

ADEQ OPERATING AIR PERMIT

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

Permit #: 1527-AOP-R4

IS ISSUED TO:

Alcoa Industrial Chemicals
4701 Alcoa Road
Bauxite, AR 72011
Saline County
CSN: 63-0010

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:

April 21, 1999

and

April 20, 2004

AND IS SUBJECT TO ALL LIMITS AND CONDITIONS CONTAINED HEREIN.

Signed:

Keith A. Michaels

Date Modified

SECTION I: FACILITY INFORMATION

PERMITTEE:	Alcoa Industrial Chemicals
CSN:	63-0010
PERMIT NUMBER:	1527-AOP-R4
FACILITY ADDRESS:	4701 Alcoa Road Bauxite, AR 72011
COUNTY:	Saline
CONTACT POSITION:	Mike Glagola
TELEPHONE NUMBER:	(501) 776-4931
REVIEWING ENGINEER:	Shawn Hutchings
UTM North-South (Y):	3825.7
UTM East-West (X):	543.3
	Zone 15

Alcoa Industrial Chemicals
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CSN #: 63-0010

SECTION II: INTRODUCTION

Alcoa Industrial Chemicals (Alcoa) is a manufacturer of various forms of alumina. This permit modification is allowing Alcoa to return to its original feed rate of aluminum fluoride in sources 405EP0133 and 405EP0233. This will increase hourly emissions of hydrogen fluoride. Alcoa requested the same annual limits for these sources. A plantwide 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 is four small baghouses which will exhaust sources from Building 426.

Total emissions from these baghouses are estimated at 2.25 tons per year.

This facility is subject to all applicable requirements in Regulation 18, Regulation 19, and Regulation 26. Various operations at the facility are also subject to New Source Performance Standards, Subparts Dc and UUU, which are identified in the appropriate process sections in this permit. These Subparts can be found in Appendices C and D.

Each section in this permit is arranged by process area, 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.

A summary of testing requirements can be found in Appendix A. The opacity survey form can be found in Appendix B.

Regulations

This facility is subject to regulation under the *Arkansas Air Pollution Control Code (Regulation 18)*; the *Regulations of the Arkansas Plan of Implementation for Air Pollution Control (Regulation 19)*; the *Regulations of the Arkansas Operating Air Permit Program (Regulation #26)*; 40 CFR 52.21, *Prevention of Significant Deterioration*; NSPS Subpart UUU, *Standards of Performance for Calciners and Driers in the Mineral Industry*; and NSPS Subpart Dc, *Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units*.

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The following table is a summary of emissions from the facility. Specific conditions and emissions for each source can be found starting on the page cross referenced in the table.

EMISSION SUMMARY					
Source No.	Description	Pollutant	Emission Rates		Cross Reference Page
			lb/hr	tpy	
Total Allowable Emissions		PM	310.1	1115.4	
		PM ₁₀	309.4	1112.0	
		SO ₂	13.2	56.0	
		VOC	55.8	52.0	
		CO	64.6	154.6	
		NO _x	170.8	647.4	
		HF	58.1	109.5	
		HCl	57.8	199.8	
045BH69	BV-69 Alumina Storage Dust Collector	PM	0.1	0.4	23
		PM ₁₀	0.1	0.4	
045BH70	BV-70 Alumina Storage Dust Collector	PM	0.1	0.4	23
		PM ₁₀	0.1	0.4	
045BH87	Magnesium Oxide Storage Dust Collector	PM	0.3	1.1	23
		PM ₁₀	0.3	1.1	
045BH88	Quick Lime Storage Dust Collector	PM	0.3	1.1	23
		PM ₁₀	0.3	1.1	
046BL01	#1 Package Boiler	PM	0.6	2.3	23
		PM ₁₀	0.6	2.3	
		SO ₂	0.1	0.1	
		VOC	0.3	1.0	
		CO	1.4	6.0	
		NO _x	5.5	23.9	
046BL02	#2 Package Boiler	PM	0.6	2.3	23
		PM ₁₀	0.6	2.3	
		SO ₂	0.1	0.1	
		VOC	0.3	1.0	
		CO	1.4	6.0	
		NO _x	5.5	23.9	

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Source No.	Description	Pollutant	Emission Rates		Cross Reference Page
			lb/hr	tpy	
046BL03	#3 Package Boiler	PM	0.6	2.3	23
		PM ₁₀	0.6	2.3	
		SO ₂	0.1	0.1	
		VOC	0.3	1.0	
		CO	1.4	6.0	
		NO _x	5.5	23.9	
046BL04	#4 Package Boiler	PM	0.6	2.3	23
		PM ₁₀	0.6	2.3	
		SO ₂	0.1	0.1	
		VOC	0.3	1.0	
		CO	1.4	6.0	
		NO _x	5.5	23.9	
046BL05	#5 Package Boiler	PM	0.6	2.3	23
		PM ₁₀	0.6	2.3	
		SO ₂	0.1	0.1	
		VOC	0.3	1.0	
		CO	1.4	6.0	
		NO _x	5.5	23.9	
400BH01	#5 Storage Bin Dust Collector	PM	1.0	4.4	23
		PM ₁₀	1.0	4.4	
400BH02	Bulk Loading Dust Collector	PM	1.3	5.5	23
		PM ₁₀	1.3	5.5	
400BH03	#2 Storage Tank Dust Collector	PM	1.5	6.6	23
		PM ₁₀	1.5	6.6	
400BH04	#1 Storage Tank Dust Collector	PM	0.5	2.2	23
		PM ₁₀	0.5	2.2	
400BH05	#3A Storage Tank Dust Collector	PM	0.5	2.2	23
		PM ₁₀	0.5	2.2	
400BH06	#3B Storage Tank Dust Collector	PM	0.5	2.2	23
		PM ₁₀	0.5	2.2	
400BH07	#4 Storage Tank Dust Collector	PM	0.5	2.2	23
		PM ₁₀	0.5	2.2	

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Source No.	Description	Pollutant	Emission Rates		Cross Reference Page
			lb/hr	tpy	
400BH08	#1 Rework Tank Dust Collector	PM PM ₁₀	0.3 0.3	1.1 1.1	23
400SB01	#1 Dryer	PM PM ₁₀	1.0 1.0	4.4 4.4	23
400SB02	#2 Dryer	PM PM ₁₀	1.0 1.0	4.4 4.4	23
400SB03	#3 Dryer	PM PM ₁₀	1.0 1.0	4.4 4.4	23
410BH01	#1 Dust Collector	PM PM ₁₀	0.8 0.8	3.3 3.3	23
410BH02	#2 Mikro Pulsaire Dust Collector	PM PM ₁₀	0.8 0.8	3.3 3.3	23
410BH03	Nuisance Dust, #3 Grinding	PM PM ₁₀	0.5 0.5	2.2 2.2	23
410BH04	Bin Vent #1 Feed Tank	PM PM ₁₀	0.1 0.1	0.4 0.4	23
410BH05	Bin Vent #2 Feed Tank	PM PM ₁₀	0.1 0.1	0.4 0.4	23
410BH06	#2 Product Tank Dust Collector	PM PM ₁₀	0.5 0.5	2.2 2.2	23
451BH01	Lubral Mixer Dust Collector	PM PM ₁₀	0.3 0.3	1.1 1.1	23
451BH02	H-700 West Tank (Twin Units, one stack)	PM PM ₁₀	1.5 1.5	6.6 6.6	23
451BH03	H-700 Dust Collector	PM PM ₁₀	0.5 0.5	2.2 2.2	23
451BH04	Ground Gel Collector	PM PM ₁₀	0.5 0.5	2.2 2.2	23

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Source No.	Description	Pollutant	Emission Rates		Cross Reference Page
			lb/hr	tpy	
451BH05	Spray Dryer Nuisance Dust Collector	PM PM ₁₀	0.8 0.8	3.3 3.3	23
451BH06	Hydral Bulk Loading Nuisance Dust Collector	PM PM ₁₀	0.3 0.3	1.1 1.1	23
451BH07	PD Nuisance Dust Collector	PM PM ₁₀ SO ₂ VOC CO NO _x	0.5 0.5 1.0 0.1 0.1 0.3	1.9 1.9 4.4 0.1 0.4 1.1	23
451BH08	Spacerite Feed Tank Dust Collector	PM PM ₁₀	0.5 0.5	2.2 2.2	23
451BH09	Spacerite Product Tank Collector	PM PM ₁₀	0.3 0.3	1.1 1.1	23
451BH010	CX200S Nuisance Dust Collector	PM PM ₁₀	1.0 1.0	4.4 4.4	23
451BH011	Auxiliary Spray Dryer D/C	PM PM ₁₀ SO ₂ CO NO _x	1.3 1.3 1.0 0.1 0.3	5.6 5.6 4.4 0.3 1.3	23
451BH014	H-700 Spray Dryer Dust Collector	PM PM ₁₀ SO ₂ CO NO _x	5.1 5.1 1.0 0.2 0.9	21.9 21.9 4.4 0.8 3.9	23
451BH011	Auxiliary Spray Dryer D/C	VOC	52.1	40.0	23
451BH014	H-700 Spray Dryer Dust Collector				
451BH012	#4 Bin Vent Dust Collector	PM PM ₁₀	0.8 0.8	3.3 3.3	23

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Source No.	Description	Pollutant	Emission Rates		Cross Reference Page
			lb/hr	tpy	
451BH013	Auxiliary Spray Dryer Nuisance Dust Collector	PM PM ₁₀	0.3 0.3	1.1 1.1	23
451BH015	Flash Dryer	PM PM ₁₀ SO ₂ VOC CO NO _x	2.0 1.3 0.1 0.1 1.4 1.6	8.8 5.4 0.1 0.4 5.9 7.1	23
451TD01	#1 Tunnel Dryer Exhaust	PM PM ₁₀ SO ₂ VOC CO NO _x	0.3 0.3 1.0 0.2 0.7 2.8	1.2 1.2 4.4 0.5 3.1 12.3	23
451TD02	#2 Tunnel Dryer Exhaust	PM PM ₁₀ SO ₂ VOC CO NO _x	0.3 0.3 1.0 0.2 0.7 2.8	1.2 1.2 4.4 0.5 3.1 12.3	23
451TD03	Pre-Dyer Exhaust	PM PM ₁₀ SO ₂ VOC CO NO _x	0.2 0.2 1.0 0.1 0.5 1.7	0.7 0.7 4.4 0.3 1.8 7.4	23
451TD04	Final Dryer Exhaust #1	PM PM ₁₀ SO ₂ VOC CO NO _x	0.1 0.1 1.0 0.1 0.2 0.6	0.1 0.1 4.4 0.2 0.6 2.6	23
050BH07	#1 Dust Collector	PM PM ₁₀	1.0 1.0	4.4 4.4	34

