Facility Name: **C-E Minerals Plant 1**
City: Andersonville
County: Sumter
AIRS #: 04-13-261-00003

Application #: TV- 9374
Date Application Received: October 23, 1996
Date Application Deemed Administratively Complete: June 19, 1997
Date of Draft Permit:
Permit No: 3295-261-0003-V-01-0

Program	Review Engineers	Review Managers
SSPP/ASU	Noel DoHarris	James P. Current
SSCP/ASU	Doug Waldron	Lou Musgrove
ISMP	DeAnna Oser	Larry Webber
TOXICS	n/a	n/a

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 C-E Minerals - Plant 1 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: C-E Minerals - Plant 1

2. Parent/Holding Company Name: Imerys.

3. Previous and/or Other Name(s): Previously known as Mullite Company - Plant 1.

4. Facility Location: Highway 49
Andersonville, Georgia 31711
(Sumter County)

5. Attainment or Non-attainment Area Location: Located outside the ozone non-attainment area.

6. Class I Area Impacts: The facility is not located within 100 km of a Class I area.

B. Site Determination

C-E Minerals Plant 1, C-E Minerals Plant 2 and Treibacher Schleifmittel have been determined to be one part 70 site. All three facilities are under common control and on contiguous property. The facilities are all under the control of Imerys and the property containing C-E Minerals Plant 2 and Treibacher Schleifmittel is separated from C-E Minerals Plant 1 by a roadway.

C-E Minerals Plant 1 and C-E Minerals Plant 2 have historically been treated as one site by EPD for PSD review.

Facility AIRS Numbers:

C-E Minerals - Plant 1:	04-13-261-00003
C-E Minerals - Plant 2:	04-13-261-00047
Treibacher Schleifmittel:	04-13-261-00070

This Title V Permit will cover only C-E Minerals Plant 1. C-E Minerals Plant 2 (AFS No. 261-00047) has applied for a separate Title V Permit under application No. TV-9372. Treibacher Schleifmittel, which took control of what was part of C-E Minerals Plant 2, has submitted a part 70 application.

C. Existing Permits

Table 1 below lists all current permits, as amended, issued to the facility.

Table 1: List of Current Permits, as Amended

Permit Number	Purpose of Issuance	Date of Issuance and Date of Amendments (if any)	Comments	
			Yes	No
3295-129-10423	Operation of kaolin processing facility.	Original Issuance - March 6, 1990		Y
3295-129-10423	Installation and operation of truck loadout system and a baghouse.	Amendment - November 25, 1992		Y
3295-129-10423	Reduction of SO_2 emission limits for kilns. (Fee related)	Amendment - November 30, 1992		Y
3295-129-10423	Authority to install and operate deduster system and a baghouse.	Amendment - August 16, 1996		Y

D. Process Description

1. SIC Codes(s)

SIC Code(s), if applicable

3295/3255

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)

Depending on customer's needs the facility produces differently sized processed kaolin (coarse grind to very fine).

. Overall Facility Process Description

Kaolin ore is shipped to the processing facility via truck from off-site mine locations. The material is mixed, fed directly into extruders and mills, and then dried. Emissions are vented to cyclone/scrubber air pollution control systems.

Raw material is also extruded into pellets that are transported via conveyors to dryers that dry only surface water to ensure the pellets do not stick together in storage silos before being transported. Some of the pellets from the storage silos are fed to higher temperature kilns, then to kiln coolers and ultimately to a product storage building where it can be forwarded to any processing system for crushing, grinding, milling, and screening depending on customer requirements. Scrubbers and/or baghouses control emissions from the kilns and crushing/grinding operations.

4. Process Flow Diagram: Hard copy attachment to application.

E. Regulatory Status

1. This facility is a major source under PSD because its potential emissions of PM, PM-10, NOx, and SO_2 are greater than 250 tpy (it is not one of the 28 named source categories under PSD). The facility has had one PSD review in 1989. In the Permit issued on March 6, 1990, the facility took limits on operating hours for the bauxite grinding circuit (BG-29) to avoid PSD/NSR review for the permit application review which was done at that time. This operation is limited to 5200 hours of operation during any twelve consecutive months.

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?		
		Major Source Status	Major Source requesting SM Status	Non-Major Source Status
PM	Y	Y		
PM_{10}	Y	Y		
SO_2	Y	Y		
VOC	Y			Y
NO_x	Y	Y		
CO	Y			Y
TRS	n/a			
H_2S	n/a			
Individual HAP	n/a			
Total HAPs	n/a			

3. MACT Standards

No MACT standards apply to this facility.

4. Program Applicability

Program	Program Code	Applicable?
PSD	6	Yes
Part 61 NESHAP	8	No
NSPS	9	Yes
Part 63 NESHAP	M	No
Title V	V	Yes

Regulatory Analysis

II. Requirements for Entire Facility

A. Emission and Operating Caps

There are no facility wide emission or operating caps applicable to the facility.

B. Applicable Rules and Regulations

There are no specific facility wide rules or regulations applicable to this facility.

C. Compliance Status

There are no current compliance issues for this facility.

D. Operational Flexibility

The facility did not request any alternate operating scenarios for any of its equipment or processes.

E. Permit Conditions

There are no specific facility wide Permit Conditions for this facility.

