

## STATEMENT OF BASIS

For the issuance of Draft Air Permit # 1035-AOP-R6 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:

Jesse Smith

4. NAICS DESCRIPTION AND CODE:

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

5. SUBMITTALS:

Date of Application	Type of Application (New, Renewal, Modification, Deminimis/Minor Mod, or Administrative Amendment)	Short Description of Any Changes That Would Be Considered New or Modified Emissions
4/6/2016	Administrative Amendment	None

6. REVIEWER'S NOTES:

Mid-America Cabinets, located at 20980 Marion Lee Road, Gentry, Arkansas, manufactures wooden kitchen cabinetry. The permittee has submitted an administrative amendment to the permit to add a secondary wood shredder to the insignificant activity list. There is no change to the permitted emissions.

7. COMPLIANCE STATUS:

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

The last inspection for this facility was performed on March 15, 2016. There were no areas of concern noted.

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 C.F.R. 63, Subpart JJ

10. EMISSION CHANGES AND FEE CALCULATION:

See emission change and fee calculation spreadsheet in Appendix A.

11. AMBIENT AIR EVALUATIONS:

a) Reserved.

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

c) H<sub>2</sub>S Modeling:

A.C.A. §8-3-103 requires hydrogen sulfide emissions to meet specific ambient standards. Many sources are exempt from this regulation, refer to the Arkansas Code for details.

Is the facility exempt from the H<sub>2</sub>S Standards Y

If exempt, explain: No H<sub>2</sub>S present.

Pollutant	Threshold value	Modeled Concentration (ppb)	Pass?
H <sub>2</sub> S	20 parts per million (5-minute average*)		
	80 parts per billion (8-hour average) residential area		
	100 parts per billion (8-hour average) nonresidential area		

\*To determine the 5-minute average use the following equation

$$C_p = C_m (t_m/t_p)^{0.2} \text{ where}$$

C<sub>p</sub> = 5-minute average concentration

C<sub>m</sub> = 1-hour average concentration

t<sub>m</sub> = 60 minutes

t<sub>p</sub> = 5 minutes

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	7.6 lb/gal VOC 3.5 lb/gal Acetone	None	N/A	Spray rate of 7.5 gallons/hr; tpy is actual usage & Maximum HAP content of 1.8 lb/gal
02	Material Balance	7.6 lb/gal VOC 3.5 lb/gal Acetone	None	N/A	Spray rate of 7.5 gallons/hr; tpy is actual usage & Maximum HAP content of 1.8 lb/gal
03	Material Balance	7.6 lb/gal VOC 3.5 lb/gal Acetone	None	N/A	Spray rate of 3.75 gallons/hr; tpy is actual usage & Maximum HAP content of 1.8 lb/gal
04	Material Balance	7.6 lb/gal VOC 3.5 lb/gal Acetone	None	N/A	Spray rate of 7.5 gallons/hr; tpy is actual usage & Maximum HAP content of 1.8 lb/gal
05	AP-42	0.03gr/scf	Cyclone	70%	
06	Material	7.6 lb/gal VOC	None	N/A	Spray rate of 3.75 gallons/hr; tpy

SN	Emission Factor Source (AP-42, testing, etc.)	Emission Factor (lb/ton, lb/hr, etc.)	Control Equipment	Control Equipment Efficiency	Comments
	Balance	3.5 lb/gal Acetone			is actual usage & Maximum HAP content of 1.8 lb/gal
07	Material Balance	7.1 lb/gal VOC 0.7 lb/gal Acetone	None	N/A	Spray rate of 0.5 gallons/hr; tpy is actual usage & Maximum HAP content of 0.3 lb/gal
08	Material Balance	Mol fraction Vinyl Acetate = 0.15% Area of Surface = 446.1 m <sup>2</sup> /hr	None	N/A	Method from Alliance for the Polyurethanes Industry for Adhesives/Coatings
09	Material Balance	7.1 lb/gal VOC 0.7 lb/gal Acetone	None	N/A	Spray rate of 0.5 gallons/hr; tpy is actual usage & Maximum HAP content of 0.3 lb/gal
10	Material Balance	7.6 lb/gal VOC 3.5 lb/gal Acetone	None	N/A	Spray rate of 7.5 gal/hr, tpy is actual usage & Maximum HAP content of 1.8 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, & 08	TLV values	Varies (See TLV Table)	Continuously	Y
	VOC/HAP content	7.6 lb VOC per gallon 7.5 lb HAP per gallon	Continuously	Y
07 & 09	TLV values	Varies (See TLV Table)	Continuously	Y
	VOC/HAP content	7.1 lb per gallon	Continuously	Y
Facility	Annual VOC emissions	120.0 tons per year	Monthly	Y
	Single HAP	19.60 tons per year	Monthly	Y
	Total HAPs	23.00 tons per year	Monthly	Y
Facility	Acetone Content	3.5 lb per gallon	Continuously	Y
	Acetone Usage	19.60 tons per year	Monthly	Y
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 <sup>2</sup> per hour	Hourly	Y
09	Toluene Usage	3 gallons per month	Monthly	Y

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16. OPACITY:

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

17. DELETED CONDITIONS:

Former SC	Justification for removal
N/A	

18. GROUP A INSIGNIFICANT ACTIVITIES:

Source Name	Group A Category	Emissions (tpy)						
		PM/PM <sub>10</sub>	SO <sub>2</sub>	VOC	CO	NO <sub>x</sub>	HAPs	
							Single	Total
Secondary Wood Shredder	A-13	0.2						

19. VOIDED, SUPERSEDED, OR SUBSUMED PERMITS:

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

Permit #
1035-AOP-R5

## APPENDIX A – EMISSION CHANGES AND FEE CALCULATION

## Fee Calculation for Major Source

Revised 08-26-15

Facility Name: Mid-America Cabinets, Incorporated  
 Permit Number: 1035-AOP-R5  
 AFIN: 04-00247

\$/ton factor	23.93	Annual Chargeable Emissions (tpy)	148.6
Permit Type	AA	Permit Fee \$	0

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)	0
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 condensable 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		17.6	17.6	0		
PM <sub>10</sub>		17.6	17.6	0	0	17.6
SO <sub>2</sub>		0	0	0	0	0
VOC		120	120	0	0	120
CO		0	0	0		
NO <sub>x</sub>		0	0	0	0	0
Single HAP	<input type="checkbox"/>	19.6	19.6	0		
Total HAP	<input type="checkbox"/>	23	23	0		

Pollutant (tpy)	Check if Chargeable Emission	Old Permit	New Permit	Change in Emissions	Permit Fee Chargeable Emissions	Annual Chargeable Emissions
Acetone	<input checked="" type="checkbox"/>	11	11	0	0	11