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Source No.	Description	Pollutant	Emission Rates		Cross Reference Page
			lb/hr	tpy	
051BH03	#3 Bin Vent Dust Collector	PM PM ₁₀	0.1 0.1	0.4 0.4	34
051BH04	#4 Bin Vent Dust Collector	PM PM ₁₀	0.1 0.1	0.4 0.4	34
051BH06	#1 Air Slide Dust Collector	PM PM ₁₀	0.8 0.8	3.3 3.3	34
051BH07	#3 Air Slide Dust Collector	PM PM ₁₀	0.8 0.8	3.3 3.3	34
051BH08	#2 Air Slide Dust Collector	PM PM ₁₀	0.6 0.6	2.3 2.3	34
051BH11	Unloading Hopper Airslide Dust Collector	PM PM ₁₀	0.3 0.3	1.1 1.1	34
055BH01	#1 Blender Dust Collector	PM PM ₁₀	1.8 1.8	7.7 7.7	34
055BH02	#2 Blender Discharge Dust Collector	PM PM ₁₀	1.0 1.0	4.4 4.4	34
055BH03	Nuisance Dust Collector	PM PM ₁₀	1.1 1.1	4.7 4.7	34
405BH03	Building 405B Nuisance Dust Collector	PM PM ₁₀	0.3 0.3	1.1 1.1	34
405BH04	#4 Alumina Transport Dust Collector	PM PM ₁₀	1.0 1.0	4.4 4.4	34
405BH05	#5 Alumina Transport Dust Collector	PM PM ₁₀	1.0 1.0	4.4 4.4	34
405BH06	#6 Alumina Transport Dust Collector	PM PM ₁₀	1.0 1.0	4.4 4.4	34
405BH0308	#1 Blender Collector	PM PM ₁₀	0.3 0.3	1.1 1.1	34

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Source No.	Description	Pollutant	Emission Rates		Cross Reference Page
			lb/hr	tpy	
405BH0309	#2 Blender Collector	PM PM ₁₀	0.3 0.3	1.1 1.1	34
405BH0310	#1 High Tank Dust Collector	PM PM ₁₀	0.3 0.3	1.1 1.1	34
405BH0312	#1 Lift System Dust Collector	PM PM ₁₀	0.8 0.8	3.3 3.3	34
405EP0133	#1 ESP	PM PM ₁₀ SO ₂ VOC CO NO _x HF HCl	25.0 25.0 1.0 0.2 1.6 19.6 58.1 28.9	109.5 109.5 4.4 0.9 6.7 85.8 109.5 99.9	34
405EP0233	#2 ESP	PM PM ₁₀ SO ₂ VOC CO NO _x HF HCl	25.0 25.0 1.0 0.2 1.6 19.6 58.1 28.9	109.5 109.5 4.4 0.9 6.7 85.8 109.5 99.9	34
415BH0401	415-7 Dust Collector	PM PM ₁₀	0.5 0.5	2.2 2.2	34
415BH0402	415-8 Dust Collector	PM PM ₁₀	0.5 0.5	2.2 2.2	34
415BH6191	415-4 Dust Collector	PM PM ₁₀	1.3 1.3	5.5 5.5	34
415BH6192	415-11 Dust Collector	PM PM ₁₀	1.5 1.5	6.6 6.6	34
415BH6201	#1 3W1 Mini-Collector	PM PM ₁₀	0.3 0.3	1.1 1.1	34

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Source No.	Description	Pollutant	Emission Rates		Cross Reference Page
			lb/hr	tpy	
415BH6202	#2 3W1 Mini Collector	PM PM ₁₀	0.3 0.3	1.1 1.1	34
415BH6203	#1 3W2 Mini Collector	PM PM ₁₀	0.3 0.3	1.1 1.1	34
415BH6204	#2 3W2 Mini Collector	PM PM ₁₀	0.3 0.3	1.1 1.1	34
415BH6225	415-9 Dust Collector	PM PM ₁₀	0.8 0.8	3.3 3.3	34
415BH6227	415-10 Dust Collector	PM PM ₁₀	0.5 0.5	2.2 2.2	34
415BH6401	415-12 Dust Collector	PM PM ₁₀	0.8 0.8	3.3 3.3	34
415BH6451	415-6 Dust Collector	PM PM ₁₀	0.3 0.3	1.1 1.1	34
420BH05	#1 Bagging Dust Collector	PM PM ₁₀	0.5 0.5	2.2 2.2	34
420BH06	#2 Bagging Dust Collector	PM PM ₁₀	0.5 0.5	2.2 2.2	34
420BH6193	#1 Air Slide Vent Dust Collector	PM PM ₁₀	0.3 0.3	1.1 1.1	34
420BH6194	#2 Air Slide Vent Dust Collector	PM PM ₁₀	0.3 0.3	1.1 1.1	34
420BH6260	420-4 Flex Kleen Dust Collector	PM PM ₁₀	2.5 2.5	11.0 11.0	34
420BH7614	420-3 Dust Collector	PM PM ₁₀	0.5 0.5	2.2 2.2	34
420BH7801	420-5 Bulk Loading Dust Collector	PM PM ₁₀	0.8 0.8	3.3 3.3	34

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Source No.	Description	Pollutant	Emission Rates		Cross Reference Page
			lb/hr	tpy	
420ABH7714	420A-2 Coarse Dust Collector	PM PM ₁₀	0.5 0.5	2.2 2.2	34
420ABH7716	420A-3 Fines Dust Collector	PM PM ₁₀	0.8 0.8	3.3 3.3	34
420ABH7810	Norblo XFER Dust Collector	PM PM ₁₀	0.5 0.5	2.2 2.2	34
420ABH7811	#7 Product Tank Dust Collector	PM PM ₁₀	0.5 0.5	2.2 2.2	34
420ABH7851	Majac Dust Collector	PM PM ₁₀	1.3 1.3	5.5 5.5	34
060BH0285	Raw Mix Dust Collector	PM PM ₁₀	1.0 1.0	4.4 4.4	42
060BH0402	#3 A3 Tank Dust Collector	PM PM ₁₀	1.0 1.0	4.4 4.4	42
060BH0406	#4 Dust Collector	PM PM ₁₀	0.5 0.5	2.2 2.2	42
060BH0510	#3A Surge Tank Dust Collector	PM PM ₁₀	0.5 0.5	2.2 2.2	42
060BH0528	#3B Surge Tank Dust Collector	PM PM ₁₀	0.5 0.5	2.2 2.2	42
060BH0573	Clinker Dust Collector	PM PM ₁₀	1.5 1.5	6.6 6.6	42
060BH0602	#2 Surge Tank Dust Collector	PM PM ₁₀	0.8 0.8	3.3 3.3	42
060EP0241	#2 Kiln ESP	PM PM ₁₀ SO ₂ VOC CO NO _x	20.0 20.0 1.0 0.4 6.0 22.5	87.6 87.6 4.4 1.6 26.1 98.5	42

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Source No.	Description	Pollutant	Emission Rates		Cross Reference Page
			lb/hr	tpy	
435BH0712	Packaging Tank #3 & #4 Dust Collector	PM PM ₁₀	1.5 1.5	6.6 6.6	42
435BH0754	#4 Blender Dust Collector	PM PM ₁₀	1.0 1.0	4.4 4.4	42
435BH0760	#5 Blender Dust Collector	PM PM ₁₀	1.0 1.0	4.4 4.4	42
435BH0770	Rework System Dust Collector	PM PM ₁₀	0.5 0.5	2.2 2.2	42
425AUC01	Bulk Loading Station (trucks) beneath 425A Dense Phase Pump feed tank	PM PM ₁₀	55.0 55.0	11.0 11.0	38
425BH01	Low Iron Tabular	PM PM ₁₀	0.8 0.8	3.3 3.3	45
425BH02	High Iron Tabular	PM PM ₁₀	1.5 1.5	6.6 6.6	45
425BH03	Ground Ore Collection	PM PM ₁₀	1.3 1.3	5.5 5.5	45
425BH04	Dust Collector 4th Floor	PM PM ₁₀	0.8 0.8	3.3 3.3	45
425BH05	#2 Flex-Kleen Dust Collector	PM PM ₁₀	2.5 2.5	11.0 11.0	45
425BH06	#1 Ceramic Mill Dust Collector	PM PM ₁₀	2.5 2.5	11.0 11.0	45
425BH07	425A DPP Collector	PM PM ₁₀	0.5 0.5	2.2 2.2	45
425BH08	T-1 Mill Dust Collector	PM PM ₁₀	0.5 0.5	2.2 2.2	45
425BH09	#2, 3, 4 Ground Ore Bin Vents Dust Collector	PM PM ₁₀	0.4 0.4	1.4 1.4	45

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Source No.	Description	Pollutant	Emission Rates		Cross Reference Page
			lb/hr	tpy	
425BH1003	325 Tabular Ceramic Mill	PM PM ₁₀	0.8 0.8	3.3 3.3	45
425BH1037	Ground Ore Dust Collector	PM PM ₁₀	1.0 1.0	4.4 4.4	45
425BH3343	8th Floor Flex-Kleen Dust Collector	PM PM ₁₀	1.5 1.5	6.6 6.6	45
425EP04	#8 Converter/Dryer	PM PM ₁₀ SO ₂ VOC CO NO _x	13.8 13.8 0.6 0.2 0.7 8.4	60.4 60.4 2.6 0.4 2.9 36.8	45
426BH1032	#2 Ceramic Mill Dust Collector	PM PM ₁₀	1.0 1.0	4.4 4.4	45
426BH1035	#8 Ball Former Dust Collector	PM PM ₁₀	0.3 0.3	1.1 1.1	45
426BH1045	#3 Ceramic Mill Dust Collector	PM PM ₁₀	1.5 1.5	6.6 6.6	45
426BH3311	#1 Tabular Dust Collector	PM PM ₁₀	1.5 1.5	6.6 6.6	45
426BH3314	#2 Tabular Dust Collector	PM PM ₁₀	1.5 1.5	6.6 6.6	45
426BH3317	#3 Tabular Dust Collector	PM PM ₁₀	2.3 2.3	9.9 9.9	45
426BH3320	#4 Tabular Dust Collector	PM PM ₁₀	2.3 2.3	9.9 9.9	45
426BH5015	Ground Ore Dust Collector	PM PM ₁₀	1.5 1.5	6.6 6.6	45
426BH5041	Unground Ore Dust Collector	PM PM ₁₀	1.5 1.5	6.6 6.6	45

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			lb/hr	tpy	
426BH5044	12-1 Bin Dust Collector	PM PM ₁₀	0.1 0.1	0.4 0.4	45
426BH5045	Bulk Loading Dust Collector	PM PM ₁₀	0.1 0.1	0.4 0.4	45
426BH7086	Boric Acid Collector	PM PM ₁₀	0.3 0.3	1.1 1.1	45
426EP06	#11 & #12 Converter/Dryer	PM PM ₁₀ SO ₂ VOC CO NO _x	23.0 23.0 1.0 0.2 21.9 31.1	100.7 100.7 4.4 0.6 33.1 86.5	45
426EP07	#13 & #14 Converter/Dryer	PM PM ₁₀ SO ₂ VOC CO NO _x	23.0 23.0 1.0 0.2 21.9 31.1	100.7 100.7 4.4 0.6 33.1 86.5	45
141BH01	Milled Product Collector Building 141	PM PM ₁₀	0.5 0.5	2.2 2.2	50
141BH02	Glass Frit/Fines Collectors	PM PM ₁₀	1.0 1.0	4.4 4.4	50
141BH03	Nuisance Collector	PM PM ₁₀	1.5 1.5	6.6 6.6	50
141BH04	Mill Feed Tank Collector	PM PM ₁₀	0.3 0.3	1.1 1.1	50
141BH05	#1 Classifier Collector	PM PM ₁₀	0.3 0.3	1.1 1.1	50
141BH06	#2 Classifier Collector	PM PM ₁₀	0.3 0.3	1.1 1.1	50

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Source No.	Description	Pollutant	Emission Rates		Cross Reference Page
			lb/hr	tpy	
MISC	Storage Piles and Haul Roads	PM	22.3	97.5	52
		PM ₁₀	22.3	97.5	

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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.

