# 7 April 2005

Mr. Randall H. Borges, President U.S. Watercraft, LLC 226 West Shore Road Portsmouth, RI 02871

Dear Mr. Borges:

The Department of Environmental Management, Office of Air Resources has reviewed and approved your request for a revision to your minor source permit for your fiberglass boat building facility located at 226 West Shore Road in Portsmouth, RI.

Enclosed is a revised minor source permit issued pursuant to our review of your request (Approval No. 1783).

I can be reached at 222-2808, extension 7011 if there are any questions.

Sincerely,

Douglas L. McVay Associate Supervising Engineer Office of Air Resources

# STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR RESOURCES

# MINOR SOURCE PERMIT

US WATERCRAFT, LLC

#### **APPROVAL NO. 1783**

Pursuant to the provisions of Air Pollution Control Regulation No. 9, this minor source permit is issued to:  US Watercraft, LLC	
A revision to the emission limitation	ons for styrene based on the revised AALs in
APC Regulation No. 22.	
Located at: 226	S West Shore Road, Portsmouth
revoked by or surrendered to the <i>LLC</i> from compliance with app	om the date of its issuance and shall remain in effect until e Department. This permit does not relieve <i>US Watercraft</i> , dicable state and federal air pollution control rules and etion and operation of this equipment shall be subject to the mission limitations.
Stephen Majkut, Chief	Date of issuance

**Office of Air Resources** 

# STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR RESOURCES

Permit Conditions and Emission Limitations

#### US WATERCRAFT, LLC

#### APPROVAL NO. 1783

(revised April 2005)

#### A. Emission Limitations

- 1. Volatile Organic Compound (VOC) Emission Limitations
  - a. The total quantity of VOC emissions discharged to the atmosphere from all operations conducted for the entire facility shall not exceed 8,167 pounds of VOC per calendar month based upon a 12-month rolling average.
  - b. Polyester resin shall not have a VOC content greater than 45 percent by weight.
  - c. Vinyl ester resin shall not have a VOC content greater than 50 percent by weight.
  - d. Tooling resin shall not have a VOC content greater than 55 percent by weight.
  - e. Gel coats shall not have a VOC content greater than 40 percent by weight.
  - f. Tooling gel coats shall not have a VOC content greater than 50 percent by weight.

#### 2. Styrene

The quantity of styrene discharged to the atmosphere from all operations at this facility shall not exceed the following:

- a. 16.5 pounds per hour
- b. 49.5 pounds per day
- c. 754 pounds per calendar month based upon a 12-month rolling average.

#### 3. Methyl methacrylate

a. Gel coats shall not have a methyl methacrylate content greater than 5 percent by weight.

#### 4. Hazardous Air Pollutant (HAP) Emission Limitations

The total quantity of HAP emissions discharged to the atmosphere from all operations for the entire facility shall not exceed 1,500 pounds of any one HAP or 4,000 pounds of any combination of HAPs per calendar month based upon a 12-month rolling average. "Hazardous Air Pollutant" shall mean an air pollutant that has been listed pursuant to Section 112(b) of the Clean Air Act Amendments of 1990.

# 5. Wood Products Manufacturing Operations

The total quantity of VOC emissions discharged to the atmosphere from wood products manufacturing operations, for the entire facility, shall not exceed 4000 pounds of VOC per calendar month based upon a 12-month rolling average. "Wood products manufacturing operations" shall have the meaning given to that term in Air Pollution Control Regulation No. 35.

### B. Operating Requirements

- 1. Where atomized spraying is used to apply gel coats or resins, spraying equipment shall be high volume, low pressure (HVLP) or air-assisted, airless spray guns.
- 2. On and after 11 July 2004, controlled spraying methods shall be used for all spray application of gel coats or resins where atomized spraying is used.
- 3. Controlled spray methods shall be in accordance with the Composites Fabricators Association Recommendations for Open Molding Operations. The controlled spraying workpractice must include the following elements:
  - a. Spray gun operator training that teaches proper spray gun handling techniques.
  - b. Operation of the spray gun at the lowest fluid tip pressure.
  - c. The use of close containment mold flanges to minimize overspray off the mold.

- 4. All spray gun operators shall be trained in controlled spraying techniques by 11 July 2004, or upon hiring, whichever is later. Spray gun operators shall be given periodic refresher training.
- 5. Initial and refresher training shall include, at a minimum, the following topics:
  - a. Understanding of the importance of controlled spraying;
  - b. Recognition of the effects of overspray on styrene emissions;
  - c. Recognition of the effects of spray gun pressure on emissions;
  - d. Understanding of the procedure to establish proper spray gun pressure;
  - e. Understanding of spraying techniques;
  - f. Understanding of the purpose of overspray containment flanges;
  - g. Completion of a performance evaluation.
- 6. All employees contacting gel coat and/or laminating resins shall wear either reusable or disposable non-porous gloves whenever they use or apply gel coats and/or resins.
- 7. All containers used to store VOC-containing materials must be equipped with a tight fitting lid which is kept closed when the container is not in use so as to minimize VOC emissions to the atmosphere.

#### C. Compliance Determinations

- 1. Styrene and methyl methacrylate emissions from gel coat and resin applications shall be calculated using the Composites Fabricators Association's (CFA) Unified Emissions Factors (UEF) model or other methods that have the prior approval of the Office of Air Resources.
- 2. For all other material, the emission factor shall be 100 lbs VOC or HAP emitted per 100 lbs VOC or HAP used.
- 3. Determination of VOC content of all materials shall be determined by EPA Reference Test Method 24 (40 CFR 60, Appendix A) or another test method that is approved by the Office of Air Resources and EPA.
- 4. Determination of HAP content of all materials shall be determined by EPA Reference Test Method 311 (40 CFR 63, Appendix A) or another test method that is approved by the Office of Air Resources and EPA.

5. Compliance with the VOC and/or HAP content limitations in Conditions A.1 and A.3 may be determined from manufacturers formulation data. Calculations will be used to determine the VOC and/or HAP content of any thinned material. If the VOC and or HAP content of any material, determined by a Method 24 or Method 311 test is greater than that indicated by the formulation data, the Method 24 or Method 311 test shall govern.

# D. Recordkeeping and Reporting

- 1. The owner/operator shall maintain the following records:
  - a. The name, type, and identification number of each material containing VOC and/or HAP used at the facility, including but not limited to each resin, gel coat, accelerator, activator, adhesive, epoxy, promoter, putty, paint and cleaner.
  - b. A material safety data sheet (MSDS) for each material containing VOC and/or HAP used at the facility, showing the VOC and HAP content.
  - c. For each gel coat and resin, the VOC content in weight percent and the total weight per gallon.
  - d. For each clean-up material, each VOC component and the content in volume percent.
  - e. For each material containing VOC and/or HAP used at the facility, the quantity used and the amount of waste generated (in gallons or pounds) at the facility on a monthly basis.
- 2. For each gel coat and resin used at the facility, the owner/operator shall record the method used to apply the product and the amount used for each application.
- 3. For resins containing vapor suppressants, the VSR reduction factor for each specific resin/suppressant mixture must be obtained from the resin supplier, or must be determined at the facility according to the procedures detailed in the Composites Fabricators Association Vapor Suppressant Effectiveness Test Protocol.
- 4. For each gel coat or resin which is diluted with any VOC the following records shall be kept on a daily basis in addition to those listed above:
  - a. Amount of gel coat or resin in gallons, to which the diluent was added.
  - b. Amount of diluent added, in gallons, to each gel coat or resin including its respective identification numbers.

