

# 502(b)(10) Permit for Part 70 Source

Permit Attachment No.: 3255-261-0047-V-04-3      Effective Date: January 19, 2005

**Facility Name:**            **C-E Minerals Plant 2**  
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 or in effect under the Act, the Permittee described above is issued a SIP Construction and Operating Permit for:

The construction and operation of a new mixer (Emission Unit ID No. B2), a new rotary dryer (Emission Unit ID No. BD09), a new crusher (Emission Unit ID No. BC14), and the use of silane solution in the existing Lancaster mixer in Building 6 (Emission Unit ID No. A1M) and the new Rollo-Mixer (Emission Unit ID No. B2).

This modification qualifies as a Section 502(b)(10) change to the Part 70 source in accordance with Georgia Air Quality Control Rule 391-3-1-.03(10)(b)(5).

This Permit 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 or in effect under that Act, or any other condition of this Permit and Permit No. 3255-261-0047-V-04-0. Unless modified or revoked, this Permit expires upon issuance of the next Part 70 Permit for this source.

This Permit 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 No. TV-15414 dated June 9, 2004 revised on July 28, 2004 and November 23, 2004; any other applications upon which this Permit 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 is further subject to and conditioned upon the terms, conditions, limitations, standards, or schedules contained in or specified on the attached 9 page(s), which pages are a part of this Permit, and which hereby become part of Permit No. 3255-261-0047-V-04-0.

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Director  
Environmental Protection Division

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**PART 1.0 FACILITY DESCRIPTION****1.3 Process Description of Modification**

C-E Minerals Plant 2 is planning on installing a Continental Rollo-Mixer (Emission Unit ID No. B2) that will have a process input rate of 10 tons per batch (40 tons per hour), a rotary dryer (Emission Unit ID No. BD09) that will have a maximum heat input rating of 1.0 MMBtu/hr, a crusher (Emission Unit ID No. BC14) that will have a process input rate of 0.25 tons per hour, and use a silane solution at the previously permitted Lancaster mixer (Emission Unit ID No. A1M) and use of this solution at the Rollo-Mixer B2. The Lancaster mixer will now be designated as Emission Unit ID No. A1M. The rotary dryer will process non-metallic minerals in the same manner as the rotary dryer BD2. The facility currently does not use the silane solution at this facility. The new equipment will emit particulate matter from mineral processing and VOC and hazardous air pollutants (HAPs) emissions from the silane solution application.

## 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 Emission Units

#### 3.1.1 Additional Emission Units

Emission Units		Specific Limitations/Requirements		Air Pollution Control Devices	
ID No.	Description	Applicable Requirements/Standards	Corresponding Permit Conditions	ID No.	Description
BD09	Rotary Dryer	391-3-1-.02(2)(b) 391-3-1-.02(2)(g) 391-3-1-.02(2)(p)	3.4.1, 3.4.2, 3.4.3, 6.1.8, 6.2.9	BD3	Baghouse
B2	Rollo-Mixer	391-3-1-.02(2)(b) 391-3-1-.02(2)(p) 40 CFR 60 Subpart OOO	3.2.7, 3.2.8, 3.3.1, 3.4.1, 3.4.2, 5.2.12, 5.2.13, 5.2.14, 5.3.2, 6.1.8, 6.2.10, 6.2.11, 6.2.12, 6.2.13, 6.2.14, 6.2.15	DCB2	Dust Collector
BC14	Crusher	391-3-1-.02(2)(b) 391-3-1-.02(2)(p) 40 CFR 60 Subpart OOO	3.3.1, 3.4.1, 3.4.2	B6	Baghouse (vents inside building)
AIM	Lancaster Mixer	391-3-1-.02(2)(b) 391-3-1-.02(2)(p)	3.2.7, 3.2.8, 3.4.1, 3.4.2, 6.1.8, 6.2.10, 6.2.11, 6.2.12, 6.2.13, 6.2.14, 6.2.15	A9	Baghouse (vents inside of building)

\* Generally applicable requirements contained in this permit may also apply to emission units listed above.

### 3.2 Equipment Emission Caps and Operating Limits

3.2.7 The Permittee shall not discharge or cause the discharge into the atmosphere from the silane process associated with emission units listed in table 3.1.1 volatile organic compound (VOC) emissions in an amount exceeding 39 tons during any twelve (12) consecutive month period.

[40 CFR 52.21 – PSD Avoidance]

3.2.8 The Permittee shall not discharge or cause the discharge into the atmosphere from this major Part 70 source (i.e., Plants 1, 2 and 6) any single hazardous air pollutant (HAP) which is listed in Section 112 of the Clean Air Act, in an amount equal to or exceeding 10 tons (or any lesser quantity for a single hazardous air pollutant that EPA may establish by regulation) during any 12 consecutive months, or any combination of such listed pollutants in an amount equal to or exceeding 25 tons during any 12 consecutive months.