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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 unground 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 9/15/93.

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 12/16/97 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

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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 hydal 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 to Alcoa's permit 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 are 050BH07 and 051BH08, and were being added to the Calcined Alumina Sources. Alcoa also changed the emission rates for 060EP0241 in the Calcium Aluminate section of this permit. In testing, Alcoa approached the permitted limits for this kiln and is adjusting their potential to ensure future compliance with their air permit.

Permit 1527-AOP-R3 was issued on May 22, 2001. This modification added a new flash dryer, SN-451BH015. The new dryer is subject to NSPS Subpart UUU. Alcoa is now also using CO₂ injection instead of HCl leaching in the Calcined Aluminas Production Process. Alcoa wishes to leave HCl emissions in the permit to allow them to change between the two systems at a future date. The HCl testing requirements have been changed to within 60 days of the date HCl usage is resumed. Also the AlF₃ feed rate 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 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 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

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changes, the totals in the emission summary table were updated to correct values including the changes of this amendment.

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SECTION IV: EMISSION UNIT INFORMATION

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Hydrate Chemicals

Process Description

The White Hydrate Process begins with preparation of a supersaturated sodium aluminate solution via a pressure digest process. This digest process includes alumina trihydrate (ATH) receipt and preparation, pressure digestion, liquor purification, and recovered liquor processing. Steam is utilized for several of the process steps and is supplied by natural gas fired package boilers located in building 46.

The pressure digest process takes place at Building 45. Regular smelting grade alumina trihydrate wet cake is received by truck and stored in covered tanks to provide about a two week supply. When ready to be used, the wetcake is slurried in large tanks. From there, the material is pumped into a pressure digester vessel. This mixture is heated and then flashed back down to atmospheric temperatures and pressures.

The sodium aluminate is pumped from the digester. After a holding time, solids are removed. The purified liquor is cooled (via heat exchangers). This purified, supersaturated liquor is then surged for feed to the hydrate precipitation process or to the hydral precipitation process. Solids are periodically removed from the filter as a moist cake and are hauled off site.

The final step to the digest process is the processing of the recovered effluent liquors from the hydrate and hydral processes into reusable spent liquor. This recovery process removed carbon dioxide and water, removes trihydrate solids not recovered by the hydrate and hydral processes and adds make up sodium hydroxide to compensate for losses to waste materials.

Water is primarily introduced by the product washing processes but also comes into the process by rain, packing water, hosing up, and other methods. One evaporator (Building 44) removes this water and maintains the concentration of the liquor stream.

The hydrate area precipitates aluminum trihydrate (ATH) into 3 basic products. They are C-31, C-31 Course, and beta alumina trihydrate. C-31 is the primary product, C-31 Coarse has about the same properties as C-31 except the median particle size is larger.

Ground ATH is also produced at the plantsite (Building 410). The material is blown into feed tanks 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 ATH fines.

The ATH product is stored in the primaries and sent to a hydrate drying facility (Building 400) for further processing. There, the slurry is pumped on to a horizontal pan filter where a vacuum

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is applied to the bed of material. The ATH is de-liquored and washed with high purity water to remove soluble soda. The filtrates from this step are returned to the process liquor stream. From the filter, hydrate goes into a fluidized bed steam dryer, discharges across a derrick screen, and is dense phase pumped into a product bin for storage. The fluidizing air along with fine dust exits the dryer through 2 cyclones operating in series and then goes through a venturi scrubber. The clean air then discharges through an induced draft fan to the atmosphere. Each of the product bins has its own bin vent dust collector to facilitate the operation of the dense phase pumping system. The product can be either bulk loaded or bagged out of the product bins. Each of these systems has its own baghouse dust collection equipment.

Note: Bauxite Kiln was shut down in 1985.

Hydral is a very fine, precipitated aluminum trihydrate (ATH). The material has a nominal particle size of 1 micron and a very uniform particle size distribution. Hydral is manufactured into PGA and H-710. Hydral is used by the paper, rubber, and plastics industries as a filler, coating material and fire retardant. With this permit, production of a new product will begin. The new product is a silane coated ATH for use in certain polymers.

Hydral is precipitated from seeding a supersaturate sodium aluminate liquor. The liquor is manufactured by a pressure digest process (as described in process description for White Hydrate). Seed is used in the precipitation process to hasten the precipitation kinetics and to control particle size of the final product. Seed is produced in the hydral process (Building 450).

Sodium aluminate liquor, made and surged at Building 45, is pumped into batch precipitator tanks under a controlled temperature. A controlled quantity of seed is added to the tank. The tank contents are mixed and aged before further processing.

Further processing consists of de-liquoring the precipitated hydral-sodium aluminate slurry. Liquor is removed by vacuum filtering and washing, using condensate from the wet stream evaporators. Filter/washing is done in three steps using wash water in a counter current fashion. The filtrate (a combination of sodium aluminate liquor and wash water) is removed continuously and finally returned to the wet process for recycling.

In the third step of filter/washing the hydral material splits into two product streams:

- C Tunnel dried products, and
- C Spray dried products.

In the tunnel dried product stream, the hydral is screened, filtered, and discharged onto a moving steel conveyor. The conveyor takes the wet filter cake through two drying chambers called a

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pre-dryer and a final dryer. Both chambers are heated by burning natural gas. The hot gasses are first circulated inside the dryer chambers and then to the atmosphere via exhaust fans and stacks located on the roof. There is one stack for each tunnel dryer unit. The dryer exhaust consists of the pre-dryer and final dryer combustion gasses. The dried product is discharged from the dryer into screw conveyers and an elevator which takes the material to the top of the building.

At the top of the building, the tunnel dried material is discharged through a pulverizer, across a permanent magnet and into storage bins. The material is loaded for shipment to customers. All of the above mentioned equipment and conveying systems, including the product bins, are vented to a common nuisance dust collector which is exhausted to the atmosphere via a blower. The blower stack is located on the roof near the tunnel dryer combustion exhaust stacks.

The spray dried product stream begins where the slurry is dewatered. The filter discharge cake is reslurried by remixing in the presence of a dispersant. The reslurried hydral is pumped to the spray dryer surge tank for storage. From the spray dryer surge tank, the slurry is pumped to the spray dryer feed tank. Once in the feed tank, the slurry is fed into the spray dryer chamber. The dried PGA exits the spray dryer in two ways:

- C From the coned bottom of the dryer chamber, and
- C With the hot combustion gasses.

The hot gasses exit the spray dryer through a duct to the product dust collector where the product solids are removed from the gas stream. The gas stream is exhausted from the collector to the atmosphere via an ID fan located on the top floor of the spray dryer tower.

The solids which were removed by the product collector are combined with the solids from the dryer cone in the product elevator and discharged to an air slide conveying system and into one of three product tanks. The PGA is bagged or bulk loaded for distribution to customers. The product elevator, air slides, bins, etc. are vented to a nuisance dust collector which exhausts to the atmosphere inside the building on the top floor of the spray dryer tower.

Pursuant to a memo from John Rasnic, Director of Manufacturing, Energy and Transportation Division Office of Compliance of the EPA to all EPA Regional Directors, and in the preamble to Subpart UUU, Alcoa is not required to operate continuous opacity monitors at 451BH011 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.

Specific Conditions

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- Pursuant to §19.501 et seq of the Regulations of the Arkansas State Implementation Plan for Air Pollution Control (Regulation 19) and 40 CFR Part 52, Subpart E, the permittee shall not exceed the emission rates set forth in the following table. These emission rates are based on maximum physical capacity of the equipment.

Source	Pollutant	lb/hr	tpy
045BH69	PM ₁₀	0.1	0.4
045BH70	PM ₁₀	0.1	0.4
045BH87	PM ₁₀	0.3	1.1
045BH88	PM ₁₀	0.3	1.1
046BL01	PM ₁₀	0.6	2.3
	SO ₂	0.1	0.1
	VOC	0.3	1.0
	CO	1.4	6.0
	NO _x	5.5	23.9
046BL02	PM ₁₀	0.6	2.3
	SO ₂	0.1	0.1
	VOC	0.3	1.0
	CO	1.4	6.0
	NO _x	5.5	23.9
046BL03	PM ₁₀	0.6	2.3
	SO ₂	0.1	0.1
	VOC	0.3	1.0
	CO	1.4	6.0
	NO _x	5.5	23.9
046BL04	PM ₁₀	0.6	2.3
	SO ₂	0.1	0.1
	VOC	0.3	1.0
	CO	1.4	6.0
	NO _x	5.5	23.9

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Source	Pollutant	lb/hr	tpy
046BL05	PM ₁₀	0.6	2.3
	SO ₂	0.1	0.1
	VOC	0.3	1.0
	CO	1.4	6.0
	NO _x	5.5	23.9
400BH01	PM ₁₀	1.0	4.4
400BH02	PM ₁₀	1.3	5.5
400BH03	PM ₁₀	1.5	6.6
400BH04	PM ₁₀	0.5	2.2
400BH05	PM ₁₀	0.5	2.2
400BH06	PM ₁₀	0.5	2.2
400BH07	PM ₁₀	0.5	2.2
400BH08	PM ₁₀	0.3	1.1
400SB01	PM ₁₀	1.0	4.4
400SB02	PM ₁₀	1.0	4.4
400SB03	PM ₁₀	1.0	4.4
410BH01	PM ₁₀	0.8	3.3
410BH02	PM ₁₀	0.8	3.3
410BH03	PM ₁₀	0.5	2.2
410BH04	PM ₁₀	0.1	0.4
410BH05	PM ₁₀	0.1	0.4
410BH06	PM ₁₀	0.5	2.2
451BH01	PM ₁₀	0.3	1.1
451BH02	PM ₁₀	1.5	6.6
451BH03	PM ₁₀	0.5	2.2

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Source	Pollutant	lb/hr	tpy
451BH04	PM ₁₀	0.5	2.2
451BH05	PM ₁₀	0.8	3.3
451BH06	PM ₁₀	0.3	1.1
451BH07	PM ₁₀	0.5	1.9
	SO ₂	1.0	4.4
	VOC	0.1	0.1
	CO	0.1	0.4
	NO _x	0.3	1.1
451BH08	PM ₁₀	0.5	2.2
451BH09	PM ₁₀	0.3	1.1
451BH010	PM ₁₀	1.0	4.4
451BH011	PM ₁₀	1.3	5.6
	SO ₂	1.0	4.4
	CO	0.1	0.3
	NO _x	0.3	1.3
451BH012	PM ₁₀	0.8	3.3
451BH013	PM ₁₀	0.3	1.1
451BH014	PM ₁₀	5.1	21.9
	SO ₂	1.0	4.4
	CO	0.2	0.8
	NO _x	0.9	3.9
451BH011	VOC	52.1	40.0
451BH014			
451BH015	PM ₁₀	1.3	5.4
	SO ₂	0.1	0.1
	VOC	0.1	0.5
	CO	1.4	5.9
	NO _x	1.6	7.1

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Source	Pollutant	lb/hr	tpy
451TD01	PM ₁₀	0.3	1.2
	SO ₂	1.0	4.4
	VOC	0.2	0.5
	CO	0.7	3.1
	NO _x	2.8	12.3
451TD02	PM ₁₀	0.3	1.2
	SO ₂	1.0	4.4
	VOC	0.2	0.5
	CO	0.7	3.1
	NO _x	2.8	12.3
451TD03	PM ₁₀	0.2	0.7
	SO ₂	1.0	4.4
	VOC	0.1	0.3
	CO	0.5	1.8
	NO _x	1.7	7.4
451TD04	PM ₁₀	0.1	0.1
	SO ₂	1.0	4.4
	VOC	0.1	0.2
	CO	0.2	0.6
	NO _x	0.6	2.6

2. Pursuant to §18.801 of the Arkansas Air Pollution Control Code (Regulation 18) and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall not exceed the emission rates set forth in the following table. These emission rates are based on maximum physical capacity of the equipment.

