

STATEMENT OF BASIS

For the issuance of Draft Air Permit # 1672-AR-8 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:

Franck Houenou

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, De Minimis/Minor Mod, or Administrative Amendment)	Short Description of Any Changes That Would Be Considered New or Modified Emissions
11/5/2015	De Minimis	Installation of a sixteenth vacuum furnace

6. REVIEWER'S NOTES:

This permit is for a De Minimis modification to air permit 1672-AR-8. Due to production demands and changes, the facility would like to install a sixteenth vacuum furnace at SN-08. This modification will not result in a change in emissions since the annual powder usage limit will not be increased.

Also, the facility has added a small, laboratory-scale vacuum furnace (AMP test Furnace) that is being used for developing and testing materials, and would like to add it as an insignificant source according to group A-13.

7. COMPLIANCE STATUS:

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

Currently, there are no active/pending enforcement actions or recent compliance issues.

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 ≥ 100 tpy and on the list of 28 or single pollutant ≥ 250 tpy and not on list*

If yes, explain why this permit modification is not PSD.

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.

c) H₂S Modeling:

A.C.A. §8-3-103 requires hydrogen sulfide emissions to meet specific ambient standards. Many sources are exempt from this regulation, refer to the Arkansas Code for details.

Is the facility exempt from the H₂S Standards N

If exempt, explain: No H₂S emission

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

17. DELETED CONDITIONS:

Former SC	Justification for removal
	No Conditions were deleted

18. GROUP A INSIGNIFICANT ACTIVITIES:

Source Name	Group A Category	Emissions (tpy)						
		PM/PM ₁₀	SO ₂	VOC	CO	NO _x	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, <1.2% VOC, 4 drums/yr)	A-13	0						
Foam for packing part in nitrite area (two-part spray, Instapak "A" and	A-13	0						

Gflex "B", non-VOC, no emissions)								
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					
AMP test furnace	A-13	0.01	0.27	1.48	1.50	0.01	0.25	0.31
Test Kiln, electric, not in use	A-5	0						

19. VOIDED, SUPERSEDED, OR SUBSUMED PERMITS:

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

Permit #
1672-AR-7

APPENDIX A – EMISSION CHANGES AND FEE CALCULATION

Fee Calculation for Minor Source

Revised 08-26-15

Facility Name: Alumina Ceramics, Inc
 Permit Number: 1672-AR-7
 AFIN: 63-00164

			Old Permit	New Permit
\$/ton factor	23.93	Permit Predominant Air Contaminant	64.1	64.1
Minimum Fee \$	400	Net Predominant Air Contaminant Increase	0	
Minimum Initial Fee \$	500			
Check if Administrative Amendment	<input type="checkbox"/>	Permit Fee \$	400	
		Annual Chargeable Emissions (tpy)	64.1	

Pollutant (tpy)	Old Permit	New Permit	Change
PM	0.6	0.6	0
PM ₁₀	0.6	0.6	0
SO ₂	12.8	12.8	0
VOC	64.1	64.1	0
CO	58.6	58.6	0
NO _x	0.7	0.7	0