

STATEMENT OF BASIS

for the issuance of Draft Air Permit # 1527-AOP-R3

1. PERMITTING AUTHORITY:

Arkansas Department of Environmental Quality
8001 National Drive
Post Office Box 8913
Little Rock, Arkansas 72219-8913

2. APPLICANT:

Alcoa Industrial Chemicals
4701 Alcoa Road
Bauxite, Arkansas 72011

3. PERMIT WRITER:

Shawn Hutchings

4. PROCESS DESCRIPTION AND SIC CODE:

SIC Description: Industrial Inorganic Chemicals
SIC Code: 2819

5. SUBMITTALS: November 16, 2000

6. REVIEWER'S NOTES:

Alcoa Industrial Chemicals (Alcoa) is a manufacturer of various forms of alumina. This modification adds 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. Alcoa has removed the equipment which allows them to use HCl leaching.

7. COMPLIANCE STATUS: The following summarizes the current compliance status of the facility including active/pending enforcement actions and recent compliance activities and issues

There are no current enforcement actions against the facility.

8. APPLICABLE REGULATIONS:

A. Applicability

Did the facility undergo PSD review in this permit (i.e., BACT, Modeling, et cetera) (Y/N) n

Has this facility underwent PSD review in the past (Y/N) n Permit # N/A

Is this facility categorized as a major source for PSD? (Y/N) Y

\$ 100 tpy and on the list of 28 (100 tpy)? (Y/N) y

\$ 250 tpy all other (Y/N) y

B. PSD Netting

Was netting performed to avoid PSD review in this permit? (Y/N) N

C. Source and Pollutant Specific Regulatory Applicability

Source	Pollutant	Regulation [NSPS, NESHAP (Part 61 & Part 63), or PSD <u>only</u>]
046BL01 046BL02 046BL03 046BL04 046BL05	fuel record keeping only	NSPS Part Dc
451BH011 451BH015	PM, Opacity	NSPS Subpart UUU

9. EMISSION CHANGES:

The following table summarizes plantwide emission changes associated with this permitting action.

Plantwide Permitted Emissions (ton/yr)			
Pollutant	Air Permit 1527-AOP-R2	Air Permit 1527-AOP-R3	Change
PM/PM ₁₀	693.5	706.5	13
SO ₂	42.1	42.2	0.1

Plantwide Permitted Emissions (ton/yr)			
Pollutant	Air Permit 1527-AOP-R2	Air Permit 1527-AOP-R3	Change
VOC	51.3	51.7	0.4
CO	102.5	117.0	14.5
NO _x	482.7	492.8	10.1
HCl	459.6	459.6	0
HF	89.8	89.8	0

10. MODELING:

A. Criteria Pollutants

Examination of the source type, location, plot plan, land use, emission parameters, and other available information indicate that modeling is not warranted at this time.

B. Non-Criteria Pollutants

Non-criteria pollutant emission rates have not changed from the previous permit. Modeling is not warranted at this time.

11. CALCULATIONS:

SN	Emission Factor Source (AP-42, Testing, etc)	Emission Factor and units (lbs/ton, lbs/hr, etc)	Control Equipment Type (if any)	Control Equipme nt Efficienc y	Comments (Emission factor controlled/uncont rolled, etc)
451BH015	AP-42 for natural gas combustion and dryer emissions	varied	baghouse	99% PM	
All others see previous SOBs					

12. TESTING REQUIREMENTS:

This permit requires stack testing of the following sources.

SN(s)	Pollutant	Test Method	Test Interval	Justification For Test Requirement
451BH015	PM, Opacity	5 and 9	initial only	NSPS Subpart UUU requirement.
All others see previous SOBs				

13. MONITORING OR CEMS

The following are parameters that must be monitored with CEMs or other monitoring equipment (temperature, pressure differential, etc), frequency of recording and whether records are needed to be included in any annual, semiannual or other reports.

No monitoring requirements or CEMS were added to the permit in this modification.

14. RECORD KEEPING REQUIREMENTS

The following are items (such as throughput, fuel usage, VOC content of coating, etc) that must be tracked and recorded, frequency of recording and whether records are needed to be included in any annual, semiannual or other reports.

No additional record keeping was added to this permit.

15. OPACITY

SN	Opacity %	Justification (NSPS limit, Dept. Guidance, etc)	Compliance Mechanism (daily observation, weekly, control equipment operation, etc)
451BH015	10	NSPS limit	weekly observation
All others see previous permit			

16. DELETED CONDITIONS:

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The following Specific Conditions were included in the previous permit, but deleted for the current permitting action.

No conditions were deleted from the previous permits.

17. VOIDED, SUPERSEDED OR SUBSUMED PERMITS

List all active permits for this facility which are voided/superseded/subsumed by issuance of this permit.

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18. CONCURRENCE BY:

The following supervisor concurs with the permitting decision:

Thomas Rheaume, P.E.