Source	Pollutant	lb/hr	tpy
045BH69	PM	0.1	0.4
045BH70	PM	0.1	0.4
045BH87	PM	0.3	1.1
045BH88	PM	0.3	1.1
046BL01	PM	0.6	2.3

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Source	Pollutant	lb/hr	tpy
046BL02	PM	0.6	2.3
046BL03	PM	0.6	2.3
046BL04	PM	0.6	2.3
046BL05	PM	0.6	2.3
400BH01	PM	1.0	4.4
400BH02	PM	1.3	5.5
400BH03	PM	1.5	6.6
400BH04	PM	0.5	2.2
400BH05	PM	0.5	2.2
400BH06	PM	0.5	2.2
400BH07	PM	0.5	2.2
400BH08	PM	0.3	1.1
400SB01	PM	1.0	4.4
400SB02	PM	1.0	4.4
400SB03	PM	1.0	4.4
410BH01	PM	0.8	3.3
410BH02	PM	0.8	3.3
410BH03	PM	0.5	2.2
410BH04	PM	0.1	0.4
410BH05	PM	0.1	0.4
410BH06	PM	0.5	2.2
451BH01	PM	0.3	1.1
451BH02	PM	1.5	6.6

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Source	Pollutant	lb/hr	tpy
451BH03	PM	0.5	2.2
451BH04	PM	0.5	2.2
451BH05	PM	0.8	3.3
451BH06	PM	0.3	1.1
451BH07	PM	0.5	1.9
451BH08	PM	0.5	2.2
451BH09	PM	0.3	1.1
451BH010	PM	1.0	4.4
451BH011	PM	1.3	5.6
451BH012	PM	0.8	3.3
451BH013	PM	0.3	1.1
451BH014	PM	5.1	21.9
451BH015	PM	2.0	8.8
451TD01	PM	0.3	1.2
451TD02	PM	0.3	1.2
451TD03	PM	0.2	0.7
451TD04	PM	0.1	0.1

3. Pursuant to §19.304 of the Regulation of the Arkansas State Implementation Plan for Air Pollution Control (Regulation 19), and 40 CFR Part 60 Subpart Dc §60.48(c), the permittee shall maintain records of the amount of natural gas combusted in each of the package boilers (046BL01 thru 046BL05) during each month. These records shall be kept on site and all records shall be maintained for at least two years.
4. Pursuant to §19.705 of the Regulations of the Arkansas State Implementation Plan for Air Pollution Control (Regulation 19), A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, and 40 CFR Part 70.6, the permittee shall combust only pipeline quality natural gas in the boilers and dryers at the hydrate chemicals process.

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5. Pursuant to §19.702 of the Arkansas State Implementation Plan for Air Pollution Control (Regulation 19) and 40 CFR Part 52 Subpart E, the permittee shall test the exhaust of one of the six package boilers (046BL01 - 046BL06) for NO_x and CO using EPA Reference Methods 7E and 10, respectively. The boiler being tested shall be operating within 90% of its rated capacity during the testing or the test shall be invalid. The Department shall choose which boiler is to be tested on the day of the test. This is initial compliance testing and is not required to be performed annually. This initial test was performed on May 11, 1998.
6. Pursuant to §19.705 of the Regulations of the Arkansas State Implementation Plan for Air Pollution Control (Regulation 19), and 40 CFR Part 60 Subpart UUU §60.732, particulate emissions from the auxiliary spray dryer, 451BH011, and the flash dryer, 451BH015, shall not exceed 0.025 grams/dscm. Compliance with this condition was demonstrated by an initial compliance test for 451BH011 and will be demonstrated by Specific Condition 7 for 451BH015.
7. Pursuant to §19.705 of the Regulations of the Arkansas State Implementation Plan for Air Pollution Control (Regulation 19), and 40 CFR Part 60 Subpart UUU §60.732, the permittee shall conduct an initial compliance test for particulate emissions using EPA Reference Method 5 and opacity using EPA Reference Method 9 from the flash dryer, 451BH015. These tests shall be conducted within 60 days of achieving the maximum production rate and no later than 180 days after the start up of the source.
8. Pursuant to §19.304 of Regulation 19 and 40 CFR Part 60, Subpart UUU, the permittee shall not cause to be discharged to the atmosphere from sources SN-451BH015 and 451BH011 gases which exhibit an opacity greater than 10% as measured in accordance with EPA Reference Method 9 as found in 40 CFR Part 60, Appendix A. Compliance with this condition shall be verified by compliance with Plantwide Condition 13.
9. Pursuant to §19.705 of Regulation 19, A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, and 40 CFR 70.6, the permittee shall not exceed a production rate of 8.4 million pounds of silane coated alumina trihydrate during any consecutive twelve month period based on a rolling twelve month sum.
10. Pursuant to §19.705 of Regulation 19, and 40 CFR Part 52, Subpart E, the permittee shall maintain records of the amount of silane coated alumina trihydrate produced during each calendar month. These records shall be kept on site and made available for inspection upon request by the 15th day of the month following the reported twelve month period.

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Calcined Aluminas

Process Description

The Calcined Aluminas Plant consists of 2 separate production areas. The Special Aluminas facility (Building 420) is made up of 2 rotary kilns, 2 continuous ball mills (Building 420) and 1 batch mill (Building 420). The Calcination facility consists of 1 flash calciner (Building 50), 1 railcar unloading station (Building 51) and 1 batch ball mill (Building 55).

The Calcined Aluminas Plant at Arkansas Operations receives various calcined aluminas as its process feed stocks. All feedstocks 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 and enters a rotary cooler where a water jacket is used for heat removal. The cooled alumina exits the rotary cooler and is transported to storage bins. The flue gases from the rotary kilns are processed through electrostatic precipitators 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, bulk tanker trucks, 50 pound, 25 kilogram, 100 pound paper bags, 300-400 pound fiber drums, and super sacks weighing 2,000 - 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 and bulk tanker trucks are also shipped directly to customers as a packaging alternative.

Ground aluminas are processed through the two continuous ball mills. Either mill can feed the two rotary blenders. Blending is performed based on customer requirements. Ground aluminas are processed through derrick scalping screens to remove worn out media that exits the ball mills with the product. Ground alumina has the same packaging alternatives as unground alumina.

SG Alumina is produced by grinding unground alumina in a batch ball mill located in Building 55 and 420. The unground alumina charges are batch weighed according to the recipes for each product into a batch charge hopper. The product is 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.

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11. Pursuant to §19.501 et seq of the Regulations of the Arkansas State Implementation Plan for Air Pollution Control (Regulation 19) and 40 CFR Part 52, Subpart E, the permittee shall not exceed the emission rates set forth in the following table. These emission rates are based on maximum physical capacity of the equipment.

Source	Pollutant	lb/hr	tpy
050BH07	PM ₁₀	1.0	4.4
051BH03	PM ₁₀	0.1	0.4
051BH04	PM ₁₀	0.1	0.4
051BH06	PM ₁₀	0.8	3.3
051BH07	PM ₁₀	0.8	3.3
051BH08	PM ₁₀	0.6	2.3
051BH11	PM ₁₀	0.3	1.1
055BH01	PM ₁₀	1.8	7.7
055BH02	PM ₁₀	1.0	4.4
055BH03	PM ₁₀	1.1	4.7
405BH03	PM ₁₀	0.3	1.1
405BH04	PM ₁₀	1.0	4.4
405BH05	PM ₁₀	1.0	4.4
405BH06	PM ₁₀	1.0	4.4
405BH0308	PM ₁₀	0.3	1.1
405BH0309	PM ₁₀	0.3	1.1
405BH0310	PM ₁₀	0.3	1.1
405BH0312	PM ₁₀	0.8	3.3

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Source	Pollutant	lb/hr	tpy
405EP0133	PM ₁₀	25.0	109.5
	SO ₂	1.0	4.4
	VOC	0.2	0.9
	CO	1.6	6.7
	NO _x	19.6	85.8
405EP0233	PM ₁₀	25.0	109.5
	SO ₂	1.0	4.4
	VOC	0.2	0.9
	CO	1.6	6.7
	NO _x	19.6	85.8
415BH0401	PM ₁₀	0.5	2.2
415BH0402	PM ₁₀	0.5	2.2
415BH6191	PM ₁₀	1.3	5.5
415BH6192	PM ₁₀	1.5	6.6
415BH6201	PM ₁₀	0.3	1.1
415BH6202	PM ₁₀	0.3	1.1
415BH6203	PM ₁₀	0.3	1.1
415BH6204	PM ₁₀	0.3	1.1
415BH6225	PM ₁₀	0.8	3.3
415BH6227	PM ₁₀	0.5	2.2
415BH6401	PM ₁₀	0.8	3.3
415BH6451	PM ₁₀	0.3	1.1
420BH05	PM ₁₀	0.5	2.2
420BH06	PM ₁₀	0.5	2.2
420BH6193	PM ₁₀	0.3	1.1
420BH6194	PM ₁₀	0.3	1.1

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Source	Pollutant	lb/hr	tpy
420BH6260	PM ₁₀	2.5	11.0
420BH7614	PM ₁₀	0.5	2.2
420BH7801	PM ₁₀	0.8	3.3
420ABH7714	PM ₁₀	0.5	2.2
420ABH7716	PM ₁₀	0.8	3.3
420ABH7810	PM ₁₀	0.5	2.2
420ABH7811	PM ₁₀	0.5	2.2
420ABH7851	PM ₁₀	1.3	5.5

12. Pursuant to §18.801 of the Arkansas Air Pollution Control Code (Regulation 18) and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall not exceed the emission rates set forth in the following table. These emission rates are based on maximum physical capacity of the equipment.

