

Part 70 Operating Permit Amendment

Permit Amendment No.: **3255-261-0047-V-04-6** Effective Date: **January 30, 2006**

Facility Name: **C-E Minerals Plant 2**

Facility Address Highway 195
Andersonville, Georgia 31711, Sumter County

Mailing Address: P.O. Box 37
Andersonville, Georgia 31711

**Parent/Holding
Company:** Imerys

Facility AIRS Number: 04-13-261-00047

In accordance with the provisions of the Georgia Air Quality Act, O.C.G.A. Section 12-9-1, et seq and the Georgia Rules for Air Quality Control, Chapter 391-3-1, adopted pursuant to and in effect under the Act, the Permittee described above is issued a construction permit for:

The increase of the SO₂ emissions limitation in Condition No. 3.2.1 for Kilns 1K, 2K, 3K, 4K, and 5K from 80 pounds per hour to 116 pounds per hour. Modification of General Record keeping Requirements Condition No. 6.1.7. Changes to permit limits and record keeping shall occur upon completion of stack height modifications.

This Permit Amendment is conditioned upon compliance with all provisions of The Georgia Air Quality Act, O.C.G.A. Section 12-9-1, et seq, the Rules, Chapter 391-3-1, adopted and in effect under that Act, or any other condition of this Permit Amendment and Permit No. 3255-261-0047-V-04-0. Unless modified or revoked, this Permit Amendment expires upon issuance of the next Part 70 Permit for this source.

This Permit Amendment may be subject to revocation, suspension, modification or amendment by the Director for cause including evidence of noncompliance with any of the above; or for any misrepresentation made in Application Nos. TV-15800 and TV-15933 dated November 3, 2004 and January 4, 2005; any other applications upon which this Permit Amendment or Permit No. 3255-261-0047-V-04-0 are based; supporting data entered therein or attached thereto; or any subsequent submittal or supporting data; or for any alterations affecting the emissions from this source.

This Permit Amendment is further subject to and conditioned upon the terms, conditions, limitations, standards, or schedules contained in or specified on the attached **6**, which pages are a part of this Permit Amendment, and which hereby become part of Permit No. 3255-261-0047-V-04-0.

Director
Environmental Protection Division

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PART 1.0 FACILITY DESCRIPTION

1.3 Process Description of Modification

The facility has submitted an application for the increase in the SO₂ emission limitations for Kilns 1K, 2K, 3K, 4K, and 5K in Condition No. 3.2.1 from 80 pounds per hour to 116 pounds per hour. The facility has submitted SO₂ NAAQS and increment consumption air quality analysis that demonstrates that the NAAQS and the PSD SO₂ increment will not be violated due to the increase in SO₂ emissions. The stacks (Stack ID Nos. 16 and 17) for kilns 2K and 3K from Plant No. 2 will be raised from 120 feet to approximately 160 feet in order to demonstrate compliance with the increment consumption analysis.

Condition 6.1.7 is being modified by increasing the excursion threshold for SO₂ concentration from 310 ppm to 450 ppm.

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PART 3.0 REQUIREMENTS FOR EMISSION UNITS

Note: Except where an applicable requirement specifically states otherwise, the averaging times of any of the Emissions Limitations or Standards included in this permit are tied to or based on the run time(s) specified for the applicable reference test method(s) or procedures required for demonstrating compliance.

