ADEQ

ARKANSAS
Department of Environmental Quality

AUG 1 2012

James Whitener
Environmental Health and Safety Manager
Almatis, Inc.
4701 Alcoa Road
Bauxite, AR 72011

Re: Notice of Administrative Amendment
AFIN: 63-00010, Permit No.: 1527-AOP-R14

Dear Mr. Whitener:

Enclosed is Permit 1527-AOP-R14 completed in accordance with the provisions of Section 19.407 of Regulation No. 19, *Regulations of the Arkansas Plan of Implementation for Air Pollution Control.*

Sources were removed from the permit that were sold to Huber, are no longer active, or are no longer at the facility.

Please place the revised permit in your files.

Sincerely,

Mike Bates
Chief, Air Division

am
Enclosure

ADEQ
OPERATING
AIR PERMIT

Pursuant to the Regulations of the Arkansas Operating Air Permit Program, Regulation 26:

Permit No. : 1527-AOP-R14

IS ISSUED TO:

Almatis, Inc.
4701 Alcoa Road
Bauxite, AR 72011
Saline County
AFIN: 63-00010

THIS PERMIT AUTHORIZES THE ABOVE REFERENCED PERMITTEE TO INSTALL, OPERATE, AND MAINTAIN THE EQUIPMENT AND EMISSION UNITS DESCRIBED IN THE PERMIT APPLICATION AND ON THE FOLLOWING PAGES. THIS PERMIT IS VALID BETWEEN:

August 9, 2011 AND August 8, 2016

THE PERMITTEE IS SUBJECT TO ALL LIMITS AND CONDITIONS CONTAINED HEREIN.

Signed:

Mike Bates
Chief, Air Division

AUG 1 2012
Date

Almatis, Inc.
Permit #: 1527-AOP-R13
AFIN: 63-00010

Table of Contents

Almatis, Inc.
Permit #: 1527-AOP-R13
AFIN: 63-00010

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
MVAC	Motor Vehicle Air Conditioner
No.	Number
NO_x	Nitrogen Oxide
PM	Particulate Matter
PM_{10}	Particulate Matter Smaller Than Ten Microns
SNAP	Significant New Alternatives Program (SNAP)
SO_2	Sulfur Dioxide
SSM	Startup, Shutdown, and Malfunction Plan
Tpy	Tons Per Year
UTM	Universal Transverse Mercator
VOC	Volatile Organic Compound

SECTION I: FACILITY INFORMATION

PERMITTEE:	Almatis, Inc.
AFIN:	63-00010
PERMIT NUMBER:	1527-AOP-R14
FACILITY ADDRESS:	4701 Alcoa Road Bauxite, AR 72011
MAILING ADDRESS:	4701 Alcoa Road Bauxite, AR 72011
COUNTY:	Saline County
CONTACT NAME:	James Whitener
CONTACT POSITION:	Environmental Health and Safety Manager
TELEPHONE NUMBER:	501-776-4931
REVIEWING ENGINEER:	Adam McDaniel
UTM North South (Y):	Zone 15: 3826440.19 m
UTM East West (X):	Zone 15: 543120.42 m

SECTION II: INTRODUCTION

Summary of Permit Activity

Almatis, Inc. located at 4701 Alcoa Road in Bauxite, AR is a manufacturer of various forms of alumina. Almatis submitted an administrative amendment application to remove the sources sold to Huber and some other sources that are no longer active or at the facility. The total permitted annual emission rate limit changes associated with this modification are: -75.8 tpy PM, -68.9 tpy PM_{10}, -13.8 tpy SO_2, -45.5 tpy VOC, -83.3 tpy CO, -98.9 tpy NO_X, and -0.05 tpy Formaldehyde.

Process Description

Each section in this permit is arranged by process area, and then broken down by building for point sources. Each point source at the facility has been given a unique identifier (SN Number) using a consistent format. Each alpha-numeric identifier begins with the building number, followed by a 2 or 4 digit numeric code establishing the identity of each source. The 2-letter codes used to identify each source type may indicate the type of control equipment used to control emissions or a type of combustion source without control equipment. The codes are BH-baghouse, CY-cyclone, EP-electrostatic precipitator, SB-scrubber, AV-activator, TD-tunnel dryer, and BL-boiler. Nomenclature for insignificant sources is consistent with that found in the Insignificant Source list in this permit. The opacity survey form can be found in Appendix A.

Regulations

The following table contains the regulations applicable to this permit.

Regulations
Arkansas Air Pollution Control Code, Regulation 18, effective June 18, 2010
Regulations of the Arkansas Plan of Implementation for Air Pollution Control, Regulation 19, effective July 9, 2012
Regulations of the Arkansas Operating Air Permit Program, Regulation 26, effective July 9, 2012
40 CFR 52.21 Prevention of Significant Deterioration.
NSPS 40 CFR Part 60 Subpart UUU - *Standards of Performance for Calciners and Driers in the Mineral Industry*
NSPS 40 CFR Part 60 Subpart LL - *Standards of Performance for Metallic Mineral Processing Plants*

Almatis, Inc.
Permit #: 1527-AOP-R13
AFIN: 63-00010

Emission Summary

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

EMISSION SUMMARY				
Source Number	Description	Pollutant	Emission Rates	
			lb/hr	tpy
Total Allowable Emissions		PM	169.0	630.9
		PM_{10}	169.0	630.9
		SO_2	5.0	22.0
		VOC	19.6	24.1
		CO	53.8	235.5
		NO_X	130.2	570.2
HAPs		Formaldehyde*	0.02	0.02
		HF	58.1	109.5***
		Diethanolamine*	0.4	1.5
Hydrate Chemicals				
143FHE01	Spray Dryer	VOC	16.1	9.5
		Formaldehyde	0.02	0.02
400BH02	Bulk Loading Dust Collector	PM	1.1	4.8
		PM_{10}	1.1	4.8
400BH03	#2 Storage Tank Dust Collector	PM	1.4	6.0
		PM_{10}	1.4	6.0
400BH04	#1 Storage Tank Dust Collector	PM	0.2	1.0
		PM_{10}	0.2	1.0
400BH05	#3A Storage Tank Dust Collector	PM	0.2	1.0
		PM_{10}	0.2	1.0
400BH06	#3B Storage Tank Dust Collector	PM	0.2	1.0
		PM_{10}	0.2	1.0
400BH07	#4 Storage Tank Dust Collector	PM	0.2	1.0
		PM_{10}	0.2	1.0
400BH08	#Rework Tank Dust Collector	PM	0.1	0.1
		PM_{10}	0.1	0.1
400BH09	# Storage Bin Dust Collector	PM	0.4	1.5
		PM_{10}	0.4	1.5
400SB01	#1 Dryer (Cyclone /Scrubber)	PM	0.7	3.1
		PM_{10}	0.7	3.1
400SB02	#2 Dryer (Cyclone /Scrubber)	PM	0.7	3.1
		PM_{10}	0.7	3.1

Almatis, Inc.
Permit #: 1527-AOP-R13
AFIN: 63-00010

EMISSION SUMMARY				
Source Number	Description	Pollutant	Emission Rates	
			lb/hr	tpy
400SB03	#3 Dryer (Cyclone /Scrubber)	PM PM_{10}	0.7 0.7	3.1 3.1
410BH01	#1 Dust Collector (Baghouse)	PM PM_{10}	0.6 0.6	2.3 2.3
410BH02	#2 Mikro Pulsarie Dust Collector (Baghouse)	PM PM_{10}	0.6 0.6	2.3 2.3
410BH03	Nuisance Dust, #3 Grinding (Baghouse)	PM PM_{10}	0.2 0.2	0.9 0.9
410BH04	Bin Vent #1 Feed Tank (Baghouse)	PM PM_{10}	0.1 0.1	0.1 0.1
410BH05	Bin Vent #2 Feed Tank (Baghouse)	PM PM_{10}	0.1 0.1	0.1 0.1
410BH06	#2 Product Tank Dust Collector (Baghouse)	PM PM_{10}	0.3 0.3	1.2 1.2
Calcined Aluminas				
050BH07	#1 Dust Collector (Baghouse)	PM PM_{10}	0.7 0.7	2.8 2.8
051BH03	#2 Air Slide Dust Collector (Baghouse)	PM PM_{10}	0.1 0.1	0.2 0.2
051BH04	Unloading Hopper Airslide Dust Collector (Baghouse)	PM PM_{10}	0.1 0.1	0.2 0.2
051BH06	#1 Blender Dust Collector (Baghouse)	PM PM_{10}	0.6 0.6	2.3 2.3
051BH07	#2 Blender Discharge Dust Collector (Baghouse)	PM PM_{10}	0.6 0.6	2.3 2.3
051BH08	Nuisance Dust Collector (Baghouse)	PM PM_{10}	0.6 0.6	2.3 2.3
051BH11	Batch Ball Mill	PM PM_{10}	0.1 0.1	0.5 0.5
055BH01	Building 405B Nuisance Dust Collector	PM PM_{10}	1.7 1.7	7.5 7.5
055BH02	#4 Alumina Transport Dust Collector (Baghouse)	PM PM_{10}	0.6 0.6	2.8 2.8
055BH03	#5 Alumina Transport Dust Collector (Baghouse)	PM PM_{10}	1.1 1.1	4.7 4.7
055BM01	#6 Alumina Transport Dust Collector (Baghouse)	VOC Diethanolamine	2.5 0.4	11.0 1.5

Almatis, Inc.
Permit #: 1527-AOP-R13
AFIN: 63-00010

EMISSION SUMMARY				
Source Number	Description	Pollutant	Emission Rates	
			lb/hr	tpy
405BH03	#1 Blender Collector (Baghouse)	Exhaust into Building		
405BH04	#3 Air Slide Dust Collector (Baghouse)	PM PM_{10}	0.7 0.7	2.8 2.8
405BH05	#2 Air Slide Dust Collector (Baghouse)	PM PM_{10}	0.7 0.7	2.8 2.8
405BH06	Unloading Hopper Airslide Dust Collector (Baghouse)	PM PM_{10}	0.7 0.7	2.8 2.8
405BH0308	#1 Blender Dust Collector (Baghouse)	PM PM_{10}	0.1 0.1	0.1 0.1
405BH0309	#2 Blender Collector	PM PM_{10}	0.1 0.1	0.1 0.1
405BH0310	#1 High Tank Dust Collector	PM PM_{10}	0.1 0.1	0.1 0.1
405BH0312	#1 Lift System Dust Collector	PM PM_{10}	0.5 0.5	2.2 2.2
405BH0133	#1 Baghouse	PM PM_{10} SO_2 VOC CO NO_X HF	14.6 14.6 1.0 0.2 3.7 19.6 58.1	64.0 64.0 4.4 0.9 16.1 85.8 109.5***
405BH0134	Special Cycle Baghouse	PM PM_{10}	0.6 0.6	2.7 2.7
405BH0136	Mini-Size Dust Collector (Baghouse)	PM PM_{10}	0.2 0.2	0.9 0.9
405BH0233	#2 Baghouse	PM PM_{10} SO_2 VOC CO NO_X HF	4.2 4.2 1.0 0.2 3.7 19.6 58.1	18.0 18.0 4.4 0.9 16.1 85.8 109.5***
415BH0401	415-7 Dust Collector (Baghouse)	PM PM_{10}	0.2 0.2	1.0 1.0
415BH0402	415-8 Dust Collector (Baghouse)	PM PM_{10}	0.2 0.2	1.0 1.0

Almatis, Inc.
Permit #: 1527-AOP-R13
AFIN: 63-00010

EMISSION SUMMARY				
Source Number	Description	Pollutant	Emission Rates	
			lb/hr	tpy
415BH6192	415-11 Dust Collector (Baghouse)	PM PM_{10}	0.9 0.9	3.5 3.5
415BH6201	#1 3W1 Mini-Collector (Baghouse)	PM PM_{10}	0.2 0.2	0.7 0.7
415BH6202	#2 3W1 Mini Collector (Baghouse)	PM PM_{10}	0.2 0.2	0.7 0.7
415BH6203	#1 3W2 Mini Collector (Baghouse)	PM PM_{10}	0.2 0.2	0.7 0.7
415BH6204	#2 3W2 Mini Collector (Baghouse)	PM PM_{10}	0.2 0.2	0.7 0.7
415BH6225	415-9 Dust Collector (Baghouse)	PM PM_{10}	0.5 0.5	2.3 2.3
415BH6227	415-10 Dust Collector (Baghouse)	PM PM_{10}	0.3 0.3	1.2 1.2
415BH6401	415-12 Dust Collector (Baghouse)	PM PM_{10}	1.9 1.9	8.3 8.3
415BH6451	415-6 Dust Collector (Baghouse)	PM PM_{10}	0.2 0.2	0.7 0.7
415BH0001	No. 2 Bin Discharge Air Slide DC (Baghouse)	PM PM_{10}	0.1 0.1	0.2 0.2
415BH0002	No. 4 Bin Discharge Air Slide DC (Baghouse)	PM PM_{10}	0.1 0.1	0.1 0.1
415BH0003	No. 5 Bin Discharge Air Slide DC (Baghouse)	PM PM_{10}	0.1 0.1	0.1 0.1
415BH0004	No. 7 BIN Discharge Air Slide DC (Baghouse)	PM PM_{10}	0.1 0.1	0.1 0.1
415BH0005	No. 8 Bin Discharge Air Slide DC (Baghouse)	PM PM_{10}	0.1 0.1	0.1 0.1
415BH0006	No. 10 Bin Discharge Air Slide DC	PM PM_{10}	0.1 0.1	0.2 0.2
415BH0007	No. 11 Bin Discharge Air Slide DC (Baghouse)	PM PM_{10}	0.1 0.1	0.2 0.2
415BH0008	No. 13 Bin Discharge Air Slide DC (Baghouse)	PM PM_{10}	0.1 0.1	0.2 0.2
415BH0009	No. 15ABin Discharge Air Slide DC (Baghouse)	PM PM_{10}	0.1 0.1	0.2 0.2
415BH0010	No. 16 Bin Discharge Air Slide DC (Baghouse)	PM PM_{10}	0.1 0.1	0.2 0.2