Source	Pollutant	lb/hr	tpy
050BH07	PM	1.0	4.4
051BH03	PM	0.1	0.4
051BH04	PM	0.1	0.4
051BH06	PM	0.8	3.3
051BH07	PM	0.8	3.3
051BH08	PM	0.6	2.3
051BH11	PM	0.3	1.1
055BH01	PM	1.8	7.7
055BH02	PM	1.0	4.4
055BH03	PM	1.1	4.7
405BH03	PM	0.3	1.1

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Source	Pollutant	lb/hr	tpy
405BH04	PM	1.0	4.4
405BH05	PM	1.0	4.4
405BH06	PM	1.0	4.4
405BH0308	PM	0.3	1.1
405BH0309	PM	0.3	1.1
405BH0310	PM	0.3	1.1
405BH0312	PM	0.8	3.3
405EP0133	PM	25.0	109.5
405EP0233	PM	25.0	109.5
415BH0401	PM	0.5	2.2
415BH0402	PM	0.5	2.2
415BH6191	PM	1.3	5.5
415BH6192	PM	1.5	6.6
415BH6201	PM	0.3	1.1
415BH6202	PM	0.3	1.1
415BH6203	PM	0.3	1.1
415BH6204	PM	0.3	1.1
415BH6225	PM	0.8	3.3
415BH6227	PM	0.5	2.2
415BH6401	PM	0.8	3.3
415BH6451	PM	0.3	1.1
420BH05	PM	0.5	2.2
420BH06	PM	0.5	2.2

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Source	Pollutant	lb/hr	tpy
420BH6193	PM	0.3	1.1
420BH6194	PM	0.3	1.1
420BH6260	PM	2.5	11.0
420BH7614	PM	0.5	2.2
420BH7801	PM	0.8	3.3
420ABH7714	PM	0.5	2.2
420ABH7716	PM	0.8	3.3
420ABH7810	PM	0.5	2.2
420ABH7811	PM	0.5	2.2
420ABH7851	PM	1.3	5.5

13. Pursuant to §18.801 of the Arkansas Air Pollution Control Code (Regulation 18) and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall not exceed the following emission rates. Compliance with these rates shall be demonstrated by Specific Conditions 16, 18, and 19.

Source	Pollutant	lb/hr	tpy
405EP0133	Hydrogen Fluoride	58.1	109.5
	Hydrochloric Acid	28.9	99.9
405EP0233	Hydrogen Fluoride	58.1	
	Hydrochloric Acid	28.9	

14. Pursuant to §19.702 of the Arkansas State Implementation Plan for Air Pollution Control (Regulation 19) and 40 CFR Part 52 Subpart E, the permittee shall test sources 405EP0133 and 405EP0233 for particulate using Method 5, CO using Method 10, and NO_x using Method 7E, on an annual basis. See Plantwide Condition 16 for testing interval relaxation requirement.

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15. Pursuant to A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, source 405EP0133 shall not be operated with a stack height less than 121 feet from ground level.
16. Pursuant to §18.1004 of the Arkansas Air Pollution Control Code (Regulation 18) and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall not exceed a combined aluminum fluoride (AlF_3) feed rate of 127 lb/hr in 405EP0133 or 405EP0233. 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.
17. Pursuant to §18.1004 of the Arkansas Air Pollution Control Code (Regulation 18) and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, 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 405EP0133 or 405EP0233. These monthly records will show compliance with the 109.5 ton per year limits on HF emissions. These records shall be updated by the 15th day of the month following the month which the records represent and submitted in accordance with General Provision 7.
18. Pursuant to §18.1004 of Regulation 18, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall not exceed a hydrogen chloride (HCl) feed rate of 1 gal/min at either 405EP0133 or 405EP0233. The HCl feed rate limit is based on a HCl emission factor of 1.33 lb HCl emitted per gallon of HCl feed rate. This emission factor was determined during stack testing in March, 1999.
19. Pursuant to §18.1002 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall test sources 405EP0133 and 405EP0233 for hydrogen fluoride (HF) and hydrogen chloride (HCl) using Reference Method 26A and 26, respectively. 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. For testing requirement relaxation, see Specific Condition 21.
20. Pursuant to §18.1004 of the Arkansas Air Pollution Control Code (Regulation 18) and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall maintain an

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operating log for 405EP0133 and 405EP0233 which shows the aluminum fluoride and hydrogen chloride feed rates. This log shall be kept available for inspection upon request by Department personnel. For record keeping relaxation, see Specific Condition 21.

21. Pursuant to §18.1004 of Regulation 18, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall maintain records of the dates when HCl feed is discontinued and restarted. These records shall be kept on site and made available to Department personnel upon request. During times of shutdown, the permittee is not required to maintain the feed rate log for HCl required in Specific Condition 20. The annual testing for HCl required in Specific Condition 19 will not be required while HCl injection has been discontinued. The test will be required 60 days after HCl injection has restarted.

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Calcium Aluminate Cement

Process Description

The Calcium Aluminum Cement Plant receives limestone and alumina as feedstock. The limestone and alumina are co-ground in a continuous ball mill with steel liners and steel balls. The ball mill discharge (called raw mix) is batch blended in a rotary blender for consistency. This raw mix is heat treated in a rotary kiln to produce a calcium aluminate clinker with pre-determined calcium/alumina phase composition. This clinker is ground with additives in a continuous ball mill with steel liners and steel balls. The finished cement is blended in an air merge blender for consistency and packaged in bags for storage and shipment.

The ball mills and rotary kiln are located at building 60 and the air merge blenders and packaging area are located in building 435.

There are five different grades of cement campaigned in the calcium aluminate cement plant. The properties of these grades are controlled by various process controls and/or feedstocks. The cement products include a 70% AL_2O_3 cement, CA-14 and 4 different 80% AL_2O_3 cements, CA-25 Regular, CA-25 Long Working, CA-25C Casting, and CA-25GG Gunning Grade.

Specific Conditions

22. Pursuant to §19.501 et seq of the Regulations of the Arkansas State Implementation Plan for Air Pollution Control (Regulation 19) and 40 CFR Part 52, Subpart E, the permittee shall not exceed the emission rates set forth in the following table. These emission rates are based on maximum physical capacity of the equipment.

Source	Pollutant	lb/hr	tpy
060BH0285	PM ₁₀	1.0	4.4
060BH0402	PM ₁₀	1.0	4.4
060BH0406	PM ₁₀	0.5	2.2
060BH0510	PM ₁₀	0.5	2.2
060BH0528	PM ₁₀	0.5	2.2
060BH0573	PM ₁₀	1.5	6.6

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Source	Pollutant	lb/hr	tpy
060BH0602	PM ₁₀	0.8	3.3
060EP0241	PM ₁₀	20.0	87.6
	SO ₂	1.0	4.4
	VOC	0.4	1.6
	CO	6.0	26.1
	NO _x	22.5	98.5
435BH0712	PM ₁₀	1.5	6.6
435BH0754	PM ₁₀	1.0	4.4
435BH0760	PM ₁₀	1.0	4.4
435BH0770	PM ₁₀	0.5	2.2

23. Pursuant to §18.801 of the Arkansas Air Pollution Control Code (Regulation 18) and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall not exceed the emission rates set forth in the following table. These emission rates are based on maximum physical capacity of the equipment.

Source	Pollutant	lb/hr	tpy
060BH0285	PM	1.0	4.4
060BH0402	PM	1.0	4.4
060BH0406	PM	0.5	2.2
060BH0510	PM	0.5	2.2
060BH0528	PM	0.5	2.2
060BH0573	PM	1.5	6.6
060BH0602	PM	0.8	3.3
060EP0241	PM	20.0	87.6
435BH0712	PM	1.5	6.6
435BH0754	PM	1.0	4.4
435BH0760	PM	1.0	4.4

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Source	Pollutant	lb/hr	tpy
435BH0770	PM	0.5	2.2

24. Pursuant to §19.702 of the Arkansas State Implementation Plan for Air Pollution Control (Regulation 19) and 40 CFR Part 52 Subpart E, the permittee shall measure the exhaust of 060EP0241 for particulate, nitrogen oxides, and carbon monoxide annually using EPA Reference Methods 5, 7E, and 10, respectively. See Plantwide Condition 16 for testing interval relaxation requirement.
25. Pursuant to §19.702 of the Arkansas State Implementation Plan for Air Pollution Control (Regulation 19) and 40 CFR Part 52 Subpart E, the permittee shall measure the exhaust of 060BH0573 for particulate annually using EPA Reference Method 5. See Plantwide Condition 16 for testing interval relaxation requirement.
26. Pursuant to §19.705 of the Arkansas State Implementation Plan for Air Pollution Control (Regulation 19), A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, and 40 CFR 70.6, the permittee shall combust only pipeline quality natural gas at source 060EP0241.

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Tabular

Process Description

The tabular alumina plant at Arkansas operations receives calcined alumina as process feedstock in bulk hopper cars. This 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 the 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 inch to 100 mesh and finer.

Products are sold in 50 and 100 pound bags, semi-bulk bags, bulk trucks and bulk hopper cars.

Specific Conditions

27. Pursuant to §19.501 et seq of the Regulations of the Arkansas State Implementation Plan for Air Pollution Control (Regulation 19) and 40 CFR Part 52, Subpart E, the permittee shall not exceed the emission rates set forth in the following table. These emission rates are based on maximum physical capacity of the equipment.

Source	Pollutant	lb/hr	tpy
425AUC01	PM ₁₀	55.0	11.0
425BH01	PM ₁₀	0.8	3.3
425BH02	PM ₁₀	1.5	6.6
425BH03	PM ₁₀	1.3	5.5
425BH04	PM ₁₀	0.8	3.3
425BH05	PM ₁₀	2.5	11.0
425BH06	PM ₁₀	2.5	11.0
425BH07	PM ₁₀	0.5	2.2
425BH08	PM ₁₀	0.5	2.2

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Source	Pollutant	lb/hr	tpy
425BH09	PM ₁₀	0.4	1.4
425BH1033	PM ₁₀	0.8	3.3
425BH1037	PM ₁₀	1.0	4.4
425BH3343	PM ₁₀	1.5	6.6
425EP04	PM ₁₀	13.8	60.4
	SO ₂	0.6	2.6
	VOC	0.2	0.4
	CO	0.7	2.9
	NO _x	8.4	36.8
426BH1032	PM ₁₀	1.0	4.4
426BH1035	PM ₁₀	0.3	1.1
426BH1045	PM ₁₀	1.5	6.6
426BH3311	PM ₁₀	1.5	6.6
426BH3314	PM ₁₀	1.5	6.6
426BH3317	PM ₁₀	2.3	9.9
426BH3320	PM ₁₀	2.3	9.9
426BH5015	PM ₁₀	1.5	6.6
426BH5041	PM ₁₀	1.5	6.6
426BH5044	PM ₁₀	0.1	0.4
426BH5045	PM ₁₀	0.1	0.4
426BH7086	PM ₁₀	0.3	1.1
426EP06	PM ₁₀	23.0	100.7
	SO ₂	1.0	4.4
	VOC	0.2	0.6
	CO	21.9	33.1
	NO _x	31.1	86.5

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Source	Pollutant	lb/hr	tpy
426EP07	PM ₁₀	23.0	100.7
	SO ₂	1.0	4.4
	VOC	0.2	0.6
	CO	21.9	33.1
	NO _x	31.1	86.5

28. Pursuant to §18.801 of the Arkansas Air Pollution Control Code (Regulation 18) and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall not exceed the emission rates set forth in the following table. These emission rates are based on maximum physical capacity of the equipment. Source 425AUC01 will demonstrate compliance by Specific Condition 30.

