STATEMENT OF BASIS

for the issuance of Air Permit # 401-AR-18

1. PERMITTING AUTHORITY:

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

2. APPLICANT:

Epoxyn 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: 339111

5. SUBMITTALS: January 25, 2007

6. REVIEWER'S NOTES: Epoxyn Products operates a facility which manufactures laboratory counter tops in Mountain Home, Arkansas. This modification authorizes acetone emissions at the touch up paint area (SN-21). SN-21 has potential acetone emissions of 2.0 tpy tons/year (tpy).

7. COMPLIANCE STATUS: Last date of inspection was in May 10, 2006. The facility was out of compliance at the last date of inspection. The records of xylene content maintained by the facility was found inconsistent with the MSDS sheet provided by the 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-17	Air Permit 401-AR-18	Change
PM/PM_{10}	34.4	34.4	0
SO_2	2.5	2.5	0
VOC	80.6	80.6	0
CO	4.3	4.3	0
NO_x	15.9	15.9	0
Acetone	0	2.0	+2.0
Phthalic Anhydride	7.92	7.92	0
Toluene	0	0	0
Xylene	6.5	6.5	0
Total HAP	17.92	17.92	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.

Pollutant	Emission Rate (lb/hr)	NAAQS Standard ($\mu g/m^3$)	Averaging Time	Highest Concentration ($\mu g/m^3$)	% of NAAQS
PM_{10}	9.0	50	Annual	7.1	14%
		150	24-Hour	59.7	39.8%
SO_2	0.7	80	Annual	2.81	3.5%
		1300	3-Hour	101.85	7.8%
		365	24-Hour	27.049	7.4%
VOC	80.6 tpy	0.12	1-Hour (ppm)	0.012 ppm	10%
CO	1.0	10,000	8-Hour	36.84	0.36%
		40,000	1-Hour	113.8	0.28%

Pollutant	Emission Rate (lb/hr)	NAAQS Standard ($\mu g/m^3$)	Averaging Time	Highest Concentration ($\mu g/m^3$)	% of NAAQS
NO_x	3.8	100	Annual	6.2	6.2%

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/m^3), 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?
Phthalic Anhydride	6.057	0.667	3.25	No
Xylene	434	47.7	2.10	Yes
Acetone	1187	130	2.0	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, $\mu g/m^3$) = 1/100 of Threshold Limit Value	Modeled Concentration ($\mu g/m^3$)	Pass?
Phthalic Anhydride	60.57	15.8	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)
02, 03, 05, 07, 12, 21, 24, 25, 29, 30, 31, and 32	Environ Study dated 11/25/97. Mass Balance	2.2×10^{-4} lb phthalic anhydride/ lb epoxyn mix. VOC Xylene acetone	N.A.	-	-
23	Mass Balance	-	-	-	-
28	5.2 tpy = (100% - 99%) x 520 tons/yr		Baghouse	99%	

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	Dust collected in panel saw baghouse	No more than 520 ton/yr	Monthly	N
facility	Natural Gas Usage	297.2 MM cf per year	Monthly	N
facility	Epoxyn mix	197,260 lb per 24 hour period	Daily	N
01, 02, 03, 04, 05, 07, 08, 10, 11, 12, 24, 25, 29, 30, and 32	Formulation of HAPS in materials and solvent based product.	See permit.	Monthly	N
21	Acetone emissions HAPs content and purchases of HAPs containing materials	2.0 tpy 3.5 tpy	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
None	

17. VOIDED, SUPERSEDED OR SUBSUMED PERMITS

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

Permit
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18. CONCURRENCE BY:

The following supervisor concurs with the permitting decision:

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David Triplett, P.E.