

TITLE V APPLICATION REVIEW

Facility Name: Thiele Kaolin Company, Sandersville Plant

City: Sandersville

County: Washington

AIRS #: 04-13-303-00006

Application #: TV- 9274

Date Application Received: October 22, 1996

Date Application Deemed Administratively Complete: April 22, 1997

Date of Draft Permit: _____

Permit No: 3259-303-0006-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 **Thiele Kaolin Company, Sandersville 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: Thiele Kaolin Company, Sandersville Plant
2. Parent/Holding Company Name: Thiele Kaolin Company
3. Previous and/or Other Name(s)

None.

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

Permit Number and/or Purpose of Issuance	Date of Issuance and Date of Amendments (if any)	Comments	
		Yes	No
3295-150-3889-0	March 30, 2000 (Amendment)		X
3295-150-3889-0	March 24, 1997 (Amendment)		X
3295-150-3889-0	June 17, 1993 (Amendment)		X
3295-150-3889-0	February 3, 1993 (Amendment)		X
3295-150-3889-0	October 6, 1992 (Amendment)		X
3295-150-3889-0	March 9, 1992 (Amendment)		X
3295-150-3889-0	July 17, 1990 (Amendment)		X

Permit Number and/or Purpose of Issuance	Date of Issuance and Date of Amendments (if any)	Comments	
		Yes	No
3295-150-3889-0	June 23, 1989 (Amendment)		X
3295-150-3889-0	February 15, 1989 (Amendment)		X
3295-150-3889-0	February 12, 1988 (Amendment)		X
3295-150-3889-0	January 16, 1987 (Amendment)		X
3295-150-5892-0	November 30, 1977 (Permit)		X
3295-150-3889-0	July 31, 1975 (Permit)		X

Table 2: Comments on Specific Permits

Permit Number	Comments
3295-150-5892-0	None
3295-150-3889-0	None

D. Process Description

1. SIC Code(s)

Major - 3259

2. Description of Product(s)

Thiele Kaolin processes kaolin.

3. Overall Facility Process Description

Kaolin slurry at about 30% solids is pumped about 14 miles from the mines sites to the Sandersville Plant. The slurry, upon reaching the plant, is stored in large tanks. From these tanks the clay is pumped to various processes consisting of magnetic separators, attrition mills, centrifuges, and addition of leaching chemicals. The main chemicals added are sulfuric acid and sodium hypochlorite. The slurry is stored in various large storage tanks between these processes.

The next process stage is dewatering by rotary drum vacuum filters. At this stage water is removed, raising the slurry solids content to about 60% solids. The slurry is also dispersed and pH raised to about neutral with soda ash. The only air pollution control equipment to this point is a bin vent on the soda ash bin which is filled (about every two weeks) by air conveying from a delivery truck.

From the vacuum filters the slurry is pumped to storage tanks prior to processing it for shipments. The clay is processed for shipment by three primary processes: spray drying, calcining, and raising solids content to approximately 70%.

There are four spray dryer systems at this plant: No. 2 Spray Dryer (SD2), No. 3 Spray Dryer (SD3), No. 4 Spray Dryer (SD4), and No. 5 Spray Dryer (SD5). Each of these systems produces a dry hydrous kaolin product. Each consists of a spray dryer with a natural gas furnace, which uses fuel oil only during natural gas curtailments. Each has a large multi-module fabric baghouse to control air emissions and recover product.

No. 1 Spray Dryer (SD1) is the same as those listed above except it dries kaolin for further processing by the calciners. Its product can only be air conveyed to either the 100A or 100B (calciner) silos.

Each of these systems and its auxiliary equipment is shown in detail in the enclosed process diagrams.

There are five silos for temporary storage of dry kaolin before shipping. There are two bagging systems (one for 50 and 100 pound bags and one for 1-ton bags) for both the hydrous and anhydrous (calcined) clays. Dry kaolin is shipped from the plant either in bulk or in bags by either rail or truck transportation.

There are fugitive dust collection systems for railcar loading points.

There are two makedown systems for producing 70% solids kaolin slurry from hydrous (spray dried) kaolin. From these system the slurry is either pumped directly into tanker trucks or rail tank cars or into temporary tanks for later loading into these conveyances. There is also a makedown system for the calciner complex.

There are two calciner systems (CA1 and CA2) with tandem spray dryers (SD6 and SD7) which use heat from calciner emissions to dry clay which will be calcined. Associated with the calciner systems are six concrete silos and two groups of grinding mills for pre-calcined kaolin and two groups of grinding mills for post-calcined clay.

The plant also has two 1,100 kW electrical generators, each of which is used about 40 hours per year to take advantage of lower available electrical rates.

4. Overall Process Flow Diagram

The process flow diagrams are included in the application.

E. Regulatory Status

1. PSD/NSR

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 Nitrogen Oxides (NO_x). Thiele Kaolin is subject to the PSD Increment for PM-10 (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	U			U
Total HAPs	U			U

3. MACT Standards

Thiele Kaolin 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

Thiele Kaolin currently operates in compliance.

D. Operational Flexibility

Not applicable.

E. Permit Conditions

None.

III. Regulated Equipment Requirements

A. Brief Process Description

Thiele Kaolin processes kaolin.

