spout	391-3-1-.02(2)(p)1 391-3-1-.02(2)(b) 391-3-1-.02(2)(e) 40 CFR 52.21 Avoidance	S-725	Baghouse
S-722	Silo #26	391-3-1-.02(2)(p)1 391-3-1-.02(2)(b) 391-3-1-.02(2)(e) 40 CFR 60 Subpart OOO	S-723	Bin Vent
S-861	Conveyor Belt to Bagger #10A	391-3-1-.02(2)(p)1 391-3-1-.02(2)(b) 391-3-1-.02(2)(e) 40 CFR 60 Subpart OOO	S-862	Baghouse
S-870	Conveyor Belt to Bagger #10B	391-3-1-.02(2)(p)1 391-3-1-.02(2)(b) 391-3-1-.02(2)(e) 40 CFR 60 Subpart OOO	S-866	Baghouse
S-881	One-ton Surge Bin #10A	391-3-1-.02(2)(p)1 391-3-1-.02(2)(b) 391-3-1-.02(2)(e) 40 CFR 60 Subpart OOO	S-880	Bin Vent
S-882	One-ton Surge Bin Bagger #10A	391-3-1-.02(2)(p)1 391-3-1-.02(2)(b) 391-3-1-.02(2)(e) 40 CFR 60 Subpart OOO	S-880	Bin Vent
S-886	One-ton Surge Bin #10B	391-3-1-.02(2)(p)1 391-3-1-.02(2)(b) 391-3-1-.02(2)(e) 40 CFR 60 Subpart OOO	S-885	Bin Vent
S-887	One-ton Surge Bin Bagger #10B	391-3-1-.02(2)(p)1 391-3-1-.02(2)(b) 391-3-1-.02(2)(e) 40 CFR 60 Subpart OOO	S-885	Bin Vent
S-750	Calciner Unground Feed Surge Bin	391-3-1-.02(2)(p)1 391-3-1-.02(2)(b) 391-3-1-.02(2)(e) 40 CFR 52.21 Avoidance	S-751	Baghouse
S-752	Calcine Pre-grinder #1	391-3-1-.02(2)(p)2 391-3-1-.02(2)(b) 40 CFR 64 391-3-1-.02(2)(e) 40 CFR 52.21 Avoidance	S-755	Bin Vent

Emission Units		Applicable Requirements/Standards	Air Pollution Control Devices	
ID No.	Description		ID No.	Description
S-753	Calcine Pre-grinder #2	391-3-1-.02(2)(p)1 391-3-1-.02(2)(b) 40 CFR 64 391-3-1-.02(2)(e) 40 CFR 52.21 Avoidance	S-755	Bin Vent
S-761	Calcine Pre-grinder #3	391-3-1-.02(2)(p)1 391-3-1-.02(2)(b) 40 CFR 64 391-3-1-.02(2)(e) 40 CFR 60 Subpart OOO	S-755	Bin Vent
S-757	Calcine Pre-grind Surge Bin	391-3-1-.02(2)(p)1 391-3-1-.02(2)(b) 40 CFR 64 391-3-1-.02(2)(e) 40 CFR 52.21 Avoidance	S-755	Bin Vent
S-758	Calcine Furnace Feed Bin	391-3-1-.02(2)(p)1 391-3-1-.02(2)(b) 391-3-1-.02(2)(e) 40 CFR 52.21 Avoidance	S-759	Baghouse
S-769	Calcine Product Surge Bin	391-3-1-.02(2)(p)1 391-3-1-.02(2)(b) 40 CFR 64 391-3-1-.02(2)(e) 40 CFR 52.21 Avoidance	S-770	Baghouse
S-771	Calcine Post-grinder #4	391-3-1-.02(2)(p)1 391-3-1-.02(2)(b) 40 CFR 64 391-3-1-.02(2)(e) 40 CFR 60 Subpart OOO	S-775	Baghouse
S-772	Calcine Post-grinder #5	391-3-1-.02(2)(p)1 391-3-1-.02(2)(b) 40 CFR 64 391-3-1-.02(2)(e) 40 CFR 60 Subpart OOO	S-775	Baghouse
S-773	Calcine Post-grinder #6	391-3-1-.02(2)(p)1 391-3-1-.02(2)(b) 40 CFR 64 391-3-1-.02(2)(e)	S-775	Baghouse
S-774	Calcine Post-grinder #7	391-3-1-.02(2)(p)1 391-3-1-.02(2)(b) 40 CFR 64 391-3-1-.02(2)(e) 40 CFR 60 Subpart OOO	S-775	Baghouse
S-781	Storage Silo A	40 CFR 52.21 Avoidance 391-3-1-.02(2)(p)1 391-3-1-.02(2)(b) 391-3-1-.02(2)(e) 40 CFR 52.21 Avoidance	S-782	Bin Vent
S-783	Storage Silo B	391-3-1-.02(2)(p)1 391-3-1-.02(2)(b) 391-3-1-.02(2)(e) 40 CFR 52.21 Avoidance	S-784	Bin Vent