Source	Pollutant	lb/hr	tpy
425AUC01	PM	55.0	11.0
425BH01	PM	0.8	3.3
425BH02	PM	1.5	6.6
425BH03	PM	1.3	5.5
425BH04	PM	0.8	3.3
425BH05	PM	2.5	11.0
425BH06	PM	2.5	11.0
425BH07	PM	0.5	2.2
425BH08	PM	0.5	2.2
425BH09	PM	0.4	1.4
425BH1033	PM	0.8	3.3
425BH1037	PM	1.0	4.4
425BH3343	PM	1.5	6.6
425EP04	PM	13.8	60.4

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Source	Pollutant	lb/hr	tpy
426BH1032	PM	1.0	4.4
426BH1035	PM	0.3	1.1
426BH1045	PM	1.5	6.6
426BH3311	PM	1.5	6.6
426BH3314	PM	1.5	6.6
426BH3317	PM	2.3	9.9
426BH3320	PM	2.3	9.9
426BH5015	PM	1.5	6.6
426BH5041	PM	1.5	6.6
426BH5044	PM	0.1	0.4
426BH5045	PM	0.1	0.4
426BH7086	PM	0.3	1.1
426EP06	PM	23.0	100.7
426EP07	PM	23.0	100.7

29. Pursuant to §19.702 of the Arkansas State Implementation Plan for Air Pollution Control (Regulation 19) and 40 CFR Part 52 Subpart E, the exhaust of the three dryer ESPs (425EP04, 426EP06, and 426EP07) shall be measured for particulate, nitrogen oxides, and carbon monoxide, using EPA Reference Methods 5, 7E, and 10, respectively. This testing shall be performed annually. See Plantwide Condition 16 for testing interval relaxation requirement.
30. Pursuant to §19.705 of the Arkansas State Implementation Plan for Air Pollution Control (Regulation 19), A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, and 40 CFR Part 70.6, 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.

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31. Pursuant to §19.705 of the Arkansas State Implementation Plan for Air Pollution Control (Regulation 19) and 40 CFR Part 52 Subpart E, the permittee shall keep records on the amount of alumina loaded out at 425AUC01 during each calendar month. Each twelve month total shall be available for inspection by the last day of the month after the reported 12 months. These records shall be maintained on site and shall be provided to Department personnel upon request.
32. Pursuant to §19.705 of the Arkansas State Implementation Plan for Air Pollution Control (Regulation 19), A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, and 40 CFR 70.6, the permittee shall combust only pipeline quality natural gas at sources 425EP04, 426EP06, and 426EP07.

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Electronic Packaging

Process Description

Two different powder products are manufactured in this facility using two separate processes. Pneumatic conveyance of both materials through the process 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 process 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 stream are separated. The transport air is recycled into the classifier. The coarse fraction is pneumatically conveyed to a product collector where the air and solids stream are separated. The air exits the process through the main classifier blower. 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 systems, gravimetric feeders, or the #1 lift system.

Specific Conditions

33. Pursuant to §19.501 et seq of the Regulations of the Arkansas State Implementation Plan for Air Pollution Control (Regulation 19) and 40 CFR Part 52, Subpart E, the permittee shall not exceed the emission rates set forth in the following table. These emission rates are based on maximum physical capacity of the equipment.

Source	Pollutant	lb/hr	tpy
141BH01	PM ₁₀	0.5	2.2
141BH02	PM ₁₀	1.0	4.4
141BH03	PM ₁₀	1.5	6.6
141BH04	PM ₁₀	0.3	1.1
141BH05	PM ₁₀	0.3	1.1
141BH06	PM ₁₀	0.3	1.1

34. Pursuant to §18.801 of the Arkansas Air Pollution Control Code (Regulation 18) and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall not exceed the emission rates set forth in the following table. These emission rates are based on maximum physical capacity of the equipment.

Source	Pollutant	lb/hr	tpy
141BH01	PM	0.5	2.2
141BH02	PM	1.0	4.4
141BH03	PM	1.5	6.6
141BH04	PM	0.3	1.1
141BH05	PM	0.3	1.1
141BH06	PM	0.3	1.1

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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

35. Pursuant to §19.501 et seq of the Regulations of the Arkansas State Implementation Plan for Air Pollution Control (Regulation 19) and 40 CFR Part 52, Subpart E, the permittee shall not exceed the emission rates set forth in the following table.

Source	Pollutant	lb/hr	tpy
MISC	PM ₁₀	22.3	97.5

36. Pursuant to §18.801 of the Arkansas Air Pollution Control Code (Regulation 18) and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall not exceed the emission rates set forth in the following table.

Source	Pollutant	lb/hr	tpy
MISC	PM	22.3	97.5

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SECTION V: COMPLIANCE PLAN AND SCHEDULE

Alcoa Industrial Chemicals is in compliance with the applicable regulations cited in the permit application. Alcoa Industrial Chemicals 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. Pursuant to §19.704 of Regulation 19, 40 CFR Part 52, Subpart E, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the Director shall be notified in writing within thirty (30) days after construction has commenced, construction is complete, the equipment and/or facility is first placed in operation, and the equipment and/or facility first reaches the target production rate.
2. Pursuant to §19.410(B) of Regulation 19, 40 CFR Part 52, Subpart E, the Director may cancel all or part of this permit if the construction or modification authorized herein is not begun within 18 months from the date of the permit issuance or if the work involved in the construction or modification is suspended for a total of 18 months or more.
3. Pursuant to §19.702 of Regulation 19 and/or §18.1002 of Regulation 18 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311, any equipment that is to be tested, unless stated in the Specific Conditions of this permit or by any federally regulated requirements, shall be tested with the following time frames: (1) Equipment to be constructed or modified shall be tested within sixty (60) days of achieving the maximum production rate, but in no event later than 180 days after initial start-up of the permitted source or (2) equipment already operating shall be tested according to the time frames set forth by the Department. The permittee shall notify the Department of the scheduled date of compliance testing at least fifteen (15) days in advance of such test. Compliance test results shall be submitted to the Department within thirty (30) days after the completed testing.
4. Pursuant to §19.702 of Regulation 19 and/or §18.1002 of Regulation 18 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311, the permittee shall provide:
 - a. Sampling ports adequate for applicable test methods
 - b. Safe sampling platforms
 - c. Safe access to sampling platforms
 - d. Utilities for sampling and testing equipment
5. Pursuant to §19.303 of Regulation 19 and A.C.A. §8-4-203 as referenced by A.C. A. §8-4-304 and §8-4-311, the equipment, control apparatus and emission monitoring equipment shall be operated within their design limitations and maintained in good condition at all times.
6. Pursuant to Regulation 26 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, this permit subsumes and incorporates all previously issued air permits for this facility.

Acid Rain (Title IV)

7. Pursuant to §26.701 of Regulation #26 and 40 CFR 70.6(a)(4), the permittee is prohibited from causing any emissions which exceed any allowances that the source lawfully holds under Title IV of the Act or the regulations promulgated thereunder. No permit revision is required for increases in emissions that are authorized by allowances acquired pursuant to the acid rain program, provided that such increases do not require a permit revision under any other applicable requirement. This permit establishes no limit on the number of allowances held by the permittee. The source may not, however, use allowances as a defense to noncompliance with any other applicable requirement of this permit or the Act. Any such allowance shall be accounted for according to the procedures established in regulations promulgated under Title IV of the Act.

Title VI Provisions

8. The permittee shall comply with the standards for labeling of products using ozone depleting substances pursuant to 40 CFR Part 82, Subpart E:
 - a. All containers containing a class I or class II substance stored or transported, all products containing a class I substance, and all products directly manufactured with a class I substance must bear the required warning statement if it is being introduced to interstate commerce pursuant to §82.106.
 - b. The placement of the required warning statement must comply with the requirements pursuant to §82.108.
 - c. The form of the label bearing the required warning must comply with the requirements pursuant to §82.110.
 - d. No person may modify, remove, or interfere with the required warning statement except as described in §82.112.
9. The permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR Part 82, Subpart F, except as provided for MVACs in Subpart B:
 - a. Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to §82.156.
 - b. Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to §82.158.

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- c. Persons performing maintenance, service repair, or disposal of appliances must be certified by an approved technician certification program pursuant to §82.161.
 - d. Persons disposing of small appliances, MVACs, and MVAC-like appliances must comply with record keeping requirements pursuant to §82.166. (“MVAC-like appliance” as defined at §82.152.)
 - e. Persons owning commercial or industrial process refrigeration equipment must comply with leak repair requirements pursuant to §82.156.
 - f. Owners/operators of appliances normally containing 50 or more pounds of refrigerant must keep records of refrigerant purchased and added to such appliances pursuant to §82.166.
10. If the permittee manufactures, transforms, destroys, imports, or exports a class I or class II substance, the permittee is subject to all requirements as specified in 40 CFR part 82, Subpart A, Production and Consumption Controls.
11. If the permittee performs a service on motor (fleet) vehicles when this service involves ozone-depleting substance refrigerant (or regulated substitute substance) in the motor vehicle air conditioner (MVAC), the permittee is subject to all the applicable requirements as specified in 40 CFR part 82, Subpart B, Servicing of Motor Vehicle Air Conditioners.
- The term “motor vehicle” as used in Subpart B does not include a vehicle in which final assembly of the vehicle has not been completed. The term “MVAC” as used in Subpart B does not include the air-tight sealed refrigeration system used as refrigerated cargo, or the system used on passenger buses using HCFC-22 refrigerant.
12. The permittee shall be allowed to switch from any ozone-depleting substance to any alternative that is listed in the Significant New Alternatives Program (SNAP) promulgated pursuant to 40 CFR part 82, Subpart G, Significant New Alternatives Policy Program.
13. Pursuant to §18.501 of the Arkansas Air Pollution Control Code (Regulation 18), and 40 CFR Part 52, Subpart E, 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 B) 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 Alcoa 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 B), which shall be kept on site and available for

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inspection. Also, records shall be kept on site and made available upon request showing that the visual inspections of each source are being performed as required by this condition. This condition pertains to sources with 5% and 10% opacity limits.

14. Pursuant to §19.503 of the Arkansas Plan of Implementation for Air Pollution Control (Regulation 19), and 40 CFR Part 52, Subpart E, 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 B) 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 Alcoa 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 B), which shall be kept on site and available for inspection. Also, records shall be kept on site and made available upon request showing that the visual inspections of each source are being performed as required by this condition. This condition pertains to sources with 20% opacity limits.
15. Pursuant to §19.304 of Regulation 19 and 40 CFR Part 60, Subpart UUU, the permittee shall visually inspect sources SN-451BH015 at least once per week. If any source appears to be out of compliance with the opacity limit while conducting the visual inspection then Alcoa 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 B), which shall be kept on site and available for inspection. Also, records shall be kept on site and made available upon request showing that the visual inspections of each source are being performed as required by this condition.
16. Pursuant to §19.702 of the Arkansas State Implementation Plan for Air Pollution Control (Regulation 19) and 40 CFR Part 52 Subpart E, except as specified elsewhere, stack testing shall be performed on an annual basis on each source required to be tested in this permit. 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.