III. Requirements for Emission Units

A. Brief Process Description

1. Bauxite Grinding Circuit (BG29)
   The purpose of the bauxite grinding circuit is to produce a fine powder from kaolin pellets. This emission unit, whose only pollutant is particulate matter, was installed in October 1989 and is therefore subject to NSPS OOO, limiting its stack emissions to 0.02 gr/dscf. In March 1990 its operation was limited to 5,200 hours of operation during any 12-month period to avoid PSD/NSR review. This piece of equipment is also subject to Georgia Rules 391-3-1-.02(2)(p). The emission limitation imposed by NSPS OOO ensures compliance with Georgia Rule (p). The annual stack emissions from this emission unit have been calculated to be 4.5 tons per year taking into consideration its operational limit and the NSPS OOO emission factor.

2. Loadout System
   This is a pneumatic conveying system that delivers the kaolin products to either rail cars or trucks. The only emission from this equipment is particulate matter. The system was installed in November 1992 and is therefore subject to NSPS OOO, limiting its stack emissions to 0.02 gr/dscf. There are no operational limitations for the system. Its annual stack emissions total 1.9 tons per year. This piece of equipment is also subject to Georgia Rules 391-3-1-.02(2)(p). The emission limitation imposed by NSPS OOO ensures compliance with Georgia Rule (p).

3. Deduster System (DDL and DDR)
   The two dedusters are used to transport dry raw material to the investment Casting System (IC1). Emissions (dust) from the raw material is vented to the deduster baghouse (BH1). The system was installed in 1996 making it subject to the provisions of NSPS OOO. Its stack emissions are limited to 0.02 gr/dscf. There are no operational limitations for this system. Annual stack emissions for this system total 11.3 tons per year. The emission limitation imposed by NSPS OOO ensures compliance with Georgia Rule (p).

B. 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**
Crushing/Grinding Systems					
CM1	Cage Mill	391-3-1-.02(2)(b) 391-3-1-.02(2)(p) 391-3-1-.02(2)(g)	3.4.1, 3.4.2, 3.4.3, 5.2.1, 5.2.4, 6.1.7	CM1C	Cage Mill Cyclone
				CM1S	Cage Mill Scrubber
RM1	Roller Mill	391-3-1-.02(2)(b) 391-3-1-.02(2)(p) 391-3-1-.02(2)(g)	3.4.1, 3.4.2, 3.4.3, 5.2.1, 5.2.4, 6.1.7	RM1C	Roller Mill Cyclone
				RM1S	Roller Mill Baghouse
CBM	Ceramic Ball Mill System	391-3-1-.02(2)(b) 391-3-1-.02(2)(p)	3.4.1, 3.4.2, 3.5.1, 5.2.1, 5.2.2, 5.2.3, 6.1.7	BHN	Baghouse
SBM	Steel Ball Mill System	391-3-1-.02(2)(b) 391-3-1-.02(2)(p)	3.4.1, 3.4.2, 3.5.1, 5.2.1, 5.2.2, 5.2.3, 6.1.7	BHM	Baghouse
BG29	Bauxite Grinding Circuit	40 CFR 60 Subpart OOO 391-3-1-.02(2)(b)	3.2.1, 3.3.1, 3.4.1, 3.4.2, 3.5.1, 5.2.1,	BH29	Baghouse

Emission Units		Specific Limitations/Requirements		Air Pollution Control Devices	
ID No.	**Description**	**Applicable Requirements/Standards**	**Corresponding Permit Conditions**	**ID No.**	**Description**
		391-3-1-.02(2)(p)	5.2.2, 5.2.3, 6.1.7, 6.2.1, 6.2.2		
TYLS	Tyler System	391-3-1-.02(2)(b) 391-3-1-.02(2)(p)	3.4.1, 3.4.2, 3.5.1, 5.2.1, 5.2.2, 5.2.3, 6.1.7	BHS	Baghouse
Kiln/Cooler Systems					
1K	Kiln & Cooler System	391-3-1-.02(2)(b) 391-3-1-.02(2)(p) 391-3-1-.02(2)(g)	3.2.2, 3.4.1, 3.4.2, 3.4.3, 5.2.1, 5.2.4, 5.2.7, 5.2.9, 6.1.7	1Z 1C	Kiln Multi-tube Cyclone & Scrubber
2K	Kiln & Cooler System	391-3-1-.02(2)(b) 391-3-1-.02(2)(p) 391-3-1-.02(2)(g)	3.2.2, 3.4.1, 3.4.2, 3.4.3, 5.2.1, 5.2.4, 5.2.7, 5.2.9, 6.1.7	2Z 2C	Kiln Multi-tube Cyclone & Scrubber
Loading/Unloading Operations					
FG11	Loadout Pneumatic System	40 CFR 60 Subpart OOO 391-3-1-.02(2)(b) 391-3-1-.02(2)(p)	3.3.1, 3.4.1, 3.4.2, 5.2.5, 6.1.7, 6.2.1, 6.2.2	BH11	Pneumatic Conveyor Bin Filter
BG47	Bulk Loadout	391-3-1-.02(2)(b) 391-3-1-.02(2)(p)	3.4.1, 3.4.2, 5.2.5, 6.1.7	BH47	Bulk Loadout Bin Filter
Other Systems/Equipment					
IC1	Investment Casting System	391-3-1-.02(2)(b) 391-3-1-.02(2)(p)	3.4.1, 3.4.2, 3.5.1, 5.2.2, 5.2.3, 6.1.7	BHM	Baghouse
DDL	Deduster System	40 CFR 60 Subpart OOO 391-3-1-.02(2)(b) 391-3-1-.02(2)(p)	3.3.1, 3.4.1, 3.4.2, 3.5.1, 5.2.2, 5.2.3, 6.1.7, 6.2.1, 6.2.2	BH1	Deduster Baghouse
DDR	Deduster System	40 CFR 60 Subpart OOO 391-3-1-.02(2)(b) 391-3-1-.02(2)(p)	3.3.1, 3.4.1, 3.4.2, 3.5.1, 5.2.2, 5.2.3, 6.1.7, 6.2.1, 6.2.2	BH1	Deduster Baghouse

C. Compliance Status

No compliance issues were reported by the facility.

