STATE OF MISSOURI
DEPARTMENT OF NATURAL RESOURCES
MISSOURI AIR CONSERVATION COMMISSION

PERMIT BOOK

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: 052007-005
Project Number: 2006-01-011

Owner: Edwards FRP Repair
Owner's Address: 31197 Wingate Road, Sedalia, MO 65301
Installation Name: Edwards FRP Repair
Installation Address: 31197 Wingate Road, Sedalia, MO 65301
Location Information: Pettis County, S4, T44, R21

Application for Authority to Construct was made for:

Installation of a fiberglass tanks manufacturing operation. These were constructed prior to receipt of a permit from the Air Pollution Control Program. Obtaining this permit is part of a remedial action required by the Air Pollution Control Program. This review was conducted in accordance with Section (5), 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 (listed as attachments starting on page 2) are applicable to this permit.

MAY 10 2007
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. Specifically, all air contaminant control devices shall be operated and maintained as specified in the application, associated plans and specifications.

You must notify the Air Pollution Control Program of the anticipated date of start up of this (these) air contaminant source(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 as provided in RSMo 643.075. If you choose to appeal, the Air Pollution Control Program must receive your written declaration within 30 days of receipt of this permit.

If you choose not to appeal, this certificate, the project review, your application and associated correspondence constitutes your permit to construct. The permit allows you to construct and operate your air contaminant source(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 Department of Natural Resources has established the Outreach and Assistance Center to help in completing future applications or fielding complaints about the permitting process. You are invited to contact them at 1-800-361-4827 or (573) 526-6627, or in writing addressed to Outreach and Assistance Center, P.O. Box 176, Jefferson City, MO 65102-0176.

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 Air Pollution Control Program, P.O. Box 176, Jefferson City, MO 65102-0176, attention Construction Permit Unit.
Installation of a fiberglass tanks manufacturing operation. These were constructed prior to receipt of a permit from the Air Pollution Control Program. Obtaining this permit is part of a remedial action required by the Air Pollution Control Program. This review was conducted in accordance with Section (5), Missouri State Rule 10 CSR 10-6.060, *Construction Permits Required*. 
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.”

Edwards FRP Repair
Pettis County, S4, T44, R21

1. National Emission Standards for Hazardous Air Pollutants (NESHAP)

This installation shall comply with all applicable emission limits, testing, monitoring, sampling, reporting, and record keeping requirements of 40 CFR Part 63, Subpart WWWW, National Emission Standards for Hazardous Air Pollutants: Reinforced Plastics Composites Productions.

2. Nuisance Odor and Corrective Action

If a continuing situation of demonstrated nuisance odors exists in violation of 10 CSR 10-2.070, Restriction of Emission of Odors, the Director may require the Edwards FRP Repair to submit a corrective action plan within thirty (30) days, adequate to timely and significantly mitigate the odors. Edwards FRP Repair shall implement any such plan immediately upon its approval by the Director. Failure to either submit or implement such a plan shall be a violation of the permit.
REVIEW OF APPLICATION FOR AUTHORITY TO CONSTRUCT AND OPERATE
SECTION (5) REVIEW
Project Number: 2006-01-011
Installation ID Number: 159-0059
Permit Number:

Edwards FRP Repair
31197 Wingate Road
Sedalia, MO 65301

Complete: January 11, 2006
Reviewed: October 19, 2006

Parent Company:
Edwards FRP Repair
31197 Wingate Road
Sedalia, MO 65301

Pettis County, S4, T44, R21

REVIEW SUMMARY

• Edwards FRP Repair has applied for authority to install a fiberglass tanks manufacturing operation.

• Hazardous air pollutant (HAP) emissions are expected from the proposed equipment. HAP of concern from this process is styrene.

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

• The Maximum Achievable Control Technology (MACT) standard, Subpart WWWW, National Emission Standards for Hazardous Air Pollutants: Reinforced Plastics Composites Productions, applies to this installation.

• No air pollution control equipment is being used in association with this installation.

• This review was conducted in accordance with Section (5) of Missouri State Rule 10 CSR 10-6.060, Construction Permits Required. Potential emissions of styrene, a HAP, are above the major level to trigger Section (9) review. However, as described in Section (9), since the subject project’s processes are regulated under a federal regulation, 40 CFR Part 63, National Emission Standards for Hazardous Air Pollutants: Reinforced Plastics Composites Productions, the source is exempt from review under Section (9).

• This installation is located in Pettis 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 on styrene since potential emissions are above the threshold levels.

• Emissions testing is not required for the equipment in this project. However, Edwards FRP Repair is required to perform emission testing if required by Subpart WWWW.

• A Part 70 Operating Permit is required for this installation within 1 year of the issuance of this permit.

• Approval of this permit is recommended with special conditions.

