

STATEMENT OF BASIS

For the issuance of Draft Air Permit # 1672-AR-4 AFIN: 63-00164

1. PERMITTING AUTHORITY:

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

2. APPLICANT:

CoorsTek Arkansas Operations - Boone Road Facility
3315 Boone Road
Benton, Arkansas 72015

3. PERMIT WRITER:

Patty Campbell, P.E.

4. PROCESS DESCRIPTION AND NAICS CODE:

NAICS Description: Brick and structural clay tile, structural product, pottery product, nonclay refractories.

NAICS Code: 327121, 32331, 327123, 327112, 327113, 327125

5. SUBMITTALS:

June 4, 2008

6. REVIEWER'S NOTES:

CoorsTek Arkansas Operations (CoorsTek – Boone Road) owns and operates a high technology custom equipment manufacturing facility located at 3315 Boone Road, Benton, Saline County, AR 72015. This permitting action is necessary to:

1. Remove four baghouses (SN-10, 17, 18, and 19) and one periodic kiln (SN-20);
2. Identify six baghouses (SN-11, 12, 13, 14, 15, and 16) as Insignificant Activities;
3. Add natural gas emissions for Spray Dryer (SN-03), rated 3.5 MMBtu/hr;
4. Update the ammonium hydroxide (NH₃OH) evaporative emission factor to 0.1%;
5. Reduce the throughput of silicon carbide (SC30) formulated products, with a maximum 7% organic binder, cured in the Electric Furnace Cure Ovens (SN-08) from 625,000 to 300,000 pounds per 12-month period;
6. Include the throughput of green boron carbide (B4C) formulated products, with a maximum 3% organic binder, cured in the Electric Furnace Cure Ovens (SN-08) of 300,000 pounds per 12-month period;
7. Update reportable HAPs, Ethylene glycol monobutyl ether (EGBE) has been delisted as a HAP; and
8. Update the soap VOC emission factor for the Alumina Wash Line (SN-09).

Total annual permitted emission rate changes with this permitting action are: -1.1 tpy PM/PM₁₀, 0.2 tpy SO₂, -2.8 tpy VOC, -2.0 tpy CO, 0.5 tpy NO_x, -0.39 tpy Ammonia, and -1.0 tpy EGBE.

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 pending or active legal actions concerning air permitting.

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

9. SOURCE AND POLLUTANT SPECIFIC REGULATORY APPLICABILITY:

None.

10. EMISSION CHANGES AND FEE CALCULATION:

See emission change and fee calculation spreadsheet in Appendix A.

11. MODELING:

Criteria Pollutants

Examination of the source type, location, plot plan, land use, emission parameters, and other available information indicate that modeling is not warranted at this time.

Non-Criteria Pollutants:

1st Tier Screening (PAER)

Estimated hourly emissions from the following sources were compared to the Presumptively Acceptable Emission Rate (PAER) for each compound. The Department has deemed the PAER to be the product, in lb/hr, of 0.11 and the Threshold Limit Value (mg/m³), as listed by the American Conference of Governmental Industrial Hygienists (ACGIH).

Pollutant	TLV (mg/m ³)	PAER (lb/hr) = 0.11 × TLV	Proposed lb/hr	Pass?
Ammonia	17.41	1.91	0.0047	Yes

12. CALCULATIONS:

SN	Emission Factor Source (AP-42, testing, etc.)	Emission Factor (lb/ton, lb/hr, etc.)	Control Equipment	Control Equipment Efficiency	Comments
01	Stack test, dated 10/14-18/1996 at CO facility	$\frac{\text{lb}}{\text{MMscf}}$ 18 PM/PM ₁₀ 31 SO ₂ 263 VOC 735 CO 232 NO _x	None	NA	Periodic Kiln

SN	Emission Factor Source (AP-42, testing, etc.)	Emission Factor (lb/ton, lb/hr, etc.)	Control Equipment	Control Equipment Efficiency	Comments
03	AP-42 Table 1.4-1 1.4-2	lb/MMscf 7.6 PM/PM ₁₀ 0.6 SO ₂ 5.5 VOC 84 CO 100 NO _x 0.1% ammonia evaporative emission factor	None	NA	natural gas and trace amounts of ammonia evaporation
04, 05, 06, & 07	Stack test	lb/MMscf 79 PM/PM ₁₀ 148 SO ₂ 370 VOC 239 CO 152 NO _x	None	NA	Continuous Kilns
08	Mass Balance	Formulas & %s vary	None	NA	8 Electric Tunnel Kilns, no fuel emissions
09	Mass Balance & MSDS	5% VOC	None	NA	Soap

13. TESTING REQUIREMENTS:

None.

14. MONITORING OR CEMS:

None.

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 Pounds/consecutive 12-month period	Frequency	Report (Y/N)
08	Silicon Carbide SC2 (Aquadag)	120,000	Monthly	N
08	Silicon Carbide SC30	300,000	Monthly	N
08	Boron carbide	300,000	Monthly	N

Permit #: 1672-AR-4

AFIN: 63-00164

Page 5 of 5

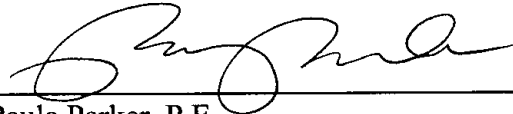
19. VOIDED, SUPERSEDED, OR SUBSUMED PERMITS:

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

Permit #
1672-AR-3

20. CONCURRENCE BY:

The following supervisor concurs with the permitting decision.



Paula Parker, P.E.

APPENDIX A – EMISSION CHANGES AND FEE CALCULATION

Fee Calculation for Minor Source

Facility Name: Coors Inc Arkansas
 Operation: Blast Road Facility
 Permit Number: 16792AR-4
 ARIN: 63-00164

\$/ton factor 22.07
 Minimum Fee \$ 400
 Minimum Initial Fee \$ 500

Check if Administrative Amendment

Permit Predominant Air Contaminant
 Net Chargeable Emission Increase
 Permit Modification Fee \$
 Initial Permit Fee \$
 Annual TPY Chargeable Emissions

Old Permit	New Permit
400	
0	
	42.7

Pollutant (tpy)	Old Permit	New Permit	Change	
PM	5.7	4.6	-1.1	
PM ₁₀	5.7	4.6	-1.1	
SO ₂	8.2	8.4	0.2	
VOC	45.5	42.7	-2.8	
CO	23.8	21.8	-2.0	
NO _x	11.7	12.2	0.5	
Ammonia	0.40	0.01	-0.39	
EGBE (delisted)	1.0	0.0	-1.0	
	0	0	0	
pc	0	0	0	
9/25/2008	0	0	0	