D. Operational Flexibility

The facility made no requests for operational flexibility.

E. Permit Conditions

The following conditions have been included in the Title V permit and are equipment specific:

! Condition 3.2.1 applies to the bauxite grinding circuit (BG29) and limits its operation to 5200 hours during any twelve-month period. This limitation was put in place to avoid PSD/NSR review in March 1990.

! Condition 3.2.2 applies to kilns 1K and 2K. It limits emissions of SO_2 from each kiln to 80 pounds per hour. This limitation was imposed in November 1992 to reduce emissions of SO_2 and reduce the facility's air permit fees. The concentrations (in ppm) of SO_2 in the exhaust gas streams of the scrubbers (1Z and 2Z) are monitored weekly. Weekly monitoring, instead of daily monitoring, is done due to difficulty, on the part of the

source, to perform this reading on a daily basis.

- Condition 3.3.1 applies NSPS OOO requirements and limitations to the following equipment:
  i. Bauxite Grinding Circuit (BG29)
  ii. Loadout System (FG11)
  iii. Deduster Systems (DDL and DDR)

- Condition 3.4.1 applies Georgia Rule 391-3-1-.02(2)(p) - "Particulate Emissions from Kaolin and Fuller's Earth Processes" - to all processing equipment at the facility. The equipment list in B above indicates emission units subject to this state rule.

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

A. 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.

B. 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. The current air quality permit allows certain changes to be made to the facility without permit revision. These changes may include installing new equipment and replacing existing equipment. If these changes are made, a condition has been included in the permit requiring the initial performance test to be performed in accordance with 40 CFR 60.8 and the applicable Subpart of 40 CFR Part 60. Additional performance testing is not required by any applicable regulation, therefore this permit does not contain any other conditions requiring specific testing for any other source.

V. Monitoring Requirements (Related to Data Collection)

A. 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.

B. Specific Monitoring Requirements

Most sources at the plant are controlled by baghouses whose emissions are subject to one or more of Georgia Rules 391-3-1-.02(b) and 391-3-1-.02(p) and 40 CFR Part 60 Subpart OOO. These sources include the roller mill, ceramic ball mill system, steel ball mill system, bauxite grinding circuit, Tyler system, dedusting systems and the investment casting system. Visible emissions is a better indicator of baghouse condition and performance than the more conventional methods of monitoring pressure drop and temperature since the temperature in some baghouses is due to friction from grinding and would not cause significant bag degradation. Small baghouses, bin vents and those baghouses which operate infrequently are not required to perform detailed monitoring due to the unlikelihood

of significant particulate matter emissions and opacity.

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 that is 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 that 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. These requirements provide a reasonable assurance of compliance with the particulate matter and opacity standards.

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 requirement 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. This provides a reasonable assurance of compliance with the applicable particulate matter and opacity standards.

Both kiln cooler systems (1K & 2K), controlled by scrubbers 1Z and 2Z and cyclones 1C and 2C, are subject to Georgia Rules 391-3-1-.02(2)(b), (n) and (p). In addition, these units are subject to limits for maximum fuel sulfur and sulfur dioxide emissions. A cyclone and scrubber are used on each system for control of particulate matter and sulfur dioxide. Monitoring requirements consist of daily measurement and recording of the scrubbing liquid flow rate and pressure drop across the scrubbers. Scrubbant liquid pH is also required to be measured each day. Ranges and/or values for these parameters are specified in the permit and deviations from the ranges/values are required to be reported. A weekly measurement of the sulfur dioxide concentration in the exhaust gas of the systems is also required. A concentration for sulfur dioxide, also based upon emissions test data and which matches the SO_2 emissions allowable, was specified as a trigger value for determining excursions. Additionally, a Preventive Maintenance Program is required to be established for the multiclones. The Program will consist of weekly inspections to ensure that the multiclones are properly operated and maintained. Any adverse condition, discovered by the inspections of the multiclones, is required to be recorded as an excursion.

For the scrubber CM1S controlling emissions from the cage mill, monitoring requirements consist of daily readings of the scrubbing liquid flow rate and daily readings of the pressure drop across the scrubber. Values for scrubber parameters were based upon emissions test data that showed particulate matter and sulfur dioxide emissions in compliance with allowable emissions limitations.

Due to the scrubbers being the primary control devices on the cage mill CM1 and kiln cooler systems 1K and 2K and the baghouse being primary control device for roller mill RM1, it was determined that the combination of the monitoring requirements for these systems along with the operation and maintenance checks required by Condition

5.2.4 for the cyclones and multi tube cyclones would be sufficient to verify proper particulate matter control for the systems as a whole.

C. Record Keeping and Reporting Requirements.

Records of all data collected in accordance with the required monitoring protocols discussed in Section 5.2 shall be maintained by the Permittee and shall be submitted on a semiannual basis.