[40 CFR 63 Subpart B/ 112(g) of CAA avoidance]

**PART 5.0 REQUIREMENTS FOR MONITORING (Related to Data Collection)****5.2 Specific Monitoring Requirements**

5.2.12 The Permittee shall install, calibrate, maintain, and operate monitoring devices for the measurement of the indicated parameters on the equipment in the following table. Data shall be recorded at the frequencies specified. Where such performance specification(s) exist, each system shall meet the applicable performance specification(s) of the Division's monitoring requirements.

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

Emission Unit	Control Device ID	Description of Control Device	Parameter to be monitored	Recording Frequency*
Rollo-mixer B2	DCB2	Dust Collector	Pressure drop	Weekly

\* Weekly means each week or portion of each week of operation of the associated emission unit that is required to utilized baghouse controls.

5.2.13 The Permittee shall perform a check of visible emissions from the Rollo-Mixer Dust Collector (APCD ID No. DCB2). 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 using procedures a through d below 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 shall be reported as monitor downtime in the report required by Condition 6.1.4.

[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 paragraph b or 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. 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 Condition 5.2.13 a or b, 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 140° 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.

5.2.14 Within 60 days of the issuance of this permit, the Permittee shall develop and implement a Preventive Maintenance Program for the baghouse specified in Condition 5.2.13 to assure that the provisions of condition 8.17.1 are met. The program shall be subject to review and modification by the Division and shall include the pressure drop ranges that indicate proper operation for each baghouse. At a minimum, the following operation and maintenance checks shall be made on at least a weekly basis, and a record of the findings and corrective actions taken shall be kept in a maintenance log:

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

- a. Record the pressure drop across each baghouse and ensure that it is within the appropriate range.
- b. For baghouses equipped with compressed air cleaning systems, check the system for proper operation. This may include checking for low pressure, leaks, proper lubrication, and proper operation of timer and valves.
- c. For baghouses equipped with reverse air cleaning systems, check the system for proper operation. This may include checking damper, bypass, and isolation valves for proper operation.
- d. For baghouses equipped with shaker cleaning systems, check the system for proper operation. This may include checking shaker mechanism for loose or worn bearings, drive components, mounting; proper operation of outlet/isolation valves; proper lubrication.
- e. Check dust collector hoppers and conveying systems for proper operation.

### **5.3 Record Keeping and Reporting Requirements (associated with Specific Monitoring Requirements)**

5.3.2 The Permittee shall, in accordance with the requirements of Conditions Nos. 6.1.1 and 6.1.6 of this permit, maintain records of all data and information required by Conditions Nos. 5.2.12, 5.2.13 and 5.2.14. Reports shall be submitted in accordance with the requirements of Condition 6.1.4.

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

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

6.1.8 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)

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 period of 12 consecutive months during which the total emissions of any single HAP from this major Part 70 source (i.e., Plants 1, 2 and 6) are equal to or exceed 10 tons (or any lesser quantity for a single hazardous air pollutant that the U.S. EPA may establish by rule);
  - ii. Any period of 12 consecutive months during which the combined emissions of all HAP compounds from this major Part 70 source (i.e., Plants 1, 2 and 6) are equal to or exceed 25 tons; and
  - iii. Any period of 12 consecutive months during which the total VOC emissions from the silane process associated with emission units listed in table 3.1.1 are equal to or exceed 39 tons.
  - iv. Any use of fuel other than propane, natural gas, or No. 2 fuel oil in Rotary Dryer BD09 (Emission Unit ID No. BD09).
- 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)
- i. Any two consecutive required daily determinations of visible emissions requiring action by Condition 5.2.13 a. or b. from the same source.

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- 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 6.2.12 and 6.2.14 for the VOC and HAPs emissions. The report shall consist of six 12-consecutive month totals (a total for each month in the semiannual reporting period) of the VOC and HAPs emissions. A 12-consecutive month total shall be defined as the sum of the VOC and HAPs emissions for a month plus the total VOC and HAPs emissions for the previous 11 consecutive months.