EMISSION SUMMARY				
Source Number	Description	Pollutant	Emission Rates	
			lb/hr	tpy
415BH0011	No. 16A Bin Discharge Air Slide DC (Baghouse)	PM PM_{10}	0.1 0.1	0.2 0.2
415BH0012	No. 17 Bin Discharge Air Slide DC (Baghouse)	PM PM_{10}	0.1 0.1	0.2 0.2
415BH0013	No. 18A Bin Discharge Air Slide DC (Baghouse)	PM PM_{10}	0.1 0.1	0.2 0.2
415BH0014	Air Merge Blender Discharge Air Slide DC (Baghouse)	PM PM_{10}	0.1 0.1	0.2 0.2
415BH0015	No. 220 Discharge Air Slide DC (Baghouse)	PM PM_{10}	0.1 0.1	0.3 0.3
415BH0016	No. 223 Discharge Air Slide DC (Baghouse)	PM PM_{10}	0.1 0.1	0.3 0.3
415BH0017	Air Merge Blender Feed Air Slide DC (Baghouse)	PM PM_{10}	0.1 0.1	0.3 0.3
415BH0018	No. 9 Bucket elevator DC (Baghouse)	PM PM_{10}	0.1 0.1	0.3 0.3
420BH05	#1 Bagging Dust Collector (Baghouse)	PM PM_{10}	0.2 0.2	0.9 0.9
420BH06	#2 Bagging Dust Collector (Baghouse)	PM PM_{10}	0.2 0.2	0.9 0.9
420BH6193	#1 Air Slide Vent Dust Collector (Baghouse)	PM PM_{10}	0.2 0.2	0.7 0.7
420BH6194	#2 Air Slide Vent Dust Collector (Baghouse)	PM PM_{10}	0.2 0.2	0.7 0.7
420BH6260	420-4 Flex Kleen Dust Collector (Baghouse)	PM PM_{10}	2.4 2.4	10.2 10.2
420BH7614	420-3 Dust Collector (Baghouse)	PM PM_{10}	0.3 0.3	1.3 1.3
420BH7801	420-5 Bulk Loading Dust Collector (Baghouse)	PM PM_{10}	0.5 0.5	2.1 2.1
420ABH7714	420A-2 Coarse Dust Collector	PM PM_{10}	0.3 0.3	1.1 1.1
420ABH7716	420A-3 Fines Dust Collector	PM PM_{10}	0.4 0.4	1.8 1.8
420ABH7810	Norblo XFER Dust Collector	PM PM_{10}	0.3 0.3	1.1 1.1
420ABH7811	#7 Product Tank Dust Collector	PM PM_{10}	0.3 0.3	1.4 1.4

Almatis, Inc.
Permit #: 1527-AOP-R13
AFIN: 63-00010

EMISSION SUMMARY				
Source Number	Description	Pollutant	Emission Rates	
			lb/hr	tpy
420ABH7851	Majac Dust Collector	PM PM_{10}	1.0 1.0	4.4 4.4
420BH07	Classifier Dust Collector (Baghouse)	PM PM_{10}	1.8 1.8	7.5 7.5
Tabular				
425AUC01	Bulk Loading Station (trucks) beneath 425A Dense Phase Pump feed tank (Baghouse)	PM PM_{10}	0.2 0.2	0.9 0.9
425BH01	Low Iron Tabular (Baghouse)	PM PM_{10}	0.5 0.5	2.1 2.1
425BH02	High Iron Tabular (Baghouse)	PM PM_{10}	1.5 1.5	6.4 6.4
425BH03	Ground Ore Collection (Baghouse)	PM PM_{10}	1.0 1.0	4.2 4.2
425BH04	Bulk Loading Dust Collector 4th Floor (Baghouse)	PM PM_{10}	0.5 0.5	2.3 2.3
425BH05	Nuisance CM Dust Collector (Baghouse)	PM PM_{10}	2.4 2.4	10.5 10.5
425BH06	#1 Ceramic Mill Dust Collector (Baghouse)	PM PM_{10}	2.4 2.4	10.5 10.5
425BH07	425A DPP Collector (Baghouse)	PM PM_{10}	0.4 0.4	1.5 1.5
425BH08	T-1 Mill Dust Collector (Baghouse)	PM PM_{10}	0.3 0.3	1.3 1.3
~~425BH09~~	~~Ground Ore Bin Vents Dust Collector~~	PM PM_{10}	0.4 0.4	1.4 1.4
425BH1003	325 Tabular Ceramic Mill (Baghouse)	PM PM_{10}	0.6 0.6	2.5 2.5
425BH1037	Ground Ore Dust Collector (Baghouse)	PM PM_{10}	0.7 0.7	3.0 3.0
425BH3343	8th Floor Flex-Kleen Dust Collector (Baghouse)	PM PM_{10}	1.5 1.5	6.4 6.4
425EP04	#8 Converter/Dryer (ESP)	PM PM_{10} SO_2 VOC CO NO_X	23.0 23.0 1.0 0.2 2.6 10.0	100.7 100.7 4.4 0.6 11.5 43.8

EMISSION SUMMARY				
Source Number	Description	Pollutant	Emission Rates	
			lb/hr	tpy
426BH1032	#2 Ceramic Mill Dust Collector (Baghouse)	PM PM_{10}	0.8 0.8	3.5 3.5
426BH1045	#3 Ceramic Mill Dust Collector (Baghouse)	PM PM_{10}	1.4 1.4	6.0 6.0
426BH3311	#1 Tabular Dust Collector (Baghouse)	PM PM_{10}	1.4 1.4	6.1 6.1
426BH3314	#2 Tabular Dust Collector (Baghouse)	PM PM_{10}	2.3 2.3	9.8 9.8
426BH3317	#3 Tabular Dust Collector (Baghouse)	PM PM_{10}	2.2 2.2	9.6 9.6
426BH3320	#4 Tabular Dust Collector (Baghouse)	PM PM_{10}	2.2 2.2	9.6 9.6
426BH5015	Ground Ore Dust Collector (Baghouse)	PM PM_{10}	1.3 1.3	5.6 5.6
426BH5041	Unground Ore Dust Collector (Baghouse)	PM PM_{10}	1.3 1.3	5.6 5.6
426BH5044	12-1 Bin Dust Collector (Baghouse)	PM PM_{10}	0.1 0.1	0.1 0.1
426BH5045	Bulk Loading Dust Collector (Baghouse)	PM PM_{10}	0.1 0.1	0.1 0.1
426BH7086	Boric Acid Collector (Baghouse)	PM PM_{10}	0.3 0.3	1.1 1.1
426EP06	#11 & #12 Converter/Dryer (ESP)	PM PM_{10} SO_2 VOC CO NO_X	23.0 23.0 1.0 0.2 21.9 40.5	100.7 100.7 4.4 0.6 95.9 177.4
426EP07	#13 & #14 Converter/Dryer (ESP)	PM PM_{10} SO_2 VOC CO NO_X	23.0 23.0 1.0 0.2 21.9 40.5	100.7 100.7 4.4 0.6 95.9 177.4
Electronic Packaging				
141BH01	Milled Product Collector Building 141 (Baghouse)	PM PM_{10}	0.3 0.3	1.2 1.2

EMISSION SUMMARY				
Source Number	Description	Pollutant	Emission Rates	
			lb/hr	tpy
141BH04	Mill Feed Tank Collector (Baghouse)	PM PM_{10}	0.1 0.1	0.2 0.2
141BH05	#1 Classifier Collector (Baghouse)	PM PM_{10}	0.1 0.1	0.3 0.3
141BH06	#2 Classifier Collector (Baghouse)	PM PM_{10}	0.1 0.1	0.1 0.1
Miscellaneous Sources				
MISC	Storage Piles and Haul Roads	PM PM_{10}	22.2 22.2	3.7 3.7

*HAPs included in the VOC totals. Other HAPs are not included in any other totals unless specifically stated.
**Air Contaminants such as ammonia, acetone, and certain halogenated solvents are not VOCs or HAPs.
***HF has an annual limit of 109.5 tpy.

SECTION III: PERMIT HISTORY

Permit 328-A was issued on 3/24/76 for installation of a 305 MMBtu/hr boiler which could burn either natural gas or fuel oil.

Permit 394-A was issued on 1/28/77 for installation of three dust collectors in new cement production facility.

Permit 417-A was issued on 7/22/77 for installation of a cyclone and a baghouse in building 70 for the F-100 pilot plant.

Permit 583-A was issued on 11/16/79 for installation of a ballformer mill in the tabular process.

Permit 606-A was issued on 4/4/80 for installation of three dust collectors in building 50 for the calcination process, two dust collectors in the cement production process in building 60, and two dust collectors in the tabular process, building 426, for control of fugitive emissions.

Permit 621-A was issued on 5/23/80 for installation of three wet scrubbers on the hydrate drying in building 400.

Permit 626-A was issued on 8/21/81 for the installation of a ceramic mill to grind tabular alumina in building 426.

Permit 665-A was issued on 8/21/81 to replace an old dust collector in building 106 with a newer, more efficient dust collector.

Permit 666-A was issued on 8/21/81 for the installation of eight new dust collectors to replace one bigger collector in building 51, and for the installation of a new dust collector in building 60.

Permit 738-A was issued on 5/25/84 for the installation of a new limestone crushing facility controlled with a baghouse. They also replaced scrubber with an electrostatic precipitator on the bauxite calcining process. This process originally calcined lime, but was converted to bauxite.

Permit 861-A was issued on 12/28/87 for the consolidation of 29 air permits which were issued to Alcoa since 1972.

Permit 861-AR-1 was issued on 2/27/90 for producing A4000SG in building 141. This process was never put into operation, however.

Permit 861-AR-2 was issued on 8/20/90 for adding a bin vent dust collector, a process dust collector, and a railcar unloading station.

Permit 861-AR-3 was issued on 1/23/91 for the addition of a process to produce Spacerite S-11, a paint additive.

Permit 1325-A was issued on 6/1/92 to expand the tabular process in building 425. A separate permit number was started so that the consolidation of permit 861 and 1437 would not hold up this process change.

Permit 1325-AR-1 was issued on 9/18/92 for additional process equipment in building 426 which consisted of an un-ground ore dust (calcined alumina) collection system.

Permit 1325-AR-2 was issued on 11/13/92 to improve housekeeping in calcined alumina process by using 20 collection points instead of 18.

Permit 1437-A was issued on 1/5/93 for the EHS Department.

Permit 1325-AR-3 was issued on 5/25/93 to increase collection points on screened tabular from 21 to 32 to reduce product loss.

Permit 1325-AR-4 was issued on 7/8/93 to relocate the #7 product tank in building 50 to building 420-A.

Permit 1325-AR-5 was issued on September 15, 1993.

Permit 1325-AR-6 was issued on 2/4/94 for changes to the #4 Blender dust collection, and to relocate #1 Bin Vent dust collector from building 51 to building 435.

Permit 861-AR-4 was issued on 2/8/96 for the installation of six new package boilers. Boiler #3 and #4 were permanently shut down in order to net out of PSD review.

Permit 1527-A was issued on December 12, 1997 for the purpose of consolidating the three permits into one. This permit also contained language that gives Alcoa the flexibility to make certain modifications to the baghouses without triggering a permit modification procedure. This permit also addressed the issue of hydrogen fluoride emission rates which were previously unpermitted.

Permit 1527-AOP-R0 was the first Title V permit for this facility and was issued on April 21, 1999. The physical changes from permit 1527-A included: installation of a dust collector on the hydral bulk loading belt in Building 451; relocation of a dust collector from a dense phase pump which assisted in the transfer of alumina from the Tabular Plant to the Sinter Plant, to building 425; installation of a dust collector on the hydral bulk loading belt; replacement of baghouses 415BH6191 and 415BH6192 with two more efficient baghouses; and a change in the routing of the baghouse ductwork in building 415. Also, according to a memo from John Rasnic, Director of Manufacturing, Energy and Transportation Division Office of Compliance of the EPA to all EPA Regional Directors, Alcoa is not required to operate continuous opacity monitors at 451BH011 as originally required because the emission rate of particulate matter is less than 25 tons per year. This memo was written to address NSPS Subpart UUU requirements for opacity monitors. Thus, the opacity monitoring requirements at source 451BH011 were deleted from the permit.

Permit 1527-AOP-R1 was issued on February 2, 2000. This permit revision addressed three items: 1) modification of baghouse 055BH03 to increase the air flow rate by 200 cfm, and adding a new pick-up point to control an existing source of particulate; 2) the addition of Hydrochloric Acid emissions to sources 405EP0133 and 405EP0233 to account for existing

emissions previously not addressed; and 3) the addition of a new product which resulted in VOC emissions from a spray dryer controlled by baghouse 451BH011.

Permit 1527-AOP-R2 was issued on January 30, 2001. This modification brought two baghouses back on-line which were previously taken out of service and changes emission rates for one of the kilns. The two baghouses were 050BH07 and 051BH08, and were being added to the Calcined Alumina Sources. The emission rates for 060EP0241 in the Calcium Alumate section of this permit were changed.

Permit 1527-AOP-R3 was issued on May 22, 2001. This modification added a new flash dryer, SN-451BH015. The dryer is subject to NSPS Subpart UUU. CO2 injection used instead of HCl leaching in the Calcined Aluminas Production Process was utilized. Alcoa requested HCl emissions in the permit to allow them to change between the two systems at a future date. The HCl testing requirements changed to within 60 days of the date HCl usage is resumed. Also the AlF3 feed rates for 405EP0133 and 405EP0233 were lowered due to new emission factors. The emission limits for these sources were unchanged.

An Administrative Amendment to 1527-AOP-R3 was issued on September 17, 2001. This amendment included the following changes: The emission totals for 451BH015 were updated to match the limits in Specific Conditions No. 1 and 2 of the permit, the PM emissions for this source were also corrected from 8.6 to 8.8 tpy, and source 141BH05 was added to Specific Conditions No. 33 and 34. The source, 141BH05, was included in the emission summary and had compliance conditions. It, however, had no emission limits in a Specific Condition. In addition to these changes, the totals in the emission summary table were updated to correct values including the changes of this amendment.

Permit 1527-AOP-R4 was issued on July 25, 2002. This permit modification allowed returning to its original feed rate of aluminum fluoride in sources 405EP0133 and 405EP0233. This will increased hourly emissions of hydrogen fluoride. The permit had the same annual limits for these sources. A plant wide condition was inadvertently removed in a previous permit. This condition allowed for testing of some sources every two years. This condition was replaced. An insignificant source was added as an administrative amendment during the comment period of the permit. This insignificant source was four small baghouses which will exhaust sources from Building 426. Total emissions from these baghouses are estimated at 2.25 tons per year.

Permit 1527-AOP-R5 was issued on July 21, 2005. This permit was the first Title V renewal for the facility. With the renewal several additional permit applications and minor modification applications were included into this permit. The changes in this permit are as follows. The sources 451BH02, 451TD01, 451TD02, 451TD03, and 451TD04 were removed from the permit as they are no longer in service. Hydrochloric acid emissions were removed from sources 405BH0133 and 405EP0233. The facility no longer uses hydrochloric acid in these sources. Sources 055BM01 and 060BH04 were added to the permit. In previous permits, sources 426EP06 and 426EP07 were permitted for continuous operation. However these sources annual

emission rates for CO and NO_X did not correspond to continuous use rates. These rates were corrected adding approximately 120 tons of CO and 100 tons of NO_X to the permit.

Permit 1527-AOP-R6 was issued on November 7, 2006. This permit, allowed the modification an existing baghouse (426BH3314) associated with the Tabular Process. The modification included an internal reconfiguration and a switch from filter bags to cartridge type filters. Additionally, a new product recovery system was installed, which included a bucket elevator and screener, with a baghouse (405BH0134) to control emissions, associated with the Calcined Aluminas Production Process. There were no production increases associated with the installation of the new product recovery system and baghouse (405BH0134). Permitted emission increases included 6.4 tpy of PM and PM_{10}.

Permit 1527-AOP-R7 was issued on April 3, 2007. This permit, allowed an on-site bagging operation at Building 451with the following changes: Almatis relocated, utilized, and renumbered an idle baghouse (435BH0760), the #5 Blender Dust Collector. The idle baghouse was renumbered from 435BH0760 to 451BH0760 and was utilized in Building 451 to control emissions from PGA bagging operations. Almatis requested to remove from service the #5 Storage Bin Dust Collector (400BH01) was removed from building 400 due to the end of its service life. Additionally, baghouse (60BH0402) was relocated to replace the baghouse being removed from service. After relocation of the idle baghouse, was renumbered from 60BH0402 to 400BH09. This modification allowed relocation of an idle baghouse (426BH1035) from building 426 to building 405 for dust control and renamed it 405BH1035 for the prevention of nuisance dust emitted from the kiln seals from collecting on the burner floor and surrounding area. The permitted emissions increased by 2.2 tpy of PM and PM_{10}.

Permit 1527-AOP-R8 was issued on October 16, 2007. A new classifier system was installed and operated the new classifier system at Building 420. The system included a classifier, a cyclone, a dust collector, and three air sides. Three new pickup points were installed on each of the three air slides, and nuisance dust associated with the air slides are collected with an existing dust collector (420BH6260). All other dust associated with the classifier system is controlled by a new dust collector. For the proposed minor modification the permitted emissions increased by 0.4 tpy of PM and PM_{10}. A new material was tested for its silane coated products operations. This activity was permitted at SN-143FHE01. The permitted emissions increased by 9.5 tpy of VOC and 0.02 tpy formaldehyde. Additionally, the Nuisance Dust Collector (SN-405BH1035) was removed from the operation.

Permit 1527-AOP-R9 was issued on March 26, 2008. Almatis requested to install and operate a new Mini-Size Dust Collector SN-405BH0136 on the dust return airslide conveyor (ASCs) to the No. 1 Kiln at Building 405A. The permitted emission rates increase associated with the installation of SN-405BH0136 was 0.9 ton per year (tpy) PM/PM_{10}. A blower for H-700 spray dryer dust collector SN-451BH014 was replaced. The permitted emission rates increased 0.7 ton per year (tpy) PM/PM_{10}. NO_X hourly emission rates were corrected for SN-405BH0133 and SN-405EP0233 from 16.6 lb/hr to 19.6 lb/hr in the current permit. SN-405BH0135 corrected to SN-

405BH1035 in the Specific Condition No. 18. The emission limit for dryer 0.025 grams/dscm corrected to 0.025 grains/dscf in Specific Condition No. 6 of the permit.

Permit 1527-AOP-R10 was issued on June 10, 2008. Almatis submitted an application for a minor modification to Permit #1527-AOP-R9. Almatis requested authorization to:

- install and operate eighteen (18) Mini-Size Dust Collectors and fans (SN-415BH0001 through SN-415BH0018),
- revise the nuisance dust collection ducting from the No. 11 dust collector to the No. 5 bucket elevator and the associated feed input belt conveyor and screener, and
- Remove No.4 baghouse dust collector (SN-415BH6191) and reduce the capacity of the No. 11 dust collector (SN-415BH6192) from 12,300 to 7,500 ACFM.

The new eighteen (18) Mini-Size Dust Collectors resulted in an increase of PM/ PM_{10} emissions by 2.6 tpy. However, removal of SN-425BH6191 and reducing the capacity of SN-415BH6192 resulted in a decrease of PM/ PM_{10} emissions by 6.5 tpy. The permitted emissions decreased due to this modification 4.6 tpy of PM and 2.8 PM_{10}.

Permit 1527-AOP-R10 was issued on March 23, 2009. Almatis requested approval to increase the NO_X emission limits for SN-426EP06 and SN-426EP07 based on the stack test results of the samples May 2008. This modification results in a total increase of 82.4 tpy. The increase amount is above PSD threshold limit of 40.0 tpy. However, according to 40 CFR 52.21(b)(2)(i), this modification is not involved any physical change or change in the method of the operation. In addition, since SN-426EP06 and SN-426EP07 were installed in 1967 which is before the PSD regulation was effective, these sources are qualified to be grandfathered sources. Therefore, PSD does not apply for these modifications.

Additionally, Almatis submitted an application for a minor modification to Permit #1527-AOP-R10. Almatis requested an authorization to adjust the emission limit for the new classifier system (SN-420BH07) at Building 420. This adjustment was necessary because the classifier was incorrectly sized by the vendor. The permitted emissions are increasing in PM/ PM_{10} by 7.1 tons per year (tpy).

Permit 1527-AOP-R11 was issued on March 23, 2009. Almatis requested approval to increase the NO_X emission limits for SN-426EP06 and SN-426EP07 based on the stack test results of the samples May 2008. This modification results in a total increase of 82.4 tpy. The increase amount is above PSD threshold limit of 40 tpy. However, according to 40 CFR 52.21(b)(2)(i), this modification is not involved any physical change or change in the method of the operation. In addition, since SN-426EP06 and SN-426EP07 were installed in 1967 which is before the PSD regulation was effective, these sources are qualified to be grandfathered sources. Therefore, PSD did not apply for these modifications.

Additionally, Almatis submitted another application and requested an authorization to adjust the emission limit for the new classifier system at Building 420, SN-420BH07. This adjustment was necessary because the classifier was incorrectly sized by the vendor. The permitted emissions were increased in PM/PM_{10} by 7.1 tons per year (tpy).

Almatis, Inc.
Permit #: 1527-AOP-R13
AFIN: 63-00010

Permit 1527-AOP-R12 was issued on August 9, 2011. Almatis submitted a renewal application to renew the facility's Title V air permit. In addition to renewing the facility's Title V air permit, the permit removed SN-060BH03, SN-060BH04, SN-060BH05, SN-060BH0285, SN-060BH0406, SN-060BH0510, SN-060BH0528, SN-060BH0573, SN-060BH0602, SN-060EP0241, SN-141BH02, and SN-141BH03 from the permit. The permit replaced baghouse 415-12 Dust Collector, SN-415BH6401, with a larger unit. The total permitted annual emission rate limit decreases associated with this renewal included: 99.6 tons per year (tpy) PM, 69.6 tpy PM_{10}, 4.4 tpy SO_2, 0.08 tpy VOC, 26.1 tpy CO, and 16.1 tpy NO_X.

Permit 1527-AOP-R13 was issued on May 22, 2012. Almatis submitted a minor modification application to replace an electrostatic precipitator (405EP0233) with a new baghouse (405BH0233). The total permitted annual emission rate limit changes associated with this modification was a decrease of 91.5 tons per year (tpy) PM/PM_{10}.

SECTION IV: SPECIFIC CONDITIONS

HYDRAL PRODUCTS

WHITE HYDRATE PRODUCTION PROCESS

BUILDINGS 400 and 410

Ground ATH is produced at the plant site (Building 410). The material is transported into feed tanks from Building 400 and then fed into ball mills. Particle size is controlled in the ball mills to make various-sized products. The feed and product bins all have baghouse collectors to catch any ATH fines.

Note: Bauxite Kiln was shut down in 1985.

Specific Conditions

1. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by compliance with Specific Conditions # 3, 8, and 10 and Plantwide Conditions # 5 and 7. [Regulation 19, §19.501,and 40 CFR Part 52, Subpart E]

Source	Description	Pollutant	lb/hr	tpy
143FHE01	Spray Dryer	VOC	16.1	9.5
400BH02	Bulk Loading Dust Collector	PM_{10}	1.1	4.8
400BH03	#2 Storage Tank Dust Collector	PM_{10}	1.4	6.0
400BH04	#1 Storage Tank Dust Collector	PM_{10}	0.2	1.0
400BH05	#3A Storage Tank Dust Collector	PM_{10}	0.2	1.0
400BH06	#3B Storage Tank Dust Collector	PM_{10}	0.2	1.0
400BH07	#4 Storage Tank Dust Collector	PM_{10}	0.2	1.0
400BH08	#Rework Tank Dust Collector	PM_{10}	0.1	0.1
400BH09	#5 Storage Bin Dust Collector	PM_{10}	0.7	3.1
400SB01	#2 Dryer (Cyclone/Scrubber)	PM_{10}	0.7	3.1
400SB02	#3 Dryer (Cyclone/Scrubber)	PM_{10}	0.7	3.1
400SB03	#1 Dryer (Cyclone/Scrubber)	PM_{10}	0.7	3.1
410BH01	#1 Dust Collector (Baghouse)	PM_{10}	0.6	2.3
410BH02	#2 Mikro Pulsarie Dust Collector (Baghouse)	PM_{10}	0.6	2.3
410BH03	Nuisance Dust, #3 Grinding (Baghouse)	PM_{10}	0.2	0.9
410BH04	Bin Vent #1 Feed Tank (Baghouse)	PM_{10}	0.1	0.1
410BH05	Bin Vent #2 Feed Tank (Baghouse)	PM_{10}	0.1	0.1
410BH06	#2 Product Tank Dust Collector (Baghouse)	PM_{10}	0.3	1.2

2. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by compliance with Specific Conditions # 3, 8, and 10 and Plantwide Conditions # 5 and 7. [Regulation 18, §18.801,and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

Source	Description	Pollutant	lb/hr	tpy
143FHE01	Spray Dryer	Formaldehyde	0.02	0.02
400BH02	Bulk Loading Dust Collector	PM	1.1	4.8
400BH03	#2 Storage Tank Dust Collector	PM	1.4	6.0
400BH04	#1 Storage Tank Dust Collector	PM	0.2	1.0
400BH05	#3A Storage Tank Dust Collector	PM	0.2	1.0
400BH06	#3B Storage Tank Dust Collector	PM	0.2	1.0
400BH07	#4 Storage Tank Dust Collector	PM	0.2	1.0
400BH08	#Rework Tank Dust Collector	PM	0.1	0.1
400BH09	#5 Storage Bin Dust Collector	PM	0.4	1.5
400SB01	#1 Dryer (Cyclone /Scrubber)	PM	0.7	3.1
400SB02	#2 Dryer (Cyclone /Scrubber)	PM	0.7	3.1
400SB03	#3 Dryer (Cyclone /Scrubber)	PM	0.7	3.1
410BH01	#1 Dust Collector (Baghouse)	PM	0.6	2.3
410BH02	#2 Mikro Pulsarie Dust Collector (Baghouse)	PM	0.6	2.3
410BH03	Nuisance Dust, #3 Grinding (Baghouse)	PM	0.2	0.9
410BH04	Bin Vent #1 Feed Tank (Baghouse)	PM	0.1	0.1
410BH05	Bin Vent #2 Feed Tank (Baghouse)	PM	0.1	0.1
410BH06	#2 Product Tank Dust Collector (Baghouse)	PM	0.3	1.2

3. The permittee shall combust only pipeline quality natural gas in the dryers at the hydrate chemicals process. [§19.705, A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, and 40 CFR Part 70.6]

4. The permittee shall maintain records of the amount of silane coated alumina trihydrate produced during each calendar month. These records shall updated by the fifteenth day of the month following the month the records represent, be kept onsite, made available to Department personnel upon request, and submitted in accordance with General Provision 7. [§19.705, A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, and 40 CFR Part 70.6]

5. The permittee shall conduct an initial performance test for PM emissions from the #5 Storage Bin Dust Collector (SN-400BH09) as required by 40 CFR Part 60 Subpart A §60.8. [§19.702, A.C.A.§8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311, and 40 CFR Part 60 Subpart A §60.8]

6. On and after the date on which the performance test required to be conducted by §60.8 is completed, the permittee shall not cause to be discharged into the atmosphere from any

stack emissions that: [§19.705, A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, and 40 CFR Part 60 Subpart LL §60.382 (a)(1)(2)]

a. Contain particulate matter in excess of 0.05 g/dscm (0.02 gr/dscf); and
b. Exhibit greater than 7% opacity, unless the stack emissions are discharged from an affected facility using a wet scrubbing control device.

7. On and after the sixtieth day after achieving the maximum production rate at which the affected facility will be operate, but not later than 180 days after initial startup, the permittee shall not cause to be discharged into the atmosphere from an affected facility (400BH09) any process fugitive emissions that exhibit greater than 10% opacity. [§19.705, A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, and 40 CFR Part 60 Subpart LL §60.382 (b)] The initial performance tests for sources 451BH0760 and 400BH09 were performed over a two day period on June 27 and June 29, 2007.