VI. Other Record keeping and Reporting Requirements

Section 6.1 of the Permit contains general requirements for the maintenance of all records for a period of five years following the date of entry and the prompt reporting of all related information to deviations from applicable requirements. The submission of written reports (semiannually) of any failure to meet an applicable emission and/or any failure to comply with or complete any work practice or standard contained in this permit is also required. Condition 6.1.7 requires the Permittee to report any departure from an indicator range or value established for monitoring consistent with any averaging period specified for averaging the results of monitoring.

Records, including identification of any excursions from 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.

A requirement is included for C-E Minerals to maintain a record of all actions taken to suppress fugitive dust from the vehicular traffic on paved roads (VFDG) in order to show compliance with Georgia Rule 391-3-1-.02(2)(n). Fuel certifications are required to be submitted with each semiannual report submitted to the Division by the facility.

C-E Minerals is required to obtain certifications for each shipment of oil received. The certifications must include the supplier's name and an analysis of the fuel received. C-E Minerals is also required to obtain supplier sulfur content analyses for each shipment of coal received. Kilns 1K and 2K use pulverized coal as primary fuel and use natural gas and No. 2 fuel oil as back up fuels. Cage mill CM1 and roller mill RM1 both use natural gas as primary fuel and No. 2 fuel oil as a back up fuel.

General requirements for the maintenance of all records for a period of five years are included in Condition 6.1.1. Prompt reporting of upset conditions resulting in lengthy excess emissions are required in Condition 6.1.2. Records of the hours of operation of Bauxite Grinding Circuit BG-29 and semiannual reports of 12-consecutive month rolling totals of hours of operation are required in condition 6.2.3.

VII. Specific Requirements

A. Operational Flexibility

Other than standard conditions 7.1.1, 7.2.1, and 7.2.2, operational flexibility provisions have not been incorporated into this Title V Permit. The applicant did not include any alternative operating scenarios in their Title V application nor did they request any specific operational flexibility conditions.

B. Alternative Requirements

There are no alternative requirements that need to be incorporated into the Title V Permit.

C. Insignificant Activities

The following two tables are lists of the facility's insignificant activities at the time of permit issuance. The first activity listed under the category "Storage Tanks and Equipment" was originally listed as a significant emission unit in Section 5 of the Title V application. It was determined to meet the description shown in the table.

INSIGNIFICANT ACTIVITIES CHECKLIST

Category	Description of Insignificant Activity	Quantity
Fuel Burning Equipment	Stationary engines burning: natural gas, LPG, and/or diesel fueled generators used for emergency, peaking, and/or standby power generation, where the combined peaking and standby power generation do not exceed 200 hours per year.	1
	natural gas, LPG, and/or diesel fuel used for other purposes, provided that the output of each engine does not exceed 400 horsepower and that no individual engine operates for more than 2,000 hours per year.	2
Maintenance, Cleaning and Housekeeping	Cold cleaners having an air/vapor interface of not more than 10 square feet and that do not use a halogenated solvent.	2
Laboratories and Testing	Research and development facilities, quality control testing facilities and/or small pilot projects, where combined daily emissions from all operations are not individually major or are support facilities not making significant contributions to the product of a collocated major manufacturing facility.	1
Storage Tanks and Equipment	All petroleum liquid storage tanks storing a liquid with a true vapor pressure of equal to or less than 0.50 psia as stored.	1
	All petroleum liquid storage tanks with a capacity of less than 10,000 gallons storing a petroleum liquid.	2

INSIGNIFICANT ACTIVITIES BASED ON EMISSION LEVELS

Description of Emission Units / Activities	Quantity
Pug Mill Extruder	1
Lime Storage Bin	2
Kiln Drop-out Box	2
Kiln TA Box	2

Generic Emission Groups/Emission Units

The generic emission groups/units in the tables below are preset at the facility. Section 4.50 of the application included an apron pellet dryer. This emission unit has been determined to be fuel burning equipment with a heat input rating of less than 10 MMBtu/hr, but greater than 5 MMBtu/hr. Subsequently, it is now included in the appropriate section as a generic emission unit subject to Georgia Rules 391-3-1-.02(2)(b) and (d).

Emission units/activities appearing in the following table are subject only to one or more of Georgia Rules 391-3-1-.02 (2) (b), (e) &/or (n). Potential emissions of particulate matter, from these sources based on TSP, are less than 25 tons per year per process line or unit in each group. Any emissions unit subject to a NESHAP, NSPS, or any

Description of Emissions Units / Activities	Number of Units (if appropriate)	Applicable Rules		
		Opacity Rule (b)	PM from Mfg Process Rule (e)	Fugitive Dust Rule (n)
Mineral Storage Shed	1	X		X
Wet Pellet Storage Silos	4	X		X

The following table includes groups of fuel burning equipment subject only to Georgia Rules 391-3-1-.02 (2) (b) & (d).Any emissions unit subject to a NESHAP, NSPS, or any specific Air Quality Permit Condition(s) are not included in this table.

Description of Fuel Burning Equipment	Number of Units
Fuel burning equipment with a rated heat input capacity of less than 10 million BTU/hr burning only natural gas and/or LPG.	1
Fuel burning equipment with a rated heat input capacity of less than 5 million BTU/hr, burning only distillate fuel oil, natural gas and/or LPG.	None
Any fuel burning equipment with a rated heat input capacity of 1 million BTU/hr or less.	None

The single item in the table directly above is the apron pellet dryer which was listed in section 4.50 of the application in the AEmissions Based on Emission level.≅ Since it is fuel burning equipment with heat input capacity less than 10 million Btu/hr, it has been placed in the appropriate section of the permit.

D. Temporary Sources

No temporary sources were indicated in the Title V application.

E. Short-Term Activities

The following short-term activity has been included in the Permit (Condition 7.6.1):

Description of Activity	Duration	Frequency	Applicable Standard(s)	Emission Limitations
Kiln maintenance shut-down	12 hrs	8 per year, per kiln	391-3-1-02(2)(b) 391-3-1-02(2)(p)	1. 10,000 lb per year of any regulated air pollutant; and 2. less than 1,000 lb per year of any regulated HAP and less than 2,500 lb per year of a combination of regulated HAPs

G. Emissions Trading

Not applicable.

H. Acid Rain Requirements

The facility is not subject to Acid Rain requirements.

I. Prevention of Accidental Releases

No applicability indicated.

J. Stratospheric Ozone Protection Requirements

No applicability indicated in Section 3.11 of the application.

K. Pollution Prevention

The facility has not indicated any additional pollution prevention controls.

L. Specific Conditions

All conditions have been covered elsewhere in the review.

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.

Draft Permit Review		
Reviewing Program	**Comments Received? (y/n)**	**Comments Taken Into Consideration In Draft Permit? (y/n)**
ISMP	Yes	Yes - All incorporated
SSCP	No	N/A

SSPP Unit Manager:

James P. Current, Unit Manager Date

SSPP Program Manager:

James P. Johnston, Program Manager Date

Addendum to Narrative

EPD issued draft Title V Permit 3255-261-0003-V-01-0 to C-E Minerals Plant 1 located in Andersonville on December 31, 2001. The public notice for this Title V Permit was published in the Americus Times-Recorder on January 30, 2002. The public comment period expired March 1, 2002. The US EPA has required EPD to add condition 8.23.1. Conditions 6.1.6, 7.10.1, 8.5.3, 8.8.3, 8.11.3, 8.14.2.a.iv, and 8.20.1 are template conditions that have been changed by EPD to improve the accuracy of the Title V Permit. On February 28, 2002, comments were received from Mr. Randy Brogdon with Troutman Sanders LLP. Mr. Brogdon's comments were made on behalf of C-E Minerals. All comments have been address and changes have been made to improve the accuracy of the final Title V Permit. The remainder portion of this addendum to the Narrative provides detailed responses to C-E Minerals' comments.

C-E Minerals' Comment I.

EPD Should Modify Section 1.1. of the Permit to reflect that Plants 1 and 2 are Separate Title V Sources…

Response to C-E Minerals' Comment I.

Section 1.1

EPD has addressed the Part 70 site determination in a letter from Mr. James P. Johnston to Mr. Paul V. Hall dated October 28, 1999. EPD has determined that Plant 1 and 2 comprise a single Part 70 site. EPD does not agree with the commenter's opinion that Plants 1 and 2 are different Part 70 sites. The following summarizes the basis for EPD's determination:

1. C-E Minerals Plants 1 and 2 are both owned by one entity and are therefore under common control.
2. The properties on which C-E Minerals Plant 1 and 2 are located are separated only by a roadway. Therefore, by definition, both facilities lie on contiguous property.
3. While the plants may have multiple Standard Industrial Classification (SIC) codes, both Plants 1 and 2 are comprised of pollutant-emitting activities, which belong to the same industrial grouping. The primary process at Plants 1 and 2 include manufacturing of refractory materials with an SIC code of 3255.

No changes were made to Section 1.1.

C-E Minerals' Comment II.

Section 5.0 Includes Monitoring and Preventative Maintenance Provisions Which Are Overly Burdensome and Exceed EPD's Authority Under the Title V Program…

Response to C-E Minerals' Comment II.

EPD disagrees with the commenter's opinion that EPD has exceeded its authority. Additionally, the commenter provided no justification that the proposed monitoring would be "overly burdensome."

The commenter requested EPD to explain how the new monitoring provisions are authorized under state/federal law and the Appalachian Power decision. The 40 CFR 70.6(a)(3)(i)(B) requires EPD to establish periodic

monitoring sufficient to yield reliable data from the relevant time period that are representative of the source's compliance for when the applicable requirement does not already require monitoring. For units listed in Table 3.1 of the Title V Permit, the applicable requirements (NSPS OOO, Georgia Rules (b), (g) and (p)) do not contain any monitoring requirements. In accordance with the Appalachian Power decision, 40 CFR 70.6(a)(3)(i)(B) applies, and provides the legal authority for requiring Part 70 monitoring. This explanation regarding the Appalachian Power decision uniformly applies to all of EPD's responses regarding Part 70 monitoring.

Condition 5.2.2

The commenter requested EPD to change Condition 5.2.2 to allow weekly in lieu of daily VE checks or provide an explanation of why the suggested revision is not sufficient to meet Part 70 monitoring requirements. EPD believes that performing a visible emissions check once each day of operation, or portion of each day of operation, is a fundamental part of tracking proper operations and maintenance of the baghouses. EPD has found that baghouses that are properly operated and maintained will comply with the particulate matter and visible emission limits. Reducing the frequency of visible emission monitoring from daily to weekly could allow baghouses to operate improperly for extended periods of time. While EPD has linked daily checks to proper maintenance and operation, EPD does not believe weekly checks would be considered part of proper operation and maintenance. The commenter has not proposed any alternative monitoring that would justify weekly checks as an acceptable frequency that satisfies the monitoring requirements of §70 .6(a)(3)(i)(B). The frequency requirement for VE checks in Condition 5.2.2 has not been changed.