## 6.2 Specific Record Keeping and Reporting Requirements

- 6.2.9 The Permittee shall verify that each shipment of fuel oil received is distillate oil by obtaining fuel oil supplier certifications. Supplier certifications shall contain the name of the supplier and a statement from the supplier that the oil is distillate oil. For the purposes of this Condition, distillate oil means fuel oil that complies with the specifications for fuel oil numbers 1 and 2 as defined in ASTM D396.  
[391-3-1-.02(6)(b)1, and 40 CFR 70.6(a)(3)(i)]
- 6.2.10 The Permittee shall maintain monthly usage records of all VOC and HAP containing materials introduced into the Rollo-Mixer and Lancaster Mixer (Emission Unit ID Nos. B2 and A1M). These records shall include the total weight of each material used, the VOC and HAP content of each material (expressed as a weight percentage) and the maximum amount of VOC and HAPs that could form from reaction. These records shall be kept available for inspection by or submittal to the Division for five years from the date of record.  
[391-3-1-.02(6)(b)1 and 391-3-1.03(2)(c)]
- 6.2.11 The Permittee shall use the records required in Condition 6.2.10 to calculate combined total monthly VOC emissions from the silane process associated with emission units listed in table 3.1.1. All demonstration calculations, including any Division-approved emission factor used in the calculations, shall be kept as part of the records required in Condition 6.2.10. The Permittee shall notify the Division in writing if the combined total monthly VOC emissions from the silane process associated with emission units listed in table 3.1.1, exceed 3.25 tons during any calendar month. This notification shall be postmarked by the fifteenth day of the following month and shall include an explanation of how the Permittee intends to maintain compliance with the emission limit in Condition 3.2.7.  
[391-3-1-.02(6)(b)1 and 391-3-1.03(2)(c)]
- 6.2.12 The Permittee shall use the monthly VOC emission data required in Condition 6.2.11 to calculate the combined 12-month rolling total of VOC emissions from the silane process associated with emission units listed in table 3.1.1 for each calendar month. The Permittee shall notify the Division in writing if the combined 12-month rolling total of VOC emissions from the silane process associated with emission units listed in table 3.1.1, exceeds 39 tons. This notification shall be postmarked by the fifteenth day of the following month. A 12-month rolling total shall be defined as the sum of VOC emitted for a month plus the total VOC emitted for the previous 11 consecutive months.  
[391-3-1-.02(6)(b)1 and 391-3-1.03(2)(c)]

- 6.2.13 The Permittee shall use the monthly records required in Condition 6.2.10 to calculate total monthly emissions of each listed hazardous air pollutant. The Permittee shall notify the Division in writing if emissions of any individual hazardous air pollutant exceed 0.83 tons (or one-twelfth of any lesser quantity for a single hazardous air pollutant that the U.S. EPA may establish by rule), or if emissions of all listed hazardous air pollutants combined exceed 2.08 tons, during any calendar month. This notification shall be postmarked by the fifteenth day of the following month and shall include an explanation of how the Permittee intends to maintain compliance with the emission limit in Condition 3.2.8. All calculations should be kept as part of the monthly record. These usage records shall be kept available for inspection or submittal for five years from the date of record.  
[391-3-1-.02(6)(b)1 and 391-3-1.03(2)(c)]
- 6.2.14 The Permittee shall use the records required in Condition 6.2.13 to calculate the twelve month rolling total emissions of each listed hazardous air pollutant and combined hazardous air pollutants. The Permittee shall notify the Division in writing if the twelve month rolling total emissions of any individual hazardous air pollutant equal to or exceed 10 tons (or one-twelfth of any lesser quantity for a single hazardous air pollutant that the U.S. EPA may establish by rule), or if the twelve month rolling total emissions of all listed hazardous air pollutants combined equal to or exceed 25 tons, during any calendar month. This notification shall be postmarked by the fifteenth day of the following month. All calculations should be kept as part of the monthly record. These usage records shall be kept available for inspection or submittal for five years from the date of record. A 12-month rolling total shall be defined as the sum of HAPs emitted for a month plus the total of HAPs emitted for the previous 11 consecutive months.  
[391-3-1-.02(6)(b)1 and 391-3-1.03(2)(c)]
- 6.2.15 Within 60 days of the issuance of this permit, the Permittee shall submit sample monthly records required by Conditions 6.2.10-6.2.14 of this Permit for approval by the Division.  
[391-3-1-.02(6)(b)1 and 391-3-1.03(2)(c)]

**PART 7.0 OTHER SPECIFIC REQUIREMENTS**

**7.1 Operational Flexibility Associated with this Modification**

Not Applicable

**7.2 Off-Permit Changes Associated with this Modification**

Not Applicable

**7.3 Alternative Requirements Associated with this Modification**

[White Paper #2]

Not Applicable

**7.4 Insignificant Activities Associated with this Modification**

(see Attachment B for the list of Insignificant Activities in existence at the facility at the time of permit issuance)

**7.5 Temporary Sources Associated with this Modification**

[391-3-1-.03(10)(d)5 and 40 CFR 70.6(e)]

Not Applicable

**7.6 Short-term Activities Associated with this Modification**

(see Section 4.40 of Permit application and White Paper #1)

Not Applicable

**7.7 Compliance Schedule/Progress Reports Associated with this Modification**

[391-3-1-.03(10)(d)3 and 40 CFR 70.6(c)(4)]

None applicable

**7.8 Emissions Trading Associated with this Modification**

[391-3-1-.03(10)(d)1(ii) and 40 CFR 70.6(a)(10)]

Not Applicable

**7.9 Acid Rain Requirements Associated with this Modification**

Not Applicable

**7.12 Revocation of Existing Permits and Amendments**

Not Applicable

**7.13 Pollution Prevention Associated with this Modification**

Not Applicable

**7.14 Specific Conditions Associated with this Modification**

7.14.2 The Division reserves the right to amend this air quality permit upon receipt of a comment or comments, submitted prior to February 11, 2005, which provide relevant information not previously available to the Division.