

July 10, 2008

Randy Mauzy, VP of Technology AluChem of Little Rock, LLC 10500 Arch Street Pike Little Rock, AR 72206

Dear Mr. Mauzy:

The enclosed Permit No. 2168-A is your authority to construct, operate, and maintain the equipment and/or control apparatus as set forth in your application initially received on 3/12/2008.

After considering the facts and requirements of A.C.A. §8-4-101 et seq., and implementing regulations, I have determined that Permit No. 2168-A for the construction, operation and maintenance of an air pollution control system for AluChem of Little Rock, LLC to be issued and effective on the date specified in the permit, unless a Commission review has been properly requested under §2.1.14 of Regulation No. 8, Arkansas Department of Pollution Control & Ecology Commission's Administrative Procedures, within thirty (30) days after service of this decision.

All persons submitting written comments during this thirty (30) day period, and all other persons entitled to do so, may request an adjudicatory hearing and Commission review on whether the decision of the Director should be reversed or modified. Such a request shall be in the form and manner required by §2.1.14 of Regulation No. 8.

Sincerely,

Mike Bates

Chief, Air Division

# ADEQ MINOR SOURCE AIR PERMIT

Permit No.: 2168-A

IS ISSUED TO:

AluChem of Little Rock, LLC 10500 Arch Street Pike Little Rock, AR 72206 Pulaski County AFIN: 60-00005

THIS PERMIT IS THE ABOVE REFERENCED PERMITTEE'S AUTHORITY TO CONSTRUCT, MODIFY, OPERATE, AND/OR MAINTAIN THE EQUIPMENT AND/OR FACILITY IN THE MANNER AS SET FORTH IN THE DEPARTMENT'S MINOR SOURCE AIR PERMIT AND THE APPLICATION. THIS PERMIT IS ISSUED PURSUANT TO THE PROVISIONS OF THE ARKANSAS WATER AND AIR POLLUTION CONTROL ACT (ARK. CODE ANN. SEC. 8-4-101 *ET SEQ.*) AND THE REGULATIONS PROMULGATED THEREUNDER, AND IS SUBJECT TO ALL LIMITS AND CONDITIONS CONTAINED HEREIN.

Signed:

Mike Bates

Chief, Air Division

July 10, 2008

Date

## AluChem of Little Rock, LLC Permit #: 2168-A

AFIN: 60-00005

## Table of Contents

Section I: FACILITY INFORMATION	,
Section II: INTRODUCTION	4
Summary of Permit Activity	
Process Description	4
Regulations	4
Total Allowable Emissions	4
Section III: PERMIT HISTORY	-
Section IV: EMISSION UNIT INFORMATION	••••••
SN-01 Conditions	
NSPS Conditions	
Section V: INSIGNIFICANT ACTIVITIES	11
Section VI: GENERAL CONDITIONS	10
Appendix A (40 CFR Part 60, Subpart III III)	12

Permit #: 2168-A AFIN: 60-00005

## List of Acronyms and Abbreviations

A.C.A. Arkansas Code Annotated

AFIN ADEQ Facility Identification Number

CFR Code of Federal Regulations

CO Carbon Monoxide

HAP Hazardous Air Pollutant

lb/hr Pound Per Hour

No. Number

NO<sub>x</sub> Nitrogen Oxide

PM Particulate Matter

PM<sub>10</sub> Particulate Matter Smaller Than Ten Microns

SO<sub>2</sub> Sulfur Dioxide

Tpy Tons Per Year

UTM Universal Transverse Mercator

VOC Volatile Organic Compound

Permit #: 2168-A AFIN: 60-00005

## Section I: FACILITY INFORMATION

PERMITTEE:

AluChem of Little Rock, LLC

AFIN:

60-00005

PERMIT NUMBER:

2168-A

**FACILITY ADDRESS:** 

10500 Arch Street Pike

Little Rock, AR 72206

MAILING ADDRESS:

10500 Arch Street Pike

Little Rock, AR 72206

COUNTY:

Pulaski County

CONTACT NAME:

Randy Mauzy

CONTACT POSITION:

VP of Technology

TELEPHONE NUMBER:

513-733-8519

REVIEWING ENGINEER: Derrick Brown

UTM North South (Y):

Zone 15: 3835053 m

UTM East West (X):

Zone 15: 5631039 m

Permit #: 2168-A AFIN: 60-00005

#### **Section II: INTRODUCTION**

## Summary of Permit Activity

AluChem, LLC (60-0005) plans to construct and operate an alumina refining facility located at 10500 Arch Street Pike, Little Rock, Pulaski County, Arkansas. Raw alumina will be received, dried/processed at this facility. Permitted facility emissions will be 18.9, 12.0, 0.1, 15.4, 0.9, 12.9 and 9.5 tons per year of PM, PM<sub>10</sub>, SO<sub>2</sub>, NO<sub>x</sub>, VOC, CO and HF respectively. Hydrogen fluoride will be produced as a by-product of the process.

#### **Process Description**

Aluchem processes metal grade alumina (MGA) and/or alumina trihydrate (ATH). Raw alumina is received by truck or rail and conveyed to a storage bin (SN-01) outfitted with a bin vent filter. From storage, the material is pneumatically conveyed to the Kiln Feed Bin (SN-02). This bin is also equipped with a bin vent filter and feeds the Kiln (SN-03). The Kiln is natural gas-fired with a heat input rating of approximately 35.0 MMBtu/hr. The kiln is outfitted with a high efficiency cyclone and fabric filter dust collector in series. Collected fines from the cyclone and collector are fed back into the kiln. In addition, the kiln is fed with aluminum fluoride (AIF<sub>3</sub>). One by-product from the calcining of MGA and AIF<sub>3</sub> will be hydrogen fluoride (HF).

As calcined material exits the kiln, it is screened (SN-04) for refractory spalls. Final product is routed to one of the two product bins (SN-06). Any out of specification material is sent to the kiln recycle hopper (SN-05) to be processed again.

## Regulations

The following table contains the regulations applicable to this permit.

Regulations	
Arkansas Air Pollution Control Code, Regulation 18, effective February 15, 1999	
Regulations of the Arkansas Plan of Implementation for Air Pollution Control, Regulation 19, effective October 15, 2007	
O CFR Part 63, Subpart UUU, Standards of Performance for Calciners and Dryers	in
Mineral Industries	

Permit #: 2168-A AFIN: 60-00005

## **Total Allowable Emissions**

The following table is a summary of emissions from the facility. This table, in itself, is not an enforceable condition of the permit.

TOTAL ALLOWABLE EMISSIONS				
Pollutant —	Emission Rates			
Tonutant	lb/hr	tpy		
PM	4.5	18.9		
PM <sub>10</sub>	2.9	12.0		
SO <sub>2</sub>	0.1	0.1		
VOC	0.2	0.9		
СО	3.0	12.9		
NO <sub>x</sub>	3.5	15.4		
Hydrogen Fluoride	2.2	9.5		

Permit #: 2168-A AFIN: 60-00005

Section III: PERMIT HISTORY

Permit 2168-A is the first air permit issued to this facility.

Permit #: 2168-A AFIN: 60-00005

## Section IV: EMISSION UNIT INFORMATION

## **Specific Conditions**

1. The permittee shall not exceed the emission rates set forth in the following table. [Regulation 19, §19.501 et seq., and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

SN	Description	Pollutant	lb/hr	tpy
01	Receiving Bin with Bin Vent Filter	PM <sub>10</sub>	0.2	0.8
02	Kiln Feed Bin with Bin Vent Filter	PM <sub>10</sub>	0.2	0.8
03	Kiln (35 MM Btu/hr) with Cyclone in Series with Bahouse and Sodium Bicarbonate Spray	PM <sub>10</sub> SO <sub>2</sub> VOC CO NO <sub>x</sub>	2.1 0.1 0.2 3.0 3.5	9.1 0.1 0.9 12.9 15.4
04	Screening with Fabric Collector	PM <sub>10</sub>	0.1	0.2
05	Kiln Recycle Hopper	PM <sub>10</sub>	0.1	0.3
06	Final Product Bins (2) with Bin Vent Filter	PM <sub>10</sub>	0.2	0.8

2. The permittee shall not exceed the emission rates set forth in the following table. [Regulation 18, §18.801 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

SN	Description	Pollutant	lb/hr	tpy
01	Receiving Bin with Bin Vent Filter	PM	0.2	0.8
02	Kiln Feed Bin with Bin Vent Filter	PM	0.2	0.8
03	Kiln (35 MM Btu/hr) with Cyclone in Series with Bahouse and Sodium Bicarbonate Spray	PM HF*	3.3 2.2	14.2 9.5
04	Screening with Fabric Collector	PM	0.4	1.6
05	Kiln Recycle Hopper	PM	0.2	0.7
06	Final Product Bins (2) with Bin Vent Filter	PM	0.2	0.8

<sup>\*</sup>HF - Hydrogen Fluoride

Permit #: 2168-A AFIN: 60-00005

3. Visible emissions may not exceed the limits specified in the following table of this permit as measured by EPA Reference Method 9. [A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

SN	Limit	Regulatory Citation
01 - 06	5%	§18.501 of Regulation 18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311

- 4. The permittee shall not cause or permit the emission of air contaminants, including odors or water vapor and including an air contaminant whose emission is not otherwise prohibited by Regulation #18, if the emission of the air contaminant constitutes air pollution within the meaning of A.C.A. §8-4-303. [Regulation 18, §18.801 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]
- 5. The permittee shall not conduct operations in such a manner as to unnecessarily cause air contaminants and other pollutants to become airborne. [Regulation 18, §18.901 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]
- 6. The permittee shall not receive more than 131,400 tons of product at the facility's receiving bin (SN-01) per consecutive 12-month period. [Regulation 19, §19.705 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]
- 7. The permittee shall maintain monthly records which demonstrate compliance with Specific Condition #6. The permittee shall update the records by the fifteenth day of the month following the month to which the records pertain. The permittee will keep the records onsite, and make the records available to Department personnel upon request. [Regulation 19, §19.705 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]
- 8. The permittee shall use at least 18 pounds of Sodium Bicarbonate per hour at SN-03 to ensure that Hydrogen Fluoride emissions are maintained at or below permitted levels. [Regulation 18, §18.1004 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]
- 9. The permittee shall monitor continuously and record daily the amount of sodium bicarbonate injected into the calciner (SN-03) to ensure compliance with Specific Condition #8. The permittee will keep the records onsite, and make the records available to Department personnel upon request. [Regulation 18, §18.1004 and A.C.A. §8-4-304 as referenced by §8-4-304 and §8-4-311]

#### **NSPS** Conditions

The permittee shall not discharge into the atmosphere from, SN-03, emissions which contain particulate matter in excess of 0.092 gram per dry standard cubic meter (g/dscm) [0.040 grain per dry standard cubic foot (gr/dscf)]. [Regulation 19, §19.304 and 40 CFR Part 60, §60.732(a)]

Permit #: 2168-A AFIN: 60-00005

- 11. The permittee shall not discharge into the atmosphere from SN-03, emissions which exhibit greater than 10 percent opacity. [Regulation 19, §19.304 and 40 CFR Part 60, §60.372(b)]
- 12. The permittee shall install, maintain, and operate a continuous monitoring system to measure and record the opacity of emissions discharged to the atmosphere from SN-03. [Regulation 19, §19.304 and 40 CFR Part 60, §60.734(a)]
- 13. The permittee shall retain measurements required by Specific Condition #11 for at least 2 years. [Regulation 19, §19.304 and 40 CFR Part 60, §60.735(a)]
- 14. The permittee shall submit written reports semiannually of exceedances of control device operating parameters required by Specific Condition #11. For the purposes fo these reports, exceedances are defined as follows: [Regulation 19, §19.304 and 40 CFR Part 60, §60.735(c)(1)]
  - 1. All 6-minute periods during which the average opacity from dry control devices is greater than 1- percent.
- 15. Within 60 days of achieving the maximum production rate, but no later than 180 days after initial start up of the permitted source, the facility shall test SN-03 using Method 5 for particulate matter and Method 9 for opacity. For the particulate matter test the sampling time and volume for each test run shall be at least 2 hours and 1.70 dscm. [Regulation 19, §19.304 and 40 CFR Part 60, §60.736(b)(1) and (2)]
- Within 60 days of achieving the maximum production rate, but no later than 180 days after initial start up of the permitted source, the facility shall test SN-03 for Hydrogen Fluoride using a method approved by the Department. This method must be approved by the Department prior to testing. [Regulation 18, §18.1002 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

Permit #: 2168-A AFIN: 60-00005

## Section V: INSIGNIFICANT ACTIVITIES

The Department deems the following types of activities or emissions as insignificant on the basis of size, emission rate, production rate, or activity in accordance with Group A of the Insignificant Activities list found in Regulation 18 and 19 Appendix A. Insignificant activity emission determinations rely upon the information submitted by the permittee in an application dated March 11, 2008.

Description	Category
No insignificant activities were identified this permit action.	

Permit #: 2168-A AFIN: 60-00005

#### Section VI: GENERAL CONDITIONS

- 1. Any terms or conditions included in this permit that specify and reference Arkansas Pollution Control & Ecology Commission Regulation 18 or the Arkansas Water and Air Pollution Control Act (A.C.A. §8-4-101 et seq.) as the sole origin of and authority for the terms or conditions are not required under the Clean Air Act or any of its applicable requirements, and are not federally enforceable under the Clean Air Act. Arkansas Pollution Control & Ecology Commission Regulation 18 was adopted pursuant to the Arkansas Water and Air Pollution Control Act (A.C.A. §8-4-101 et seq.). Any terms or conditions included in this permit that specify and reference Arkansas Pollution Control & Ecology Commission Regulation 18 or the Arkansas Water and Air Pollution Control Act (A.C.A. §8-4-101 et seq.) as the origin of and authority for the terms or conditions are enforceable under this Arkansas statute.
- 2. This permit does not relieve the owner or operator of the equipment and/or the facility from compliance with all applicable provisions of the Arkansas Water and Air Pollution Control Act and the regulations promulgated under the Act. [A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]
- 3. The permittee shall notify the Department in writing within thirty (30) days after commencement of construction, completion of construction, first operation of equipment and/or facility, and first attainment of the equipment and/or facility target production rate. [Regulation 19, §19.704 and/or A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]
- 4. Construction or modification must commence within eighteen (18) months from the date of permit issuance. [Regulation 19, §19.410(B) and/or Regulation 18, §18.309(B) and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]
- 5. The permittee must keep records for five years to enable the Department to determine compliance with the terms of this permit such as hours of operation, throughput, upset conditions, and continuous monitoring data. The Department may use the records, at the discretion of the Department, to determine compliance with the conditions of the permit. [Regulation 19, §19.705 and/or Regulation 18, §18.1004 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]
- A responsible official must certify any reports required by any condition contained in this permit and submit any reports to the Department at the address below. [Regulation 19, §19.705 and/or Regulation 18, §18.1004 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

Arkansas Department of Environmental Quality Air Division

WII DIAIZIOII

ATTN: Compliance Inspector Supervisor

Permit #: 2168-A AFIN: 60-00005

> 5301 Northshore Drive North Little Rock, AR 72118-5317

- 7. The permittee shall test any equipment scheduled for testing, unless stated in the Specific Conditions of this permit or by any federally regulated requirements, within the following time frames: (1) newly constructed or modified equipment within sixty (60) days of achieving the maximum production rate, but no later than 180 days after initial start up of the permitted source or (2) existing equipment already operating according to the time frames set forth by the Department. The permittee must notify the Department of the scheduled date of compliance testing at least fifteen (15) days in advance of such test. The permittee must submit compliance test results to the Department within thirty (30) days after the completion of testing. [Regulation 19, §19.702 and/or Regulation 18, §18.1002 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]
- 8. The permittee shall provide: [Regulation 19, §19.702 and/or Regulation 18, §18.1002 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]
  - a. Sampling ports adequate for applicable test methods;
  - b. Safe sampling platforms;
  - c. Safe access to sampling platforms; and
  - d. Utilities for sampling and testing equipment
- 9. The permittee shall operate equipment, control apparatus and emission monitoring equipment within their design limitations. The permittee shall maintain in good condition at all times equipment, control apparatus and emission monitoring equipment. [Regulation 19, §19.303 and/or Regulation 18, §18.1104 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]
- 10. If the permittee exceeds an emission limit established by this permit, the permittee will be deemed in violation of said permit and will be subject to enforcement action. The Department may forego enforcement action for emissions exceeding any limits established by this permit provided the following requirements are met: [Regulation 19, §19.601 and/or Regulation 18, §18.1101 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]
  - a. The permittee demonstrates to the satisfaction of the Department that the emissions resulted from an equipment malfunction or upset and are not the result of negligence or improper maintenance, and the permittee took all reasonable measures to immediately minimize or eliminate the excess emissions.
  - b. The permittee reports the occurrence or upset or breakdown of equipment (by telephone, facsimile, or overnight delivery) to the Department by the end of the next business day after the occurrence or the discovery of the occurrence.
  - c. The permittee must submit to the Department, within five business days after the occurrence or the discovery of the occurrence, a full, written report of such occurrence, including a statement of all known causes and of the scheduling and

Permit #: 2168-A AFIN: 60-00005

nature of the actions to be taken to minimize or eliminate future occurrences, including, but not limited to, action to reduce the frequency of occurrence of such conditions, to minimize the amount by which said limits are exceeded, and to reduce the length of time for which said limits are exceeded. If the information is included in the initial report, the information need not be submitted again.

- 11. The permittee shall allow representatives of the Department upon the presentation of credentials: [A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]
  - a. To enter upon the permittee's premises, or other premises under the control of the permittee, where an air pollutant source is located or in which any records are required to be kept under the terms and conditions of this permit;
  - b. To have access to and copy any records required to be kept under the terms and conditions of this permit, or the Act;
  - c. To inspect any monitoring equipment or monitoring method required in this permit;
  - d. To sample any emission of pollutants; and
  - e. To perform an operation and maintenance inspection of the permitted source.
- 12. The Department issued this permit in reliance upon the statements and presentations made in the permit application. The Department has no responsibility for the adequacy or proper functioning of the equipment or control apparatus. [A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]
- 13. The Department may revoke or modify this permit when, in the judgment of the Department, such revocation or modification is necessary to comply with the applicable provisions of the Arkansas Water and Air Pollution Control Act and the regulations promulgated the Arkansas Water and Air Pollution Control Act. [Regulation 19, §19.410(A) and/or Regulation 18, §18.309(A) and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]
- 14. This permit may be transferred. An applicant for a transfer must submit a written request for transfer of the permit on a form provided by the Department and submit the disclosure statement required by Arkansas Code Annotated §8-1-106 at least thirty (30) days in advance of the proposed transfer date. The permit will be automatically transferred to the new permittee unless the Department denies the request to transfer within thirty (30) days of the receipt of the disclosure statement. The Department may deny a transfer on the basis of the information revealed in the disclosure statement or other investigation or, deliberate falsification or omission of relevant information. [Regulation 19, §19.407(B) and/or Regulation 18, §18.307(B) and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]
- 15. This permit shall be available for inspection on the premises where the control apparatus is located. [A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

Permit #: 2168-A AFIN: 60-00005

- This permit authorizes only those pollutant emitting activities addressed herein. [A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]
- This permit supersedes and voids all previously issued air permits for this facility. [Regulation 18 and 19 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]
- 18. The permittee must pay all permit fees in accordance with the procedures established in Regulation No. 9. [A.C.A §8-1-105(c)]
- 19. The permittee may request in writing and at least 15 days in advance of the deadline, an extension to any testing, compliance or other dates in this permit. No such extensions are authorized until the permittee receives written Department approval. The Department may grant such a request, at its discretion in the following circumstances:
  - a. Such an extension does not violate a federal requirement;
  - b. The permittee demonstrates the need for the extension; and
  - c. The permittee documents that all reasonable measures have been taken to meet the current deadline and documents reasons it cannot be met.

[Regulation 18, §18.102(C-D), Regulation 19, §19.103(D), A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311, and CFR Part 52, Subpart E]

- 20. The permittee may request in writing and at least 30 days in advance, temporary emissions and/or testing that would otherwise exceed an emission rate, throughput requirement, or other limit in this permit. No such activities are authorized until the permittee receives written Department approval. Any such emissions shall be included in the facilities total emissions and reported as such. The Department may grant such a request, at its discretion under the following conditions:
  - a. Such a request does not violate a federal requirement;
  - b. Such a request is temporary in nature;
  - c. Such a request will not result in a condition of air pollution;
  - d. The request contains such information necessary for the Department to evaluate the request, including but not limited to, quantification of such emissions and the date/time such emission will occur;
  - e. Such a request will result in increased emissions less than five tons of any individual criteria pollutant, one ton of any single HAP and 2.5 tons of total HAPs; and
  - f. The permittee maintains records of the dates and results of such temporary emissions/testing.

[Regulation 18, §18.102(C-D), Regulation 19, §19.103(D), A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311, and CFR Part 52, Subpart E]

Permit #: 2168-A AFIN: 60-00005

- 21. The permittee may request in writing and at least 30 days in advance, an alternative to the specified monitoring in this permit. No such alternatives are authorized until the permittee receives written Department approval. The Department may grant such a request, at its discretion under the following conditions:
  - a. The request does not violate a federal requirement;
  - b. The request provides an equivalent or greater degree of actual monitoring to the current requirements; and
  - c. Any such request, if approved, is incorporated in the next permit modification application by the permittee.

[Regulation 18, \$18.102(C-D), Regulation19, \$19.103(D), A.C.A. \$8-4-203 as referenced by A.C.A. \$8-4-304 and \$8-4-311, and CFR

## APPENDIX A 40 CFR Part 60, Subpart UUU

	·	
		,

Home Page > Executive Branch > Code of Federal Regulations > Electronic Code of Federal Regulations



## e-CFR Data is current as of July 2, 2008

#### Title 40: Protection of Environment

PART 60—STANDARDS OF PERFORMANCE FOR NEW STATIONARY SOURCES

Browse Previous | Browse Next

Subpart UUU—Standards of Performance for Calciners and Dryers in Mineral Industries

Source: 57 FR 44503, Sept. 28, 1992, unless otherwise noted.

#### § 60.730 Applicability and designation of affected facility.

- (a) The affected facility to which the provisions of this subpart apply is each calciner and dryer at a mineral processing plant. Feed and product conveyors are not considered part of the affected facility. For the brick and related clay products industry, only the calcining and drying of raw materials prior to firing of the brick are covered.
- (b) An affected facility that is subject to the provisions of subpart LL, Metallic Mineral Processing Plants, is not subject to the provisions of this subpart. Also, the following processes and process units used at mineral processing plants are not subject to the provisions of this subpart: vertical shaft kilns in the magnesium compounds industry; the chlorination-oxidation process in the titanium dioxide industry; coating kilns, mixers, and aerators in the roofing granules industry; and tunnel kilns, tunnel dryers, apron dryers, and grinding equipment that also dries the process material used in any of the 17 mineral industries (as defined in §60.731, "Mineral processing plant").
- (c) The owner or operator of any facility under paragraph (a) of this section that commences construction, modification, or reconstruction after April 23, 1986, is subject to the requirements of this subpart.

#### § 60.731 Definitions.

As used in this subpart, all terms not defined herein shall have the meaning given them in the Clean Air Act and in subpart A of this part.

Calciner means the equipment used to remove combined (chemically bound) water and/or gases from mineral material through direct or indirect heating. This definition includes expansion furnaces and multiple hearth furnaces.

Control device means the air pollution control equipment used to reduce particulate matter emissions released to the atmosphere from one or more affected facilities.

Dryer means the equipment used to remove uncombined (free) water from mineral material through direct or indirect heating.

Installed in series means a calciner and dryer installed such that the exhaust gases from one flow

through the other and then the combined exhaust gases are discharged to the atmosphere.

Mineral processing plant means any facility that processes or produces any of the following minerals, their concentrates or any mixture of which the majority (>50 percent) is any of the following minerals or a combination of these minerals: alumina, ball clay, bentonite, diatomite, feldspar, fire clay, fuller's earth, gypsum, industrial sand, kaolin, lightweight aggregate, magnesium compounds, perlite, roofing granules, talc, titanium dioxide, and vermiculite.

#### § 60.732 Standards for particulate matter.

Each owner or operator of any affected facility that is subject to the requirements of this subpart shall comply with the emission limitations set forth in this section on and after the date on which the initial performance test required by §60.8 is completed, but not later than 180 days after the initial startup, whichever date comes first. No emissions shall be discharged into the atmosphere from any affected facility that:

- (a) Contains particulate matter in excess of 0.092 gram per dry standard cubic meter (g/dscm) [0.040 grain per dry standard cubic foot (gr/dscf)] for calciners and for calciners and dryers installed in series and in excess of 0.057 g/dscm (0.025 gr/dscf) for dryers; and
- (b) Exhibits greater than 10 percent opacity, unless the emissions are discharged from an affected facility using a wet scrubbing control device.

[57 FR 44503, Sept. 28, 1992, as amended at 65 FR 61778, Oct. 17, 2000]

#### § 60.733 Reconstruction.

The cost of replacement of equipment subject to high temperatures and abrasion on processing equipment shall not be considered in calculating either the "fixed capital cost of the new components" or the "fixed capital cost that would be required to construct a comparable new facility" under §60.15. Calciner and dryer equipment subject to high temperatures and abrasion are: end seals, flights, and refractory lining.

#### § 60.734 Monitoring of emissions and operations.

- (a) With the exception of the process units described in paragraphs (b), (c), and (d) of this section, the owner or operator of an affected facility subject to the provisions of this subpart who uses a dry control device to comply with the mass emission standard shall install, calibrate, maintain, and operate a continuous monitoring system to measure and record the opacity of emissions discharged into the atmosphere from the control device.
- (b) In lieu of a continuous opacity monitoring system, the owner or operator of a ball clay vibrating grate dryer, a bentonite rotary dryer, a diatomite flash dryer, a diatomite rotary calciner, a feldspar rotary dryer, a fire clay rotary dryer, an industrial sand fluid bed dryer, a kaolin rotary calciner, a perlite rotary dryer, a roofing granules fluid bed dryer, a roofing granules rotary dryer, a talc rotary calciner, a titanium dioxide spray dryer, a titanium dioxide fluid bed dryer, a vermiculite fluid bed dryer, or a vermiculite rotary dryer who uses a dry control device may have a certified visible emissions observer measure and record three 6-minute averages of the opacity of visible emissions to the atmosphere each day of operation in accordance with Method 9 of appendix A of part 60.
- (c) The owner or operator of a ball clay rotary dryer, a diatomite rotary dryer, a feldspar fluid bed dryer, a fuller's earth rotary dryer, a gypsum rotary dryer, a gypsum flash calciner, gypsum kettle calciner, an industrial sand rotary dryer, a kaolin rotary dryer, a kaolin multiple hearth furnace, a perlite expansion furnace, a talc flash dryer, a talc rotary dryer, a titanium dioxide direct or indirect rotary dryer or a vermiculite expansion furnace who uses a dry control device is exempt from the monitoring requirements of this section.
- (d) The owner or operator of an affected facility subject to the provisions of this subpart who uses a wet scrubber to comply with the mass emission standard for any affected facility shall install, calibrate, maintain, and operate 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 pressure loss

monitoring device must be certified by the manufacturer to be accurate within 5 percent of water column gauge pressure at the level of operation. The liquid flow rate monitoring device must be certified by the manufacturer to be accurate within 5 percent of design scrubbing liquid flow rate.

