

STATEMENT OF BASIS

for the issuance of Draft Air Permit # 401-AR-13

1. PERMITTING AUTHORITY:

Arkansas Department of Environmental Quality
8001 National Drive
Post Office Box 8913
Little Rock, Arkansas 72219-8913

2. APPLICANT:

Epoxy Products
500 East 16th Street
Mountain Home, Arkansas 72653

3. PERMIT WRITER:

Siew Low

4. PROCESS DESCRIPTION AND NAICS CODE:

NAICS Description: Laboratory apparatus and furniture manufacturing
NAICS Code: 3339111

5. SUBMITTALS: June 24, 2003, July 11, 2003, and July 30, 2003.

6. REVIEWER'S NOTES: Epoxy Products operates a facility which manufactures laboratory counter tops in Mountain Home, Arkansas. This de minimis modification to permit #401-AR-13 authorizes the installation and operation of a new Thermal Curing Unit (SN-29). The new Thermal Curing Unit utilizes a Mobil-Therm oil electric heating system, and is positioned to use the existing permitted vent hoods SN-05 and SN-07. No emissions increase has been requested by the permittee.

7. COMPLIANCE STATUS: There are no compliance issues pending for this facility.

8. APPLICABLE REGULATIONS:

A. Applicability

Did the facility undergo PSD review in this permit (i.e., BACT, Modeling, et cetera) (Y/N) N

Has this facility underwent PSD review in the past (Y/N) N Permit # N/A

Is this facility categorized as a major source for PSD? (Y/N) N

\$ 100 tpy and on the list of 28 (100 tpy)? (Y/N) N

\$ 250 tpy all other (Y/N) N

9. EMISSION CHANGES:

The following table summarizes plantwide emission changes associated with this permitting action.

Plantwide Permitted Emissions (ton/yr)			
Pollutant	Air Permit 401-AR-12	Air Permit 401-AR-13	Change
PM/PM ₁₀	31.8	31.8	0
SO ₂	2.5	2.5	0
VOC	65.0	65.0	0
CO	4.3	4.3	0
NO _x	15.9	15.9	0
Phthalic Anhydride	7.9	7.9	0
Toluene	3.5	3.5	0
Xylene	3.9	3.9	0
Total HAP	15.3	15.3	0

10. MODELING:

A. 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.

B. 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 deemed 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/m³)	PAER (lb/hr) = 0.11*TLV	Proposed lb/hr	Pass?
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Pollutant	TLV (mg/m ³)	PAER (lb/hr) = 0.11*TLV	Proposed lb/hr	Pass?
Phthalic Anhydride	6.057	0.667	2.4	No
Toluene	188	20.68	3.5	Yes
Xylene	434	47.7	1.3	Yes

2nd Tier Screening (PAIL)

SCREEN3 air dispersion modeling was performed on the estimated hourly emissions from the following sources, in order to predict ambient concentrations beyond the property boundary. The Presumptively Acceptable Impact Level (PAIL) for each compound was deemed by the Department to be one one-hundredth of the Threshold Limit Value, as listed by the ACGIH.

Pollutant	(PAIL, µg/m ³) = 1/100 of Threshold Limit Value	Modeled Concentration (µg/m ³)	Pass?
Phthalic Anhydride	60.57	15.60	Yes

11. CALCULATIONS:

SN	Emission Factor Source (AP-42, Testing, etc)	Emission Factor and units (lbs/ton, lbs/hr, etc)	Control Equipment Type (if any)	Control Equipment Efficiency	Comments (Emission factor controlled/ uncontrolled, etc)
29	Environ Study dated 11/25/97. Engineering Estimate.	2.16e-4 lb phthalic anhydride/ lb epoxyn mix. 0.08 lb/hr of PM/PM10 0.41 lb/hr of VOC	N.A.	-	-

12. TESTING REQUIREMENTS:

This permit requires stack testing of the following sources.

SN(s)	Pollutant	Test Method	Test Interval	Justification For Test Requirement
No sources are required to be stack tested at this time.				

13. MONITORING OR CEMS

The following are parameters that must be monitored with CEMs or other monitoring equipment (temperature, pressure differential, etc), frequency of recording and whether records are needed to be included in any annual, semiannual or other reports.

SN	Parameter or Pollutant to be Monitored	Method of Monitoring (CEM, Pressure Gauge, etc)	Frequency*	Report (Y/N)**
No parameters require monitoring by CEM at this time.				

* Indicate frequency of recording required for the parameter (Continuously, hourly, daily, etc.)

** Indicates whether the parameter needs to be included in reports.

14. RECORD KEEPING REQUIREMENTS

The following are items (such as throughput, fuel usage, VOC content of coating, etc) that must be tracked and recorded, frequency of recording and whether records are needed to be included in any annual, semiannual or other reports.

SN	Recorded Item	Limit (as established in permit)	Frequency*	Report (Y/N)**
28	Linear feet of silica sand material cut	990,584 linear feet	Monthly	N
facility	Natural Gas Usage	297.2 MM cf per year	Monthly	N
facility	Epoxy mix	180, 822 lb per 24 hour period	Daily	N
facility	Formulation of HAPS in materials and solvent based product.	See permit.	Monthly	N

* Indicate frequency of recording required for the item (Continuously, hourly, daily, etc.)

** Indicates whether the item needs to be included in reports

15. OPACITY

SN	Opacity %	Justification (NSPS limit, Dept. Guidance, etc)	Compliance Mechanism (daily observation, weekly, control equipment operation, etc)
18 and 19	0	Departmental Guidance	Annual Inspection
All others	5%	Departmental Guidance	Annual Inspection

16. DELETED CONDITIONS:

The following Specific Conditions were included in the previous permit, but deleted for the current permitting action.

Former SC	Justification for removal
No specific conditions were deleted from the permit.	

17. VOIDED, SUPERSEDED OR SUBSUMED PERMITS

List all active permits for this facility which are voided/superseded/subsumed by issuance of this permit.

Permit #
401-AR-12

18. CONCURRENCE BY:

The following supervisor concurs with the permitting decision:

Lyndon Poole, P.E.