Emission Units		Applicable Requirements/Standards	Air Pollution Control Devices	
ID No.	Description		ID No.	Description
S-785	Storage Silo C	391-3-1-.02(2)(p)1 391-3-1-.02(2)(b) 391-3-1-.02(2)(e) 40 CFR 52.21 Avoidance	S-786	Bin Vent
S-787	Storage Silo D	391-3-1-.02(2)(p)1 391-3-1-.02(2)(b) 391-3-1-.02(2)(e) 40 CFR 52.21 Avoidance	S-788	Bin Vent
S-790	Calcine One-ton Bagger Surge Bin	391-3-1-.02(2)(p)1 391-3-1-.02(2)(b) 40 CFR 64 391-3-1-.02(2)(e) 40 CFR 60 Subpart OOO	S-791	Baghouse
S-789	Calcine One-ton Bagger #7	391-3-1-.02(2)(p)1 391-3-1-.02(2)(b) 391-3-1-.02(2)(e) 40 CFR 60 Subpart OOO	S-911	Baghouse
S-792	Calcine One-ton Bagger #9	391-3-1-.02(2)(p)1 391-3-1-.02(2)(b) 391-3-1-.02(2)(e) 40 CFR 60 Subpart OOO	S-827	Baghouse
S-793	50# Bag Vacuum Packer #8	391-3-1-.02(2)(p)1 391-3-1-.02(2)(b) 391-3-1-.02(2)(e) 40 CFR 60 Subpart OOO	S-993	Bag Filter
S-795	Calcine Bagger (2 spout) #5	391-3-1-.02(2)(p)1 391-3-1-.02(2)(b) 391-3-1-.02(2)(e) 40 CFR 52.21 Avoidance	S-799	Baghouse
S-798	Calcine Bagger (2 spout) Feed Bin #5	391-3-1-.02(2)(p)1 391-3-1-.02(2)(b) 40 CFR 64 391-3-1-.02(2)(e) 40 CFR 52.21 Avoidance	S-796	Baghouse
S-950	Twiggs County (Degritting Plant) - Feed Hopper	391-3-1-.02(2)(p)1 391-3-1-.02(2)(b) 391-3-1-.02(2)(n) 391-3-1-.02(2)(e) 40 CFR 60 Subpart OOO	None	None
S-951	Twiggs County (Degritting Plant) - Belt Conveyor	391-3-1-.02(2)(p)1 391-3-1-.02(2)(b) 391-3-1-.02(2)(n) 391-3-1-.02(2)(e) 40 CFR 60 Subpart OOO	None	None
S-629	#5 Raymond Mill Furnace	391-3-1-.02(2)(b) 391-3-1-.02(2)(g)	None	None
None	Twiggs County Degritter (1005 hp compression ignition)	391-3-1-.02(2)(b) 391-3-1-.02(2)(g) 40 CFR 63 Subpart ZZZZ	None	None

B. Equipment & Rule Applicability

Emission and Operating Caps:
The limits in Section 3.2, of Title V permit No. 1455-289-0001-V-05-0, are being carried over in the enclosed Tilte V renewal permit. KaMin - Macon Facility had those limits placed to either avoid some of the requirements of 40 CFR 52.21, *Prevention of Significant Deterioration (PSD)*, or being

classified as a major source of HAPs under 40 CFR 63, *National Emission Standards for Hazardous Air Pollutants*.

Rules and Regulations Assessment:

In addition to the State rules, the most prominent of which are summed up in Section 3.4 of the enclosed permit, this kaolin processing plant is subject to 40 CFR 60 Subpart OOO, *Standards of Performance for Nonmetallic Mineral Processing Plants,* 40 CFR 60 Subpart UUU, *Standards of Performance for Calciners and Dryers in Mineral Industries* and 40 CFR 63 Subpart ZZZZ, *National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines*.

C. Permit Conditions

The conditions of Title V permit No. 1455-289-0001-V-05-0 were carried over to the enclosed permit (except satisfied testing Condition 4.2.3). Also, per the request of the Industrial Source Monitoring Unit, item (m) was added to Condition 4.2.1. Moreover, the following changes were requested by KaMin – Macon Facility in Title V Application TV-599943:

- Removing "kaolin" from the permit cover page citing that *"Under 40 CFR 60.671, the facility is allowed to process any inert nonmetallic mineral."* This request was granted.

- Changing Condition 3.2.1 to clarify that the PSD Avoidance is for PM10 emissions. This request is reasonable because it is consistent with the guidance, in EPA's October 16, 1995 memorandum titled *Definition of Regulated Pollutant for Particulate Matter for Purposes of Title V,* which says "[t]*he Federal minimum for applicability of title V to sources of particulate matter should be based on the amount of emissions of PM-10, not particulate matter, that the source has the potential to emit."*

- Adding the following sources to CAM Conditions 5.2.9 & 5.2.11 stating that "*KaMin reevaluated the CAM applicability for emission units at the facility to account for updates to process throughputs and control equipment for the previous Title V renewal. As part of the reevaluation, a total of seven (7) pollutant specific emission units (PSEU) listed below are now subject to the CAM Rule in 40 CFR 64 because their pre-controlled emission levels can exceed the major source thresholds*." I mentioned to the company that CAM does not typically apply to conveyer belts and had the company the check and reaffirm exit gas flow rates of Conveyor Belts 10A & 10B.

Emission Unit	**Pollutant**
Conveyor Belt 10A (S-861)	Particulate matter
Conveyor Belt 10B (S-870)	Particulate matter
Silo #20 (S-701)	Particulate matter
Silo #21 (S-704)	Particulate matter
Silo #22 (S-707)	Particulate matter
Silo #23 (S-713)	Particulate matter
Silo #24 (S-717)	Particulate matter
Silo #25 (S-720)	Particulate matter

- Removing Condition 6.1.7(b)(vi) citing: *"Generator #1 and Generator #2 were removed in the previous Title V Permit 1455-289-0001-V-04 and have not been at the facility for a long time."* This request was granted.

- Changing "quarterly" to "semiannual" in Conditions 6.1.4, 6.1.7(d)(i) and 6.2.4(b). This request is reasonable because Condition 5.2.1 requires Continuous Opacity Monitoring System (COMS) (not a Continuous Emissions Monitoring Systems (CEMS), which requires quarterly reporting).

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

Required initial performance tests have been completed. However, the enclosed permit allows certain changes to be made to the facility without permit revision. These changes may include installing new equipment and replacing existing equipment and Condition 4.2.1 is meant to require initial performance test be performed in accordance with 40 CFR 60.8 and 63.7 and the applicable NSPS or NESHAP Subpart.

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

No new monitoring conditions are being added in the enclosed Title V Renewal Permit.

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.

No new CAM requirements have been specified in this Permit renewal (The CAM conditions of permit No. 1455-289-0001-V-05-0 have been carried over). Also, per KaMin reevaluation seven pollutant specific emission units were added to the CAM applicability list.

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

None is being added to in the enclosed Title V Renewal Permit.

VII. Specific Requirements

A. Operational Flexibility

See Condition 7.1.2.

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 associated with the enclosed permit.

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.//