

STATEMENT OF BASIS

For the issuance of Draft Air Permit # 1035-AOP-R2 AFIN: 04-00247

1. PERMITTING AUTHORITY:

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

2. APPLICANT:

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

3. PERMIT WRITER:

Paul Osmon

4. PROCESS DESCRIPTION AND NAICS CODE:

NAICS Description: Wood Kitchen Cabinet Manufacturing
NAICS Code: 337110

5. SUBMITTALS:

May 13, 2005

6. REVIEWER'S NOTES:

This is the first Title V permit renewal for the facility. No changes in emissions or processes except to add a laminator to the Insignificant Activities List. The facility is subject to 40 CFR 63, Subpart JJ.

7. COMPLIANCE STATUS:

There are no compliance issues related to this facility.

8. APPLICABLE REGULATIONS:

PSD Applicability

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

Is the facility categorized as a major source for PSD? N
 ≥ 100 tpy and on the list of 28? N
 ≥ 250 tpy all other? N

PSD Netting

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

Source and Pollutant Specific Regulatory Applicability

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

9. EMISSION CHANGES:

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

| Plantwide Permitted Emissions (tpy) | | | |
|-------------------------------------|----------------------|----------------------|--------|
| Pollutant | Permit # 1035-AOP-R1 | Permit # 1035-AOP-R2 | Change |
| PM | 17.6 | 17.6 | 0 |
| PM ₁₀ | 17.6 | 17.6 | 0 |
| VOC | 166.9 | 166.9 | 0 |
| Any single HAP | 33.5 | 33.5 | 0 |
| Total HAP | 55.1 | 55.1 | 0 |
| Acetone | 89.1 | 89.1 | 0 |

10. 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.

The following TLV table is included in the permit. Acetone is evaluated separately because it is a named substance in the permit which is not a HAP but has a listed TLV.

| Minimum HAP TLV (mg/m ³) | Maximum Individual HAP Content (wt. %) |
|---|--|
| 172.0 | 100 |
| 153.9 | 90 |
| 136.8 | 80 |
| 119.7 | 70 |
| 102.6 | 60 |
| 85.5 | 50 |
| 68.4 | 40 |
| 51.3 | 30 |
| 34.2 | 20 |
| 25.6 | 15 |
| 17.1 | 10 |
| 12.8 | 7.5 |
| 8.4 | 5.0 |
| 4.2 | 2.5 |
| 1.7 | 1.0 |

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 has deemed the PAER to be the product, in lb/hr, of 0.11 and the Threshold Limit Value (mg/m³), 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? |
|-----------|-----------------------------|------------------------------|----------------|-------|
| Acetone | 1188 | 130.68 | 109.0 | Y |

Other Modeling:

Odor: No styrene or hydrogen sulfide emissions from this facility.

11. 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 | NA | Spray Rate of 7.5 gallons/hr; tpy is actual usage |
| 02 | Material Balance | 7.5 Lb/gal VOC 4.0 Lb/gal Acetone | None | NA | Spray Rate of 8.75 gallons/hr; tpy is actual usage |
| 03 | Material Balance | 7.5 Lb/gal VOC 4.0 Lb/gal Acetone | None | NA | Spray Rate of 2.5 gallons/hr; tpy is actual usage |
| 04 | Material Balance | 7.5 Lb/gal VOC 4.0 Lb/gal Acetone | None | NA | Spray Rate of 7.5 gallons/hr; tpy is actual usage |
| 06 | Material Balance | 7.5 Lb/gal VOC 4.0 Lb/gal Acetone | None | NA | Spray Rate of 0.5 gallons/hr; tpy is actual usage |
| 07 | Material Balance | 7.5 Lb/gal VOC 4.0 Lb/gal Acetone | None | NA | Spray Rate of 0.5 gallons/hr; tpy is actual usage |
| 05 | AP-42 | 0.03gr/scf | cyclone | 70% | Controlled |

12. TESTING REQUIREMENTS:

The permit requires testing of the following sources.

| SN | Pollutants | Test Method | Test Interval | Justification |
|----------------------------------|------------|-------------|---------------|---------------|
| No stack testing in this permit. | | | | |

13. 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) |
|---------------------------------------|--|------------------------------------|-----------|--------------|
| No Monitoring or CEMS in this permit. | | | | |

14. RECORD KEEPING 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 through 04 06 07 | VOC usage | 166.9 tons/12months | Monthly | Y |
| 01 through 04 06 07 | VOC content | 7.5 lb/gal | - | - |
| 01 through 04 06 07 | HAP usage | 33.5 any single HAP 55.1 Total HAP | Monthly | Y |
| 01 through 04 06 07 | HAP content | TLV Table see permit | - | - |
| 01 through 04 06 07 | Acetone Usage | 89.1 tpy | - | - |

| | | | | |
|---------------------------------|-----------------------|--|--------------|---|
| 01 through 04 06 07 | Acetone Content | 4.0 Lb/gal except for pure solvent used for gun cleaning | - | - |
| 01 through 04 06 07 | Subpart JJ Compliance | 1.0 lbs solid deposit/lb VHAP emitted of compliant materials usage | twice yearly | Y |
| 01 through 04 06 07 | Subpart JJ Compliance | various reports including work plans, operator training documentation, and usage of HAP in Table 5 | as required | N |

15. OPACITY:

| SN | Opacity | Justification for limit | Compliance Mechanism |
|----|---------|-------------------------|----------------------|
| 05 | 20% | Department Guidance | weekly observations |

16. DELETED CONDITIONS:

| Former SC | Justification for removal |
|-----------|---------------------------|
| | No permit changes. |

17. VOIDED, SUPERCEDED, OR SUBSUMED PERMITS:

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

| Permit # |
|-------------|
| 1035-AOP-R1 |

Permit #: 1035-AR-2

AFIN: 04-00247

Page 7 of 7

18. CONCURRENCE BY:

The following supervisor concurs with the permitting decision.

Thomas Rheaume, P.E.