8. The permittee shall determine compliance with the particulate matter standards in Specific Conditions No. 6 and 7 as follows:

a. Method 5 or 17 shall be used to determine the particulate matter concentration. The sample volume for each run shall be at least 1.70 dscm (60 dscf). The sampling probe and filter holder of Method 5 may be operated without heaters if the gas stream being sampled is at ambient temperature. For gas streams above ambient temperature, the Method 5 sampling train shall be operated with a probe and filter temperature slightly above the effluent temperature (up to a maximum filter temperature of 121°C (250°F)) in order to prevent water condensation on the filter.
b. Method 9 and the procedures in §60.11 shall be used to determine opacity from stack emissions and process fugitive emissions. The observer shall read opacity only when emissions are clearly identified as emanating solely from the affected facility being observed. [§19.705, A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, and 40 CFR Part 60 Subpart LL §60.386 (b)]

9. The permittee shall maintain monthly records which demonstrate compliance with the emission rates set forth in Specific Condition #1 (VOC) and Specific Condition #2 (Formaldehyde) for SN-143FHE01. The permittee will maintain a rolling twelve month total for each pollutant. These records shall updated by the fifteenth day of the month following the month the records represent, be kept onsite, made available to Department personnel upon request, and submitted in accordance with General Provision # 7. [Regulation No. 19 §19.705 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311] [Regulation No. 18 §18.1004 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

10. The permittee will not produce more than 2 million (2,000,000) pounds of silane coated products per consecutive twelve month period at SN-143FHE01. [Regulation 18, §18.1004, Regulation No. 19, §19.705, 40 CFR Part 70.6, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

11. The permittee will maintain records of the amount of silane coated products produced at SN-143FHE01. These records will be maintained on a monthly basis and updated no later than the fifteenth day of the month following the month to which the records pertain. The permittee will maintain a rolling twelve month total of the amount of silane coated products produced. These records shall updated by the fifteenth day of the month following the month the records represent, be kept onsite, made available to Department personnel upon request, and submitted in accordance with General Provision 7. [Regulation 18, §18.1004, Regulation No. 19, §19.705, 40 CFR Part 52, Subpart E, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

CALCINED ALUMINAS PRODUCTION PROCESS

BUILDINGS 50, 51, 55, 405, 415, 420, and 420A

The Calcined Alumina Plant consists of two rotary kilns, three ball mills (Buildings 55 and 420), one rail car unloading station, and two railcar loading stations.

The Calcined Aluminas Plant receives various calcined aluminas as its process feed stocks. The calcined aluminas are received via bulk rail cars. The calcined alumina rail cars are unloaded via a pneumatic lift system to dry blender/ storage bins.

The alumina feed stocks are dry fed or wet fed to the rotary kilns depending on the product being made. Mineralizers are fed concurrently with the alumina feed stock for some products. All rotary kilns are fired with natural gas.

Calcined product exits the kilns. This red hot material enters a rotary cooler where ambient air and a water jacket is used for heat removal. The cooled alumina exits the rotary cooler and is then pneumatically transported to storage bins. The flue gases from the rotary kilns are processed through electrostatic precipitators and cyclones to remove entrained dust. The captured dust is recycled back into the rotary kiln.

The calcined alumina products are sold in unground, ground, and super ground forms. The unground alumina is packaged directly from storage bins into rail cars, 50-pound, 25-kilogram, 100-pound paper bags; 300- to 400-pound fiber drums; and super sacks weighing 2,000 to 3,500 pounds. The unground alumina can be blended in an air merge blender prior to packaging if the customer's applications require this process step. Bulk rail cars are also shipped directly to customers as a packaging alternative.

Ground aluminas ranging from 90 – 99.9% - 325 mesh are processed through the one continuous ball mill in Special Aluminas. The mill grinds using ceramic (high alumina) media. Blending is performed based on customer requirements. Ground aluminas are processed through derrick's scalping screens to remove worn out media that exits the ball mills with the product. Ground aluminas have the same packaging alternatives as unground aluminas.

Super ground (SG) aluminas are >99.3% finer than 325 mesh and are approaching complete agglomerate separation into ultimate crystals. These SG aluminas are produced by grinding unground alumina in a batch ball mill located in Buildings 55 and 420. The unground alumina charges are batch weighed according to the recipes for each product into a batch charge hopper. The unground alumina passes through deironing filters as it is being loaded into the hopper. The weighed charge is loaded into the batch ball mill and ground for a specific time period, screened to remove worn out media, and then packaged. Standard packaging options include 50-pound paper bags and 400-pound fiber drums.

New Product Recovery System

The Special Cycle Baghouse (405BH0134) provides dust control for the new systems pickup points which include a bucket elevator, a screener, a potential future Grinding Mill, and existing conveyors. The source is permitted at maximum capacity.

New classifier system at Building 420 (420BH07):

The system includes a classifier, a cyclone, a dust collector, and three air sides. Three new pickup points will be installed on each of the three air slides, and nuisance dust associated with the air slides will be collected with an existing dust collector (420BH6260). All other dust associated with the classifier system will be controlled by a new dust collector (420BH07). For the proposed minor modification the permitted emissions increase by 0.4 tpy of PM and PM_{10}.

Eighteen (18) mini-size dust collectors (SN-BH0001 through SN-BH0018) and fans will be installed in the Building 415.

Specific Conditions

12. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by compliance with Specific Condition # 15 and Plantwide Conditions # 5 and 7. [Regulation 19, §19.501 et seq. and 40 CFR Part 52, Subpart E]

Source	Description	Pollutant	lb/hr	tpy
050BH07	#1 Dust Collector (Baghouse)	PM_{10}	0.7	2.8
051BH03	#3 Bin Vent Dust Collector (Baghouse)	PM_{10}	0.1	0.2
051BH04	#3 Bin Vent Dust Collector (Baghouse)	PM_{10}	0.1	0.2
051BH06	#1 Air Slide Dust Collector (Baghouse)	PM_{10}	0.6	2.3
051BH07	#3 Air Slide Dust Collector (Baghouse)	PM_{10}	0.6	2.3
051BH08	#2 Air Slide Dust Collector (Baghouse)	PM_{10}	0.6	2.3
051BH11	Unloading Hopper Airslide Dust Collector (Baghouse)	PM_{10}	0.1	0.5
055BH01	#1 Blender Dust Collector (Baghouse)	PM_{10}	1.7	7.5
055BH02	#2 Blender Discharge Dust Collector (Baghouse)	PM_{10}	0.6	2.8
055BH03	Nuisance Dust Collector (Baghouse)	PM_{10}	1.1	4.7
055BM01	Batch Ball Mill	VOC	2.5	11.0
405BH03	Building 405B Nuisance Dust Collector	Exhaust into Building		
405BH04	#4 Alumina Transport Dust Collector (Baghouse)	PM_{10}	0.7	2.8
405BH05	#5 Alumina Transport Dust Collector (Baghouse)	PM_{10}	0.7	2.8
405BH06	#6 Alumina Transport Dust Collector (Baghouse)	PM_{10}	0.7	2.8
405BH0308	#1 Blender Collector	PM_{10}	0.1	0.1
405BH0309	#2 Blender Collector	PM_{10}	0.1	0.1
405BH0310	#1 High Tank Dust Collector (Baghouse)	PM_{10}	0.1	0.1
405BH0312	#1 Lift System Dust Collector (Baghouse)	PM_{10}	0.5	2.2

Source	Description	Pollutant	lb/hr	tpy
405BH0133	#1 Baghouse	PM_{10}	14.6	64.0
		SO_2	1.0	4.4
		VOC	0.2	0.9
		CO	3.7	16.1
		NO_X	19.6	85.8
405BH0134	Special Cycle Baghouse	PM_{10}	0.6	2.7
405BH0136	Mini-Size Dust Collector (Baghouse)	PM_{10}	0.2	0.9
405BH0233	#2 Baghouse	PM_{10}	4.2	18.0
		SO_2	1.0	4.4
		VOC	0.2	0.9
		CO	3.7	16.1
		NO_X	19.6	85.8
415BH0401	415-7 Dust Collector (Baghouse)	PM_{10}	0.2	1.0
415BH0402	415-8 Dust Collector (Baghouse)	PM_{10}	0.2	1.0
415BH6192	415-11 Dust Collector (Baghouse)	PM_{10}	0.9	3.5
415BH6201	#1 3W1 Mini-Collector (Baghouse)	PM_{10}	0.2	0.7
415BH6202	#2 3W1 Mini Collector (Baghouse)	PM_{10}	0.2	0.7
415BH6203	#1 3W2 Mini Collector (Baghouse)	PM_{10}	0.2	0.7
415BH6204	#2 3W2 Mini Collector (Baghouse)	PM_{10}	0.2	0.7
415BH6225	415-9 Dust Collector (Baghouse)	PM_{10}	0.5	2.3
415BH6227	415-10 Dust Collector (Baghouse)	PM_{10}	0.3	1.2
415BH6401	415-12 Dust Collector (Baghouse)	PM_{10}	1.9	8.3
415BH6451	415-6 Dust Collector (Baghouse)	PM_{10}	0.2	0.7
415BH0001	No. 2 Bin Discharge Air Slide DC (Baghouse)	PM_{10}	0.1	0.2
415BH0002	No. 4 Bin Discharge Air Slide DC (Baghouse)	PM_{10}	0.1	0.1
415BH0003	No. 5 Bin Discharge Air Slide DC (Baghouse)	PM_{10}	0.1	0.1
415BH0004	No. 7 BIN Discharge Air Slide DC (Baghouse)	PM_{10}	0.1	0.1
415BH0005	No. 8 Bin Discharge Air Slide DC (Baghouse)	PM_{10}	0.1	0.1
415BH0006	No. 10 Bin Discharge Air Slide DC	PM_{10}	0.1	0.2
415BH0007	No. 11 Bin Discharge Air Slide DC (Baghouse)	PM_{10}	0.1	0.2
415BH0008	No. 13 Bin Discharge Air Slide DC (Baghouse)	PM_{10}	0.1	0.2
415BH0009	No. 15ABin Discharge Air Slide DC (Baghouse)	PM_{10}	0.1	0.2
415BH0010	No. 16 Bin Discharge Air Slide DC (Baghouse)	PM_{10}	0.1	0.2
415BH0011	No. 16A Bin Discharge Air Slide DC (Baghouse)	PM_{10}	0.1	0.2
415BH0012	No. 17 Bin Discharge Air Slide DC (Baghouse)	PM_{10}	0.1	0.2
415BH0013	No. 18A Bin Discharge Air Slide DC (Baghouse)	PM_{10}	0.1	0.2
415BH0014	Air Merge Blender Discharge Air Slide DC (Baghouse)	PM_{10}	0.1	0.2
415BH0015	No. 220 Discharge Air Slide DC (Baghouse)	PM_{10}	0.1	0.3
415BH0016	No. 223 Discharge Air Slide DC (Baghouse)	PM_{10}	0.1	0.3
415BH0017	Air Merge Blender Feed Air Slide DC (Baghouse)	PM_{10}	0.1	0.3
415BH0018	No. 9 Bucket elevator DC(Baghouse)	PM_{10}	0.1	0.3
420BH05	#1 Bagging Dust Collector (Baghouse)	PM_{10}	0.2	0.9

Source	Description	Pollutant	lb/hr	tpy
420BH06	#2 Bagging Dust Collector (Baghouse)	PM_{10}	0.2	0.9
420BH07	#3 Bagging Dust Collector (Baghouse)	PM_{10}	1.8	7.5
420BH6193	#1 Air Slide Vent Dust Collector (Baghouse)	PM_{10}	0.2	0.7
420BH6194	#2 Air Slide Vent Dust Collector (Baghouse)	PM_{10}	0.2	0.7
420BH6260	420-4 Flex Kleen Dust Collector (Baghouse)	PM_{10}	2.4	10.2
420BH7614	420-3 Dust Collector (Baghouse)	PM_{10}	0.3	1.3
420BH7801	420-5 Bulk Loading Dust Collector (Baghouse)	PM_{10}	0.5	2.1
420ABH7714	420A-2 Coarse Dust Collector (Baghouse)	PM_{10}	0.3	1.1
420ABH7716	420A-3 Fines Dust Collector (Baghouse)	PM_{10}	0.4	1.8
420ABH7810	Norblo XFER Dust Collector (Baghouse)	PM_{10}	0.3	1.1
420ABH7811	#7 Product Tank Dust Collector (Baghouse)	PM_{10}	0.3	1.4
420ABH7851	Majac Dust Collector (Baghouse)	PM_{10}	1.0	4.4

13. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by compliance with Specific Condition # 15 and Plantwide Conditions # 5 and 7. [Regulation 18, §18.801, and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

Source	Description	Pollutant	lb/hr	Tpy
050BH07	#1 Dust Collector (Baghouse)	PM	0.7	2.8
051BH03	#3 Bin Vent Dust Collector (Baghouse)	PM	0.1	0.2
051BH04	#3 Bin Vent Dust Collector (Baghouse)	PM	0.1	0.2
051BH06	#1 Air Slide Dust Collector (Baghouse)	PM	0.6	2.3
051BH07	#3 Air Slide Dust Collector (Baghouse)	PM	0.6	2.3
051BH08	#2 Air Slide Dust Collector (Baghouse)	PM	0.6	2.3
051BH11	Unloading Hopper Airslide Dust Collector (Baghouse)	PM	0.1	0.5
055BH01	#1 Blender Dust Collector (Baghouse)	PM	1.7	7.5
055BH02	#2 Blender Discharge Dust Collector (Baghouse)	PM	0.6	2.8
055BH03	Nuisance Dust Collector (Baghouse)	PM	1.1	4.7
055BM01	Batch Ball Mill	Diethanolamine	0.4	1.5
405BH03	Exhaust into Building			
405BH04	#4 Transport Dust Collector	PM	0.7	2.8
405BH05	#5 Alumina Transport Dust Collector (Baghouse)	PM	0.7	2.8
405BH06	#6 Alumina Transport Dust Collector (Baghouse)	PM	0.7	2.8
405BH0308	#1 Blender Collector	PM	0.1	0.1
405BH0309	#2 Blender Collector	PM	0.1	0.1
405BH0310	#1 High Tank Dust Collector (Baghouse)	PM	0.1	0.1
405BH0312	#1 Lift System Dust Collector (Baghouse)	PM	0.5	2.2
405BH0133	#1 Baghouse Special Cycle Baghouse	PM	14.6	64.0