B. Equipment List for the Process

Table 3.1

Emission Units		Specific Limitation(s)/Requirements		Air Pollution Control Devices	
ID No.	Description	Applicable Requirement(s) / Standard(s)	Corresponding Permit Condition(s)	ID No.(s)	Description
BOILERS					
BO	OLD BOILER	391-3-1-.02(2)(b) 391-3-1-.02(2)(d) 391-3-1-.02(2)(g)	3.4.3, 3.4.5, 3.4.6	---	NONE
B1	NEW BOILER	391-3-1-.02(2)(d) 391-3-1-.02(2)(g)	3.4.4, 3.4.5, 3.5.7	---	NONE
SPRAY DRYERS					
SD1	SPRAY DRYER NO. 1	391-3-1-.02(2)(b) 391-3-1-.02(2)(p)2 391-3-1-.02(2)(g)	3.4.2, 3.4.6, 3.5.10	DC1	BAGHOUSE
SD2	SPRAY DRYER NO. 2	391-3-1-.02(2)(b) 391-3-1-.02(2)(p)2 391-3-1-.02(2)(g)	3.4.2, 3.4.6	DC2	BAGHOUSE
SD3	SPRAY DRYER NO. 3	391-3-1-.02(2)(b) 391-3-1-.02(2)(p)2 391-3-1-.02(2)(g)	3.4.2, 3.4.6	DC3	BAGHOUSE

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Emission Units		Specific Limitation(s)/Requirements		Air Pollution Control Devices	
ID No.	Description	Applicable Requirement(s) / Standard(s)	Corresponding Permit Condition(s)	ID No.(s)	Description
SD4	SPRAY DRYER 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, 3.5.6	DC4	BAGHOUSE
SD5	SPRAY DRYER NO. 5	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, 3.5.8, 3.5.9	DC5	BAGHOUSE
SD6	SPRAY DRYER NO. 6	391-3-1-.02(2)(p)1 NSPS UUU	3.5.4, 3.3.2, 3.4.1, 3.5.11	HR1 DC6	SCRUBBER BAGHOUSE
SD7	SPRAY DRYER NO. 7	391-3-1-.02(2)(p)1 NSPS UUU	3.5.4, 3.3.2, 3.4.1, 3.5.11	HR2 DC7	SCRUBBER BAGHOUSE
<i>CALCINERS</i>					
CA1	CALCINER NO. 1	391-3-1-.02(2)(p)1 NSPS UUU 40 CFR Part 52.21	3.5.5, 3.3.2, 3.3.3, 3.4.1, 3.5.8, 3.5.9	HR1	SCRUBBER
CA2	CALCINER NO. 2	391-3-1-.02(2)(p)1 NSPS UUU 40 CFR Part 52.21	3.5.5, 3.3.2, 3.3.3, 3.4.1, 3.5.11	HR2	SCRUBBER
<i>BAGGERS, RECEIVERS, SILOS, AND BUCKET ELEVATORS</i>					
BE1	SPRAY DRYER NO. 2 BUCKET ELEVATOR	391-3-1-.02(2)(b) 391-3-1-.02(2)(p)1	3.4.1	BC1	BAGHOUSE
BE2	SPRAY DRYER NO. 3 BUCKET ELEVATOR	391-3-1-.02(2)(b) 391-3-1-.02(2)(p)1	3.4.1	BC2	BAGHOUSE
BE3	SPRAY DRYER NO. 4 BUCKET ELEVATOR	391-3-1-.02(2)(p)1 NSPS OOO	3.5.3, 3.3.1, 3.4.1	BC3E	BAGHOUSE
BG3	50 LB. BAGGER AT #1 CALCINER	391-3-1-.02(2)(p)1 NSPS OOO	3.5.3, 3.3.1, 3.4.1	BC3	BAGHOUSE
BG4	ONE TON BAGGER AT CALCINER WAREHOUSE	391-3-1-.02(2)(p)1 NSPS OOO	3.5.3, 3.3.1, 3.4.1	BC4	BAGHOUSE
BE4	SPRAY DRYER NO. 4 TRACK LOADING BUCKET ELEVATOR	391-3-1-.02(2)(b) 391-3-1-.02(2)(p)1	3.4.1	BC4	BAGHOUSE
SBS1	50 LB. BAGGER SCAVENGER	391-3-1-.02(2)(b) 391-3-1-.02(2)(p)1	3.4.1	CBS1	BAGHOUSE
PC1	SILO 100B	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	CR1	BIN VENT
PC2	PRODUCT RECEIVER SILO 200B	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	CR2	BAGHOUSE
PC3	PRODUCT RECEIVER NO. 1 CALCINER	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	CR3	BAGHOUSE
PC4	PRODUCT RECEIVER SILO 300B	391-3-1-.02(2)(p)1 NSPS OOO	3.5.3, 3.3.1, 3.3.3, 3.4.1	CR4	BAGHOUSE

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Emission Units		Specific Limitation(s)/Requirements		Air Pollution Control Devices	
ID No.	Description	Applicable Requirement(s) / Standard(s)	Corresponding Permit Condition(s)	ID No.(s)	Description
		40 CFR Part 52.21			
PC5	CALCINER NO. 1 REJECT 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	CR5	BAGHOUSE
PC6	PRODUCT RECEIVER SILO 400B	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	CR6	BAGHOUSE
PC7	SILO 100A	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	CR7	BIN VENT
PC8	PRODUCT RECEIVER SILO 200A	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	CR8	BAGHOUSE
PC9	PRODUCT RECEIVER CALCINER NO. 2	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	CR11	BAGHOUSE
PC10	PRODUCT RECEIVER SILO 300A	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	CR9	BAGHOUSE
PC12	PRODUCT RECEIVER SILO 400A	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	CR10	BAGHOUSE
RL1	SPRAY DRYER NO. 5 RAILCAR LOADING	391-3-1-.02(2)(p)1 NSPS OOO	3.5.3, 3.3.1, 3.4.1	DC5	BAGHOUSE
RL2, RL3	CALCINERS NO. 1 AND NO. 2 RAILCAR LOADING	391-3-1-.02(2)(p)1 NSPS OOO	3.5.3, 3.3.1, 3.4.1	LC2	BAGHOUSE
SLURRY SYSTEM					
SM3	CALCINER SLURRY MAKEDOWN SURGE BIN	391-3-1-.02(2)(p)1 NSPS OOO	3.5.3, 3.3.1, 3.4.1	MC3	BAGHOUSE
SM4	SLURRY SYSTEM SILO 400A WEIGH BELT	391-3-1-.02(2)(p)1 NSPS OOO	3.5.3, 3.3.1, 3.4.1	MC4	BAGHOUSE
SM5	SLURRY SYSTEM SILO 400B WEIGH BELT	391-3-1-.02(2)(p)1 NSPS OOO	3.5.3, 3.3.1, 3.4.1	MC5	BAGHOUSE
MILLS					
PCM1	CALCINER NO. 1 PREMILLS (5)	391-3-1-.02(2)(p)1 NSPS OOO	3.5.3, 3.3.1, 3.4.1	DC201	BAGHOUSE
PCM2	CALCINER NO. 1 POSTMILLS (8)	391-3-1-.02(2)(p)1 NSPS OOO	3.5.3, 3.3.1, 3.4.1	DC401	BAGHOUSE
PCM3	CALCINER NO. 2 PREMILLS (5)	391-3-1-.02(2)(p)1 NSPS OOO	3.5.3, 3.3.1, 3.4.1	DC202	BAGHOUSE
PCM4	CALCINER NO. 2 POSTMILLS (8)	391-3-1-.02(2)(p)1 NSPS OOO	3.5.3, 3.3.1, 3.4.1	DC402	BAGHOUSE
SILOS					

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Emission Units		Specific Limitation(s)/Requirements		Air Pollution Control Devices	
ID No.	Description	Applicable Requirement(s) / Standard(s)	Corresponding Permit Condition(s)	ID No.(s)	Description
S1	SILO NO. 1	391-3-1-.02(2)(b) 391-3-1-.02(2)(p)2	3.4.2	SC1	BIN VENT
S2	SILO NO. 2	391-3-1-.02(2)(b) 391-3-1-.02(2)(p)2	3.4.2	SC2	BIN VENT
S3	SILO NO. 3	391-3-1-.02(2)(b) 391-3-1-.02(2)(p)2	3.4.2	SC3	BIN VENT
S4	SILO NO. 4	391-3-1-.02(2)(b) 391-3-1-.02(2)(p)2	3.4.2	SC4	BIN VENT
S5	SILO NO. 5	391-3-1-.02(2)(b) 391-3-1-.02(2)(p)2	3.4.2	SC5	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" This regulation is listed in the permit as Condition 3.3.1. All of the equipment in Table 3.1 subject to this regulation is identified in the column, **Corresponding Permit Condition**. In order for 40 CFR, Part 60, Subpart OOO to be applicable, the emission sources will have the following requirements:

- a. Identified as a crusher, grinding mill, screening operation, bucket elevator, belt conveyor, bagging operation, storage bin, enclosed truck or railcar loading station.
- b. Equipment 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 will 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," This regulation is listed in the permit as Condition 3.3.2. All of the equipment in Table 3.1 subject to this regulation is identified in the column listed as, **Corresponding Permit Condition**. This includes **Calcliner No. 1 (CA1), Calciner No. 2 (CA2), Spray Dryer No. 4, Spray Dryer No. 5, Spray Dryer No. 6, and Spray Dryer No. 7**. In order for 40 CFR, Part 60, Subpart UUU to be applicable, the emission sources will 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 will 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*. Thiele Kaolin 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 IMERYYS 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 IMERYYS 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 equipment must have stack emission limits and the increment consuming sources in the table listed below will not exceed the specified limit. Any source subject to this requirement will be identified under **Corresponding Permit Condition** as Condition 3.3.3.

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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	PM ₁₀ Emission Limit (lb/hr)
DC-5	THL1	Spray Dryer No. 5	7.987
CR-1	THL2	Conveyor, BV101B	0.556
CR-2	THL3	Conveyor, DC201	3.015
CR-3	THL4	Conveyor, PR206	0.141
CR-4	THL5	Conveyor, DC302A&B	5.741
CR-5	THL6	Conveyor, PR315	0.094
CR-6	THL7	Conveyor, DC401	3.492
SB-1	THL8	Calciner #1, Calciner #2	2.219
CR-7	THL9	Conveyor, BV101A	0.556
CR-8	THL10	Conveyor, DC202	1.210
CR-9	THL11	Conveyor, DC302 C&D	3.635
CR-10	THL12	Conveyor, DC402	2.158
CR-11	THL13	Conveyor, PR207	0.139
CR-12	THL14	Conveyor, PR316	0.093
DC-4	THL15	Spray Dryer #4	8.369

Table 1: A list of increment consuming sources subject to limits which will ensure compliance with the PSD increment. The limits are based on PM-10 Increment Modeling received on April 06, 1998.

- Georgia Rule 391-3-1-.02(2)(p)(1) "Particulate Emissions from Kaolin and Fullers Earth Processes" This regulation is listed in the permit as Condition 3.4.1. All of the equipment in Table 3.1 subject to this regulation is identified in the column listed as, **Corresponding Permit Condition**. This includes equipment put into operation or extensively altered after January 01, 1972. For this regulation, particulate matter emissions will not equal to or exceed the allowable rates specified in the below equations, unless otherwise specified in this Permit.

$$E = 3.59P^{0.62} ; \quad \text{for equipment with process input weight rate up to and including 30 tons per hour;}$$

$$E = 17.31P^{0.16} ; \quad \text{for equipment with process input weight rate above 30 tons per hour.}$$

where E = The emission rate is in pounds per hour.
P = The process input weight rate is in tons per hour.

5. Georgia Rule 391-3-1-.02(2)(p)(2) "Particulate Emissions from Kaolin and Fullers Earth Processes" This regulation is listed in the permit as Condition 3.4.2. All of the equipment in Table 3.1 subject to this regulation is identified in the column listed as, **ACorresponding Permit Condition@**. This includes equipment put into operation or extensively altered on or before January 01, 1972. For this regulation, particulate matter emissions will not equal to or exceed the allowable rates specified in the below equations, unless otherwise specified in this Permit.

$$E = 4.1P^{0.67}; \quad \text{for equipment with process input weight rate up to and including 30 tons per hour;}$$
$$E = 55P^{0.11} - 40; \quad \text{for equipment with process input weight rate above 30 tons per hour.}$$

where E = The allowable emission rate is in pounds per hour.

P = The process input weight rate is in tons per hour.

6. Georgia Rule 391-3-1-.02(2)(b)1 **AVisible Emissions@**This is a general permitting requirement which applies to all facilities. This regulation is listed in the permit as Condition 3.4.3. All of the equipment in Table 3.1 subject to this regulation is identified in the column listed as, **ACorresponding Permit Condition@**. Visible emissions will not equal or exceed forty (40) percent.
7. Georgia Rule 391-3-1-.02(2)(d) **AFuel-burning Equipment@** This regulation is listed in the permit as Condition 3.4.4. The equipment in Table 3.1 subject to this regulation is the New Boiler (B1) which will not exhibit 20 percent opacity or greater, except for one six-minute period per hour of not more than 27 percent opacity.

Additionally, emissions will not contain particulate matter in excess of 0.61 lbs/10⁶ BTU heat input from Old Boiler (Emission Unit BO) and 0.32 lbs/10⁶ BTU heat input from the New Boiler (Emission Unit B1). This particulate matter limit is listed in the permit as Condition 3.4.5.

8. Georgia Rule 391-3-1-.02(2)(g) **ASulfur Dioxide.@**This regulation is listed in the permit as Condition 3.4.6. All of the equipment in Table 3.1 subject to this regulation is identified in the column listed as, **ACorresponding Permit Condition@**. This regulation includes all fuel burning sources below 100 million BTU's of heat input per hour will not burn fuel containing more than 2.5 percent sulfur, by weight. All fuel burning sources having a heat input of 100 million BTU's per hour or greater will not burn a fuel containing more than 3 percent sulfur, by weight.

D. Compliance Status

Thiele Kaolin is in compliance at this time.

E. Operational Flexibility

Not applicable.

F. Permit Conditions

Because of the close proximity and magnitude of each source, Thiele Kaolin, Burgess Pigment, IMERYS (p.k.a. ECC), and J. M. Huber are required to submit a comprehensive PM₁₀ 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, Thiele Kaolin 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.

1. The Permittee 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 3.2.1. All of the equipment in Table 3.1 subject to this regulation is identified in the column, **ACorresponding Permit Condition@**. This stack emissions limit which is included in 40 CFR, Part 60, Subpart OOO may also be requested by Thiele Kaolin even though the equipment is not subject to the regulation to remain below the particulate matter increment.
2. The Permittee will limit stack emissions as not to contain particulate matter in excess of 0.063 g/dscm (0.025 grains/dscf) from each source code identified in Table 3.1. This stack limit is listed in the permit as Condition 3.2.2. All of the equipment in Table 3.1 subject to this regulation is identified in the column, **ACorresponding Permit Condition@**. This stack emissions limit which is included in 40 CFR, Part 60, Subpart UUU may also be requested by Thiele Kaolin even though the equipment is not subject to the regulation to remain below the particulate matter increment.
3. The Permittee will limit stack emissions as not to contain particulate matter in excess of 0.10 g/dscm (0.04 grains/dscf) from each source code identified in Table 3.1. This stack limit is listed in the permit as Condition 3.2.3. All of the equipment in Table 3.1 subject to this regulation is identified in the column, **ACorresponding Permit Condition@**. This stack emissions limit which is included in 40 CFR, Part 60, Subpart UUU may also be requested by Thiele Kaolin even though the equipment is not subject to the regulation to remain below the particulate matter increment.
4. **Spray Dryer No. 4 (SD4)** will be limited such that the total uncontrolled emissions of sulfur dioxide could not equal or exceed 40 tons during any 12 consecutive months. The sulfur content of fuel oil will not exceed 0.5% weight percent. The hours of operation will not equal or exceed 2,174 during any 12 consecutive month period.
5. **New Boiler (B1)** will be limited such that the total uncontrolled emissions of sulfur dioxide could not equal or exceed 12.7 pounds per hour. The sulfur content of fuel oil will not exceed 0.5% weight percent. The consumption of fuel oil will not exceed 1,626,626 gallons during any 12 consecutive month period.
6. **Calciner No. 1 (CA1)** and **Spray Dryer No. 5 (SD5)** will be limited such that the cumulative total uncontrolled emissions of sulfur dioxide could not equal or exceed 40 tons during any 12 consecutive months. The consumption of fuel oil will not exceed 563,380 gallons during any 12 consecutive month period. The sulfur content of fuel oil will not exceed 1.0% weight percent.

7. **Calciner No. 1 (CA1) and Spray Dryer No. 5 (SD5)** will not discharge, or cause the discharge, into the atmosphere nitrogen oxide (NO_x) emissions in excess of 0.15 pounds per million BTU heat input.
8. **Spray Dryer No. 1 (SD1)** will not discharge, or cause the discharge, into the atmosphere, particulate matter emissions in excess of 10.8 pounds per hour.
9. **Calciner No. 2 (CA2), Spray Dryer No. 6 (SD6), and Spray Dryer No. 7 (SD7)** will burn only natural gas.
10. **Spray Dryer No. 1 (SD1), Spray Dryer No. 2 (SD2), and Spray Dryer No. 3 (SD3)** will burn only No. 2 fuel oil or natural gas.

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

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.

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 Thiele Kaolin 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.

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

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.

Specific Monitoring Requirements

Calciners No. 1 and No. 2 are subject to 40 CFR 60 Subpart UUU. The Calciners exhaust through Spray Dryers No. 6 and No. 7 (SD6 and SD7), each controlled by a baghouse. The exhaust is then routed to a Heat Recovery Scrubber (HR1 and HR2). Since the Spray Dryers are also subject to 40 CFR 60 Subpart UUU, a Continuous Opacity Monitoring System (COMS) is required on the exhaust prior to the heat recovery scrubber for each dryer. The exceedances for the COMS are defined in Subpart UUU.

If the Spray Dryers are out of operation, the Calciner exhaust will be routed to a Venturi Scrubber (S1A and S2A) and then on to the Heat Recovery Scrubbers (HR1 and HR2). Subpart UUU requires the Venturi Scrubbers be equipped with monitoring devices that continuously measure and record the pressure loss of the gas stream through the scrubber and the scrubbing liquid flow rate to the scrubber. The permit specifies that an arithmetic average of the pressure loss and scrubbing liquid flow rate be determined and recorded for each rolling two-hour average of operation of the scrubbers. The scrubber monitoring strategy and trigger values for exceedances are based on Subpart UUU. The Heat Recovery Scrubbers (HR1 and HR2) are secondary control equipment; therefore, no monitoring is required by this permit.

Spray Dryers No. 4 and No. 5 (SD4 and SD5) are subject to 40 CFR 60 Subpart UUU and are controlled by baghouses. Subpart UUU requires that a dryer equipped with a dry control device have a Continuous Opacity Monitoring System (COMS). The COMS is sufficient monitoring to assure compliance from these dryers with the applicable limits.

Other sources at the plant are controlled by baghouses. These sources include various feed and storage silos, grinding mills, and dryers. The existing SIP permit requires that all baghouses have pressure drop indicators and all baghouses that receive gases at higher than ambient air temperature have temperature indicators. This Title V permit uses a different monitoring strategy. Visible emissions is a better indicator of baghouse condition and performance, and the temperature in some baghouses is due to friction from grinding and would not cause significant bag degradation. Small baghouses and those baghouses which operate infrequently are not required to do detailed monitoring due to little likelihood of significant particulate matter emissions.

On the larger frequently operated baghouses, visible emissions are checked at least once each day of operation. The visible emissions must be below a given opacity action level or corrective action is required. The opacity action levels vary based on the particulate matter emission limits (i.e. NSPS or SIP). Sources with higher particulate matter emission limits have higher opacity action levels. The opacity action levels are, however, lower than the opacity limitations in the SIP visible emissions rule and NSPS. The opacity action levels selected correspond to properly operated baghouses which are indicative of compliance with the applicable particulate matter standard. A Preventive Maintenance Program is also required on the larger frequently operated baghouses. The program requires weekly monitoring of pressure drop and maintenance checks. The baghouses receiving gases from combustion sources are also 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. Each time that problems are revealed by the visible emissions check are not corrected within 24 hours and each time that the temperature exceeds the specified level must be reported as an excursion. The information gathered by the Preventive Maintenance Program is not reported on any set schedule. This information is retained by the Permittee and must be provided upon request by the Division.

Calciners No. 1 and No. 2, Spray Dryers No. 4 and No. 5, and various pneumatic conveyors are subject to a PSD Increment for PM-10 in accordance with 40 CFR Part 52.21. The Spray Dryers and conveyors are each controlled by a baghouse; the Calciners are controlled by either a baghouse or a Venturi Scrubber. The daily visible emissions check combined with the weekly Preventive Maintenance Program should assure compliance with the incremented limits.

Spray Dryer No. 1 (SD1) is limited to particulate matter emissions in not to equal or exceed 10.8 pounds per hour. The daily visible emissions check combined with the weekly Preventive Maintenance Program should assure compliance with the incremented limits.

The permit requires all uncontrolled sources except boilers and air heaters be checked daily for obvious mechanical failure and for the presence of visible emissions. The permit includes a requirements to take corrective action and keep records. If problems are revealed during the daily check, they must be reported if not corrected within 24 hours.