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SECTION VII: INSIGNIFICANT ACTIVITIES

Pursuant to §26.304 of Regulation 26, the following sources are insignificant activities. Any activity for which a state or federal applicable requirement applies is not insignificant even if this activity meets the criteria of §304 of Regulation 26 or is listed below. Insignificant activity determinations rely upon the information submitted by the permittee in an application dated October 9, 1996.

Emission Source Description	Reason Insignificant
Building 141, power building vent (4' dia.), southeast corner	Out of Service
Building 141, power building vent (5' x 5'), southwest corner of upper level	Out of Service
Bulk loading station (trucks), midway on west side of Bldg 141	Out of Service
Pressure relief vent (2") for compressor on 2 nd floor, located 12' from ground on west side of Building 141	Out of Service
Air Conditioner vent (2"), west side of building 141	Out of Service
Open top tank, west side of Building 405A	Out of service
Tank fill pipe, southwest corner of Building 405A	No emissions
Intake air vent for air dryer, building 435 area	No emissions
Steam vents (6 @ 2" dia.), north side of building 42	out of service
Steam source, discharge to storm sewer grate on north side of building 42	out of service
Steam vent (2" dia.), south side on building 42 and east end	out of service
Steam source, open tank on south side on building 42	out of service
Steam source, open concrete tank on south side on Building 42	out of service
Roof vents (2 @ 16" dia.), building 43	out of service
Exhaust stack (22" dia., 27' elevation), southeast corner of building 39A	out of service
Bulk unloading station (trucks) for sodium hydroxide, north side of bldg 45	no emissions

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Emission Source Description	Reason Insignificant
Dryer exhaust, building 400 area	particulate during upset conditions only
Bulk loading airslide, building 410 (trucks)	out of service
Pilot dryer blower intake, east end of building 451	no discharge
Control room air intake vent, building 451	no discharge
Axial cooling bin heat exhausters (6 @ 24" dia.), north side of building 425 at 4th/5th floor level	no pollutant discharge
Dryer heat exhaust (8 @ 20" dia., elevation=134'), building 425 roof	no pollutant discharge
Air intakes (5 @ 12" dia.), west side of Building 426 converter wing	No pollutant discharge
Heater vents (6"), south side of Building 426 above dock area	No pollutant discharge
Dryer heat exhausts (4 @ 20" dia., elevation = 130')	No pollutant discharge
Dust collection system, southeast corner of Building 41-exhaust inside	No emissions
Water heater flue, north side of Building 41A bin vent on ground FAH tank	out of service
Perchloric storage area (building 41 area)	no emissions
Fume hood exhausts (7 x 8" dia., elev. = Building +6') building 41 area	Group A, #5
Fume hood exhaust, Building 41 Grinding Room	Group A, #5
Chemical vent (2" dia., 12' elev.), south side of building 152	Group A, #5
Fume hood exhaust, south side of building 152	Group A, #5
Fume hood exhaust (2 @ 6" x 8" dia., 10' elev.), north side of building 152	Group A, #5
Air line vent (1.5" dia., 4' elev.), east side of building 158	No regulated pollutant emissions

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Emission Source Description	Reason Insignificant
Plant air exhaust from pump (4" dia., 1' elev.), south side of building 158	No regulated pollutant emitted
Dynamometer exhausts (2 x 4" dia., 15' elev.), west side of building 158	Out of Service
Hydrate Chemical Precipitator Tanks, building 45	Group A, #13
4 - Baghouses exhausting from Building 426	Group A, #13

Pursuant to §26.304 of Regulation 26, the emission units, operations, or activities contained in Regulation 19, Appendix A, Group B, have been determined by the Department to be insignificant activities. Activities included in this list are allowable under this permit and need not be specifically identified.

SECTION VIII: GENERAL PROVISIONS

1. Pursuant to 40 C.F.R. 70.6(b)(2), 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.
2. Pursuant to 40 C.F.R. 70.6(a)(2) and §26.7 of the Regulations of the Arkansas Operating Air Permit Program (Regulation 26), 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.
3. Pursuant to §26.4 of Regulation #26, it is the duty of the permittee to submit a complete application for permit renewal at least six (6) months prior to the date of permit expiration. Permit expiration terminates the permittee's right to operate unless a complete renewal application was submitted at least six (6) months prior to permit expiration, in which case the existing permit shall 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.
4. Pursuant to 40 C.F.R. 70.6(a)(1)(ii) and §26.7 of Regulation #26, 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, both provisions are incorporated into the permit and shall be enforceable by the Director or Administrator.
5. Pursuant to 40 C.F.R. 70.6(a)(3)(ii)(A) and §26.7 of Regulation #26, records of monitoring information required by this permit shall include the following:
 - a. The date, place as defined in this permit, and time of sampling or measurements;
 - b. The date(s) analyses were performed;
 - c. The company or entity that performed the analyses;
 - d. The analytical techniques or methods used;
 - e. The results of such analyses; and

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- f. The operating conditions existing at the time of sampling or measurement.
6. Pursuant to 40 C.F.R. 70.6(a)(3)(ii)(B) and §26.7 of Regulation #26, records of all required monitoring data and support information shall be retained for a period of at least 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.
7. Pursuant to 40 C.F.R. 70.6(a)(3)(iii)(A) and §26.7 of Regulation #26, the permittee shall submit reports of all required monitoring every 6 months. If no other reporting period has been established, the reporting period shall end on the last day of the anniversary month of this permit. The report shall be due within 30 days of the end of the reporting period. Even though the reports are due every six months, each report shall contain a full year of data. All instances of deviations from permit requirements must be clearly identified in such reports. All required reports must be certified by a responsible official as defined in §26.2 of Regulation #26 and must be sent to the address below.
- Arkansas Department of Environmental Quality
Air Division
ATTN: Compliance Inspector Supervisor
Post Office Box 8913
Little Rock, AR 72219
8. Pursuant to 40 C.F.R. 70.6(a)(3)(iii)(B), §26.7 of Regulation #26, and §19.601 and 19.602 of Regulation #19, all deviations from permit requirements, including those attributable to upset conditions as defined in the permit shall be reported to the Department. An initial report shall be made to the Department by the next business day after the occurrence. The initial report may be made by telephone and shall include:
- a. The facility name and location,
 - b. The process unit or emission source which is deviating from the permit limit,
 - c. The permit limit, including the identification of pollutants, from which deviation occurs,
 - d. The date and time the deviation started,
 - e. The duration of the deviation,
 - f. The average emissions during the deviation,
 - g. The probable cause of such deviations,
 - h. Any corrective actions or preventive measures taken or being taken to prevent such deviations in the future, and

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- i. The name of the person submitting the report.

A full report shall be made in writing to the Department within five (5) business days of discovery of the occurrence and shall include in addition to the information required by initial report a schedule of actions to be taken to eliminate future occurrences and/or to minimize the amount by which the permits limits are exceeded and to reduce the length of time for which said limits are exceeded. If the permittee wishes, they 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 such report will serve as both the initial report and full report.

9. Pursuant to 40 C.F.R. 70.6(a)(5) and §26.7 of Regulation #26, and A.C.A. §8-4-203, as referenced by §8-4-304 and §8-4-311, if any provision of the permit or the application thereof to any person or circumstance is held invalid, such invalidity shall 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.
10. Pursuant to 40 C.F.R. 70.6(a)(6)(i) and §26.7 of Regulation #26, 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, or modification; or for denial of a permit renewal application. Any permit noncompliance with a state requirement constitutes a violation of the Arkansas Water and Air Pollution Control Act (A.C.A. §8-4-101 *et seq.*) and is also grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application.
11. Pursuant to 40 C.F.R. 70.6(a)(6)(ii) and §26.7 of Regulation #26, 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 in order to maintain compliance with the conditions of this permit.

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12. Pursuant to 40 C.F.R. 70.6(a)(6)(iii) and §26.7 of Regulation #26, this permit may be modified, revoked, reopened, and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition.
13. Pursuant to 40 C.F.R. 70.6(a)(6)(iv) and §26.7 of Regulation #26, this permit does not convey any property rights of any sort, or any exclusive privilege.
14. Pursuant to 40 C.F.R. 70.6(a)(6)(v) and §26.7 of Regulation #26, the permittee shall 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 shall also furnish to the Director copies of records required to be kept by the permit. For information claimed to be confidential, the permittee may be required to furnish such records directly to the Administrator along with a claim of confidentiality.
15. Pursuant to 40 C.F.R. 70.6(a)(7) and §26.7 of Regulation #26, the permittee shall pay all permit fees in accordance with the procedures established in Regulation #9.
16. Pursuant to 40 C.F.R. 70.6(a)(8) and §26.7 of Regulation #26, no permit revision shall be required, under any approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes that are provided for elsewhere in this permit.
17. Pursuant to 40 C.F.R. 70.6(a)(9)(i) and §26.7 of Regulation #26, if the permittee is allowed to operate under 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 scenario under which the facility or source is operating.
18. Pursuant to 40 C.F.R. 70.6(b) and §26.7 of Regulation #26, all terms and conditions in this permit, including any provisions designed to limit a source's potential to emit, are enforceable by the Administrator and citizens under the Act unless the Department has specifically designated as not being federally enforceable under the Act any terms and conditions included in the permit that are not required under the Act or under any of its applicable requirements.

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19. Pursuant to 40 C.F.R. 70.6(c)(1) and §26.7 of Regulation #26, any document (including reports) required by this permit shall contain a certification by a responsible official as defined in §26.2 of Regulation #26.
20. Pursuant to 40 C.F.R. 70.6(c)(2) and §26.7 of Regulation #26, the permittee shall allow an authorized representative of the Department, upon presentation of credentials, to perform the following:
 - 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 that must be kept 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 the purpose of assuring compliance with this permit or applicable requirements.
21. Pursuant to 40 C.F.R. 70.6(c)(5) and §26.7 of Regulation #26, the permittee shall submit a compliance certification with terms and conditions contained in the permit, including emission limitations, standards, or work practices. This compliance certification shall be submitted annually and shall be submitted to the Administrator as well as to the Department. All compliance certifications required by this permit shall include the following:
 - 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. Pursuant to §26.7 of Regulation #26, nothing in this permit shall alter or affect the following:

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- 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. Pursuant to A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, this permit authorizes only those pollutant emitting activities addressed herein.