Source	Description	Pollutant	lb/hr	Tpy
405BH0134	Special Cycle Baghouse	PM	0.6	2.7
405BH0136	Mini-Size Dust Collector (Baghouse)	PM	0.2	0.9
405BH0233	#2 Baghouse	PM	4.2	18.0
415BH0401	415-7Dust Collector	PM	0.2	1.0
415BH0402	415-8 Dust Collector (Baghouse)	PM	0.2	1.0
415BH6191	415-11 Dust Collector (Baghouse)	Removed from Service		
415BH6192	415-11 Dust Collector (Baghouse)	PM	0.9	3.5
415BH6201	#1 3W1 Mini-Collector (Baghouse)	PM	0.2	0.7
415BH6202	#2 3W1 Mini Collector	PM	0.2	0.7
415BH6203	#1 3W2 Mini Collector (Baghouse)	PM	0.2	0.7
415BH6204	#2 3W2 Mini Collector (Baghouse)	PM	0.2	0.7
415BH6225	415-9 Dust Collector (Baghouse)	PM	0.5	2.3
415BH6227	415-10 Dust Collector (Baghouse)	PM	0.3	1.2
415BH6401	415-12 Dust Collector (Baghouse)	PM	1.9	8.3
415BH6451	415-6 Dust Collector (Baghouse)	PM	0.2	0.7
415BH0001	No. 2 Bin Discharge Air Slide DC (Baghouse)	PM	0.1	0.2
415BH0002	No. 4 Bin Discharge Air Slide DC (Baghouse)	PM	0.1	0.1
415BH0003	No. 5 Bin Discharge Air Slide DC (Baghouse)	PM	0.1	0.1
415BH0004	No. 7 BIN Discharge Air Slide DC (Baghouse)	PM	0.1	0.1
415BH0005	No. 8 Bin Discharge Air Slide DC (Baghouse)	PM	0.1	0.1
415BH0006	No. 10 Bin Discharge Air Slide DC	PM	0.1	0.2
415BH0007	No. 11 Bin Discharge Air Slide DC (Baghouse)	PM	0.1	0.2
415BH0008	No. 13 Bin Discharge Air Slide DC (Baghouse)	PM	0.1	0.2
415BH0009	No. 15ABin Discharge Air Slide DC (Baghouse)	PM	0.1	0.2
415BH0010	No. 16 Bin Discharge Air Slide DC (Baghouse)	PM	0.1	0.2
415BH0011	No. 16A Bin Discharge Air Slide DC (Baghouse)	PM	0.1	0.2
415BH0012	No. 17 Bin Discharge Air Slide DC (Baghouse)	PM	0.1	0.2
415BH0013	No. 18A Bin Discharge Air Slide DC (Baghouse)	PM	0.1	0.2

Source	Description	Pollutant	lb/hr	Tpy
415BH0014	Air Merge Blender Discharge Air Slide DC (Baghouse)	PM	0.1	0.2
415BH0015	No. 220 Discharge Air Slide DC (Baghouse)	PM	0.1	0.3
415BH0016	No. 223 Discharge Air Slide DC (Baghouse)	PM	0.1	0.3
415BH0017	Air Merge Blender Feed Air Slide DC (Baghouse)	PM	0.1	0.3
415BH0018	No. 9 Bucket elevator DC (Baghouse)	PM	0.1	0.3
420BH05	#1 Bagging D/C (Baghouse)	PM	0.2	0.9
420BH06	#2 Bagging D/C (Baghouse)	PM	0.2	0.9
420BH07	#3 Bagging D/C (Baghouse)	PM	01.8	7.5
420BH6193	#1 Air Slide Vent Dust Collector (Baghouse)	PM	0.2	0.7
420BH6194	#2 Air Slide Vent Dust Collector Baghouse)	PM	0.2	0.7
420BH6260	420-4 Flex Kleen Dust Collector (Baghouse)	PM	2.4	10.2
420BH7614	420-3 Dust Collector (Baghouse)	PM	0.3	1.3
420BH7801	420-5 Bulk Loading Dust Collector (Baghouse)	PM	0.5	2.1
420ABH7714	420A-2 Coarse Dust Collector Baghouse)	PM	0.3	1.1
420ABH7716	420A-3 Fines Dust Collector (Baghouse)	PM	0.4	1.8
420ABH7810	Norblo XFER Dust Collector (Baghouse)	PM	0.3	1.1
420ABH7811	#7 Product Tank Dust Collector (Baghouse)	PM	0.3	1.4
420ABH7851	Majac Dust Collector (Baghouse)	PM	1.0	4.4

14. The permittee shall not exceed the following emission rates. Compliance with these rates shall be demonstrated by compliance with Specific Conditions # 17 through 19. [Regulation 18, §18.801, and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

Source	Pollutant	lb/hr	tpy
405BH0133	HF	58.1	109.5
405EP0233	HF	58.1	

15. The permittee shall test source SN-405BH0233 for PM using Method 5. Using this method the permittee can assume that the PM emissions are the same as PM_{10} emissions, or the permittee can run a test specifically for PM_{10} using methods 201A, CO using Method 10, and NO_X using Method 7E, on an annual basis. This test shall be conducted in accordance with Plantwide Condition #3. The testing required in this condition is qualified for the testing interval relaxation provisions of Plantwide Condition #9. [§19.702 and 40 CFR Part 52 Subpart E]

16. SN-405BH0133 and SN-405BH0233 shall not be operated with a stack height less than 121 feet from ground level. [A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

17. The permittee shall not exceed a combined aluminum fluoride (AlF_3) feed rate of 127 lb/hr in SN-405BH0133 or SN-405BH0233. The HF feed rate limit is based on a HF emission factor of 915 lb HF emitted per ton of aluminum fluoride feed rate. In the event that the annual HF stack testing reveals higher emission factors, then the permittee shall submit a permit modification to revise the feed rate limit set forth in this condition. The permittee shall demonstrate compliance with this condition by compliance with Specific Condition No. 17. [§18.1004 and A.C.A §8-4-203 as referenced by §8-4-304 and §8-4-311]

18. The permittee shall maintain daily records of the aluminum fluoride feed rate. These records shall include amount of aluminum fluoride fed to each source, the hours the source was operated, and the daily average feed rate to the two sources. The permittee shall also maintain monthly records which show the consecutive 12 month rolling total of aluminum fluoride fed to and HF emitted from sources SN-405BH0133 or SN-405BH0233. These monthly records will show compliance with the 109.5 ton per year limits on HF emissions. These records shall be updated by the fifteenth day of the month following the month which the records represent, kept onsite, made available to the Department upon request, and submitted in accordance with General Provision 7. [§18.1004 and A.C.A §8-4-203 as referenced by §8-4-304 and §8-4-311]

19. The permittee shall test source SN-405BH0233 for hydrogen fluoride (HF) using Reference Method 26. This testing shall be performed annually. The permittee shall compute the HF emission factor determined during this testing in units of pounds of HF emitted per ton of fluoride feed rate. The permittee shall use the average feed rate during the duration of the test in conjunction with the average emission rate measured during the duration of the test, to derive the appropriate HF emission factor. This test shall be conducted in accordance with Plantwide Condition #3. The testing required in this condition is qualified for the testing interval relaxation provisions of Plantwide Condition #9. [§18.1002 and A.C.A §8-4-203 as referenced by §8-4-304 and §8-4-311]

20. #2 Baghouse (SN-405BH0233), The Classifier Dust Collector SN-420BH07, Mini-Size Dust Collector SN-405BH0136, H-700 Spray Dryer Dust Collector SN-451BH014, and Bin Discharge Air Slide Dust Collectors SN-415BH0001 through SN-415BH0018 must meet the applicable requirements of 40 CFR 60 Subpart LL (Standards of Performance for Metallic Mineral Processing Plants). [Regulation No. 19 §19.304 and 40 CFR 60 Subpart LL].

26. The permittee shall conduct an initial performance test for PM emissions from SN-405BH0233. These sources should have already been tested: SN-420BH07; SN-405BH0136; SN-451BH014; one source from the group of 415 BH02, 415 BH03, 415 BH04 or 415 BH05; one source from the group of 415 BH01, 415 BH06, 415 BH07, 415

BH09, 415 BH11, 415 BH12, 415 BH13 or 415 BH14; one source from the group of 415 BH08 or 415 BH10; 415 BH15 and one source from the group of 415 BH16, 415 BH17 or 415 BH18 as required by 40 CFR Part 60 Subpart A §60.8. [§19.702, A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311, and 40 CFR Part 60 Subpart A §60.8]

21. On and after the date on which the performance test required to be conducted by §60.8 is completed, the permittee shall not cause to be discharged into the atmosphere from any stack emissions that:

    a. Contain particulate matter in excess of 0.05 g/dscm (0.02 gr/dscf); and
    b. Exhibit greater than 7% opacity, unless the stack emissions are discharged from an affected facility using a wet scrubbing control device. [§19.705, A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, and 40 CFR Part 60 Subpart LL §60.382 (a)(1)(2)]

28. On and after the sixtieth day after achieving the maximum production rate at which the affected facility will be operate, but not later than 180 days after initial startup, the permittee shall not cause to be discharged into the atmosphere from an affected facility SN-405BH0233, SN-405BH0134, SN-420BH07, SN-451BH014, SN-405BH0136, and SN-415BH0001 through SN-415BH0018 and any process fugitive emissions that exhibit greater than 10% opacity. [§19.705, A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, and 40 CFR Part 60 Subpart LL §60.382 (b)]

22. The permittee shall determine compliance with the particulate matter standards in Specific Conditions # 21.a and 21.b as follows:

    a. Method 5 or 17 shall be used to determine the particulate matter concentration. The sample volume for each run shall be at least 1.70 dscm (60 dscf). The sampling probe and filter holder of Method 5 may be operated without heaters if the gas stream being sampled is at ambient temperature. For gas streams above ambient temperature, the Method 5 sampling train shall be operated with a probe and filter temperature slightly above the effluent temperature (up to a maximum filter temperature of 121°C (250°F)) in order to prevent water condensation on the filter.
    b. Method 9 and the procedures in §60.11 shall be used to determine opacity from stack emissions and process fugitive emissions. The observer shall read opacity only when emissions are clearly identified as emanating solely from the affected facility being observed. [§19.705, A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, and 40 CFR Part 60 Subpart LL §60.386 (b)]

23. Visible emissions may not exceed the limits specified in the Appendix A (opacity survey 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]

TABULAR PROCESS

BUILDINGS 425 AND 426

The tabular alumina plant at the Arkansas facility receives calcined alumina as process feedstock in bulk hopper cars and from Building 405. The alumina is ground in a steel-media mill and transported to the ball forming operation. Ball forming is a two-stage process. Seed is produced and then green (unfired) balls are produced on proprietary equipment.

The green balls are then fired into tabular in the conversion stage, which consists of drying, firing and cooling equipment. The fired tabular balls are then either sold or crushed and screened into sizes varying from 0.5" to 100 mesh. Further size reduction occurs in pebble mills, which produce both screened and air-classified products.

Products are sold in paper bags, semi-bulk bags/drums, and bulk hopper cars/trucks.

The #2 Tabular Baghouse (426BH3314) has been modified to reduce erosion. The modification includes an internal reconfiguration and switches from filter bags to cartridge type filters.

Specific Conditions

24. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by compliance with Specific Conditions # 26, 27 and 29 and Plantwide Conditions # 5 and 7. [Regulation 19, §19.501 et seq. and 40 CFR Part 52, Subpart E]

Source	Description	Pollutant	lb/hr	tpy
425AUC01	Bulk Loading Station (trucks) beneath 425A Dense Phase Pump feed tank (Baghouse)	PM_{10}	0.2	0.9
425BH01	Low Iron Tabular (Baghouse)	PM_{10}	0.5	2.1
425BH02	High Iron Tabular (Baghouse)	PM_{10}	1.5	6.4
425BH03	Ground Ore Collection (Baghouse)	PM_{10}	1.0	4.2
425BH04	Bulk Loading Dust Collector 4th Floor (Baghouse)	PM_{10}	0.5	2.3
425BH05	Nuisance CM Dust Collector (Baghouse)	PM_{10}	2.4	10.5
425BH06	#1 Ceramic Mill Dust Collector (Baghouse)	PM_{10}	2.4	10.5
425BH07	425A DPP Collector (Baghouse)	PM_{10}	0.4	1.5
425BH08	T-1 Mill Dust Collector (Baghouse)	PM_{10}	0.3	1.3
425BH09	Ground Ore Bin Vents Dust Collector	PM_{10}	0.4	1.4
425BH1003	325 Tabular Ceramic Mill (Baghouse)	PM_{10}	0.6	2.5
425BH1037	Ground Ore Dust Collector (Baghouse)	PM_{10}	0.7	3.0
425BH3343	8th Floor Flex-Kleen Dust Collector (Baghouse)	PM_{10}	1.5	6.4
425EP04	#8 Converter/Dryer (ESP)	PM_{10} SO_2 VOC CO NO_X	23.0 1.0 0.2 2.6 10.0	100.7 4.4 0.6 11.5 43.8

Source	Description	Pollutant	lb/hr	tpy
426BH1032	#2 Ceramic Mill Dust Collector (Baghouse)	PM_{10}	0.8	3.5
426BH1035	#8 Ball Former Dust Collector	Source relocated to 405BH1035		
426BH1045	#3 Ceramic Mill Dust Collector (Baghouse)	PM_{10}	1.4	6.0
426BH3311	#1 Tabular Dust Collector (Baghouse)	PM_{10}	1.4	6.1
426BH3314	#2 Tabular Dust Collector (Baghouse)	PM_{10}	2.3	9.8
426BH3317	#3 Tabular Dust Collector (Baghouse)	PM_{10}	2.2	9.6
426BH3320	#4 Tabular Dust Collector (Baghouse)	PM_{10}	2.2	9.6
426BH5015	Ground Ore Dust Collector (Baghouse)	PM_{10}	1.3	5.6
426BH5041	Unground Ore Dust Collector (Baghouse)	PM_{10}	1.3	5.6
426BH5044	12-1 Bin Dust Collector (Baghouse)	PM_{10}	0.1	0.1
426BH5045	Bulk Loading Dust Collector (Baghouse)	PM_{10}	0.1	0.1
426BH7086	Boric Acid Collector (Baghouse)	PM_{10}	0.3	1.1
426EP06	#11 & #12 Converter/Dryer (ESP)	PM_{10} SO_2 VOC CO NO_X	23.0 1.0 0.2 21.9 40.5	100.7 4.4 0.6 95.9 177.4
426EP07	#13 & #14 Converter/Dryer (ESP)	PM_{10} SO_2 VOC CO NO_X	23.0 1.0 0.2 21.9 40.5	100.7 4.4 0.6 95.9 177.4

25. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by compliance with Specific Conditions # 26, 27 and 29 and Plantwide Conditions # 5 and 7. [Regulation 18, §18.801, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

Source	Description	Pollutant	lb/hr	tpy
425AUC01	Bulk Loading Station (trucks) beneath 425A Dense Phase Pump feed tank (Baghouse)	PM	0.2	0.9
425BH01	Low Iron Tabular (Baghouse)	PM	0.5	2.1
425BH02	High Iron Tabular (Baghouse)	PM	1.5	6.4
425BH03	Ground Ore Collection (Baghouse)	PM	1.0	4.2
425BH04	Bulk Loading Dust Collector 4th Floor (Baghouse)	PM	0.5	2.3
425BH05	Nuisance CM Dust Collector (Baghouse)	PM	2.4	10.5
425BH06	#1 Ceramic Mill Dust Collector (Baghouse)	PM	2.4	10.5
425BH07	425A DPP Collector (Baghouse)	PM	0.4	1.5
425BH08	T-1 Mill Dust Collector (Baghouse)	PM	0.3	1.3
425BH09	Ground Ore Bin Vents Dust Collector	PM	0.4	1.4
425BH1003	325 Tabular Ceramic Mill (Baghouse)	PM	0.6	2.5

Source	Description	Pollutant	lb/hr	tpy
425BH1037	Ground Ore Dust Collector (Baghouse)	PM	0.7	3.0
425BH3343	8th Floor Flex-Kleen Dust Collector (Baghouse)	PM	1.5	6.4
425EP04	#8 Converter/Dryer(ESP)	PM	23.0	100.7
426BH1032	#2 Ceramic Mill Dust Collector (Baghouse)	PM	0.8	3.5
426BH1035	#8 Ball Former Dust Collector	Source relocated to 405BH1035		
426BH1045	#3 Ceramic Mill Dust Collector (Baghouse)	PM	1.4	6.0
426BH3311	#1 Tabular Dust Collector (Baghouse)	PM	1.4	6.1
426BH3314	#2 Tabular Dust Collector (Baghouse)	PM	2.3	9.8
426BH3317	#3 Tabular Dust Collector (Baghouse)	PM	2.2	9.6
426BH3320	#4 Tabular Dust Collector (Baghouse)	PM	2.2	9.6
426BH5015	Ground Ore Dust Collector (Baghouse)	PM	1.3	5.6
426BH5041	Unground Ore Dust Collector (Baghouse)	PM	1.3	5.6
426BH5044	12-1 Bin Dust Collector (Baghouse)	PM	0.1	0.1
426BH5045	Bulk Loading Dust Collector (Baghouse)	PM	0.1	0.1
426BH7086	Boric Acid Collector (Baghouse)	PM	0.3	1.1
426EP06	#11 & #12 Converter/Dryer (ESP)	PM	23.0	100.7
426EP07	#13 & #14 Converter/Dryer (ESP)	PM	23.0	100.7

26. The exhaust of the three dryer ESPs (SN-425EP04, SN-426EP06, and SN-426EP07) shall be tested for PM and PM_{10} using Method 5, by using this method the permittee can assume all PM is PM_{10} or also run test specifically for PM_{10} using methods 201A, CO using Method 10, and NO_X using Method 7E, on an annual basis. This test shall be conducted in accordance with Plantwide Condition # 5 and upon showing consistent compliance; stack testing shall be performed every two (2) years thereafter. Consistent compliance shall be defined as two consecutive annual stack tests, for each source, which are within the permit limits. If a source which has demonstrated consistent compliance fails a test, then that source shall return to annual testing until consistent compliance can be established. The testing required in this condition is qualified for the testing interval relaxation provisions of Plantwide Condition # 8. The performance tests for the emissions form SN-426EP06 and SN-426EP07 were performed on June 29, 2010 and June 30, 2010, respectively. [§19.702 and 40 CFR Part 52 Subpart E]

27. The permittee shall not load out more than 20,000 tons of alumina at 425AUC01 (bulk loading station at trucks underneath Dense Phase pump feed tank) during any consecutive 12 month period. [§19.705, A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, and 40 CFR 70.6]

28. The permittee shall keep records on the amount of alumina loaded out at SN-425AUC01 during each calendar month. These records shall include the amount of alumina loaded out each of the previous 12 months and the total loaded out over the previous consecutive 12 months. These records shall be updated by the fifteenth day of the month following the month which the records represent, kept onsite, made available to the Department

upon request, and submitted in accordance with General Provision # 7. [§19.705, A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, and 40 CFR 70.6]

29. The permittee shall combust only pipeline quality natural gas at sources 425EP04, 426EP06, and 426EP07. [§19.705, A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, and 40 CFR 70.6]

30. The permittee shall conduct an initial performance test for PM emissions from the # 2 Tabular Dust Collector (426BH3314) as required by 40 CFR Part 60 Subpart A §60.8. [§19.702, A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311, and 40 CFR Part 60 Subpart A §60.8]

31. On and after the date on which the performance test required to be conducted by §60.8 is completed, the permittee shall not cause to be discharged into the atmosphere from any stack emissions that:

    a. Contain particulate matter in excess of 0.05 g/dscm (0.02 gr/dscf); and
    b. Exhibit greater than 7% opacity, unless the stack emissions are discharged from an affected facility using a wet scrubbing control device.[§19.705, A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, and 40 CFR Part 60 Subpart LL §60.382 (a)(1)(2)]

32. On and after the sixtieth day after achieving the maximum production rate at which the affected facility will be operate, but not later than 180 days after initial startup, the permittee shall not cause to be discharged into the atmosphere from an affected facility (426BH3314) any process fugitive emissions that exhibit greater than 10% opacity. [§19.705, A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, and 40 CFR Part 60 Subpart LL §60.382 (b)] The applicable performance test for source 426BH3314 was performed on December 8, 2007 to demonstrate compliance with 40 CFR Part 60 Subpart LL §60.382(b).

33. The permittee shall determine compliance with the particulate matter standards in Specific Conditions # 31.a and 31.b as follows:

    a. Method 5 or 17 shall be used to determine the particulate matter concentration. The sample volume for each run shall be at least 1.70 dscm (60 dscf). The sampling probe and filter holder of Method 5 may be operated without heaters if the gas stream being sampled is at ambient temperature. For gas streams above ambient temperature, the Method 5 sampling train shall be operated with a probe and filter temperature slightly above the effluent temperature (up to a maximum filter temperature of 121°C (250°F)) in order to prevent water condensation on the filter.
    b. Method 9 and the procedures in §60.11 shall be used to determine opacity from stack emissions and process fugitive emissions. The observer shall read opacity only when emissions are clearly identified as emanating solely from the affected facility being observed. [§19.705, A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, and 40 CFR Part 60 Subpart LL §60.386 (b)]

ELECTRONIC PACKAGING

BUILDING 141

Two different fine powder products are manufactured in this facility using two separate processes. Pneumatic conveyance of both materials through the processes necessitates the use of both product and fugitive dust collectors.

The first process is a grinding operation. The unground powder is transported to the facility in a trailer and unloaded pneumatically into the mill feed tank. A bin vent collector atop the feed tank separates transport air from the solids stream. The unground powder exits the feed tank, passes through a gravimetric feeder, and into the mill. The material is ground in the mill to the consistency of flour and transported pneumatically to the product collector where the air and solids streams are separated. The transport air exits the process through the dust collector blower. The ground product is packaged in appropriate containers directly beneath the product collector. A nuisance dust collector catches any fugitive dust that may escape the packaging system or gravimetric feeder.

The second process is a ground powder classification operation. This operation is actually two parallel systems that can manufacture two different classified powders without concern for cross contamination, except in the classifier proper which must be cleaned out between products. One of the parallel systems is not used routinely for any product at this time. The second ground powder is transported to the facility in drums or super sacks. These containers are emptied into the feed tank using the pneumatic lift system. A bin vent collector atop the feed tank separates transport air from the solids stream. The ground powder exits the feed tank, passes through a gravimetric feeder, and into the classifier. The ground fraction is pneumatically conveyed to a coarse cyclone system where the air and solids streams are separated. The transport air is recycled into the classifier. The coarse fraction is then packaged in appropriate containers beneath the cyclones. The fine fraction is pneumatically conveyed to the product collector where the air and solids streams are separated. The fine fraction is packaged in appropriate containers directly beneath the product collector. The nuisance dust collector captures any fugitive dust that may escape the packaging system, gravimetric feeders, or the #1 lift system.

Specific Conditions

34. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by compliance with Plantwide Conditions # 5 and 7. [Regulation 19, §19.501 et seq. and 40 CFR Part 52, Subpart E]

Source	Description	Pollutant	lb/hr	tpy
141BH01	Milled Product Collector Building 141 (Baghouse)	PM_{10}	0.3	1.2
141BH02	Glass Frit/Fines Collectors	Removed from Service		
141BH03	Nuisance Collector	Removed from Service		

Source	Description	Pollutant	lb/hr	tpy
141BH04	Mill Feed Tank Collector (Baghouse)	PM_{10}	0.1	0.2
141BH05	#1 Classifier Collector (Baghouse)	PM_{10}	0.1	0.3
141BH06	#2 Classifier Collector (Baghouse)	PM_{10}	0.1	0.1

35. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by compliance with Plantwide Conditions # 5 and 7. [Regulation 18, §18.801, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

Source	Description	Pollutant	lb/hr	tpy
141BH01	Milled Product Collector Building 141 (Baghouse)	PM	0.3	1.2
141BH02	Glass Frit/Fines Collectors	Removed from Service		
141BH03	Nuisance Collector	Removed from Service		
141BH04	Mill Feed Tank Collector (Baghouse)	PM	0.1	0.2
141BH05	#1 Classifier Collector (Baghouse)	PM	0.1	0.3
141BH06	#2 Classifier Collector (Baghouse)	PM	0.1	0.1

STORAGE PILES AND HAUL ROADS

Process Description

Fugitive emissions occur from traffic on the paved and unpaved roads at the facility. The emissions from these haul roads were calculated using the equations for paved and unpaved roads found in AP-42, Chapter 13, Section 13.2.1 and 13.2.2. Storage piles at the facility generate fugitive particulate emissions. These emissions were calculated using the AP-42 equations found in Section 13.2.4.

Specific Conditions

36. The permittee shall not exceed the emission rates set forth in the following table. [Regulation 19, §19.501 et seq. and 40 CFR Part 52, Subpart E]

Source	Description	Pollutant	lb/hr	tpy
MISC	Storage Piles and Haul Roads	PM_{10}	22.2	3.7

37. 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 §8-4-304 and §8-4-311]

Source	Description	Pollutant	lb/hr	tpy
MISC	Storage Piles and Haul Roads	PM	22.2	3.7

SECTION V: COMPLIANCE PLAN AND SCHEDULE

~~Almatis, Inc. will continue to operate in compliance with those identified regulatory provisions.~~
The facility will examine and analyze future regulations that may apply and determine their applicability with any necessary action taken on a timely basis.

SECTION VI: PLANTWIDE CONDITIONS

1. The permittee shall notify the Director in writing within thirty (30) days after commencing construction, completing construction, first placing the equipment and/or facility in operation, and reaching the equipment and/or facility target production rate. [Regulation 19 §19.704, 40 CFR Part 52, Subpart E, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

2. If the permittee fails to start construction within eighteen months or suspends construction for eighteen months or more, the Director may cancel all or part of this permit. [Regulation 19 §19.410(B) and 40 CFR Part 52, Subpart E]

3. The permittee must test any equipment scheduled for testing, unless otherwise stated in the Specific Conditions of this permit or by any federally regulated requirements, within the following time frames: (1) new equipment or newly 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) operating equipment according to the time frames set forth by the Department or within 180 days of permit issuance if no date is specified. The permittee must notify the Department of the scheduled date of compliance testing at least fifteen (15) business days in advance of such test. The permittee shall submit the compliance test results to the Department within thirty (30) calendar days after completing the testing. [Regulation 19 §19.702 and/or Regulation 18 §18.1002 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

4. The permittee must provide:
   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.

   [Regulation 19 §19.702 and/or Regulation 18 §18.1002 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

5. The permittee must operate the equipment, control apparatus and emission monitoring equipment within the design limitations. The permittee shall maintain the equipment in good condition at all times. [Regulation 19 §19.303 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

6. This permit subsumes and incorporates all previously issued air permits for this facility. [Regulation 26 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

7. The opacity limit for each emission source listed in the table of allowable emission rates is limited to the value in the opacity survey (Appendix A) as measured by EPA Reference Method 9. All sources are to be visually inspected at least once per week. If any source appears to be out of compliance with the opacity limit while conducting the visual

inspection then the permittee shall perform a Method 9 evaluation on that particular source(s). If any source should exceed its opacity limit, then the cause of the exceedance shall be investigated and corrected as soon as possible. The opacity of each source that appears to be out of compliance with the opacity limit shall be recorded on the opacity survey forms (Appendix A), which shall be kept onsite and available for inspection. Also, records shall be kept onsite and made available upon request showing that the visual inspections of each source are being performed as required by this condition. Any source which is idled or shut down for the entire calendar week need only note the source is shut down or idled and not make the visual inspection of the source that week. Sources with 5% and 10% opacity limits not required by an NSPS are subject to the following regulation §18.501 and 40 CFR Part 52, Subpart E and sources with a 20% opacity limit are subject to the following regulation §19.503 and 40 CFR Part 52, Subpart E.

8. For the sources with stack testing requirements in Specific Condition # 15, 19, and 26, testing shall be performed on an annual basis in accordance with Plantwide Condition No. 3 on each source required to be tested. Upon showing consistent compliance, stack testing shall be performed every two (2) years thereafter. Consistent compliance shall be defined as two consecutive annual stack tests, for each source, which are within the permit limits. If a source which has demonstrated consistent compliance fails a test, then that source shall return to annual testing until consistent compliance can be established. If a source is shut down or in a section of the plant which is idle when its testing is due, the source need not be restarted to be tested. The permittee shall inform the Department that the source is shut down and testing postponed at least 15 days prior to the date the test would be required. Once restarted, the idled or shut down source must be tested within sixty (60) days of achieving the maximum production rate, but no later than 180 days after start up of the source in accordance with Plantwide Condition # 5. If a source misses any testing requirement due to being shut down or idle the source shall resume annual testing until consistent compliance can be established. [§19.702 and 40 CFR Part 52 Subpart E]

SECTION VII: INSIGNIFICANT ACTIVITIES

The following sources are insignificant activities. Any activity that has a state or federal applicable requirement shall be considered a significant activity even if this activity meets the criteria of §26.304 of Regulation 26 or listed in the table below. Insignificant activity determinations rely upon the information submitted by the permittee in an application dated: January 20, 2010, March 2, 2012, and July 9, 2012.