Thiele Kaolin has two boilers, Old Boiler (BO) and New Boiler (B1), subject to Georgia Rules 391-3-1-.02(2)(d) and (g) that burn fuel oil and natural gas. Old Boiler (BO) is subject to Georgia Rules 391-3-1-.02(2)(b). New Boiler (B1) has restrictions on sulfur emissions of 12.7 lbs per hour, sulfur content of fuel oil will not exceed 0.5% weight percent, and consumption of fuel oil will not exceed 1,626,626 gallons during any 12 consecutive month period. Natural gas has negligible amounts of sulfur; therefore no monitoring is required. The monitoring strategy for boilers (BO & B1) certifying compliance with Georgia Rule (g) and distillate oil requires Thiele Kaolin to obtain certification from the fuel oil suppliers for each shipment. Permit condition 5.2.6 requires this certification. Condition 5.2.7 requires Thiele Kaolin to maintain fuel consumption records on both boilers (BO & B1).

Spray Dryer No. 1 (SD1), Spray Dryer No. 2 (SD2), and Spray Dryer No. 3 (SD3) will only burn No. 2 fuel oil or natural gas. Natural gas has negligible amounts of sulfur; therefore no monitoring is required. The monitoring strategy for Spray Dryer No. 1 (SD1), Spray Dryer No. 2 (SD2), and Spray Dryer No. 3 (SD3) certifying compliance with Georgia Rule (g) requires Thiele Kaolin to obtain certification from the fuel oil suppliers for each shipment. Permit condition 5.2.6 requires this certification. Condition 5.2.7 requires Thiele Kaolin to maintain fuel consumption records on Spray Dryer No. 1 (SD1), Spray Dryer No. 2 (SD2), and Spray Dryer No. 3 (SD3).

Calciner No. 1 (CA1) and Spray Dryer No. 5 (SD5) is limited to uncontrolled emissions of sulfur dioxide will not equal or exceed 40 tons during any 12 consecutive months. The consumption of fuel oil shall not exceed 563,380 gallons during any 12 consecutive month period, and the sulfur content of fuel oil will not exceed 1.0% weight percent. The monitoring strategy for Calciner No. 1 (CA1) and Spray Dryer No. 5 (SD5) certifying compliance with sulfur limits in the fuel oil requires Thiele Kaolin to obtain certification from the fuel oil suppliers for each shipment. Permit condition 5.2.6 requires this certification. Condition 5.2.7 requires Thiele Kaolin to maintain fuel consumption records on Calciner No. 1 (CA1) and Spray Dryer No. 5 (SD5).

Calciner No. 1 (CA1) and Spray Dryer No. 5 (SD5) each have a nitrogen oxide (NO_x) emissions limit of 0.15 pounds per million BTU heat input. A performance test was done as a requirement from previous permitting demonstrating compliance therefore, no monitoring is required.

Spray Dryer No. 4 (SD4) is limited to uncontrolled emissions of sulfur dioxide will not equal or exceed 40 tons during any 12 consecutive months. The sulfur content of fuel oil will not exceed 0.5% weight percent and the hours of operation will not equal or exceed 2,174 during any 12 consecutive month period. The monitoring strategy for Spray Dryer No. 4 (SD4) certifying compliance with sulfur limits in the fuel oil requires Thiele Kaolin to obtain certification from the fuel oil suppliers for each shipment. Permit condition 5.2.6 requires this certification. Condition 5.2.7 requires Thiele Kaolin to maintain fuel consumption records on Spray Dryer No. 4 (SD4). Thiele Kaolin must maintain and record the hours of operation from Spray Dryer No. 4 (SD4) certifying compliance as not to exceed 2,174 hours during any 12 consecutive month period. Permit condition 6.2.4 requires this to demonstrate compliance.

TITLE V APPLICATION REVIEW

Calciner No. 2 (CA2), Spray Dryer No. 6 (SD6), and Spray Dryer No. 7 (SD7) shall burn only natural gas. In Georgia, the sulfur content of natural gas is insignificant, so no monitoring is required. Particulate matter emissions from combustion of distillate fuel oil and natural gas is insignificant, so no additional monitoring is required.

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 conditions 5.2.2 and 5.2.7 and only minor modifications allowed to Thiele Kaolin, confidence is high the PSD PM increment will not be compromised. Any cumulative modification above state deferral levels may require modeling data to be submitted demonstrating compliance.

Record keeping and Reporting Requirements

Records, including identification of any exceedances or excursions from applicable monitoring triggers, the cause of such occurrence, the corrective action taken, and the certifications that fuel oil received is distillate oil and only distillate oil is burned are required to be kept by the Permittee and reporting is required on a semiannual basis.

Thiele Kaolin has many annual fuel consumption limits for several pieces of equipment. All fuel burning sources, including boilers (BO and B1), Calciner (CA1), and Spray Dryer Nos. 1, 2, 3, 4, and 5 (SD1, SD2, SD3, SD4, and SD5, respectively), are required to monitor and record the amount of fuel oil combusted each month and include this information in the semiannual report. Calciner No. 2 (CA2), Spray Dryer No. 6 (SD6), and Spray Dryer No. 7 (SD7) will burn only natural gas.

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.

VII. Specific Requirements

A. Operational Flexibility

☐ Not applicable.

B. Alternative Requirements

☐ None.

C. Insignificant Activities

☐ refer to ' 4.10 of the Title V permit application

D. Temporary Sources

☐ 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.

