STATEMENT OF BASIS

For the issuance of Draft Air Permit # 1949-AR-8 AFIN: 21-00121

- 1. **PERMITTING AUTHORITY:**
 - Arkansas Department of Environmental Quality 5301 Northshore Drive North Little Rock, Arkansas 72118-5317
- 2. APPLICANT:

Joernes Healthcare, Inc., dba Akin Industries, Incorporated 100 East Brookhaven Dumas, Arkansas 71639

3. PERMIT WRITER:

Charles Hurt, P.E.

4. PROCESS DESCRIPTION AND NAICS CODE:

NAICS Description: Institutional Furniture Manufacturing NAICS Code: 337127

5. SUBMITTALS:

10/29/2012

6. **REVIEWER'S NOTES**:

Joernes Healthcare, Incorporated (AFIN: 21-00121) formerly known as Akin Industries, Incorporated manufactures wood and upholstered furniture for the healthcare industry at its location of 100 East Brookhaven, Dumas, Desha County, Arkansas. Joernes requested to increase the handheld aerosol spray annual usage from 30.5 gallons to 300 gallons. Permitted VOC and HAP emission limits were not increased.

7. COMPLIANCE STATUS:

The following summarizes the current compliance of the facility including active/pending enforcement actions and recent compliance activities and issues.

The facility was last inspected on December 14, 2011, and the inspection report did not note any non-compliance issues.

8. PSD APPLICABILITY:

- a. Did the facility undergo PSD review in this permit (i.e., BACT, Modeling, etc.)? N/A
- b. Is the facility categorized as a major source for PSD? N/A
 - Single pollutant ≥ 100 tpy and on the list of 28 or single pollutant ≥ 250 tpy and not on list, or
 - CO_2e potential to emit $\geq 100,000$ tpy and ≥ 100 tpy/ ≥ 250 tpy of combined GHGs?

If yes, explain why this permit modification is not PSD.

N/A

9. GHG MAJOR SOURCE (TITLE V):

Indicate one:

- Facility is classified as a major source for GHG and the permit includes this designation
- Facility does not have the physical potential to be a major GHG source
- Facility has restrictions on GHG or throughput rates that limit facility to a minor GHG source. Describe these restrictions:

10. SOURCE AND POLLUTANT SPECIFIC REGULATORY APPLICABILITY:

There are not applicable source or pollutant specific regulations.

11. EMISSION CHANGES AND FEE CALCULATION:

See emission change and fee calculation spreadsheet in Appendix A.

12. 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:

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 TLV) that pass the PAER or PAIL. Therefore, modeling of specific non-criteria pollutants was not performed.

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Maximum Single HAP Concentration (lb/gal)	Minimum TLV (mg/m ³)
8.00	176.1
7.00	154.1
6.00	132.1
5.00	110.1
4.00	88.1
2.00	44.0
3.00	66.0
2.00	44.0
1.00	22.0
0.75	16.5
0.50	11.0
0.25	5.5
0.10	2.2

Other Modeling:

The facility has not reported any use of materials containing hydrogen sulfide or styrene. Therefore, odor modeling is not warranted at this time.

13. CALCULATIONS:

SN	Emission Factor Source	Emission Factor and units	Control Equipment Type	Control Equipment Efficiency	Comments
01	Manufacturer's Specifications	PM: 0.5 mg/m ³	baghouse	99%	Air flow rate: 35,000 cfm
02, 03	AP-42, 4 th Ed. table 10.4.1	PM: 0.03 gr/ft ³	cyclone		Air flow rate: 20,000 cfm
04	Mass Balance, AP-42	1 lb _{PM} / 1 T _{sawdust}	baghouse cyclone	99% 85%	
05-07, 10-14	Equipment Spec. & MSDS sheets	<i>maximum lb/gal</i> VOC: 8.0 HAPs: 8.0 Acetone: 6.7			Maximum Capacity: 26 gal/hr
15	Equipment Spec. & MSDS	Max Content lb/gal VOC: 8.0 HAPs: 8.0 Acetone: 6.7			Maximum Capacity: 3 gal/hr
16	Mass Balance, MSDS	Max Content lb/gal VOC: 8.0 HAPs: 5.0			Maximum Capacity: 0.11 gal/hr

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14. TESTING REQUIREMENTS:

The permit does not require testing.

15. MONITORING OR CEMS

The permit does not require CEMS or other monitoring devices.

16. RECORDKEEPING REQUIREMENTS:

The following are items (such as throughput, fuel usage, VOC content, etc.) that must be tracked and recorded.

SN	Recorded Item	Limit	Frequency	Report (Y/N)
05-07,	Monthly VOC Emissions [material, MSDS, VOC content (lb/gal), & usage (gal/month)]	99.8 tpy 8.0 lb/gal	Monthly	Y
10-15, 16	Monthly HAP Emissions [material, MSDS, HAP content (lb/gal), & usage (gal/month)]	23.7 tpy	Monthly	Y
16	Handheld Aerosol Spray Can Usage	300 gallons/yr (3,000 cans, 384 mL each)	Monthly	Y

17. OPACITY:

SN	Opacity	Justification for limit	Compliance Mechanism
01-04	15%	Department Guidance	Inspector's Observation

18. DELETED CONDITIONS:

No condition was deleted.

19. GROUP A INSIGNIFICANT ACTIVITIES

The permittee did not request any new modifications to the insignificant activity table.

20. VOIDED, SUPERSEDED, OR SUBSUMED PERMITS:

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

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21. CONCURRENCE BY:

The following supervisor concurs with the permitting decision.

Ph lip Murphy, P.E

Engineering Supervisor, Air Division

APPENDIX A – EMISSION CHANGES AND FEE CALCULATION

Fee Calculation for Minor Source

Revised 08-20-12

E State

Facility Name: Joernes Healthcare, Inc., dba Akin Industries, Incorporated Permit Number: 1949-AR-8 AFIN: 21-00121

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			Old Permit Ne	w Permit
\$/ton factor	22.97	Permit Predominant Air Contaminant	99.8	99.8
Minimum Fee \$	400	Net Predominant Air Contaminant Increase	0	
Minimum Initial Fee \$	500			
Check if Administrative Amendment	Г	Permit Fee \$ Annual Chargeable Emissions (tpy)	<u>400</u> 99.8	

Pollutant (tpy)	Old Permit	New Permit	Change
PM	45.6	45.6	0
PM ₁₀	45.6	45.6	0
SO ₂ VOC	0	0	0
VOC	99.8	99.8	0
CO	0	0	0
NO _X	0	0	0
Acetone	30	30	0