Condition 5.2.2

The commenter expressed concern about unclear compliance obligation because daily visible emission checks are required for each portion of day of operation, and the requirement does not specifically address what is required when operating at nighttime or periods of adverse atmospheric conditions. The commenter suggested additional wording in condition 5.2.2. Such as, "provided the sources are operating during the daytime and provided VE checks are possible due to atmospheric conditions." EPD acknowledge that there may be certain atmospheric conditions or sun positions that could prevent C-E Minerals from performing the VE checks according to the specified procedure. However, EPD believe that these periods will be minimal provided C-E Minerals makes every effort, as expected, to collect the data when possible. (I.e., less than 5% monitor downtime is expected to result from adverse atmospheric conditions and improper sun positioning). EPD had no intention of taking enforcement actions when limitations of the monitoring strategy caused the monitor downtime. To clarify EPD's intent, Condition 5.2.2 has been re-written to require the checks at least once for each day or portion of each day of operation except when atmospheric conditions or sun positioning prevent any opportunity to perform the daily VE check. Any operational day when atmospheric conditions or sun position prevent a daily reading will need to be reported as monitor downtime, and this information will be used to determine if additional monitoring is necessary. As required under 70.6(a)(3)(i)(B), EPD will amend the Title V Permit as needed to require additional monitoring if the specified monitoring fails to provide reliable data from the relevant time period that are representative of the source's compliance.

Conditions 5.2.2 and 6.1.7c.i

EPD disagrees with the commenter's suggested action levels of 7 and 40 percent opacity for NSPS and non-NSPS units respectively because these action levels would fail to sufficiently yield reliable data from the relevant time period that are representative of the source's compliance. In particulate, the suggested action levels do not provide a reasonable assurance that the particulate matter emission limits will be met. Further more, EPD does not believe initiating maintenance based on an "action level" representing noncompliance is acceptable. Action to maintain the baghouse should have already occurred prior to exceeding the visible emission limit. EPD believes that properly operated baghouses will comply with both the visible emission limits and particulate matter emission limits. EPD's monitoring strategy establishes action levels indicative of properly operated and maintained baghouses as part of monitoring sufficient to yield reliable data from the relevant time period that are representative of the source's compliance. No change has been made to the opacity action levels specified in Condition 5.2.2. While evaluating the action levels in Condition 5.2.2 used to reportable excursions in Condition 6.1.7c.i, EPD identify an error in Condition 6.1.7c.i. The error allows for possible continued operational and maintenance problems to exist without a reportable excursion. As intended by EPD, Condition 6.1.7c.i has been corrected to include a reporting of excursions for all two consecutive instances that VE checks required action.

Condition 5.2.2c

The commenter suggested removing certain data recording requirements from Condition 5.2.2c that EPD believes are important part of monitoring. EPD considers baghouse maintenance data, such as pressure drop, to be integral to the overall Part 70 monitoring strategy that ensures baghouses are properly operated and maintained, which provides reliable data from the relevant time period that are representative of the source's compliance. Data recording requirements contained in Condition 5.2.2c for pressure drop and other pertinent operating parameters has not been changed.

Conditions 5.2.3

EPD disagrees with the commenter's suggested changes to Conditions 5.2.3, which limits EPD's authority to prescribe proper maintenance of baghouses and cyclones. The suggested wording implies that EPD would need to know that a violation has occurred to affectively change the Preventative Maintenance Program. However, the commenter has not proposed monitoring sufficient to yield reliable data from the relevant time period that are representative of the sources compliance. EPD has relied on prescribing minimum preventative maintenance as an integral part of the overall Part 70 monitoring strategy. Condition 5.2.3 has not been changed.

Section 3.1 and Conditions 5.2.2, 5.2.4 and 6.1.7c.iv

EPD disagrees with the commenter's suggested removal of the Preventative Maintenance Plan for cyclones and multi tube cyclones contained in Condition 5.2.4. EPD believes that the Preventative Maintenance Plan is an important part of the overall Part 70 monitoring strategy. However, EPD has identified several errors regarding the cyclones and multi tube cyclone monitoring that need to be corrected. The multi tube cyclones controlling the kiln coolers were not identified in the Draft Permit. Consequently, the specified monitoring will not provide reliable data from the relevant time period that are representative of the source's compliance. Section 3.1 and Condition 5.2.4 have been modified to correctly identify the cyclones and multi tube cyclones. Condition 5.2.2 has been modified to required daily VE checks on the multi tube cyclones controlling the kiln coolers, which include an opacity action level of 10% that represents proper operations and maintenance. Condition 6.1.7c.iv

has been changed to require reporting based on the VE checks of the kiln cooler multi cyclones only. The other cyclones and multi tube cyclones exhaust into subsequent control equipment that already have sufficient reportable elements that are defined as excursions. The changes to Section 3.1 and Conditions 5.2.2, 5.2.4 and 6.1.7c.iv will ensure proper operations and maintenance of the cyclones and multi tube cyclones are monitored sufficient to yield reliable data from the relevant time period that are representative of the source's compliance. The commenter's suggestion to remove the Preventative Maintenance Plan for cyclones without a reasonable method for ensuring compliance does not meet 70.6(a(3)(i)(B) requirements.

Conditions 5.2.1, 5.2.2c and 5.2.3a

EPD disagrees with the commenter's opinions regarding pressure drop monitoring and record keeping requirement per Conditions 5.2.1, 5.2.2c, and 5.2.3a. EPD believes that tracking the pressure drop once a week and when visible emissions are present provides data that can be used to verify the baghouses have been properly maintained. Pressure drop is a widely recognized parameter used for evaluating performance and proper operation of baghouses. EPD considers pressure drop as an important element of the Preventative Maintenance Plan. EPD is confident that properly operated and maintained baghouses will comply with the applicable particulate matter and visible emission limits. Hence, EPD considers tracking of pressure drop data as an integral part of the Part 70 monitoring strategy to obtain reliable data from the relevant time period that are representative of the source's compliance. EPD does not agree with the commenter's attempts to link baghouse pressure drop monitoring to the requirements contained in the 40 CFR Part 60 Subpart OOO, Rule 391-3-1-.02 (b) and Rule 391-3-1-.02(p). These regulations do not require baghouse monitoring. Hence, baghouse monitoring is required by §70.6(a)(3)(i)(B). The commenter has not provided an alternative Part 70 monitoring strategy sufficient to yield reliable data from the relevant time period that are representative of the source's compliance.

Conditions 5.2.1 and 6.1.7

The commenter requested changing the frequency of monitoring pressure drop contained in Condition 5.2.1 from daily to weekly. The commenter erroneously associated the daily pressure drop readings with baghouses. The daily monitoring required in Condition 5.2.1 applies to the scrubbers. EPD disagrees with the commenter regarding frequency of monitoring. After further consideration, EPD has identified this as an error in the monitoring requirement. EPD considers continuous monitoring of pressure drop across a scrubber and water flow rate to a scrubber to be a well-developed standard monitoring approach that is reasonable. The Draft Title V Permit will be changed to require continuous monitoring of the scrubbers. Additionally, Condition 5.2.1 included an identification error. The scrubbers are used to control emissions from the kilns not the kiln coolers. Condition 5.2.9 has been added to allow 120 days to implement new monitoring including the installation of monitoring equipment needed for continues measurements of pressure drop and water flow rate. Conditions 5.2.1 and 6.1.7 have been changed and Condition 5.2.9 has been added to the Title V Permit.

Condition 5.2.6

C-E Minerals requested the removal of the requirement to use Conditional Test Method 30 (CTM-30) in Condition 5.2.6. EPD intended to require the portable analyzer calibration checks to meet equivalent criteria as contained in CTM-30. To clarify, reference to CTM-30 has been removed, and Condition 5.2.6 has been

modified to include specific calibration requirements.

Conditions 3.2.2, 3.2.3, 5.2.6, 6.2.4, 6.2.5, 6.2.8 and 6.2.9

EPD disagrees with the commenter's opinion that weekly SO_2 monitoring required by Condition 5.2.6 eliminates the need to report fuel sulfur content as required by Conditions 6.2.8 and 6.2.9 of the Draft Permit. Condition 5.2.6 is part of the monitoring used to ensure compliance with the SO_2 mass emission rate limit (80 lb/hr) specified by Condition 3.2.2. While, Conditions 6.2.4, 6.2.5, 6.2.8, and 6.2.9 are recordkeeping and reporting requirements to ensure the sulfur content of the fuel does not exceed the limit (2.5% by weight) specified in Condition 3.4.3. Hence, EPD believes that Condition 6.2.4, 6.2.5, 6.2.8, and 6.2.9 are necessary to provide monitoring sufficient to yield reliable data from the relevant time period that are representative of the source's compliance. Conditions 6.2.8 and 6.2.9 have not been changed.

Condition 5.2.8

EPD disagrees with the commenter's opinion that temperature monitoring of baghouses as specified by Condition 5.2.8 is not authorized. EPD is confident that a properly maintained and operated baghouse will comply with emission limits. The Part 70 monitoring strategy has been designed to track proper maintenance and operations of the baghouses. The monitoring of baghouse temperature is an integral part of tracking proper operations. Bag temperature exceeding the rated design would be indicative of poor operations. The commenter has not provided a reasonable alternative monitoring method sufficient to yield reliable data from the relevant time period that are representative of the source's compliance. Hence, Condition 5.2.8 has not been changed.

CE Minerals' Comment III.

Several Provisions in the Title V Permit Must Be Designated as "State-Only Enforceable" Conditions…

Response to C-E Minerals' Comment III.

Conditions 8.2.1, 8.11.5 and 8.15.1

The commenter has expressed that the citation of regulatory authority as required by the 40 C.F.R. 70.6(a)(1) provides the basis for "Federally Enforceable" vs. "State Only Enforceable" conditions per 40 C.F.R. 70.6(b). EPD does not agree with the commenter. EPD has provided the underlying regulatory authority as required by the 40 C.F.R. 70.6(a)(1), and has indicated Conditions that are "State Only Enforceable" as required by 40 C.F.R. 70.6(b). There is only one method for designating a condition as state only enforceable. That is by stating such at the beginning of the permit condition. The Division intended to marked each condition as "State Only Enforceable" as applicable and required by 40 CFR 70.6(b)(2). EPD considers all conditions of the Title V Permit to be federally enforceable unless otherwise identified per 40 CFR 70.6(b)(1) and condition 8.2.1. Conditions 8.11.5 and 8.15.1 were labeled "State Only Enforceable Condition." EPD has determined that Condition 8.11.5 is based on a direct SIP requirement, and is federally enforceable. EPD has the authority in accordance with the SIP (State Implementation Plan per CFR Part 52 Subpart L) to require Condition 8.15.1, but this specific condition is state enforceable only because the requirement regarding concealment of emissions is not part of the SIP. Hence, Condition 8.11.5 is Federally Enforceable, and Condition 8.15.1 is "State Only

Enforceable." The term "State Only Enforceable" was removed from Condition 8.11.5. No other changes were made regarding State Only Enforceable vs. Federally Enforceable requirements of the Title V Permit.