TITLE V APPLICATION REVIEW

Closing Block: We have reviewed and recommend issuance of draft Permit No. 3295-303-0006-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

Thiele Kaolin Company, Sandersville Plant, TV-9274

Comments

1. The Standard Industrial Classification (SIC) given and that used as part of the permit number is incorrect. The correct SIC for this facility is 1455. This is the SIC that has been submitted on all our applications and has been accepted by the EPD and EPA for the previous 25 years. Thiele mines all of its basic raw material (i.e. kaolin) which is used at its plant. As such the proper SIC is 1455.

Division's response: SIC Code identification removed from cover page.

The SIC Code(s) identified 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 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. (Section 2.21) Typographical - Sentence has extra "with" in it.

Division's response: Division agrees, changes made.

3. (Section 5.2.1.a) Spray Drier #4 baghouse is not subject to continuous opacity monitoring requirements. Delete this item.

Division's response: Division disagrees, no changes made.

4. (Section 5.2.2) We believe there are no provisions in Clean Air Act amendments requiring nor is it practicable because of varying operational schedules and weather conditions to perform visible emission checks daily. Weekly visible emission (VE) checks should be sufficient monitoring to insure that control equipment is meeting applicable standards on a periodic basis.

Division's response: Division disagrees. However the Division made some changes to condition 5.2.2 to clarify the periodic monitoring requirements of 40CFR 70.6(a)(3)(i)(b). The revised condition is as follows:

- 5.2.2 The Permittee shall perform a check of visible emissions from all baghouses (including process baghouses) controlling emission from sources listed in Section 3.1 of this permit, and from sources added or replaced in accordance with the provisions of condition 7.1.2. Sources subject to condition 5.2.1 and baghouses controlling emissions from silos with dedicated bin vents, wet screening operations, bucket elevators, screw conveyors, bagging operations, and pneumatic conveyors are exempt from this condition. The Permittee shall retain a record in a daily visible emissions (VE) log suitable for inspection or submittal. The check shall be conducted at least once for each day or portion of each day of operation and shall be conducted using the following procedure:

[391-3-1-.02(6)(b)1 and 40 CFR 70.6(a)(3)(i)]

- a. Determine, in accordance with the procedures specified in paragraph (d) of this condition, if visible emissions are present at the discharge point to the atmosphere from each of the sources and record the results in the daily (VE) log. For sources that exhibit visible emissions, the Permittee shall comply with either paragraph (b) or paragraph (c) of this condition.
 - b. For each source determined to be emitting visible emissions, the Permittee shall determine whether the emissions equal or exceed the opacity action level at any time during the determination for that source using the procedure specified in paragraph (d) of this condition, except that the person performing the determination shall have received additional training acceptable to the Division to recognize the appropriate opacity level and the determination shall cover a period of three minutes. The opacity action level for baghouses subject to the emission limitations of the NSPS regulations is 5 percent, for baghouses not subject to NSPS regulations is 10 percent. The results shall be recorded in the daily (VE) log. For sources that exhibit visible emissions of greater than or equal to the opacity action level, the Permittee shall comply with paragraph (c) of this condition.
 - c. For each source that requires action in accordance with 5.2.2a. or 5.2.2b, the Permittee shall determine the cause of the excursion and correct the problem in the most expedient manner possible. The Permittee shall note the cause of the excursion, the pressure drop, any other pertinent operating parameters, and the corrective action taken in the maintenance log.
 - d. The person performing the determination shall stand at a distance of at least 15 feet which is sufficient to provide a clear view of the plume against a contrasting background with the sun in the 140E sector at his/her back. Consistent with this requirement, the determination shall be made from a position such that the line of vision is approximately perpendicular to the plume direction. Only one plume shall be in the line of sight at any time when multiple stacks are in proximity to each other.
5. (Section 5.2.2(b)) This provision is counter to provisions of Clean Air Act Amendments of 1990 (CAAA90) that prohibits more stringent emission limits than those in existing permits. The "greater than or equal to 5 percent equates to a zero opacity limit for sources with up to 10% opacity limits and the 10% limits for sources with up to 40% opacity limits reduces them to a 10% opacity limit. We propose that NSPS sources have an action limit of greater than 5%, 20% opacity-permitted sources have action limit of greater than 10%, and 40% opacity permitted sources have an action limit of greater than 20%. The first sentence should delete "at any time during the determination" as determinations are based on a 3-minute average.

Division's response: Division disagrees, no changes made. Condition 5.2.2(b) is based on the periodic monitoring requirements of 70.6(a)(3)(i)(B). The opacity levels contained in Condition 5.2.2(c) are levels at which the Permittee shall take further action and are not emission limits.

6. (Section 5.2.2(c)) The term "excursion", wherever it appears under c., should be replaced with the phrase "opacity above specified action level". The term "pressure drop" should be deleted as under most of our present permits pressure gauges are not a requirement. (Also see comment on 5.2.3.)

Division's response: Division disagrees, no changes made. EPD defines an excursion as "any departure from an indicator range or value established for monitoring consistent with any averaging period specified for averaging the results of monitoring" and thus will not depart from this nomenclature.

Condition 5.2.2(c) includes requirements for pressure drop gauges. The Division believes pressure drop indicators are an instrument which may assist in identifying potential failures.

7. (Section 5.2.3) There is no provision in CAAA-90 for maintenance plan to be subject for approval or modification by the permitting authority if a facility is meeting all applicable standards. The use of "pressure drops" should be deleted as they are not presently requirements in our permits. Additionally they are not necessary indicative of compliance with a regulated parameter and would at best only indicate a major failure which would have been already detected by other methods.