Description	Category
Dump Chute, east side of Building 400	A-13
Dump Chute, middle tank on north side of Building 400	A-13
Clean-Out Chute, southwest corner of Building 410	A-13
Clean-Out Chute to dumpster on ground, west end of Building 55	A-13
Dump Chute, 5 from bins to ground along east side of Building 415	A-13
Dump Chute, upper floors to dumpster in dock area on south end of Building 415	A-13
Dump Chute, Building 415 railcars loading station to ground	A-13
Dump Chute from second floor to ground, north side of Building 420A	A-13
Clean-Out Chute on northeast corner of Building 425	A-13
Dump Chute to dumpster, east end of dock area on north side of Building 425	A-13
Dump Chute to contained area, west end of dock area on north side of Building 425	A-13
Dump Chute from fourth floor, north side of Building 425	A-13
Dump Chute to contained area on northeast corner of Building 426 to converter wing	A-13
Dump Chute to under bulk loading belt, south side of Building 426 in dock area	A-13

SECTION VIII: GENERAL PROVISIONS

1. Any terms or conditions included in this permit which 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 which 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. [40 CFR 70.6(b)(2)]

2. This permit shall be valid for a period of five (5) years beginning on the date this permit becomes effective and ending five (5) years later. [40 CFR 70.6(a)(2) and Regulation 26 §26.701(B)]

3. The permittee must submit a complete application for permit renewal at least six (6) months before permit expiration. Permit expiration terminates the permittee's right to operate unless the permittee submitted a complete renewal application at least six (6) months before permit expiration. If the permittee submits a complete application, the existing permit will remain in effect until the Department takes final action on the renewal application. The Department will not necessarily notify the permittee when the permit renewal application is due. [Regulation 26 §26.406]

4. Where an applicable requirement of the Clean Air Act, as amended, 42 U.S.C. 7401, et seq. (Act) is more stringent than an applicable requirement of regulations promulgated under Title IV of the Act, the permit incorporates both provisions into the permit, and the Director or the Administrator can enforce both provisions. [40 CFR 70.6(a)(1)(ii) and Regulation 26 §26.701(A)(2)]

5. The permittee must maintain the following records of monitoring information as required by this permit.

    a. The date, place as defined in this permit, and time of sampling or measurements;
    b. The date(s) analyses performed;
    c. The company or entity performing the analyses;
    d. The analytical techniques or methods used;
    e. The results of such analyses; and
    f. The operating conditions existing at the time of sampling or measurement.

    [40 CFR 70.6(a)(3)(ii)(A) and Regulation 26 §26.701(C)(2)]

6. The permittee must retain the records of all required monitoring data and support information for at least five (5) years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. [40 CFR 70.6(a)(3)(ii)(B) and Regulation 26 §26.701(C)(2)(b)]

7. The permittee must submit reports of all required monitoring every six (6) months. If the permit establishes no other reporting period, the reporting period shall end on the last day of the month six months after the issuance of the initial Title V permit and every six months thereafter. The report is due on the first day of the second month after the end of the reporting period. Although the reports are due every six months, each report shall contain a full year of data. The report must clearly identify all instances of deviations from permit requirements. A responsible official as defined in Regulation No. 26, §26.2 must certify all required reports. The permittee will send the reports to the address below:

    Arkansas Department of Environmental Quality
    Air Division
    ATTN: Compliance Inspector Supervisor
    5301 Northshore Drive
    North Little Rock, AR 72118-5317

    [40 CFR 70.6(a)(3)(iii)(A) and Regulation 26 §26.701(C)(3)(a)]

8. The permittee shall report to the Department all deviations from permit requirements, including those attributable to upset conditions as defined in the permit.

    a. For all upset conditions (as defined in Regulation19, § 19.601), the permittee will make an initial report to the Department by the next business day after the discovery of the occurrence. The initial report may be made by telephone and shall include:

        i. The facility name and location;
        ii. The process unit or emission source deviating from the permit limit;
        iii. The permit limit, including the identification of pollutants, from which deviation occurs;
        iv. The date and time the deviation started;
        v. The duration of the deviation;
        vi. The average emissions during the deviation;
        vii. The probable cause of such deviations;
        viii. Any corrective actions or preventive measures taken or being taken to prevent such deviations in the future; and
        ix. The name of the person submitting the report.

The permittee shall make a full report in writing to the Department within five (5) business days of discovery of the occurrence. The report must include, in addition to the information required by the initial report, a schedule of actions taken or planned to eliminate future occurrences and/or to minimize the amount the permit's limits were exceeded and to reduce the length of time the limits were exceeded. The permittee may submit a full report in writing (by facsimile, overnight courier, or other means) by the next business day after discovery of the occurrence, and the report will serve as both the initial report and full report.

b. For all deviations, the permittee shall report such events in semi-annual reporting and annual certifications required in this permit. This includes all upset conditions reported in 8a above. The semi-annual report must include all the information as required by the initial and full reports required in 8a.

[Regulation 19 §19.601 and §19.602, Regulation 26 §26.701(C)(3)(b), and 40 CFR 70.6(a)(3)(iii)(B)]

9. If any provision of the permit or the application thereof to any person or circumstance is held invalid, such invalidity will not affect other provisions or applications hereof which can be given effect without the invalid provision or application, and to this end, provisions of this Regulation are declared to be separable and severable. [40 CFR 70.6(a)(5), Regulation 26 §26.701(E), and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

10. The permittee must comply with all conditions of this Part 70 permit. Any permit noncompliance with applicable requirements as defined in Regulation 26 constitutes a violation of the Clean Air Act, as amended, 42 U.S.C. §7401, et seq. and is grounds for enforcement action; for permit termination, revocation and reissuance, for permit modification; or for denial of a permit renewal application. [40 CFR 70.6(a)(6)(i) and Regulation 26 §26.701(F)(1)]

11. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity to maintain compliance with the conditions of this permit. [40 CFR 70.6(a)(6)(ii) and Regulation 26 §26.701(F)(2)]

12. The Department may modify, revoke, reopen and reissue the permit or terminate the permit for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition. [40 CFR 70.6(a)(6)(iii) and Regulation 26 §26.701(F)(3)]

13. This permit does not convey any property rights of any sort, or any exclusive privilege. [40 CFR 70.6(a)(6)(iv) and Regulation 26 §26.701(F)(4)]

14. The permittee must furnish to the Director, within the time specified by the Director, any information that the Director may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee must also furnish to the Director copies of records required by the permit. For information the permittee claims confidentiality, the Department may require the permittee to furnish such records directly to the Director along with a claim of confidentiality. [40 CFR 70.6(a)(6)(v) and Regulation 26 §26.701(F)(5)]

15. The permittee must pay all permit fees in accordance with the procedures established in Regulation 9. [40 CFR 70.6(a)(7) and Regulation 26 §26.701(G)]

16. No permit revision shall be required, under any approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes provided for elsewhere in this permit. [40 CFR 70.6(a)(8) and Regulation 26 §26.701(H)]

17. If the permit allows different operating scenarios, the permittee shall, contemporaneously with making a change from one operating scenario to another, record in a log at the permitted facility a record of the operational scenario. [40 CFR 70.6(a)(9)(i) and Regulation 26 §26.701(I)(1)]

18. The Administrator and citizens may enforce under the Act all terms and conditions in this permit, including any provisions designed to limit a source's potential to emit, unless the Department specifically designates terms and conditions of the permit as being federally unenforceable under the Act or under any of its applicable requirements. [40 CFR 70.6(b) and Regulation 26 §26.702(A) and (B)]

19. Any document (including reports) required by this permit must contain a certification by a responsible official as defined in Regulation 26, §26.2. [40 CFR 70.6(c)(1) and Regulation 26 §26.703(A)]

20. The permittee must allow an authorized representative of the Department, upon presentation of credentials, to perform the following: [40 CFR 70.6(c)(2) and Regulation 26 §26.703(B)]

    a. Enter upon the permittee's premises where the permitted source is located or emissions related activity is conducted, or where records must be kept under the conditions of this permit;
    b. Have access to and copy, at reasonable times, any records required under the conditions of this permit;
    c. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit; and

d. As authorized by the Act, sample or monitor at reasonable times substances or parameters for assuring compliance with this permit or applicable requirements.

21. The permittee shall submit a compliance certification with the terms and conditions contained in the permit, including emission limitations, standards, or work practices. The permittee must submit the compliance certification annually. If the permit establishes no other reporting period, the reporting period shall end on the last day of the anniversary month of the initial Title V permit. The report is due on the first day of the second month after the end of the reporting period. The permittee must also submit the compliance certification to the Administrator as well as to the Department. All compliance certifications required by this permit must include the following: [40 CFR 70.6(c)(5) and Regulation 26 §26.703(E)(3)]

a. The identification of each term or condition of the permit that is the basis of the certification;
b. The compliance status;
c. Whether compliance was continuous or intermittent;
d. The method(s) used for determining the compliance status of the source, currently and over the reporting period established by the monitoring requirements of this permit; and
e. Such other facts as the Department may require elsewhere in this permit or by §114(a)(3) and §504(b) of the Act.

22. Nothing in this permit will alter or affect the following: [Regulation 26 §26.704(C)]

a. The provisions of Section 303 of the Act (emergency orders), including the authority of the Administrator under that section;
b. The liability of the permittee for any violation of applicable requirements prior to or at the time of permit issuance;
c. The applicable requirements of the acid rain program, consistent with §408(a) of the Act; or
d. The ability of EPA to obtain information from a source pursuant to §114 of the Act.

23. This permit authorizes only those pollutant emitting activities addressed in this permit. [A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

24. 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 §18.314(A), Regulation 19 §19.416(A), Regulation 26 §26.1013(A), A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, and 40 CFR Part 52, Subpart E]

25. 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 facility's 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 §18.314(B), Regulation 19 §19.416(B), Regulation 26 §26.1013(B), A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, and 40 CFR Part 52, Subpart E]

26. 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 §18.314(C), Regulation 19 §19.416(C), Regulation 26 §26.1013(C), A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, and 40 CFR Part 52, Subpart E]

APPENDIX A:
Opacity Survey

OPACITY SURVEY

WEEK OF:											SECTION TO BE READ:			
SN	Process Unit	Permit Opacity	Opacity	SN	Process Unit	Permit Opacity	Opacity	SN	Process Unit	Permit Opacity	Opacity	SN	Process Unit	Permit Opacity	Opacity
MAIN SOURCES				**SECTION 2 Continued**				**SECTION 3 Continued**							
400SB01	#1 Scrubber	20[a]		141BH06	#2 Classifier D/C	5[a]		415BH6451	415-6 D/C	5[a]					
400SB02	#2 Scrubber	20[a]		400BH02	Bulk Loading D/C	5[a]		415BH0401	415-7 D/C	5[a]					
400SB03	#3 Scrubber	20[a]		400BH03	#2 Storage Tank D/C	5[a]		415BH0402	415-8 D/C	5[a]					
405BH0133	#1 Baghouse	20[a]		400BH04	#1 Storage Tank D/C	5[a]		415BH6225	415-9 D/C	5[a]					
405BH0134	Special Cycle BH	10[c]		400BH05	#3A Storage Tank D/C	5[a]		415BH6227	415-20 D/C	5[a]					
405BH0136	Baghouse	10c		400BH06	#3B Storage Tank D/C	5[a]		415BH6192	415-11 D/C	5[a]					
405BH0233	#2 Baghouse	20a		400BH07	#4 Storage Tank D/C	5[a]		415BH6401	415-12 D/C	5[a]					
425EP04	#4 ESP	20[a]		400BH08	#1 Rework Tank D/C	5a		415BH6202	#2 3W1 D/C	5[a]					
426EP06	#6 ESP	20[a]		400BH09	#5 Storage Bin D/C	10c		415BH6204	#2 3W2 D/C	5[a]					
426EP07	#7 ESP	20[a]		**SECTION 3**				415BH6201	#1 3W1 D/C	5[a]					
SECTION 1				405BH312	#1 Lift System d/c	5[a]		415BH6203	#1 3W2 D/C	5[a]					
050BH07	#1 Dust Collector	5[a]		405BH308	#1 Blender D/C	5[a]		420BH6260	420-4 Flex-Kleen	5[a]					
051BH03	#3 Bin Vent D/C	5[a]		405BH309	#2 Blender D/C	5[a]		420BH05	#1 Bagging D/C	5[a]					
051BH04	#4 Bin Vent D/C	5[a]		405BH310	#1 High Tank D/C	5[a]		420BH06	#2 Bagging D/C	5[a]					
051BH06	#1 Air Slide D/C	5[a]		405BH03	Bldg 405b nuisance			420BH6193	#1 AirSlide Vent	5[a]					
051BH07	#3 Air Slide D/C	5[a]		405BH04	#4 Alumina D/C	5[a]		420BH6194	#2 AirSlide Vent	5[a]					
051BH08	#2 Air Slide D/C	5[a]		405BH05	#5 Alumina D/C	5[a]		420BH7614	420-3 DC	5[a]					
051BH11	Unload Hopper D/C	5[a]		405BH06	#6 Alumina D/C	5[a]		420BH7801	420-5 Bulk Loading DC	5[a]					
055BH01	#1 Blender D/C	5[a]		410BH01	#1 D/C	5[a]		420ABH7851	Majac D/C	5[a]					
055BH02	#2 Blender D/C	5a		410BH02	#2 mic-pulsair D/C	5[a]		420ABH7714	420A-2 Course D/C	5[a]					
055BH03	Nuisance D/C	5a		410BH03	Nuisance, #3 Grind	5[a]		420ABH7716	420A-3 Fines D/C	5[a]					
SECTION 2				410BH04	Bin Vent #1 Feed	5[a]		420ABH7810	Norblo XFER D/C	5[a]					
141BH01	Milled Product D/C	5[a]		410BH05	Bin Vent #2 Feed	5[a]		420ABH7811	#7 Product Tank	5[a]					
141BH04	Mill Feed Tank D/C	5[a]		410BH06	#2 Product Tank D/C	5[a]		420BH07	Dust Collector	10[c]					
141BH05	#1 Classifier D/C	5[a]		415BH6191	415 Air Slides	5[a]									