INSTALLATION DESCRIPTION

Edwards FRP Repair operates a fiberglass product manufacturing plant in Sedalia, Missouri. No permits have been issued to Edwards FRP Repair from the Air Pollution Control Program. A Notice of Violation (NOV) #AP05PWJ15 was issued to Edwards FRP Repair for constructing and operating the installation in this project without a construction permit. In a letter dated September 9, 2006 from the Air Pollution Control Program, this installation was notified that 40 CSR Part 63 Subpart WWWW, Reinforced Plastics Composites Production, applies to this installation.

PROJECT DESCRIPTION

This installation is equipped with a fiberglass chop spray gun to manufacture fiberglass septic tanks. According to the Inspection Report, a maximum of 3 tanks can be produced per 8-hour shift. Approximately 200 pounds of resin is applied on a tank. According to the application, this resin contains 33.56% by weight of styrene.

EMISSIONS/CONTROLS EVALUATION

Styrene is the main pollutant of concern in this project. The emission factor of styrene is calculated using the method described in Composite Fabricators Association (CFA) Unified Emissions Factors (UEF). The existing actual emissions were estimated from the 2005, Emission Inventory Questionnaire (EIQ). 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.
Table 1: Emissions Summary (tons per year)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>PM$_{10}$</td>
<td>15.0</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>SOx</td>
<td>40.0</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>NOx</td>
<td>40.0</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>VOC</td>
<td>40.0</td>
<td>N/A</td>
<td>7.435</td>
<td>12.63</td>
<td>N/A</td>
</tr>
<tr>
<td>CO</td>
<td>100.0</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>HAPs</td>
<td>10.0/25.0</td>
<td>N/A</td>
<td>N/D</td>
<td>12.15</td>
<td>Subpart WWWW</td>
</tr>
<tr>
<td>Styrene</td>
<td>10.0</td>
<td>N/A</td>
<td>N/D</td>
<td>12.15</td>
<td>Subpart WWWW</td>
</tr>
</tbody>
</table>

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

PERMIT RULE APPLICABILITY

This review was conducted in accordance with Section (5) of Missouri State Rule 10 CSR 10-6.060, **Construction Permits Required**. Potential emissions of styrene, a HAP, are above the major level to trigger Section (9) review. However, as described in Section (9), since the subject project’s processes are regulated under a federal regulation, 40 CFR Part 63, **National Emission Standards for Hazardous Air Pollutants: Reinforced Plastics Composites Productions**, the source is exempt from review under Section (9).

APPLICABLE REQUIREMENTS

Edwards FRP Repair 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. For a complete list of applicable requirements for your installation, please consult your operating permit.

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 April 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


AMBIENT AIR QUALITY IMPACT ANALYSIS

Screen 3 modeling analysis is performed on styrene since potential emissions are above threshold level. Based on calculation, the emission rate for styrene is 2.78 pounds per hour. The following table lists the predicted styrene impact from the subject sources and comparison with the applicable Risk Assessment Level (RAL) for styrene.

Table 2: Styrene Modeling Results

<table>
<thead>
<tr>
<th>Pollutants</th>
<th>Modeled Impact</th>
<th>Risk Assessment Level</th>
<th>Time Period</th>
</tr>
</thead>
<tbody>
<tr>
<td>Styrene</td>
<td>419.6 µg/m³</td>
<td>2240 µg/m³</td>
<td>24-Hour</td>
</tr>
<tr>
<td></td>
<td>83.92 µg/m³</td>
<td>333 µg/m³</td>
<td>Annual</td>
</tr>
</tbody>
</table>

As indicated in the previous table, styrene emissions are expected to be in compliance with the RAL.
STAFF RECOMMENDATION

On the basis of this review conducted in accordance with Section (5), Missouri State Rule 10 CSR 10-6.060, Construction Permits Required, I recommend this permit be granted with special conditions.

Fuad Wadud
Environmental Engineer

PERMIT DOCUMENTS

The following documents are incorporated by reference into this permit:

- The Application for Authority to Construct form, dated January 4, 2006, received January 5, 2006, designating Edwards FRP Repair as the owner and operator of the installation.
- Composite Fabricators Association (CFA), Unified Emissions Factors (July 2001).
- Material Safety Data Sheet (MSDS).
Mr. Robert Edwards  
Owner/President  
Edwards FRP Repair  
31197 Wingate Road  
Sedalia, MO 65301  


Dear Mr. Edwards:  

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 amended 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 Fuad Wadud at (573) 751-4817, or you may write to me at the Department of Natural Resources’ Air Pollution Control Program, P.O. Box 176, Jefferson City, Missouri 65102. Thank you for your attention to this matter.  

Sincerely,  

AIR POLLUTION CONTROL PROGRAM  

Kendall B. Hale  
New Source Review Unit Chief  

KBH: fwl  

Enclosures  

c: Kansas City Regional Office  
PAMS File: 2006-01-011  

Permit Number: