STATE OF MISSOURI

DEPARTMENT OF NATURAL RESOURCES

MISSOURI AIR CONSERVATION COMMISSION

PERMIT TO CONSTRUCT

Under the authority of RSMo 643 and the Federal Clean Air Act the applicant is authorized to construct the air contaminant source(s) described below, in accordance with the laws, rules and conditions as set forth herein.

Permit Number: 07 2008 - 010

Project Number: 2008-01-023


Parent Company Address: 707 W. Highway 60, Monett, MO 65708

Installation Name: Architectural Systems, Inc.

Installation Address: P.O. Box 519, Monett, MO 65708

Location Information: Barry County, S06, T25N, R27W

Application for Authority to Construct was made for:
The following emission sources were constructed prior to obtaining a permit; a 12.60 gallon per hour spray paint booth, a 1.3 million British thermal unit per hour (MMBtu/hr) drying oven a three stage 0.75 million Btu/hr phosphate washer/coating operation, and a 0.2 million Btu/hr paint hook burn off oven. This review was conducted in accordance with Section (6), Missouri State Rule 10 CSR 10-6.060, Construction Permits Required.

☐ Standard Conditions (on reverse) are applicable to this permit.

☒ Standard Conditions (on reverse) and Special Conditions are applicable to this permit.

JUL 28 2008

EFFECTIVE DATE

DIRECTOR OR DESIGNEE

DEPARTMENT OF NATURAL RESOURCES
STANDARD CONDITIONS:

Permission to construct may be revoked if you fail to begin construction or modification within two years from the effective date of this permit. Permittee should notify the Air Pollution Control Program if construction or modification is not started within two years after the effective date of this permit, or if construction or modification is suspended for one year or more.

You will be in violation of 10 CSR 10-6.060 if you fail to adhere to the specifications and conditions listed in your application, this permit and the project review. In the event that there is a discrepancy between the permit application and this permit, the conditions of this permit shall take precedence. Specifically, all air contaminant control devices shall be operated and maintained as specified in the application, associated plans and specifications.

You must notify the departments' Air Pollution Control Program of the anticipated date of start up of this (these) air contaminant sources(s). The information must be made available not more than 60 days but at least 30 days in advance of this date. Also, you must notify the Department of Natural Resources Regional office responsible for the area within which you are located within 15 days after the actual start up of this (these) air contaminant source(s).

A copy of this permit and permit review shall be kept at the installation address and shall be made available to Department of Natural Resources' personnel upon request.

You may appeal this permit or any of the listed special conditions to the Administrative Hearing Commission (AHC), P.O. Box 1557, Jefferson City, MO 65102, as provided in RSMo 643.075.6 and 621.250.3. If you choose to appeal, you must file a petition with the AHC within 30 days after the date this decision was mailed or the date it was delivered, whichever date was earlier. If any such petition is sent by registered mail or certified mail, it will be deemed filed on the date it is mailed. If it is sent by any method other than registered mail or certified mail, it will be deemed filed on the date it is received by the AHC.

If you choose not to appeal, this certificate, the project review and your application and associated correspondence constitutes your permit to construct. The permit allows you to construct and operate your air contaminant sources(s), but in no way relieves you of your obligation to comply with all applicable provisions of the Missouri Air Conservation Law, regulations of the Missouri Department of Natural Resources and other applicable federal, state and local laws and ordinances.

The Air Pollution Control Program invites your questions regarding this air pollution permit. Please contact the Construction Permit Unit at (573) 751-4817. If you prefer to write, please address your correspondence to the Missouri Department of Natural Resources, Air Pollution Control Program, P.O. Box 176, Jefferson City, MO 65102-0176, attention: Construction Permit Unit.
STATE OF MISSOURI

DEPARTMENT OF NATURAL RESOURCES

MISSOURI AIR CONSERVATION COMMISSION

PERMIT TO CONSTRUCT

Under the authority of RSMo 643 and the Federal Clean Air Act the applicant is authorized to construct the air contaminant source(s) described below, in accordance with the laws, rules and conditions as set forth herein.

Permit Number: 2008-01-023


Parent Company Address: 707 W. Highway 60, Monett, MO 65708

Installation Name: Architectural Systems, Inc.

Installation Address: P.O. Box 519, Monett, MO 65708

Location Information: Barry County, S06, T25N, R27W

Application for Authority to Construct was made for:

The following emission sources were constructed prior to obtaining a permit; a 12.60 gallon per hour spray paint booth, a 1.3 million British thermal unit per hour (MMBtu/hr) drying oven, a three stage 0.75 million Btu/hr phosphate washer/coating operation, and a 0.2 million Btu/hr paint hook burn off oven. This review was conducted in accordance with Section (6), Missouri State Rule 10 CSR 10-6.060, Construction Permits Required.

☐ Standard Conditions (on reverse) are applicable to this permit.

☐ Standard Conditions (on reverse) and Special Conditions are applicable to this permit.

EFFECTIVE DATE: Director or Designee, Department of Natural Resources.
STANDARD CONDITIONS:

Permission to construct may be revoked if you fail to begin construction or modification within two years from the effective date of this permit. Permittee should notify the Air Pollution Control Program if construction or modification is not started within two years after the effective date of this permit, or if construction or modification is suspended for one year or more.

You will be in violation of 10 CSR 10-6.060 if you fail to adhere to the specifications and conditions listed in your application, this permit and the project review. In the event that there is a discrepancy between the permit application and this permit, the conditions of this permit shall take precedence. Specifically, all air contaminant control devises shall be operated and maintained as specified in the application, associated plans and specifications.

You must notify the departments’ Air Pollution Control Program of the anticipated date of start up of this (these) air contaminant sources(s). The information must be made available not more than 60 days but at least 30 days in advance of this date. Also, you must notify the Department of Natural Resources Regional office responsible for the area within which you are located within 15 days after the actual start up of this (these) air contaminant source(s).

A copy of this permit and permit review shall be kept at the installation address and shall be made available to Department of Natural Resources’ personnel upon request.

You may appeal this permit or any of the listed special conditions to the Administrative Hearing Commission (AHC), P.O. Box 1557, Jefferson City, MO 65102, as provided in RSMo 643.075.6 and 621.250.3. If you choose to appeal, you must file a petition with the AHC within 30 days after the date this decision was mailed or the date it was delivered, whichever date was earlier. If any such petition is sent by registered mail or certified mail, it will be deemed filed on the date it is mailed. If it is sent by any method other than registered mail or certified mail, it will be deemed filed on the date it is received by the AHC.

If you choose not to appeal, this certificate, the project review and your application and associated correspondence constitutes your permit to construct. The permit allows you to construct and operate your air contaminant sources(s), but in no way relieves you of your obligation to comply with all applicable provisions of the Missouri Air Conservation Law, regulations of the Missouri Department of Natural Resources and other applicable federal, state and local laws and ordinances.

The Air Pollution Control Program invites your questions regarding this air pollution permit. Please contact the Construction Permit Unit at (573) 751-4817. If you prefer to write, please address your correspondence to the Missouri Department of Natural Resources, Air Pollution Control Program, P.O. Box 176, Jefferson City, MO 65102-0176, attention: Construction Permit Unit.
SPECIAL CONDITIONS:

The permittee is authorized to construct and operate subject to the following special conditions:

The special conditions listed in this permit were included based on the authority granted the Missouri Air Pollution Control Program by the Missouri Air Conservation Law (specifically 643.075) and by the Missouri Rules listed in Title 10, Division 10 of the Code of State Regulations (specifically 10 CSR 10-6.060). For specific details regarding conditions, see 10 CSR 10-6.060 paragraph (12)(A)10. “Conditions required by permitting authority.”

Architectural Systems, Inc.
Barry County, S06, T25N, R27W

1. Emission Limitation for Volatile Organic Compounds (VOCs)
   A. Architectural Systems, Inc. shall emit less than 250 tons of VOCs from the entire installation in any consecutive 12-month period.

   B. Attachment A or an equivalent forms approved by the Air Pollution Control Program shall be used to demonstrate compliance with Special Conditions 1(A). Architectural Systems, Inc. shall maintain all records required by this permit for not less than five (5) years and shall make them available immediately to any Missouri Department of Natural Resources’ personnel upon request. These records shall include Material Safety Data Sheets (MSDS) for all materials used in this equipment.

   C. Architectural Systems, Inc. shall report to the Air Pollution Control Program's Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten (10) days after the end of the month during which the records from Special Condition Number 1(B) indicate that the source exceeds the limitation of Special Conditions Number 1(A).

2. Emission Limitation for Hazardous Air pollutants (HAPs)
   The Maximum Achievable Control Technology (MACT) standard, 40 CFR Part 63, Subpart MMMM, National Emission Standards for Surface Coating of Miscellaneous Metal Parts and Products applies to the proposed equipment.

3. Emission Limitation for Nitrogen Oxides (NOx)
   A. Architectural Systems, Inc. shall emit less than 40 tons of NOx from the entire installation in any consecutive 12-month period.

   B. Attachment B or an equivalent forms approved by the Air Pollution Control Program shall be used to demonstrate compliance with Special Conditions 3(A). Architectural Systems, Inc. shall maintain all records required by this permit for not less than five (5) years and shall make them available immediately to any Missouri Department of Natural Resources’ personnel
SPECIAL CONDITIONS:
The permittee is authorized to construct and operate subject to the following special conditions:

upon request.

C. Architectural Systems, Inc. shall report to the Air Pollution Control Program's Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten (10) days after the end of the month during which the records from Special Condition Number 3(B) indicate that the source exceeds the limitation of Special Conditions Number 3(A).

4. Required Operating Conditions for Spray Paint Booth Arrestor Filters.
A. Architectural Systems, Inc. shall control emissions from the EP-01 paint spray booths by using paint arrestor filter as specified in the permit application. The arrestor filters shall be operated and maintained in accordance with the manufacturer's specifications. The filters shall be equipped with a gauge or meter, which indicates the pressure drop across the filter. These gauges or meters shall be located such that the Department of Natural Resource employees may easily observe them. Replacement filters shall be kept on hand at all times. The filters shall be made of fibers appropriate for operating conditions expected to occur (i.e. temperature limits, acidic and alkali resistance, and abrasion resistance).

B. Architectural Systems, Inc. shall monitor and record the operating pressure drop across the filters at least once every 24 hours. The operating pressure drop shall be maintained within the design conditions specified by the manufacturer's performance warranty.

C. Architectural Systems, Inc. shall maintain an operating and maintenance log for the filters which shall include the following:
   1.) Incidents of malfunction, with impact on emissions, duration of event, probable cause, and corrective actions; and
   2.) Maintenance activities, with inspection schedule, repair actions, and replacements, etc.

5. Required Operating Conditions for Thinner, Paints and Solvents.
Architectural Systems, Inc. shall keep the thinners, paints, solvents and cleaning solutions in sealed containers whenever the materials are not in use. Architectural Systems, Inc. shall provide and maintain suitable, easily read, permanent markings on all thinners, paints, solvents, and cleaning solution containers used with this equipment.

6. Paved Haul Road Control
Architectural Systems, Inc. shall control fugitive emissions from 0.1 miles of haul road at this site by paving and washing/cleaning.
SPECIAL CONDITIONS:
The permittee is authorized to construct and operate subject to the following special conditions:

A. Architectural Systems, Inc. shall pave with materials such as asphalt, concrete, and/or other material(s). If materials other than asphalt or concrete are used, Architectural Systems, Inc. must receive approval from the Air Pollution Control Program. The pavement shall be applied in accordance with industry standards for such pavement so as to achieve control of fugitive emissions while the plant is operating.

B. Maintenance and/or repair of the road surface shall be conducted as necessary to ensure that the physical integrity of the pavement is adequate to achieve control of fugitive emissions from these areas.
REVIEW OF APPLICATION FOR AUTHORITY TO CONSTRUCT AND OPERATE
SECTION (6) REVIEW
Project Number: 2008-01-023
Installation ID Number: 009-0062
Permit Number:

Architectural Systems, Inc. Complete: 01/24/2008
P.O. Box 519,
Monett, MO 65708

Parent Company:
Architectural Systems, Inc.
707 W. Highway 60,
Monett, MO 65708

Barry County, S06, T25N, R27W

REVIEW SUMMARY

- As a condition of remedial enforcement action Architectural Systems, Inc. is seeking a construction permit for a plant in operation since 2000. They have applied for authority to construct a 12.60 gallon per hour spray paint booth, a 1.3 Btu/hr drying oven, a three stage 0.75 million Btu/hr phosphate washer/coating operation, and a 0.2 million Btu/hr paint hook burn off oven.

- Hazardous Air Pollutant (HAP) emissions are expected from the proposed equipment. HAPs of concern from this process are glycol ethers (cas # 20-10-0), ethyle benzene (cas # 100-41-4), xylene (cas # 131-11-3), dimethyl phthalate (cas# 131-11-3), toluene (cas # 108-88-3), methyl isobutyl ketone (cas # 108-10-1).

- None of the New Source Performance Standards (NSPS) apply to the proposed equipment.

- Subpart MMMM of the National Emission Standards for Hazardous Air Pollutants (NESHAPs) regulations applies to this installation. The Maximum Achievable Control Technology (MACT) standard, 40 CFR Part 63, Subpart MMMM, National Emission Standards for Surface Coating of Miscellaneous Metal Parts and Products applies to the proposed equipment.

- Electrostatic spray gun and fabric filters in the booth areas are being used to control the particulate emission from the equipment in this permit.

- This review was conducted in accordance with Section (6) of Missouri State Rule 10 CSR 10-6.060, Construction Permits Required. Potential emissions of HAPs are above major source levels. VOCs have been limited to 250 tons per year below major source levels.
• This installation is located in Barry County, an attainment area for all criteria air pollutants.

• This installation is not on the List of Named Installations [10 CSR 10-6.020(3)(B), Table 2].

• Ambient air quality modeling was performed to determine the ambient impact of the following HAPs: glycol ethers (cas # 20-10-0), ethyle benzene (cas # 100-41-4), xylene (cas # 131-11-3), dimethyl phthalate (cas# 131-11-3), toluene (cas # 108-88-3), methyl isobutyl ketone (cas # 108-10-1). No model is currently available which can accurately predict ambient ozone concentrations caused by this installation’s VOC emissions.

• Options selected for compliance verification by MACT MMMM could require emissions testing.

• A Part 70 operating permit application is required for this installation within 60 days from permit issuance.

• Approval of this permit is recommended with special conditions.

INSTALLATION/PROJECT DESCRIPTION

Located in Monett, Missouri in Barry County, Architectural Systems, Inc. applies coatings to architectural subsections which are required to meet the specifications of Architectural Aluminum Manufacturers Association publication number AAMA 605.2-2000. They are a high performance architectural coating manufacturer that uses aluminum extrusions to make prefabricated metal storefronts. The installation is a major source for HAPs and is required to obtain a P70 operating permit. The installation took a 40 ton per year limit on nitrogen oxides (NOx) emissions to avoid increment modeling. The site was constructed prior to obtaining a construction permit.

Aluminum extrusions receive a dip in a cleaning solution (caustic) then a rinse a dip tank and then into a phosphate solution and two additional rinse steps. No emissions are reported from this equipment. The pretreatment cleaning and the phosphate coating and rinsing processes are a wet process with no anticipated emissions. The emissions (EP-03) from this source consists of the natural gas combustion emissions from the three process heaters each rated at 0.25 MMBtu/hr.

EP-01 is the painting spray booth area which consists of a total of six stacks, S1 through S6, where a combination of three coats of primer and paint are applied. The aluminum extrusions enter the paint booth area consisting of six booths. The extrusions proceed through the booths and the coatings are applied. The first two booths apply the primer or base coat, and the following booths apply the remaining color or clear coats. The extrusions then proceed to the drying oven for final curing, to the coating manufacture's specifications, of the applied coatings.
An electrostatic paint system is utilized to minimize overspray. A 75% transfer efficiency is applied to the control of the particulate matter from the spray guns and a paint arrestor filter is rated at 90% for control of particulate matter. The extrusions are then sent to an oven pass. The natural gas fired drying oven EP-02 is rated at a 1.3 MMBtu/hr rated and is designed to operate in the 400 to 500 degrees Fahrenheit range.

EP-04 is a natural gas paint burn off oven used to burn the overspray coatings from the racks and hooks used to suspend the extrusions from the conveyor to allow movement through the paint line and drying oven. The burn-off oven is rated at 0.2 MMBtu/hr.

The application indicated that a haul road that is paved of 0.1 miles was used at the site to deliver materials and ship product. The emissions from this road were counted in the plant over all PTE. Haul Road emissions were taken from AP-42, 13.2.1 Paved Roads.

No other emission sources have been reported by the installation.

No permits have been issued to Architectural Systems, Inc. from the Air Pollution Control Program. However, a determination of no permit required letter was issued for home products painting on June 7, 2000.

The installation is considered major for HAPs. The company provided information indicating that they have not exceeded 250 tons per year in actual emissions. The MACT, Subpart MMMM will apply to the equipment associated with this project. A MACT, Subpart MMMM facility using high performance coatings has the option to comply with the emission limit for high performance coating operations using the compliant materials approach, the emission rate without add-on controls approach, or the emission rate with add on controls approach. The rule also allows for a facility-specific emission limit approach. Therefore, this project is not subject to the requirements of Missouri Rule 10 CSR 10-6.060, Section (9), Hazardous Air Pollutant Permits even though the potential to emit for several individual HAPs and the combined HAPs exceed the major Source levels of 10.0/25.0 tons per year, respectively.

EMISSIONS/CONTROLS EVALUATION

The emission factors and control efficiencies used in this analysis were obtained from the Environmental Protection Agency (EPA) document AP-42, *Compilation of Air Pollutant Emission Factors*, Fifth Edition, section number 1.4, *Natural Gas Combustion* (1998) and section number 13.2.1 *Paved Roads* (2003). Potential emissions of the application represent the potential of the new equipment, assuming continuous operation (8760 hours per year.) The following table provides an emissions summary for this project.
The paint consumption calculations are based on the following: a nozzle rate of 6.24 gallon per hour, a load rate of 2.5 racks per minute with a 160 square feet per rack. The spray application rate is of 2.5 minutes per rack. EP-01 is determined to have a Maximum Hourly Design Rate of 12.565 gallons per hour. A paint transfer efficiency of 75% was applied for the use of electrostatic system to limit overspray which is subsequently captured through the use of fabric filters in the booth areas. The fabric filters were assigned a capture efficiency of 90%.

Table 1: Emissions Summary (tons per year)

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>Regulatory De Minimis Levels</th>
<th>Existing Potential Emissions</th>
<th>Existing Actual Emissions</th>
<th>Potential Emissions of the Application</th>
<th>New Installation Conditioned Potential</th>
</tr>
</thead>
<tbody>
<tr>
<td>PM$_{10}$</td>
<td>15.0</td>
<td>N/A</td>
<td>N/A</td>
<td>13.0</td>
<td>N/D</td>
</tr>
<tr>
<td>SOx</td>
<td>40.0</td>
<td>N/A</td>
<td>N/A</td>
<td>0.53</td>
<td>N/D</td>
</tr>
<tr>
<td>NOx</td>
<td>40.0</td>
<td>N/A</td>
<td>N/A</td>
<td>88.39</td>
<td>&lt;40</td>
</tr>
<tr>
<td>VOC</td>
<td>40.0</td>
<td>N/A</td>
<td>N/A</td>
<td>454.15</td>
<td>&lt;250</td>
</tr>
<tr>
<td>CO</td>
<td>100.0</td>
<td>N/A</td>
<td>N/A</td>
<td>74.25</td>
<td>N/D</td>
</tr>
<tr>
<td>HAPs</td>
<td>10.0/25.0</td>
<td>N/A</td>
<td>N/A</td>
<td>367.29</td>
<td>N/D</td>
</tr>
<tr>
<td>Glycol Ethers</td>
<td>5*</td>
<td>N/A</td>
<td>N/A</td>
<td>63.90</td>
<td>N/D</td>
</tr>
<tr>
<td>Ethyle Benzene</td>
<td>10.0</td>
<td>N/A</td>
<td>N/A</td>
<td>16.41</td>
<td>N/D</td>
</tr>
<tr>
<td>Xylene</td>
<td>10.0</td>
<td>N/A</td>
<td>N/A</td>
<td>70.68</td>
<td>N/D</td>
</tr>
<tr>
<td>Dimethyl Phthalate</td>
<td>10.0</td>
<td>N/A</td>
<td>N/A</td>
<td>80.09</td>
<td>N/D</td>
</tr>
<tr>
<td>Toluene</td>
<td>10.0</td>
<td>N/A</td>
<td>N/A</td>
<td>54.10</td>
<td>N/D</td>
</tr>
<tr>
<td>Methyl Isobutyl Ketone</td>
<td>10.0</td>
<td>N/A</td>
<td>N/A</td>
<td>82.11</td>
<td>N/D</td>
</tr>
</tbody>
</table>

N/A = Not Applicable; N/D = Not Determined.

* The HAP is listed at the Screen Modeling Action Level (SMAL); it is not a De Minimis level.

**PERMIT RULE APPLICABILITY**

This review was conducted in accordance with Section (6) of Missouri State Rule 10 CSR 10-6.060, *Construction Permits Required*. Potential emissions of HAPs are at major source levels. VOC’s are above de minimis levels. NO$_x$ is limited to below de minimis levels.

**APPLICABLE REQUIREMENTS**

Architectural Systems, Inc. shall comply with the following applicable requirements. The Missouri Air Conservation Laws and Regulations should be consulted for specific record keeping, monitoring, and reporting requirements. Compliance with these emission standards, based on information submitted in the application, has been verified at the time this application was approved.
GENERAL REQUIREMENTS

- Submission of Emission Data, Emission Fees and Process Information, 10 CSR 10-6.110
  The emission fee is the amount established by the Missouri Air Conservation Commission annually under Missouri Air Law 643.079(1). Submission of an Emissions Inventory Questionnaire (EIQ) is required June 1 for the previous year's emissions.

- Operating Permits, 10 CSR 10-6.065

- Restriction of Particulate Matter to the Ambient Air Beyond the Premises of Origin, 10 CSR 10-6.170

- Restriction of Emission of Visible Air Contaminants, 10 CSR 10-6.220

- Restriction of Emission of Odors, 10 CSR 10-3.090

SPECIFIC REQUIREMENTS

- Restriction of Emission of Particulate Matter From Industrial Processes, 10 CSR 10-6.400

- Maximum Achievable Control Technology (MACT) Regulations, 10 CSR 10-6.075, National Emission Standards for Surface Coating of Miscellaneous Metal Parts and Products applies to the spray coating equipment, 40 CFR Part 63, Subpart MMMM

- Maximum Allowable Emissions of Particulate Matter From Fuel Burning Equipment Used for Indirect Heating, 10 CSR 10-3.060

AMBIENT AIR QUALITY IMPACT ANALYSIS

Screen 3 modeling was used to predict hourly concentrations for the following pollutants: glycol ethers, ethyle benzene, xylene, dimethyl phthalate, toluene, and methyl isobutyl ketone. The calculated 24-hour and annual concentrations of the pollutants were compared to the 24 -hour and annual Risk Assessment Levels (RAL) limits. Table 2 shows both the modeled concentrations along with the corresponding RAL values. The predicted concentrations of the pollutants are significantly less than the limits and thus compliant with the RAL values.
### Table 2: Risk Assessment Concentrations Compared to 24-hour and Annual

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>24 Hr Modeled Impact</th>
<th>24 Hr RAL</th>
<th>Annual Modeled Impact</th>
<th>Annual RAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Glycol Ethers</td>
<td>24.3</td>
<td>450</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Ethyl Benzene</td>
<td>6.3</td>
<td>360</td>
<td>1.3</td>
<td>300</td>
</tr>
<tr>
<td>Xylene</td>
<td>26.9</td>
<td>250</td>
<td>5.4</td>
<td>11.8</td>
</tr>
<tr>
<td>Dimethyl Phthalate</td>
<td>30.5</td>
<td>40</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Toluene</td>
<td>20.6</td>
<td>400</td>
<td>4.1</td>
<td>20</td>
</tr>
<tr>
<td>Methyl Isobutyl Ketone</td>
<td>31.2</td>
<td>84</td>
<td>6.3</td>
<td>55.7</td>
</tr>
</tbody>
</table>

The MHDR of HAP are calculated based on the highest weight percent of individual HAPs (worse case) being used in the coating. The yearly amount based on 8760 hours was used to establish the one hour rate. EPA approved conversion factors (0.4 and 0.08) were used to compute concentrations for longer averaging periods. The 24 hour average equals the one-hour rate multiplied by 0.4. The annual average equals the one hour rate multiplied by 0.08.

### STAFF RECOMMENDATION

On the basis of this review conducted in accordance with Section (6), Missouri State Rule 10 CSR 10-6.060, *Construction Permits Required*, I recommend this permit be granted with special conditions.

