

STATEMENT OF BASIS

For the issuance of Draft Air Permit # 1035-AOP-R4 AFIN: 04-00247

1. PERMITTING AUTHORITY:

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

2. APPLICANT:

Mid-America Cabinets, Incorporated
20980 Marion Lee Road
Gentry, Arkansas 72734

3. PERMIT WRITER:

Charles Hurt, P.E.

4. PROCESS DESCRIPTION AND NAICS CODE:

NAICS Description: Wood Kitchen Cabinet and Countertop Manufacturing
NAICS Code: 337110

5. SUBMITTALS:

11/22/2011

6. REVIEWER'S NOTES:

Mid-America Cabinets, located at 20980 Marion Lee Road, Gentry, Arkansas, manufactures wooden kitchen cabinetry. The permittee requested the modification to install an additional stain booth (SN-10), to increase coating usage at existing booths, to permit the lamination operation (SN-08) at the maximum capacity that the equipment is capable of achieving, and to incorporate the counter top cleaning operation into Specific Conditions #5 and #6. The coating usage at the existing booths increased by 20%, and the affected sources were SN-01, SN-02, SN-03, SN-04, SN-06, and SN-07. Former Specific Conditions #52 and #53 were removed because SN-08 was permitted at its maximum hourly capacity. For SN-09, former Specific Conditions #54, #55, #56, and #57 were removed and compliance will be demonstrated through Specific Conditions #6, #10, and #16. Overall, permitted emissions increased by 3.8 tpy VOC.

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 September 15, 2011 and determined to be operating in accordance with Permit No. 1035-AOP-R3.

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
Single pollutant ≥ 100 tpy and on the list of 28 or single pollutant ≥ 250 tpy and not on list?

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

9. SOURCE AND POLLUTANT SPECIFIC REGULATORY APPLICABILITY:

Source	Pollutant	Regulation (NSPS, NESHAP or PSD)
Facility	HAP	40 CFR 63, Subpart JJ

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:

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.

Other Modeling:

Odor:

H₂S Modeling:

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.

12. CALCULATIONS:

SN	Emission Factor Source (AP-42, testing, etc.)	Emission Factor (lb/ton, lb/hr, etc.)	Control Equipment	Control Equipment Efficiency	Comments
01	Material Balance	7.5 lb/gal VOC 4.0 lb/gal Acetone	None	N/A	Spray rate of 7.5 gallons/hr; tpy is actual usage & Maximum HAP content of 7.5 lb/gal
02	Material Balance	7.5 lb/gal VOC 4.0 lb/gal Acetone	None	N/A	Spray rate of 8.75 gallons/hr; tpy is actual usage & Maximum HAP content of 7.5 lb/gal
03	Material Balance	7.5 lb/gal VOC 4.0 lb/gal Acetone	None	N/A	Spray rate of 2.5 gallons/hr; tpy is actual usage & Maximum HAP content of 7.5 lb/gal
04	Material Balance	7.5 lb/gal VOC 4.0 lb/gal Acetone	None	N/A	Spray rate of 7.5 gallons/hr; tpy is actual usage & Maximum HAP content of 7.5 lb/gal
05	AP-42	0.03gr/scf	Cyclone	70%	
06	Material Balance	7.5 lb/gal VOC 4.0 lb/gal Acetone	None	N/A	Spray rate of 0.5 gallons/hr; tpy is actual usage & Maximum HAP content of 7.5 lb/gal
07	Material Balance	7.5 lb/gal VOC 4.0 lb/gal Acetone	None	N/A	Spray rate of 0.5 gallons/hr; tpy is actual usage & Maximum HAP content of 7.5 lb/gal
08	Material Balance	7.5 lb/gal VOC	None	N/A	Maximum HAP content of 7.5 lb/gal
09	Material Balance	7.5 lb/gal VOC	None	N/A	

SN	Emission Factor Source (AP-42, testing, etc.)	Emission Factor (lb/ton, lb/hr, etc.)	Control Equipment	Control Equipment Efficiency	Comments
10	Material Balance	VOC	None	N/A	Spray rate of 2.25 gal/hr, tpy is actual usage & Maximum HAP content of 7.5 lb/gal

13. TESTING REQUIREMENTS:

The permit requires testing of the following sources.

SN	Pollutants	Test Method	Test Interval	Justification
N/A				

14. MONITORING OR CEMS

The permittee must monitor the following parameters with CEMS or other monitoring equipment (temperature, pressure differential, etc.)

SN	Parameter or Pollutant to be Monitored	Method (CEM, Pressure Gauge, etc.)	Frequency	Report (Y/N)
N/A				

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	Frequency	Report (Y/N)
01 – 04 & 06 - 09	TLV values	Varies (See TLV Table)	Continuously	Y
	VOC/HAP content	7.5 lb per gallon	Continuously	Y
Facility	Annual VOC emissions	167.1 tons per year	Monthly	Y
	Single HAP	47.64 tons per year	Monthly	Y
	Total HAPs	55.24 tons per year	Monthly	Y

SN	Recorded Item	Permit Limit	Frequency	Report (Y/N)
Facility	Acetone Content	4.0 lb per gallon	Continuously	Y
	Acetone Usage	89.10 tons per year	Monthly	Y
	Toluene emissions	47.64 tons per year	Monthly	Y
	Hours of Operation	Five days a week from 6 AM – 10 PM and Sundays from 6 AM – 12 Noon	Daily	N
01 – 04, 06, 07, and 10	Subpart JJ Compliance	1.0 lbs solid deposit/lb VHAP emitted of compliant materials usage	Twice yearly	Y
	Subpart JJ Compliance	Various reports including work plans, operator training documentation, and usage of HAP	As required	N
08	Laminate area	4,800 ft ² per hour	Hourly	Y
09	Toluene Usage	3 gallons per month	Monthly	Y

16. OPACITY:

SN	Opacity	Justification for limit	Compliance Mechanism
05	20%	Department Guidance	Weekly observations

17. DELETED CONDITIONS:

Former SC	Justification for removal
52 through 57	Obsolete

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18. GROUP A INSIGNIFICANT ACTIVITIES

Source Name	Group A Category	Emissions (tpy)					HAPs	
		PM/PM ₁₀	SO ₂	VOC	CO	NO _x	Single	Total
N/A								

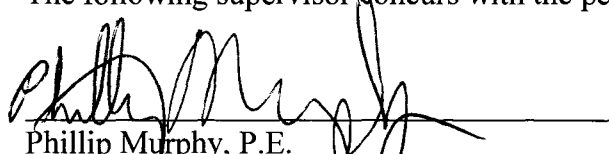
19. VOIDED, SUPERSEDED, OR SUBSUMED PERMITS:

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

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20. CONCURRENCE BY:

The following supervisor concurs with the permitting decision.


Phillip Murphy, P.E.
Engineering Supervisor, Air Division

APPENDIX A – EMISSION CHANGES AND FEE CALCULATION

Fee Calculation for Major Source

Revised 08-30-11

Facility Name: Mid-America Cabinets, Incorporated
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\$/ton factor	22.65	Annual Chargeable Emissions (tpy)	277.6
Permit Type	Minor Mod	Permit Fee \$	500

Minor Modification Fee \$	500
Minimum Modification Fee \$	1000
Renewal with Minor Modification \$	500
Check if Facility Holds an Active Minor Source or Minor Source General Permit	<input type="checkbox"/>
If Hold Active Permit, Amt of Last Annual Air Permit Invoice \$	0
Total Permit Fee Chargeable Emissions (tpy)	3.8
Initial Title V Permit Fee Chargeable Emissions (tpy)	

HAPs not included in VOC or PM:

Chlorine, Hydrazine, HCl, HF, Methyl Chloroform, Methylene Chloride, Phosphine, Tetrachloroethylene, Titanium Tetrachloride

Air Contaminants:

All air contaminants are chargeable unless they are included in other totals (e.g., H2SO4 in condensible PM, H2S in TRS, etc.)

Pollutant (tpy)	Check if Chargeable Emission	Old Permit	New Permit	Change in Emissions	Permit Fee Chargeable Emissions	Annual Chargeable Emissions
PM	<input checked="" type="checkbox"/>	17.6	17.6	0	0	17.6
PM ₁₀	<input type="checkbox"/>	17.6	17.6	0		
SO ₂	<input type="checkbox"/>	0	0	0		
VOC	<input checked="" type="checkbox"/>	167.1	170.9	3.8	3.8	170.9
CO	<input type="checkbox"/>	0	0	0		
NO _x	<input type="checkbox"/>	0	0	0		
Single HAP	<input type="checkbox"/>	47.64	51.4	3.76		
Total HAP	<input type="checkbox"/>	55.24	59.12	3.88		
Acetone	<input checked="" type="checkbox"/>	89.1	89.1	0	0	89.1