

Vectorworks Marine, Inc.  
Fiberglass Boat Manufacturing Facility  
Facility ID No.: 0090127  
Brevard County

**Title V Air Operation Permit Revision**

**PROPOSED Permit No.: 0090127-008-AV**  
**Revision to Title V Air Operation Permit 0090127-007-AV**

Permitting & Compliance Authority:  
Florida Department of Environmental Protection  
3319 Maguire Boulevard, Suite 232  
Orlando, Florida 32803  
Telephone: 407/893-3334  
Fax: 407/897-5963

# Title V Air Operation Permit Revision

**PROPOSED Permit No.: 0090127-008-AV**  
**Revision to Title V Air Operation Permit 0090127-007-AV**

## Table of Contents

<b>Section</b>	<b>Page Number</b>
Placard Page .....	1
I. Facility Information .....	2
Subsection A. Facility Description.	
Subsection B. Summary of Emissions Unit ID No(s). and Brief Description(s).	
Subsection C. Relevant Documents.	
II. Facility-wide Conditions .....	3
III. Emissions Unit(s) and Conditions	
Subsection A. 001 – Laminating/Gelcoating Operations.....	7
Appendix A-1, Abbreviations, Acronyms, Citations, and Identification Numbers	
Appendix H-1, Permit History/ID Number Changes	
Appendix I-1, List of Insignificant Emission Units and/or Activities	
<b>Appendix TV-6, Title V Conditions (6/23/06)</b>	
Appendix Subpart 63-A	
Appendix Subpart VVVV	
<b>Appendix Subpart WWWW</b>	



# Florida Department of Environmental Protection

Central District Office  
3319 Maguire Boulevard, Suite 232  
Orlando, Florida 32803-3767

Charlie Crist  
Governor

Jeff Kottkamp  
Lt. Governor

Michael W. Sole  
Secretary

**Permittee:**

Vectorworks Marine, Inc.  
805 Marina Road  
Titusville, FL 32796

**PROPOSED Permit No.:** 0090127-008-AV

**Facility ID No.:** 0090127

**SIC Nos.:** 37

**Project:** Title V Air Operation Permit Revision

Attention: Jeffrey Gray, CEO and Managing Director

This permit revision is being issued for the purposes of incorporating the terms and conditions of the air construction permit No. 0090127-009-AC, which incorporates of 40 CFR 63 Subpart WWW (NESHAP: Reinforced Plastic Composites Production). The facility is located at 805 Marina Road, Titusville, Brevard County; UTM Coordinates: Zone 17, 518.01 km East and 3166.10 North; Latitude: 28° 37' 24" North and Longitude: 80° 48' 50" West.

This Title V Air Operation Permit Revision is issued under the provisions of Chapter 403, Florida Statutes (F.S.) and Florida Administrative Code (F.A.C.) Chapters 62-4, 62-210, and 62-213. The above named permittee is hereby authorized to perform the work or operate the facility shown on the application and approved drawing(s), plans, and other documents, attached hereto or on file with the permitting authority, in accordance with the terms and conditions of this permit.

**Referenced attachments made a part of this permit:**

Appendix I-1, List of Insignificant Emissions Units and/or Activities

**Appendix TV-6, TITLE V CONDITIONS (version dated 6/23/06)**

Appendices Subpart 63-A, Subpart VVVV, and Subpart WWW

**Revision Effective Date:**

**TBD**

**Renewal Application Due Date:**

**August 15, 2010**

**Expiration Date:**

**March 30, 2011**

STATE OF FLORIDA DEPARTMENT  
OF ENVIRONMENTAL PROTECTION

---

James N. Bradner, P.E.  
Program Administrator  
Air Resources Management

JNB/jar

*"More Protection, Less Process"*  
[www.dep.state.fl.us](http://www.dep.state.fl.us)

**Section I. Facility Information.**

**Subsection A. Facility Description.**

This facility consists of a fiberglass boat manufacturing operation, which includes lamination/gelcoating, and related activities associated with fiberglass boat manufacturing facility.

Also included in this permit are miscellaneous unregulated/insignificant emission units and/or activities.

Based on the Title V Air Operation Permit Revision application received February 28, 2008, this facility is a major source of hazardous air pollutants (HAPs).

**Subsection B. Summary of Emissions Unit ID No(s). and Brief Description(s).**

**E.U. ID No./Brief Description**

**001 Lamination/Gelcoating and Related Activities**

Please reference the Permit No., Facility ID No., and appropriate Emissions Unit(s) ID No(s). on all correspondence, test report submittals, applications, etc.

**Subsection C. Relevant Documents.**

The documents listed below are not a part of this permit, however, are specifically related to this permitting action.

These documents are provided to the permittee for information purposes only:

Appendix A-1, Abbreviations, Acronyms, Citations, and Identification Numbers

Appendix H-1, Permit History/ID Number Changes

These documents are on file with permitting authority:

Initial Title V Air Operation Permit issued May 1, 2006.

Application for an Air Construction/Title V Air Operation Permit Revision received 2/28/2008.

**Section II. Facility-wide Conditions.**

**The following conditions apply facility-wide:**

1. APPENDIX TV-6, TITLE V CONDITIONS (version dated 06/26/06), is a part of this permit.
2. General Pollutant Emission Limiting Standards. Objectionable Odor Prohibited. The permittee shall not cause, suffer, allow, or permit the discharge of air pollutants which cause or contribute to an objectionable odor.  
[Rule 62-296.320(2), F.A.C.]
3. General Particulate Emission Limiting Standards. General Visible Emissions Standard. Except for emissions units that are subject to a particulate matter or opacity limit set forth or established by rule and reflected by conditions in this permit, no person shall cause, let, permit, suffer or allow to be discharged into the atmosphere the emissions of air pollutants from any activity, the density of which is equal to or greater than that designated as Number 1 on the Ringelmann Chart (20 percent opacity). EPA Method 9 is the method of compliance pursuant to Rule 62-297, F.A.C.  
[Rule 62-296.320(4)(b)1. & 4., F.A.C.]
4. Prevention of Accidental Releases (Section 112(r) of CAA).
  - a. The permittee shall submit its Risk Management Plan (RMP) to the Chemical Emergency Preparedness and Prevention Office (CEPPO) RMP Reporting Center when, and if, such requirement becomes applicable. Any Risk Management Plans, original submittals, revisions or updates to submittals, should be sent to:  

RMP Reporting Center  
Post Office Box 1515  
Lanham-Seabrook, MD 20703-1515  
Telephone: 301/429-5018
  - and,
  - b. The permittee shall submit to the permitting authority Title V certification forms or a compliance schedule in accordance with Rule 62-213.440(2), F.A.C.  
[40 CFR 68]
5. Insignificant Emissions Units and/or Activities. Appendix I-1, List of Insignificant Emissions Units and/or Activities, is a part of this permit.  
[Rules 62-213.440(1), 62-213.430(6), and 62-4.040(1)(b), F.A.C.]
6. General Pollutant Emission Limiting Standards. Volatile Organic Compounds (VOC) Emissions or Organic Solvents (OS) Emissions. The permittee shall allow no person to store, pump, handle, process, load, unload or use in any process or installation, volatile organic compounds (VOC) or organic solvents (OS) without applying known and existing vapor emission control devices or systems deemed necessary and ordered by the Department. To comply, procedures to minimize pollutant emissions shall include the following:
  - a) tightly cover or close all VOC containers when they are not in use,
  - b) tightly cover, where possible, all open troughs, basins, baths, tanks, etc. when they are not in use,
  - c) maintain all piping, valves, fittings, etc. in good operating condition,
  - d) prevent excessive air turbulence across exposed VOC's,

- e) immediately confine and clean up VOC spills and make sure certain wastes are placed in closed containers for reuse, recycling or proper disposal.

[Rule 62-296.320(1)(a), F.A.C.]

**7.** Reasonable precautions to prevent emissions of unconfined particulate matter at this facility may include the following on an as-needed basis:

- a) Frequent sweeping of outside areas
- b) Maintain filters in good working order

[Rule 62-296.320(4)(c)2., F.A.C.]

**8.** When appropriate, any recordings, monitoring, or reporting requirements that are time-specific shall be in accordance with the effective date of the permit, which defines day one.

[Rule 62-213.440, F.A.C.]

