Florida Department of Environmental Protection

Northeast District
7825 Baymeadows Way, Suite B200
Jacksonville, Florida 32256-7590
Phone: 904/807-3300 ♦ Fax: 904/448-4366

Charlie Crist
Governor

Jeff Kottkamp
Lt. Governor

Michael W. Sole
Secretary

PERMITTEE:

Sybo Composites, LLC.
404 South Riberia St. Building 4
St. Augustine, Florida 32084

Authorized Representative:
Stuart Lahaise, President & CEO

Air Permit Number:1090462-001-AC
Date of Issue: October 22, 2009
Expiration Date: October 22, 2010

Sybo Composites
Minor Source Air Construction Permit
Initial AC

PROJECT AND LOCATION

This is the final air construction permit, which authorizes the construction of a Fiberglass Reinforced Plastic Parts Facility for the manufacture of ballistic panels from polyester/vinyl ester resin and gel coat. This facility uses a close-molded process. The proposed work will be conducted at Sybo Composites which is a Fiberglass Reinforced Plastic Parts Manufacturing facility (Standard Industrial Classification No. 3089). The facility will be located in St. Johns County at 404 South Riberia St. Building 4 in St. Augustine, Florida. The UTM coordinates are Zone 17, 469.78 km East, and 3305.16 km North. As noted in the Final Determination provided with this final permit, only minor changes and clarifications were made to the draft permit.

STATEMENT OF BASIS

This Air Construction Permit is issued under the provisions of: Chapter 403 of the Florida Statutes (F.S.) and Chapters 62-4, 62-204, 62-210, 62-212, 62-296 and 62-297 of the Florida Administrative Code (F.A.C.). The permittee is authorized to operate in accordance with the conditions of this permit and as described in the application, approved drawings, plans, and other documents on file with the Department. Because of the technical nature of the project, the permit contains numerous acronyms and abbreviations, which are defined in Appendix A of this permit.

CONTENTS

Section	Description
Section 1	General Information
Section 2	Administrative Requirements
Section 3	Emissions Unit Specific Conditions
Section 4	Appendices

Executed in Jacksonville, Florida.

10/22/2009

Christopher L. Kirts, P. E.
District Air Program Administrator

Date

FACILITY AND PROJECT DESCRIPTION

Sybo Composites manufactures ballistic panels from polyester/vinyl ester resin and gel coat using a close-molded process that involves a combination of infusion and resin transfer molding (light RTM). The infusion process uses a vacuum to draw the resin into the mold, while the light RTM uses a low pressure vacuum to distribute resin into the mold. Both processes use a mold that is closed to the environment.

The molds used to make the final products are typically two pieces; one at the top and one at the bottom. The mold is prepared first by waxing followed by the application of a mold release compound to both parts to facilitate the ease of removal of the cured finished products from the mold. Fiberglass mat or granite is then placed into the mold. When granite is used as a component, a two part urethane/polyester primer (ATPRIME 2A and B mixed 50/50) will be applied in a very thin layer (using a brush or roller) to allow the granite to adhere to the vinyl ester resin. Gel coat is then manually applied by either using a brush or roller.

Following the application of primer and gel coat, the mold is closed sealed and catalyzed vinyl ester is then injected into the closed mold using either the vacuum technique or the light RTM pressure injection technique. Resin will be left to cure in the closed mold and subsequently released after curing. The finished products will then be assembled to their final configuration. Acetone will be used for cleanup.

The air pollutant emissions from the facility are: Volatile Organic Compound (VOC) and HAP, primarily styrene, and methacrylate (MMA) are generated from the coating, mold release and primer used in the fiberglass reinforced plastic parts operation at the facility. Compliance with the facility-wide VOC/HAP emissions shall be accomplished through record keeping.

This facility is considered a natural minor facility based on the information provided in the application.

The existing facility consists of the following permitted emissions unit.

Facility ID No. 1090462

EU ID No.	Emission Unit Description
001	Fiberglass Reinforced Plastic Parts Operation

FACILITY REGULATORY CLASSIFICATION

- The facility is not a major source of hazardous air pollutants (HAP).
- The facility has no units subject to the acid rain provisions of the Clean Air Act (CAA).
- The facility is not a Title V major source of air pollution in accordance with Chapter 213, F.A.C.
- The facility is not a major stationary source in accordance with Rule 62-212.400(PSD), F.A.C.

SECTION 2. ADMINISTRATIVE REQUIREMENTS

1. Permitting and Compliance Authority: The permitting and compliance authority for this project is the Northeast District Office, Florida Department of Environmental Protection (Department). The mailing address and phone number of the District is 7825 Baymeadows Way, Suite B-200, Jacksonville, Florida 32256-7590, (904)807-3300. All documents related to applications for permits to operate an emissions unit, and compliance activities such as reports, tests, and notifications shall be submitted to this District office.

2. Appendices: The following Appendices are attached as part of this permit:
   a. Appendix A. Citation Formats and Glossary of Common Terms;
   b. Appendix B. General Conditions;
   c. Appendix C. Common Conditions;
   d. Appendix D. Common Testing Requirements

3. Applicable Regulations, Forms and Application Procedures: Unless otherwise specified in this permit, the operation of the subject emissions units shall be in accordance with the capacities and specifications stated in the application. The facility is subject to all applicable provisions of: Chapter 403, F.S.; and Chapters 62-4, 62-204, 62-210, 62-212, 62-296 and 62-297, F.A.C. Issuance of this permit does not relieve the permittee from compliance with any applicable federal, state, or local permitting or regulations.

4. New or Additional Conditions: For good cause shown and after notice and an administrative hearing, if requested, the Department may require the permittee to conform to new or additional conditions. The Department shall allow the permittee a reasonable time to conform to the new or additional conditions, and on application of the permittee, the Department may grant additional time.
   [Rule 62-4.080, F.A.C.]

5. Modifications: No new emissions unit shall be constructed and no existing emissions unit shall be modified without obtaining an air construction permit from the Department. Such permit shall be obtained prior to beginning construction or modification.
   [Rules 62-210.300(1), and 62-212.300, (1) (a), F.A.C.]

6. Application for Non Title V Air Permit: This permit authorizes construction of the permitted emissions units and initial operation to determine compliance with Department rules. A completed **Application for Non Title V Air Permit** (DEP Form No. 62-210.900(3), F.A.C.), shall be submitted to the Department at least 60 days prior to the expiration date of this construction permit. To properly apply for a construction permit, the permittee shall submit the appropriate application form, processing fee, and compliance test reports as required by this permit.

   [Rule 62-4.090, F.A.C.] [Rules 62-4.055 and 62-4.220, F.A.C.]

Facility Wide Emissions

This section of the permit addresses the following emissions unit

Emissions Unit	Emissions Unit. Description
001	Fiberglass Reinforced Plastic Parts Operation

ESSENTIAL POTENTIAL TO EMIT PARAMETERS

1. **Hours of Operation.** The hours of operation are not restricted, i.e. 24 H/D; 7 D/W; 52 W/Y, and 8760 Hours per year.

   [Rules 62-4.160(2), 62-210.200(PTE), F.A.C, Air Construction Application request dated 07/21/09]

EMISSION LIMITATIONS AND PERFORMANCE STANDARDS

2. **Volatile Organic Compounds (VOC), Total HAPs and Individual HAP**: The maximum facility-wide VOC emissions rate is limited to less than 100 tons per consecutive 12 months. The maximum facility-wide total Hazardous Air Pollutants (HAPs) emissions rate is limited less than 25 tons per consecutive 12 months and individual HAP is limited to less than 10 tons per consecutive 12 months.

   [Rule 62-210.200(203), (PTE), Rule 62-210.300 (1), and F.A.C.]

RECORD KEEPING

3. **Record Keeping.** In order to demonstrate compliance with the facility wide emissions limitations as stated in **Specific Condition No. 2** of this section, and pursuant to Rule 62-4.070(3), F.A.C., the Permittee shall maintain a monthly log at the facility for each material that contains VOC and HAPs for a period of at least three years from the date the data is recorded. The log, at a minimum, shall contain the following:

   a) Designation of the month and year of operation for which the records are being tabulated; and
   b) Consecutive 12-month total VOC, Total HAPs and individual HAP emissions rate.
   c) Record the total quantity, in pounds of each material/product used. Be sure to also record the method of application (where appropriate) for each material used (hand lay-up, spray lay-up, etc.).
   d) For each material/product used, record the percentage (%) and quantity (pounds) for eachVOC/OS specie be sure to also identify each chemical specie that is HAP.

      Note: ***Since some solvents used may not contain 100% solvent, the log shall specify each specific miscellaneous solvent which was used. Documentation of miscellaneous solvents used shall be determined by a mass balance method (amount used minus amount captured for disposal or recycle).***
   e) Record the total monthly hours of operation.
   f) Documents or supporting justifications for VOC, Total HAPs and individual HAP emissions calculation including, but not limited to:

      i. Material Safety Data Sheet (MSDS) or material specification sheet.
      ii. Purchase receipt of the VOC containing materials or other supporting documents indicating the materials usage.

General Requirements

1. Each log shall have the appropriate footnotes listing any emissions factors used. Should there be a change in the emission factor(s) used; the most current factor shall be employed.

2. Each log, where applicable, shall have attached the documentation for all chemicals captured for disposal or recycle.

3. Daily logs shall be completed by the next business day. The monthly logs shall be completed by the end of the following month. Supporting documentation (MSDS sheets, purchase orders, etc.) shall be kept for each material which include sufficient information to determine VOC/OS emissions. These records shall be made available to the Department upon request.

[Rules 62-4.070(3), and Rule 62-4.160 (14)(b), F.A.C.]