C-E Minerals' Comment IV

The Draft Permit Should Include Applicable Georgia Air Quality Rules that Address Excess Emission During Startup, Shutdown, and Malfunction Situations.

EPD's Response to C-E Minerals' Comment IV

Condition 7.14.1

The commenter requested and EPD agrees to add 391-3-1-.02(2)(a)7 to the Title V Permit.

C-E Minerals' Comment V

The Draft Permit Includes Several Minor Incorrect Statements which should be changed Prior to Issuance of the Final Title V Permit.

Response to C-E Minerals' Comment V

Section 1.3

The commenter requested changing Section 1.3 to read "kaolin, bauxitic clays and nonmetallic minerals" in place of "Kaolin." As requested, the change has been made.

Section 3.1

The commenter requested changing Section 3.1 to read "RM1B" in place of "RM1S". As requested, the change has been made.

Condition 3.5.2

The commenter requested removing Condition 3.5.2. Condition 3.5.2 of the Title V Permit originated from the work practice standard contained in Condition 17 of C-E Minerals Air Quality Permit No. 3295-129-10423. Condition 3.5.2 provides a clear expectation that an adequate inventory of replacement filter bags for all baghouses is necessary. As required by Condition 391-3-1-.03(2)(c), EPD has specified this as a condition under which the facility shall be operated in order to comply with the rules. Removing this condition would only make the exception to comply more ambiguous. No change will be made to Condition 3.5.2.

Condition 5.2.1

The commenter requested changing Condition 5.2.1 to read "RM1B" in place of "RM1S." As requested, the

change has been made.

Condition 5.2.5

The commenter requested changing Condition 5.2.5 to read "stack" in place of "point." Emission point more accurately describes EPD's intent. The monitoring of Condition 5.2.5 applies to uncontrolled emission units that may or may not vent to a stack, but still require Part 70 monitoring. Hence, monitoring the emission point is most appropriate, and no change was made to the condition.

Condition 6.1.1

The commenter requested clarification of "permanent form" in Condition 6.1.1. EPD intended for the common meaning to apply. EPD believes Condition 6.1.1 is sufficiently written, and no change has been made. Nothing in this condition limits the media used to record data. Digital, paper, or any other technology found to provide a permanent form is acceptable.

Condition 6.1.2

The commenter requested changing Condition 6.1.2 to read "within seven (7) days" to "within seven (7) business days". This wording is directly from Rule 391-3-1-.02(6)(b)1(iv). Hence, the Rule would need to be amending before making the requested change. Condition 6.1.2 was not changed.

Condition 6.1.4a.

The commenter requested clarification of the phrase "required work practice procedure" in Condition 6.1.4a. EPD intended for Condition 6.1.4 to have specific reportable elements including excess emissions, exceedances, and excursions as described in the Title V Permit. Hence, EPD has removed this phrase from Condition 6.1.4a to eliminate confusion.

Conditions 5.2.3f, 5.2.8 and 6.1.7c.v

The commenter identified "Condition 5.2.3f" as the incorrect citation contained in Condition 6.1.7c.v. This citation has been corrected to Condition 5.2.8.

Condition 6.1.7c.viii

The commenter requested changing Condition 6.1.7c.viii to read "less than 250 gallons per minute" in place of "less than 344 gallons per minute." The commenter provided no supporting data that the scrubber can efficiently remove Particulate Matter and Sulfur Dioxide at a scrubber liquid flow rate of 250 gpm. The application shows 360 to 500 gpm as the design water flow rate. Based on the application, EPD arrived at the lower acceptable water flow rate of 344 gpm by allowing water flow to drop by 80% of the average design flow rate of 430 gpm. No change was made to Condition 6.1.7c.viii.

Condition 7.6.1

The commenter requested changing Condition 7.6.1 to read "duration 16 hrs and frequency 12 per year per kiln" in place of "duration 12 hrs and frequency 8 per year per kiln." EPD has determined that the startup and shutdown is a part of the normal kiln operations, and is already covered by the Title V Permit. EPD recognizes that processing equipment at the facility will require maintenance, which is also allowed by the Title V Permit. Conditions 8.22.1 and 8.22.2 sufficiently limits fugitive dust from all plant activities including maintenance. Condition 7.6.1 has been removed from the Title V Permit.

Condition 8.17.1

The commenter requested clarification of "manner consistent with" used in Condition 8.17.1 by adding a citation to the applicable standard and regulation with reference to the specific permit condition. EPD does not believe clarification is necessary. This condition is cited directly from Rule 391-3-1-.02(2)(a)10, and requires C-E Minerals to operate the facility in a responsible manner. EPD does not believes that evidence of noncompliance with an emission standard is necessary to determine if the facility has been operated and maintained in a "manner consistent with" good air pollution control practices. Condition 8.17.1 has not been changed.