[a]This opacity limit assigned pursuant to §18.501 of Regulation 18, §19.503 of Regulation 19, and 40 CFR Part 52, Subpart E. (Plantwide Condition # 7)
[b]This opacity limit assigned pursuant to §19.304 of Regulation 19 and 40 CFR Part 60, Subpart UUU. (Specific Condition # 6 & 8)
[c]This opacity limit assigned pursuant to §19.304 of Regulation 19 and 40 CFR Part 60, Subpart LL. (Specific Conditions # 6, 21.b, & 31.b)

removed from service

SN	Process Unit	Permit Opacity	Weekly Opacity
SECTION 4			
425AUC01	BLS Truck	5[a]	
425BH01	Low Iron Tabular	5[a]	
425BH02	High Iron Tabular	5[a]	
425BH1003	325 Ceramic Mill	5[a]	
425BH03	Ground Ore D/C	5[a]	
425BH3343	8th Floor D/C	5[a]	
425BH04	4th Floor D/C	5[a]	
425BH05	#2 Flex-Kleen D/C	5[a]	
425BH06	#3 Flex-Kleen D/C	5[a]	
425BH07	425A DPP D/C	5[a]	
425BH08	T-1 Mill D/C	5[a]	
425BH09	#2, 3, 4 Ground Ore D/C	5[a]	
425BH1035	#8 Ball Former DC	5[a]	
425BH1037	Product D/C	5[a]	
426BH3320	#4 Tabular D/C	5[a]	
426BH3317	#3 Tabular D/C	5[a]	
426BH5041	Unground Ore D/C	5[a]	
426BH5015	Ground Ore D/C	5[a]	
426BH3311	#1 Tabular D/C	5[a]	
426BH3314	#2 Tabular D/C	10[c]	
426BH1045	#3 Ceramic Mill D/C	5[a]	
426BH7086	Boric Acid D/C	5[a]	

SN	Process Unit	Permit Opacity	Weekly Opacity
SECTION 3 Continued			
426BH1032	#2 Ceramic Mill D/C	5[a]	
426BH5044	12-1 Bin D/C	5[a]	
426BH5045	Bulk Load D/C	5[a]	
SECTION 4 Continued			
415BH0001	# 2 Bin Disch. Air Slide DC (	10[c]	
415BH0002	# 4 Bin Discharge Air Slide DC	10[c]	
415BH0003	# 5 Bin Discharge Air Slide DC	10[c]	
415BH0004	# 7 BIN Discharge Air Slide DC	10[c]	
415BH0005	# 8 Bin Discharge Air Slide DC	10[c]	
415BH0006	# 10 Bin Discharge Air Slide DC	10[c]	
415BH0007	# 11 Bin Discharge Air Slide DC	10[c]	
415BH0008	# 13 Bin Discharge Air Slide DC	10[c]	
415BH0009	# 15ABin Discharge Air Slide DC	10[c]	
415BH0010	# 16 Bin Discharge Air Slide DC	10[c]	
415BH0011	# 16A Bin Discharge Air Slide DC	10[c]	
415BH0012	# 17 Bin Discharge Air Slide DC	10[c]	
415BH0013	# 18A Bin Discharge Air Slide DC	10[c]	
415BH0014	Air Merge Blender Discharge Air Slide DC	10[c]	
415BH0015	# 220 Discharge Air Slide DC	10[c]	
415BH0016	# 223 Discharge Air Slide DC	10[c]	
415BH0017	Air Merge Blender Feed Air Slide DC	10[c]	
415BH0018	No. 9 Bucket Elevator DC	10[c]	

COMMENTS:

FUGITIVE EMISSIONS:

[a]This opacity limit assigned pursuant to §18.501 of Regulation 18, §19.503 of Regulation 19, and 40 CFR Part 52, Subpart E. (Plantwide Condition # 7)
[b]This opacity limit assigned pursuant to §19.304 of Regulation 19 and 40 CFR Part 60, Subpart UUU. (Specific Condition # 6 & 8)
[c]This opacity limit assigned pursuant to §19.304 of Regulation 19 and 40 CFR Part 60, Subpart LL. (Specific Conditions # 6, 21.b, & 31.b)

Observed By: _____ **Date:** _____ **Checked By:** _____ **Date:**

_____ **Excursion Reports Initiated** **Approved By:** _____ **Date:**

APPENDIX B:
NSPS 40 CFR Part 60 Subpart UUU
-
Standards of Performance for Calciners and Driers in the Mineral Industry

e-CFR Data is current as of July 13, 2012

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.

APPENDIX C:
NSPS 40 CFR Part 60 Subpart LL

-

Standards of Performance for Metallic Mineral Processing Plants

e-CFR Data is current as of July 13, 2012

Title 40: Protection of Environment

PART 60—STANDARDS OF PERFORMANCE FOR NEW STATIONARY SOURCES

Browse Previous | Browse Next

Subpart LL—Standards of Performance for Metallic Mineral Processing Plants

Source: 49 FR 6464, Feb. 21, 1984, unless otherwise noted.

§ 60.380 Applicability and designation of affected facility.

(a) The provisions of this subpart are applicable to the following affected facilities in metallic mineral processing plants: Each crusher and screen in open-pit mines; each crusher, screen, bucket elevator, conveyor belt transfer point, thermal dryer, product packaging station, storage bin, enclosed storage area, truck loading station, truck unloading station, railcar loading station, and railcar unloading station at the mill or concentrator with the following exceptions. All facilities located in underground mines are exempted from the provisions of this subpart. At uranium ore processing plants, all facilities subsequent to and including the beneficiation of uranium ore are exempted from the provisions of this subpart.

(b) An affected facility under paragraph (a) of this section that commences construction or modification after August 24, 1982, is subject to the requirements of this part.

§ 60.381 Definitions.

All terms used in this subpart, but not specifically defined in this section, shall have the meaning given them in the Act and in subpart A of this part.

Bucket elevator means a conveying device for metallic minerals consisting of a head and foot assembly that supports and drives an endless single or double strand chain or belt to which buckets are attached.

Capture system means the equipment used to capture and transport particulate matter generated by one or more affected facilities to a control device.

Control device means the air pollution control equipment used to reduce particulate matter emissions released to the atmosphere from one or more affected facilities at a metallic mineral processing plant.

Conveyor belt transfer point means a point in the conveying operation where the metallic mineral or metallic mineral concentrate is transferred to or from a conveyor belt except where the metallic mineral is being transferred to a stockpile.

Crusher means a machine used to crush any metallic mineral and includes feeders or conveyors located immediately below the crushing surfaces. Crushers include, but are not limited to, the following types: jaw, gyratory, cone, and hammermill.

Enclosed storage area means any area covered by a roof under which metallic minerals are stored prior to further processing or loading.

Metallic mineral concentrate means a material containing metallic compounds in concentrations higher than naturally occurring in ore but requiring additional processing if pure metal is to be isolated. A metallic mineral concentrate contains at least one of the following metals in any of its oxidation states and at a concentration that contributes to the concentrate's commercial value: Aluminum, copper, gold, iron, lead, molybdenum, silver, titanium, tungsten, uranium, zinc, and zirconium. This definition shall not be construed as requiring that material containing metallic compounds be refined to a pure metal in order for the material to be considered a metallic mineral concentrate to be covered by the standards.

Metallic mineral processing plant means any combination of equipment that produces metallic mineral concentrates from ore. Metallic mineral processing commences with the mining of ore and includes all operations either up to and including the loading of wet or dry concentrates or solutions of metallic minerals for transfer to facilities at non-adjacent locations that will subsequently process metallic concentrates into purified metals (or other products), or up to and including all material transfer and storage operations that precede the operations that produce refined metals (or other products) from metallic mineral concentrates at facilities adjacent to the metallic mineral processing plant. This definition shall not be construed as requiring that mining of ore be conducted in order for the combination of equipment to be considered a metallic mineral processing plant. (See also the definition of *metallic mineral concentrate.*)

Process fugitive emissions means particulate matter emissions from an affected facility that are not collected by a capture system.

Product packaging station means the equipment used to fill containers with metallic compounds or metallic mineral concentrates.

Railcar loading station means that portion of a metallic mineral processing plant where metallic minerals or metallic mineral concentrates are loaded by a conveying system into railcars.

Railcar unloading station means that portion of a metallic mineral processing plant where metallic ore is unloaded from a railcar into a hopper, screen, or crusher.

Screen means a device for separating material according to size by passing undersize material through one or more mesh surfaces (screens) in series and retaining oversize material on the mesh surfaces (screens).

Stack emissions means the particulate matter captured and released to the atmosphere through a stack, chimney, or flue.

Storage bin means a facility for storage (including surge bins and hoppers) of metallic minerals prior to further processing or loading.

Surface moisture means water that is not chemically bound to a metallic mineral or metallic mineral concentrate.

Thermal dryer means a unit in which the surface moisture content of a metallic mineral or a metallic mineral concentrate is reduced by direct or indirect contact with a heated gas stream.

Truck loading station means that portion of a metallic mineral processing plant where metallic minerals or metallic mineral concentrates are loaded by a conveying system into trucks.

Truck unloading station means that portion of a metallic mineral processing plant where metallic ore is unloaded from a truck into a hopper, screen, or crusher.

[49 FR 6464, Feb. 21, 1984, as amended at 65 FR 61760, Oct. 17, 2000]

§ 60.382 Standard for particulate matter.

(a) On and after the date on which the performance test required to be conducted by §60.8 is completed, no owner or operator subject to the provisions of this subpart shall cause to be discharged into the atmosphere from an affected facility any stack emissions that:

(1) Contain particulate matter in excess of 0.05 grams per dry standard cubic meter (0.02 g/dscm).

(2) Exhibit greater than 7 percent opacity, unless the stack emissions are discharged from an affected facility using a wet scrubbing emission control device.

(b) On and after the sixtieth day after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial startup, no owner or operator subject to

the provisions of this subpart shall cause to be discharged into the atmosphere from an affected facility any process fugitive emissions that exhibit greater than 10 percent opacity.

[49 FR 6464, Feb. 21, 1984, as amended at 65 FR 61760, Oct. 17, 2000]

§ 60.383 Reconstruction.

(a) The cost of replacement of ore-contact surfaces 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. Ore-contact surfaces are: Crushing surfaces; screen meshes, bars, and plates; conveyor belts; elevator buckets; and pan feeders.

(b) Under §60.15, the "fixed capital cost of the new components" includes the fixed capital cost of all depreciable components (except components specified in paragraph (a) of this section) that are or will be replaced pursuant to all continuous programs of component replacement commenced within any 2-year period following August 24, 1982.

§ 60.384 Monitoring of operations.

(a) The owner or operator subject to the provisions of this subpart shall install, calibrate, maintain, and operate a monitoring device for the continuous measurement of the change in pressure of the gas stream through the scrubber for any affected facility using a wet scrubbing emission control device. The monitoring device must be certified by the manufacturer to be accurate within ±250 pascals (±1 inch water) gauge pressure and must be calibrated on an annual basis in accordance with manufacturer's instructions.

(b) The owner or operator subject to the provisions of this subpart shall install, calibrate, maintain, and operate a monitoring device for the continuous measurement of the scrubbing liquid flow rate to a wet scrubber for any affected facility using any type of wet scrubbing emission control device. The monitoring device must be certified by the manufacturer to be accurate within ±5 percent of design scrubbing liquid flow rate and must be calibrated on at least an annual basis in accordance with manufacturer's instructions.

§ 60.385 Recordkeeping and reporting requirements.

(a) The owner or operator subject to the provisions of this subpart shall conduct a performance test and submit to the Administrator a written report of the results of the test as specified in §60.8(a).

(b) During the initial performance test of a wet scrubber, and at least weekly thereafter, the owner or operator shall record the measurements of both the change in pressure of the gas stream across the scrubber and the scrubbing liquid flow rate.

(c) After the initial performance test of a wet scrubber, the owner or operator shall submit semiannual reports to the Administrator of occurrences when the measurements of the scrubber pressure loss (or gain) or liquid flow rate differ by more than ±30 percent from the average obtained during the most recent performance test.

(d) The reports required under paragraph (c) shall be postmarked within 30 days following the end of the second and fourth calendar quarters.

(e) The requirements of this subsection remain in force until and unless the Agency, in delegating enforcement authority to a State under section 111(c) of the Act, approves reporting requirements or an alternative means of compliance surveillance adopted by such States. In that event, affected sources within the State will be relieved of the obligation to comply with this subsection, provided that they comply with requirements established by the State.

[49 FR 6464, Feb. 21, 1984, as amended at 54 FR 6676, Feb. 14, 1989; 65 FR 61760, Oct. 17, 2000]

§ 60.386 Test methods and procedures.

(a) In conducting the performance tests required in §60.8, the owner or operator shall use as reference methods and procedures 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 complance with the particulate matter standards §60.382 as follows:

(1) Method 5 or 17 shall be used to determine the particulate matter concentration. The sample volume for each run shall be at least 1.70 dscm (60 dscf). The sampling probe and filter holder of Method 5 may be operated without heaters if the gas stream being sampled is at ambient temperature. For gas streams above ambient temperature, the Method 5 sampling train shall be operated with a probe and filter temperature slightly above the effluent temperature (up to a maximum filter temperature of 121 °C (250 ° F)) in order to prevent water condensation on the filter.

(2) Method 9 and the procedures in §60.11 shall be used to determine opacity from stack emissions and process fugitive emissions. The observer shall read opacity only when emissions are clearly identified as emanating solely from the affected facility being observed.

(c) To comply with §60.385(c), the owner or operator shall use the monitoring devices in §60.384(a) and (b) to determine the pressure loss of the gas stream through the scrubber and scrubbing liquid flow rate at any time during each particulate matter run, and the average of the three determinations shall be computed.

[54 FR 6676, Feb. 14, 1989, as amended at 65 FR 61760, Oct. 17, 2000]