- c. The weight percent of VOC in each gel coat or resin, as applied and as supplied and the VOC density of the diluents.
- 5. The owner/operator shall maintain the following records for wood products manufacturing operations:
  - a. The name, identification number and amount of each finishing, gluing and washoff material used each month at the facility.
  - b. Certified Product Data Sheets showing the VOC and VHAP content of each finishing, gluing and washoff material used at the facility.
  - c. The type and amount of VOC used as thinners and in cleaning operations each month at the facility.
- 6. The owner/operator shall maintain records of the training program for controlled spraying. These records shall include, at a minimum, the following:
  - a. A list of all current personnel, by name, who are required to be trained and a record of the date that each employee was trained.
  - b. An outline of the subjects covered in the initial and refresher training.
  - c. A copy of the controlled spraying performance evaluation for each employee.
- 7. The owner/operator shall, on a daily basis determine the total quantity of styrene discharged to the atmosphere from the entire facility. The owner/operator shall keep records of this determination and provide such records to the Office of Air Resources upon request.
- 8. The owner/operator shall notify the Office of Air Resources, in writing within 15 days, whenever the quantity of styrene discharged to the atmosphere from all operations at this facility, exceeds the following:
  - a. 16.5 pounds per hour
  - b. 49.5 pounds per day
- 9. The owner/operator shall, on a monthly basis, no later than 5 days after the first of the month, determine the total quantity of styrene, VOC and HAP discharged to the atmosphere from the entire facility. The owner/operator shall keep records of this determination and provide such records to the Office of Air Resources upon request.

10. The owner/operator shall notify the Office of Air Resources, in writing within 15 days, whenever the quantity of air contaminants discharged to the atmosphere, based upon a 12-month rolling average, from all operations at this facility, exceeds the following for any of the listed air contaminants:

c. Styrene: 754 pounds per month

d. VOC: 8167 pounds per month

e. Any one HAP: 1500 pounds per month

f. Any combination of HAPs: 4000 pounds per month

- 11. The owner/operator shall, on a monthly basis, no later than 5 days after the first of the month, determine the total quantity of VOC discharged to the atmosphere from wood products manufacturing operations. The owner/operator shall keep records of this determination and provide such records to the Office of Air Resources upon request.
- 12. The owner/operator shall notify the Office of Air Resources, in writing within 15 days, whenever the quantity of VOC discharged to the atmosphere, based upon a 12-month rolling average, from wood products manufacturing operations at this facility, exceeds 4000 pounds of VOC per calendar month based upon a 12-month rolling average.
- 13. The owner/operator shall notify the Office of Air Resources of any anticipated noncompliance with the terms of this permit or any other applicable air pollution control rules and regulations.
- 14. The owner/operator shall notify the Office of Air Resources, in writing, of any noncompliance with the terms of this permit within 30 calendar days of becoming aware of such occurrence and supply the Director with the following information:
  - a. The name and location of the facility;
  - b. The subject source(s) that caused the noncompliance with the permit term;
  - c. The time and date of first observation of the incident of noncompliance;
  - d. The cause and expected duration of the incident of noncompliance;
  - e. The estimated rate of emissions (expressed in lbs/hr or lbs/day) during the incident and the operating data and calculations used in estimating the emission rate.

- f. The proposed corrective actions and schedule to correct the conditions causing the incidence of noncompliance.
- 15. The owner/operator shall notify the Office of Air Resources in writing of any planned physical or operational change to any equipment covered under this approval that would:
  - a. Change the representation of the facility in the application.
  - b. Alter the applicability of any state or federal air pollution rules or regulations.
  - c. Result in the violation of any terms or conditions of this permit.
  - d. Qualify as a modification under APC Regulation No. 9.

Such notification shall include:

- Information describing the nature of the change.
- Information describing the effect of the change on the emission of any air contaminant.
- The scheduled completion date of the planned change.

Any such change shall be consistent with the appropriate regulation and have the prior approval of the Director.

16. All records required in this permit shall be maintained for a minimum of five years after the date of each record and shall be made available to representatives of the Office of Air Resources upon request.

#### D. Other Permit Conditions

- 1. To the extent consistent with the requirements of this permit and applicable federal, state, and local laws, the facility shall be designed, constructed, and operated in accordance with the representation of the facility in the permit application dated 13 June 2003.
- 2. Employees of the Office of Air Resources and its authorized representatives shall be allowed to enter the facility at all times for the purpose of inspecting any air pollution source, investigating any condition it believes may be causing air pollution or examining any records required to be maintained by the Office of Air Resources

3. At all times, including periods of startup, shutdown and malfunction, the owner/operator shall, to the extent practicable, maintain and operate the facility in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Office of Air Resources which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures and inspection of the source.

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