**9.** The permittee shall submit all compliance related notifications and reports required of this permit to the Department of Environmental Protection's Central District office:

Florida Department of Environmental Protection  
3319 Maguire Blvd., Suite 232  
Orlando, Florida 32803  
Telephone: 407/894-7555

[Rule 62-4.070(3), F.A.C.]

**10. Hours of Operation.** The facility is allowed to operate continuously.

[Rule 62-210.200, (PTE), F.A.C. and construction permit 0950217-006-AC]

**11. Emission Limit.** The maximum facility VOC emission rate is limited to less than 50 tons per consecutive twelve months, single HAP emissions are limited to less than 50 tons per consecutive twelve months, and combined HAP emissions are limited to less than 50 tons per consecutive twelve months.

[Rule 62-210.200, (PTE), F.A.C., and construction permit 0090127-006-AC]

**12.** Supporting documentation, such as Material Safety Data Sheets, purchase orders, EPA "As Supplied" data sheets, EPA Method 24, etc., shall be kept which includes sufficient information to determine compliance. Documentation of each chemical reclaimed will use a mass balance method to determine usage/emissions (amount used minus amount collected for disposal or recycle). The log and documents shall be kept at the facility for at least 5 years and made available to the Department. The monthly logs shall be completed by the end of the following month.

[Rules 62-4.070(3), and 62-213.440(1)(b)2.b., F.A.C.]

**13. Annual Operating Report.** The owner or operator shall complete DEP Form No. 62-210.900(5), F.A.C., “Annual Operating Report for Air Pollutant Emitting Facility,” for each calendar year and submit it either electronically using the latest Department Annual Operating Report software or by hard copy to the air compliance section of this office on or before March 1 of the following year in accordance with Rule 62-210.370(3), F.A.C. The emissions shall be computed in accordance with the provisions of Rule 62-210.370(2), F.A.C., for the purposes of the annual operating report. The address for the Central District is the following:

Florida Department of Environmental Protection  
3319 Maguire Blvd., Suite 232  
Orlando, Florida 32803  
Telephone: 407/894-7555

{Permitting Note: This condition implements the requirements of Rules 62-210.370(3) F.A.C. (see Condition 24. of APPENDIX TV-6, TITLE V CONDITIONS.)}  
[Rule 62-210.370(3), F.A.C.]

**14. Statement of Compliance.** The annual statement of compliance pursuant to Rule 62-213.440(3)(a)2., F.A.C., shall be submitted to the Department and EPA within 60 (sixty) days after the end of the calendar year using DEP Form No. 62-213.900(7), F.A.C. The required elements of the compliance certification are listed in 40 C.F.R. Part 70.6(c)(5)(iii) as indicated in Condition Number 51 of Appendix TV-6, Title V Conditions.  
[Rules 62-213.440(3) and 62-213.900, F.A.C.]

{Permitting Note: This condition implements the requirements of Rules 62-213.440(3)(a)2. & 3., F.A.C. (see Condition 51. of APPENDIX TV-6, TITLE V CONDITIONS.)}

**15. Renewal.** At least 180 days prior to the expiration date of this operation permit, the permittee shall submit to this office four copies of an air permit application, DEP Form No. 62-210.900(1).  
[Rule 62-4.090, F.A.C.]

### **Recordkeeping and Reporting Requirements**

**16.** In order to demonstrate compliance with facility-wide condition no. 11. and specific condition no. A1, the permittee shall maintain a log at the facility for a period of at least 5 years from the date the data is recorded. The log at a minimum shall contain the following:

#### **Monthly**

- a) month and year for which records are being tabulated
- b) consecutive 12 month  
total of:
  - gel-coat
  - resins
  - other VOC/HAP containing materials
  - VOC emission rate
  - combined HAPs emission rate
  - individual HAP emission rate
  - **monthly hours of operation**

[Rules 62-4.070(3), and 62-213.440(1)(b)2., F.A.C., construction permit 0090127-006-AC]

### **40 CFR 63, Subpart VVVV**

**17.** The emissions unit(s) in this subsection are subject to the applicable requirements contained in 40 C.F.R. 63, Subpart A, which is incorporated by reference and attached to this permit.

**18.** The facility is subject to the applicable requirements contained in 40 CFR 63, Subpart VVVV, which is incorporated by reference and attached to this permit. The company shall maintain records to show compliance with Subpart VVVV. Rule 63.5701 allows three methods to comply with open molding emission limit; a) maximum achievable control technology model point averaging (emission averaging) option, b) compliant material option, or c) add-on control device. The facility has chosen the “point value” method of compliance with the MACT of 40 CFR 63 Subpart VVVV for fiberglass boat builders.

**40 CFR 63, Subpart WWWW**

**19.** The facility is subject to the applicable requirements contained in 40 CFR 63, Subpart WWWW, which is incorporated by reference and attached to this permit. The company shall maintain records to show compliance with Subpart WWWW. The facility has chosen the “point value” method of compliance with the MACT of 40 CFR 63 Subpart WWWW (NESHAP: Reinforced Plastic Composites Production).



**Section III. Emissions Unit(s) and Conditions.**

**Subsection A. This section addresses the following emissions unit(s).**

**E.U. ID No./ Brief Description**

001 Lamination/Gelcoating, and related activities associated with Fiberglass Boat Manufacturing Facility

**The following conditions apply to the emissions unit(s) listed above:**

**Emission Limitations and Standards**

**A1.** The facility volatile organic compound (VOC) emission rate is limited to less than 50 tons per consecutive twelve months. The emissions are based on the quantity of material used during any consecutive twelve-month period and the following emission factors:

1. Styrene emissions shall be determined using the following equation:

$$\text{Emissions (tons)} = \frac{\text{Ms} \times \text{EF}}{2000 \text{ lb/ton}}$$

where:

Ms = amount of styrene containing material used (in tons)

EF = emission factor (lb/ton) for styrene monomer content (from table below)

The applicable styrene emission factor shall be obtained (interpolated/extrapolated, if applicable) from the following table, in conjunction with the percent of available non-vapor suppressed (NVS) styrene monomer in the resin/gelcoat:

% Monomer	Resin** Hand (Non-Spray) Layup	Resin** Mechanical Atomized Spray Layup	Resin Mechanical Nonatomized* Spray Layup	Gel Coat** Mechanical Atomized Spray Layup	Gelcoat Mechanical Nonatomized* Spray Layup
18	39	51	39	138	67
19	41	54	41	148	70
20	43	58	43	158	79
21	45	61	45	168	88
22	48	64	47	178	97
23	50	68	49	189	106
24	52	71	51	200	115
25	55	75	54	211	124
26	57	78	56	221	133
27	59	82	58	233	142
28	62	86	60	244	151
29	64	90	62	256	160
30	67	94	64	269	169
31	69	97	66	281	178
32	71	102	68	295	187

% Monomer	Resin** Hand (Non- Spray) Layup	Resin** Mechanical Atomized Spray Layup	Resin Mechanical Nonatomized* Spray Layup	Gel Coat** Mechanical Atomized Spray Layup	Gelcoat Mechanical Nonatomized* Spray Layup
33	74	105	71	308	196
34	77	112	74	322	205
35	80	118	77	336	214
36	83	127	80	354	223
37	86	136	83	371	232
38	90	146	86	390	241
39	92	156	89	408	250
40	95	166	93	427	259
41	98	176	96	446	268
42	100	187	99	466	278
43	112	192	102	477	287
44	117	202	105	495	296
45	122	212	108	513	305
46	127	221	111	532	314
47	133	232	115	551	323
48	138	242	118	571	332
49	143	252	121	590	341
50	148	263	124	609	350

\* *Nonatomized* means any application technology in which the resin is not broken into droplets or an aerosol as it travels from the application equipment to the surface of the part. Nonatomized resin application technology includes, but is not limited to, flowcoaters, chopper flowcoaters, and pressure fed resin rollers. In addition, the device must be operated according to the manufacturer's directions, including instructions to prevent the operation of the device at excessive spray pressures.

\*\* *The emission factors in these columns are based on a weighted average using the following assumptions:*

- *Using the Unified Emission Factors - 20% by weight of the facility's usage of resins and gelcoats are for reinforced plastic composites production for items such as hatches and doors, but not for hulls and decks.*
- *Using the National Marine Manufacturer Association's Factors – 80% by weight of the facility's usage of resins and gelcoats are for items such as decks and hulls.*

[Rules 62-4.070(3) and 62-213.440(1)(b)2., F.A.C.]

**A2.** See facility-wide condition no. 3 for the visible emission limitation for each emission unit.