#### § 60.735 Recordkeeping and reporting requirements.

- (a) Records of the measurements required in §60.734 of this subpart shall be retained for at least 2 years.
- (b) Each owner or operator who uses a wet scrubber to comply with §60.732 shall determine and record once each day, from the recordings of the monitoring devices in §60.734(d), an arithmetic average over a 2-hour period of both the change in pressure of the gas stream across the scrubber and the flowrate of the scrubbing liquid.
- (c) Each owner or operator shall submit written reports semiannually of exceedances of control device operating parameters required to be monitored by §60.734 of this subpart. For the purpose of these reports, exceedances are defined as follows:
- (1) All 6-minute periods during which the average opacity from dry control devices is greater than 10 percent; or
- (2) Any daily 2-hour average of the wet scrubber pressure drop determined as described in §60.735(b) that is less than 90 percent of the average value recorded according to §60.736(c) during the most recent performance test that demonstrated compliance with the particulate matter standard; or
- (3) Each daily wet scrubber liquid flow rate recorded as described in §60.735(b) that is less than 80 percent or greater than 120 percent of the average value recorded according to §60.736(c) during the most recent performance test that demonstrated compliance with the particulate matter standard.
- (d) The requirements of this section remain in force until and unless the Agency, in delegating enforcement authority to a State under section 111(c) of the Clean Air Act, approves reporting requirements or an alternative means of compliance surveillance adopted by such State. In that event, affected facilities within the State will be relieved of the obligation to comply with this section provided that they comply with the requirements established by the State.

[57 FR 44503, Sept. 28, 1992, as amended at 58 FR 40591, July 29, 1993]

#### § 60.736 Test methods and procedures.

- (a) In conducting the performance tests required in §60.8, the owner or operator shall use the test methods in appendix A of this part or other methods and procedures as specified in this section, except as provided in §60.8(b).
- (b) The owner or operator shall determine compliance with the particulate matter standards in §60.732 as follows:
- (1) Method 5 shall be used to determine the particulate matter concentration. The sampling time and volume for each test run shall be at least 2 hours and 1.70 dscm.
- (2) Method 9 and the procedures in §60.11 shall be used to determine opacity from stack emissions.
- (c) During the initial performance test of a wet scrubber, the owner or operator shall use the monitoring devices of §60.734(d) to determine the average change in pressure of the gas stream across the scrubber and the average flowrate of the scrubber liquid during each of the particulate matter runs. The arithmetic averages of the three runs shall be used as the baseline average values for the purposes of §60.735(c).

#### § 60.737 Delegation of authority.

- (a) In delegating implementation and enforcement authority to a State under section 111(c) of the Act, the authorities contained in paragraph (b) of this section shall be retained by the Administrator and not transferred to a State.
- (b) Authorities which will not be delegated to States: No restrictions.

Browse Previous	Browse Next		

For questions or comments regarding e-CFR editorial content, features, or design, email  $\underline{\text{ecfr@nara.gov}}$ .

For questions concerning e-CFR programming and delivery issues, email webteam@gpo.gov.

Section 508 / Accessibility

## **CERTIFICATE OF SERVICE**

I, Cynthia Hook, hereby certify that a copy of this permit has been mailed by first class mail to
AluChem of Little Rock, LLC, 10500 Arch Street Pike, Little Rock, AR, 72206, on this
10 th day of July , 2008.
AAR
Cynthia Hook, AAII, Air Division