3.1.3 Modified Emission Units

Emission Units		Specific Limitations/Requirements		Air Pollution Control Devices	
ID No.	Description	Applicable Requirements/Standards	Corresponding Permit Conditions	ID No.	Description
1K	Rotary Kiln No.1	391-3-1-.02(2)(b) 391-3-1-.02(2)(p) 391-3-1-.02(2)(g) 40 CFR 52.21 PSD	3.2.1, 3.4.1, 3.4.2, 3.4.3, 3.5.1, 3.5.2, 5.2.1, 5.2.2, 5.2.3, 5.2.4, 5.2.5, 5.2.7, 5.2.8, 5.2.9, 6.1.7, 6.2.4, 6.2.5, and 6.2.7	1KZ	Kiln Multi-tube Cyclone (1C) & Scrubber (1Z)
	Cooler No. 1			1KCC or IKCC & CBH4	Multicyclone or Multi-cyclone and Baghouses
2K	Rotary Kiln No.2	391-3-1-.02(2)(b) 391-3-1-.02(2)(p) 391-3-1-.02(2)(g) 40 CFR 52.21 PSD	3.2.1, 3.4.1, 3.4.2, 3.4.3, 3.5.1, 3.5.2, 5.2.1, 5.2.2, 5.2.3, 5.2.4, 5.2.5, 5.2.7, 5.2.8, 5.2.9, 6.1.7, 6.2.4, and 6.2.5	2KZ	Kiln Multi-tube Cyclone (2C) & Scrubber (2Z)
	Cooler No. 2			2KCC	Multicyclone
3K	Rotary Kiln No.3	391-3-1-.02(2)(b) 391-3-1-.02(2)(p) 391-3-1-.02(2)(g) 40 CFR 52.21 PSD	3.2.1, 3.4.1, 3.4.2, 3.4.3, 3.5.1, 3.5.2, 5.2.1, 5.2.2, 5.2.3, 5.2.4, 5.2.5, 5.2.7, 5.2.8, 5.2.9, 6.1.7, 6.2.4, and 6.2.5	3KZ	Kiln Multi-tube Cyclone (3C) & Scrubber (3Z)
	Cooler No. 3			3KCC	Multicyclone
4K	Rotary Kiln No.4	391-3-1-.02(2)(b) 391-3-1-.02(2)(p) 391-3-1-.02(2)(g) 40 CFR 52.21 PSD	3.2.1, 3.4.1, 3.4.2, 3.4.3, 3.5.1, 3.5.2, 5.2.1, 5.2.2, 5.2.3, 5.2.4, 5.2.5, 5.2.7, 5.2.8, 5.2.9, 6.1.7, 6.2.4, 6.2.5, and 6.2.7	4KZ	Kiln Multi-tube Cyclone (4C) & Scrubber (4Z)
	Cooler No. 4			4KCC or IKCC & CBH4	Multi- Cyclone or Multi-cyclone and Baghouses
5K	Kiln No. 5	391-3-1-.02(2)(b) 391-3-1-.02(2)(p) 391-3-1-.02(2)(g) 40 CFR 52.21 PSD	3.2.1, 3.4.1, 3.4.2, 3.4.3, 3.5.1, 3.5.2, 5.2.1, 5.2.2, 5.2.3, 5.2.4, 5.2.5, 5.2.7, 5.2.8, 5.2.9, 6.1.7, 6.2.4, and 6.2.5	5KZ	Kiln Multi-tube Cyclone (2C) & Scrubber (2Z)
	Cooler No. 5			5KCC	Cooler Multi-tube Cyclone

3.2 Equipment Emission Caps and Operating Limits

Modified Condition

3.2.1 Upon increasing stack height for rotary Kilns 2K and 3K, the Permittee shall not allow emissions in excess of the limits listed in Table 3.2.1. The limits are in addition to any other applicable limitation. Until the stack heights are increased, the Permittee shall not allow SO₂ emissions from Kilns 1K-5K to exceed 80 pounds per hour each and PM emissions from each cooler 4K and 5K to exceed 9.42 pounds per hour each. [40 CFR Part 52 Section 52.21]

Table 3.2.1

Source Code(s)	Emission Unit(s)	Pollutants	Emission Rates Not To Exceed	Stack Height
1K	Rotary Kiln	SO ₂	116 lbs/hr	120 feet
2K	Rotary Kiln	SO ₂	116 lbs/hr	160 feet
3K	Rotary Kiln	SO ₂	116 lbs/hr	160 feet
4K	Rotary Kiln	SO ₂	116 lbs/hr	120 feet
	Cooler	PM	9.42 lbs/hr	52 feet
5K	Rotary Kiln	SO ₂	116 lbs/hr	120 feet
	Cooler	PM	9.42 lbs/hr	52 feet

PART 6.0 OTHER RECORD KEEPING AND REPORTING REQUIREMENTS**6.1 General Record Keeping and Reporting Requirements**

Modified Condition contingent on increasing the stack height for C. E. Minerals Plant 2 stacks 16 and 17 to 160 feet.

6.1.7 For the purpose of reporting excess emissions, exceedances or excursions in the report required in Condition 6.1.4, the following excess emissions, exceedances, and excursions shall be reported:

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

- a. Excess emissions: (means for the purpose of this Condition and Condition 6.1.4, any condition that is detected by monitoring or record keeping which is specifically defined, or stated to be, excess emissions by an applicable requirement)
 - i. None required to be reported in accordance with Condition 6.1.4.
- b. Exceedances: (means for the purpose of this Condition and Condition 6.1.4, any condition that is detected by monitoring or record keeping that provides data in terms of an emission limitation or standard and that indicates that emissions (or opacity) do not meet the applicable emission limitation or standard consistent with the averaging period specified for averaging the results of the monitoring)
 - i. Any 12-consecutive month period during which fuel oil was fired in the Rotary Dryer (BD2) more than 1,200 hours.
 - ii. Deleted
 - iii. Deleted
 - iv. Deleted
 - v. Deleted
 - vi. Deleted
 - vii. Deleted
 - viii. Deleted
 - ix. Deleted
 - x. Any 12-consecutive month period that the Roller Mill (RM3) was operated more than 5,600 hours.
 - xi. Any time when fuel other than natural gas, propane, or No. 2 fuel is fired in the Rotary Dryer (BD2).
 - xii. Any time when coal fired in a Rotary Kiln (K1, K2, K3, K4 or K5) contains more than 2.5% sulfur by weight.
 - xiii. Any time when fuel oil is fired that does not meet the definition of distillate oil as specified in Condition 6.2.4.
 - xiv. Any time when Baghouse CBH4 is not operated while processing dry kaolin, dry bauxitic, meta kaolin, or meta bauxitic clays in Cooler (K1) or Cooler (K4).
- c. Excursions: (means for the purpose of this Condition and Condition 6.1.4, any departure from an indicator range or value established for monitoring consistent with any averaging period specified for averaging the results of the monitoring)

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- i. Any two consecutive required daily determinations of visible emissions requiring action by Condition 5.2.2 a. or b. from the same source.
 - ii. Any visible emissions or mechanical failure or malfunction discovered by the walk through described in condition 5.2.6 that are not eliminated or corrected within 24 hours of first discovering the visible emissions or mechanical failure or malfunction.
 - iii. Each occurrence when the temperature at the inlet of any baghouse specified in condition 5.2.4 exceeds the filter bag design temperature or the equivalent filter bag design temperature recorded in accordance with condition 5.2.4.
 - iv. Any average SO₂ concentration, measured in accordance with Condition 5.2.7, which is greater than **450 ppm**.
 - v. Any pH measurement below 5.0, measured in accordance with Condition 5.2.8.
 - vi. Any two-hour average of the wet scrubber pressure loss required by Condition 5.2.1 that is less than 10.8 inches of water column for each scrubber (1KZ, 2KZ, 3KZ, 4KZ, and 5KZ).
 - vii. Any two-hour average of the wet scrubber liquid flow rate required by Condition 5.2.1 that is less than 344 gallons per minute or greater than 516 gallons per minute for each scrubber (1KZ, 2KZ, 3KZ, 4KZ, and 5KZ).
 - viii. For scrubber CMD2, any two-hour block average of the wet scrubber pressure loss that is less than 90 percent of the value established in condition 5.2.10. For the purposes of this permit, a two-hour block average shall be defined as any one of the eight consecutive two-hour time periods between 12:00 midnight and the following midnight.
 - ix. For scrubber CMD2, any two-hour block average of the wet scrubber liquid flow rate that is less than 80 percent or more than 120 percent of the value established in condition 5.2.1.1. For the purposes of this permit, a two-hour block average shall be defined as any one of the eight consecutive two-hour time periods between 12:00 midnight and the following midnight.
- d. In addition to the excess emissions, exceedances and excursions specified above, the following should also be included with the report required in Condition 6.1.4:
- i. A report, prepared from the records required by Condition 6.2.3, for Roller Mill (ID No. RM3). The report, for each emission unit, shall consist of six-12-consecutive month totals (a total for each month in the semiannual reporting period) of the hours of operation. A 12-consecutive month total shall be defined as the sum of the hours of operation for a month plus the total hours of operation for the previous 11 consecutive months.
 - ii. The report shall contain fuel supplier certifications and a certified statement from a Responsible Official that the records of fuel supplier certifications submitted represent all of the fuel oil combusted during the semiannual period. If no fuel oil was combusted during the semiannual period, the report should so state.
 - iii. The report shall contain coal supplier records and a certified statement from a Responsible Official that the records of fuel supplier analyses submitted represent all of the coal combusted during the semiannual period. If no coal was combusted during the semiannual period, the report should so state.

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- iv. The report shall contain a certified statement from a Responsible Official showing all fuels that were fired in the Rotary Dryer (BD2) during the reporting period.
 - v. A report, prepared from the records required by Condition 6.2.7, of start and end times for the operation of Baghouse CBH4 and operations of Coolers K1 and K4, which represent each day or portion of each day dry kaolin, dry bauxitic, meta kaolin, or meta bauxitic clay is processed.
 - vi A report, prepared from the records required by Condition 6.2.8 for Rotary Dryer (ID No. BD2). The report shall consist of six 12-consecutive month totals (a total for each month in the semiannual reporting period) of the hours of operation of the dryer on No. 2 fuel oil. A 12-consecutive month total shall be defined as the sum of the hours of operation for a month plus the total hours of operation for the previous 11 consecutive months.
- 6.1.9 Within 30 days of completing construction of the new stacks, the permittee shall submit a notification stating the new stack heights.