STATEMENT OF BASIS

For the issuance of Draft Air Permit # 1672-AR-11 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:

The following is a list of ALL permit applications included in this permit revision.

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
12/3/2018	Deminimis	7 carbide vacuum furnaces

6. **REVIEWER'S NOTES**:

Coorstek, Inc. owns and operates a high technology custom ceramic product manufacturing facility located at 3315 Boone Road, Benton, AR. This permit modification is a deminimis change to add 7 more Carbide Electric Furnaces to SN-08 for a total of 23. Annual throughput is not changing there is no changed in annual emission rates.

7. COMPLIANCE STATUS:

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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 actions against the facility.

8. PSD/GHG APPLICABILITY:

a) Did the facility undergo PSD review in this permit (i.e., BACT, Modeling, etc.)? N If yes, were GHG emission increases significant? 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

If yes for 8(b), explain why this permit modification is not PSD.

9. SOURCE AND POLLUTANT SPECIFIC REGULATORY APPLICABILITY:

Source	Pollutant	Regulation (NSPS, NESHAP or PSD)
	none	

10. PERMIT SHIELD – TITLE V PERMITS ONLY:

Did the facility request a permit shield in this application? N (Note - permit shields are not allowed to be added, but existing ones can remain, for minor modification applications or any Regulation 18 requirement.)

11. EMISSION CHANGES AND FEE CALCULATION:

See emission change and fee calculation spreadsheet in Appendix A.

12. AMBIENT AIR EVALUATIONS:

The following are results for ambient air evaluations or modeling.

a) NAAQS

A NAAQS evaluation is not required under the Arkansas State Implementation Plan, National Ambient Air Quality Standards, Infrastructure SIPs and NAAQS SIP per Ark. Code Ann. § 8-4-318, dated March 2017 and the ADEQ Air Permit Screening Modeling Instructions.

b) Non-Criteria Pollutants:

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

c) H₂S Modeling:

No H₂S permitted

13. CALCULATIONS:

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

14. TESTING REQUIREMENTS:

The permit requires testing of the following sources.

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

15. MONITORING OR CEMS:

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

This permit requires no monitoring or CEMs.

16. 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 tons	Monthly	N
08	throughput	455,000 lbs	Monthly	N

17. OPACITY:

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

18. DELETED CONDITIONS:

Former SC	Justification for removal
	No Conditions were deleted.

19. GROUP A INSIGNIFICANT ACTIVITIES:

The following is a list of Insignificant Activities including revisions by this permit.

	Group A			Emissie	ons (tpy))	-	
Source Name	Category	PM/PM ₁₀	SO_2	VOC	CO	NO _x	HA	
	Cutogory	1 101/1 101/0	502	100	0	ΠΟ _X	Single	Total
Alumina Lap and								
Polish (inorganic								
water-based	A-13	0						
slurry, wet	A-15	0						
process, no								
emissions)								
Alumina Shake								
and Dye (liquid								
water-based dye,	A-13	0						
Magnaflux SKL-								
4C, no emissions)								
Alumina Grinding								
(water-based wet	A-13	0						
process, no	11 10	0						
emissions)								
Silicon Lap and								
Polish (inorganic								
water-based	A-13	0						
slurry, wet	11 10	0						
process, no								
emissions)								
Solvent								
Cleaner/Degreaser	A-13	0						
(All-Purpose		Ŭ						
Simple Green								

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Cleaner (ready-to- use) water-based wet process, no 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				

20. VOIDED, SUPERSEDED, OR SUBSUMED PERMITS:

The following is a list of all active permits voided/superseded/subsumed by the issuance of this permit.

Permit #	
1672-AR-10	

APPENDIX A – EMISSION CHANGES AND FEE CALCULATION

CoorsTek Benton Permit #: 1672-AR-10 AFIN: 63-00164

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

	Old Permit	New Permit
Permit Predominant Air Contaminant	64.2	64.2
Net Predominant Air Contaminant Increase	0	
Permit Fee \$	400	

Check if Administrative Amendment

Annual Chargeable Emissions (tpy) 64.2

Pollutant (tpy)	Old Permit	New Permit	Change
PM	1	1	0
PM_{10}	0.9	0.9	0
PM _{2.5}	0	0	0
SO_2	10.6	10.6	0
VOC	64.2	64.2	0
СО	58.1	58.1	0
NO _X	19.9	19.9	0
HAPs	14.1	14.1	0
	0	0	0
	0	0	0
	0	0	0
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Revised 03-11-16

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