Tim Hines
Environmental Engineer

### PERMIT DOCUMENTS

The following documents are incorporated by reference into this permit:

- The Application for Authority to Construct form, dated 01/16/08, received 01/10/2008, designating Architectural Systems, Inc. as the owner and operator of the installation.


- Southwest Regional Office Site Survey.
Attachment A – Monthly VOC Emissions Tracking Record

Architectural Systems, Inc.
Barry County, S06, T25N, R27W
Project Number: 2008-01-023
Installation ID Number: 009-0062
Permit Number: _______

This sheet covers the month of ____________________

<table>
<thead>
<tr>
<th>Emission Points</th>
<th>Description</th>
<th>Amount Processed This Month</th>
<th>Emission Factor</th>
<th>(a) Monthly Emissions from Each Emission Point (tons)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(b) Total VOC Emissions Calculated for this Month (tons):
(c) 12-Month VOC Emissions from Previous Month’s Attachment A (tons):
(d) Monthly VOC Emissions Total from previous year’s Attachment A (tons):
(e) Current 12-month VOC Emissions (tons):

(a) Monthly Emissions from each emission point is calculated by multiplying the amount processed by the emission factors. The emission factors can be obtained from three (3) sources where applicable: Stack testing results, EPA document AP-42.
(b) Total VOC Emissions for this Month Calculated by Summing (a). Monthly Emissions from Each Emission Point.
(c) 12-Month VOC Emissions total can be taken from (e) of last month’s Attachment A.
(d) The Monthly VOC Emissions from previous year’s Attachment A is the emissions from thirteen (13) month ago.
(e) Current 12-Month VOC Emissions can be calculated by (b) + (c) – (d).

A 12-Month Total VOC emissions total (e) of less than 250 tons indicates compliance.
Attachment B – Monthly NOx Emissions Tracking Record

Architectural Systems, Inc.
Barry County, S06, T25N, R27W
Project Number: 2008-01-023
Installation ID Number: 009-0062
Permit Number: ______

This sheet covers the month of ________________

<table>
<thead>
<tr>
<th>Emission Points</th>
<th>Description</th>
<th>Amount Processed This Month</th>
<th>Emission Factor</th>
<th>(a) Monthly Emissions from Each Emission Point (tons)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(b) Total NOx Emissions Calculated for this Month (tons):
(c) 12-Month NOx Emissions from Previous Month’s Attachment B (tons):
(d) Monthly NOx Emissions Total from previous year’s Attachment B (tons):
(e) Current 12-month NOx Emissions (tons):

(a) Monthly Emissions from each emission point is calculated by multiplying the amount processed by the emission factors. The emission factors can be obtained from stack testing results or EPA document AP-42.
(b) Total NOx Emissions for this Month Calculated by Summing (a). Monthly Emissions from Each Emission Point.
(c) 12-Month NOx Emissions total can be taken from (e) of last month’s Attachment B.
(d) The Monthly NOx Emissions from previous year’s Attachment B is the emissions from thirteen (13) month ago.
(e) Current 12-Month NOx Emissions can be calculated by (b) + (c) – (d).

A 12-Month Total NOx emissions total (e) of less than 40 tons indicates compliance.
Mr. Scott Beckwith  
President  
Architectural Systems, Inc.  
P.O. Box 519  
Monett, MO 65708

RE: New Source Review Permit - Project Number: 2008-01-023

Dear Mr. Beckwith:

Enclosed with this letter is your permit to construct. Please study it carefully. Also, note the special conditions, if any, on the accompanying pages. The document entitled, "Review of Application for Authority to Construct," is part of the permit and should be kept with this permit in your files.

Operation in accordance with these conditions, your new source review permit application and with your operating permit is necessary for continued compliance.

The reverse side of your permit certificate has important information concerning standard permit conditions and your rights and obligations under the laws and regulations of the State of Missouri.

If you have any questions regarding this permit, please do not hesitate to contact Timothy Paul Hines, at the departments’ Air Pollution Control Program, P.O. Box 176, Jefferson City, MO 65102 or at (573) 751-4817. Thank you for your attention to this matter.

Sincerely,

AIR POLLUTION CONTROL PROGRAM

Kendall B. Hale  
New Source Review Unit Chief

KBH:thl

Enclosures

c: Southwest Regional Office  
PAMS File: 2008-01-023  
Permit Number: