STATEMENT OF BASIS

For the issuance of Draft Air Permit # 1672-AR-9 AFIN: 63-00164

1. PERMITTING AUTHORITY:

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

2. APPLICANT:

CoorsTek Benton 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. ALL SUBMITTALS:

Date of Application	Type of Application	Short Description of Any Changes
	(New, Renewal, Modification,	That Would Be Considered New or
	Deminimis/Minor Mod, or	Modified Emissions
	Administrative Amendment)	
12/12/2016	Modification	None. Emission factor change only.

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. CoorsTek is modifying emission rates on the Tunnel Kilns SN-04, 05, 06, 07, and 08 based on recent testing. Permitted emission rates increased 0.7 tpy of particulate, 0.2 tpy of VOC and 20.7 tpy of NOx. All other pollutants emission rates were reduced.

7. COMPLIANCE STATUS:

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

Describe compliance status of the facility here. Include any current or pending CAO's or if this permit addresses the requirements of a CAO or other enforcement issues.

Facility had contacted compliance section regarding possibility of emissions being higher on four sources than as permitted. Facility tested those sources for all criteria pollutants. No action was taken by compliance section.

8. PSD APPLICABILITY:

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

Ν

- b) Is the facility categorized as a major source for PSD?
- Single pollutant \geq 100 tpy and on the list of 28 or single pollutant \geq 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.

12. CALCULATIONS:

SN	Emission Factor Source (AP-42, testing, etc.)	Emission Factor (lb/ton, lb/hr, etc.)	Control Equipment	Control Equipment Efficiency	Comments
04, 05, 06, 07	Testing	Varied	None	none	

Permit #: 1672-AR-9 AFIN: 63-00164 Page 3 of 5

13. TESTING REQUIREMENTS:

The 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)
Non	e			

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)
03	throughput	1,200,000 lbs	Monthly	Ν
04, 05	throughput	771 lbs	Monthly	Ν
06, 07	throughput	263 tons	Monthly	Ν
08	throughput	455,000 lbs	Monthly	Ν

16. OPACITY:

SN	Opacity	Justification for limit	Compliance Mechanism
03, 04, 05, 06, 07, 08	5%	Department Guidance	Inspector to verify upon inspection and natural gas combustion.

17. DELETED CONDITIONS:

Former SC	Justification for removal	
No conditions were deleted.		

Permit #: 1672-AR-9 AFIN: 63-00164 Page 4 of 5

18. GROUP A INSIGNIFICANT ACTIVITIES:

	Group A	Emissions (tpy)						
Source Name	Category	PM/PM ₁₀	SO_2	VOC	СО	NO _x	HA	
		111/11/10	502	100	00	ΠΟ _λ	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 Gflex "B", non- VOC, no emissions)	A-13	0						

Permit #: 1672-AR-9 AFIN: 63-00164 Page 5 of 5

	Group A	Emissions (tpy)						
Source Name	Category	PM/PM ₁₀	SO ₂	VOC	СО	NO _x	HA	Ps
		$\mathbf{F}\mathbf{W}\mathbf{I}/\mathbf{F}\mathbf{W}\mathbf{I}_{10}$	50_2	VUC	CO	NO _x	Single	Total
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. VOIDED, SUPERSEDED, OR SUBSUMED PERMITS:

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

Permit #	
1672-AR-8	

APPENDIX A – EMISSION CHANGES AND FEE CALCULATION

CoorsTek Benton Permit #: 1672-AR-9 AFIN: 63-00164

\$/ton factor	23.93
Minimum Fee \$	400
Minimum Initial Fee \$	500

	Old Permit	New Permit
Permit Predominant Air Contaminant	64.1	64.3
Net Predominant Air Contaminant Increase	0.2	
Permit Fee \$	400	

Check if Administrative Amendment

Permit Fee \$400Annual Chargeable Emissions (tpy)64.3

Pollutant (tpy)	Old Permit	New Permit	Change
РМ	0.6	1.3	0.7
PM_{10}	0.6	1.2	0.6
PM _{2.5}	0	0	0
SO ₂	12.8	10.7	-2.1
VOC	64.1	64.3	0.2
СО	58.6	58.2	-0.4
NO _X	0.7	21.4	20.7
HAPs	14.4	14.2	-0.2
	0	0	0
	0	0	0
	0	0	0
	0	0	0
	0	0	0
	0	0	0
	0	0	0
	0	0	0
	0	0	0
	0	0	0
	0	0	0
	0	0	0
	0	0	0
	0	0	0
	0	0	0
	0	0 0	0
	0	0	0 0
	0	0	0
	0	0	0
	0	0	0
	0	0	0
	0	0	0
	0	0	0
	0	0	0
	0	0	0
	0	0	0
	0	0	0
	0	0	0
	0	0	0
	0	0	0
	0	0	0
	0	0	0
	0	0	0

Pollutant (tpy)	Old Permit	New Permit	Change
	0	0	0
	0	0	0
	0	0	0
	0	0	0
	0	0	0
	0	0	0
	0	0	0
	0	0	0
	0	0	0
	0	0	0
	0	0	0
	0	0	0
	0	0	0
	0	0	0
	0	0	0
	0	0	0
	0	0	0
	0	0	0
	0	0	0
	0	0	0
	0	0	0
	0	0	0
	0	0	0
	0	0	0
	0	0	0
	0	0	0