

## STATEMENT OF BASIS

For the issuance of Draft Air Permit # 1672-AR-6 AFIN: 63-00164

1. PERMITTING AUTHORITY:

Arkansas Department of Environmental Quality  
5301 Northshore Drive  
North Little Rock, Arkansas 72118-5317

2. APPLICANT:

Alumina Ceramics, Inc. d/b/a CoorsTek  
3315 Boone Road  
Benton, Arkansas 72015

3. PERMIT WRITER:

Shawn Hutchings

4. NAICS DESCRIPTION AND CODE:

NAICS Description: Pottery, Ceramics, and Plumbing Fixture Manufacturing  
NAICS Code: 327110

5. SUBMITTALS:

Date of Application	Type of Application (New, Renewal, Modification, Deminimis/Minor Mod, or Administrative Amendment)	Short Description of Any Changes That Would Be Considered New or Modified Emissions
9/18/2014	Deminimis	New Furnace installed.
10/16/2014	Modification	None, Updated emission factors
3/25/2015	AA	None, Insignificant activity

6. REVIEWER'S NOTES:

Alumina Ceramics, Inc., CoorsTek Arkansas Operations owns and operates a high technology custom equipment manufacturing facility located at 3315 Boone Road, Benton, AR.

This modification allows a 15<sup>th</sup> vacuum furnace to SN-08 to be installed. The 15<sup>th</sup> furnace was previously permitted but never installed. No changes to the permit were necessary to incorporate this change. And updating emission factors for SN-03, 04, 05, 06, 07, and 08 based on testing.

7. COMPLIANCE STATUS:

The following summarizes the current compliance of the facility including active/pending enforcement actions and recent compliance activities and issues.

There are no known enforcement issues with the facility.

8. PSD APPLICABILITY:

a) Did the facility undergo PSD review in this permit (i.e., BACT, Modeling, etc.)? N

b) Is the facility categorized as a major source for PSD? N

- *Single pollutant  $\geq 100$  tpy and on the list of 28 or single pollutant  $\geq 250$  tpy and not on list*

9. SOURCE AND POLLUTANT SPECIFIC REGULATORY APPLICABILITY:

Source	Pollutant	Regulation (NSPS, NESHAP or PSD)
None		

10. EMISSION CHANGES AND FEE CALCULATION:

See emission change and fee calculation spreadsheet in Appendix A.

11. AMBIENT AIR EVALUATIONS:

a) Reserved.

b) Non-Criteria Pollutants:

Based on Department procedures for review of non-criteria pollutants, emissions of non-criteria pollutants are below thresholds of concern.

12. CALCULATIONS:

SN	Emission Factor Source (AP-42, testing, etc.)	Emission Factor (lb/ton, lb/hr, etc.)	Control Equipment	Control Equipment Efficiency	Comments
03 through 08	Testing	Varied per source	None	N/A	Highest tested rates were applied to a theoretical maximum throughput.

13. TESTING REQUIREMENTS:

The permit requires testing of the following sources.

SN	Pollutants	Test Method	Test Interval	Justification
This permit requires no testing				

14. MONITORING OR CEMS:

The permittee must monitor the following parameters with CEMS or other monitoring equipment (temperature, pressure differential, etc.)

SN	Parameter or Pollutant to be Monitored	Method (CEM, Pressure Gauge, etc.)	Frequency	Report (Y/N)
This permit requires no monitoring.				

15. RECORDKEEPING REQUIREMENTS:

The following are items (such as throughput, fuel usage, VOC content, etc.) that must be tracked and recorded.

SN	Recorded Item	Permit Limit	Frequency	Report (Y/N)
08	Throughput and content limits	Table SC 07	Monthly	N

16. OPACITY:

SN	Opacity	Justification for limit	Compliance Mechanism
01, 03, 04, 05, 06, 07, 08	5%	Department Guidance	Inspector to Verify upon inspection and

SN	Opacity	Justification for limit	Compliance Mechanism
			proper equipment operation

17. DELETED CONDITIONS:

Former SC	Justification for removal
8 and 9	Source moved to insignificant activities.

18. GROUP A INSIGNIFICANT ACTIVITIES:

Source Name	Group A Category	Emissions (tpy)						
		PM/PM <sub>10</sub>	SO <sub>2</sub>	VOC	CO	NO <sub>x</sub>	HAPs	
							Single	Total
Alumina Lap and Polish (inorganic water-based slurry, wet process, no emissions)	A-13	0						
Alumina Shake and Dye (liquid water-based dye, Magnaflux SKL-4C, no emissions)	A-13	0						
Alumina Grinding (water-based wet process, no emissions)	A-13	0						
Silicon Lap and Polish (inorganic water-based slurry, wet process, no emissions)	A-13	0						
Solvent Cleaner/Degreaser (All-Purpose Simple Green Cleaner (ready-to-use) water-based wet process, no emissions)	A-13	0						

emissions, <1.2% VOC, 4 drums/yr)								
Foam for packing part in nitrite area (two-part spray, Instapak "A" and Gflex "B", non-VOC, no emissions)	A-13	0						
Baghouses (used for intermittent housekeeping <i>only</i> , not control equipment) (formerly SN-11, 12, 13, 14, 15, 16, 17 and 19)	A-13	0.1						
Alumina Was Line	A-13		0.43					
Test Kiln, electric, not in use	A-5	0						

19. DELETED CONDITIONS:

Former SC	Justification for removal
No conditions were deleted.	

20. GROUP A INSIGNIFICANT ACTIVITIES:

Source Name	Group A Category	Emissions (tpy)						
		PM/PM <sub>10</sub>	SO <sub>2</sub>	VOC	CO	NO <sub>x</sub>	HAPs	
							Single	Total
No changes were made to the insignificant activities								

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21. VOIDED, SUPERSEDED, OR SUBSUMED PERMITS:

List all active permits voided/superseded/subsumed by the issuance of this permit.

Permit #
1672-AR-5

APPENDIX A – EMISSION CHANGES AND FEE CALCULATION





**\*\*DO NOT PASTE INTO SOB\*\*    \*\*Use Ctrl + e to Print to Last Pollutant\*\***

**Fee Calculation for Minor Source**

Revised 08-25-14

Alumina Ceramics, Inc.  
 (CoorsTek Arkansas Operations, Boone Road Facility)  
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			<b>Old Permit</b>	<b>New Permit</b>
\$/ton factor	23.89	Permit Predominant Air Contaminant	46.5	83.5
Minimum Fee \$	400	Net Predominant Air Contaminant Increase	37	
Minimum Initial Fee \$	500			
Check if Administrative Amendment	<input type="checkbox"/>	Permit Fee \$	<u>883.93</u>	
		Annual Chargeable Emissions (tpy)	<u>83.5</u>	

Pollutant (tpy)	Old Permit	New Permit	Change
PM	4.7	0.7	-4
PM <sub>10</sub>	4.7	4.7	0
SO <sub>2</sub>	8.5	18.3	9.8
VOC	46.5	83.5	37
CO	22	70.5	48.5
NO <sub>x</sub>	12.4	8.7	-3.7
		0	0
Ammonia	0.01	0.01	0
HAPs	0	14.2	14.2
	0	0	0

