## STATEMENT OF BASIS

For the issuance of Draft Air Permit # 1672-AR-13 AFIN: 63-00164

### 1. PERMITTING AUTHORITY:

Division 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 ManufacturingNAICS 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
5/5/2022	Deminimis	Added Sources as part of SN-10

#### 6. **REVIEWER'S NOTES:**

Coorstek, Inc. owns and operates a high technology custom ceramic product manufacturing facility located at 3315 Boone Road, Benton, AR. With this deminimis change the facility is adding 3 vacuum dryers to the facility as part of SN-10. Permitted emission rates increased 8 tpy of VOC, 0.3 tpy of HAPs and 32.4 tpy of Acetone.

## 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. UNCONSTRUCTED SOURCES:

Unconstructed Source	Permit Approval Date	Extension Requested Date	Extension Approval Date	If Greater than 18 Months without Approval, List Reason for Continued Inclusion in Permit
SN-10	SN-10		-	Any unconstructed sources were reapplied for in this application.

## 11. 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 Rule 18 requirement.)

If yes, are applicable requirements included and specifically identified in the permit? N If not, explain why.

For any requested inapplicable regulation in the permit shield, explain the reason why it is not applicable in the table below.

Source	Inapplicable Regulation	Reason
	N/A	

12. COMPLIANCE ASSURANCE MONITORING (CAM) – TITLE V PERMITS ONLY:

List sources potentially subject to CAM because they use a control device to achieve compliance and have pre-control emissions of at least 100 percent of the major source level. List the pollutant of concern and a brief summary of the CAM plan (temperature monitoring, CEMs, opacity monitoring, etc.) and frequency requirements of § 64.

Source	Pollutant Controlled	Cite Exemption or CAM Plan Monitoring and Frequency		
N/A				

## 13. EMISSION CHANGES AND FEE CALCULATION:

See emission change and fee calculation spreadsheet in Appendix A.

#### 14. 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 DEQ Air Permit Screening Modeling Instructions.

b) Non-Criteria Pollutants:

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

c) H<sub>2</sub>S 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  $H_2S$  Standards If exempt, explain: No permitted  $H_2S$  Ν

## 15. CALCULATIONS:

SN	Emission Factor Source (AP-42, testing, etc.)	Emission Factor (lb/ton, lb/hr, etc.)	Control Equipment	Control Equipment Efficiency	Comments
04					
and	Testing	Varied			
05					
08	Testing	Varied	Afterburner	95	
09	Testing	Varied	Afterburner	95	
10	Testing and Manufacturers Specs	Varied	Condenser for Solvent Recovery Scrubber for Odor Control	Not Used	

## 16. TESTING REQUIREMENTS:

The permit requires testing of the following sources.

SN	Pollutants Test Method		Test Interval	Justification
		None		

# 17. 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)
08A, 08B, 09	Temperature	Temperature gauge	Daily	Ν

## 18. 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	2,400,000 lbs	Monthly	Ν
08A and B	Throughput	1,200,000 lbs	Monthly	Ν
04, 05	Throughput	771 tons	Monthly	Ν

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## 19. OPACITY:

SN	Opacity	Justification for limit	Compliance Mechanism
03, 04, 05, 08A and B, 09	5%	Reg.18.501	Natural gas combustion and inspector to verify on inspection

## 20. DELETED CONDITIONS:

Former SC	Justification for removal
	None

# 21. GROUP A INSIGNIFICANT ACTIVITIES:

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

	Group A			Emissi	ons (tpy)	)		
Source Name	Group A Category	$PM/PM_{10}$	$SO_2$	VOC	СО	NO <sub>x</sub>	HA	Ps
	Category	1 101/1 101/0	$50_2$	100	CO	NO <sub>X</sub>	Single	Total
Alumina Lap and Polish (inorganic water-based slurry, wet process, no	A-13	0						
emissions)								
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	A-13	0						

				1	1		1	
(All-Purpose								
Simple Green								
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	A-13	0						
Gflex "B", non-								
VOC, no								
emissions)								
Baghouses (used								
for intermittent								
housekeeping								
only, not control	A-13	0.1						
equipment)	A-15	0.1						
(formerly SN-11,								
12, 13, 14, 15, 16,								
17 and 19)								
Baghouse for								
intermittent dust	A-13	0.08						
housekeeping	A-13	0.08						
(ball mills)								
AMP Test	A-13							
Furnace	A-13							
Alumina Wash	A 12			0.42				
Line	A-13			0.43				
Clean Solvent	A 10			0.05				
Storage Tank	A-13			0.05				
Waste Solvent	A 10			0.05				
Storage Tank	A-13			0.05				
Test Kiln, electric,	A 7	0						
not in use	A-5	0						
L			1	L	l	l	L	L

# 22. 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-12	

APPENDIX A – EMISSION CHANGES AND FEE CALCULATION

# CoorsTek Benton Permit #: 1672-AR-13 AFIN: 63-00164

\$/ton factor	25.13
Minimum Fee \$	400
Minimum Initial Fee \$	500

	Old Permit	New Permit
Permit Predominant Air Contaminant	30.9	37.1
Net Predominant Air Contaminant Increase	6.2	
Permit Fee \$	400	
Ammal Channachla Emissions (tos)	27.1	

Check if Administrative Amendment

Net i redominant / in Contaminant increase	0.2
Permit Fee \$ Annual Chargeable Emissions (tpy)	400 37.1

Pollutant (tpy)	Old Permit	New Permit	Change
PM	3.4	3.4	0
$PM_{10}$	1.6	1.6	0
PM <sub>2.5</sub>			0
SO <sub>2</sub>	30.9	30.9	0
VOC	27.3	35.3	8
СО	18.7	18.7	0
NO <sub>X</sub>	27.4	27.4	0
Acetone	4.7	37.1	32.4
HAPs	7.4	7.7	0.3
	0	0	0
	0	0	0
	0	0	0
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Pollutant (tpy)	Old Permit	New Permit	Change
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