Division-s response: Division disagrees, no changes made. Condition 5.2.3 is based on the periodic monitoring requirements of 70.6(a)(3)(i)(B). Pressure drop indicators are required by 5.2.3 to identify potential maintenance problems.

8. (Section 5.2.3.a) Same as above statement for 5.2.3 concerning pressure drops. 5.2.5 Same as comment for 5.2.2.

Division-s response: Division disagrees. No changes made.

9. (Section 5.2.5a) Pre NSPS uncontrolled emissions are allowed 20% opacity action limit should be minimum of 10%. NSPS uncontrolled are allowed 10% and should have action limit of greater than 5% opacity.

Division-s response: Division disagrees, no changes made. This condition is consistent with permits of this type.

10. (Section 5.2.5b) Add to end of sentence "**above** specified opacity action limit".

Division-s response: Division disagrees, no changes made. This condition is consistent with permits of this type.

11. (Section 5.2.7) There are presently no requirements to record fuel oil use individually for each process. We do, however, keep total plant usage for permit fee purposes. We therefore ask that this be the requirement for this part.

Division-s response: Division disagrees, no changes made. Conditions 3.5.6, 3.5.7, & 3.5.8 have sulfur emission limits for individual equipment to avoid possible PSD. Condition 3.5.11 and 3.5.12 have specific fuel usage requirements as requested by application No. TV--9274.

12. (Section 5.2.8(c)(i)) Strike word "required".

Division-s response: Division agrees, changes made.

13. (Section 5.2.8(c)(ii)) Replace "any visible emissions" with "emissions above opacity action level".

Division-s response: Division disagrees. However, the condition was changed to clarify and is as follows:

- 5.2.8(c) ii. Visible emissions resulting from mechanical failure or malfunction discovered by the walk through described in Condition 5.2.5 that are not eliminated or corrected within 24 hours of first discovering the visible emissions or mechanical failure or malfunction.

14. (Section 5.2.8(c)(iii)) Remove this in its entirety as this does not, in any way, constitute a violation, excursion, etc., of a permit limit or requirement. This information is to be used only for maintenance guidance.

Division-s response: Division disagrees, no changes made. The Division believes this condition does not, in any way, constitute a violation. However, the Division does believe elevated gas temperatures above a normal operation range entering a baghouse may indicate potential failures.

15. (Section 5.2.10) The NSPS UUU - does not require a rolling two-hour average. Subpart UUU states "arithmetic average over a 2-hour period" make 5.2.10 conform to the requirement.

Division-s response: Division disagrees, no changes made. The Division believes this is appropriate for this control equipment.

16. (Section 5.2.11(c)) This section is not applicable to wet scrubber and continuous opacity monitors. It is a repeat of section 5.2.8c and must have accidentally been repeated in this section.

Division-s response: Division agrees, condition deleted.

17. (Section 5.3.1) This paragraph states reports are to be submitted quarterly. Section 5.3.6 states they are semiannual reports. This is also stated in 5.3.5. We request semiannual reports of quarterly results.

Division-s response: Division agrees, changes made.

18. (Section 5.3.5) Change to require reporting of plant total fuel oil usage and not by individual processes unless otherwise required under present permits.

Division-s response: Division disagrees, no changes made. The Division believes in order for Thiele Kaolin to avoid possible PSD under 40 CFR Part 52.21 for **Spray Dryer No. 4 (SD4), Calciner No. 1 (CA1) and Spray Dryer No. 5 (SD5)** as stated in Conditions 3.5.6, & 3.5.8, this condition is appropriate. Moreover, **Boiler (B1)** has a specific sulfur limit in Condition 3.5.7. **Spray Dryer No. 1 (SD1), Spray Dryer No. 2 (SD2), and Spray Dryer No. 3 (SD3)** has a No. 2 fuel oil limit in Condition 3.5.12.

19. (Section 6.1.1) Statement should be added that maintenance of 5 year record keeping requirement begins with date of issuance of Title V permit. Records prior to this date are to be maintained for two years.

Division-s response: Division disagrees, no changes made. It is understood previous record keeping requirements were two years. However, Part 70 Title V now requires 5 years of record keeping to verify compliance. The Division expects the company to retain all existing records until it has accumulated 5 years of records. From that point on (which should be within 3 years), the company should maintain 5 years of records.

20. (Section 6.1.2) First and second paragraph. There is no definition of a deviation in permit. Condition should simply require reporting of any excessive emission within 7 days of occurrence when period exceeds 4 hours.

Division-s response: Division disagrees, no changes made. The division believes the condition is sufficiently explained.

21. (Section 6.2.3) The reporting (and presumably the limit) of a 1/12 the annual consecutive limit needs to be deleted as there are no regulations to establish this limit and none are in our present permits. This should state that a report is to be submitted whenever "the consecutive 12-month limit is exceeded".

Division=s response: Division disagrees, no changes made. This is a notification of *possible* noncompliance and not a notification of noncompliance with the monthly 1/12 annual total. EPD believes it is necessary to determine a potential violation of conditions 3.5.6, 3.5.7, and 3.5.8. This does not establish an additional limit.

22. (Section 6.2.4) There is no limitation on the number of hours #5 spray drier can be in operation in its existing permit. This restriction is for hours of operation using fuel oil, not processing hours.

Division=s response: Division agrees, changes made.