

**STATEMENT OF BASIS**  
*for the issuance of Draft Air Permit # 1949-AR-2*

1. PERMITTING AUTHORITY:

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

2. APPLICANT:

Akin Industries, Inc.  
100 East Brookhaven  
Dumas, Arkansas 71639

3. PERMIT WRITER:

Amanda Holloway

4. PROCESS DESCRIPTION AND NAICS CODE:

NAICS Description: Nonupholstered Wood Furniture Manufacturing & Upholstered Furniture Manufacturing  
NAICS Code: 337122, 337121

5. SUBMITTALS: September 26, October 17, and October 23, 2003

6. REVIEWER'S NOTES:

Akin Industries, Inc. manufactures wood and upholstered furniture for the health care industry at its location of 100 East Brookhaven, Dumas, Desha County, Arkansas. This modification will allow the facility to construct and operate two new spray application booths (SN-14 and SN-15) along with a coating testing process (Insignificant Activity). With the permit modification the annual permitted emissions of total HAP will increase 0.2 tpy to a total allowable combined HAP emission of 23.7 tpy.

7. COMPLIANCE STATUS:

There are currently no enforcement activities against the facility.

8. APPLICABLE REGULATIONS:

A. Applicability

Did the facility undergo PSD review in this permit (i.e. BACT, Modeling, etc.)?       N

Has this facility undergone 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  

B.      PSD Netting

    Was netting performed to avoid PSD review in this permit?        N  

C.      Source and Pollutant Specific Regulatory Applicability

    Not applicable.

9.      EMISSION CHANGES:

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

<b>Plantwide Permitted Emissions (ton/yr)</b>			
<b>Pollutant</b>	<b>Air Permit 1949-AR-1</b>	<b>Air Permit 1949-AR-2</b>	<b>Change</b>
PM	45.7	45.7	0
PM <sub>10</sub>	45.7	45.7	0
VOC	72.0	72.0	0
Total HAP	23.5	23.7	0.2
Toluene	7.88	7.88	0
2-Butoxyethanol	1.23	1.23	0
Xylene	4.00	4.0	0
Ethyl Benzene	4.53	4.53	0
Methyl Ethyl Ketone	8.13	8.13	0
Methyl Isobutyl Ketone	1.30	1.3	0
Methanol	1.30	1.3	0
Napthalene	0.21	0.21	0
Dibutyl Phthalate	1.75	1.75	0

Plantwide Permitted Emissions (ton/yr)			
Pollutant	Air Permit 1949-AR-1	Air Permit 1949-AR-2	Change
Hexane	4.90	4.9	0
Acetone	20.00	20.0	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

This permit contains a TLV table for non-criteria pollutants. Modeling was used to determine the permitted emission rates for ranges of non-criteria pollutants (grouped by TLVs) which would pass the *PAIL*. Therefore, modeling of specific non-criteria pollutants was not performed. The analysis as provided by the application is attached.

Product	HAP/Toxic Content (lb/gal)
Acetone	8.0
Toluene	5.1
2-Butoxyethanol	2.6
Xylene	8.0
Ethylbenzene	8.0
MEK	8.0
MIBK	5.5
Methanol	7.0
Napthalene	1.4
Dibutyl Phthalate	0.13
Hexane	4.7

11. CALCULATIONS:

SN	Emission Factor Source	Emission Factor and units	Control Equipment Type	Control Equipment Efficiency	Comments
01	Manufacturer's	PM: 0.5 mg/m <sup>3</sup>	baghouse	99%	Air flow rate: 35,000 cfm

SN	Emission Factor Source	Emission Factor and units	Control Equipment Type	Control Equipment Efficiency	Comments
	Specifications				
02, 03	AP-42, 4 <sup>th</sup> Ed. table 10.4.1	PM: 0.03 gr/ft <sup>3</sup>	cyclone		Air flow rate: 20,000 cfm
04	Mass Balance, AP-42	1 lb <sub>PM</sub> / 1 T <sub>sawdust</sub>	baghouse cyclone	99% 85%	
05-07, 10-14	Equipment Spec. & MSDS sheets	<i>maximum lb/gal</i> Acetone: 8.0 Toluene: 6.4 2-Butoxyethanol: 2.6 Xylene: 8.0 Ethylbenzene: 8.0 MEK: 8.0 MIBK: 6.4 Methanol: 8.0 Naphthalene: 1.6 Dibutyl Phthalate: 0.16 Hexane: 5.6			Maximum Capacity: 26 gal/hr
15	Equipment Spec. & MSDS	<i>Max Content lb/gal</i> VOC: 8.0 Acetone: 8.0 Toluene: 6.4 Hexamethylene Diisocyanate: 0.1 Dibutyl Phthalate: 0.16 Hexane: 5.6			Maximum Capacity: 3 gal/hr

13. TESTING REQUIREMENTS:

There are no testing requirements at this facility.

14. MONITORING OR CEMS

There are no required monitoring devices or CEMS at this facility.

15. 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	Frequency*	Report (Y/N)**
05-07, 10-15	Monthly VOC Emissions [material, MSDS, VOC content (lb/gal), & usage (gal/month)]	72.0 tpy 8.0 lb/gal	Monthly	Y
	Monthly HAP Emissions [material, MSDS, HAP content (lb/gal), & usage (gal/month)]	23.7 tpy	Monthly	Y

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

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

16. OPACITY

SN	Opacity %	Justification (NSPS limit, Dept. Guidance, etc)	Compliance Mechanism (daily observation, weekly, control equipment operation, etc)
01-04	15	Department Guidance	EPA Method 9

17. DELETED CONDITIONS:

No specific conditions have been deleted.

18. VOIDED, SUPERSEDED OR SUBSUMED PERMITS

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

<b>Permit #</b>
1949-AR-1

Permit #: 1949-AR-1  
CSN #: 21-0121  
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19. CONCURRENCE BY:

The following supervisor concurs with the permitting decision:

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*Lyndon Poole, P.E.*