APPENDIX A

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Summary of Testing Requirements		
Source	Testing	Pollutant
046BL01, 02, 03, 04, 05	U	NO _x
	U	CO
405EP0133	U	PM, CO, NO _x
	U	HF, HCl
405EP0233	U	PM, CO, NO _x
	U	HF, HCl
060EP0241	U	PM, CO, NO _x
060BH0573	U	PM
425EP04	U	PM, CO, NO _x
426EP06	U	PM, CO, NO _x
426EP07	U	PM, CO, NO _x

APPENDIX B

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
MAIN SOURCES				SECTION 1				SECTION 2			
046BL01	#1 Package Boiler	5 ^a		045BH69	BV-69 Alumina D/C	5 ^a		141BH01	Milled Product D/C	5 ^a	
046BL02	#2 Package Boiler	5 ^a		045BH70	BV-70 Alumina D/C	5 ^a		141BH02	Glass Frit/Fines D/C	5 ^a	
046BL03	#3 Package Boiler	5 ^a		045BH88	MgO Storage D/C	5 ^a		141BH03	Nuisance D/C	5 ^a	
046BL04	#4 Package Boiler	5 ^a		045BH87	Lime Storage D/C	5 ^a		141BH04	Mill Feed Tank D/C	5 ^a	
046BL05	#5 Package Boiler	5 ^a		050BH07	#1 Dust Collector	5 ^a		141BH05	#1 Classifier D/C	5 ^a	
060EP0241	#2 Kiln ESP	20 ^b		051BH03	#3 Bin Vent D/C	5 ^a		141BH06	#2 Classifier D/C	5 ^a	
060BH0573	Clinker D/C	5 ^a		051BH04	#4 Bin Vent D/C	5 ^a		400BH01	#5 Storage Bin D/C	5 ^a	
400SB01	#1 Scrubber	20 ^b		051BH06	#1 Air Slide D/C	5 ^a		400BH02	Bulk Loading D/C	5 ^a	
400SB02	#2 Scrubber	20 ^b		051BH07	#3 Air Slide D/C	5 ^a		400BH03	#2 Storage Tank D/C	5 ^a	
400SB03	#3 Scrubber	20 ^b		051BH08	#2 Air Slide D/C	5 ^a		400BH04	#1 Storage Tank D/C	5 ^a	
405EP0133	#1 ESP	20 ^b		051BH11	Unload Hopper D/C	5 ^a		400BH05	#3A Storage Tank D/C	5 ^a	
405EP0233	#2 ESP	20 ^b		055BH01	#1 Blender D/C	5 ^a		400BH06	#3B Storage Tank D/C	5 ^a	
425EP04	#4 ESP	20 ^b		055BH02	#2 Blender D/C	5 ^a		400BH07	#4 Storage Tank D/C	5 ^a	
426EP01	#6 ESP	20 ^b		055BH03	Nuisance D/C	5 ^a		400BH08	#1 Rework Tank D/C	5 ^a	
426EP02	#7 ESP	20 ^b		060BH05	#1 Blender	5 ^a					
				060BH406	#4 Blender	5 ^a					
				060BH02	#2 Blender	5 ^a					
				060BH0528	#3B Blender	5 ^a					
				060BH0510	#3A Blender	5 ^a					
				420BH7614	420-3 D/C	5 ^a					
				420BH7801	420-5 Bulk Load	5 ^a					
				060BH0285	Raw Mix D/C	5 ^a					
				060BH0402	#3 A3 Tank D/C	5 ^a					
				060BH06	#2 Surge D/C	5 ^a					

^aThis opacity limit assigned pursuant to §18.501 of Regulation 18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311. (Plantwide Condition 13)

^bThis opacity limit assigned pursuant to §19.503 of Regulation 19 and 40 CFR Part 52, Subpart E. (Plantwide Condition 14)

SN	Process Unit	Permit Opacity	Weekly Opacity	SN	Process Unit	Permit Opacity	Weekly Opacity	SN	Process Unit	Permit Opacity	Weekly Opacity
SECTION 3				420BH05	#1 Bagging D/C	5 ^a		426BH1045	#3 Ceramic Mill D/C	5 ^a	
405BH312	#1 Lift System d/c	5 ^a		420BH06	#2 Bagging D/C	5 ^a		426BH7086	Boric Acid D/C	5 ^a	
405BH308	#1 Blender D/C	5 ^a		420BH6193	#1 AirSlide Vent	5 ^a		426BH1032	#2 Ceramic Mill D/C	5 ^a	
405BH309	#2 Blender D/C	5 ^a		420BH6194	#2 AirSlide Vent	5 ^a		426BH5044	12-1 Bin D/C	5 ^a	
405BH310	#1 High Tank D/C	5 ^a		420ABH7851	Majac D/C	5 ^a		426BH5045	Bulk Load D/C	5 ^a	
405BH03	Bldg 405b nuisance	5 ^a		420ABH7714	420A-2 Course D/C	5 ^a		SECTION 5			
405BH04	#4 Alumina D/C	5 ^a		420ABH7716	420A-3 Fines D/C	5 ^a		435BH0712	Product Tank #3/#4	5 ^a	
405BH05	#5 Alumina D/C	5 ^a		420ABH7810	Norblo XFER D/C	5 ^a		435BH0754	Blender #4 D/C	5 ^a	
405BH06	#6 Alumina D/C	5 ^a		420ABH7811	#7 Product Tank	5 ^a		435BH0760	Blender #5 D/C	5 ^a	
410BH01	#1 D/C	5 ^a		SECTION 4				435BH0770	Rework System D/C	5 ^a	
410BH02	#2 mic-pulsair D/C	5 ^a		425BH01	Low Iron Tabular	5 ^a		451BH01	#1 Product Bin Vent d/c	5 ^a	
410BH03	Nuisance, #3	5 ^a		425BH02	High Iron Tabular	5 ^a		451BH02	H-700 Twin Pro. D/C	5 ^a	
410BH04	Bin Vent #1 Feed	5 ^a		425BH1003	325 Ceramic Mill	5 ^a		451BH04	Ground Gel D/C	5 ^a	
410BH05	Bin Vent #2 Feed	5 ^a		425BH03	Ground Ore D/C	5 ^a		451BH05	Auxiliary Spray Dryer	5 ^a	
410BH06	#2 Product Tank D/C	5 ^a		425BH3343	8th Floor D/C	5 ^a		451BH06	Hydral bulk loading d/c	5 ^a	
415BH6191	415-4 D/C	5 ^a		425BH04	4th Floor D/C	5 ^a		451BH07	PD Nuisance D/C	5 ^a	
415BH6451	415-6 D/C	5 ^a		425BH05	#2 Flex-Kleen D/C	5 ^a		451BH08	Spacerite Feed Tank	5 ^a	
415BH0401	415-7 D/C	5 ^a		425BH06	#3 Flex-Kleen D/C	5 ^a		451BH09	Spacerite Product D/C	5 ^a	
415BH0402	415-8 D/C	5 ^a		425BH07	425A DPP D/C	5 ^a		451BH010	CX200S Nuisance D/C	5 ^a	
415BH6225	415-9 D/C	5 ^a		425BH08	T-1 Mill D/C	5 ^a		451BH011	Aux. Spray Dryer D/C	10 ^c	
415BH6227	415-20 D/C	5 ^a		425BH1037	Product D/C	5 ^a		451BH012	#4 Bin Vent D/C	5 ^a	
415BH6192	415-11 D/C	5 ^a		426BH3320	#4 Tabular D/C	5 ^a		451BH013	#2 Spray Dryer Nuis.D/C	5 ^a	
415BH6401	415-12 D/C	5 ^a		426BH3317	#3 Tabular D/C	5 ^a		451BH014	#1 Spray Dryer Pro. Collector	5 ^a	
415BH6202	#2 3W1 D/C	5 ^a		426BH5041	Unground Ore D/C	5 ^a		451BH015	Flash Dryer	10 ^c	
415BH6204	#2 3W2 D/C	5 ^a		426BH5015	Ground Ore D/C	5 ^a		451CY01	Alumina Spray Dryer	20 ^b	
415BH6201	#1 3W1 D/C	5 ^a		426BH3311	#1 Tabular D/C	5 ^a		451TD01	#1 Tunnel Dryer	20 ^b	
415BH6203	#1 3W2 D/C	5 ^a		426BH3314	#2 Tabular D/C	5 ^a		451TD02	#2 Tunnel Dryer	20 ^b	
420BH6260	420-4 Flex-Kleen	5 ^a						451TD03	CX200S Pre-Dryer	20 ^b	
								451TD04	CX200S Final Dryer	20 ^b	
				FUGITIVE EMISSIONS:							
COMMENTS:											

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

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

^aThis opacity limit assigned pursuant to §18.501 of Regulation 18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311. (Plantwide Condition 13)

^bThis opacity limit assigned pursuant to §19.503 of Regulation 19 and 40 CFR Part 52, Subpart E. (Plantwide Condition 14)

^cThis opacity limit assigned pursuant to §19.304 of Regulation 19 and 40 CFR Part 60, Subpart UUU. (Specific Condition 8)

APPENDIX B

APPENDIX C

APPENDIX D

Request for PDS Invoice	
Invoice Number <i>(assigned when invoice is printed)</i>	PDS-

AFIN r	63-00010		
Name <i>(for confirmation only)</i>	Alcoa Industrial Chemicals		
Invoice Type (pick one) r	Initial	Mod X	Variance
	Annual	Renewal	Interim Authority
Permit Number r	1527-AOP-R4		
Media Code (A, S, U, W) r	A		
Fee Code or Pmt Type Coder	TV		
Fee Description <i>(for confirmation only)</i>	Title V modification		
Amount Due r <i>(whole dollar amount only)</i>	\$1000		
Printed Comment <i>(600 characters maximum)</i>	No ton per year increase only hourly rate changes. Fee minumum		

<i>Note: The information below is for use by the requesting division; it will not print on the invoice.</i>	
Engineer	Shawn Hutchnings
Paid? (yes/no)	
Check number	
Comments	

r **Required data** (See "g:\Misc\PDS_FeeCodes.wpd" for descriptions and discussions of fee codes)

Request submitted by:	Date:
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Public Notice

Pursuant to the Arkansas Operating Air Permit Program (Regulation #26) Section 602, the Air Division of the Arkansas Department of Environmental Quality gives the following notice:

Alcoa Industrial Chemicals, CSN: 63-0010, located at 4701 Alcoa Road in Bauxite, AR is a manufacturer of various forms of alumina. This permit modification is allowing Alcoa to return to its original feed rate of aluminum fluoride in sources 405EP0133 and 405EP0233. This will increase hourly emissions of hydrogen fluoride. Alcoa requested the same annual limits for these sources. A plantwide condition was inadvertently removed in a previous permit. This condition allowed for testing of some sources every two years. This condition was replaced..

The application has been reviewed by the staff of the Department and has received the Department's tentative approval subject to the terms of this notice.

Citizens wishing to examine the permit application and staff findings and recommendations may do so by contacting Doug Szenher, Information Officer. Citizens desiring technical information concerning the application or permit should contact Shawn Hutchings, Engineer. Both Doug Szenher and Shawn Hutchings can be reached at the Department's central office, 8001 National Drive, Little Rock, Arkansas 72209, telephone: (501) 682-0744.

The draft permit and permit application are available for copying at the above address. A copy of the draft permit has also been placed at the Little Rock Public Library, 100 S. Rock Street, Little Rock, AR, 72201. This information may be reviewed during normal business hours.

Interested or affected persons may also submit written comments or request a hearing on the proposal, or the proposed modification, to the Department at the above address - Attention: Doug Szenher. In order to be considered, the comments must be submitted within thirty (30) days of publication of this notice. Although the Department is not proposing to conduct a public hearing, one will be scheduled if significant comments on the permit provisions are received. If a hearing is scheduled, adequate public notice will be given in the newspaper of largest circulation in the county in which the facility in question is, or will be, located.

The Director shall make a final decision to issue or deny this application or to impose special conditions in accordance with Section 2.1 of the Arkansas Pollution Control and Ecology Commission's Administrative Procedures (Regulation #8) and Regulation #26.

Dated this

Richard A. Weiss
Interim Director